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EXPERIENCES IN THE USE OF SOCIAL ACCOUNTING IN PUBLIC POLICY IN THE UNITED STATES

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INTRODUCTION

A SKEPTIC, asked about the use of social accounting in the determination of economic policy in the United States, might well answer that public policy in the United States has been guided neither by social nor by any other kind of accounting. Although it is true that national accounts have been used increasingly in the debates on public policy, it is difficult to evaluate the contribution that national accounting has actually made in the *determination* of public policies. Unless on guard, the enthusiastic disciple of the new art of national accounting may easily become a victim of delusion, particularly if he has an opportunity to address such a distinguished group of fellow workers. Tō avoid this danger I will emphasize the potential rather than actual use of national accounting. This modification of the topic assigned to me is, I believe, called for by the fact that national accounting in the United States has not yet been used in the same definite operational manner in which it has been used in some of the other countries that are included in this discussion.

In this paper, then, I shall review only briefly (1) the evolution of economic and fiscal policies and national economic accountin the United States; (2) the methods of national accounting that have been developed in the United States; (3) the use that national accounting could have in economic stabilization and other policies in the United States. Finally (4) I would like to close with some comparisons of the role of national economic accounting in countries of predominantly free enterprise with its role in countries with a higher degree of regulation.

Before I enter the subject of my paper, allow me to make a few terminological remarks.

1. The term 'accounting' may be misleading if it is understood to mean that the results are as accurate as business accounting is supposed to be. The term is used in order to suggest that

national economic accounts are tailored for use by those concerned with the formulation of economic policy, just as business accounts are designed for use of business management.

2. I have been referring to economic rather than social accounting, and I hope you will bear with me if I stick to this terminology which I believe is preferable. National economic accounting suggests the computation of aggregates and significant component parts of national income, national expenditures, assets, and liabilities. Social accounting, on the other hand, may be understood to mean an endeavor to measure the welfare aspects of economic transactions. I intend to touch upon the relationship between national economic accounts and the general welfare in the concluding section of this paper, but by using the term 'national economic accounts' I would like to emphasize that no attempt is made to measure social benefits or social costs except to the extent that they are reflected in aggregates and parts of national income and national expenditure.

3. One final terminological comment: National accounts present transactions of the economy as a whole[1] and in significant standardized breakdowns in a manner suitable for use in policy formulation. They denote a specific form of presenting economic data. The data themselves may relate either to the record of the past, or may incorporate forecasts, or may present statements of attainable objectives for the future. I suggest that projections made into the future under various alternative assumptions of policy be called economic 'models'. Models are used to demonstrate the anticipated effects of policies that are under examination.

To the extent that national economic accounts are used as a basis for formulating attainable objectives for the future, they are often called national economic budgets. They should be distinguished from economic forecasts with which I do not intend to deal in detail in this paper.

[1] In this discussion I do not include accounts related only to sectors of the economy as they are presented, for instance, in the international balance of payments, or in accounting statements for agriculture, or in economic accounts for particular regions of the country.

I. THE EVOLUTION OF ECONOMIC AND FISCAL POLICIES AND NATIONAL ECONOMIC ACCOUNTING IN THE UNITED STATES

1. *Estimates of national income for records of past achievements*

The history of economic policies and economic statistics is closely interrelated. At times when economic policy was mainly concerned with trade or production of specific industries and commodities, emphasis was on specific operational statistics of international trade and domestic production.

During these periods, estimates of national income and wealth were mainly of an 'academic' character. These estimates became available years after the event and were used largely for a historical appraisal of economic trends and achievements. They were of interest and significance because they played a role in the ideological battle between the defenders of the capitalistic enterprise system and its social or socialistic critics. Emphasis was on the measurement of the increase in real income and wealth, on size distribution and concentration of income and wealth, and on similar questions. The use of these estimates was not directly related to the formulation and execution of policies.

2. *Measurement of national income and the government net contribution as a basis for compensatory fiscal policy during the depression*

Beginning with the Great Depression, however, public policy became directly concerned with changes in employment, production, and purchasing power on a national basis. Up-to-date estimates of national income were needed to appraise the effect of government policies and as a basis for policy formation.

In this period the government's 'net contribution' to disposable income was computed by economists of the Federal Reserve Board by making adjustments in Federal expenditure and revenue figures.[1] In order to estimate the 'income-creating' effect of the net contribution thus computed, it was necessary to relate it to current estimates of national income, saving, and business investment. These statistical analyses aimed at measuring the effect of fiscal policy on consumer incomes and expendi-

[1] For an explanation of the computation of the government net contribution, see Temporary National Economic Committee Hearings, Part 9, pp. 3528–30 and 4011 and 4017; and an unpublished manuscript entitled 'Review and Analysis of Monetary and Fiscal Policy, 1919 to 1939', prepared by Bertrand Fox for the Committee for Economic Development, 1948. Besides the 'net contribution', the Federal Reserve Board also computed gross figures which have become a regular Treasury publication, Federal 'cash income' and 'cash outgo'.

tures ('multiplier' effect) and on business investment ('acceleration' effect). The appraisal of fiscal policy in the light of national income, consumer expenditures, and business investment during the recovery effort may well be regarded as *the origin of national* economic accounting in the United States. National economic accounting became a necessity when government budgets began to be viewed as a means to aid in balancing the economic accounts.

We cannot claim that during the early part of the New Deal the policy of the Federal Government was guided by the intention to promote recovery through compensatory public spending. It is probably more correct to say that in this period the government found itself impelled to increase spending in order to take care of those who suffered most from the depression. At the same time it simply proved impossible to raise sufficient taxes to meet rising expenditures. Thus income-creating deficits resulted from fiscal and political necessities rather than from a deliberate recovery policy. However, the more sophisticated – and during this period this meant Keynesian-trained – economists in the Federal Government interpreted the result of this policy in terms of the income-creating effect of the government's net contribution.

In 1937, partly as a result of the beginning of collection of social security taxes (without corresponding disbursements of social security benefit payments) the government net contribution dropped sharply. At the same time recovery suffered a very sharp setback. The statistical relationship, shown in the estimates of the government net contribution and national income, was interpreted as a causal relationship, and a program of compensatory fiscal measures was recommended on that basis and submitted in a Presidential message to Congress on 14th April 1938.

Early during the depression the Department of Commerce had taken over the various statistics of national income and expenditures from the National Bureau of Economic Research. Spurred by the increasing use of national income and expenditure statistics for purposes of policy during the depression, the Department of Commerce made great efforts to improve these estimates and to compile them as promptly as possible. At the end of the 1930's these estimates had become a regular element in the Federal statistical service.

3. *Measurement of the inflationary gap during the war*

At the beginning of the defense effort in 1940 the government had much better statistical tools available than at the beginning of the depression; economists also were better trained to use these tools.

Throughout the defense and war period, government economists estimated the anticipated impact of rising military expenditures on national income and the magnitude of the inflationary gap created thereby. These estimates were used for the formulation of wartime fiscal programs, and for appraising the inflationary pressure which had to be dealt with by direct price controls and rationing. While the experts[1] made significant use of projections of national income and production as a basis for the fiscal and economic programs which they recommended, actual policy was determined to a greater extent by what was regarded as politically feasible and acceptable.

Nevertheless, methods for establishing attainable economic objectives in terms of targets for war production, civilian consumption, and price stabilization were greatly improved during these war years. The use of national income and expenditure projections for measuring the inflationary gap and for appraising the adequacy of government programs familiarized not only many economists but also congressmen and businessmen with these new tools of national accounting. The idea of establishing national objectives for the war effort helped to create a concept that was subsequently used also in connection with postwar problems.

4. *Measurement of the task of postwar reconversion*

During the war, in the United States as elsewhere, attempts were made to foresee the problems that labor, business, farmers, and the government would have to face in the task of reconversion from war to peace.

[1] Most of these efforts are incorporated in unpublished office memoranda. The work was carried on particularly in the Office of Price Administration, the War Production Board, the Budget Bureau, the Treasury, and the Federal Reserve Board. One private study by Carl Shoup, Ruth Mack, and Milton Friedman, *Taxing to Prevent Inflation*, was published in 1943 (Columbia University Press, New York). An interesting use of national accounts for purposes of international comparison was made in a report to the Combined Production and Resources Board by a special combined committee, *The Impact of the War on Nonfood Consumption Levels in the United Kingdom, United States, and Canada*, September 1945, Washington, D.C. Some of this work is reflected in a general way in the Budget Messages of the President during the war years, and in testimony of the Treasury and the Office of Price Administration before congressional committees.

One of the earliest studies of postwar problems during the war was prepared in the Department of Commerce and published in 1943 under the title *Markets After The War*. Potential markets for a variety of products were estimated on the assumption of full employment incomes after the war. This study was widely distributed among businessmen and may have aided in raising their sights in preparing for market opportunities in the postwar period.[1]

Towards the end of the war, when measures for facilitating demobilization and reconversion were in preparation, large 'frictional' unemployment was expected to result from the rapid discharge of millions of soldiers and the sudden cancelation of war contracts.[2] Fortunately, no unemployment of such large dimension occurred. This error, however, discredited economic forecasts to a considerable extent, and resulted in a good deal of skepticism among economists and statisticians concerning the ability to forecast. The emphasis was shifted towards a more basic analysis of the factors of strength and weakness in the economy. It was believed more important for policy formulation to indicate the adjustments in economic relations that are needed to approximate desirable goals than to try to predict exactly the turning points in the cycle.

During the depression, attention had been focused on the effect of the government 'net contribution' to disposable income as a recovery measure. During the war period the absorption of some of the war-created 'excess' purchasing power was the main problem. For an appraisal of the postwar problems it was recognized that a greater variety of partly independent factors had to be evaluated. Besides the anticipated reduction in government operations there were the backlogs in consumer expenditures, and the desire of business to replenish depleted inventories and to modernize and expand plant and equipment. Drastic changes

[1] See *Markets After The War*, by S. Morris Livingston, U.S. Department of Commerce, Washington, D.C., 1943. It is of interest to compare the correlation method used by the Department of Commerce with the input-output technique used subsequently by the Bureau of Labor Statistics in the study 'Full Employment Patterns, 1950', *Monthly Labor Review*, February and March 1947, U.S. Department of Labor, Washington, D.C. (see below, p. 86). Here should be mentioned also a study prepared by W. S. Woytinsky for the Social Security Administration, 'Postwar Economic Perspectives', Parts I–IV, in the *Social Security Bulletin*, December 1945, January, February, and March 1946. In 1947 the Twentieth Century Fund published a study of economic objectives and targets entitled *America's Needs and Resources*.

[2] See, for instance, 4th Report, Director of War Mobilization and Reconversion, Washington, D.C., 1st October 1945, p. 13.

in international transactions had to be taken into account, and the effects of each of these changes on all other factors had to be considered. Global estimates or projections of national income, correlated with the government's net contribution, were no longer sufficient. A statement of national income and expenditures, the Nation's Economic Budget, was needed to analyze changes in the significant component parts of the economy and to evaluate them in their mutual interrelationship.[1]

One such attempt was the statement of 'The Government's Budget and the Nation's Budget', which was first incorporated in President Roosevelt's Budget Message of 3rd January 1945. This statement was based on the Department of Commerce estimates of gross national income and expenditures and the Budget Bureau's estimates of the government's consolidated cash budgets.[2] It included a consumer account, a business account, an international account, and a government account. President Roosevelt presented this table as a basis for outlining the postwar task of achieving full employment and economic stability.

Senator Murray's Full Employment Bill of 1945 provided for a national economic budget that was to be the instrument for the formulation and presentation to Congress of an annual full employment program. The final Employment Act of 1946 no longer used the term 'national economic budget' and was less specific than the original bill with respect to the statistical estimates which were to be used as a basis for policy formulation. Nevertheless, the Act still requires the President to submit in his Economic Report (a) estimates of 'needed levels' of employment, production, and purchasing power; (b) a statement of 'current and foreseeable trends' in employment, production, and purchasing power; and (c) a recommendation of economic policies that he deems necessary to achieve the needed levels. This Act thus requires the President to base a review of economic

[1] The first statement of the Nation's Budget was published in an article by Grover W. Ensley, 'A Budget for the Nation', *Social Research*, September 1943, Vol. X, pp. 280–300 (New York).

A group of government economists cooperated with staff members of the National Planning Association in projecting 'National Budgets for Full Employment' (Planning Pamphlets No. 43 and 44, Washington, D.C., 1945). These estimates suggested three different ways in which full employment could be accomplished in the postwar period, either through large government budgets, or through large business investments, or through a high level of consumer expenditures. There were substantial increases – as compared with the prewar level – in all three categories at the same time which partly explains the inflationary pressure that actually occurred in the postwar period.

[2] For an explanation of the consolidated cash budget, see below, p. 84.

programs and his policy recommendations on a statistical statement and an appraisal of economic objectives and trends. I do not think I am stretching the language of the law too far if I say that this legislation suggests that economic policy reommendations be based on national economic accounts as the term has been used in this discussion.

Actually the Nation's Economic Budget statements have been published only for periods of the past in official documents. But estimates for the most recent past have been used as a basis for a qualitative analysis of foreseeable trends, particularly in appraising the inflationary pressures in recent years and the likelihood and intensity of possible future deflationary trends. The appraisal of these trends in turn was used for the consideration of appropriate fiscal and other economic policies.

Only in passing should I add here that this type of aggregate analysis had to be supplemented by other data, particularly on wages and prices. The national budget approach does not lend itself easily to a consideration of the wage-price spiral, which has played an important role in the recent inflationary development.

In the subsequent section I will explain briefly the method of national accounting used in connection with the Economic Reports.

II. METHODS OF NATIONAL ACCOUNTING IN THE UNITED STATES

An Appendix to this paper gives an example of the Nation's Economic Budget in the form in which it is currently used in the President's Economic Reports and in the Reviews of the Council of Economic Advisers. Also given are some details of the consumer, business, international and government accounts for the years 1939 and 1948. The national accounts have been published only for periods of the past. They have been used as a basis for qualitative statements in the text on 'foreseeable' trends and for projections of attainable objectives for selected items.

The table does not need much explanation for those familiar with problems of national economic accounting and budgeting. Basically, it presents a double entry system in which each economic transaction appears once as a receipt and once as an expenditure item.

The breakdown into consumer, business, international, and government as the major accounts is natural for any accounting system which is to be used for policy purposes. The mechanism by which operating decisions are made in each of these categories is different, and different policies affect consumer behavior, business investment, foreign transactions, and government transactions.[1]

It will be noted that the business account includes on the receipts side only undistributed profits and the addition to business reserves after taxes, and on the expenditure side all investment in plant and equipment, new construction, and inventories.

As the table is broken down by consumer, business, international, and government accounts, it shows for each one of these groups the excess of receipts over expenditures or the excess of expenditures over receipts, thereby demonstrating the interlocking of the various elements in the economic system.

Looking, for instance, at the figures for 1948, it is shown that the net savings of consumers, plus the excess of receipts of the government, equal the excess of business investments plus the excess of foreign investments, after some allowance is made for statistical inaccuracies and some other technical adjustments. Thus saving and investment are demonstrated in their interrelationship.

Those who like to relate the national economic accounts more directly to business accounts might prefer to include all gross receipts and gross expenditures of businesses. The inclusion of those gross figures in the Nation's Economic Budget would lead, however, to double and triple counting. Business receipts from consumers, government, and foreign countries are reflected in consumer and government expenditures and exports. Business expenditures are reflected in the stockholders' and workers' incomes, government tax receipts and imports. Therefore it would be necessary to deduct from the gross transactions of business all those that are reflected in other accounts. In the system of accounts which has been used by the Council of Economic

[1] Any attempt to divide the economy into significant sectors runs into difficulties that require more or less arbitrary decisions. For instance, farmers or owners of unincorporated businesses have a 'split personality'. Their net income from business is treated as personal income; that part of their income reinvested in their farms or businesses appears as personal saving; expenditures for inventories, plant and equipment appear as business investment. Also the construction of a home by the owner-occupant is treated as a business investment. Consumer income and expenditures include an allowance for imputed rent.

Advisers and the Department of Commerce business gross receipts and gross expenditures have not been included because no good way has been found that would not complicate these summary statements more than the added detail seems to be worth.

The government account includes Federal, State, and local government transactions. The Federal transactions are based on the consolidated cash budget rather than on the conventional budget. The consolidated cash budget includes all cash receipts from the public in the form of taxes and other revenues. On the expenditure side it includes all cash disbursements to the public. The consolidated budget reflects transactions of general and special Treasury accounts, Government corporations (net), or Federal trust accounts. Expenditures include those for the purchase of goods and services as well as for transfer payments.[1] Only excluded are noncash transactions and transfers among various government accounts. The inclusion of government expenditures for transfer payments in addition to those for goods and services gives a more complete picture of the immediate impact of government transactions on the national economy as a whole than those statements which exclude transfer payments, or than the conventional budget statements. The consolidated cash budget is directly derived from and is reconcilable with the official budget estimates.[2] Government transfer payments are given separately (in lower-case letters) and they can be traced back (allowing for some time lag and statistical discrepancies) through the system because they appear also (in lower-case letters) as consumer receipts from transfer payments, as business receipts, and as government loans transferred abroad in the international account. (See Appendix, Table 1.)

It is by no means claimed that these tables reflect anything like an ideal and complete system of national accounting. This system of national accounts is but one form of presenting

[1] The Post Office, like Government corporations, is treated on a net basis. It would be most logical to classify quasi-commercial Government corporations as businesses which then could be subdivided into private and public enterprises. The present data, however, do not permit a separation of the quasi-commercial from the other activities of Government corporations. (See also the discussion of Administrative Departments and Trading Departments in J. R. Hicks' *The Problem of Budgetary Reform*, Oxford, 1948.)

[2] The consolidated cash budget computation is presented in one of the tables in the Budget document and corresponds to the monthly Federal 'cash income' and 'cash outgo' series published by the Treasury Department (see above footnote 1, p. 77).

national income and national expenditure estimates in what is believed to be a significant and usable combination.

When the need arose for presenting a concise picture of the major component parts of the economy in their interrelationship, it was not possible to start from scratch with a system of national accounting that would fulfill all desirable requirements.[1] A compromise had to be made between the data believed desirable for policy use on the one hand, and the estimates that were readily available. On the basis of methods developed in the Department of Commerce it was possible to obtain quarterly estimates even shortly before the end of the period to which the figures pertain. Thus the Economic Report published at the beginning of January presents preliminary data for the whole preceding year.

It was also believed necessary to tie in the basic concepts of the Nation's Economic Budget with the concepts of national income and expenditure with which the public had become familiar through the work of the National Bureau of Economic Research and the Department of Commerce. Thus the Nation's Economic Budget was so defined that its total is identical with the gross national product. With respect to government transactions, a concept had to be used that permitted ready reconciliation with the official budget estimates in order to minimize public confusion.

While this statement of the Nation's Economic Budget has proven useful for broad policy purposes, it is recognized that a fully developed system of national accounts should also include other information. It is obvious that any attempt to depict the status of the economy in such a highly condensed form must omit much relevant detail and must be supplemented by many other statistics. To mention only one example: the national income and expenditure estimates do not depict changes in assets and liabilities. It would be desirable if national income and expenditure accounts could be supplemented by national balance sheet accounts.

It has been suggested that national economic accounts should flow directly from individual and business accounts. I do not think that it is a defect of these estimates that they are derived

See, for instance, Richard Stone's report in the United Nations publication, *Measurement of National Income and the Construction of Social Accounts*, Studies and Reports on Statistical Methods No. 7, Geneva, 1947.

from statistical estimates rather than directly from business accounts. Business accounts are devised for the purpose of facilitating the management of individual firms. A national accounting system should be so devised as to give the most concise information needed for national economic policies. Estimates of national income and expenditures seem to serve this purpose even though they do not present all the information that would be desirable.

It is very fortunate that fundamental research work in the methods of national accounting is being carried on, for instance, by Morris Copeland, with the support of the National Bureau of Economic Research and the Federal Reserve Board. He is in the process of developing a system of accounts that depicts the money flows in the economy, and relates gross receipts and expenditures (from non-borrowing-and-lending transactions) both to the national income and expenditure accounts and to changes in cash balances, portfolios and debts. But this work is not sufficiently advanced to have these estimates so up to date as the current estimates of national income and expenditures. Therefore they are not yet available for policy use.[1]

I should mention another supplementary development which I believe is of great significance for the projection of national accounts into the future and for policy consideration, namely, the inter-industry relationship studies which have been initiated by Professor Leontief, of Harvard University, and which at the moment are being carried on by the Bureau of Labor Statistics in the Department of Labor. These studies present a system of input-output relationships between labor, raw materials, and industrial facilities[2] on the one hand, and output of a specific commodity on the other hand. When fully developed, these methods will permit the computation of the impact of, for example, changes in government programs on the demand for labor and materials and on needed capacities. This is an essential auxiliary tool in projecting national income and expenditures and translating the aggregates into specific requirements of labor, materials, and facilities.

[1] Changes in liquid assets, as in many other statistical data, are of course considered in the economic analysis even though they are not shown in the Nation's Economic Budget accounts.

[2] Consideration of the dynamic relationship between output and the use of facilities and inventories is still in the exploratory stage. Work in this field is being carried on by Professor Leontief and by the Cowles Commission at the University of Chicago.

III. THE USE OF NATIONAL ECONOMIC ACCOUNTS FOR A POLICY OF ECONOMIC STABILIZATION

I could stop here; I have shown the purposes of policy, particularly fiscal policy, which, during the depression of the thirties and throughout the war and postwar period, stimulated the development of national economic accounting in the United States; and I have mentioned some of the current research work that is going on. Thus I have about covered the facts. I feel, however, that I have hardly touched upon the most important problems with which we are presently concerned. In this section of my paper I will deal with the use of national economic projections or national economic budgets for policies of economic stabilization. Much of what I have to say will refer to work of an exploratory nature.

1. *Economic projections in the President's Economic Reports*

As required by the Employment Act of 1946, each of the Economic Reports has presented a target figure for employment and production that should be reached in the ensuing year in order to satisfy the purposes of the Act. In the Reports of January 1948 and 1949 an attempt has also been made to go beyond the ensuing year and to project objectives into a longer-run future. These projections include the labor force, national income, production, consumption, investment, and a few other items. These objectives have been used as a broad background for the presentation of the President's long-range economic and social programs. President Truman, in his January 1949 Economic Report, referred to the usefulness of setting up such objectives in the following way:

> In order to have a yardstick for appraising strength and weaknesses in our economy and the adequacy of Government programs, we need concrete objectives for economic growth, and particularly standards for a better balance between production and consumption, income and investment, and prices, profits, and wages which will be conducive to sustained economic progress. In the Annual Economic Review of the Council of Economic Advisers, transmitted herewith, there is a detailed treatment of our growth possibilities over the next few years.

The Council of Economic Advisers, in its Annual Economic

Review, which is incorporated in the Economic Report, states the purposes of these projections as follows:

> The Employment Act of 1946 is based on the conviction that our economic system can sustain high and steady levels of employment and production. But such an outcome is not automatic. It will be achieved only if business, workers, farmers, and the Government are guided less by the records of the past than by the possibilities of the future. The Employment Act therefore calls for estimates of the levels of employment, production, and purchasing power needed to accomplish the purposes of the law. . . .
>
> Such economic objectives are not to be confused with economic blueprints or plans used in regulated economies. They are conceived simply as bench marks for the orientation of private enterprise and public policies. Nor are they forecasts of what would be likely to happen without special effort. They depend upon success in accomplishing the objectives of the Employment Act. We present them as an attempt to integrate governmental and private thinking in a way that is essential for making rational decisions.

The Economic Report has not presented objectives of national accounts in all categories. It has only indicated for a number of the most significant areas of the economy the rate of growth that would be required and could be attained under conditions of balanced economic expansion and steady full employment. It estimates, for instance, that under such conditions of full and steady employment the Nation's Economic Budget total (gross national product) should increase by about 3 percent per year in real terms, assuming that the population will increase by about 1 percent. Mining, manufacturing, and agricultural production would increase at a somewhat lower rate, while services would increase somewhat more.

A considerable effort was made to determine the rate of investment which would correspond to the needed addition to plant and capacity. It was estimated that an investment of about 12 percent of a rising gross national product would provide the needed and sustainable expansion of industrial facilities. While, as compared with the prewar period, business investment, government operations and net foreign investment increased at a higher rate than consumption, the projections indicate that consumer expenditures over the next few years must increase by about 4 percent per year in order to reach a balance between expansion of consumer markets and the expansion of productive facilities.

In preparing these target estimates it was necessary to make certain assumptions with respect to component parts that are largely determined by foreign and domestic policy decisions. With regard to domestic policies, enactment of social programs which are now in the recommendation stage was assumed. Concerning defense expenditures, it was assumed that after some further increase relaxation of international tension would permit a moderate reduction. Alternative estimates under less optimistic assumptions have also been prepared.

The preparation of these objectives began with a tentative estimate of the rise in total production which would result from projected changes in the labor force, productivity and hours of work. Then followed estimates of consumer demand, investment needs, international and government transactions. Thus a hypothetical bill of final goods and services was obtained for future years from the demand side. This bill of finished goods was then translated into the estimates of manpower, materials and facilities needed to produce these goods and services. In this step the input-output technique was employed. This final step was used for a check of the original tentative estimates and served as a basis for revision by a process of subsequent approximations. It should be emphasized that the methods as well as the results are largely of an experimental character.[1]

2. *Economic objectives as a guide for economic adjustments*

Stabilization policy requires, first of all, a recognition of the elements of instability. In a period of outright inflation or deflation and mass unemployment, it is not so difficult to discover the general nature of the changes in government operations that are necessary to restore stability or high activity in the economy. If the business accounts or consumer accounts show or threaten to show a substantial deflationary shrinkage or an inflationary expansion, the need for compensatory fiscal measures – possibly along with other nonfiscal policies – is clearly indicated. Economic stabilization policy, however, will not always be designed to deal with these extreme conditions.

In an economy operating at a high level it is often not easy to

[1] A similar method was used first by the Bureau of Labor Statistics in 'Full Employment Patterns, 1950', op. cit. The estimates presented in the Economic Reports, however, go beyond the BLS method by a more detailed computation of investment needs. But we are still at the beginning in the development of adequate methods for the establishment of investment objectives.

determine whether changes within the economy represent desirable adjustments or trends towards instability. In order to identify movements toward adjustments and movements toward maladjustments, we need a concrete concept of those dynamic relationships among the component parts of the economy that are conducive to sustained and balanced expansion.

Some economists try to identify maladjustments by going back to former years and comparing economic relationships in previous periods with those prevailing at the present time. Such comparisons are certainly very useful, but it has been pointed out[1] that they do not offer the full solution to our problem. If we go back to former boom years, let us say 1929, we may use as a 'norm' the very proportions which made the economy so vulnerable to the subsequent depression. Relationships in periods of under-employment, on the other hand, are not applicable to periods of high employment. Confining studies to historical material may appear much less hazardous than embarking on projections into the future. While all projections into the future are hazardous indeed, using the past as a norm may be even more deceptive.[2] The study of objectives to which I am referring takes into consideration past experience as well as changes in technology, institutions, and attitudes. In the light of these objectives it becomes possible to analyze and evaluate recent trends.

The Economic Reports have observed, for instance, that during the inflationary postwar boom the nonconsumption items in the Nation's Economic Budget, particularly domestic business investment and net foreign investment, increased faster than consumer income and consumer demand and accounted for a larger proportion of national output than in any previous peacetime year for which records are available. That was probably a desirable development at a time when business had to replenish its inventories and modernize plant and equipment, and when aid to foreign countries was urgently needed. The Reports expressed concern, however, whether consumer income and expenditures would automatically increase when business investment and international trade assumed more 'normal' pat-

[1] See, for instance, *Report of the Joint Committee on the Economic Report*, 1st March 1949, Washington, D.C.

[2] This consideration must be kept in mind also when using the correlation method for projecting past trends into the future. The input-output technique reduces the reliance on past relationships.

terns. In anticipation that these difficulties would arise when the postwar boom began to taper off, policies were recommended that were designed to mitigate the contraction in private capital expansion and to support consumer demand by such measures as extension of social security programs, stimulation of housing, and preparation of public investment and developmental programs.

3. *Economic objectives as a guide for formulating and appraising specific economic programs and business plans*

Projections have been used not only for identifying economic maladjustments in general, but also as an aid in the appraisal of specific programs.

A start has been made in relating long-range economic programs, for instance for irrigation of land or power development, to long-range economic objectives. Objectives with respect to production of and demand for agricultural products, energy, transportation, etc., can serve as benchmarks for appraising the economic justification of specific government developmental programs. National economic accounts and economic models have been used also in an attempt to examine the economic effect of programs such as those for foreign economic aid and national defense. National economic accounting in a number of foreign countries has been greatly stimulated by requesting the countries cooperating in the United States foreign aid program to submit projections covering the period of the foreign aid program as a means of appraising how these countries propose to use foreign aid in their efforts to become self-supporting.

Some business groups have also attempted to examine their own investment needs in the light of the anticipated growth of the national economy as a whole. Here lies what I believe may be a very promising development. For purposes of economic stabilization, it is essential that the wild fluctuations in business investments be substantially reduced. Fluctuations could be diminished if business could be induced to orient its expansion programs more towards long-range objectives than to short-run fluctuations in the immediate economic outlook. If business has confidence that the government 'means business' in counteracting depressions, it will be more ready to consider anticipated full employment markets as a basis for investment programs. Then it becomes essential that projections of national accounts be made that indicate for the major lines of industry their prospective markets in a full employment economy of stabilized growth.

Economic projections can thereby aid in identifying for government and business orientation the general direction in which the major branches of the economy *should move if* balanced expansion is to be promoted by government and business decisions. Without such projections it would be difficult to determine whether a change in the rate of consumption and investment or government expenditures is in the direction of balance or imbalance.

Thus far, projections have been attempted only for broad categories and for a few very important materials. For an examination of investment needs for specific industries or for an appraisal for specific government programs, it would be necessary to obtain many more details than are now available. This applies particularly, but by no means exclusively, to the appraisal of economic feasibility of specific defense and mobilization programs. Details of needed manpower, specific raw materials, and productive facilities require a much finer breakdown by industries and products. The input-output technique, to which I referred above, can be used for that purpose. The computation of details was limited in the past by inadequate information on input-output relationships, and by the conventional computing devices. More detailed factual information may be obtained from sample surveys that are in the planning stage. In addition, the use of modern, high-speed computing machines opens up new possibilities.

IV. ECONOMIC OBJECTIVES AS A GUIDE FOR POLICY IN AN ECONOMY OF PREDOMINANTLY PRIVATE ENTERPRISE

1. *Projections of an 'imperative' and an 'orientation' character*

This conference is hearing reports about the policy use made of national accounting in countries with a high degree of government regulation and operation and in countries in which government regulation and operation are minimized. I can imagine that some are asking themselves whether there is, in a country of predominantly free enterprise such as the United States, a real place for the use of national economic accounts and national economic objectives.

As I have mentioned before in quoting a statement by the Economic Council, the economic projections or targets that have been used in the United States are of a different character from the plans used in countries with a higher degree of government operation or regulation. All these projections combine statements of what is desirable and estimates of what people are likely to buy under assumed conditions of income and employment.

The projections are to some extent of an 'imperative' character, and to some extent of an 'orientation' character.[1] Imperative statements reflect policy recommendations or policy decisions to be put into effect by appropriate government action. Orientation statements establish benchmarks which serve for guidance in the formulation of private decisions or government programs. They are not intended to be enforced by government action.

The economic plans for a fully regulated economy are predominantly of an imperative character. They decide the allocation of labor, materials, and facilities, and assume that these decisions will be implemented and enforced by a machinery of government controls. There are, however, certain elements in these plans of fully regulated economies which are estimates rather than decrees. Even in fully regulated economies, consumers are given some freedom in the use of their money, and workers in the choice of their jobs, and to that extent the plans reflect estimates of what consumers or workers are likely to do rather than what they are told to do.

The projections used in the United States are predominantly of the orientation character and only to a minor extent of the imperative character. It is true that the Employment Act makes it the responsibility of the government to develop economic programs designed to promote a stable and high level of employment and production. Thus the totals represent goals of production and employment opportunities required by full employment. If reasonably full employment should not be attained through the operation of the free forces of the market, supplementary economic policies designed to bring about that result must be recommended. To that extent there is an imperative aspect in the total.

[1] These terms are suggested by André Marchal in 'Le Plan Français', *Kyklos*, Vol. I, Fasc. 2, Bern, 1947; see also my article, 'The Government Budget and the Nation's Economic Budget', in *Openbare Financien*, January 1948 (Alphen aan den Rijn, N. Samson N.V.).

However, most details are mere estimates. We estimate what we think consumers will buy with a given income and a given income distribution. If consumers should change their habits and buy something different, the estimates must be revised rather than the objective enforced.

The 'orientation' character of the projections of national accounts can perhaps best be expressed by an analogy used by Leon Keyserling, Vice Chairman of the Council of Economic Advisers, in a recent speech.[1] He said that businessmen, workers and farmers are no more compelled to follow the 'prosperity budget' (to use his term) than to heed the weather report. And yet there is a reasonable assumption that the publication of the weather report, and of recognized economic objectives, has a considerable effect on the behavior of individuals or businessmen.

There are only certain elements in the details of the projection which are of the enforceable or imperative character. This is true in the area of government operations and also with respect to certain objectives which depend partly on private, partly on government operations. We are establishing, for instance, certain objectives for housing or medical care in accord with existing or proposed legislation, assuming that the government will take some action if necessary to accomplish the objective. The same is true with respect to other specific welfare objectives.

There are borderline areas as, for instance, in the case of nutrition. It is believed that government measures would be taken if nutrition should fall substantially below minimum standards. To a large extent, the projection can be regarded as reflecting the existing concepts of the general welfare and the extent to which the people expect their government to step in to aid in the realization of the demands for the general welfare.

It should hardly be necessary to add here as a footnote that the projections do not reflect the economist's ideas about what the general welfare is. The economist records what he finds is the people's concept of general welfare. In this he is guided by the actual behavior of consumers in various income brackets,

[1] 'Business and Government in the American System', Third Annual Harvard Business School Conference on Business and Government Relations, Washington, D.C., 9th April 1949. See also Mr. Keyserling's recurrent development on the theme of national budgets for target and policy purposes in three articles in the *New York Times Magazine*, New York, 8th June 1947, 13th June 1948, and 9th January 1949, entitled 'Must We Have Another Depression?', 'The Economic Test: Will We Act in Time?', and 'For a National Prosperity Budget'.

and by what the people expect their government to do as reflected in political platforms, pending legislation, and responsible policy recommendations. It is the job of the economist to sketch out a picture of the economy in terms of national accounts that is internally consistent, corresponds to the requirements of balanced economic growth, and approximates in the best possible way the desired content of the general welfare.

2. *The use of economic objectives in the democratic process of policy formulation*

Liberal doctrine taught that the economic welfare of the community flows from the individual decisions made by millions of businessmen, workers, farmers, and consumers. Through prices and costs, the market provides the guideposts for the individual decisions and integrates them into an interdependent whole. To insure that everybody plays his role according to the rules of the game is the important function assigned to the government.

In this approach the general welfare is not a goal toward which either the individual or the government is consciously working. Rather, it is a *result* of individual and government action. Similarly, as some people believe that health is best taken care of if nobody thinks or speaks of it, laissez-faire theory believes that the general welfare is best taken care of if nobody thinks of it as a direct guide to action. Economic accounts and economic objectives, therefore, have no place in the laissez-faire ideology.

We have learned that this ideology presented a useful hypothesis for analyzing an important aspect of our economic system, but that it cannot reflect the full reality of the modern economy. Large-scale business enterprises, labor unions, and farm groups are making decisions which are partly guided by the signposts of the market, but which also partly determine the market. The 'blind' forces of the market are increasingly modified by group action. In a democracy, group action depends largely on the approval of public opinion. Group action cannot run counter for long to public opinion without inviting restraining legislation. Therefore groups are forced to justify their action in terms of the public interest and the general welfare.

This appeal for public support, however, often pays no more than lip service to the general welfare. The general welfare at present is just as abstract a concept as 'virtue'. It must be filled with concrete meaning before it can be used as an actual yardstick for judging beneficial or harmful aspects of group behavior. In an age of organized group power, free institutions cannot survive unless groups recognize that their own self-interest will be endorsed by the community only to the extent that it does not conflict with, but rather promotes, national economic objectives.

The use of national economic objectives for appraising not only public but also private action will probably require a long evolutionary process. But in discussions of wage policy, of the farm price support program, and of investment policies, we already find that the parties debating a proposal are beginning to ask themselves how a particular measure affects the other groups in the population, and how it gears into national income and employment opportunities as a whole.

It follows that a democratic policy of free institutions requires that substance be given to the concept of the general welfare. National economic projections may become a focal point for democratic debate of what is required by the general welfare. The computation of these economic objectives to a large extent is simply a technical job of translating into figures the requirements of the general welfare on which everybody will agree. There are, however, and there always will be, areas of controversy with respect to the objectives, and particularly concerning the priority of objectives on which public opinion has not yet crystallized. A decision on these controversial issues should be hammered out in lively democratic debate. The estimator reflects but cannot make the decisions of these controversies.

Once estimates reflect the best concrete and quantitative interpretation of the general welfare, economic groups can present their case both in terms of their own self-interest and in terms of the recognized economic objectives. Thus they are forced to reconcile the appeal to their own members with the appeal to the general public. I believe that an economy of free institutions can survive in a period of powerful organized interests only if these groups accept the rules of the game, and also feel obliged to consider their group actions in terms of their contribution to the national economic objectives.

The powerful disintegrating forces which we have in a society of antagonistic group interests must be offset by an integrating force. There is an integrating force which has great vitality, namely, the recognition that the purposes of society are above group interests. In technical language, we would say that there is in each economic situation a relationship among prices and wages, consumption and business investment, private action and government programs which is most nearly consistent with the requirements of the general welfare. The recognition of this essential interdependence of the groups in the whole national economy is reflected in the growing interest in these statistical efforts which we call national economic accounts. This interest in national economic accounts may be regarded as a promising symptom of a growing feeling of responsibility for the effects of group action, private and public, on the national economy as a whole. As the late Budget Director, Harold D. Smith, said: 'Such thinking in terms of the Nation's budget would promote more community thinking and more national and social responsibility.'[1]

Perhaps it may appear paradoxical to regard these national economic objectives as an essential element in the democratic struggle for economic stability, while statements of national blueprints which on the surface appear similar to those of economic objectives are an essential tool of totalitarian economic management. If democratic nations should refuse to use national economic accounts because they appear so similar to totalitarian blueprints, then they would make the mistake which the Soviets made during the early period of 'war-communism' when they rejected bookkeeping in monetary terms for socialized industries as a 'capitalistic' method of management.

National accounting statements are neither totalitarian nor democratic. They can be used in either system. They have, however, a different significance and different use in totally planned economies, in economies with partial controls, or in predominantly uncontrolled economic systems. I have tried to point out the vital role this approach may play in a country that is striving towards economic growth and stability with a minimum of government regulation. But we are at best at the beginning of a promising development.

[1] Harold D. Smith, *The Management of Your Government*, McGraw-Hill, New York, 1945, p. 178.

APPENDIX

by Mary W. Smelker

THE NATION'S ECONOMIC BUDGET

The Nation's Economic Budget is designed to give a synoptic picture of the economy. It shows the magnitudes of income and expenditure of major economic groups, net additions and absorption of saving by these groups, and the gross national income and product. To achieve so much in a single table may be characterized as a *tour de force*, and as with most accomplishments in the latter category some violence is done, in this case to various statistical niceties. Statistics for the Nation's Economic Budget are drawn from various sources and are not always entirely comparable. Statistics relating to the private sectors of the economy are taken from the 'National income and product' series of the Department of Commerce,[1] while the government account is based mainly on 'Cash receipts from the public' and 'Cash payments to the public' as compiled by the Bureau of the Budget.[2]

The alternative to the procedure of combining these two sets of estimates would have been either to use the national income concept of government transactions, which excludes various classes of government receipts and payments, or to place all the accounts on a cash basis. The first alternative was rejected because it was thought preferable to utilize official Budget Bureau estimates of the Federal budget, and because a more restricted set of figures might appear to minimize the role of government fiscal operations. On the other hand, we are not yet able to set up a complete current set of cash accounts. Even if this could be done, however, the familiarity of the national income accounts, and the desirability of reconciling with the total output of goods and services, would be cogent reasons for keeping the Nation's Economic Budget on the present basis.

The gross national product or income includes only certain types of receipts or payments, namely, those associated with current production. Other types of receipts or payments represent transfers of claims using the term in the broadest sense. For example, the govern-

[1] Estimates of national income and product and related series are published for the years 1942 to date in the *Survey of Current Business*, U.S. Department of Commerce, July 1949 and February 1950.

[2] Federal cash receipts from the public and payments to the public represent a consolidation of the United States budget with the capital government trust and corporation accounts. All intragovernmental or noncash transactions have been eliminated. A detailed explanation of this consolidation may be found in the Budget of the United States Government for the fiscal year 1950, p. 1375. A summary of the derivation of cash receipts and payments from budgetary receipts and expenditures for calendar year 1948 was presented in the Annual Review of the Council of Economic Advisers, January 1949, pp. 89 and 90.

ment transfers purchasing power to the recipients of veterans' pensions. Such payments have an important bearing both on government outlays and on the spending and saving of individuals. It was necessary, therefore, in the Nation's Economic Budget to include the main flows of transfer payments in addition to the flows associated with current production. To indicate the distinction, the former are in italics and the latter in roman type. Obviously, only the latter may be totaled to arrive at the gross national product.

Referring to Table 1, government expenditures for goods and services are shown in line 15, and all other government cash payments in line 16 (italics). The receipts of transfers to individuals and government interest are shown in line 2, and included in consumer disposable income. Government cash loans and investments to 'the rest of the world' have also been entered as a receipt in the international account (line 9). While these payments obviously increase the purchasing power of the 'rest of the world', the term 'transfer' may convey the impression that unilateral transfers are included. For various reasons, indicated later, unilateral transfers are considered as a direct goods and service expenditure of either consumers or government and do not appear either as a receipt or investment item in the international account.

In order to show the essential equivalence of income derived from current production with gross national product or expenditure, some adjustments must be made. In U.S. statistics, 'subsidies, less the surplus on current account of government enterprises' is included in national income, but not in the gross national product. A deduction from income is therefore necessary. This adjustment, plus the statistical discrepancy (i.e. the difference between largely independent estimates of income and product) is shown in line 19. Remaining government payments not included anywhere in receipts (e.g. net loans to business, purchase of existing assets, etc.[1]) were netted against adjustments on the receipts side of the account, line 17, in order to balance out savings.

Some additional adjustments are required in receipts because of a lack of comparability in the method of estimating government and private receipts. Discrepancies arise from the fact that in calculating consumers' disposable income, for example, or corporate income after taxes, taxes were reckoned on a liability basis whereas actual collections by the government enter into the government account. Government tax receipts lag behind liabilities; in the case of corporations the lag is as much as a year. The identity of saving with invest-

[1] However, one very large category of loans, crop-secured loans under the price support program, is included in government expenditures for goods and services. The security is included as capital formation of the government, and the loan included in farm income at the time it is made.

TABLE 1

The Nation's Economic Budget, 1948-49

(Billions of dollars, annual rates, seasonally adjusted)

Economic Group	1948, first half			1948, second half			1949, first half[1]		
	Receipts	Expenditures	Excess of receipts (+) or deficit (−)	Receipts	Expenditures	Excess of receipts (+) or deficit (−)	Receipts	Expenditures	Excess of receipts (+) or deficit (−)
CONSUMERS									
1. Disposable income relating to current production	170.5			181.0			178.5		
2. *Government transfers and net interest payments*	15.3			14.7			15.9		
3. *Disposable personal income*	185.8			195.7			194.6		
4. Expenditures for goods and services		177.0			180.6			178.8	
5. *Personal savings* (+)			+8.8			+15.2			+15.6
BUSINESS									
6. Retained business receipts from current production	25.2			28.7			28.3		
7. Gross private domestic investment		42.4			47.6			38.5	
8. *Excess of receipts* (+) *or investment* (−)			−17.2			−18.9			−10.2
INTERNATIONAL									
9. *Government loan transfers abroad*	1.7			0.9			0.9		
10. Net foreign investment		3.4			0.4			1.2	
11. *Excess of receipts* (+) *or investment* (−)			−1.6			+0.4			−0.3
GOVERNMENT (Federal, State, and local)									
12. Tax payments or liabilities	60.2			60.2			56.0		
13. *Adjustment to cash basis*	+1.9			−2.3			1.6		

14. *Cash receipts from the public*	62.1			57.9			57.6		
15. Purchases of goods and services		33.7			39.8			43.2	
16. *Government transfers*		16.8			15.1			16.7	
17. *Cash payments to the public*		50.5			54.8			59.9	
18. *Excess of receipts (+) or payments (−)*			+11.6			+3.1			−2.3
ADJUSTMENTS									
19. For receipts relating to gross national product	+0.8		+0.8	−1.4		−1.4	−1.2		−1.2
20. *Other adjustments*	−2.4		−2.4	+1.6		+1.6	−1.6		−1.6
21. Gross national product	256.5	256.5	0	268.4	268.4	0	261.6	261.6	0

[1] Estimates based on incomplete data.

Note: Items relating to current production of goods and services are shown in regular type. Transfer payments and receipts and subtotals including them are in italics; these items are not included in the gross national product.

Detail will not necessarily add to totals because of rounding.

Explanatory notes:

Lines 1–5: See Table 2, Consumer Account.

Lines 6–8: See Table 3, Business Account.

Lines 9–11: See Table 4, International Account.

Lines 12–18: See Table 5, Government Account.

Line 19: Includes the statistical discrepancy and the current surplus of government enterprises less government subsidies. The statistical discrepancy represents the difference between two independent estimates of gross national product, one arrived at by estimating the income received from current output and one by estimating expenditures for this output. The adjustment for statistical discrepancy brings the estimate on the receipts side into agreement with that on the expenditure side of the accounts.

Line 20: An adjustment is necessary to balance the sum of the transfers on the receipts side with that on the payments side because of the fact that somewhat different bases for measurement have been used in estimating various components of receipts and payments. Most of the discrepancies reduce to a difference in timing between the recording of a receipt and a payment. A correction must be made for the difference between the time a tax liability is incurred or payments are made and the time a receipt is recorded by the government. Payment is sometimes made for goods produced in a previous period; interest payments on a cash basis differ from the accrued interest shown under consumer receipts, etc.

Sources: This table is based on the national income and product statistics of the Department of Commerce, with revised figures for net foreign investment and construction, and on Federal cash receipts from and payments to the public estimated by the Bureau of the Budget.

ment is thus destroyed by the varying basis of tax estimates, unless an adjusting item is introduced.

The magnitude and nature of the adjustments required to go from the income and product basis of accounting to cash receipts and payments is shown in Table 5, the government account. Some remarks on this account follow the discussion of the composition of the private sectors of the economy below.

In considering the third column, additions to and absorption of saving, it should be noticed that the term 'saving' is used in a sense which is not very rigidly defined. Except for consumer saving, which conforms to usual definitions, it more nearly approximates 'additions to' or 'withdrawals from' the income stream. This is especially true

TABLE 2

Consumer Account, 1948-49

(Billions of dollars, annual rates, seasonally adjusted)

Receipts or Expenditures	1948		1949
	First half	Second half	First half[1]
Receipts:			
Personal income arising from current production of goods and services:			
Wage and salary receipts and other labor income	131.3	138.9	136.9
Proprietors' and rental income	49.2	49.8	47.2
Dividends and private interest	11.2	12.1	12.6
Business transfer payments	0.6	0.6	0.6
Total	192.3	201.4	197.3
Plus:			
Net interest paid by government	4.4	4.5	4.6
Other government transfer payments	10.9	10.2	11.3
Equals: Total personal income	207.7	216.0	213.1
Less: Personal tax and nontax payments	22.0	20.3	18.8
Equals: Disposable personal income	185.8	195.7	194.4
Expenditures:			
Durable goods	23.2	23.8	23.4
Nondurable goods	101.8	102.6	99.7
Services	51.9	54.2	55.6
Total expenditures	177.0	180.6	178.8
Personal saving	8.8	15.2	15.6

[1] Estimates based on incomplete data.

Note: Detail will not necessarily add to totals because of rounding.

in the case of the government account which is strictly on a cash basis and contains capital items.

Consumer account

Table 2 shows personal income and its principal components, personal taxes, and a breakdown of expenditures by important classifications. Consumer income includes the net profits of unincorporated businesses after adjustment for inventory valuation and farm proprietors' income. Expenditures for construction of dwellings are considered as a business investment, but other durable goods purchases are included in consumption expenditure. Personal saving is a residual figure derived by deducting consumption expenditures from disposable income.

TABLE 3

Business Account, 1948-49

(Billions of dollars, annual rates, seasonally adjusted)

Receipts or Investment	1948		1949
	First half	Second half	First half
Receipts:			
Corporate profits before tax	34.0	35.6	27.9
Less:			
Corporate profits tax liabilities	13.2	14.0	11.0
Dividends	7.6	8.1	8.4
Equals: Corporate undivided profits	13.2	13.5	8.4
Plus:			
Capital consumption allowances	15.2	16.2	16.4
Corporate inventory valuation adjustment[1]	−3.2	−1.0	3.4
Equals: Retained earnings and additions to reserves	25.2	28.7	28.3
Private domestic gross investment:			
Construction	17.5	18.3	16.6
Producers' durable equipment	20.2	21.1	20.8
Change in inventories	4.7	8.2	1.1
Nonfarm only	4.0	6.2	0.1
Total gross private domestic investment	42.4	47.6	38.5
Excess of receipts (+) or investment (−)	−17.2	−18.9	−10.2

Note: Detail will not necessarily add to totals because of rounding.

Source: Based on estimates of the Department of Commerce.

[1] This adjustment is required because corporate income is reckoned inclusive of changes in the book value of inventory, as is customary in business accounting, whereas only the value of the real change in inventories is counted as current output in the gross national product.

Business account

Business income includes undistributed corporate profits after adjustment for inventory valuation, plus capital consumption allowances on corporate and noncorporate capital, including residences. Gross investment includes noncorporate and corporate investment, including residential construction.[1]

Profits are included after inventory valuation adjustment in business receipts in accordance with the national income and product basis of accounting. The gross national output or product for any period includes only the real change in inventories (net change in physical volume valued at current prices) rather than the change in the book value. An adjustment is therefore made in proprietors' and in corporate net income to exclude income arising from revaluation of existing inventory. (In Table 2, proprietors' income is shown after inventory valuation adjustment.)

International account

In the international account, U.S. Government net cash long-term loans abroad and cash subscriptions to the International Monetary Fund or International Bank for Reconstruction and Development are included as a receipt for the 'rest of the world'. Investment consists of the net balance of payments on current account (or net foreign investment), which excludes that part of the export surplus financed by U.S. gifts, public or private (net). Thus exports financed under ECA or other unilateral aid programs or by private remittances are not represented in the international account. They are included as a direct public or consumer expenditure for goods and services. The excess of receipts or investment (line 11, Table 1) thus shows that part of the surplus of exports of goods and services not financed through public or private gifts or by government cash loans or subscriptions.

From many points of view this treatment is unsatisfactory. It would perhaps have been preferable, in view of the fact that there is more interest in the volume of real exports than in the balance of current payments, to show the entire surplus of exports of goods and services as investment, and the entire means of finance made available by the

[1] In this type of classification the fiction is used that a farmer or businessman who invests his own money borrows money from himself in his capacity as a consumer. The internal consistency of the accounts would be better preserved by substituting for the present consumer account a personal account which on the receipts side would include net personal income plus capital consumption allowances for farms and unincorporated businesses, and on the expenditure side consumer expenditures and personal investment. A corporation account would then be substituted for the present business account. However, this would divide investment into two components artificially, blurring the line between consumer and business-type expenditure.

U.S. Government as a receipt.[1] Net foreign investment has not proved a very significant economic variable in recent periods, since it moves fairly erratically, depending on how much government aid is on a loan rather than a grants basis – a decision sometimes made *ex post facto*.

Similar distortions have been introduced in the government product figures in order to compensate foı the fact that receipts from the sale of surplus property are included in net foreign investment, although production took place in a previous period and was recorded in the gross national product at that time. In order to avoid overstating current gross national product, a compensating deduction is made in current government expenditures for goods and services at the time a receipt from surplus sales is recorded in the balance of payments. (See footnote [5], Table 5.)

Table 4 shows the derivation of net foreign investment from the export surplus; the estimates of net unilateral transfers are from official balance of payment statistics published by the Department of Commerce; loans and subscriptions are on a Daily Treasury Statement or cash payments basis. Thus 'Payments to the International Monetary Fund and International Bank' represent the cash payment to these organizations by the U.S. on subscriptions, and not disbursements by these organizations.

Tables 7 and 8, Federal Cash Payments by Function and by Type of Recipient, give a more comprehensive picture of the expenditures of the U.S. Government relating to international affairs broadly conceived. Table 7 breaks down all Federal cash payments according to major governmental function. The 'International affairs and finance' function includes cash disbursements for foreign aid, including grants whether rendered in cash or in goods,[2] and long and short-term loans; expenses connected with the administration of such programs; subscriptions to the International Bank and the International Monetary Fund; membership in other international organizations such as the U.N., FAO, UNESCO, WHO, IRO, State Department expenditures, etc. It is to be noted, however, that substantial amounts of credit not involving current outlays of cash, e.g. surplus property and lend-lease pipeline credits, have been extended to foreign countries.

The 'international' category in Table 8, 'Cash Payments by Type

[1] In this case, net U.S. grants and private gifts would have to be deducted from government expenditures for goods and services and consumer expenditures respectively.

[2] Unilateral grants included in the international affairs functions differ from those in the international account table because of the fact that the latter are net and are based partly on vouchers and partly on physical shipments, while all items in the cash payment table are on a Daily Treasury Statement basis (partly checks issued, partly checks paid).

of Recipient', differs in several respects from the international 'function', Table 7. Administrative expenses of foreign aid programs are not included in the recipient classification, since such expenses largely fall under wages and salaries of Federal personnel, while a small amount of overseas procurement not in the 'function' has been included in the recipient group. Also, a somewhat arbitrary decision was made to exclude short-term credit from the international recipient classification.

TABLE 4

International Account, 1948-49

(Billions of dollars, annual rates)

Receipts or Investment	1948		1949 First half
	First half	Second half	
Receipts:			
Net long-term loans[1]	1.1	0.8	0.8
Payments to the International Monetary Fund and International Bank[2]	0.6	0.1	0.1
Total government cash loans and investments abroad	1.7	0.9	0.9
Investments:			
Excess of exports of goods and services over imports	7.2	5.4	7.3
Less:			
Net unilateral transfers:			
Government[3]	3.2	4.3	5.5
Private	0.7	0.6	0.6
Equals: Net foreign investment	3.3	0.5	1.2
Excess of receipts (+) or investment (−)	−1.6	+0.4	−0.3

Estimates based on incomplete data.

[1] Includes only cash withdrawals under loan agreements. Does not include noncash transactions such as lend-lease and surplus property credits.
[2] Cash payments on subscriptions.
[3] Does not agree with unilateral aid included in Table 8, which is on a Daily Treasury Statement basis.

Government account

The government account reconciles cash receipts from and payments to the public with the government revenue and expenditure estimates which have been incorporated in the national income and product accounts. It also provides a breakdown of government receipts and expenditures into Federal and State and local components.

In the cash payment series, the receipts of the government corporations have been offset against the expenditures and only the net expenditure has been included. The same treatment is accorded the Post Office because of the quasi-commercial character of its operations.[1] Ideally, government corporations expenditures should be broken down into governmental and commercial and only the latter included on a net basis. So far, this has not been feasible, due to the complexity of the operations of the corporations.

Grants-in-aid to State and local governments are included as a cash payment of the Federal Government and are not counted as either a cash receipt or payment of the States and localities.

The major revenue sources of the Federal Government are shown in Table 6, Cash Receipts from the Public. Expenditures according to major governmental function are shown in Table 7, Cash Payments to the Public. In Table 8, Federal expenditures have been classified by recipient, whether individuals, businesses, foreign countries, or States and localities. In most cases the term 'recipient' means the initial recipient. However, this classification has not been followed in the case of a considerable part of the expenditure for international aid. All aid expenditures have here been included in the 'international' category, even though in many cases purchases of commodities for shipment were made directly from business by the U.S. Government. The same procedure has been followed in the case of State and local aid programs, although the amounts of direct procurement by the Federal Government for these programs are not considerable. Similarly, wages and salaries do not include those of postal employees, the entire deficit having been included as a subsidy to business.

[1] The national income and product accounts include the purchases of government enterprises (in general the Post Office and government corporations) on capital account, their net interest payments and their operating surplus or deficit. See Table III, Consolidated Government Receipts and Expenditures Accounts in the *Survey of Current Business*, U.S. Department of Commerce, July 1949.

TABLE 5

Government Account (Federal, State, and Local), 1948-49

(Billions of dollars, annual rates, seasonally adjusted)

Receipt or Expenditure	1948 First half	1948 Second half	1949 First half
Receipts:			
Tax and nontax payments or liabilities:[1]			
Federal	45.0	44.3	39.4
State and local	15.2	15.9	16.6
Total	60.2	60.2	56.0
Adjustment to cash basis:			
Noncash receipts[2]	−1.1	−1.1	−1.7
Excess of cash receipts over tax liabilities or payments[3]	3.0	−1.2	3.3
Cash receipts from the public	62.1	57.9	57.6
Expenditures:			
Purchases of goods and services:			
Federal[4]	18.7	23.0	25.7
State and local	15.0	16.7	17.4
Total	33.7	39.7	43.2
Other government payments:			
Transfers to individuals	10.9	10.2	11.3
Cash interest payments to the public[5]	4.4	4.4	4.2
Loans to foreign governments and subscriptions to the International Bank and International Monetary Fund[6]	1.7	0.9	0.9
All other[7]	−0.2	−0.4	0.4
Total	16.8	15.1	16.8
Cash payments to the public	50.5	54.8	59.9
Cash surplus (+) or deficit (−)	+11.6	+3.1	−2.3
ADDENDUM			
Federal:			
Cash receipts	47.4	42.6	41.7
Cash payments	35.1	38.7	42.7
Surplus (+) or deficit (−)	+12.3	+3.9	−1.0
State and local:			
Cash receipts	14.7	15.3	15.9
Cash payments	15.4	16.1	17.2
Surplus (+) or deficit (−)	−0.7	−0.8	−1.3

Note: Detail will not necessarily add to totals because of rounding.

TABLE 6

Federal Cash Receipts from the Public other than Borrowing
Calendar Years 1948 *and* 1949

(Billions of dollars, annual rates, seasonally adjusted)

Cash Receipts	1948		1949 First half
	First half	Second half	
Federal cash receipts from the public:			
Direct taxes on individuals[1]	22.8	19.0	18.7
Direct taxes on corporations	11.1	11.1	12.0
Employment taxes	2.4	2.5	2.5
Excises and customs	7.8	8.0	7.9
Surplus property receipts	1.8	0.5	0.7
Deposits by States, unemployment insurance	0.9	1.1	0.9
Veterans' life insurance premiums	0.4	0.4	0.4
Other	2.4	2.1	1.4
Less: Refunds of receipts	2.2	2.2	−2.8
Total Federal cash receipts from the public	47.4	42.6	41.7

Note: Detail will not necessarily add totals because of rounding.

[1] Includes personal income taxes and estate and gift taxes.

Footnotes to Table 5

[1] Personal and indirect business tax payments and corporation tax liabilities. Includes contributions for social insurance.

[2] Consists of deductions from government employees' salaries for retirement funds, and government contributions to retirement funds, national service life and government life insurance funds.

[3] Includes excess of corporation tax receipts over liabilities and excess of personal tax receipts over payments. Cash receipts also include some items of miscellaneous internal revenue not included in tax and nontax payments, such as receipts from sales of surplus property.

[4] Sales of surplus property of 1 billion dollars in the first, and 300 million dollars in the second half of 1948, and 200 million dollars in the first half of 1949 have been deducted from gross expenditures.

[5] Does not agree with net interest paid by government (Table 2) which is on an accrual basis.

[6] See Table 4, International Account.

[7] Includes all other cash payments less noncash payments for goods and services. Other cash payments include net payments by government corporations (except capital formation), net prepayments, and the excess of checks paid over checks issued. Noncash purchases of goods and services include deductions from government employees' salaries for retirement funds and the government contribution to such funds.

TABLE 7

Federal Cash Payments to the Public by Function
Calendar Years 1948 *and* 1949

(Billions of dollars, annual rates, seasonally adjusted)

Function	1948 First half	1948 Second half	1949 First half
National defense	11.1	11.2	12.9
International affairs and finance	5.2	6.1	7.3
Veterans' services and benefits	7.0	6.9	7.2
Social welfare, health, and security	2.2	2.5	2.5
Agriculture and agricultural resources	0.4	2.3	2.8
Interest on the public debt	3.9	3.8	4.0
Other	5.3	6.6	6.6
Deduction from Federal employees' salaries for retirement	−0.2	−0.3	−0.3
Clearing account for outstanding checks and telegraphic reports	+0.2	−0.5	−0.2
Total cash payments to the public	35.1	38.7	42.7

Note: Detail will not necessarily add to totals because of rounding.

Footnotes to Table 8

[1] Excluding terminal leave pay.

[2] Civilian wages and salaries exclude payroll deductions for Federal employees' retirement, and Post Office wages and salaries.

[3] Also includes cash terminal leave pay to enlisted personnel, cashing of terminal leave bonds, mustering-out pay, and payment of government and national service life insurance benefits to veterans' beneficiaries.

[4] Repayments exceed loans.

[5] Includes interest payments on the Federal debt, and a small amount of interest on tax refunds. Interest figures in this table are not comparable with those in Table 2. Interest in that table includes payments to unincorporated business as well as to individuals and is adjusted for certain interaccount transfers.

[6] Consists of cash trust account payments other than payment of social insurance benefits and government and national service life insurance. Such items as repayments of personal funds of military and civilian personnel located overseas which were deposited in trust accounts, and payments of earnings to prisoners of war, are included.

[7] Less than 50 million dollars.

[8] In cash payments to the public, the Post Office is included on a net basis. The whole deficit is shown here as a subsidy, and is included in the business category because the deficit arises primarily out of the subsidy to mail other than first class.

[9] Equals the excess of Federal cash payments to the public over the sum of all other payments shown in this table. Includes mainly government purchases of goods and services from business.

[10] Estimates are on a Daily Treasury Statement basis, which does not necessarily agree with U.S. Government aid as shown in balance of trade statistics.

[11] Includes other government expenditures abroad and payments for memberhip in international organizations other than listed above.

TABLE 8

Federal Cash Payments to the Public by Type of Recipient
Calendar Years 1947 *and* 1948

(Billions of dollars)

Payments to	Seasonally adjusted annual rates	
	1947	1948
Individuals:		
Salaries and wages of Federal personnel:		
Military[1]	3.0	2.7
Civilian[2]	4.6	4.6
Allowances to dependants of military personnel[3]	0.3	0.3
Readjustment benefits, pensions, and other payments to veterans	7.0	5.8
Social insurance beneficiaries	1.8	1.9
Loans to home owners[4]	−0.2	−0.1
Interest[5]	0.8	1.1
Other[6]	0.4	0.7
Total	17.7	17.0
Business and farmers:		
Subsidies and other payments to farmers	0.8	1.1
Loans and investments	0.1	(7)
Interest[5]	2.9	2.8
Subsidy arising from postal deficit[8]	0.2	0.5
Home-mortgage purchases from financial institutions	0.1	0.2
Other[9]	7.4	7.7
Total	11.5	12.3
International:		
Loans and grants, European Recovery Program	—	1.8
Other loans to foreign governments (net withdrawals)	3.6	0.5
Other grants[10]	1.9	2.8
Payments to the International Monetary Fund and International Bank	1.8	0.4
Other[11]	0.1	0.6
Total	7.4	6.0
State and local governments and public agencies:		
Grants-in-aid	1.6	1.8
Interest	0.1	0.1
Loans	(7)	(7)
Total	1.8	1.9
Clearing account for outstanding checks and telegraphic reports	+0.2	−0.2
Total Federal cash payments to the public	38.6	37.0

For notes see p. 110 opposite.