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Volume Title: The National Economic Accounts of the United States: Review, Appraisal, and Recommendations

Volume Author/Editor: National Accounts Review Committee

Volume Publisher: UMI

Volume ISBN: 0-87014-063-9

Volume URL: <http://www.nber.org/books/nati58-1>

Publication Date: 1958

Chapter Title: Chapter VII. Specific problems of main accounts

Chapter Author: National Accounts Review Committee

Chapter URL: <http://www.nber.org/chapters/c6362>

Chapter pages in book: (p. 70 - 96)

(d) Extension of the constant-dollar estimates back of 1929

The committee recommends elsewhere the extension of the current-dollar estimates back of 1929. A similar extension of the constant-dollar series for gross national product and the principal expenditure components is also recommended. Not only would such data be of interest for a closer study of economic growth in this country, but it would be useful in providing a broader base for comparison than the present initial year, 1929, which from many points of view was an exceptional one.

(e) Preparation of a special supplement on constant-dollar estimates

At present very little is published on the methods and sources of data underlying the constant-dollar estimates. Preparation of a supplement to the Survey of Current Business presenting information in substantial detail is important for the proper interpretation and use of these estimates.

(f) Other proposals

A number of other proposals relating to the constant-dollar estimates were considered of lower priority, because insufficient developmental work had been done to merit their being undertaken on an official basis at the present time, or because the quantitative departure from the present or proposed estimates would be small. Among these were the development of constant-dollar estimates of factor input, obtained by adjustment of the current-dollar income estimates by indexes of factor rather than of product prices; and the development of constant-dollar expenditure estimates valued at factor costs as well as at market prices.

The committee also considered the question of developing constant-dollar estimates of certain financial flows, for example, personal saving and undistributed corporate profits. Since these flows do not relate to any identifiable product magnitude, the choice of a price index for adjustment to constant-dollar terms seems essentially arbitrary, and can be determined only with reference to the particular purpose at hand. If, for instance, the amount of saving supplied in recent years should be compared with that of the twenties, one might deflate present-dollar figures by use of a composite index reflecting the price measurement of investment goods, particularly producers' durables and construction. In this case, we measure the ability of saving to finance investments. For other purposes, other indexes may be more appropriate. For instance, if we measure private saving as a reserve for old age, or for financing children's education, or for the case of serious illness, different methods of deflation would be warranted. The committee believes that the selection of the appropriate deflators must be left to the analyst using the data. Therefore, the committee refrained from recommending any attempt to develop a general price deflator for saving.

CHAPTER VII. SPECIFIC PROBLEMS OF MAIN ACCOUNTS

1. THE PERSONAL ACCOUNT

The personal segment of the national income and product accounts covers essentially the consuming public, and therefore incorporates

vital information for the understanding of economic processes and trends. At the present time, the personal account includes mainly the activities of individuals and families in their capacity as income receivers and consumers. In addition, it includes nonprofit organizations, personal trust funds, and private pension, health, and welfare funds.

To make the information in the personal account more useful, four types of revisions and additions to the estimates now prepared should be made as soon as the data permit. First, the account should be deconsolidated in supplementary tables to show separate figures for households and institutions and, within the household sector, data should be shown separately for nonfarm households, farm households, and other households. Secondly, estimates of the purchases, holdings, and depreciation of durable assets of households (including homes, automobiles, and major household appliances) should be prepared in both current and constant prices. Thirdly, supplementary information should be provided on realized capital gains and losses. And, fourthly, in connection with the development of the national balance sheet, it would be desirable to have periodic estimates of unrealized capital gains and losses.⁴¹

(a) Treatment of nonprofit organizations and funds

Since the personal account shows the transactions of the persons and institutions in the personal sector with the other sectors of the economy, the income receipts of nonprofit organizations, personal trust funds, and private pension and related funds are included in personal receipts, and their purchase from other sectors are included in personal consumption expenditures. For the same reason, transactions between households and nonprofit institutions (except wages paid by these institutions to households) disappear altogether from the present national accounts.

The troublesome feature of the present practice is that the nonprofit organizations and financial institutions included in the personal account are organized primarily to provide services, so that they cannot be regarded as consumers. Moreover, even the treatment of financial intermediaries is not entirely uniform. The production activities of mutual financial intermediaries, such as life-insurance companies and investment funds, are included in the business sector, but the net increase in equities in such institutions accruing to individuals is, by a process of imputation, transferred to the personal sector.⁴² On the other hand, nonprofit organizations, personal trusts, and private pension, health, and welfare funds are included entirely in the personal account, so that their current-account activities (regarded as consisting solely of the payment of wages and salaries) are counted as income originating in households. As a result of this rather complicated treatment, all savings accumulated for the benefit of individuals, either in their own accounts or in the accounts of funds or mutual financial intermediaries, are counted as personal saving.

⁴¹ Recent changes in methods of income disbursement call for a review of the methods of compensation and of withdrawing incomes from corporations. The subject is treated below in ch. X, sec. 9.

⁴² Specifically, premiums and other remittances paid by individuals to life-insurance companies and other mutual organizations and cash benefits received by individuals from them are treated as though they constituted transfers among individuals and hence are omitted from the accounts, and the income and operating expenses of these intermediaries are treated as if they were income and purchases, respectively, of households.

Three possible approaches were considered by the committee to remedy the deficiencies of the present treatment.

First, the present coverage of the personal account might be retained, but personal trusts and private pension, health, and welfare funds could be treated at life-insurance companies are treated at the present time. The magnitudes shown for personal income, personal-consumption expenditures, and personal saving would remain as they are now, but the production activities of the trusts and funds would be removed from the personal account. To distinguish the incomes, savings, and investment of nonprofit organizations and financial intermediaries from the corresponding figures for households, it would be necessary to provide additional supplementary tables showing a breakdown of the personal account between households and institutions. The disadvantages of this approach are: (a) Nonprofit organizations cannot be regarded as households and (b) the motivations and operations of personal trust funds and private pension, health, and welfare funds are different from the motivations and operations of households.

Second, all nonprofit organizations and mutual financial institutions now included in the personal account might be treated like businesses, and the present imputation of the increase in equities of mutuals to households eliminated. Although this approach would clean up the personal account, it would be inappropriate to treat the savings of nonprofit organizations, and particularly of mutual financial intermediaries, in the same way as the undistributed earnings of corporations.

Third, all nonprofit organizations and mutual financial institutions (including mutual life-insurance companies and investment trusts) might be combined into a new sector having its own articulated account. The advantage of this approach is that it would combine into a single account all mutual financial intermediaries and other institutions not in corporate form managing funds that belong to individuals or that eventually are paid to them in the form of pension, health, or welfare benefits. However, this improvement would be obtained at a substantial price, since the addition of a new articulated account would complicate the national income and product tables and would require the estimation of some crossflows between the new account and the other accounts which have relatively little practical significance, although other crossflows that would be shown for the first time are of considerable size and interest.⁴³

Although a solution that would satisfy all theoretical as well as practical requirements is not possible, a majority of the committee felt that, on balance, the first approach should be adopted. In arriving at this decision, the majority was fully aware that the third approach would provide an accounting structure that better fits the realities of the Nation's economic organization. However, it was persuaded that the practical difficulties of setting up a new articulated account out-

⁴³ Among the complications created by this solution are the following: (1) A separate line would appear in the product table showing the imputed value of the services provided without charge by nonprofit institutions; (2) expenditures that are now included as a single total in personal-consumption expenditures (e. g., the cost of education provided by nonprofit schools and colleges) would be divided between personal-consumption expenditures and expenditures by nonprofit organizations; and (3) transfers from government and business to nonprofit organizations and institutions would have to be taken into account explicitly in reconciling gross national product and personal disposable income.

weighed the advantages that would be derived, particularly since it is possible to provide adequate breakdowns to permit the separation of the activities of institutions and households. Moreover, the transactions of the institutions and mutual organizations that might be included in the new account, though important, are small relative to the totals for the economy as a whole. Finally, no other country has a separate account for nonprofit institutions and mutual organizations, so that the change would not contribute to international comparability.

Accordingly, the only change we recommend is that personal trusts and private pension, health, and welfare funds be treated as life-insurance companies are now treated. However, we strongly urge that separate receipt and outlay tables be provided, at least on an annual basis, for each of the major categories of organizations in the personal account—particularly for the financial organizations on the one hand and for institutions like churches, labor unions, foundations, and colleges on the other—so that the user can make the combinations that best meet his needs.

There are no very serious statistical difficulties in obtaining separate data on the receipts and outlays of nonprofit organizations and private pension, health, and welfare funds. The committee recommends, therefore, that this be done immediately. However, the data on personal trust funds are still too poor—particularly for the funds not administered by banks and trust companies—and not sufficiently current to make this separation feasible at the present time. When data are available—and every attempt should be made to obtain them in the near future, in the interest of providing the basis for more adequate analyses of the capital markets—the receipts and outlays of personal trust funds, at least those administered by banks and trust companies, should also be shown separately.

The committee has also considered the possibility of transferring the Government retirement and other employee trust funds to the personal account, since the operations, at least of the State and local government retirement funds, are fundamentally similar to the operations of private pension, health, and welfare funds. We believe, however, that, on balance, it would be desirable to keep Government retirement funds in the Government account, particularly those of the Federal Government. In the first place, the largest of the Government funds—the Federal old-age and survivors insurance trust fund—is sufficiently different from private pension funds to warrant separate treatment. In the second place, transferring Government funds to the personal account would introduce still another deviation between the official figures on cash receipts and expenditures of Government agencies and the corresponding figures for Government in the income and product accounts. Moreover, the receipts and outlays of Government funds are already shown separately in the national income supplement in sufficient detail to permit interested users to treat like private funds all Government retirement and other employee trust funds (including Federal, State, and local funds) when this is preferable for their purposes.

(b) *Classification of households*

Eventually, the national accounts should provide separate estimates for the transactions of at least three major groups of households in the personal sector: (1) Households of farm entrepreneurs; (2)

households of nonfarm entrepreneurs (including, and possibly separating, the households of self-employed professionals); and (3) other households, i. e., primarily those of wage and salary earners and retired persons. Unfortunately, data are not yet available to make such a subclassification to a satisfactory degree of accuracy.

A first step in this direction has, however, been taken in the survey of farmers' expenditures in 1955 by the Department of Agriculture, which, on the basis of a sample of farm households, provides an estimate of farmers' personal and business income and expenditures. The committee endorses the attempts of the Department to put this survey on an annual basis, and urges that the results be made available in time to be used in the preparation of the annual national income and product estimates, i. e., not later than the middle of the year.

Difficulties are admittedly much more serious in the case of nonfarm entrepreneurial families, even if no effort is made to separate business from household activities. (See discussion in ch. V.) No attempt that has as yet been made to obtain income and expenditure data for this group of economic units has been really successful. These units are, however, so important for many aspects of national accounting—not to speak of their importance for economic and social policy—that these attempts must be continued and, indeed, must be accelerated and intensified, as will be stressed in chapter XI, section 2 (a). Until satisfactory data become available, all nonfarm households will have to be retained as a sector of the personal account without distinction between entrepreneurial and other nonfarm families.

So long as there is reasonable hope of obtaining data on nonfarm entrepreneurial families, the committee is loath to recommend as a compromise a shift of business income and expenditures of nonfarm entrepreneurs to the business sector that would involve estimating—rather arbitrarily—proprietors' withdrawals as the bulk of nonfarm entrepreneurs' income in the personal account.

Another breakdown of the personal account that is important for economic analysis is a classification, by size, of family income. The available size distributions are based, to a large extent, on meager data, and a substantial effort should be made to improve the statistics underlying them. Our recommendations for making the necessary improvements are contained in chapter X, where the problems of constructing income-size distributions are discussed in some detail.

(c) *Treatment of consumers' durables*

Outlays on consumers' durables other than houses are now treated as current expenditures and, hence, are not taken into account in the calculation of saving or capital formation.

Some members of the committee regard this treatment as unsatisfactory for at least five reasons. First, treating consumer durables as current expenditures runs counter to the principle that whatever is regarded as part of reproducible national wealth—and few would exclude items like automobiles, household appliances and furniture—must also be included in capital expenditures. Second, since the services of consumer durables outlast the period in which they are purchased it may be, and often is, misleading and exaggerates fluctuations in actual consumption if a year's purchases are equated with the services of the stock of consumer durables. Third, exclusion of consumer durables from capital formation violates the principle of invari-

ance. As consumers switch from patronizing streetcars and commercial laundries to the use of their own automobiles and their own washing machines the national accounts register a decline in capital formation though in reality all that has shifted is the ownership of the stock of urban transportation or laundry services. Fourth, one important category of consumer durables, household machinery, has become so much an integrated part of the house that a distinction between the bare frame of the house and the equipment in it appears to be arbitrary. Fifth, consumer durables are often bought on credit. To regard an increase in debt on consumer durables as dissaving but not to include the acquisition of the durables themselves in saving is not likely to lead to figures useful in the analysis of the saving process or the capital market.

In all these respects consumer durables appear to be entirely similar to owner-occupied homes. These, however, are capitalized in our present national income accounts, i. e., they are excluded from current expenditures, but instead, depreciation allowances are added to current expenditures and estimates of the use value (equated to imputed net rent) is added to consumer income. Mortgage debt on owner-occupied homes is, of course, treated as a component of dissaving. The committee minority would like to see the basic economic similarity between the major consumer durables and owner-occupied homes recognized by equality of treatment in the national income and product accounts.

The majority of the committee, however, felt that it would be better to leave the accounts as they are on the ground that the change would, on balance, lessen the usefulness of the basic figures for purposes of economic analysis. In the first place, many items purchased by consumers last more than 1 year (e. g., pots and pans, linens, house furnishings, tennis rackets, clothing, etc.), and it would clearly be undesirable to regard many of them as capital expenditures. Any dividing line that would be drawn between goods bought by consumers that should be capitalized and those that should be treated as current expenditures must inevitably be arbitrary. Second, few consumers regard their outlays on durables as savings. Thus, most people would find it hard to interpret a figure for consumer expenditures which excluded outlays on an arbitrary list of durable goods and included depreciation on such goods. Third, the fact that some consumer durables are purchased on credit hardly distinguishes these consumer purchases from many others. In recent years, credit for financing the purchases of services and goods that are now classified as non-durables has risen sharply. From the standpoint of setting up balance sheets for households, it would be impossible accurately to allocate consumer debt (other than mortgages) to particular assets except on a rather arbitrary basis. Finally, it would be possible to show in supplementary tables the purchases, stocks, and depreciation of selected consumer durables to enable users to treat them as capital expenditures, without impairing the simplicity and clarity of the data on consumer expenditures.

Although the committee is divided on the appropriate treatment of consumer durables, it is unanimous in recommending that the national income and product tables should provide an integrated set of estimates of purchases, stocks, and depreciation allowances of the

major consumer durables. This would enable users who so desire to calculate a broader measure of capital formation and personal saving than is now currently available. Users who want also to allow for the use value of the stock of consumer durables to complete the parallelism with the treatment of owner-occupied houses would, however, still have to make their own estimates, as the majority regards these as too speculative to be undertaken by a Government agency.

(d) Treatment of capital gains and losses

Some very important problems are posed by the treatment of capital gains and losses, both realized and unrealized. Since they concern mostly the personal account, though they also affect the business and government sectors, they are treated at this point in the report.

At present, realized and unrealized capital gains and losses are excluded from the national income and product accounts—as well as from other segments of the system of national accounts—on the argument that capital gains and losses do not reflect output; nor can they be regarded as transfer payments. (The latter interpretation would be possible only in cases, such as gambling gains and losses, in which one party's gain must be at least balanced by another party's loss.) This treatment may satisfy those who regard the national accounts exclusively as a measure of output of the economy. It is difficult to reconcile with the fact that both realized and unrealized capital gains and losses may, and probably do, affect the behavior of consumers and producers; and with the further, and possibly more significant, fact that realized capital gains and losses represent additions to or reductions in recipients' purchasing power which are quite similar in distributional effect and in some, but not all, other respects to their ordinary income.

Although the committee does not recommend a change in the concepts of national income and product, we suggest that an effort be made to provide estimates of realized and unrealized capital gains and losses in view of their significance for many types of economic behavior and analysis, both in the short and in the long run, as well as for economic policy; and, because of the importance of the figures, for a reconciliation between cumulated current saving and changes in the current value of assets and net worth.

We recommend, therefore, that the National Income Division should develop estimates of realized capital gains and losses for each sector, distinguishing the main types of assets on which such gains and losses arise, i. e. primarily corporate stock, real estate, and inventories. (In the latter case, the necessary estimates are already being made by the National Income Division in the form of the inventory valuation adjustment.) The main source for these estimates will be Statistics of Income, but more detailed tabulations than are now available will be needed. These estimates will have to be prepared in such a form that they can be combined with current income in the computation of a broader concept of income. The preparation of statistics of income including and excluding capital gains and losses is particularly important for distributions of personal income by type and by size.

Attempts should also be made to develop estimates of unrealized capital gains and losses, possibly by the organization which will pre-

pare national balance sheets. These estimates should be made for each sector distinguished in the system of accounts and for each of the major types of assets subject to substantial fluctuations in value. This would exclude claims and liabilities having a fixed value if calculations are carried through in current prices, but would have to include them if the estimates are expressed in constant values because in that case unrealized capital gains and losses will arise also for assets and liabilities which are collected, or discharged, at face value. All these estimates of unrealized capital gains and losses will necessarily have to be very rough; but they are important enough, e. g., for the explanation of changes in the distribution of wealth, to justify the effort to tie them into a system of national accounts.

2. THE GOVERNMENT SECTOR

(a) *Conceptual problems*

(1) *Government domestic interest payments.*—In the United States system of national accounts, interest payments on the Government debt are excluded from the income and product total in the same way as transfer payments. While few disagree regarding transfer payments, there are substantial differences of opinion concerning the treatment of interest payments. The committee has not tried to produce a final theoretical solution of this problem. We are setting forth first arguments advanced for treating Government interest payments like transfer payments then arguments for regarding all interest payments as factor costs. While the committee was not unanimous on this theoretical question, the great majority agrees in its practical recommendation which will be presented later in this section.

The following is the trend of thought which leads to the treatment of Government interest like transfer payments.⁴⁴ Transfer payments are excluded from gross national income and product totals because these payments have no counterpart in the production of goods and services in the same accounting period. The criterion does not depend on whether or not the relief recipient or the veteran has "earned" these payments by his previous services, but rather on whether these payments were received in the accounting period, without a corresponding production or service in that period.

A similar reasoning has been applied to the interest on the war debt. Both with respect to the care of war veterans and the cost of borrowing an argument could be made that these expenses should be considered in a computation of the costs of a war. Nevertheless, after the war is over, payments to war veterans and payments to the holders of war bonds are made for a service in a period of the past; there is no counterpart in production during the years when these payments occur.

The suggestion that interest payments on the war debt should be treated like transfers originated in the post-World War I period. It was argued that the inclusion of interest on the war debt as a part

⁴⁴ Some theorists have taken the position that all interest payments by producers are essentially like dividends, i. e., a distribution of profits. In this view it might be proper to consider both interest and dividends as transfers in the system of national economic accounts. Government interest would then also be viewed in this light and considered as a redistribution of income collected by taxes. Consumer interest in such a theory could either be considered as a transfer or a payment for specific services. The majority of the committee has not accepted this line of reasoning.

of national income would lead to absurd results. Could one say that a country becomes poorer by avoiding or redeeming a war debt by high taxation or wiping out a war debt by inflation, repudiation, or currency reform? Or could one say that a country becomes richer if it raises the interest rate on all war bonds?

Certainly, all such measures would affect total production of goods and services favorably or unfavorably. These effects are measured by the usual estimates of total income and production. In this view, there is no additional effect which should be measured by counting interest payments on the war debt as a payment for a current factor of production.

The question must then be asked why are interest payments on, e. g., bonds issued by an industrial enterprise included in the national income and product total? The reason is that generally there exist tangible assets which have been financed by bonds and these assets contribute their services to production during the period when interest is paid. Thus, there is in this case, a simultaneous counterpart to production which would be neglected if interest payments on commercial debt were not included in income and production totals. This is apparently the reasoning why the National Income Division makes the distinction between payments of Government interest and private interest. The assimilation of Government interest to transfers thus rests exclusively on the argument developed with respect to the war debt. How about the interest on Government debt issued for financing assets, such as roads or schools or municipal waterworks that contribute services to current production?

Proponents of the opposite view, who recommend that all payments for interest be treated as factor payments like salaries and wages, do not face this difficulty. They argue, in the most general way, that no Government or private individual or business firm is willing to pay a price unless a service is rendered worth the price. Thus the fact that interest is paid proves that there must be a service performed and that there is no need to search any further to find out what kind of contribution to the national product has been made.

Those who argue for inclusion of all Government interest in national product, but are not satisfied with the mere fact of market acceptance as justification for treating all Government interest as a factor payment, have advanced two different reasons. Some have suggested that the community which approves borrowing for wartime purpose determines that it prefers investment in war to investment in factories or roads. Government interest payments thus would reflect the services of defense and self-preservation arising out of the war—services which might otherwise have reflected investment in civilian economy. If it is asked how such interest commitments would be considered if war should bring defeat, proponents argue that in that contingency the interest on the war debt would be comparable to that on a business investment which turned out to be a failure. If interest is paid under those circumstances, so the reasoning continues, it represents the price which the community is willing to pay for an asset, namely, for avoiding the undesirable consequences of repudiation. The asset is the preservation of confidence in the Government's credit, and possibly the currency, which would be impaired by repudiation in one form or another. This seems a farfetched argument, but it maintains the criterion that there must be some use-

ful, even though imaginary, asset corresponding to the debt and that the interest payment is considered to be equivalent to the service of that asset.

The second argument raises an even more fundamental question. It denies the necessary and direct relationship between financial claims and tangible assets, between income and production. Rather, incomes are considered to be derived on the basis of contracts. A worker earns his wage on the basis of a contract. Even if he should (unnoticed by the employer) idle on the job and make no contribution to production, he still receives his wage. An inventor who has sold a patent may receive royalties under a contract even if it turns out that his invention is not used. Likewise, an investor in private obligations acquires a claim for interest payments irrespective of whether or not the firm has succeeded in making productive use of the capital. There is a relationship between incomes and production in the economic process, but that relationship is too complex for use in distinguishing between payments for factor costs and transfer payments, or between incomes received from current production and transfer incomes. In the last consequence, this view leads to the conclusion that national economic accounts can only depict the flow of funds and that it is futile to try to identify and separate the payments and receipts which represent production of goods and services and their disposition.

Most members of the committee, while recognizing the logical consistency of this position, believe that the purposes for which national accounts primarily are used cannot be served merely by tracing a flow of funds without relationship to production and disposition of goods and services, and that such a mere description of flows without distinction of their economic character does not satisfy even the requirements of business accounting. They acknowledge that relating the flow of funds to production requires some more or less arbitrary assumptions for which no more can be claimed than that they are reasonable and useful in economic analysis. It is true that there are exceptions to the rule that interest payments on private debt have a counterpart in a contribution to production in the same accounting period; it is also true that the interest payments may not always adequately reflect the real contribution to production. Nevertheless, there is no better and simpler method available for accounting for the services of the assets financed by credit. The interest on the war debt however is too large an item—it is now on the order of \$5 to \$6 billion a year—to be considered just another exception to the general correspondence of interest payments and continued contribution of an asset to production.

The committee generally, therefore, does not disagree with the present practice of treating the interest on the war debt like a transfer. It does object, however, to the practice of treating interest on all other Government debt, particularly on the State and local debt, in the same way. Since by far the largest part of the Federal debt is the war debt, it is not a matter of urgency to attempt a separation between the part of interest payments which must be attributed to the war debt, those which must be attributed to deficits in current accounts, and those which reflect the acquisition of assets contributing to current national product. The committee is willing to accept for the present the National Income Division's treatment of Government interest as

far as the Federal interest payments are concerned. The State and local debt—approaching \$50 billion—involves estimated annual interest payments of more than \$1 billion, to which the war debt argument does not apply. The committee recommends, therefore, that in the future, the interest on State and local debt be treated as a part of the income and product totals on the assumption that they reflect the continuing contribution to production of assets financed by the issue of these loans.

This proposal is advanced as a practical interim solution. It cannot be regarded as the final answer because this solution still does not account for the services of Federal assets in general and of those State and local assets which have been financed by current revenues. A final solution consistent with the treatment of interest in the private sector would include that part of Federal interest payments which could be regarded as reflecting the services of Federal assets; and an imputed interest payment for those State and local assets, on the basis of the interest rate actually paid for the assets which have been financed by borrowing. Such a more nearly complete accounting for the services of all Government assets should be adopted only after an inventory of Government assets has been obtained in connection with a comprehensive national wealth and balance sheet account. (See ch. VIII, sec. 2c and ch. XIV, sec. 5.)

(2) *The treatment of Government transfer payments and payments of Government interest abroad.*—The present treatment of Government transfers to and from foreign countries in the National Income Division's statistics leaves much to be desired. At present, Government transfers to and from abroad are netted and included among Government expenditures on goods and services. Government payments to and from abroad include two kinds of transactions: First, grants of funds or drawing rights which essentially facilitate other countries' imports from the country giving the transfer or from third countries; and second, transfers in kind, e. g., goods given by one government to another.

In the case of consumer transfer payments, the transfer is recorded as an income item or source of funds to the individual consumers receiving the transfer payment, and the resulting expenditures by consumers are reflected in gross national product. If the same treatment is followed for international government transfer payments, the transaction would be recorded in the Government account as a transfer and in the international trade account as a payment to abroad. If the transfer were in the form of credit or cash, the foreign country would be recorded as using this credit or cash for the purchase of exports, much as in the consumer account the recipient uses his transfer payment for consumer expenditures. If the payment were one in kind, the same fiction would be maintained. In the case of military aid, exports would show the shipment of munitions as a transfer payment recorded on the other side of the ledger. In cases where the Government drew down existing assets, e. g., defense goods, it would be necessary to show this as sales by the Government to abroad in the Government account much in the way other surplus sales are shown in the Government account. They would also, of course, appear as exports to the countries receiving the transfer in kind.

By treating transfers by the Government to and from abroad in this manner, greater explicitness would be introduced into both the

Government account and the international trade account: the export and import figures would reflect the actual movement in goods and services, and transfers would be shown in their proper role as part of the financing of such movements.

The proposed change in the presentation of international transfers in the Government account should correspondingly be applied also to other transactions such as the payment of interest to foreign holders of Government bonds. At the present time an inconsistency exists in the treatment of Government interest payments in the balance of payments and the rest-of-the-world account on the one hand, and in the Government account on the other. In the international account, payment of interest, irrespective of whether on private or Government loans, is treated as paid for a service; in the Government account, it is treated as a transfer.

If we think in terms of a worldwide system of economic accounts, Government interest paid or received should be treated the same irrespective of the residence of the bondholder. For a national account, however, one can see some justification for treating Government interest paid to a foreign bondholder differently from that paid to a domestic bondholder.

Nevertheless, in the interest of consistency, the committee proposes that property income paid to or received from abroad be subdivided between Government interest transactions and all other property income transactions. Government interest received from abroad should not be included in the amount of export and service receipts which go to make up the property income segment included in gross national product (cf. ch. V). This recommendation is complementary to the proposal that Government interest payments, like all transfer payments, should in general be excluded from Government purchases of goods and services, but that an imputed allowance for the current service of Government assets should be made.

(3) *The problem of intermediate Government services.*—One of the most difficult conceptual problems of national economic accounting is the propriety of including all Government expenditures for goods and services as component parts of the gross national product. It has been much debated in the guise of the appropriate treatment of "intermediate" Government services.⁴⁵

The argument is that some Government services become embodied in the value of private goods and are counted twice under present practice, once in the production of private goods and once in the value of goods and services of the Government. Without passing on the theoretical merits of the case the committee believes that an attempt to differentiate intermediate from final product in the Government account would give rise to too many controversial questions of classification to be embodied in the near future into the official national accounts. The committee also is uncertain whether the refinement resulting from eliminating a possible source of double counting would outweigh the possible introduction of additional sources of error. After weighing the arguments on both sides the committee thus decided it could not endorse separation and exclusion of intermediate Government services from national product.

⁴⁵ See, e. g., *Studies in Income and Wealth*, vols. 1, 1937; 20, 1957; 22 (in press).

However, the committee recommends that an attempt be made, preferably by a private research organization, to work out, both in general and in quantitative terms, a separation between Government services whose benefits accrue to the individual consumer, nonprofit private institutions, business, or other governmental units, and those services (e. g., national security, tax collection, and other administrative expenses) which do not fit into such classification by beneficiaries. Once such a distribution were successfully worked out, so that it could be kept up to date in the official national accounts, analysts would be enabled to make their own adjustments in the Government account and in the national product and income total.

(4) *Current surplus of Government enterprises and subsidies.*—The National Income Division's system of accounts treats subsidies, i. e., monetary grants provided by Government to private business (including payments to farmers) differently from transfer expenditures. The subsidies are considered to be included in the gross return of business, and, therefore, reflected in profits and farm incomes. A compensating deduction is, therefore, made in computing the gross national income. With this treatment of subsidies we do not disagree.

However, the National Income Division deducts the subsidies from the current surplus of Government enterprises and enters only the net figure in its national accounts, with the result that neither subsidies nor profits of Government enterprises are shown separately. The committee recommends that subsidies and profits (or losses) of Government enterprises be entered separately in the gross national income and product account in a manner parallel to the treatment of transfer receipts of corporate and noncorporate private enterprises.

The National Income Division justifies the present netting of subsidies and current surplus of Government enterprise by the difficulties in ascertaining the subsidy payments to Government enterprises. We recognize these difficulties, but recommend that an effort be made to obtain the data needed for a separate estimate of these items, each of which is of interest to the analyst.

(b) *Classification of Government expenditures*

A functional classification of Government expenditures should be developed which is applicable not only to Federal, but also to State and local government. For the Federal Government the functional classification system appears to be well developed. However, the same definition for "national defense" expenditures should be used both in the budget and in the national accounting classification. Procurement for military foreign aid should be shown as a special item under national defense expenditures but in such a manner as to make it clear that it is not included in the gross national product summation. United States representatives to international organizations should attempt to have the same definition also used for purposes of international comparison. If, for certain reasons, different classification systems are needed for domestic purposes and for international comparison, a reconciliation should be published in the national income supplement.

Special analysis D of the Budget Document separates current expenditures, outlays for aid and development programs, and additions to Federal assets. We propose that a similar classification of Government expenditures be adopted for the national accounts. Some of

the data in special analysis D are on a net basis—that is, capital expenditures are shown after deduction of certain revenues. For the national accounts, however, an attempt should be made to present, as far as possible, gross outlays for the acquisition of assets.

The additions to Federal assets should separate those for defense and those for nondefense purposes. Additions to defense assets should further distinguish between: (a) Military construction and construction equipment, (b) weapons (all “hardware” from bullets to battle-ships), and (c) inventories such as strategic stockpile.

Outlays for nondefense assets of the Federal, State, and local governments should be subdivided by major functions and by the character of the capital goods acquired, particularly distinguishing acquisition of new reproducible assets (structures, equipment, inventories), existing tangible assets (e. g., land) and financial assets. Grants or subsidies used for financing additions to assets held by private institutions, farms, and business enterprises should be shown separately. The classification of capital outlays should, as far as possible, dovetail with the classification of the asset accounts (see subsection (c) below) so that the asset account can be kept up to date.

The committee emphasizes that its proposal for developing information on the additions to assets of various kinds should not be interpreted as a recommendation for setting up a capital budget. The committee’s proposal aims at providing useful information concerning government transactions within the perspective of the economy as a whole. There is no intent to provide a breakdown of expenditures which in itself leads to conclusions about the desirability of expenditures or methods of financing.

In order to provide more detailed information, particularly for the purpose of computing national input-output tables, it would be most desirable if Government expenditures (either on an accrued expenditures or cash expenditure basis) could be classified by (a) programs, and (b) detailed object classification. The object classification should fit in with the standard commodity classification (standard industrial classification) and should give somewhat more detail than the present object classification used for obligational authority in the Federal Budget. Such finer cross-tabulations should be of value for progress reports on various programs. At the same time, they would permit a more detailed economic analysis of Government operations and would be essential for the computation of input-output tables.

The committee has been advised that it would not be feasible to prepare such a cross-classification of expenditures by coding and processing checks issued in the Treasury Department, but that tabulations would have to be prepared on the basis of the accounts of the individual agencies. Such a classification, if held desirable, would have to be considered by the Bureau of the Budget, Treasury, and General Accounting Office within the framework of the joint accounting program. The committee therefore recommends that the feasibility of the cross classification be explored by that group.

In order to utilize these asset breakdowns, and the segregations of durable expenditures in particular, in developing a capital account for Federal, State, and local governments another step is necessary—the calculation of depreciation allowances on tangible Government assets, allowances which can be subtracted from durable expenditures

to yield a figure for net capital formation, parallel to what is now called net private domestic investment in our official national income and product accounts. Since most of the Government agencies involved do not themselves provide figures on capital consumption allowances—there are exceptions, e. g., the Atomic Energy Commission—the depreciation allowances will have to be calculated by the national income estimators, as is already done in the case of depreciation allowances on owner-occupied residences. This calculation presupposes, in addition to assumptions about the length of useful life of the different types of Government durables, the existence of estimates of the stock of Government assets, and this is closely related to the problems connected with the derivation of a balance sheet for the various governments discussed below under (c).

Because of the difficulties in setting realistic rates of depreciation and obsolescence for military durables (weapons) the committee proposes that they be treated in the main set of national income accounts as “used up” immediately after delivery, i. e., that they be excluded from the asset account. Because of the size of the amounts involved relative to total national capital formation we suggest, however, that users of the national accounts also be furnished with an alternative estimate, possibly prepared outside the Government, in which expenditures on military durables are capitalized, i. e., removed from current expenditures but appear in the current account in the form of use value on the income side and of depreciation allowances on the expenditure side.

Thus, Government expenditures should be classified :

- (1) by functions and programs;
- (2) by character, e. g., outlays for current administration, for aid and development programs, for additions to assets. The additions to assets should be further classified, as far as feasible, in the same categories as one suggested for a classification of assets in the next section;
- (3) by objects (in accord with the Standard Commodity Classification).

For the most important items, cross-classification (e. g., outlays for assets by functions) would be desirable.

(e) *Estimate of Government assets*

The committee recommends in chapter XIV that there be developed a system of national balance sheets. Estimates of Government assets would have to form an important component part of such a system. The development of such a system requires inclusion of asset information in the Census of Governments and otherwise adding to present information concerning assets of the Federal Government. The Government assets should be broken down :

- (1) By jurisdiction (Federal, State, local, autonomous authorities of various kinds).
- (2) By character (land, structures, equipment, commodity inventories, financial assets).
- (3) By functions (agriculture, education, health, transportation, general administration, etc.).
- (4) By location (for Federal physical assets only—continental United States with possible classification by regions or States; island possessions; foreign countries).

Cross-classifications are essential for (1) and (2), and (2) and (4) and desirable for (1) and (3), and (2) and (3).

For the Federal Government, the General Services Administration in cooperation with the various executive agencies has compiled an inventory of real property owned by the United States, subdivided by agencies, type of property, and location.⁴⁶ This report covers a large part of the federally owned assets, but is based on original cost without allowance for depreciation or changes in prices.

With respect to equipment, it is probably possible to estimate an inventory with sufficient approximation on the basis of an adequate breakdown by objects by using the so-called perpetual inventory which consists of cumulating and depreciating expenditures on durables. The committee, therefore, feels that more detail on the classification of expenditures, particularly durables, deserves higher priority than an inventory of nonfinancial assets of the Federal Government, other than real estate. It may also be desirable to collect directly from governments or with the help of appraisals, sample information on useful life, and similar data which would be of help in estimating inventory magnitudes on the basis of purchases of equipment.

For State and local governments, no data on nonfinancial assets are now being collected. The committee recommends that the Government Division of the Bureau of the Census be asked to explore what records concerning assets are available in the hands of State and local governments. Depending upon the outcome of such explorations, consideration should be given to the inclusion of questions concerning nonfinancial assets of State and local governments in a future Census of Governments or to conducting a special sample survey in between census years. (For a discussion of these and other questions concerning the improvement of data with respect to State and local governments, see ch. XI, sec. 2e.)

(d) A problem of presentation

There is a difficult problem with respect to the most useful presentation of the Government sector in the system of national accounts. The importance of this problem results from the fact that national accounts have been used for presenting the budget estimates in the perspective of the national economy as a whole. This was the purpose of the tables on the Government budget and the Nation's budget which appeared for a few years in the President's budget messages. In some countries (e. g. France and some Scandinavian countries) such a connection between budget proposals and the national accounts is even required by statute.

This very important use of national accounts is impaired by the fact that the data presented in the Government sector of the accounts differ from the data which can be found in the Government budget. This is true of the consolidated Government receipts and expenditures accounts, as presented in table IV of the annual National Income supplement. The differences are more drastic in the gross national product tables and the summary tables of the national income and product accounts which include in the Government sector only Government purchases of goods and services.

⁴⁶ For a summary, see Inventory Report on Real Property Owned by the United States Throughout the World as of June 30, 1956, Committee on Appropriations of the U. S. Senate, 85th Cong., 1st sess. Document 25, February 11, 1957.

The differences result primarily from the exclusion of transfer payments and the acquisition of land and existing assets and from the use in the national accounts of actual data wherever feasible instead of budget estimates. Thus, we have, in addition to the so-called conventional budget concept and to the consolidated cash concept of the budget, a national income and product accounting concept of the budget. This situation has resulted in considerable confusion.

As a minimum, there should be published in each annual national income issue of the Survey of Current Business a reconciliation between the budget data, especially for the Federal Government, and the estimates included in the Government sector. It would also be desirable if each Federal budget would give for the past, the current, and the ensuing year the budget data in a breakdown which permits translation into the Government sector concepts of the national income and product account. The same applies to the publication of State and local budget data by the Census Bureau.

In addition it is necessary to continue to show separately the Government payments for both purchases of goods and services and transfer and interest payments. National accounts are often used for distinguishing the economic transactions which are subject to market fluctuations from those which are determined by Government. For purposes of an economic stabilization policy, for example, it would be erroneous to include transfer incomes as a part of other personal incomes but to exclude it from the Government sector. An increase in transfer expenditures generates additional personal income and consumer spending similar to an increase in, say, wages resulting from expenditures for public works.

It would be desirable therefore if, in an additional summary table, national accounts were presented in a manner in which the Government account, subdivided by Federal and State-local transactions, would show both expenditures for goods and services and transfer payments even though only the goods and services would be included in gross national product. Correspondingly, personal incomes would be subdivided into incomes derived from current production and transfer incomes with only the first included in a summation of total gross incomes. Table E of chapter V is a variant of such a summary table based on the revised form of accounts proposed by this committee.⁴⁷

3. THE FOREIGN TRADE AND PAYMENTS ACCOUNT

The rest-of-the-world sector in the United States national accounts, like the other sector accounts, was originally designed to derive the income originating in the rest of the world, so that it could be added to the income originating in other sectors of the economy to yield national income. For this reason, special attention was concentrated upon items important to the derivation of the income originating in this sector. Imports were netted with exports and factor income was netted with factor payments to derive net foreign investment. However important this procedure was in the development of the national income aggregate, it has left a great deal to be desired in the develop-

⁴⁷ For another presentation, see the Economic Report of the President, January 1957, table E6, p. 129, or, in an improved form, *Studies in Income and Wealth*, vol. 20, p. 126.

ment of national income and product accounts for analytic purposes. To be useful for these purposes, the flows in the accounts should be set forth in such a manner that their behavior over time will be easily discernible. The rest-of-the-world account in its present form is particularly unsatisfactory in this respect. Furthermore, it requires considerable labor to integrate the entries in the rest-of-the-world account with the balance of payments published by the Department of Commerce and the balance of payments manual published by the International Monetary Fund. For students working in the field of international economics, it is extremely important to be able to move easily from the international trade and financial statistics into the domestic accounts of individual economies. At the present time it is not easy.

Some of these objections relate to the classification system and form of presentation used rather than to the concepts employed in the account. But the form of the presentation is not unimportant. As has already been pointed out in section V, the aim should be complete integration between the national income and product account dealing with foreign transactions and the published balance-of-payments tables.

The committee, therefore, recommends that the rest-of-the-world account be redesigned as a foreign trade and payments account, dealing with international transactions in gross terms. One side of the account would show receipts from the sale of goods and services transfers received, and the surplus of foreign countries with the United States on current account. The other side of the account would show payments for imports of goods and services and transfers to abroad. The account thus drawn up, showing figures for the year 1953 as an example, is shown below.

Foreign trade and payments account for the United States, 1953

[In billions]

1. Exports	\$21.3
(a) Merchandise.....	16.5
(b) Shipping, tourism, etc.....	2.9
(c) Labor and property income.....	1.9
2. Transfer payments to individuals from abroad.....	0
3. Transfer payments to Government from abroad.....	.1
4. Surplus of foreign countries with United States on current account....	1.9
Receipts from abroad.....	23.2
5. Imports.....	16.4
(a) Merchandise.....	11.0
(b) Shipping, tourism, etc.....	5.0
(c) Labor and property income.....	.5
6. Transfer payments from individuals to abroad.....	.5
7. Transfer payments from Government to abroad.....	6.3
Payments to abroad.....	23.2

It will be noted that in this account transfers are shown as receipts and payments in the international account. This differs from the current United States procedure, where transfers from consumers and Government to abroad are shown as current expenditures on goods and

services by consumers and by Government. Also, they are now shown on a net basis, thus often obscuring the actual amounts involved.

Transfer payments should appear in the international account, irrespective of whether the transfers are in goods and services or in financial claims. Transfers in kind should be reflected not only as transfer payments but also as exports of goods. In instances where the Government gives to other countries goods which it had accumulated in a previous period (e. g., defense goods), they should be treated as sales of surplus goods by the Government, and also included in exports of goods. When consumers send gifts in kind abroad, they should not be included in consumers' expenditures, but should be classed as exports of merchandise.

In this area, in particular, it is important that the Department of Commerce coordinate the treatment of the individual flows in the international accounts with the International Monetary Fund, the United Nations, and the Organization of European Economic Cooperation to insure comparability with the data of other countries and to facilitate the provision of information to these groups on a comparable basis. There may be points, however, where, after due consideration, it is decided that, in the interests of internal consistency and the principles of national accounting, the principle of international comparability may have to be given up. One point in particular deserves mention. Since the committee has decided that Government interest should be treated as a transfer payment, interest paid by the Government to abroad and interest received from foreign governments should also be classified as transfer items in the national-income accounts. This treatment is not consistent with the present treatment in the balance-of-payments tables or with the United Nations national income accounting system. Many of the other points in question are on a very detailed level—such things as the treatment of locally recruited staff of embassies, staff of international organizations, production activity on ships, gold transactions and export of gold ore, international defense transactions, and pension funds. These are all problems to those dealing with them, but do not significantly affect the overall design of the accounts and, hence, need not be discussed further here.

In chapter V it was pointed out that the surplus item in the foreign trade and payments current account could be deconsolidated to show changes in assets and liabilities of the United States with foreign countries and foreign countries with the United States. This information is now shown in various places; in the table showing transactions with the rest of the world in the national-income statistics, in the rest-of-the-world account in the flow-of-funds statement, and in the financial data in the balance-of-payments tables.

Finally, it should further be pointed out that the same classification that is used for changes in assets and liabilities of the foreign sector (table A-13 of appendix A) can also be used for showing the level of assets and liabilities, thus giving the balance sheet for the foreign sector.

4. TREATMENT OF CAPITAL EXPENDITURES ⁴⁸*(a) Scope of inquiry*

The development of economic analysis over the last two decades has been characterized by increasing emphasis on the role of capital expenditures and their financing in the course of national income, flows of funds, and the financial situation. In view of this crucial role of capital expenditures, it is particularly important to have reliable estimates of capital expenditures and their financing in the national income and product accounts and to develop estimates of the stock of capital.

The committee has not undertaken to review the estimates in one important sector, inventories, because a task group organized by the Federal Reserve Board less than 2 years ago has surveyed the field thoroughly and has made detailed recommendations.⁴⁹ In another very important field, residential construction, the committee has received detailed suggestions from the agency responsible for the statistics, which include plans for verifying the reliability of the statistics now available in detail going well beyond anything the committee itself could have done. The committee, however, has studied the problems in other areas of capital expenditures sufficiently, with the help of the documents and conferences with the agencies participating in producing the statistics, to have definite views as to where the main gaps lie and as to the directions which further statistical work in the field should take.

(b) Sectoral investment accounts

Virtually all users of the National Income Division's figures agree that the provision of accounts showing changes in the different assets and liabilities of the sector ranks high among the desired improvements. The Division itself acknowledges this, and is now considering ways to fill the gap. If the committee's recommendations regarding finer sectoring, particularly the subdivision of the present personal account, and the separation of Government enterprises within the business sector are accepted, accounts showing changes in assets and liabilities will also have to be provided for each of them.

The main obstacle to immediate implementation of these obvious suggestions is the difficulty of obtaining the necessary data. This

⁴⁸ Although the report retains for readers' convenience the customary term "capital expenditures," the committee wants to emphasize at the beginning of this discussion that it is using the term in the narrow sense of expenditures on durable, reproducible, tangible assets. Retention of the term does not imply that only expenditures on durable assets have the effect of increasing productivity and output in the future. Several other categories of private or public expenditures, particularly those on education, health, research, and possibly even advertising, have similar effects. Because of the difficulty of segregating those expenditures in the other categories that have output-increasing effects, it is as yet impossible to include them in a broader concept of capital expenditures. The criterion, therefore, has been whether an expenditure increases the stock of tangible, reproducible, durable assets. Use of this criterion has the advantage of being in accord with business-accounting practice and of providing a direct connection between capital expenditures and reproducible national wealth, the latter being equal to cumulated net capital expenditures (after deduction of capital-consumption allowances). It also permits us to use the handy term "capitalization" for the process of treating an expenditure as creating a depreciable asset in the accounts, in distinction from "expensing," i. e., charging an expenditure in full to the current account of the period during which it is made. Readers who prefer a more rigorous terminology may throughout this discussion substitute "expenditures on durables" for "capital expenditures," or for the term "investment," which is sometimes used in the same sense, e. g., in the National Income Division's publications, but is only rarely used in this report because of the danger of confounding it with investment in the financial sense of acquiring an asset of any type.

⁴⁹ Reports of Federal Reserve Consultant Committee on Economic Statistics, hearings before the Subcommittee on Economic Statistics of the Joint Committee on the Economic Report, 84th Cong., 1st sess. (1955), pp. 3 ff. and 395 ff.

difficulty, in turn, results from the fact that estimates of capital expenditures are generally derived from data on expenditures for different types of structures and equipment based on output or sales of equipment manufacturers or on construction contracts, none of which provides information on the sector which is making the expenditures. The data from which capital expenditure estimates by sectors could be directly derived are usually not available, or they become available only relatively late after the event.

If sector changes in asset and liability accounts are to be developed as soon as possible, it will be advisable to proceed in two directions. First, energetic attempts must be made to obtain a breakdown of the statistics of the value of output, shipments, or sales of producer and consumer durables and of construction statistics, by sector and industry, of ultimate buyer. The committee regrets that funds requested to improve the manufacturers' sales data by providing such breakdowns, as well as more accurate data, have for 2 years been disapproved by the Congress. It hopes that such improvement will be authorized in the near future. Secondly, data must be collected, possibly with the help of sampling, which cover more sectors, which are available more promptly and which subdivide capital expenditures more adequately than has been possible hitherto. The schedule by which this information is collected can probably also be used to obtain data on capital-consumption allowances, net borrowing, issuance of securities, and acquisition or sale of existing tangible assets, all of which are needed for the establishment of complete sector accounts showing changes in assets and liabilities.

(c) *The scope of capital expenditures.*

Two of the complex theoretical and conceptual problems connected with the measurement of capital expenditures in the national income and product accounts are important enough at least to be brought to readers' attention, in order to permit an evaluation of the recommendations the committee is making in this field, even though they cannot be adequately discussed in this report. They are, first, the difference between gross and net capital expenditures and secondly, the scope and method of capital consumption allowances. The first of these problems is important not only in determining the volume of net investment, but also, as will appear in chapter XIV, in measuring the stock of reproducible durable assets as part of national wealth. The second problem has substantial influence not only on the values at which net, in contrast to gross, capital expenditures and saving are entered in the national accounts, but also on the calculation of business profits, since capital consumption allowances must be deducted from receipts before profits are determined.

In the matter of defining the scope of expenditures that are regarded as capitalizable and hence later are subject to depreciation, the committee generally accepts the present practices of the National Income Division. The committee, specifically, sees no reason for recommending changes in the present convention of—

(a) regarding all expenditures on currently produced commodities with an assumed regular life of more than 3 years as capitalizable;

(b) classifying expenditures on repair and maintenance as current, but including expenditures for major alterations and additions to existing durables with capital expenditures;

(c) treating transfer costs on existing durable (as well as intangible) assets, such as real estate dealers' commissions, as current expenses;

(d) disregarding altogether both discovery and depletion of natural resources;

(e) excluding from capital expenditures all outlays on the creation of intangible assets, such as expenditures for research and advertising; and

(f) not including expenditures on what may be called human capital, particularly expenditures on health and education, in national capital formation.

All these types of expenditures have been the subject of extensive discussion and the arguments for inclusion of some of those now excluded in a broader concept of capital formation have considerable merit. In the present state of information and so long as the national accounts are basically molded along the lines of business accounting, the present treatment appears on the whole preferable, provided no claim is made, or implied, that the category "Capital expenditures" includes all expenditures relevant, or contributing, to economic growth.

However, in line with its general principle of providing the basic information for as many useful alternative approaches as possible, the committee would like to see expenditures on these disputed items shown separately, wherever that is feasible, though of course still as a part of current expenditures, so as to permit the derivation of estimates of national capital expenditures on a broader concept by users who prefer it. The committee recognizes that some of these alternatives present such conceptual and statistical difficulties that the National Income Division should not be asked to add these estimates to its already overcrowded schedule, but economic research organizations should be encouraged to do the basic work necessary before the estimates can be put on a regular and more routinized basis, including the development of estimates back to 1929. Some of the topics involved would, it seems to the committee, be well suited for sessions of the Conference on Research in Income and Wealth.

5. THE TREATMENT OF CAPITAL CONSUMPTION ALLOWANCES

The second problem, the treatment of capital consumption allowances—which is of importance for the measurement of net national product and still more so for that of net capital expenditures, saving and net business profits—involves two quite distinct questions. The first is the decision whether to use capital consumption allowances as reported in the books of accounts or tax returns of the different sectors where they are available, i. e., chiefly for corporations and to some extent for unincorporated business. The second question arises for all sectors if it is decided that reported capital consumption allowances do not fit into a system of national accounts, but is posed in any case for the numerous sectors for which no reported capital consumption

allowances are available, i. e., at the present time households, nonprofit organizations and governments.

The present practice of the National Income Division is to accept capital consumption allowances reported in corporate tax returns (or figures extrapolated from them) except for depletion allowances which are added back to profits; to step these figures up to take account roughly of the capital consumption allowances of unincorporated non-farm business enterprises; to use the capital consumption allowances in agriculture as estimated on the basis of replacement cost by the Department of Agriculture; and finally to add an estimate for the capital consumption allowances on residential structures not owned by corporations based on a 50-year straight-line amortization of construction expenditures.

This practice means, first, absence of uniformity since most business capital consumption allowances, as well as those on residential structures, are based on original cost, while replacement cost is used in agriculture; and since most but not all businesses calculate capital consumption allowances on the straight-line rather than the declining-balance or other methods. It means, secondly, that all changes in the tax laws and regulations regarding depreciation are reflected in the national accounts; for instance, the accelerated-depreciation provisions of recent years, although these provisions may not reflect actual capital consumption. It means, thirdly, that most capital consumption allowances that appear in the accounts of one year are not comparable to the capital expenditures of the same year since they reflect the price level of an earlier period, sometimes as much as 50 years ago, when the expenditures were made. It means, fourthly, that no capital consumption allowances at all are calculated on the stock of durable consumer goods or on the structures or equipment owned by governments.

Even if it were decided to abandon the present method and to derive all capital consumption allowances in the national accounts on a systematic and uniform basis, at least four questions would remain to be decided. They are the sources of the capital expenditure data on which capital consumption allowances are to be based; the length of life and the proportion of scrap value to original cost to be used in setting depreciation rates; the method of depreciation which is to be applied; and the question whether to use original cost or replacement cost or another basis of calculation of capital consumption allowances. Most of these questions have been so thoroughly discussed among accountants, economists, and businessmen that there is no point in going here again over the arguments. All the committee needs to do is to indicate the stand it is taking on the different controversial points and to translate its decisions into recommendations that can be implemented within a reasonable time and can be fitted into a system of national accounts.

Of these questions, the first—the capital expenditures on which the calculations of depreciation allowances are to be based—is conceptually the easiest but statistically probably the most difficult one to implement. The degree of difficulty, however, depends to some extent on the depreciation method used. Under the standard straight-line method the figures required are the expenditures by the different sectors on as many types of durable assets as are distinguished, and these

data are needed for as many years before the year to which the calculation applies as correspond to the assumed life of the asset. Since the capital expenditure figures of the National Income Division go back, at least for private sectors, to 1929, there is no particular difficulty in calculating depreciation allowances for 1957 and later years for all types of assets for which the length of life is set at 28 years or less. For longer lived assets, or if depreciation allowances are to be calculated for years before 1957, it would, however, become necessary to use other unofficial estimates of capital expenditures, or to derive such estimates afresh. This is a considerable task, particularly since the figures have not always been prepared or are not available separately for each sector. Calculation of capital consumption allowances for the Government presents the additional difficulty that in the past no distinction has been made in the National Income Division's accounts between current and capital expenditures, so that in this case the entire set of capital expenditures would have to be developed from the beginning.

The length of life and the proportion of scrappage value to original cost which are necessary to determine depreciation allowances both under the straight-line and the declining-balance method are far from uniform for the same type of asset as among different businesses, although regulation F of the Treasury Department has been used as a guide in many cases. Astonishingly enough, no thorough investigation has ever been made of the actual length of life, time of scrappage, or ratio of scrap value to original cost for different types of durables except for a few regulated industries. Such a study, however, will be a prerequisite for any satisfactory calculation of depreciation allowances in the national accounts. Beyond that, such a study would make a substantial contribution to our understanding of the problem of investment and economic growth.

Of the two main methods of distributing the original cost of an asset over its total useful life the straight line method has the advantage of simplicity involving equal amounts of depreciation in each year of the asset's life, and of still being the predominant practice in business. On the other hand, arguments have been advanced that the declining balance method (in which a year's depreciation is equal to a fixed percentage of the depreciated value at the beginning of the year and hence varies in amount from year to year) conforms better to an economically significant interpretation of the decline in the value of a durable capital asset over its life.

The committee does not feel that a decision must be made at this time on the method which—not limiting the choice to straight line and declining balance methods—should ultimately be used in calculating capital consumption allowances for our national accounts. The final decision in this matter may wait until more relevant data on the increase in operating cost of durable goods with age and on the decline of their value in the second-hand market are available.

There remains the most contentious problem, that of original cost versus replacement cost, the latter interpreted as original cost adjusted for price change between the time the capital expenditures are made and the period for which the depreciation allowance is calculated. It is but a reflection of the status of the discussion among economists and accountants that the committee was unable to formulate a recom-

mentation on this problem that was acceptable to all, or even to most members.

The evident disagreement in this area results in part from the fact that the national accounts are used for various purposes, and the appropriate treatment of depreciation may vary depending on the purposes which are emphasized. If we are interested primarily in an estimate of the total net national product or of net capital formation, the deduction for depreciation should correspond as closely as possible to expenditures that would be needed to maintain the capital stock intact, i. e. be on the replacement cost basis.⁶⁰ The problem appears in a somewhat different light when the national economic accounts are used to depict the comparative position of different economic groups. The relative position of recipients of profits and other incomes would be distorted if depreciation allowances are currently calculated were increased to a replacement cost basis without at the same time revaluing capital assets and assigning the resulting capital gains or losses to the owners.

All members of the committee agree that, since each of the two alternative bases of depreciation allowances is useful for some purposes of economic analysis, the users of the national economic accounts should be furnished depreciation estimates on the basis of both original and replacement cost; that such estimates should be prepared by the National Income Division, on an annual and quarterly basis; and that the estimates should include depreciation not only for the types of reproducible assets for which it is now shown (privately owned structures and producer durables), but, in agreement with the recommendations made in chapter VII, sections 1 and 2 also for publicly owned reproduction durable assets and for the main types of consumer durables.

The majority of the committee would like to see depreciation allowances shown for each type of asset in the following form which permits users to shift from replacement to original cost basis if they so prefer:

Total depreciation allowances ((a) plus (b))

(a) Book or original cost basis

(b) Depreciation revaluation adjustment (adjustment for capital gain (+), or loss (-) on valuation of depreciation)

The committee believes that these estimates of replacement cost depreciation should be supplemented by data on the capital stock against which the depreciation is charged, also revalued to replacement cost. As is done throughout the national product account, estimates in constant as well as current dollars would be needed for all three of the measures involved—gross capital expenditures, capital consumption, and capital stock. With such data progress in the accumulation of real capital could be distinguished from realized and unrealized gains or losses and the change in position of various groups of holders of such assets could be evaluated. Accordingly, the committee recommends that estimates of capital stock and of unrealized capital gains to the holders of that stock should be developed as rapidly as possible and incorporated in the national accounts as soon as they become available.

⁶⁰ Whether or not depreciation is based on original or replacement cost it should neither underestimate the actual replacement need nor include as depreciation outlays that actually add to existing assets.

The committee's recommendations in the matter of capital consumption allowances may then be summarized as follows:

(1) Provide estimates of capital consumption at constant and replacement values for those assets for which depreciation is already carried in the national accounts, i. e., business structures and equipment and owner-occupied homes, and develop corresponding estimates of capital stocks in current and constant dollars.

(2) Develop as soon as feasible estimates of depreciation allowances and capital stock, both on original and replacement cost basis, for assets for which such estimates are not now included in the national accounts, i. e., for Government structures and equipment and for major consumer durables.

These two recommendations should not be regarded as a judgment by the committee on the use of replacement cost depreciation in business accounting, in taxation, or in regulatory practice. The committee feels that it is not its function to deal with these fields in which different tests may apply, and that the decision with respect to the treatment of depreciation in the national economic accounts should not constitute the basis for any position on the treatment of depreciation in such other areas.

(3) Initiate studies of actual length of life, scrap value, and loss-of-value curves for different types of durable assets and of their significance for economic analysis and the national economic accounts. These studies may well be handled by an independent research organization rather than by a governmental agency, and might utilize the material now being collected in connection with an inquiry by the Internal Revenue Service into the useful lives of depreciable property,⁵¹ which is to be used in preparing a new edition of bulletin F, last revised in 1942.

(4) Develop, after the results of (3) are available and probably in connection with building up capital stock figures, consistent estimates for capital consumption allowances of corporate and unincorporated business, to be used instead of the allowances reported in tax returns underlying the present depreciation estimates in the national accounts.

(5) Develop estimates of unrealized valuation changes of the stock of durables. These estimates will have to be tied to national balance sheets (see ch. XIV and tables A-13 and 14).

6. TREATMENT OF FINANCIAL INTERMEDIARIES

The treatment of financial intermediaries poses a special problem in national income accounting, since the bulk of the revenue of these institutions takes the form of interest and dividend receipts, rather than sales receipts. In the usual procedure for deriving income originating in an industry, interest and dividends received by the industry are deducted from interest and dividends paid, and the resulting figure for net interest and dividend payments is added to the sum of other factor incomes originating in the industry to obtain total income originating. If this procedure were followed in the case of financial intermediaries, however, net interest payments would be negative, and might be so large as to yield a negative entry for total income originating in the industry, a result clearly contrary to commonsense.

⁵¹ See Internal Revenue Service release 182, February 18, 1957.

To avoid this outcome, the National Income Division departs from the usual procedure in deriving income originating in financial intermediaries. The departures are basically of two types. In the case of commercial banks and investment trusts, an entry is made on the debit side of the accounts for imputed interest paid depositors, equal in amount to the excess of property income received over interest paid, and a corresponding amount, assumed to represent the value of services rendered to depositors without explicit charge, is entered on the credit side. The effect of these adjustments is to cancel out the original excess of interest receipts over payments, yielding a figure for income originating in banking equal to wages plus profits. In the second procedure, followed in the case of life insurance companies and mutual financial intermediaries other than life insurance, the enterprise is, in effect, treated as an association of individuals. Its expenditures for labor and other cost purchases and its saving are treated as though made directly by individuals, while items such as death-benefit claims and premiums are excluded from the income and product flows, since such transactions are viewed as interpersonal transfers.

These procedures have been criticized from time to time and sometimes violently. In the case of the banking procedure, for example, it has been pointed out that banks render services to borrowers as well as depositors, and the present procedure fails to recognize this. Thus, it is argued, the present treatment gives an unrealistic picture of the nature of banking operations. The conception of life insurance companies as associations of individuals has been similarly criticized.

While the unsatisfactory nature of the present procedure is generally recognized—by the National Income Division as well as others—little progress has been made toward general acceptance of any of the alternatives thus far advanced. In the committee's judgment, therefore, it would be premature to recommend a change in the present procedure. What is needed is a thorough review both within and outside the Government of the treatment of financial intermediaries in the national accounts with a view to developing an alternative, and if possible simpler, procedure that would conform more closely to the realities of the activities of these enterprises. Such a review, together with one for the closely allied area of nonprofit institutions, might go far toward clarifying and strengthening the estimates for these areas.

CHAPTER VIII. SHORT-TERM ESTIMATES

In considering short-term estimates—quarterly or monthly—the emphasis shifts almost exclusively to their usefulness in analyzing current developments. The preponderance of attention given those short-term estimates by economic analysts throughout the country, particularly those in business concerns and labor organizations, is directed toward this objective. Changes in various components of gross product and national income are closely followed as a means of understanding what is happening in the economy and of gaining insight into what the future course of developments may be.

Their usefulness in this context is in strong contrast to the very limited contributions they make toward the solution of longer term problems. Quarterly or monthly fluctuations tend to be of little significance for many kinds of basic analysis; for example, those relating