GUIDES AND PROCEDURES FOR DETERMINING FEDERAL EXPENDITURE PROGRAMS

Gerhard Colm, chief economist, National Planning Association [1]

The Employment Act of 1946 states that the Federal Government should "utilize all its plans, functions, and resources for the purpose of creating and maintaining * * * conditions under which there will be afforded useful employment opportunities * * *"

The Federal Government's spending programs certainly belong to these "plans, functions and resources." Therefore, according to the act, government spending programs, if possible, should be so formulated and conducted that they contribute to economic growth and stability. Although few people would question the validity of this legislative mandate, there is a real question whether Federal spending programs have adequately implemented this aspect of the Employment Act.

The bulk of Federal expenditures have in recent years been determined by considerations for national security or by legal commitments made in the past. Economic consideration in the formulation of Federal spending programs have been introduced primarily as a negative or restraining influence; namely, as an effort to delay nonsecurity programs in the interest of not adding to inflationary pressures. In fact, some of the increase in nondefense programs has taken place largely in spite of economic considerations and rather as the result of political and social necessity. Thus, there has been little occasion to develop procedures for a positive economic approach to expenditure programs. If, however, requirements for national security should level out, or if it should be possible to reduce them, the opportunity and the necessity may well arise for giving greater emphasis to evaluating the contributions which Federal expenditure programs can make to economic growth and stability. In that event, the examination of fiscal policy in the perspective of economic requirements could become of growing importance. The studies initiated by the Joint Economic Committee might, therefore, prove to be very timely.

In both the executive and the legislative branches, the budget is considered by agencies (Budget Bureau, Appropriations Committees) other than those entrusted with considering the economic aspects of the Federal program (Council of Economic Advisers, Joint Economic Committee). Also, the structure of the budget and the method of presentation are not tailored to provide guides for an economic consideration of expenditure programs.

Originally, the principles and procedures for budgeting were developed primarily as instruments for legislative control of the purse,

[1] In this paper I am expressing my own views, not necessarily those of the National Planning Association. I acknowledge the assistance of Manuel Helzner in the preparation of this paper.

and secondarily as instruments or executive control over the farflung administrative activities of the Government. An economic evaluation of government expenditure programs, however, is needed to assist in developing priorities among competing programs. The contribution a specific program promises to make to economic growth is not the only criterion for establishing priorities, but it should be an important consideration. The appraisal of government expenditure programs in the perspective of economic growth must, by necessity, also include the consideration of tax and debt policies. This is needed in order to determine how, in a specific situation, economic growth is best promoted. For example, might it be more desirable to adopt a new or expanded program, even if this means increasing taxes or postponing an otherwise possible tax reduction? What guides and procedures, then, have been or could be developed in order to evaluate the effect of government expenditures on economic growth and stability?

Program Effect and Spending Effect

Before attempting to answer this question, it is necessary to clarify what is meant by the effect of government expenditures on economic growth and stability. In this respect, a distinction should be made between the program effect and the spending effect of government expenditures.

The spending effect consists of the additional purchasing power created by government expenditures and put into the hands of consumers or business. Let us consider the example of a hydroelectric project undertaken by the Government. While the dams and generator stations are under construction, money is being spent for labor and material. This adds to the payrolls and earning of industry and constitutes the direct spending effect. Since consumers and business, in turn, spend all or part of this additional income, a secondary spending effect (multiplier) takes place. If the increase in total sales should induce additional investments, one then speaks of an accelerator effect derived from the original government spending.

The spending effect of a government program may be offset, in part, by the effect of taxation or government borrowing which would tend to restrict the private availability of funds. Different spending programs and different systems of taxation or borrowing will exert different types of positive or negative multiplier and accelerator pressures on the economy.

The program effect, meanwhile, takes place not while the money is being spent, but usually after the government project has been completed (except where there may be some anticipation of this effect). In the example of the hydroelectric project, when construction has been completed and electric power is produced, the creation of this additional source of electricity may have an effect on power rates or may help to meet an otherwise unsatisfied industrial demand for electric power. New industries may be attracted by the availability of cheaper power, and the entire area may undergo an economic transformation. This represents the program effect of government expenditures.

In some areas the relations between the program effect and economic growth may not always be readily identifiable. All expenditures, including those for national defense, foreign aid, veterans' benefits, social-assistance payments, have a spending effect but may not necessarily have a program effect on economic growth. Expenditures for research, training, health, conservation, or development of natural resources, etc., may affect economic growth generally. Other types of expenditures may benefit one or another group in the population (e. g., farm subsidies) but may affect general economic growth only indirectly. Some programs may indirectly affect general economic growth in a negative way. For example, one type of farm-subsidy program may tend to hold submarginal farmers on the land while another type of program would encourage them to shift to nonfarm occupations where their contribution to higher productivity and economic expansion would be greater. In any case, when examining the effect of government expenditures on economic growth and stability, it is essential that the distinction between the program effect and the spending effect be clearly recognized.

There may at times arise a conflict between policies guided by considerations of the program effect and those of the spending effect of government expenditures. During recent years spending for certain nondefense programs was held to a minimum in order to reduce the inflationary effect of government spending. This may well account for some of the delays in programs for education, training and research, conservation of water, and other programs which contribute to economic growth. It is a difficult task of economic and fiscal statesmanship to reconcile in each situation the objectives of policies designed to promote economic stabilization with those designed to promote economic growth. Only in a period of slack do the two objectives largely coincide.

Guides for an Economic Consideration of Government Expenditures

Guides for estimating program effects

Subsequent papers will discuss the effects of government expenditure programs on specific areas such as natural resources, human resources and skills, transportation, and research. I do not know of any general method by which the program effect of a contemplated or actual government expenditure program can in any precise manner be quantitatively ascertained. Some progress in developing quantitative measurements of benefits and costs has been made in appraising water resource programs (e. g., irrigation) and transportation programs (highways, navigation). However, even in these areas program considerations appear to give inadequate attention to the longer run economic implications of government spending with the result that some government investments may not be making the maximum contribution to economic growth which could be achieved with the funds actually used.

There is great need for government to examine proposed expenditure programs in the light of their possible contribution to an expanding economy. Although methods have been worked out for appraising government programs in the light of long-range economic needs, it does not appear that such considerations have been decisive in the formulation of many of these programs. In this respect, private enterprise has made more progress in that most larger corporations formulate their investment programs with the aid of long-range projections which are designed to indicate the probable future developments for their products or services.

The health program of the Government might also be appraised in view of its contribution to economic growth. We know that many man-days of labor are lost by sickness. A Federal program which could improve the health of the people would increase the available man-hours of the labor force and make further increases in production possible. Therefore, in considering the economic effect of Federal health programs (in addition to their humanitarian values), account should be taken of the possible consequent decrease in labor absenteeism. Attention would thus be given to the relationship between economic productivity and government health programs. I doubt that it ever will be possible to present an exact economic calculus of the relationship between the cost of the health program on the one hand, and the potential increase in production on the other. However, to deny that such a relationship may exist would also be an error.

Or, let us consider the example of a flood-control program. It is possible to make a comparison between the costs of such a program and the expected savings over time resulting from the control of floods. However, this is in no way an exact cost-benefit calculation because if the program were not undertaken certain vulnerable industries might not settle in the areas exposed to the possibility of flood damage. Were the flood-control program to be undertaken, an unknown number of enterprises might settle in the no longer endangered area.

The difficulty of making a precise evaluation regarding the program effect of government expenditures increases the need for providing decision makers with an effective approach to program determination.

An entrepreneur uses judgment in addition to statistical analysis before making an investment. So also government officials can never be certain about the extent of the contribution a particular program could make to economic development. The entrepreneur may ask himself: If I do not make the contemplated investment, how will this influence the investment decisions of other entrepreneurs? Likewise, government officials should ask: Would private interests in the absence of a government program attempt to do what the Government might decide not to do? If there is the likelihood that private interests may consider performing that function, the question should then be asked as to how the private performance would compare in costs and benefits with the public performance of the same function. Thus, in considering whether the Government shall undertake proposed expenditure programs which may have an effect on economic growth, government officials who have to make the program decisions should evaluate the following information:

1. The estimated monetary and nonmonetary costs of the program as a whole (including an estimate of the time needed for its completion).

2. The estimated economic and noneconomic benefits to be derived.

(A) In economic terms—the estimated effect of the Government program on future production and its contribution to economic development. In proposing an irrigation project, for example, consideration should be given to what the need will be for additional agricultural production. Also growing any needed additional produce on newly irrigated land should be compared with the alternative of increasing production by more intensive use of fertilizer or other improvements on land already in cultivation. In addition, an economic appraisal should present estimates concerning:

(*a*) benefits for which the Government may collect fees (e. g., water fees).

(*b*) benefits for which no fees will be collected (e. g., higher productivity resulting from improved health or educational programs).

(*c*) the effect of the increase in productivity on future tax returns.

(B) In noneconomic terms—the social and other benefits or humanitarian considerations to be evaluated (such as from national defense programs or old-age assistance).

3. The probability that either private organizations or State and local governments may undertake the proposed or a similar project if the Federal Government does not undertake it. Such an evaluation should include a consideration of the advantages and disadvantages of such alternatives.

Quantitative estimates should be provided where possible; otherwise, qualitative statements with indication of likely order of magnitude or judgment should be made.

For each program an object breakdown of proposed expenditures should also be made in terms of wages, capital equipment, materials, etc., which could form the basis for evaluating the spending effect. Periodic studies should be undertaken to determine which programs contribute to economic growth, particularly in those areas where government activity may supplement and promote private endeavor. Such areas might include—

(*a*) The educational training and health needs of the labor force.

(*b*) The promotion of basic or applied research.

(*c*) The development of natural resources or substitutes.

(*d*) The need to foster more adequate transportation facilities.

(*e*) The problem of providing private capital facilities for specific purposes (e. g., small business).

(*f*) The need for promoting more comprehensive statistical programs.

In many of these areas an evaluation of program needs has been undertaken, but such studies should periodically be reexamined and brought up to date.

In the past a number of valuable studies in the economic and fiscal field have remained unutilized because no committee of the Congress had the responsibility for examining them and for making legislative recommendations based on their findings. The Joint Economic Committee could undertake to evaluate the need for government programs to contribute to economic growth and could make these studies the basis for its recommendations to the appropriate committees of the Congress.

Guides for estimating spending effects

The budget summary.—The Government's budget will always be the point of departure for an analysis of the spending effect of Government programs. The summary tables of the budget document offer a first approximation of the amounts which government activities either add to, or deduct from, consumer income or business funds. For this purpose, the summary tables which present the payments to and receipts from the Government (consolidated cash budget) are particularly useful. At first glance, a budget deficit might be assumed to indicate the amount of funds added to the stream of funds available to consumers and business, while a budget surplus might represent the extent of a curtailment of such funds. Such an approach, however, would be an oversimplification. A fiscal policy based merely on the criteria of a surplus or deficit in the budget summary could be seriously misguided. Additional factors must also be considered:

1. The effect of a budget surplus or a deficit on income, production, and employment is influenced by the way the budget surplus is used or the deficit met. A budget surplus used for repaying a Government debt held by banks may exert an anti-inflationary effect if accompanied by the appropriate monetary action. Such may not be the effect of other Government debt is redeemed. Similarly, a budget deficit financed through the banks will, under most circumstances (but not under all circumstances), have an expansionary effect. If financed through purchases by individuals of savings bonds, it would tend to absorb purchasing power which might otherwise be available for other purposes. Thus, debt-management policy must also be considered, in addition to the budget data.

2. The economic effects of a budget surplus or a budget deficit may vary, depending on the factors which brought the surplus or the deficit about. A budget deficit, for example, may result from an economic decline when payments for the unemployed are rising and tax yields are declining. This situation could result from the so-called built-in stabilizers, which would cushion the decline in private income. These stabilizers, however, cannot turn a downswing into renewed expansion. A budget deficit otherwise arising from a substantial cut in tax rates or the adoption of new or expanded Government programs could create additional demand and not merely reduce the shrinkage of purchasing power. This is the reason why, in case of a serious economic decline, the effect of built-in stabilizers should be supplemented by fiscal-policy measures, such as a speeding up of expenditure programs and/or of tax cuts. The reverse situation would be true with regard to an anti-inflation fiscal program. Tax increases and expenditure reductions should supplement the effect of rising tax yields. In any case, it is not enough to focus attention only upon the budget surplus or deficit.

3. Increases in expenditures may add to total effective purchasing power, even if financed by tax increases. Conversely, curtailment of expenditures accompanied by corresponding tax reduction may result in contraction. A balanced budget is not necessarily a neutral budget. The reason is that the multiplier and accelerator effects (positive or negative) of expenditures and of

taxes differ depending on the kind of expenditures and the kind of taxes which are adopted.

4. The budget summary does not reflect the economic significance of all Government operations. (I need not go into this aspect as the preceding paper by George F. Break is devoted to it.)

5. The budget summaries are classified according to an administrative and functional division. There is no overall classification of expenditures by economic criteria. (An incomplete object classification of obligations is the closest approximation to it.) It would be desirable if a detailed object classification of expenditures could be developed in line with the standard industrial classification system.[2]

6. An evaluation of the Government's effects on the economy as a whole must consider not only the transactions of the Federal Government, but also those of the State and local government.

7. Most important, the economic effect of Government transactions must be seen in the perspective of actual and expected developments in the private sectors of the economy.

National economic accounts.—The spending effects of Government programs (including the effects of changes in taxes and debt) can best be evaluated using the tools of national economic accounting. National economic accounts depict the incomes and expenditures of the various economic sectors—consumers, nonprofit organizations, business, and government.

In order best to appraise this effect, projections of the national accounts should be prepared for a number of years under the two following assumptions:

1. If present government programs are continued; and
2. If certain changes in government programs appear necessary in order to promote conditions under which maximum employment levels are likely to be achieved.

It would be most desirable if various alternative changes or alternative combinations of changes in government programs would be assumed. Consideration should be given to the feasibility and possible implications of speeding up certain programs in the event of an economic slack, or of slowing them down in case a high level of private activity or a high level of other government activities (e. g., national security) creates an inflationary situation. The national economic account projections would reflect changes not only in the Government account but also in the incomes and expenditures accounts of consumers and business.

If estimates of consumer and business spending under assumption No. 1 indicate a decline or an inadequate rise ("adequate" being defined as a rise commensurate with the increase in the production potential), alternative methods for bolstering consumer purchasing power and/or business investment would have to be contemplated. The Government could consider several steps. Government spending could be increased or tax rates reduced, or both. Other methods would include a reduction in interest rates (hoping to stimulate private in-

[2] See the National Economic Accounts of the United States Review, Appraisal, and Recommendations, by the National Account Review Committee of the National Bureau of Economic Research, June 1957.

vestment) or making mortgage funds available at more attractive terms.

Thus, with the aid of national economic account projections, an appraisal could be made of the need for government measures in support of consumer purchasing power or business investment or both. These projections—which, in effect, are hypothetical economic forecasts—would state what economic developments are likely to be assuming (*a*) no change in government programs; (*b*) adoption of certain changes in the programs.

The original full-employment bill provided for exactly this kind of projection of the Nation's economic budget as part of the President's Economic Report. In the version finally approved, however, the language of the legislation was made less precise, because there was doubt that the President would always be able to provide specific forecasts for the various component parts. Nevertheless, the present language of the Employment Act still suggests the legislative intent that the President should state the levels of employment, production, and purchasing power which would achieve the purposes of the act; the levels that are likely to be obtained under existing programs; and the changes in Government programs which are deemed necessary to attain the desired level of economic activity.

A projection of "needed levels" implies an estimate of the full-employment potentials for economic activity. Such a projection, particularly in a longer range perspective, is feasible, and less hazardous than a forecast, particularly a short-run forecast. Also, there is often some reasonable basis for judging the probability that these levels could or could not be achieved under existing programs. The likelihood of error increases, however, if the conditional forecast undertakes to specify not only the direction of the economic movement but also its expected magnitude and the timing of cyclical turning points. Therefore, I still believe that the Congress was wise in not requiring a specific and detailed forecast, but only a statement of foreseeable trends of economic activity.

This skepticism about making specific forecasts does not exclude the possibility of appraising, in terms of national economic account projections, the spending effect of contemplated changes in expenditure programs. Rather, I would offer the following specific proposals for consideration:

1. In each Economic Report, the President should include a statement of "needed levels of employment, production, and purchasing power," in terms of a projection of national account aggregates. The projection might cover a 5-year period.

2. In each Economic Report (or in a special report issued intermittently), a number of alternative projections should be presented, describing possible economic developments under existing programs, assuming, e. g., (*a*) an inflationary trend; (*b*) a sidewise movement of economic activity (i. e., failure to expand); (*c*) decline of, say, 5 percent per year in terms of gross national product in constant prices. By presenting such alternatives, it should be made perfectly clear that none of these trends is predicted. However, it would be desirable if the text of the report would discuss the probabilities of these various alternatives in the light of the current outlook.

3. In connection with these alternative projections, the report should also review the programs contemplated by the Government and their likely effect on consumer and business incomes and outlays.

Should the economic outlook suggest that changes in programs are called for, a specific recommendation should be presented for Government action, as well as an estimate of the expected effect of the recommended change on economic activities in terms of the national economic accounts. If it should be desirable to delay and stretch out, or speed up and enlarge, expenditure programs, the President and the Congress would take into consideration both the spending effect and the program effect of the changes which were being recommended.

Budget Consideration and Economic Considerations

Coordination in the executive branch of the Government

The Budget Bureau assists the President in the formulation of the budget. Its concern is that Budget recommendations implement the President's program, and that the objectives of Government are pursued with the greatest economy and efficiency.

The Council of Economic Advisers assists the President in the preparation of the economic report. Since the President is responsible both for the budget and the economic report, some consultation between the two agencies takes place as a matter of routine. Nevertheless, there have been instances in which the economic assumptions implied in the budget document appeared not to be consistent with statements about the economic outlook expressed in the economic report.

Two recommendations have been made by the National Planning Association for promoting greater coordination between the budget and economic report.[3]

1. Each budget message should include a budget outlook covering the same number of years as the economic projection suggested above for inclusion in the Economic Report. The Government programs included in the budget outlook would correspond to the programs (expenditures, taxes, and debt transactions) consistent with the Government's responsibilities under the Employment Act. The budget also would state the legislative changes which would be required for effectuating the proposed changes in future expenditure and tax programs.

   Inclusion of such a budget outlook would permit an examination of expenditure and tax policies in the perspective of several years. This is a necessity for effective budget control, because legislation and appropriations often have their full impact only on future budgets. This fact leads to repeated frustrations when Congress in the spring attempts to take action designed to affect the budget which becomes effective in July of the same year. That "the budget is out of control" is due largely to the fact that the budget of one particular year is, to a considerable extent,

[3] See National Planning Association Planning Pamphlet No. 90, The Need for Further Budget Reform—A Joint NPA Statement; The Federal Budget and the National Economy, a staff report by Gerhard Colm, with the assistance of Marilyn Young (March 1955).

determined by congressional action of previous years. The budget outlook would facilitate more effective congressional consideration of the budgetary implications of contemplated legislation. At the same time, it would help to coordinate economic and budgetary considerations.

In order to achieve consistency between the economic projections and the budget outlook, closer cooperation between the agencies responsible for the preparation of these two related sets of estimates would become a necessity.

2. The expenditure and revenue estimates of the budget document should be based on the assumption that reasonably full employment and price stability will be maintained during the ensuing year. Basing the budget on such an assumption rather than on an economic forecast of actual conditions removes a major source of possible inconsistency between expenditure and revenue estimates and also between the basis of the budget document and statements in the Economic Report. It would, however, be desirable if congressional appropriations would make a budgetary allowance for some contingencies; e. g., if there should be greater unemployment than implied in the expenditure estimates. If economic developments are less favorable than assumed, the President could release these contingency reserves in addition to speeding up the long-range expenditure programs for which appropriations have already been made.[4] Presumably, the President would undertake to use the contingency funds only on the advice of the Council of Economic Advisers and would report such action to the Congress.

Coordination in the legislative branch of the Government

The Joint Economic Committee has the responsibility for advising the various legislative committees of Congress and the Congress as a whole on matters relating to the implementation of the Employment Act. The scope of this responsibility certainly includes consideration of the impact of Federal expenditure programs on economic growth and stability. The NPA joint statement referred to above states:

> It would be desirable if Congress would adopt each year a concurrent resolution which would outline the broad order of magnitude of the budget over a period of years and the recommended principles of financing. Such a resolution could state that there should be an excess of revenue over total expenditures, or a balance, or that a part of the expenditures should be financed by loans. It would also set forth the changes in the longer range program if any, which are considered necessary for the purpose of counteracting business fluctuations.

The annual report of the Joint Economic Committee is well suited to provide a basis for the formulation of such a resolution.

The Joint Economic Committee has the responsibility under the Employment Act to provide "a guide to the several committees of

[4] Adoption by the Congress of the proposed shift to an accrued-expenditure basis for appropriations would materially reduce the flexibility of the Government to vary the rate of expenditures for purposes of promoting economic growth and stability. (See the testimony of Gerhard Colm before the House Committee on Government Operations, April 5, 1957.)

the Congress dealing with legislation relating to the Economic Report." In fulfillment of this function, the committee each year prepares a report containing its findings and recommendations as they relate to the principal economic proposals of the President. In addition to this, it would be highly desirable if members of the Joint Economic Committee would appear before the Appropriations and Tax Committees of both Houses to present the conclusions and policy recommendations which the Committee has reached with respect to budget matters.