

ECONOMY AND EFFICIENCY IN GOVERNMENT EXPENDITURES

SOME DEVICES FOR INCREASING EFFICIENCY IN GOVERNMENT EXPENDITURE

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This paper treats what must be considered some comparatively minor issues associated with government spending. It is concerned with how to determine the levels of some of the services that government ought to provide and how such services should be produced. Its proposals are applicable to State and local as well as Federal expenditures. I am almost certain that other participants in this study will point out that solutions to many of the central problems of public expenditure policy are essentially matters of personal taste on which unanimous agreement is not to be expected. At the present time, I am not prepared to debate this position. Instead, I shall deal with some problems whose solutions should not be arbitrary ones, even though the changes in expenditures that would follow from applying them would look small in comparison with current levels of spending.

The treatment provided does not point out in detail how the principles proposed might be applied. I shall sketch the applicability for a few examples. These examples may appear to be extreme cases and are chosen to demonstrate clearly the points I am trying to make. These proposals when applied might prompt us to do some things in ways much different from those currently employed.

Although I shall argue that demand and supply relations can guide us more in determining government expenditure than currently is the usage, this argument does not support either those who believe that the best government is the one that does least nor those who believe that the scope of governmental activities should be expanded. In many areas we don't know whether government is spending too little or too much—even though such questions could be answered unambiguously—because we have not obtained relevant information nor employed decision-making procedures which would permit us to use the relevant data.

GOVERNMENT SPENDING TO PROVIDE SERVICES AND TO REDISTRIBUTE INCOME

Government spends to provide services and to modify the distribution of income from that which would prevail if it were determined only by the pattern of resource ownership and resource prices. The extent to which income should be redistributed—the tax and ex-

penditure pattern together being important instruments of redistribution—is essentially an ethical problem and will not be discussed here.

Goods and services that should be provided by government

The goods and services whose provision to the population should be of interest to government and the goods and services which government should produce need not be the same things. The first group includes things whose costs should be covered to some extent from tax revenues, although the organization of the production of these things might be left completely to private enterprise. The things whose provision to the population is a legitimate governmental concern includes those that one might call "socially beneficial." Additional consumption of such a good or service by one person increases the welfare of other persons as well as that of the immediate consumer. Elementary school education is a service generally believed to be of this kind. Because Smith's children do not capture all of the benefits of becoming literate and perhaps learning how to think and thus eventually becoming better citizens than would be the case if they were without elementary education, Jones is willing to contribute toward the education of the Smith children, i. e., to support governmental expenditure for such education. It is believed that if elementary school education were allocated among the population in the same manner as steak or beer, too little of it would be produced. Other instances of goods or services that are socially beneficial include services to check the spread of communicable diseases and various services associated with sanitation—sewage and garbage disposal, for example.

A second category of goods and services in whose provision government should be interested might be called public goods,¹ those which can be consumed by one person without any reduction in the amounts available to other persons. For example, a radio or television transmission can be received by an additional receiving set without affecting the reception of other receivers; one's view of a public monument is independent of the number of persons who have seen it previously.

Government's interest in socially beneficial goods is to see that their consumption is larger than would be the case if they were distributed in the same manner as other goods. This objective can be attained by subsidizing producers or by giving grants to consumers conditional upon these grants being used to purchase such goods or services. Either approach requires governmental spending. The interest of government in public goods also is akin to seeing that more is produced than would be the case if they were privately produced and sold. It costs something to produce and disseminate radio programs. Yet the best way of collecting to cover these costs is not necessarily to charge each listener according to the amount he listens but rather to charge him a flat fee for the opportunity to receive radio reception. Insofar as government may act as the intermediary in collecting and dispersing funds, government expenditure is involved.

¹ Refer to Paul A. Samuelson, *The Pure Theory of Public Expenditure*, *The Review of Economics and Statistics*, XXXVI, pp. 387-389.

Goods and services that should be produced by government

Whether government should produce goods and services—socially beneficial ones, public goods, or other goods—is simply a question of whether governmental organization of production will result in a given amount being produced at a lower cost than would be achieved by private producers. Thus, there is no inherent reason for a good or service to be produced by government, even though this good is freely distributed by government, if private producers can produce it at less cost; nor is there any reason why government should not produce any good or service and sell it in the market, even though this commodity has been produced privately, if it can do so at less cost than private producers.

In this paper I shall avoid the hardest problems—those associated with how much production there should be of public goods and goods with social benefits. Instead I shall deal with some of the problems of trying to assure that the costs of producing whatever outputs are chosen is a minimum, some of the devices that can be used for determining the outputs of goods that are neither public goods nor socially beneficial but in the production of which government has definite advantages, and with some considerations in determining whether a good is socially beneficial.

MORE WIDESPREAD USE OF CONTRACTING AS A DEVICE FOR LOWERING COSTS OF SERVICES IN WHICH GOVERNMENT HAS AN INTEREST

In the United States it is widely believed that with both types of producers having access to the same technology and the same market information, private producers will produce more efficiently than government. There is relatively little pressure for government to take over the production of steel or autos or most other goods and services that are clearly neither socially beneficial nor public goods. A foundation for this belief might be that if decision makers are rewarded (or penalized) in accordance with the quality of the decisions which they make, the quality of decision making will be better than if rewards and quality of decisions are not closely related. Where profit is a good index of the quality of the decision, the results of private producers' decisions in organizing production are generally accepted.

In many areas, government has chosen to specify the amount of a product to be produced and to let private producers produce the product for government. The military does not produce its own planes, tanks, etc.; the postal service hires railways and airlines to carry mail; some school districts do not operate their own school buses, etc. The line between where government should buy goods and services and where it should produce them itself appears to have been arbitrarily drawn. If the contention that private producers can produce more efficiently is correct, there are opportunities for reducing costs of government—although the savings may not be large—through more widespread application of the practice of government specifying the task to be accomplished and letting private producers bid for the job. For example, fire protection, garbage collection, mail collection and delivery, and even many law-enforcement activities (such as checking parking violations and collecting taxes) might be contracted to private agencies.

One cannot forecast accurately the outcome of more widespread application of contracting. There should be reductions in costs of doing some of the things now done by government. But total expenditure might be increased. For example, with better garbage collection at the same cost as at present or the same kind of garbage collection at lower cost, people might demand more of it than currently is being obtained. Rather than try to guess what the expenditure pattern would be, let me try to indicate how more widespread use of contracting might be made by reference to an extreme case.

One function which government performs is that of levying and collecting taxes, the procedure whereby a person may determine his tax liability having been stated basically by legislation. There are, of course, what many people call "inequities" in the tax structure that are the results of legislation. However, there are others that are essentially administrative—in the assessment of property for tax purposes and in the undercollection of income taxes, particularly from self-employed persons. It is claimed that these could be remedied by devoting more resources to tax collection, yet there is no agreement as to how much more should be devoted to this purpose. One way of determining this would be to sell the right to collect a certain tax in a particular area. If taxpayers have adequate recourse to opportunities to prove their true tax liabilities so that they will not pay more than legally prescribed and if the right to collect a tax sells for more than the net revenues (gross collections minus collection costs) obtained by government, greater efficiency in tax collection would have been achieved. The tax "farmers" (as they were called in earlier times when such procedures were followed) would be organizing their resources more efficiently than has government in collecting a given amount of revenue and/or devoting more nearly the correct amount of resources to their function. It might be noted that such a move might prompt legislation such that taxpayers could more unambiguously determine their tax liabilities and that there should be virtually no bribery of tax collectors.

SOCIALLY BENEFICIAL GOODS AND SERVICES

There is not complete agreement with respect to precisely which goods and services are socially beneficial. However, some of this disagreement is the result of failing to distinguish between benefits that can be rewarded through the market and those that cannot. For example, investment in plant and equipment that will earn enough to pay interest and amortization costs is socially beneficial in that it results in a given amount of product being sold at a lower cost. However, the making of such an investment is rewarded through the market. If a person learns to understand things that improve his decision-making ability as a citizen but do not increase his marketable skills, this act is not rewarded through the market. Only the latter kind of action warrants expenditure as a socially beneficial action. If there are unnatural impediments to investment that prevent the first kind of action from being carried out, such impediments can be removed by the establishment of governmental agencies—for regulation or for making loans, for example—whose expenditures are relatively insignificant.

Furthermore, as already has been indicated, goods or services that are socially beneficial need not be produced by government. Unless the government is interested in controlling the curriculum, the appropriate stimulation to the production of elementary education could be provided by grants to families conditional upon such grants being used for elementary schooling. Private producers could operate the schools and collect for their services through fees.

An appraisal of current governmental aids to higher education provides an opportunity to illustrate a confusion in popular notions of socially beneficial goods. Governmental aids to education are extended not only to elementary schooling but to secondary school training and so-called higher education—the educational services provided by colleges and universities. Yet, it cannot be argued that training a person to be an accountant, an engineer, an embalmer or a mathematician or to speak French brings significant social benefits. It is true that increasing the number of accountants, engineers, etc., reduces the prices for the services which they produce. But improving technology or increasing the amount of capital employed in producing various goods and services also reduces their prices. Investment in higher education does not differ fundamentally from any other form of investment in the distribution of its returns among the persons making the investment and others. If a rationalization, consistent with our general views as to how resource allocation should be made, were to be provided for public support to higher education, this rationalization might be that existing market arrangements make it possible for us to borrow to purchase a farm, a factory, or an oil well, but that borrowing to purchase a college education usually cannot be accomplished through formal financial channels. Investment in higher education thus would be too small, if we left its determination to the same forces as are permitted to determine other investment decisions. One way to encourage more investment in higher education is to reduce its price through governmental grants to some colleges and universities.

However, if it is agreed that we should be interested primarily in assuring that individuals may invest in themselves through training on the same terms as they may invest in other assets, this objective can be achieved by creating lending institutions for making loans to purchase education—perhaps in creating an FHA for college educations. Such institutions could require considerably less Government expenditure than do current arrangements—in the long run they need not require any; and, they could result in a better allocation of educational opportunity than do present institutions. At the present time, some persons who would not buy a college education if they had the financial resources and had to pay the full costs attend some State-supported institutions. Others who would buy a college education if they could borrow the financial resources and had to pay the full costs cannot attend college. A loan program, in lieu of present forms of State support, would permit the second group of individuals to attend college, and—if educational training were priced at cost—would result in the training of fewer individuals in the first group. Governmental operation of institutions of higher learning might continue under the proposed arrangement. But, the reasons for such operation are the same as those for State operation of grocery stores, filling stations, etc.

It should be noted that pricing higher education at cost would permit us to determine whether too much or too little is being produced. When a good or service is not socially beneficial and is priced below cost, the fact that more of this good or service is demanded than is available is not sufficient to claim that a true shortage exists. In the long run, there would be "shortages" (excess demand) of all such goods and services if they were priced in this manner. Information about the quantities of socially beneficial goods and services that would be purchased at various prices also is required to determine how much should be produced. Because, at some arbitrary price, there is excess demand for such a good or service does not necessarily mean that too little is available. Excess demand for this good also may mean only that the price is too low.

PUTTING DECISIONS WITH RESPECT TO HIGHWAY SERVICES ON A SUPPLY AND DEMAND BASIS

Among the goods in which government should act as collector and disperser—if not producer—are those in which costs of collecting from each user in accordance with the amounts used are high relative to production costs. Water or electricity would be such a good, if either good were cheap but meters were very expensive. A classic example is highway services. With the exception of a few limited access highways and bridges, the costs to private producers of collecting from highway users directly in accordance with use are so high relative to construction and maintenance costs that unless government provided highways and streets, there would be too few of them.

For more than three decades, there has been much argument relating to how much should be spent on highways and who should pay the bill. The question of who should pay the bill hinges on whether highway service is socially beneficial. Although improved highways cut transport costs and hence the prices of things consumed by persons not directly using the highways, there are many other activities that result in reduced prices and for which no special means of compensation are provided. Except for potential military uses of the highways—for which the military services should pay—the case for attributing social benefits to highway services is a weak one.

In addition to attributing social benefits to highways, further resistance to conceptually applying the usual market criteria to determining how much of such service should be produced has arisen from viewing highway services as public goods. If using a highway imposed no maintenance costs and if there existed no problems of highway congestion, such a view might be legitimate. However, it is not economic to construct highways so that there are not maintenance costs (at least for some vehicles), and street and highway congestion is one of our most widely discussed problems. If difference in quality of service is considered—quality might be defined in terms of opportunity to travel at a certain speed, with a certain comfort and some specified probability of accident—much of the service offered by the street and highway system is not a public good.

If it is agreed that highway services are neither socially beneficial nor public goods it would be desirable to try to ration these services among users and to determine the amounts that should be produced in the same general way as these problems are solved for other goods. The practical problems are those of attaching appropriate prices to highway services, collecting from highway users according to the amounts of each of the services used and employing highway-use data to determine the amounts of roads of various qualities to construct.

Some of these problems have been explored in more detail elsewhere² and I will state only some of the implications of these explorations here. Collecting from highway users in accordance with the amount of service obtained can be accomplished by reliance upon motor-fuels taxes for passengers' care with supplementary weight-distance taxes for trucks and buses. Revenues could be allocated to each section of the highway system in accordance with the traffic pattern and comparisons of revenues and costs would be employed to guide the construction and maintenance patterns. Encouragement to toll roads would be provided by imputing revenues to them in the same fashion as for other roads. Thus, decisions about how much of various kinds of highway service to provide could be based on whether such changes would pay. We would be able to know more clearly than we can at the present time how adequate is our highway system.

SUMMARY

The devices that have been suggested in this paper—more widespread use of contracting in the production of services provided by government, a loan program to prospective college students rather than an expanded State role in the production of higher education, and the provision of highway services in accordance with market criteria—are all designed to make it possible for us to know more accurately whether the right amounts of certain kinds of services are being provided and if the least-cost methods for providing various amounts are being employed. The changes in government expenditures that would result from using such devices might not be large, but some improvement in resource use would result.

² See O. H. Brownlee and Walter W. Heller, *Highway Financing and Development*, *American Economic Review*, May 1956, pp. 232-250.