

GOVERNMENT EXPENDITURES AND GROWTH

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INTRODUCTION

It seems fairly clear at the outset that there are important classes of government expenditures which have a positive effect on economic growth. These include expenditures for education, health, urban renewal, highway construction, water resource development, applied research in agriculture and in the production of minerals, and basic scientific research. Of course there are other classes of government expenditures which contribute little or nothing to the growth process. These include most defense expenditures (except insofar as they produce technical progress as a byproduct) and most of the transfer payments. Indeed, it may be argued that transfer payments for agriculture impede progress by holding labor on the farm which could be better used elsewhere.

Expenditures in these latter categories may be justified on other grounds but not by their effects on the growth of output.

As regards those expenditures which do contribute to the growth of output we have to ask whether they contribute enough to justify the withdrawal of resources from other uses. We cannot have everything. If we invest in education, health, and so on, we must either forgo some current consumption or some private investment.

Two decisions are involved in setting the level of government expenditures which are justified by their contribution to economic growth. These are (1) how much should be saved and invested by the whole economy, (2) how should the investment be distributed between public and private investment?

If we wish to increase the rate of growth or output we must increase the rate of growth of capital formation (in a broad sense which includes expenditure to improve the health and education of our labor force and increase the rate of development of technique). Three alternative ways of increasing capital formation may be considered: (1) Reduction in government expenditures (relative to national income) to permit reduction in personal taxes and thereby encourage personal savings in order to supply more funds for private investment; (2) reduction in government expenditures (relative to national income) or increase in taxes on consumption to permit reduction in corporate income taxes and thereby encourage private investment; (3) increase in government expenditures which contribute to growth while cutting other government expenditures or increasing taxes.

It will be argued below that there is not likely to be a chronic shortage of personal saving over the next decade. Consequently, the first method need not be considered.

Any of a variety of combination of the other two methods would contribute to the growth rate. I think it is likely that there is a

considerable volume of government investment which will contribute as much to economic growth as additional private investment. If that is true then we will not wish to hold down government investment in order to stimulate private investment. Our real problem is therefore to decide how much of an increase in total investment we can afford and how it should be divided between public and private investment.

Over the next few years considerations of national security will probably require the maintenance of the present level of defense and foreign-aid expenditures. Indeed, the growth of the Russian economy may force us to increase defense expenditures. Most of the non-defense expenditures of both the Federal and the State and local governments consist of either transfer payments or expenditures which do contribute substantially to economic growth, e. g., education, health, highway construction. There are, no doubt, some government services which are not worth their cost, and some uneconomical subsidies. Some savings could be made by improving the efficiency of government operations. But we will not be able to free any large volume of resources for investment by reducing government purchases of goods and services. Additional resources for investment can only be obtained by holding down private consumption. That can be done either through taxation or restriction of government transfer payments. There is, of course, no necessity for increasing tax rates. But unless transfer payments are reduced it will be necessary to withhold tax reductions from consumers in order to free resources for additional investment.

In the remaining sections of this paper I shall consider the three possibilities for increasing investment mentioned above, viz, (1) reduction in personal taxation; (2) reduction in corporate taxation; (3) increase in government investment.

A SHORTAGE OF PERSONAL SAVINGS?

In the last 3 years we have been told in innumerable speeches and articles that there is a shortage of savings in this country. It has usually been suggested that this shortage could be eliminated by a reduction in government expenditures. Those statements may be adequate enough as descriptions of the situation in the last couple of years. I do not think, however, that there is much reason to anticipate a shortage of savings on the average over the next decade or so. There is always a tendency to overemphasize the significance of short-term movements in business conditions. When there is a boom in investment people talk as though it would last forever. When there is a slump they see no end to it. Yet all our experience shows that investment fluctuates, every rise in the ratio of investment to income being followed before long by a decline. It is unreasonable therefore to judge the average situation by the situation at the peak of the cycle.

During 1955 and 1956 gross private domestic investment averaged about 15.7 percent of gross national product. That was about one-half a percentage point above the average ratio for the postwar years. The depression and the Second World War caused capital shortages in both housing and industry which have now been made up. It seems unlikely, then, that a rate of investment of as much as 15 percent of gross national product can be sustained in the long run. The Na-

tional Planning Association estimates the sustainable average rate of gross investment at 13.2 percent of gross national product. When we view the investment performance of 1955 and 1956 against that background it seems unlikely that a shortage of savings will persist over a long period.

That conclusion is reinforced by the fact that in the last 3 years the growth of industrial capacity has exceeded the growth of demand in a considerable number of industries.

I conclude then that under the present tax arrangement there is no great likelihood of a chronic shortage of saving. The Government will not contribute anything to the Nation's growth potential by running a surplus and throwing additional funds on the market through debt repayment. Nor will it help to cut Government expenditures and then reduce taxes on high income persons in order to allow them to save more.

It does not follow, however, that we cannot increase the rate of growth of output by increasing the rate of saving and capital formation. We can do so in two ways: (1) By adjusting the tax structure and some of our financial arrangements in such a way as to increase the demand for capital on the part of business, (2) by Government investment in such fields as education, urban redevelopment, conservation of resources and health.

CORPORATE TAXATION AND PRIVATE INVESTMENT

A number of witnesses before this committee have argued that a higher rate of growth of output can be obtained by encouraging private investment. Their argument is fairly simple. We know that there is a great deal of relatively old and inefficient plant and equipment in use in this country. That is a persistent situation. Old equipment is constantly being replaced with new but at the same time existing equipment is getting older. Since technique is constantly improving, there is always a wide gap between the efficiency of the oldest equipment in service and that of the best available equipment. It seems clear that if we could reduce the age of the oldest equipment in use we could save labor or raw materials which could be put to other uses.

At present many companies seem to feel that an investment return of 20 percent or more (before taxes) is required to justify the replacement of old plant and equipment. If the rate of return required to justify replacement were lowered the age of the oldest equipment in use would be reduced and the productive efficiency of our economy would be increased.

Three different sets of factors operate to make firms require a high prospective return on investment: (1) Some firms may simply feel that, in view of the risk involved, an investment is not worth while unless it can be expected to yield an after-tax return of, say, 10-percent. To the extent that that is true, a reduction in the effective corporate income tax rate on earnings from new investment would reduce the before-tax rate of returns required to justify new investment. But to the extent that losses on one venture can be offset against profits from another the Government shares in the risk as well as in the profits of investments. The net effect of taxation on the level of returns required to compensate for risk should not be very great.

(2) Some firms may be willing to take lower expected returns on new investment if the investment can be financed from retained earnings. They may, however, be unwilling to take the additional financial risk associated with the use of borrowed capital. In that case more investment would be forthcoming if the corporate income tax were reduced so as to permit an increase in the flow of retained earnings. (3) Some firms may be willing to use a greater amount of borrowed funds but find it impossible (except at prohibitive rates) because of "tight" money. As I have already indicated this may be a cyclical problem but it is not a chronic one which can be dealt with by taxation. (4) Because of imperfections in the capital markets some small rapidly growing firms always find it difficult to finance investments which they consider worth while. That problem may be dealt with by changes in the structure of the capital market, but I shall not attempt to discuss them here. Alternatively consideration might be given to further tax concessions to small firms.

I have emphasized the replacement problem in the above discussion, but the same argument applies to the investment involved in the introduction of new processes or new materials which may reduce costs for other firms. It also applies to the cases involving a decision whether to build new plant or to continue using obsolete standby capacity.

To our sorrow no one knows how much effect tax reduction would have on private investment. We can hardly expect that all of the increase in corporate profits after tax resulting from tax concessions will go into additional investment. Some of it may be passed on to consumers through lower prices, and trade unions may extract some additional wage increases. At the same time dividends may increase and some firms will borrow less instead of investing more. Finally, some of the gain from tax reductions may be diverted into advertising and selling expenditure rather than into productive investment. It seems quite likely that private investment will be increased by only a fraction of any tax concessions given to private business.

That is not necessarily a controlling consideration. If tax concessions result in price reductions, wage increases, or dividend increases, households are compensated for paying higher taxes in order to permit reductions of business taxes. If firms use the gains from tax reductions to avoid borrowing or build up liquid assets, taxes on consumers can be reduced without any inflationary effect. The gains to households from these sources would, of course, be distributed differently from those emerging from a change in taxes on households in the first instance. But that is not necessarily a disadvantage.

To the extent that tax reductions do result in increased business investment they should contribute to the rate of increase of productivity. The possibility of reducing taxes to increase investment must therefore be regarded as competitive with government expenditures aimed at increasing potential output.

GOVERNMENT INVESTMENT

We are always inclined to think of investment as something involving bricks and mortar or machines. When we think of government investment we think of hydroelectric projects or toll roads. They are classified as investments because they do involve physical construc-

tion and because they produce benefits which are readily identifiable, and measurable (if not collectible) in cash. But investments do not have to have those characteristics. An investment is an expenditure which produces benefits which accrue over or last for a long time. From that point of view expenditures on education are certainly investments. They increase the productivity of the labor force not just in the year in which the expenditure is made but for many years afterward. At the same time education is supposed to produce esthetic and social benefits which last throughout the lives of the students. Those benefits do not appear in the national income statistics, but we ought not to neglect them just because they cannot be rung up on the cash register.

A similar argument applies to urban renewal. At least a quarter of gross private domestic capital formation goes into residential construction. The figure is even larger if we add the associated construction of trade and service facilities, utility construction, and public construction. Yet while we pour billions of dollars into new construction we permit our enormous existing stock of housing to deteriorate far more rapidly than is necessary. Those losses could be avoided by programs designed to rehabilitate marginal areas where deterioration of property has not gone too far, for the clearance of existing slum areas, for planning the future development of metropolitan areas. Programs of that sort would save a great deal more capital than would be required to finance them. In addition, they would provide a continuing stream of social and esthetic benefits worth a great deal in themselves.

It is not my purpose to argue for particular programs. The programs I have mentioned are only examples. I do wish to emphasize two points. First, that government investment in a wide range of fields can contribute substantially to the growth of real output as usually measured. It can do so by increasing or conserving the productivity of our existing human and natural resources. Such investments may not produce revenue for the Government, but they will add to the real output of the Nation.

It is not easy to measure the yields from education, urban redevelopment, basic research, or expenditures to improve health. It is fairly clear, however, that investment in the training of professionals yields a high return on the investment. Data on the effects of other types of education are less satisfactory. Available information on skill differentials does suggest, however, that education does have an appreciable effect on the "value of a man." Similarly most experts in the housing field seem to agree that urban renewal is economically advantageous.

Secondly, I wish to emphasize that the nonmaterial benefits of a large class of government expenditures should be regarded as contributions to economic growth even when they do not add to gross national product in constant prices.

In discussing growth we tend to talk about real national product as though we were concerned with the rate of output of a single commodity. In fact, of course, we are concerned with the output of thousands of different goods and services. We add up this collection of items by weighting the output of each item by its relative price. Such a procedure is necessary since we can shift resources from the

production of one commodity to the production of another. But if we confine our attention to the size of gross national product in constant prices we leave out of account the problem of choosing the composition of the gross national product. It is just as important to produce the right things as it is to produce more of something. For the most part we leave the decision as to what things are to be produced to individual consumers and the working of the market. The business community has every incentive to find out, if not what the customers want, at least what they can be made to want. If the customers will pay for tailfins we can have every confidence that someone will discover it and supply them. The free market method of deciding what should be produced sometimes has odd results, but most of us agree that there is no better way to do things. When the philosophers are kings things may be different, but meanwhile most of us are content to rely on the vagaries of the price system.

It is clear, however, that the market process does not work for some kinds of goods and services. Private enterprise cannot supply services which benefit everyone at once, e. g., national defense or flood control, or the benefits of well planned and zoned metropolitan areas. Nor can it supply services whose benefits are diffuse or uncertain like those from basic scientific research. Private enterprise cannot ordinarily provide services which we wish to make available even to those who cannot pay the full costs, e. g., education and hospital services.¹

Standards of service in health, education, and other types of government service ought to rise with rising income at least as much as the standard of consumption of privately supplied commodities. There is no reason to discriminate against education and in favor of backyard barbecue equipment just because one is supplied by government and the other by private industry. Yet there is danger that we will hold down the expansion of government services because no one advertises them.

Moreover it seems likely that government expenditures will have to rise even if no important programs are started. Many government services must be expanded with population. Even if there is no further increase in the general price level, construction costs will rise, and so will the costs of government services. Wages in those fields, in which productivity rises slowly, will tend to keep pace with wages in areas in which productivity is increasing more rapidly. As a result the cost of a given amount of construction or government service will rise. Finally we must keep in mind the possibility that defense expenditures will rise again as the Russian economy continues to grow.

In view of those considerations government expenditures will increase even if there is no increase in the standard of government services provided. There will therefore be strong resistance to an increase in the standards of government services. But if we do not increase the standards of education, health, and urban living conditions (among other things) we will not get the full benefit of our increasing productivity. It would be false economy to starve public

¹ I have not included private charitable organizations under the heading of private enterprise. It is also true, of course, that it would be possible to depend on private firms to operate schools or hospitals while subsidizing fees for individuals. The administrative difficulties of such arrangements are obvious.

services in order to get the maximum increase in private consumption. Indeed if it were necessary it would be better to take a slower increase in real gross national product than to get the maximum increase and then devote it to the wrong ends.

CONCLUSION

The problem of evaluating government expenditures is always one of judging whether we get enough from them to compensate for what we give up. A large proportion of our nondefense expenditures produce benefits which accrue over a long period after the expenditure is made. These expenditures have to be regarded as investments and evaluated in terms of yield or rate of return on investment. If we make government expenditures we must give up either private consumption or private investment. In principle, a government expenditure of the investment type is only justified if its yield is (*a*) high enough to justify a reduction (or loss of an increase) in consumption large enough to finance it, and (*b*) higher than the yield on private investments which would be made if taxes were lower. Both tests are involved because a reduction in consumption can always be used to provide resources for either private or public investment. In practice, however, it may not be politically feasible to give tax cuts to business without giving them to consumers. In that case, the yield required to justify a government expenditure is the yield required to justify sacrificing a politically determined combination of private consumption and private investment.

The yield from government expenditures often involves two components: (*a*) Their contribution to productivity as measured by the real gross national product; (*b*) the value of the nonmaterial benefits which they produce.

It is difficult enough to measure the effects of government expenditures on productivity, but at least the problem is one of measuring objective magnitudes. But, when we deal with the nonmaterial benefits of education, public health, or urban renewal, we are in the realm of value judgments. Some people feel that widespread liberal education is a priceless asset to the whole community. But, if we may judge from the curriculums of some of our colleges, there are many who feel that education must justify itself in dollars-and-cents terms.

Some government expenditures may be justified solely on the basis of their effect on physical productivity. But many will appear poor investments on that basis. They will only appear worthwhile if we throw their nonmaterial benefits onto the scale. And the weight given to those benefits is, in the last analysis, a matter of taste, about which we cannot dispute.