

Upward Biases in Government Spending?

*By Anthony M. Rufolo**

A recent cartoon showed a fleeing government employee shouting: "Run! Jarvis is coming to town!" Somehow, the notion has gotten around that Proposition 13 erupted quite unexpectedly. But it may be just one manifestation of a growing awareness and concern about the level of government spending.

Since spending is closely related to services, proposals to cap expenditures represent opportunities for taxpayers to focus on the tradeoff of spending against services. Debate on these proposals, however, rarely takes the form of a cool discussion of tradeoffs. Those who speak most ardently for the disadvantaged want more services and deem-

phasize the tax burden. Those who speak most ardently for the taxpayer want lower taxes and deemphasize the importance of services. Although both sides seem reluctant to admit it, issues of equity and efficiency in the volume and allocation of government spending underlie the exchanges. What hard evidence exists for helping to make the tradeoff choice?

The issues that bring town meeting participants to their feet are equity issues—concern about abandoned housing, concern about the tax burden of the middle class, and concern about welfare, to name a few. These concerns are more likely to be resolved through the dialogue of democracy than through a marshalling of hard evidence.

But the efficiency issues underlying debates about such matters as housing subsidies, farm price supports, and aid to education, for example, can be examined more precisely. Government spending decisions flow from a

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framework of calculations of program costs and benefits. While the procedures underlying this framework are sound in principle, implementing them produces some difficulties, and these difficulties may result in a tendency toward overspending by government.

WHAT DOES GOVERNMENT SPEND?

It's estimated that government expenditures in 1977 totaled \$621.2 billion—an increase from only \$11.1 billion in 1930. While inflation and the growth of the economy explain much of this jump in dollar outlays, government expenditures have been growing not only in absolute dollars but also as a percentage of GNP. From a relatively low level of slightly over 12 percent in 1930, they rose to well over 40 percent of GNP during

World War II, fell off to around 20 percent in the postwar period, and then grew steadily to their present range of 30-35 percent.

The percentage dipped in 1976 and 1977, probably reflecting the relatively rapid growth in GNP and reduction in social welfare programs that occur as the economy comes out of a recession. But except for the drop following World War II, there has been no five-year period since 1930 in which government expenditures have not shown growth both in absolute terms and as a percentage of GNP.

Of all governments in the United States, the Federal government has been the biggest spender and has had the fastest rate of growth since 1949 (see GOVERNMENT SPENDS A GROWING SHARE. . .). Much of this growth has been in the form of

GOVERNMENT SPENDS A GROWING SHARE OF GNP WITH MOST OF THE GROWTH IN STATE AND LOCAL PURCHASES AND FEDERAL TRANSFER PAYMENTS

(Dollar figures are billions)

	1949	1959	1970	1975	1976	1977*
State and Local Government						
Purchases of Goods and Services (percentage of GNP)	\$18 (7.0%)	43.7 (9.0)	123.2 (12.5)	215.6 (14.1)	231.2 (13.5)	249.5 (13.2)
Federal Government						
Purchases of Goods and Services (percentage of GNP)	19.3 (7.5)	54.7 (11.2)	97.0 (9.9)	123.3 (8.1)	130.1 (7.6)	145.4 (7.7)
State and Local Government						
Transfer Payments to Persons (percentage of GNP)	3.0 (1.2)	5.1 (1.0)	14.6 (1.5)	23.8 (1.6)	25.9 (1.5)	28.0 (1.5)
Federal Government						
Transfer Payments to Persons (percentage of GNP)	8.1 (3.1)	19.8 (4.1)	55.0 (5.6)	146.1 (9.6)	158.8 (9.3)	169.8 (9.0)
Federal Grants-in-aid to State and Local Governments (percentage of GNP)	2.1 (0.4)	6.2 (1.3)	22.6 (2.3)	54.6 (3.6)	61.0 (3.6)	67.6 (3.6)
GNP	\$ 258.0	486.5	982.4	1,528.8	1,706.5	1,890.4

* Preliminary.

SOURCES: *Facts and Figures on Government Finance* 19th ed., Tax Foundation, Inc., N.Y., Tables 28 (p. 43), 60 (p.78), and 112 (p.136) for figures before 1975, and United States Department of Commerce, Bureau of Economic Analysis for 1975-77.

someone else to do something desirable, society as a whole may benefit. The Federal government, for example, often uses financial incentives to shape the behavior of local governments. And spending can bring about a desired change in the distribution of income to individuals by providing them with cash grants or with goods and services such as medical care. (From one point of view, government provision of any item equally to all is a change in the distribution of income because, in a free market, people don't all buy the same things in the same amounts.)

Further, tax forgiveness can act as a substitute for government spending. Tax deductions, credits, preferences, or loopholes can alter private-sector behavior by reducing tax payments. Selective tax reduction has the same effect as collecting taxes and then offering subsidies, which vary with the recipients' tax brackets, for engaging in certain activities. It is estimated that these selective tax provisions are equivalent to additional government spending of tens of billions of dollars per year.¹

Finally, taxes are used not only to finance government expenditures but also to promote other goals. Redistributing income is one added aim of Federal taxation: the personal income tax increases in rate with higher incomes, and the intent of the corporate income tax appears to be to tax shareholders, who are regarded as the relatively wealthy. Raising the price of underpriced goods or undesirable items is another aim: in practice, few taxes appear to have been enacted to offset items not captured through the market, such as pollution, but some taxes have been

¹For details, see *Special Analyses, Budget of the United States Government, Fiscal Year 1979*, U.S. Government Printing Office, Washington, D.C., 1978, pp. 148-174.

Government influence over the economy is not limited to spending. Other kinds of government actions, such as changes in the minimum wage or in certain loan guarantee provisions, also can have an impact, even though they are not connected directly with current budget levels.

designed at least partially to curb consumption of certain goods, such as cigarettes and liquor. And tax provisions designed to cut energy consumption have been proposed. For some items taxes are designed to act as prices for government-provided goods and services: the gasoline tax and, to some extent, the Social Security tax are examples. And taxes are used also in attempts to stabilize the economy.

The role of government expenditures, then, is larger than it first appears. Besides the direct and obvious outlays, there are large and less obvious impacts through the alterations that expenditures and revenue raising make on our economy. It is little wonder that the size of government expenditures has become a serious issue for the nation and that the bases on which the levels are determined has come in for urgent questioning (see THE AIMS OF GOVERNMENT SPENDING).

DECIDING HOW MUCH TO SPEND

Many noneconomic considerations enter into government decisionmaking on how much to spend. Political scientists recognize that the squeaky wheel may have to be oiled; elected officials may want to be reelected, and getting reelected may require support for government expenditures that are not justifiable on economic grounds. But an accurate analysis of economic efficiency can be of great assistance to decisionmakers. Most economists agree that a thoughtful application of the cost-benefit framework can help to identify efficient program spending levels.

Does Government Spend Enough? State and local governments, quite naturally, focus on the benefits that expenditures will bring to their own constituents. This behavior suggests an economic argument for the position that government spends too little.

While the local taxing jurisdiction often can tax only its own residents, nonresidents also may be affected by the government's actions. Community A may decide to spend

transfer payments to individuals (such as Social Security) and to other governments (revenue sharing, for example) which totaled about \$237 billion in 1977. State and local governments, with the help of Federal transfer payments, increased their direct purchases of goods and services to almost \$250 billion in 1977.

These numbers can be put into perspective by considering that over the last year, Federal, state, and local governments in the U.S. spent about \$8,400 for each household in the country. Households were not taxed this amount directly, though they did finance it indirectly (see DO YOU PAY MORE TAXES THAN YOU REALIZE?). And expenditures seem likely to continue growing. The full impact of these expenditures, however, is not entirely visible even from these sizable dollar numbers.

THE FORMS OF GOVERNMENT SPENDING

Government spending usually is thought of in the very simplest terms—direct procurement, direct expenditures to run operations, and direct outlays to designated citizens. We think of government as the buyer of pencils, the employer of recordkeepers, and the supplier of prekindergarten education to disadvantaged children. But different types of expenditures can have very different effects.

If government spending finances the production of desirable goods and services which would not be produced otherwise—sending a man to the moon, perhaps—allocation of resources may reflect citizens' preferences more fully than private-sector spending would. If dollars are dispensed in the form of matching funds or other financial incentives to get

DO YOU PAY MORE TAXES THAN YOU REALIZE?

When people hear that governments spent \$8,400 for each household, they probably feel that they must be coming out ahead. After all, not many families appear to pay over \$8,000 a year in taxes. But the fact is that most people pay far more in taxes than they realize. Certain taxes are more visible than others—taxes on income and retail sales, for example. Not only these, however, but all taxes ultimately are paid by individuals.

Take, for example, the corporate income tax. This tax, though not always in any obvious way, comes from customers through higher prices, from employees through lower wages, or from stockholders through a reduced return on investment.*

The incidence of a tax—how its burden is distributed—will fall more heavily on some than on others, depending on what kind of tax it is. But, in the end, the tax will be paid by some set of people. Thus, to get a better estimate of his total tax burden, an individual would have to figure out how much higher prices are because of taxes, how much lower his wages are, and what additional return he would get from his investments.

The tax bills which he receives are a misleading guide to each person's contribution to government spending, however, not only because some taxes aren't visible but also because government can finance its spending by borrowing as well as by taxing. Government spending, not current taxation, determines what percentage of the nation's resources eventually goes to the public sector. Thus government collects more in taxes than most people realize, and expenditures are greater than taxes because of debt financing.

*Public Service Electric and Gas Company of New Jersey recently circulated a notice to its customers pointing out that 17 percent of its revenue went to paying taxes. Since Public Service is a regulated utility, it seems reasonable that prices are at least 17-percent higher because of the taxes. For other companies, the people who pay the tax seldom can be identified so readily.

THE AIMS OF GOVERNMENT SPENDING

The U. S. and other predominantly capitalist nations rely heavily on the free market system to direct resources toward their most productive use, to produce the goods that people want, and to allocate much of the final product. But unhindered markets are not always the best instruments for achieving these economic goals. And so most agree that government spending should be used to exercise some influence over the private economy. Among the most common aims of government spending are redistribution of income, correction of imperfect pricing, provision of goods and services that private markets can't provide, and stabilization of the economy when it runs off course.

Income Redistribution. The market, though it allocates productive resources efficiently, may not satisfy people's preferences for greater economic equality.

The market's efficiency shows up in rewarding people for using their labor and their other resources where they will be most productive. But the productiveness of resources, and so the price they bring, will vary with circumstances. Many people believe that something should be done to counterbalance the effects of resource ownership and unforeseen circumstances on income, and so they have supported government programs of unemployment insurance and educational assistance.*

Markets With Deceptive Signals. In a market economy, prices tell consumers the value of the resources used in producing goods and services, and they tell producers how highly consumers value additional units of goods and services. Thus prices make it possible for a decentralized economy to allocate resources efficiently. But not all prices provide reliable information.

Some prices don't convey the full cost of production—as, for example, when a firm pollutes water as it manufactures consumer goods and then fails to include the cost of cleaning that water up when it prices its products. Other prices may overstate the real cost of production because the producing firm is a monopolist and doesn't have to worry about losing customers to competing firms. Further, prices may not reflect the total value of certain goods and services to consumers because people other than the purchasers place value on these outputs.

When prices don't carry correct information, then government may be able to improve the allocation of resources by regulating the market directly or through taxes and subsidies.

Goods and Services Without Markets. Not all goods and services can be sold in a private market. The only feasible choice for some of them, such as national defense, is to have government provide them and finance them through taxes. In even more cases, government provision, though not the only available method, may be the most efficient. Thus governments construct and maintain most roads and parks.

Economic Stabilization. Many economists believe that leaving the market to run by itself may not keep the economy fully employed. And so, when demand and supply conditions at prevailing prices make for an underuse or overuse of resources, they counsel government intervention.

In principle, stabilization policy should have no permanent effect on the size of government spending. But, in fact, programs initiated or expanded to increase spending during an economic slump often are not cut back when the economy approaches full employment. Thus stabilization efforts may tend to ratchet government spending upward.

*For more information on income distribution see Timothy Hannan, "Measuring Income Distribution in the United States," *Business Review*, Federal Reserve Bank of Philadelphia, March/April 1978, pp. 3-11.

very little, for example, on street repairs and traffic control, and this decision may create traffic tie-ups in Community B by causing some people to change their travel routes. The residents of B would benefit if A were to spend more on traffic control, but this con-

sideration may not enter into the decision-making in A.

Or Should It Spend Less? On the other side, there are a number of economic efficiency arguments which suggest that government

tends to spend too much. Perhaps the most important of these arguments is that special interest groups have a strong incentive to get programs passed that favor themselves while taxpayers at large do not have an equally strong incentive to fight such programs. The benefit to the special interest groups can be large for each of a small number of members: they have a strong incentive to lobby. But a very large number of taxpayers will be splitting the bill, and so the tax savings to any of them for opposing the program are small. On net, then, projects sponsored by special interests have an unduly high probability of being enacted.

A recent example of such a situation can be found in the farm aid program. Federal aid to farmers in fiscal 1978 is expected to exceed \$10 billion. And although consumer food prices already are higher than they would be in the absence of government programs, it's expected that both direct Federal aid to farmers and food prices will continue to rise. Farmers clearly want protection from price fluctuations, and they work effectively to obtain it despite the fact that taxpayers at large would prefer lower food prices and lower taxes. And farmers are not alone in receiving special treatment for their products. Thus government may be spending too much on programs that mainly benefit certain relatively small groups.

How To Decide. Economists have proposed a conceptually simple test to help guide them in identifying efficient levels of government spending. The efficiency of any government program is to be evaluated by examining its costs and its benefits and calculating a net value. If benefits exceed costs, then the program is presumed desirable and may be a candidate for expansion. But if benefits are smaller than costs, then the program probably should be cut back or eliminated. And the appropriate size of the program can be judged by considering whether a small increase or decrease in expenditures will lead to a commensurate change in benefits.

The concept is simple, but the implementation is difficult. Many costs and benefits resist measurement, and many are not even perceived. What is the precise benefit of building one more missile, for example, or of training one more unemployed person? What are the precise costs of eliminating a recreation area to make way for a reservoir? These cost-benefit questions, which are hard enough to answer for the present or the near term, become even harder as the time horizon being considered recedes into the future.

Attempts often are made to answer these questions in actual evaluations of government programs. But it is hard to trace out program impacts. The fact that the private market is not doing it, and government is, has certain costs associated with it. These added costs are not included in the standard cost-benefit calculation although they tend to bias the analysis toward overstating the benefits and understating the costs of government programs.²

BIASES TOWARD HIGHER SPENDING

Dollar figures can be estimated for many costs and benefits, including many of the nonmarket ones. Much work has been done, for example, on valuing a human life. And adjustments can be made for the differences in timing of costs and benefits. But plugging these figures into the cost-benefit calculation usually won't give a complete picture of the effect government programs have on people and on the economy at large.

Current Tax Dollars Understate Program Costs. Tax revenue is the most obvious source of information on the cost of govern-

²Even when cost-benefit analyses of government programs avoid these difficulties, the question of production efficiency remains an open one. Production costs usually are taken for granted in cost-benefit analyses with no attention to whether they are higher than they should be. The acceptance of historical production costs doesn't tend to make these costs look any smaller (or larger) than they are, but it may lead people to put up with costs that are larger than they have to be.

ment programs. But just adding up the dollars spent will understate the true cost of direct expenditures. Government creates distortions in the economy through its taxing activities. Many programs themselves generate compliance costs. And government sometimes can create monetary liabilities which don't show up in current accounts but will have to be paid in the future.

How Do Taxes Distort? Take the case of Mr. Smith, who wants some painting done. Smith and his painter both earn \$6 per hour and pay a quarter of their income in taxes. If Smith elects to do the job himself, it will take him twelve hours, while the painter can do it in ten. Without the tax, it would be cheaper to have the painter do it; Smith would have to work more than thirteen hours to earn enough

(after taxes) to pay the painter; so it will save Smith more than an hour's wage to do it himself, even though it would have been more efficient to have the painter in. Thus the distortion caused by the tax leads to an inefficient allocation of resources: Mr. Smith wastes two hours of productive time. This effect is multiplied many times over in the U.S. economy but would not be picked up in even a careful cost-benefit calculation.

Besides the dislocation cost, there is the cost of compliance with government regulations, and this cost usually isn't included in cost-benefit analyses of government programs (see DOES GOVERNMENT REGULATE TOO MUCH?). Most individuals and firms appear to feel the cost of compliance most keenly in the time they spend on record-keeping for tax purposes. Indeed, some cor-

DOES GOVERNMENT REGULATE TOO MUCH?

Government can change the allocation of resources by regulating as well as by taxing and spending. In fact, government has a pervasive influence on the economy because it makes the legal rules of the economic game. Generally, this just takes the form of providing the legal framework in which private participants act, but it can extend up to very strong controls on some industries.

In direct regulation of utilities, for example, rates are set and some production decisions may be made by government agents to avoid the high prices and low output that a monopoly might choose. Regulations about pollution, building codes, and worker safety also influence how resources are allocated in the private sector with a relatively small amount of government spending. Regulation can have an impact also on the distribution of income. It appears that some airlines and railroads are allowed to charge prices greatly above costs on some routes so that they can run other routes where prices are below costs and still make a profit. This amounts to a redistribution from some customers to others although it doesn't show up in figures on government taxation and spending.

Regulation may be an effective tool for achieving government's aims, and it often is favored because its direct costs are relatively low. But regulation also generates some hidden costs which must be added to the actual expenditures when evaluating the results. In trying to achieve the government's goals, regulators may create important economic distortions. One such distortion comes from setting prices without sufficient regard for the appropriate measure of cost. It has been argued, for example, that the rates railroads are required to charge put them at a disadvantage to trucks for a number of commodities in which they are the more efficient carrier. Such price regulation is estimated to inflate national freight costs by \$1 billion per year or even more.* In other words, if regulators were to set prices so that they more closely reflected the cost of providing services, railroads would be expected to win back some types of business now going to higher cost trucks. And the nation's freight bill would be lower by at least \$1 billion per year. Thus the costs of regulation are often much higher than they appear to be.

*See Robert W. Harberson, "Toward Better Resource Allocation in Transport," *Journal of Law and Economics* 12 (1969), pp. 321-338.

porations and other institutions maintain whole staffs of tax accountants and attorneys. But the IRS is not the only source of compliance costs; regulations issued by other agencies at all levels of government create additional costs. The Commission on Federal Paperwork recently estimated that the cost of paperwork required by the Federal government alone may exceed \$100 billion per year and that at least \$10 billion of this is unnecessary. Clearly some administrative costs are required in the operation of government, but ignoring the private and public costs of compliance in determining the desirability of government action understates the total cost of government.

Further, the tax bite is an inadequate guide to government program costs because government can spend money it hasn't collected. Pension programs offer the main examples of this hidden expenditure. When governments make pension commitments without collecting enough funds to cover them, they are in effect borrowing money, because those funds, along with the interest they would have earned, will have to be raised when current workers retire.

In short, because of the dislocation and compliance costs that taxes impose on the economy, and because government finances some of its programs with unfunded liabilities rather than revenue (current taxes), the true total program costs are not fully represented by present-year dollar expenditures.

Dollar Value May Be a Poor Measure of Benefits. Likewise, the true total benefits of government programs may not be measured correctly by the dollar value of the goods and services they provide. Starting the evaluation of benefits from the dollar value of inputs can lead to an *overstatement* of benefits. The overstatement may occur because the direct recipients of the benefits may not value them at their cost.

Suppose, for example, that government provides a family with housing that the family could have rented for \$200 per month.

Is the housing worth \$200 to them? Presumably not, since, if it were, they would have rented the space already. So far as the family is concerned, they would appear to be satisfied better by a cash grant of \$200 which they could use to increase their consumption of goods other than housing. In fact, they might rather have a cash grant of, say, \$150 than a housing unit worth \$50 more.³

But there are many hard-to-document links between programs and effects on society that are not reflected in the dollar numbers. And this may lead to an *understatement* of benefits. Headstart and Follow Through programs, for example, may raise the skills of the participants, and this improvement might be reflected with some accuracy in the calculations of benefits. But it is possible that other, long-run consequences of better education—perhaps lower crime rates and better health—may not be included in the calculation.

Returning to the housing example, government may see benefits in housing of a certain grade that the recipients of that housing don't see. Continued use of substandard units, for example, might pose fire or health hazards to residents of other units nearby, and the cost of offsetting these hazards might exceed the cost of relocating the occupants of the substandard units. Since the total benefit of a housing program may exceed the dollar value of the units it provides, using the dollar value of those units as if it represented the total benefit provided may understate the benefits. Thus getting accurate benefit estimates for government programs is a slippery business at best.

On Balance, a Bias. There are overstatements and understatements in the estimates of the benefits from government programs. But the government program funding process does appear to suffer from a tendency to

³For a more detailed analysis see Armen A. Alchian and William R. Allen, *University Economics: Elements of Inquiry*, 3rd edition (Belmont: Wadsworth Publishing Company, Inc., 1972), pp. 148-152.

understate the costs of compliance and dislocation. The net effect is to bias the calculation—to make the net costs appear to be lower than they are. Thus government may be led to authorize some expenditures which would be recognized as undesirable if the full costs were tracked through.

The information that the competitive market provides about consumer preferences and costs of production usually is not available to government enterprises. And when that information is available, the discipline of the marketplace is not available to ensure that it is acted upon. As a result, even well-intentioned government personnel may be providing goods and services which are not worth their cost or which are produced inefficiently.

WHAT CAN BE DONE?

The movement to place limits on government spending appears to be growing. Even before Proposition 13, Congress began to set itself overall spending ceilings to use as it considered individual items of legislation each year. And there are a number of state and local governments which have statutory or constitutional limits on government spending. This approach does not guarantee that government is left with the appropriate amount of money to spend nor does it take into account the differences in the size of the cost errors in different programs; but it can restrict the tendency of governments to spend too much money.

Cost-benefit analysis of government pro-

grams can provide a useful framework for some of the information needed for an efficient allocation of resources both between the public and private sectors and within the public sector. Already it appears to have led to a number of improvements in the way government expenditure decisions are made. Now, for example, the Congressional Budget Office provides members of Congress with estimates of the costs of proposed Federal legislation for the next five years; and zero-base budgeting and sunset legislation make it easier for legislatures to reevaluate the costs and benefits of programs periodically.

Cost-benefit analysis cannot provide a framework for resolving the equity issues underlying the debates on government programs. Equity concerns, however, should enter the decision process after there is a clear understanding of the efficiency considerations. Such efficiency evaluations would be considerably sharpened by greater attention to the deeper costs and benefits.

If this were done, it almost certainly would be concluded that while government action is desirable in some areas, there are other areas where less government activity is called for. The benefits of government spending are significant, but there appear to be tendencies to understate its costs. While it is clear that the criterion of economic efficiency is not appropriate by itself for judging government actions, it provides an important discipline for voters and policymakers as they strive to make reasoned judgments on appropriate levels of government spending.

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