

GOVERNMENT BUDGETS AND THEIR RELATION TO NATIONAL ACCOUNTS

Richard Ruggles, professor of economics, Yale University, and
Nancy D. Ruggles, Bureau of Economic Affairs, United Nations

THE CHANGING ROLE OF THE GOVERNMENT IN THE ECONOMY

In the last 25 years, outlays by Federal, State, and local governments have risen over 10 times, from about \$10 billion to over \$100 billion. The rise in gross national product has not been as precipitous; on a comparable basis it has risen sevenfold, from about \$60 billion to about \$420 billion. There are, of course, many reasons for this changed relationship. A brief examination of some of them will give some insight into just how the role of government has changed, and the consequences of this change in terms of the need for budgetary information.

In 1929, total government outlays amounted to about \$10 billion, at a time when gross national product was \$105 billion. The expenditures of the Federal Government accounted for only \$2.5 billion of this, and thus constituted only about 25 percent of total government expenditures. Over the next decade there was relatively little change in State and local expenditures, despite the depression, but the Federal Government more than tripled its expenditures. Much of this increase in Federal expenditure was due to measures instituted as sedatives or cures for the depression. Thus the WPA, AAA, and even social security were introduced to provide relief and to help the economy back on its feet. By the late 1930's, however, there had been no appreciable dip in Federal expenditures; the new responsibilities that the Government had taken on primarily to combat the depression were continued even after substantial recovery had taken place.

World War II brought with it, of course, extremely large expenditures for national defense. Federal expenditures rose to over \$95 billion. At the same time, in spite of rising costs, State and local expenditures were held down even below the levels of the late 1930's; they did not even exceed the 1929 level by much more than 10 percent. By 1944, expenditures of the Federal Government constituted over 90 percent of all government expenditures. After World War II, there was a sharp rise in State and local expenditures as these governments attempted to make up for the expenditures which they had postponed during the war. Simultaneously, the Federal Government sharply curtailed its expenditures for national defense, and its total expenditures were cut by over 50 percent. Nevertheless, in 1947, when Federal Government expenditures reached their lowest point, they were still double those of State and local governments. This is in contrast with the year 1929, when Federal expenditures were one-third of State and local, and with the immediate prewar period, when they were about equal to State and local expenditures. Again, thus, the

increased responsibilities which the Federal Government had assumed during the war were continued into the postwar period. Since 1947, problems of national defense have again swelled Federal expenditures, and they have once more increased relative to State and local expenditures. There seems to be no indication that the Federal Government will shed these responsibilities, or play a less important role in the economy, in the future.

A discussion of the Government's role in terms of the expenditure of money, furthermore, does not convey the entire extent of the growth in the Government's influence in the economy. In the past 25 years, the Government has assumed more and more responsibility for the economic health of the Nation. The problems of maintaining full employment and avoiding continued inflation are now accepted by the Federal Government as primary responsibilities. The tenor of recent congressional committee hearings indicates that the Government is concerned about the degree of supervisory control it must maintain over big business and big labor. This, coupled with commitments regarding social security, education, highways, urban redevelopment, etc., suggest that in a decade's time the role of the Federal Government may be even greater.

Many of us have considerable qualms about this trend. We see before us a specter of big government. Yet the individual decisions that lead to this trend are the result of the considered judgment of intelligent men in both the executive and legislative branches of the Government. The logic of the Federal Government's responsibilities in certain of these areas is compelling. Few would question the need of the Federal Government to provide adequate defense and to maintain a healthy economy and avoid inflation. The majority of the voters are for such things as social security, new highways, and better health protection.

It is unfortunately true that in some quarters the reaction to this dilemma has been to deny the facts, and so avoid the necessity of facing reality. This is an ostrichlike approach based on the hope that if the problem is ignored it may go away. But a little reflection should make it obvious that unless there is a sound basis for believing that the Government's role will become less important in the future, it is necessary to do everything possible to make sure that the important decisions the Federal Government must make are made with the aid of all the relevant information. The denial of tools for policymaking will not reduce the amount of policymaking; but it will mean that the policies adopted may be harmful. Economic policies must be based upon a realistic understanding of the different facets of the economy and the Government's relation to them.

NATIONAL ECONOMIC ACCOUNTING AND ECONOMIC POLICY

This changing role of government in the economy has had a profound effect both upon economic analysis and upon the framework of data about our economy. And conversely, the development of a comprehensive national economic accounting framework has had considerable impact upon the procedures for determining Federal spending programs. The evolution has been such that today the Government is looked upon as a sector of the economy interacting with the private producing and consuming sectors and having as its basic accounts

the budgetary data arising from tax receipts and the expenditures of the various agencies of the Government. In this process, it is probably true to say that theoretical economics has not led the way, but rather circumstances and events themselves have led to the development of the required analytical tools. This is not to say that the tools have always been available when they were needed—hindsight shows us that our present degree of sophistication in the use of tools would have been very helpful had it been available in previous periods. But, even though the economist has not been able to show the way, in the sense of providing a well-developed analytical framework ready-made, it is, I think, fair to say that the economist has been an important partner in this development, and has made significant contributions to it. A brief examination of the evolution of national income accounting over the past 25 years will show the development of its relationship to the Government accounts and its use as a tool in analyzing Government expenditure.

National economic accounting had its roots in the national income work carried out by academic economists and research foundations both in the United States and in Europe early in this century. These early contributions were mainly concerned with establishing the absolute level of the Nation's income and the changes in this level from year to year. The national income was defined as the sum of the incomes of the people. Although measurement of national income is primarily a phenomenon of the last 30 years, the concepts were derived from the classical economics of Bentham, Mill, and Pigou.

The Federal Government did not become interested in national income until the great depression. In 1932 the Senate passed a resolution which resulted in the publication, in 1934, of a report on national income, and from that time onward there was an increasing interest in this subject. The depression posed many problems which necessitated the formulation of specific economic policies. The Government became interested in the changing level of income from year to year, and in the relation of its own expenditures and tax receipts to the national economy. But the early annual estimates were very sketchy indeed, and concentrated entirely on national income, omitting national product.

The natural evolution of national income accounting in the late 1930's was greatly stimulated by the mobilization needs of World War II. The defense effort was of a magnitude that required a much more complete understanding of the operation of the economy and the repercussions that various government taxing, spending, and borrowing policies might be expected to have. All the armament production plans had to be considered together, to make sure that the resources of the economy were sufficient to carry them all out. The total quantity of resources obviously had a limit, and total production had to be designed to fit within this limit. To schedule more production would not only be unrealistic, it would cause serious bottlenecks in some areas and useless oversupply in others. To schedule less production than the available resources would permit, on the other hand, would be to operate at a level lower than full capacity. Accordingly, data on such things as the distribution of manpower among industries and national income originating in the various industries became of extreme importance. For any realistic appraisal of the problem,

furthermore, current consumption had to be taken into account. Not all production could be devoted to war purposes; the civilian population had to be supported. An examination of the minimum level of goods and services needed for consumption was therefore necessary, and national income accounting was again called upon to show the interrelationships among the end uses of production.

The task of deciding how the production plans were to be implemented, as well as the determination of the potential level of production, also required major economic policy decisions. The war expenditure had to be financed, and the method of financing to be used was one of the more important questions that had to be faced. It was obvious that taxation should be increased. But how much could it be increased and how much additional tax revenue could be expected from the fact that the economy was working at a higher level of activity? And for the part of war expenditures that could not be financed out of taxation, how and from whom should the requisite funds be borrowed? What different repercussions on the economy would result from borrowing from banks as opposed to individuals, and what effect would such borrowing have upon the incomes of individuals and upon prices? In similar manner, how far could the price incentive be used to move resources such as labor from unessential to essential industries? Income payments obviously would be affected by any such use of the price incentive, and it was necessary to know the extent of the inflationary influence to be expected and whether means were available to offset it successfully. Finally, to what extent and by what means should civilian consumption be restricted to necessities? Relying on the price mechanism to provide the restriction again might result in a disastrous inflation, so that it was necessary to decide in what areas rationing and price control might be necessary.

It is obvious that all these problems are highly interrelated, and that they can be solved satisfactorily only if they are considered within one framework of data. Under wartime pressures national income accounting was developed to provide such a framework. With this framework it became possible to relate the total available resources to the planned production for war and for civilian consumption, and to examine the income payments and prices that would necessarily result from the adoption of any specific system of taxes, borrowing, incentive payments, price control, and rationing. By the end of the war national income accounting had thus emerged as an essential tool in the formulation of economic policy. Since the war, the national income and product accounts have been further developed as a tool for determining Federal expenditure policy, and by now the data in the accounts have become familiar to the reading public in newspapers and news magazines.

The account for the Government sector is an essential component of the national income framework as it has developed. In addition to the Government, three other sectors of the economy are distinguished: households in their role as consumers, businesses in their role as producers, and foreign countries insofar as they trade with the United States. In addition, an account is drawn up to show saving and investment. In this national income accounting system, Federal, State, and local governments are consolidated into a single

sector, but detailed classifications within the account provide significant breakdowns of different kinds of transactions at the Federal, State, and local levels.

Since the war, other forms of economic accounting have been developing to meet specific needs. Thus for example a study of post-war patterns of employment was undertaken with the aid of input-output data. A few years ago the flow-of-funds work of the Federal Reserve Board was initiated to provide data on the sources and uses of funds by various sectors of the economy, as an aid in examining credit and financial policies. Even more recently pioneering work on national wealth and national balance sheets has been undertaken by private research organizations.

During the past year, the Bureau of the Budget set up a committee to review, appraise, and make recommendations with respect to the national economic accounts of the United States. On October 29-30, 1957, hearings were held by the Subcommittee on Economic Statistics on the National Accounts Review Committee's report and recommendations.

In its review of national economic accounting, the National Accounts Review Committee emphasized the very central role which the Government accounts play in all schemes of national economic accounting. There is a great need for reform of the Government budget to permit its integration with the national accounts. One of the major recommendations which the Committee made was that the different forms of national economic accounts should be integrated into a single national economic accounting system that would include the flow-of-funds, input-output, balance of payments, balance sheet, and national wealth data, as well as the current income and product accounts. This would simplify the accounts that are needed for the Government sector; one presentation of the Government accounts would meet both the requirements of economic accounting and the needs of budgetary presentation. At the present time, many different Government accounts are compiled for various purposes. Besides the regular Government budget, Government accounts are compiled for national income accounting, flow-of-funds accounting, and input-output tables. All of these differ in some respects, and can be made comparable only through rather elaborate reconciliations.

The National Accounts Review Committee sought to remedy this situation by developing a single system of economic accounts containing an integrated set of Government accounts which would serve the needs of national income accounting, input-output tables, flow-of-funds accounting, and national balance sheets. The integration makes elaborate reconciliation between the various forms of the accounts unnecessary, and permits the user to move easily from one aspect of the Government account to another. The National Accounts Review Committee did not take the additional step of integrating the Government accounts as given in the national income accounts with those given in budget hearings and those shown in the Daily Treasury Statement. It is obvious, however, that a closer integration between the national economic accounts and the Government budget would be a great help to both the legislative and the executive branch in evaluating past performance and making reasoned judgments about future appropriations. One of the barriers that has stood in the way of such an in-

tegration is the different systems of classification used in the different accounts. The Committee has gone a long way in overcoming this difficulty by recommending the inclusion of a functional classification in the economic accounts, i. e., a classification showing the purpose of the expenditure, such as education, highways, etc. It is also true that an economic classification of expenditures—in terms of wage payments, purchases of goods, transfer payments, subsidies, etc.—would be useful in an appropriations budget, in helping to make reasoned evaluations and in analyzing the impact to the expected.

NATIONAL ECONOMIC ACCOUNTS AND BUDGETARY REFORM

The present form of the Government budget is itself an evolution, shaped to meet certain needs. The primary requirement which it is organized to fulfill is that of accountability. While it is obvious that accountability must be a function of the accounts, it is also obvious that developing accounts solely for this purpose is being penny wise and pound foolish. Actual fraud and dishonesty represent only a fraction of what could be wasted through unwise action. Additional expenditure in developing Government accounts that would be more useful both for evaluating past expenditures and for budgeting future expenditures would be many times repaid through more intelligent and economical decisions. One frequently hears from the legislative branch the complaint that they cannot deal adequately with budget requests. This is in large part a fault of the accounting procedures employed—a defect in linking the individual parts of the program with the overall. There is at the same time a need to deal with a large amount of detail and a need to place the Government expenditure program in the broader perspective of the economy as a whole. Some improvement in this area can be expected through developing better national economic accounting systems which tie in with existing Government accounting procedures. However, the basic problem does not lie in a superficial adaptation to inadequate accounting procedures, but in a reform of the basic accounting itself, so that more meaningful results can be achieved. It will take a great deal of work to develop accounting systems and controls that will serve the needs of the individual agency and at the same time feed into the more comprehensive economic accounts required for the examination of national policy, but such budgetary reform is very badly needed.

The nature of the needed reform can best be shown by a consideration of its major objectives. It must accomplish four things, in addition to providing for accountability with at least as much efficiency as at present: (1) it must distinguish among different kinds of Government economic activity; (2) it must provide a classification system that will show both the purpose of a transaction and its economic nature; (3) it must develop the accounts for individual accounting units in such a manner that they can be combined and consolidated at various levels to provide meaningful summary accounts that will fit into the national economic accounting system; and (4) it must provide a more informative treatment of transactions which are of a capital rather than a current nature.

Definition of accounting units in Government economic activity

The Government engages in many kinds of economic activity. It may be directly engaged in the sale of goods and services to the public at prices intended to cover costs of operation. It may run ancillary operations similar to those found in business, but exclusively for its own internal use. It may take on the nature of a financial enterprise, buying and selling securities on the open market. Finally, it may of course be engaging in a purely governmental activity, hiring employees and performing legislative, executive, or judicial functions. Some of the present forms of Government accounts do implicitly recognize some of these differences. For example, receipts from sales of goods are treated differently for certain Government units than for others. But present definitions of Government economic activities are not very clear-cut, and need careful reconsideration.

Government enterprises, for instance, are separated from general Government in all of the accounts, but questions can be raised both about the manner in which the sales and transactions of these groups are handled and about the activities that are treated as Government enterprises. If these Government-run units are to be considered enterprises, they should operate as enterprises, in that their accounts should include payments for services they now render free of charge to other Government agencies. In the case of the Post Office, for example, some progress has been made by requiring at least partial payment by the executive agencies for mailing privileges. Such reform should be extended to other branches of the Government, and appropriations to those branches made accordingly larger to finance payment. On the other hand, the accounts of Government enterprises should also cover more fully the economic costs they incur. The Post Office, for instance, should take account on a current basis of the cost of the buildings it occupies, in terms of either depreciation or rent, and also of a reasonable accounting allowance for local property taxes. Only in such a manner is it possible to evaluate the cost of the operation in terms of what it might be under other conditions. This argument is, of course, made much of with respect to the TVA.

Similar accounting procedures, furthermore, might well be extended to the ancillary agencies such as the Government Printing Office, and even the General Services Administration. These agencies have as their customers primarily other Government agencies, but their charges should be such as to cover the total cost of the resources used in a fair and equitable manner. For instance, the present treatment of Government buildings might be mentioned. Government agencies that occupies buildings paid for by past appropriations are at the present time receiving the benefit of these past appropriations without any evidence of this in the size of current appropriations. A new agency, on the other hand, will be forced to supply its own office space and other facilities, so that it will be paying for its space out of current appropriations. One of the things that impresses a visitor to Washington is the relative spaciousness of those agencies which have existed for some time and have their own buildings, versus those agencies that rent their space commercially. It can be argued that this is not coincidence, but is due to the form of the accounting system. An accounting reform that would require all agencies to include in their budgets a fair market rental for the space they occupy might

well lead to a more rational distribution of resources. Such a reform, for instance, could be achieved by consolidating all Government buildings under the control of a single ancillary agency, which would rent the properties to the agencies wishing to occupy them. Thus all Government agencies would be forced to make an explicit decision on whether the cost of additional space was worth the price that must be paid to obtain it. There are many similar problems in other areas. In meeting them, what is needed is closer attention to the principles of direct costing.

Economic and functional classifications of Government transactions

Defining the basic accounting units for Government economic activity and outlining the scope of the accounts within these units is of major importance, but it still leaves unsettled the problem of the internal classification of transactions within this framework. The purpose of such classification is to yield pertinent data for evaluating efficiency in performance of specific programs and the economic effects which these programs have on the rest of the economy. Two different kinds of classification are involved. Expenditures must be classified (a) by programs and projects within programs according to the purposes of the operation—agriculture, education, and so forth—and (b) by the economic nature of the expenditure—wages, interest, commodities, transfer payments, and so forth.

With respect to classification by program and project, many dilemmas arise. Appropriations are made in terms of fairly broad programs, and the basic accounting should be in terms of these programs. At the same time, it can be argued that a classification system should be developed in which the same function carried out in a number of different places within the Government is brought together under a single heading. Thus, for example, school building may be aided by a number of different agencies at different levels of Government. It is, therefore, suggested that, in addition to the program or project, there should be a classification by function that cuts across programs. A true classification by purpose, however, raises many problems. Members of the legislative branch have different purposes in mind when they vote for a specific program, and in this sense it may be that any refined approach to purpose is too subjective to serve as a basis for accounting, and that we may have to rely upon the legislative framework, accepting as a consequence the lack of comparability among agencies.

The classification of government transactions by economic nature is necessary to show the economic activity of the Government in relation to the working of the economy as a whole. One way in which this could be achieved simultaneously with a program classification would be to develop a rather elaborate cross-classification showing both the economic nature of transactions and the program of which they are a part. At the most general level such a cross-classification would probably be very useful, and the basic accounts in government units should perhaps be kept on this basis. But there is a great danger that such a system of cross-classification will get out of hand, presenting masses of detail which are essentially of no interest.

The integration and consolidation of the accounts

It is clear that this is the heart of the problem of government budgeting, since it is immediately obvious in view of the conflicting

demands that any single account or tabulation is insufficient for the evaluation of government economic activity. An accounting framework must be developed in which it is possible to move simply and easily from the detailed accounts of individual agencies to summary levels showing the relation of the Government as a whole to the rest of the economy. Neither the detailed accounts or the summary accounts by themselves are sufficient. The detailed data yield large volumes of paper in which all perspective is lost and which cannot be digested. Summary accounts hide much important and useful information in their totals. The combination which is now available—a variety of detailed and summary tables which do not mesh—creates further frustrations through the need for complex reconciliations and the existence of apparent paradoxes. What is required is a gradual consolidation and combination of data at several levels, culminating in a single summary account for all government transactions that will mesh with the summary accounts for the other sectors of the economy.

Capital versus current expenditure

One of the most frequent criticisms of the present government accounts has been that, unlike business enterprises, the Federal Government budget does not recognize the existence of capital. It is frequently pointed out that government accounts in many other countries make a distinction between current transactions and capital transactions, and that in the interest of sound accounting practice the United States should consider the merits of adopting a capital budget.

In its review of national economic accounting, the National Accounts Review Committee gave considerable attention to this problem. It became evident that there are two fairly strong arguments in favor of capital budgets. First, it cannot be denied that many of the expenditures which the Government makes are of a lumpy nature. The construction of a new building or the purchase of machinery and equipment is essentially similar to the purchase of buildings or equipment by business enterprises, in that the expenditures are intermittent rather than continuing, and should not all be attributed to the accounting period in which they are made. Second, the Government does own assets, and if, as has been recommended, national balance sheets are drawn up, these government assets should be shown. In strict accounting logic, if these assets had been considered as purchased on current account, they would have been expensed, and could not appear on the balance sheet.

Further discussion by the committee, however, brought out some equally strong arguments on the other side, which cast serious doubt on the meaningfulness of capital budgets as an analytical tool. With respect to the first argument concerning the lumpiness of expenditures for durable goods, it was pointed out that this criterion should not be restricted to items made of metal, wood, and concrete. There are similar lumpy expenditures of an invisible nature which also give off services in the future. An example is the recent cost of polio injections. It can be expected that this expenditure will have future benefits, and that smaller expenditures will be required at future dates.

Similarly, other expenditures in such areas as education, health, and national defense, could logically be included in the capital category,

in terms of both their lumpiness and their future effects. If it is argued that education will be required every year, the same argument can also be extended to government buildings, since for the Government as a whole it is reasonable to assume that the wearing out will occur every year. There is no reason to expect, furthermore, that the growth required in government buildings would be much different from the growth required for education. The committee concluded therefore that the introduction for general government of a capital budget restricted to durable goods would not be a useful device in developing criteria for government spending. In fact, if such a capital budget were taken seriously, it was generally agreed that it would be harmful. For these reasons, the committee retained the concept of a single account for government outlays, showing distinctions among kinds of expenditure as a part of the classification system.

The committee was impressed, however, by the argument relating to the need for a government balance sheet, and, breaking with traditional accounting procedure, decided to retain an accounting or inventory of assets, despite the fact that the expenditures for acquiring these assets were treated as current outlays.

A thoroughgoing budgetary reform of the nature suggested in the preceding sections would, however, help to solve this dilemma. If the concepts of government enterprises and ancillary agencies were introduced on a consistent basis, purchases of buildings and capital equipment could be treated as investment expenditures by these government enterprises and ancillary agencies. For these groups, capital accounts would be entirely proper, having the same meaning that they do for private enterprises—expenditures that are expected to yield future incomes, and so to be self-liquidating. Payments or transfers from general government to these groups would be current transactions in the general government accounts. Furthermore, assets of a non-income-producing nature owned by the general government, especially such things as parks and roads, would not be considered capital goods in the normal sense of the term, nor would they be considered marketable assets. All marketable assets and self-liquidating capital goods would be segregated into the ancillary agency and government enterprise accounts, where they could be treated as capital. From a budgetary procedure point of view, therefore, it would not be necessary to make a distinction between capital and current expenditures in the general government accounts.