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The Income Side: A Business User's Viewpoint

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NATIONAL INDUSTRIAL CONFERENCE BOARD

NATIONAL income accounting as developed by the National Income Division is admirable for the neatness and logical consistency of its approach and for its thorough cultivation of all available sources of information. It provides the federal government with a serviceable tool for the analysis of national trends and for the formulation of fiscal policy. And the data are widely used by business firms and the organizations which serve them. Yet the national accounting system's frame of reference only partly meets the requirements of business. The accounting items are general and abstract. The businessman needs specific and concrete information. The emphasis inherent in the formulation of national income accounts is on long-term trends. Businessmen are more particularly concerned with the current situation and the immediate future. For example, companies dealing with the consumer market want to know how much money people have to spend, but the national income definition of "persons" includes a variety of institutions which do not buy consumer products. Similarly, the inclusion of income-in-kind in national income aggregates represents a concept of income foreign to the businessman and irrelevant to his purposes.

To cite further examples would unduly anticipate the arguments of this paper, which attempts to list the main ways in which national income data could be made more useful to business analysts. Broadly speaking, two kinds of proposals are put forward: suggestions which require no basic alteration in the existing national income accounting, and another group, more important from the business viewpoint, which calls for the inclusion of new sectors and the deconsolidation of present accounts. The burden of the discussion is concerned with the latter group of proposals, particularly: (1) a criticism of imputation in the national income, (2) an analysis of personal income and a plea for its disaggregation, and (3) a review of the kind of information needed to make the tables dealing with disposable income by distributive shares

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more useful to businessmen, (4) suggestions for deconsolidation of the business sector of the accounts, and (5) a sketch for a new social accounting companion to gross national product.

It is recognized, of course, that the present flow of information in censuses, tax returns, questionnaires, and so forth, may be such that the current structure of accounts is all that is feasible. Further, the component parts of national income must be aggregative if the total is to have meaning. In addition, the fewer the number of sectors into which national income is divided, the greater the confidence that can be placed on the accuracy of estimates. Finally, continuity over time and comparability among countries is desirable.

Yet this review and discussion of the use of national income accounts by business would be sterile if confined to an appraisal of the present structure. The past quarter century has been profitably spent in the solidification of the national account structure and in the thorough mining of all presently available sources of information. Further progress in national accounting now calls for the application of new procedures and the development of new sources of information.

BUSINESS USES OF NATIONAL INCOME ACCOUNTING

Before proceeding with the main body of this paper, it may be useful to review briefly which of the national income accounts are used in business and how they are employed.[1] Needless to say, not all business users understand the conventions and nuances of national accounting, and the reservations surrounding the seemingly firm figures. Most executives have only a general interest in their derivation. It is the technician, such as the business analyst and the director of marketing, who is interested in details and who uses the data analytically.

National income is still used for forecasting and current business analysis, but it is very rapidly being superceded by gross national product. Estimates of national income are now chiefly used in wage negotiations and in appraising the status of an organization or an industry. In wage negotiations, labor's share in industrial and total income often enters the discussion. The state income data are widely used in marketing studies and for measuring sales potential and sales effort.

For purposes of business analysis, the major component tables of national income are being superseded by other income variants. Except for corporate profits, which he follows closely, the business analyst consults the tables of national income by distributive shares, by legal

[1] A more complete account is given by Paul L. Kircher, in "The Business Uses of National Income Data, *Accounting Review,* April 1953, p. 191.

form of organization, and by industrial origin, mainly or entirely for analysis of long-term trends. And, as was pointed out above, the vital interest of business is in the short run.

Personal income data are far more widely used in business than national income data and have far greater importance for short-run as opposed to long-run analysis. The distribution of personal income is always of intense current interest, particularly as a measure of market potential. Yet so many years must elapse before reliable estimates of money income become available that analysis is restricted to longer-run goals. Business use would quicken if up-to-date estimates were made available.

The income variant most widely used and quoted by the entire business hierarchy from chairman of the board to the technician is disposable personal income. Were disposable income estimates available monthly, they would largely replace personal income figures for business users. Personal saving is another frequently cited series, and the ratio of personal saving to disposable income is particularly useful for both short-run and long-run analysis. Business users also need these estimates on a monthly basis.

THE COMPOSITION OF PERSONAL INCOME AND SAVING

Although estimates of personal income, disposable income, personal saving, and corporate profits are the national income accounting items most widely used in business, certain improvements would make them much more useful for current analysis. In the case of personal income, farm proprietors' income should be shown separately in the monthly releases (as is done monthly in *Economic Indicators* published by the Joint Committee on the Economic Report). Even more important would be separate current monthly estimates of manufacturing wages and salaries. In the inventory cycles of the past decade the manufacturing sector typically fluctuated most. Disclosure of manufacturing labor payments would make it possible to compare changes in industrial production with the corresponding changes in manufacturing wages and salaries, and also to isolate the income effects of specific changes in manufacturing production. As matters stand now, analysis is restricted to a heterogeneous aggregate labeled commodity-producing industries (manufacturing plus agriculture, forestry and fisheries, mining, and contract construction).

The relationship of personal saving to disposable personal income rightfully receives a great deal of attention from the business analyst, but the current concept is too broad for the business user. Still, he must closely consider the composition of saving as exemplified in Table 6

of the *National Income Supplement, 1954,* and he requires prompt quarterly estimates for these items.[2] As things now stand, the business analyst is forced to "guestimate" those items, so important for studying consumer behavior.

On a lower order of priority would be monthly estimates of disposable income and personal saving—pending the time when all basic national income data are issued monthly. There seems to be no logical reason why consumer behavior should not receive at least as much attention on a monthly basis as business.

THE LAG IN REPORTING CORPORATE PROFITS

The only basic complaint regarding the time lag between the period covered by national income data and the release of such figures concerns the information on corporate profits. This component of national income has a broad business audience. (Witness the interest in the First National City Bank's series.)[3] Every effort should be made to devise methods of estimating this series on a "flash" basis. Several private organizations publish compilations of corporate profits. To date attempts by the Council of Economic Advisers to prepare preliminary estimates of corporate profits have not been successful, which suggests that better reporting techniques may have to be introduced. Even the Council's estimates are never more than one quarter ahead of the official estimates.[4] More work is needed in utilizing the early reported profits information as collected by the private organizations in collaboration with the sources used by the National Income Division. In particular, the Federal Trade Commission–Securities and Exchange Commission reports on manufacturing profits should be accelerated. Sequential sampling of profits returns may have to be investigated.

THE PROBLEM OF REVISIONS

As is so often the case, the business user of national income data presses for more current data and simultaneously bemoans the fre-

[2] *National Income Supplement, 1954, Survey of Current Business,* Dept. of Commerce. One may hope, too, that the quarterly liquid saving estimates of the Securities and Exchange Commission can also be prepared a little more promptly.

[3] For 1954, the First National City Bank presented corporate profits data for selected corporations in their *Monthly Letter* as follows: IQ, May; IIQ, August; IIIQ, November; IVQ, March 1955 (preliminary); April 1955. The corresponding National Income Division estimates appeared in the *Survey of Current Business* as follows: IQ, July; IIQ, October; IIIQ, January 1955; IVQ, May 1955.

[4] For example in 1954, the initial NID estimate of first quarter corporate profits appeared in the July *Survey of Current Business,* and the corresponding first Council estimate of second quarter profits appeared in the August *Economic Indicators.*

quent revisions of the previously published data. Currently, estimates of the national accounts appear first in *Economic Indicators* in the month following the quarter they cover. In the second month after the quarter the first official estimates of the National Income Division (NID) appear. These usually stand until the annual estimates for the year are published the following mid-year, either in the national income number of the *Survey of Current Business*, or in a *National Income Supplement*. At this point, major revisions are made. The final figures incorporate new or better quarterly data, not available when the initial quarterly estimates were released.

Unfortunately, these revisions can sometimes be substantial. An example is shown below—the ratio of personal saving to disposable personal income for 1953 and early 1954 (money figures in billions of dollars, seasonally adjusted annual rates):

		Prior to Annual Revision[a]			*After Annual Revision*[b]		
		Personal Saving	Disposable Personal Income	Ratio	Personal Saving	Disposable Personal Income	Ratio
1953	I	$17.7	$245.4	7.2%	$19.2	$247.8	7.7%
	II	17.2	247.7	6.9	19.6	250.4	7.8
	III	18.8	249.8	7.5	20.0	251.2	8.0
	IV	19.3	249.3	7.7	21.5	251.2	8.6
1954	I	20.0	249.8	8.0	21.8	252.3	8.6

[a] *Survey of Current Business*, Dept. of Commerce, May 1954, p. 4.
[b] *National Income Supplement, 1954, Survey of Current Business*, August 1954, p. 4.

The trend is roughly the same in both series of estimates shown above, but the revised data indicate a sharper rise in the saving rate in the fourth quarter, a factor sometimes overlooked in analyzing the 1953-1954 recession. In addition, the level of the saving ratio was raised in the annual revision. Since the level of the ratio is itself a factor in analyzing the current business trend, its alteration may give a different turn to the analysis.

Revisions in statistical data will always remain with us, and it may be unfair to illustrate the problem with the personal saving series (admittedly one of the weakest links in the national accounts even on an annual basis). However, greater accuracy at the earliest possible time should be considered in allocating the NID funds. *In current business analysis, it is of great importance that the "truth" be as closely approximated within the current period as possible. Revision a year later, while significant for historical purposes, comes too late for the analyst*

in his diagnosis and prognosis of current trends. The business user's plea for devoting greater attention and larger resources to current estimates in turn reflects the fact that the current data are the most frequently used by business.

IMPUTATIONS IN THE NATIONAL INCOME

Inclusion of imputed income in national income represents a legacy of its original purpose—as a measure of economic welfare. The inclusion of imputed rentals and income-in-kind undoubtedly prevents distortions in the data arising from changing institutional practices. For short-run analysis, however, particularly by business technicians, money income arising from commercial transactions is far more useful.[5]

The records of business are usually limited to actual transactions arising from visible activity. Studies of consumer markets are also in actual money terms. The same is true in investigations of the comparative position of a specific company. But when businessmen turn to national income data they are faced with a hybrid income—of which only part has meaning to them.

What is needed is a new account giving a measure of actual money income. At present, information must be taken from Tables 37 (net imputed interest paid) and 39 (personal income and personal expenditures in kind) after careful reading of the textual material in the *National Income Supplement, 1954,* to arrive at an estimate of money income. An historical table showing national and personal income annually on a cash basis would serve a basic business need. Consideration might also be given to similar tables for the quarterly series, so that the business analyst could adhere to the cash concept throughout, in dealing with the income accounts.

THE INCOME ACCOUNTS AS A PROBLEM OF DISAGGREGATION

Perhaps the most serious flaw in the present system of income accounts from the business user's viewpoint is the high degree of aggregation. National income accounts developed gradually from the original objective of measuring economic welfare toward measuring economic activity. The early development necessarily stressed grand totals. Resources were lacking to permit fine detail at that stage and emphasis

[5] Nor is the business analyst particularly impressed by the conventions used in selecting those "border-line" income elements to be included or omitted. The services of a housekeeper are reflected in the monetary measure of national income, but those of the housewife are not imputed. Board provided to domestic servants is imputed in the national income; the value of the lodging received is not.

upon detail at that time might well have retarded the formulation and acceptance of national income accounting.

Along with disaggregation in terms of further subdivision of the sectors, additional information is needed by business users for the accounts which are currently presented on a *net* basis. Both the *gross* income flows and the subtractions required, if shown, would give business users direct access to valuable information already available in the income accounts. Similarly, for income flows among elements of the same sector, the total should be made available, as well as the net figure. This might well be done where the net is zero, as in the case of gifts among individuals.

Finally, business users need more, rather than less, industry detail. Business analysts often work with industry breakdowns much finer than that provided in the present national income accounts. Such detail might well be provided in the offices of the NID in an unpublished source book, comparable to the *Statistics of Income* source book.

The need for disaggregation is particularly acute for that all-embracing total—"persons." The present four-way sector breakdown—persons, corporate, government, and rest-of-world—simply does not provide the necessary day-to-day information needed in business. The business user of income data has a three-fold interest in personal income. First, he needs an income measure which will tell him the size of the consumer market. Second, he needs a measure of "business income" to assist him in estimating the demand for plant and equipment. Third, he is interested in the ratio of saving to income as a guide to consumer behavior, with respect both to short-run fluctuations and long-term norms.

ISOLATING THE CONSUMER

Particularly for market research, but also for general business problems, the present "persons" of the income accounts should be subdivided. First and foremost, the consumer sector should be reported as a distinct entity. This means, of course, that nonprofit institutional income should be shown separately, with further segregation of income received by private pension plans, public retirement systems (other than social security), private trust funds, and other nonprofit institutions. Were this done, the business analyst would have access to data relating directly to consumers, and not to a hybrid item defined and measured for the sake of convenience.

It may be argued that interpretation of quarter-to-quarter changes in national, personal and disposable income will not be significantly affected by the removal of non-consumer income. Even if this were true

of the past, institutional changes now taking place, such as the growth of private pension plans, may well have a profound effect on income statistics in five or ten years. It is already obvious that the current concept of personal income is particularly inadequate if the analysis is extended to include saving as well as the saving ratio (saving as a percentage of income). As in the proposed substitution of money income for imputed income, disaggregation of the consumer sector is of first priority in making income data of more direct and practical use for businessmen.

THE PERSONAL ENTERPRISE SECTOR

Farmers, landlords, and shopkeepers are consumers as well as businessmen. It is necessary to separate these two aspects to obtain a consumer saving-income ratio. Personal income estimates for these groups are published. The problem, therefore, is one of estimating, first, personal saving for these groups, and second, and even more difficult, consumer saving as distinguished from business saving.

Once estimates of personal consumption expenditures for farm enterprises and nonfarm unincorporated businesses are provided, the published data on personal income in these two sectors can be converted into estimates of personal saving with the aid of estimates of personal taxes for these two sectors (see below). If the share of these two sectors is subtracted from the total of personal saving, the residual can be considered a first approximation to consumer saving. In this procedure, the nonbusiness investment use of personal saving is assumed to be due entirely to the consumer account of the personal enterprises, and fluctuations in this saving-income ratio would be attributed entirely to consumer behavior.

Such saving (personal minus business investment use of income net of borrowing) may alternatively be attributed to the behavior of these persons as businesses, rather than consumers. True, the concept does not take into consideration the desire to maintain a stronger cash position or the placing of temporarily surplus funds into interest-earning assets. Even so, accounting for such matters would make for a "purer" consumer saving concept for personal enterprises than is the case for consumer saving of other sectors.[6]

[6] Irwin Friend has suggested sampling of accounts to obtain a breakdown of components of individual saving by economic groups (see his *Individuals' Savings*, Wiley, 1954, pp. 18-19). An early attempt by Friend to do this for demand deposits is presented in his "Individuals' Demand Deposits, June, 1942-43" (*Survey of Current Business*, June 1944, pp. 14-22). Some attention is paid therein to a further breakdown for unincorporated business deposits between business and personal.

The flow-of-funds estimates of the Board of Governors of the Federal Reserve System offer an alternative procedure: "whereas in the national income account, saving out of the net income of unincorporated business occurs only in the personal sector and not in the business sector, in the flow-of-funds account such saving can occur both in the noncorporate business sectors and in the consumer sector."[7] The data shown in Table 6 of the *National Income Supplement, 1954,* for increase in equity in unincorporated nonfarm and farm enterprises are apparently used to approximate the business investment use of income (net of borrowing). The Board's use of these data does not provide a direct answer to the question of business versus consumer saving of personal enterprises; it may offer at least a partial answer to the question of allocating the income of such enterprises between the business and consumer sectors.

Underlying the special attention given to the income and saving of personal enterprises is the hypothesis that they are important determinants of economic behavior in general and of the total aggregate of saving in particular. Where rental income is a main source of landlord's income, much the same argument applies, but where rental income is a subsidiary source of income, its receipt should not be regarded as directly influencing saving behavior.

LIFE INSURANCE AND PRIVATE PENSION PLANS

Special attention should also be given to the miscellany of economic agents included in the personal sector other than consumers and personal enterprises. Four main groups are distinguished here: nonprofit institutions, private pension and welfare funds, life insurance companies, and fiduciaries. Under the present system of accounts, these groups are all subsumed under the all-embracing total of "persons," thus avoiding all problems of transfers among these groups and other parts of the personal sector. This conveniently sidesteps the necessity of allocating personal saving among these groups.

A separation of the income and saving of these groups from those of consumers and personal enterprises is needed in order to distinguish the incomes of economic agents with differing behavior patterns. In particular, the assets of private pension plans[8] and life insurance companies play an important role in the present figures of personal saving, as the following table shows (money figures in millions of dollars):

[7] *Flow of Funds in the United States, 1919-1953,* Board of Governors of the Federal Reserve System, 1955, p. 44.

[8] See *Survey of Corporate Pension Funds, 1951-54,* Securities and Exchange Commission, 1956.

Year	*Increase during the Year*			*Percentage of Disposable Income*			
	Non-Insured Pension Funds	Insured Pension Reserves	Private Insurance Reserves Excluding (2)	Col. 1	Col. 2	Personal Saving Exluding (1), (2), & (3)	Personal Saving
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1929	$ 160	$ 50	$ 990	0.2%	0.1%	3.6%	5.0%
1940	50	200	1,650	0.1	0.3	3.0	5.5
1949	600	600	3,110	0.3	0.3	1.7	4.0
1950	900	775	3,145	0.4	0.4	3.5	5.9
1951	1,336	950	3,100	0.6	0.4	5.5	7.8
1952	1,629	1,100	3,780	0.7	0.5	5.3	8.0
1953	1,717	1,125	3,915	0.7	0.4	5.2	7.9
1954	1,931	1,175	4.205	0.8	0.5	4.2	7.0
1955	2,077	1,275	4,195	0.8	0.5	3.0	5.8
1956	2,409	1,200	4,280	0.8	0.4	4.2	7.0

Sources Col. 1: Securities and Exchange Commission; Col. 2: Institute of Life Insurance; Col. 3: Personal saving in private insurance reserves taken from Securities and Exchange Commission, less Col. 2; Col. 4 through Col. 7: Personal saving and disposable personal income taken from Department of Commerce; 1929 estimate for total private insurance taken from Irwin Friend, *Individuals' Saving*, Wiley, 1954, p. 101; 1929 estimate for increase in insured pension reserves made by authors.

The magnitude of the personal saving in these two sectors alone, private pension plans and life insurance, is impressive, and carefully considered, may shed new insights into consumer spending-saving behavior.[9] Further, much information is lost by the present practice of subsuming the direct transfer of consumer income into life insurance premiums, the investment earnings of the insurance companies and pension funds, and the benefit payments by these institutions to other parts of the personal sector.

The whole subject of pension funds as they affect the component parts of the personal sector begs for further analysis. It is recognized that considerable basic research and fact gathering is required before the full impact of private pension plans on consumer spending and saving behavior can be appraised. Still, without such analysis an essential step is lost in estimating the magnitude of personal consumption expenditures and personal saving, consumer and other, that can reasonably be expected at some future date, say a decade hence.[10]

The inclusion of nonprofit institutions in the personal sector at

[9] For an earlier discussion of just one aspect, see Morris Cohen, "Postwar Consumption Functions," *Review of Economics and Statistics*, February 1952, p. 23.

[10] See *Potential Economic Growth of the United States during the Next Decade*, Materials Prepared for the Joint Committee on the Economic Report by the Committee Staff, October 1954, pp. 12-15.

the present time also masks the role of charitable contributions and other payments to such organizations, the investment income they earn, and the personal saving for which they may be responsible. The current treatment considers all transactions between nonprofit institutions and other members of the personal sector as transfers among individuals. This is also the case for the payments by fiduciary trusts.

What is implied by disaggregation of the personal sector should be clear by now. The extensive multiplication of accounts would be formidable even if analysis were limited to the items considered above. And our discussion omitted insurance (other than life) benefits paid by labor unions, gifts transferred among individuals, and other payments presently embraced under personal income. Perhaps the best that can be hoped for is a continuing four-way breakdown of the personal sector into consumers, farm enterprises, nonfarm enterprises, and other, leaving further analysis of "other" to special and occasional studies.

Perceptive business users of the national income accounts believe that a re-examination of the personal sector has a high, if not the highest, priority in any program of review of the structure of the national accounts, particularly in looking ahead to the future. The institutional framework underlying economic behavior has to be reflected in the functioning of a system of accounts. Disregard of significant institutional innovations can only lead to an antiquated and inadequate set of accounts.

DISPOSABLE INCOME BY DISTRIBUTIVE SHARES

Current accounts provide quarterly estimates of the total of disposable personal income, and also of total national income by distributive shares. The provision of national disposable income estimates on a distributive shares basis would permit more precise analysis and forecasting. For example, a meat company has discovered that meat sales are more directly related to wage and salary income than to total personal income. These items are also necessary for estimating consumer saving as opposed to the saving of business enterprises.

Provision of figures on disposable income by distributive shares requires an estimate of personal taxes for each share of personal income. Comprehensive estimates for 1929 and 1948 have already been provided for "private income" after taxes,[11] based upon the assumption "that for each taxpayer it is permissible to allocate his income tax liability among various types of income in proportion to his reported receipts of taxable income." (The data are obtained from the annual

[11] Edward F. Denison, "Distribution of National Income," *Survey of Current Business,* June 1952, pp. 22-23.

issues of *Statistics of Income,* published by the Internal Revenue Service.)

Two problems arise in estimating taxes for the various types of personal income. The first concerns taxes on capital gains, excluded from Denison's estimates. But consideration of taxes on capital gains cannot properly be separated from the question of whether capital gains themselves should be recorded in income statistics, and this is discussed below. In the case of personal taxes the question is whether personal taxes should be confined to personal income taxes or should also include other taxes such as personal property taxes. The present definition includes both types and involves some difficult problems of estimation. There is some merit to the argument that property taxes paid on rented dwellings, motor vehicle licenses and the so-called non-taxes, such as public hospital fees and special assessments should be attributed to personal consumption expenditures. Estimates of disposable income as well as consumption expenditures would be correspondingly changed.[12]

CAPITAL GAINS AND LOSSES

This Conference has long been concerned with the relation of capital gains and losses to income measurement.[13] Recently, the subject has been intensively studied from many points of view, including that of national income analysis.[14] Attention has been called to the systematic shift from property income to capital gains, particularly in the post World War II period, when personal income tax rates reached levels far above prewar experience. Business analysts are particularly interested in the systematic dependence on capital gains by the upper income groups (or the top 5 per cent),[15] and its effect on the saving-income ratio of this group, and, therefore, of the entire consumer sector. Many feel that consideration must be given to capital gains and losses in analyzing both consumer spending and saving.[16] They point

[12] See Lenore Frane and Lawrence R. Klein, "The Estimation of Disposable Income by Distributive Shares" (*Review of Economics and Statistics,* November 1953, pp. 333-337), for discussion of this point and presentation of a first approximation to the estimates suggested above.

[13] See *Studies in Income and Wealth, Volume Two,* National Bureau of Economic Research, 1938, pp. 189-263.

[14] Lawrence H. Seltzer, *The Nature and Tax Treatment of Capital Gains and Losses,* NBER, 1951, pp. 47-82, particularly pp. 51-52.

[15] See J. Keith Butters, Lawrence E. Thompson and Lynn L. Bollinger, *Effects of Taxation: Investments by Individuals,* Harvard University, Graduate School of Business Administration, 1953, *passim.*

[16] See George Garvy, "Functional and Size Distributions of Income and Their Meaning," *American Economic Review,* May 1954, pp. 246-247.

to the significant rise in stock prices and suggest that the relative strength of consumer markets in 1954, particularly for consumer durables, was attributable in part to realized, and perhaps even to unrealized, capital gains. Under these circumstances, it is felt that at least estimates of realized capital gains should be made available for the personal sector of the income accounts further classified for the consumer sector, the personal enterprise sector, and "other" (including life insurance and nonprofit institutions). Such estimates need not be made an integral part of the articulated and well-knit system of accounts, but may be presented as a separate table or appendix.

The availability of capital gains estimates will remove the inconsistency noted by some business users who wonder why capital gains are excluded from income, but taxes thereon are deducted in obtaining disposable income. If capital gains and capital gains taxes were estimated, a concept of disposable capital gains could be developed. In that case, analysis of incomes (before and after income taxes) by size could take into account the effect of capital gains.[17] Such analysis, it is felt, would be particularly helpful in studying the determinants of saving, and saving-income ratios in the crucially important top 5 per cent income group.

It is recognized that the development of estimates for unrealized capital gains awaits the formulation of official series of estimates of national wealth, sorely needed for business analysis. Such national wealth estimates would, of course, be tied in with the national income and product series.[18] But, in the meantime, estimates of selected categories of wealth (both tangible and intangible) could be developed, and the problem and significance of unrealized capital gains could be explored.

Attention would be given to historical experiences in the 1920's, 1930's, the war and postwar years, for the significance both of realized and unrealized capital gains, so as to provide business users a basis for appraising current business trends.

THE DISAGGREGATION OF WAGES AND SALARIES

Experience both in the 1948-1949 and 1953-1954 recessions has indicated to business users the volatility of wages and salaries in a mild business cycle. Wages fluctuate more markedly than salaries. Hence the separation of wages from salaries would clarify the relationship of in-

[17] See Simon Kuznets, *Shares of Upper Income Groups in Income and Savings*, NBER, 1953.

[18] See Raymond W. Goldsmith's pioneering work, in three volumes, *A Study of Saving in the United States*, Princeton University Press, 1955-1956.

come flows to production. Executive compensation, its definition and magnitude, is also worth serious attention and basic research. We know very little about how the actual number of executives has varied over the years, or how much their rates of compensation have changed.

Experience with using Bureau of Labor Statistics data on employment, hours, and earnings in analyzing the manufacturing wages and salaries component of personal income[19] suggests the need for data along the following lines:

1. Production worker employment: number employed, average weekly hours, average hourly earnings
2. Salaries, other than executives: number employed, average monthly compensation
3. Executives: number, average monthly compensation

Wage data should be available on a monthly basis to enable business users to relate changes in production activity to changes in income. If such data had been available in the 1953-1954 period, considerable insight would have been gained into the mechanics of the inventory cycle, particularly as it applied to personal income. The sum of (2) and (3) above would be available monthly if (1) and the total were estimated. In any event, (2) and (3) should be presented separately at least annually.

It is possible that at some future time monthly estimates of salaries other than executive compensation broken down into number employed and average monthly earnings would permit us to see the full impact on incomes of a significant decline in economic activity as it was happening, rather than long after the event. Separate annual estimates of wages and salaries (in the categories suggested above) would also shed considerable light on the secular movements of the distribution of functional income shares.

DECONSOLIDATION OF THE BUSINESS SECTOR

At present, corporate profits, taxes, dividends, and undistributed profits are published in industry detail. Only the net figures are shown, though the results are obtained by means of many additions and subtractions. Business users of the data particularly need the intermediate details, of the kind now found in Table 29 of the *National Income*

[19] Morris Cohen, Milton Lipton, and Bella Shapiro, "Three Perspectives on Employment," *Conference Board Business Record,* April 1954, pp. 167-171. Also, see Lawrence Grose, "Labor Income in the Postwar Period," *Survey of Current Business,* May 1952, p. 9.

Supplement, 1954, which gives estimates of corporate sales by industry. Even more to the point would be a summarized profit and loss statement for each component of the business sector.

In the case of the corporate sector of business income, most of the information necessary for a general profit and loss statement is now available. For manufacturing corporations, the following information is published quarterly by the Federal Trade Commission and the Securities and Exchange Commission:[20] (1) cost of goods sold, (2) selling, general, administrative, and other expenses, and (3) other income or deductions (net). Examination of the sources from which the Department of Commerce compiles its reports on the profits of nonmanufacturing companies suggests that the same items are available for about three-fourths of this group.[21] Three areas—contract construction, wholesale trade, and insurance carriers—for which the information needed for a profit and loss statement is not now available account for almost all the remaining nonmanufacturing corporations and 10 per cent of all corporations. If information were collected for this group, then we would have data on the income and expenses of 98 per cent of all corporations, on an industry basis.

UNINCORPORATED BUSINESS PROFIT AND LOSS STATEMENT

The deconsolidation of the corporate profit and loss accounts outlined above could be mainly accomplished by further mining of available sources. The second avenue of deconsolidation of the business sector, unincorporated business, presents a much more difficult problem. No estimates of unincorporated business expenses exist, except for farms. For farms, comprehensive estimates are in fact made by the Department of Agriculture[22] and used with only slight modifications by the Department of Commerce.[23]

Income and expenses are given in some detail for the entire period, 1909 to date. In view of the fact that farmers' record keeping is certainly no better than that of the nonfarm sector, and probably worse, the example set by the Department of Agriculture in preparing income and expense estimates for the farm sector suggests a parallel for the nonfarm sector. Certainly, the nonfarm unincorporated business sector merits more statistical research and consideration than it has hitherto received from the NID, or from any other branch of the federal gov-

[20] *Quarterly Report of U. S. Manufacturing Companies,* Federal Trade Commission and Securities and Exchange Commission, seriatim.

[21] See *National Income Supplement, 1954,* p. 95.

[22] See *The Farm Income Situation,* Dept. of Agriculture, 1955 Outlook Issue, October 28, 1954.

[23] *Ibid.,* pp. 10-15.

ernment. Perhaps the cooperation of the Small Business Administration, or successor federal agencies, can be enlisted in a broad program of statistical research. The necessary information for professional services could presumably be developed from the questionnaires presently used to complete the story of the unincorporated business sector. If estimation is confined to income tax returns, progress in the field of unincorporated business enterprise accounts will continue to be slow and disappointing.

With a sustained effort, estimates could eventually be prepared for the unincorporated business sector showing the broad outlines of a profit and loss statement. Such information would be valuable to business users since it would complete the framework of a national profit and loss statement and would enable comparison between the corporate and noncorporate sector, by industry.

Further investigation of the nonfarm unincorporated business sector would also permit evaluation of the influence of size on the behavior of business firms. Up to now, although there have been some studies of the effect of income size on business behavior, limited attention has been paid to size as a factor in business behavior. A beginning should be made by having national income accounts classified according to size of firm.

Profit and loss statements are needed not only for corporate and noncorporate business but also for the rental income sector. That such data are now considered sufficiently firm to warrant publication is evidenced by a comprehensive analysis in the *Survey of Current Business*.[24] Detailed profit and loss estimates of rental income should be made part of the accounts published each year. Such information would be of great interest, for example, to those particularly concerned with the market for repair and maintenance outlays. More important, it would complete the outline of a general profit and loss statement for the business economy, providing information needed to analyze business trends by considering both the gross, as well as the net, income flows and the role of intermediate products and services involved.

MORE RATHER THAN LESS INDUSTRY DETAIL

The final plea for greater disaggregation of the national income accounts relates to industry detail. Business users of national income data find the recent tendency to substitute broad industry groups for specific industries a retrogression. They want not fewer industry classifications, but more data and finer industrial breakdowns. As the busi-

[24] H. D. Osborne, "Rental Income and Outlay in the United States, 1929-1952," *Survey of Current Business,* June 1953, pp. 17-24.

nessman's knowledge of national accounting grows, so will his interest in and need for specific industry information.

The present classification of income by industrial origin is based essentially on the so-called two-digit classification of the *Standard Industrial Classification Manual,* and presents data for twenty-one manufacturing industries and forty-six nonmanufacturing industries. Mere mention of a three-digit classification would undoubtedly strike terror in the hearts of the custodians of national income accounts, since that would multiply the mechanical difficulties of estimation and present a host of new problems, presently avoided. Perhaps the best that can be hoped for are experimental calculations, breaking down selected two-digit manufacturing industries for late years. Certainly, data for the major components of wages and salaries and corporate income can be obtained from existing sources in greater industry detail than is now shown. Further work in this field may properly be in the province of foundation-sponsored research in the universities or in the National Bureau of Economic Research, as is the case for the estimates now being prepared of state personal income by counties.

Whatever the approach or technique selected, work should begin immediately on a more detailed industrial classification of national income. Perhaps the finer detail need be available only on a "source book" basis which could then be further exploited by interested parties, such as trade associations or labor unions.

AGRICULTURAL INCOME

Business users are often confused by the contradiction between the Department of Agriculture's estimates of agricultural income accounts and the Department of Commerce's estimates, presumably covering the same universe. The preliminary reconciliation prepared by the Department of Agriculture[25] has helped remove this confusion. However, there is still the need for a full and regularly published statistical reconciliation between the farm income data published by these two agencies. For example, the Office of Business Economics' (OBE) estimates of farm proprietors' income should be reconciled with the Agricultural Marketing Services' (AMS) series on net income of farm operators, the OBE series on national income originating on farms with the AMS series on net income originating on farms.

It would also be helpful if Table 12 of the *National Income Supplement,* "National Income by Legal Form or Organization," or some other convenient table, had the following breakdowns:

[25] *The Farm Income Situation,* 1955 Outlook Issue.

National income originating in:
  Entire economy
    Government
    Private economy
      Agriculture
      Private, nonagricultural economy
        Corporate
        Noncorporate
        Others

Such a breakdown, frequently required for analytical purposes, can be computed from the published tables. It would aid the users to have it put together in one convenient place, perhaps as a memorandum section.

GOVERNMENT AND NATIONAL INCOME

The business analyst, aware of the historic and continuing debate among national income technicians over the treatment of government in national income, hesitates to fan anew the flames of controversy. Yet he views with growing concern the limitations of current procedures and the failure to adjust conventions or techniques to the changing institutional patterns of financing government outlays.

The present system of accounts includes only the compensation of direct government employees as income generated in government, when viewed from the standpoint of legal form of organization. Where national income is calculated by industrial origin, an additional amount, compensation for the employees of government enterprises, is included. To the business user, both definitions understate the role of government in national income. Any contribution of government capital to current production and incomes is excluded entirely by the present definition, and compulsory payments by the private economy to government in the form of direct personal and corporate taxes are dealt with only in piecemeal fashion.

Even within present definitions, an alternative table is possible of the distribution of national income, which might overcome some of these objections from business users. This would present national income by disposable shares—wages and salaries, corporate income, and so forth. Government's share would then include disposable government wages and salaries plus all direct taxes.

INTEREST PAID BY GOVERNMENT

If the present account structure is to undergo a full-scale revision, then serious attention should be given to the possibility of including

interest on the public debt in the national income, though still excluding interest on the war debt. For practical purposes, dead weight war debt might be defined arbitrarily as the debt incurred over the war years, say from December 1941 through August 1945, or some date shortly thereafter.[26] Inclusion of all other interest payments in the national income is required if the government's role is to be weighed properly.

Public debt, exclusive of war debt, is no longer nominal. State and local debt is already in excess of $36 billion and federal nonwar debt is probably two or three times as large and growing. This growth may be accelerated by the recent re-introduction into federal financing of debt guaranteed by the government but outside the federal budget. The proposed highway program calls for an independent agency, the Federal Highway Corporation, which would issue bonds to the public[27] in substantial amounts. Extra-budgetal financing has obvious attractions, and will probably grow rapidly. Omission of the interest flows which underlie these significant government expenditures would introduce serious distortion in future distributive shares of national income.

GOVERNMENT CORPORATIONS

Government corporations enter in the present structure of the income accounts only through the wages and salaries they pay. The "net profit" of government corporations is defined in the accounts as a "global" total, subsidies minus current surplus. Interest payments are not included in national income. The deficiencies in the data, particularly for the war years, explain this casual treatment of government enterprises. More information is now required to assess properly the role of these enterprisers in the economy. The specific need is for profit and loss statements similar to those desired for private business.

Even more in point, depreciation on the underlying property should be calculated as a separate entry in the profit and loss accounts. Such depreciation is a minimum requirement and should be supplemented by at least a memorandum calculation of depreciation on other government property, excluding military installations. A first step might be to calculate depreciation on state and local government property thus avoiding for a time the difficulties imposed for the federal sector by war and the defense effort.

[26] The problem of war debt arising from the Korean conflict is marginal, but should be given consideration.

[27] "A Ten-Year National Highway Program," processed, The President's Advisory Committee on a National Highway Program, January 1955.

Were the kinds of information just proposed available by type of enterprise, better judgments could be made concerning the relative role of government enterprises in the business economy. For example, the simple ratio of sales by these corporations to business sales would be significant for certain types of business such as utilities. Profit and loss statements are also needed to evaluate existing toll highways and the implications of proposed new programs for substantial additions to toll highways—analyses that cannot be readily undertaken within the framework of the present system of accounts.

RECONCILIATION OF GOVERNMENT ACCOUNTS

One final pedestrian comment concerns the problem faced by the business analyst in interpreting federal government trends in the framework of the national accounts. The annual and midyear budget reviews, of course, give a wealth of information on an annual basis, including a projection for the period ahead. The current estimates of national income furnish major components of federal government receipts. What the analyst cannot do with the presently published tables is to work from the budget materials to the national income concepts.

An annual reconciliation between government as defined in the national income accounts and the conventional and cash budgets appears in the *Economic Report of the President.* This should be made a full-fledged part of the national accounts. Since Table 6 of the *National Income Supplement, 1954,* is already credited to another federal agency, there is precedent for having the Bureau of the Budget provide the data for the proposed reconciliation. More important, the business analyst should have sufficient data to tie together the budget and national income government series for a period shorter than a year, ideally on a quarterly basis. In view of the strategic role now played by government in the economy, more information is required to enable the business analyst to interpret the effect of a government deficit or surplus on national income accounts. As matters stand now, the role of the government remains pretty much of a mystery to business users of the national income accounts.

NEEDED: A NEW SOCIAL ACCOUNTING COMPANION FOR GROSS NATIONAL PRODUCT

Our discussion thus far has been based primarily on the traditional definition of national income as a measure of income flows generated in the creation of the gross national product. The presumably neat dichotomy of incomes and production, however, is not matched by an equality of use of the two measures. Clearly national income now plays

a minor role in economic and business analysis outside government offices. Some tentative suggestions are now advanced, in closing, for an alternative income or quasi-income concept that might attain co-equal status with the gross national product.

The problem can best be illuminated by considering the consumer sector. Consumer income (in the present accounts, personal income) is of great interest because it is believed to be the primary influence behind consumer expenditures. The ratio of consumer expenditures to consumer income serves to summarize the influence of other factors, such as consumer psychology, capital gains, liquid assets, or consumer spending. On the other hand, there is no companion measure with which to associate the business spending sector of gross national product. Corporate profits are but one factor influencing gross private domestic investment. What is needed, therefore, using the analogy of the consumer sector, is some measure which can be associated with private expenditures on residential construction and business inventory, plant, and equipment.

Such a need, long felt by students of the business scene, resulted in the development and widespread use of the accounts showing corporate sources and uses of funds. If somehow the sources and uses of corporate funds data, supplemented by similar estimates for the noncorporate sector, can be incorporated into the companion measure for gross national product, then both consumer and business spending could be related to the appropriate economic variables.[28] This measure would, of course, cover more than income, because the measure of national income, no matter how refined and disaggregated, could not include nonincome factors which have an important bearing on business behavior.

Finally, the analogy of the consumer sector—income as compared to expenditures—can serve to illuminate the government sector. In the case of the business sector, there is still some significant correlation between corporate income and corporate spending, both elements being readily identifiable in the accounts. But there is almost no relationship between government income, as treated in national income, and government spending. In fact, government presents the most difficult area to be covered in the companion measure for gross national product.

[28] Special attention should be directed to the comparison measure for the residential construction component of gross national product which has only an indirect relation to the income accounts because of the importance of borrowing in the purchases of new homes. Such borrowing has to be brought into the companion measure if it is to be related to such expenditures.

Three suggestions are offered to clarify government's role in national income and in the proposed companion measure:

1. The direct taxes paid or accrued by individuals and businesses should be shown separately, as suggested above, these being a major source of income to be matched against government spending.

2. Indirect taxes presently excluded from national income should be brought back into the accounts. If this were done, we would no longer be measuring national income in the current sense, and the new measure could not be subdivided according to industry. But then, the highly useful table of corporate sources and uses of funds is also presently outside the system of national accounts and is also not shown by industry.

3. The element of government borrowing should also be explicitly considered if we are to match government spending by a receipts measure. This calls for a sources and uses of funds table for government, similar to that for business.

With the sources and uses of funds shown by consumers, business, and government (plus similar data for nonprofit institutions, foreign trade, and so forth) the gross national expenditure could be set in a framework of incomes, transfers, borrowing, and lending, which would be of immediate interest to the business user of national accounts.

At this point, the recently prepared estimates of the flow-of-funds of the Board of Governors of the Federal Reserve System have to be mentioned.[29] It is, of course, too early to tell whether this series meets in practice the objective raised in this paper. A preliminary survey of the tables and the contents of the accounts in the flow-of-funds series (available annually only from 1939 through 1953) leaves us with the impression that the companion measure here called for has yet to be devised. This should not be taken to mean that the flow-of-funds data are not useful in analyzing financial, and particularly monetary, problems. So far as one can now see, however, the new data do not provide a better framework than the national income accounts for business analysis of the gross national product. Certainly their current use in business analysis is highly limited. In any event, the primary need to be filled by the proposed companion measure is to be a co-equal with the gross national product accounts in analysis of economic activity, rather than to highlight the role of financial institutions.

[29] See Morris Mendelson, "A Structure of Money Flows," *Journal of the American Statistical Association,* March 1955, pp. 72-92.

CONCLUSION

In conclusion, we again stress the progress the NID has made in the formulation of the national income accounts. The emphasis this paper may seem to have placed on minutiae of detail is a luxury that is possible only because the underlying structure is solidly designed and well built. Design and structure, however, serve only to fill basic needs; we have tried to point up how the future course of national income accounting can better take care of business needs.

C O M M E N T

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On the Bowman and Easterlin Paper

My comments on this lucid and constructive paper fall under three main headings: imputations, the treatment of banking, and the major proposals for changes and additions to the information which we provide.

IMPUTATIONS

I regret that Raymond T. Bowman and Richard A. Easterlin have gained the impression that "The Department [of Commerce] modifies its operational concepts to undertake some imputations in the belief that this is required by tradition." As I tried to explain in my paper, I believe that a concrete, practical need for imputations exists. However, tradition is likely to become an important factor because neither general reasoning nor practical need provides a clear-cut guide on how far to go in this field.

I would hesitate to explain imputations as being simply the concrete implementation of general definitions of final product and economic activity, as Bowman and Easterlin seem to be inclined to do (page 157). This approach to the problem leads into the snares that I have tried to analyze in my paper (text note 36) and in my comments on the Hagen and Budd, and Ross papers. In my rejoinder to Easterlin's comment on my paper, I attempt to show, however, that the actual disagreement between us may not be basic after all.

But there are several specific points on imputation procedure (other than in banking) which I should like to review:

1. Bowman and Easterlin note that our wage imputations are at cost to the employer and conclude from this that they are at factor cost rather than at market price, so that the distinction between the two concepts has been "lost to sight in the imputations."

Apparently they feel that, for welfare comparisons at least, our procedure understates the relative position of recipients of imputed income compared with recipients of cash income only. For example, they would perhaps have us impute to meals received as perquisites of employment the same unit prices as are charged commercially for similar meals. But this treatment would ignore the actual bargain entered into between the employer and the employee, which is surely more relevant to the employee's evaluation of the perquisite than is some other bargain made under different circumstances between different people. An employer can offer the employee a choice between a cash wage plus perquisites and a higher cash wage without perquisites. The perquisites must be valued at cost to the employer, since under no other assumption would the choice be a matter of indifference to him. The employee who least willingly accepts this offer performs a role exactly analogous to that of the marginal customer in a restaurant, in spite of the difference in conditions. Thus the cost to the employer in this case may serve to represent the market price as well as the factor cost.

The resulting difference in valuation between, for example, a meal eaten in the kitchen of a restaurant and one eaten in the dining room, may give us concern in certain types of welfare comparisons. This sort of valuation difference, however, has nothing to do with imputation as such. It can arise also in connection with items actually sold on the market. For instance, if the same basic food is valued at a higher price in one situation than in another because it has had to be transported a greater distance, the price differential may or may not be relevant to the purpose for which an expenditure comparison is made.

2. Bowman and Easterlin realize that their entry for farm imputations in Table 2 is the gross value of subsistence production before deduction of expenses (net data are not available) and hence larger than the associated imputation of net farm income. Nevertheless, they come to the conclusion (pages 159-160) that they have listed the proper amounts. I cannot follow their reasoning and believe that they have included too much. Without going into the details of disimputation techniques, which are fully explained in the *National Income Supplement, 1954*,[1] I would say that their conclusion stems from a mistaken definition of cash income, which leads them to ascribe to imputation not only its own proper role but also the task of correcting their understatement of the cash measure. It may be noted that in the case of the

[1] *National Income Supplement, 1954, Survey of Current Business,* Dept. of Commerce, p. 46.

rental imputation, which follows the same pattern as the farm imputation, they correctly include only amounts net of expense.

3. Bowman and Easterlin wonder about our treatment of consumption by nonfarm entrepreneurs out of their own stock in trade. The largest item of this type is probably food withdrawn from stock by entrepreneurs in the retail food business. In principle, such food is counted as part of entrepreneurial income and also of personal consumption expenditure. However, we have hesitated to call it an imputation. There is a close analogy between this item and direct consumer purchases from wholesalers, which are not considered imputations.

4. I agree with Bowman and Easterlin that an imputation for owner-occupied residences is desirable, but my reasons differ from theirs. I fail to see that the presence of taxes, mortgage interest, and maintenance and repair calls for imputation, as they seem to believe, "unless an imputation is made these items are charges against an item of end product which is not even counted." In the absence of imputation, these items would simply be treated as personal taxes and consumer expenditure instead of being treated as business expense.[2] To me the imputation recommends itself as a means of improving comparability in measuring the relative status of home owners and home renters, and as symmetrical with the treatment of new homes as capital formation. (However, it would be entirely feasible to account for them as capital formation without calculating an imputed rate of return; see the discussion of government capital formation in my paper.)

5. Bowman and Easterlin want to know our imputation procedure for an owner-occupied house devoted partly to business use. The following example starts with a situation in which the house is rented, because this may clarify the matter.

Suppose a real estate owner receives gross rents of $100 from a physician, and that his net rents are $100 also (expenses have been omitted because they are not germane). The physician charges $60 of his rent payments as business expense and collects $100 in fees. His net professional income will therefore be $40. Suppose also that there is a business producing $100 worth of consumer goods and paying $100 in wages. Then total income will be $240. On the expenditure side this can be assumed to be matched by $100 in consumer purchases by the real estate owner from business, plus $100 in fees paid by workers to the physician, plus $40 of rents paid by the physician in a consumer

[2] *Ibid.*

capacity. (Care has to be taken in estimating this last item to recognize that only part of the physician's rental payments are made by him as a consumer.)

Now assume that the physician buys the house, which he continues to use partly for personal and partly for business purposes. This is the case that interests Bowman and Easterlin. The real estate owner is eliminated. The physician needs to make no more payments to him, and replaces him as purchaser of the products of the business enterprise. On the expenditure side of the accounts, we shall have $100 in purchases from business as before, $100 in fees paid by workers to the physician as before, and a new item of $40 of gross imputed rental payments by the physician. (Note that in estimating this item the same care has to be taken to obtain the proper consumer allocation as in the case of the earlier monetary item, but that no new problem specifically linked to imputation is introduced.) On the income side, wages will be $100 as before, but the split between professional income and rental income will be reversed, the former appearing as $100 and the latter as $40; the essential reason for this reversal is that imputed rents for the business use of residential property would not be counted as a deduction in calculating professional income or as a receipt in calculating rents from home ownership. The shift in the classification of income is consonant with our general procedure of showing net rents as income originating in the industry which owns the property (see the Appendix to my paper, note 7).

TREATMENT OF BANKING

Bowman's and Easterlin's thoughtful discussion of our commercial banking imputation is tantalizing because their initial commendation is followed by the expression of some doubts. They approve of our going behind accounting conventions to the underlying realities in order to obtain more significant results, but they are not sure whether we have actually been successful in this search. Finally, they chide us for not having recognized certain analogies between banking and government.

Unfortunately, I cannot accept their qualified approval, because, as I indicated in my paper, I no longer regard the present Commerce Department procedure as the best available. The central flaw—essentially a violation of the factor cost concept—is exactly the one toward which their questions point.[3] My proposal was designed to eliminate from the present procedure the disturbing aspects they suggest.

[3] See the passage, "Whether the particular technique . . . *economic* sense," on page 167.

On the analogy Bowman and Easterlin see between banking and government, the new procedure for banking which I propose is very similar indeed to the present treatment of government. Bowman and Easterlin would presumably suggest making the treatment of government more like the present approach to banking.

THE MAJOR PROPOSALS

Bowman's and Easterlin's paper is devoted mainly to a discussion of income concepts, but—like all those who regard duplication as a major issue in national output measurement—they cannot present the essence of their proposals without extensive reference to the product side. In commenting on their views, it is necessary, therefore, to start with final product.

In rejecting the Commerce Department's treatment of all government purchases as final, they concentrate on our statement that "government purchases consist essentially of goods and services provided on behalf of the community as a whole, which it has been found better to secure collectively rather than individually."[4] This statement conveys our broad philosophy on the matter. But I can see that it is too general to convince anyone who is firmly wedded to an opposite view, and also that it tends to call forth an opposite statement of "broad philosophy"—for instance, that government is a producer rather than a consumer—and there the matter ends as far as fruitful discussion is concerned.

In reformulating in my paper the argument for treating all government purchases as final, I accordingly emphasized certain specific aspects of the problem. I pointed out that "duplication" is by no means unique to the case of government: it exists also in the case of consumer expenditures. Next, I diagnosed the causes of the duplication phenomenon so generalized, and in this light reached the conclusion that the omission of certain purchases from national output is not a solution that commends itself either to theoretical analysis or to common sense.

With this background, let us consider the Commerce approach to subsidies in kind which Bowman and Easterlin cite. As I see it, recognition of government subsidies in kind to business would logically require recognition of analogous consumer subsidies in kind to business. Our revulsion against recognizing the latter type of transaction should lead us to re-examine the propriety of recognizing the former type.

These comments on subsidies in kind imply also some skepticism about our treatment of cash subsidies in output measurement. We

[4] *National Income Supplement, 1954,* p. 38.

have stated that the inclusion of subsidies in the factor cost total has a strong conventional element.[5] Their exclusion from the market value of output does not seem to me to be much more firmly founded. From an operational standpoint, the latter treatment facilitates the interpretation of the market value figures in certain cases, but it can be shown that in other cases figures inclusive of subsidies would convey a clearer picture.

The way in which Bowman and Easterlin develop the case for the existence of government intermediate products does not seem to call for new comments. For the specific examples cited on page 178 I note that items now included in consumer expenditures provide exact counterparts, in the sense that movements in a product measure which includes them are subject to similar misinterpretation. What I would ask of Bowman and Easterlin is that they formulate a general distinction between government intermediate and final product, tested in terms of the consumer analogy and of the basic difficulty of inferring from national output to consumer satisfaction when needs and technology change. It would then be useful to have the implied classification of actual government expenditures worked out. Such an approach would strike toward the heart of the problem I have in achieving a meeting of minds with them; their effort to trace the implications of the hypothetical alternative assumptions that government final purchases constituted zero, 50, and 100 per cent of the total (see Table 4 of their paper)—with its postulate that the distinction is essentially self-evident—I find interesting but not immediately helpful.

Turning now to their specific proposals (in Tables 3 and 4) for elaborating the information which we now provide, I have no substantial objection to Table 3. Its first panel represents national product at market price, seen in its double aspect as product flow and flow of income, and does not involve a change in the content of our present reports.

The second panel is based upon our present concept of factor cost, to which the authors are now willing to give the benefit of their doubt (p. 172). This position I hail as a major step forward from that taken in their previous article reviewed in my Appendix, Note 6. I am pleased that a similar stand is adopted by Hagen and Budd.

Bowman and Easterlin want the current surplus or loss of government enterprises and certain types of business transfers considered part of factor cost. Their reasons are not clear to me—since they do not discuss the rationale of treating taxes, transfers, and so forth in the light of the objectives of the factor concept. However, this is not an

[5] *Ibid.*, p. 34.

important point of disagreement. As explained in the Appendix to my paper, Note 1, in most practical instances in which the former item deviates substantially from zero, it bears a close similarity to indirect taxes and subsidies. Its exclusion from factor cost serves to give it a treatment similar to that given to those taxes and subsidies.

Otherwise the left-hand side of this panel is a reproduction of the information which we now provide. On the right-hand side, indirect taxes and subsidies are allocated to the specific expenditure categories on which they impinge (except that, for reasons I do not understand, no allocation to net foreign investment is made). This information on national product at factor cost is analytically interesting—it used to be carried in the British White Papers on national income and expenditure—but I doubt whether it is sufficiently important to warrant its placement among the high-priority objectives of the National Income Division. In view of the small magnitude of indirect taxes and subsidies in the United States, it would not yield a percentage breakdown of national product significantly different from that shown by the market price data.

Turning to Table 4, we may conveniently begin with the second panel. This is an elaboration of the factor cost presentation just discussed.

The debit side maintains in essence the present Commerce breakdown. The credit side represents a further development of the credit side of the corresponding panel of Table 3. It allocates government "intermediate" services among the components of national product which they help to produce. In a detailed implementation of this procedure, government purchases to prevent the spread of disease among livestock, for instance, would presumably be allocated to food expenditures—and perhaps partially to clothing, exports, and so forth. As this afterthought indicates, the allocation project might easily get out of hand, but I would not want to prejudge its merits. There is nothing inherently unreasonable about it, especially if we take note that the authors would not propose to allocate "intermediate" products such as military items that constitute social overhead. What they propose is, after all, the presentation under common headings of expenditure streams that serve a common purpose. This is an established procedure. We already have in consumer expenditures a category for transportation, for instance, which assembles all the items that are used jointly to provide personal transportation services; there would be nothing wrong in adding the government services to business that aid personal transportation.

But this example puts the allocation of government services in a

deceptively favorable light, by suggesting that the generally accepted breakdowns of consumer expenditures provide a framework capable of serving the purposes that make the project attractive to us. But in fact our present classification of consumer expenditures by family budget categories can claim only a rather distant kinship with any classification of commodities and services by the major types of final satisfaction they provide.

Furthermore, if one attempts to improve the relationship, one runs at once into two sorts of difficulty: first, in identifying the categories of final satisfaction to be established; and, next, in distributing the institutionally distinguishable items of consumer expenditure among these. The first problem is illustrated by the case of transportation itself, which can hardly be considered to involve an elemental type of final satisfaction. The second will be illustrated if we try to allocate transportation expenditures among other more "ultimate" categories; the statistical and even the conceptual bases for quantifying such an allocation are far from apparent.

Realization of the fact that we do not now have the framework we should wish, and of the insurmountable difficulties that would be encountered in deriving one, will serve to make clear the limitations of the Bowman and Easterlin project and the very pragmatic spirit in which it would have to be conducted to yield useful results.

Another idea suggested by the Bowman and Easterlin approach is that we might drop the government-private split as a primary classification altogether and substitute a detailed classification of national consumption (and investment) into significant subcategories, with the private-government breakdown introduced only as a subsidiary feature. For instance, it might well appear advantageous to show both public and private education under a common heading.

In summary, I feel that detailed work on the Bowman and Easterlin proposal may lead to significant modifications in the nature of the project. But this is no reason for ruling it out as fruitless. I may note in passing my personal sympathy with it, as having much in common with the suggestion for a functional classification of government expenditures which I made in my paper.

Moreover, I should not be surprised if my classification of government functions turned out to be similar to the one that Bowman and Easterlin would utilize to exclude the so-called intermediate product of government from the output total. However, I would not follow them in this last step, which I regard as highly unphilosophical, and I object to the credit side of panel A of Table 4 where this amputation job is actually carried out.

It remains to examine the debit side of panel A. In order to concentrate on the main issues, let us consider a simplified and condensed version of it, neglecting capital formation and other transactions not germane to our analysis. Suppose a situation which the Department of Commerce would show as follows:

Wages	Consumption
Corporate profits	Government purchases
Indirect taxes	

Bowman-Easterlin's presentation of it would be essentially this:[6]

Wages and transfers net of tax	Consumption
Corporate profits net of tax	Government final product
Government surplus	
Government final product	

Bowman and Easterlin propose the debit side of this table as a vehicle for analyzing the distribution of the national product as given on the credit side. They introduce their discussion by pointing out, quite correctly, that the Commerce statement with which we started is inadequate to answer the question "What are the relative shares of labor and capital in the total product?" This comment is correct for many reasons—for example, the anomalous positions of indirect taxes, the failure to allow for transfers and direct taxes, and so forth. But I do not see how the task can be accomplished by use of the assortment of items on the debit side of the Bowman and Easterlin account. The reader is invited to examine carefully their discussion (pages 181 ff.) to decide whether my uncertainty is justified.

In the final pages of their paper the authors sketch an alternative procedure for allocating total product among recipients.[7] This part of their paper is hard to follow. It involves a rather difficult distinction between two concepts of factor cost which I cannot entirely grasp. Also

[6] To convert the Commerce statement into that of Bowman and Easterlin, I deduct all taxes from the left-hand side and add government transfer payments. This transforms the left-hand side into wages and transfer payments and corporate profits net of taxes. Assume for simplicity that taxes and transfer payments, together with the government purchases listed on the credit side, comprise all government receipts and expenditures; the balance of the account may then be restored by entering the government surplus on the debit side and omitting government purchases from the credit side. Finally I add the so-called final product of the government to both the debit and credit side.

[7] They refer specifically to an allocation among workers and capitalists and cause themselves much trouble by concentrating on this specific case. It would have been preferable to generalize the problem in terms of allocating product to any given ultimate income recipient, so as to abstract from the secondary problems that arise in distinguishing groups of recipients.

the discussion is brief, given the intricacies involved in the allocation of government product and—especially—of government surplus, which are necessary steps in the proposed procedure. Altogether, the project reminds me of the one undertaken by Tibor Barna,[8] and I should find it helpful if the authors would characterize their project by comparing and contrasting it with this work.

I note, finally, that the authors do not say that the carrying through of this project should be the responsibility of the Department of Commerce. In view of the undeveloped state of the project, any suggestion to that effect would be premature.

On the Cohen and Gainsbrugh Paper

As is evident from my paper, there is a substantial degree of agreement between Morris Cohen and Martin R. Gainsbrugh and myself on the general directions in which the national accounts should be elaborated. However, I feel that the adequacy of their specific criticisms and suggestions is impaired by an incomplete realization of the limits imposed upon national income estimators by gaps in the primary statistical source material, and of the problems involved in filling these gaps. Also, as I shall explain later in these comments, I cannot subscribe to their views on certain theoretical points.

STATISTICAL CONSIDERATIONS

More systematic consideration of the present state of the basic data and of the steps necessary to improve them would have helped the Cohen and Gainsbrugh analysis. The magnitude of the resources required to carry through their recommendations would have emerged. To implement the list of new projects sketched would necessitate a major increase in the size of the federal statistical program. As economists we might welcome such an increase. However, we must face the fact that it is not in sight. This realistic consideration suggests the need for a critical appraisal of these recommendations in the light of the resources that are likely to be available for the improvement of national income statistics.

Such appraisal would have highlighted, too, the conflict posed by the simultaneous call for more reliable information, on the one hand, and for information more prompt and vastly more detailed than we presently provide, on the other. Such calls come frequently from laymen, and the national income estimator listens without complaining even though he may wish that his critics would show a more sympa-

[8] Tibor Barna, *The Redistribution of Incomes through Public Finance in 1937*, London, Oxford University Press, 1945.

thetic appreciation of his dilemma. However, he hopes that professionals in the field will take account of his situation as a whole in formulating their recommendations.

I really must enter a complaint against my friends Cohen and Gainsbrugh on this score. For instance, in the discussion of our saving figures (page 191) they adopt rather exacting standards of precision. A few pages later they call for the current presentation of comprehensive profit and loss statements for corporate business, by industry, commenting that data are available for manufacturing corporations and that: "Examination of the sources from which the Department of Commerce compiles its reports on the profits of nonmanufacturing companies suggests that the same items are available for about three-fourths of this group. Three areas—contract construction, wholesale trade, and insurance carriers—for which the information needed for a profit and loss statement is not now available account for almost all the remaining nonmanufacturing corporations and 10 per cent of all corporations. If information were collected for this group, then we would have data on the income and expenses of 98 per cent of all corporations, on an industry basis. . . . The deconsolidation of the corporate profit and loss accounts outlined above could be mainly accomplished by further mining of available sources."

For certain nonmanufacturing industries we do have some information not only on profits but also on other items of the profit and loss statement. However, this information is much less comprehensive in coverage than the above quotation suggests—that for the large retail trade group, among others, consists merely of bits and pieces. In addition, the data in many cases are drawn from samples that are thin, biased, or both, or are based on definitions and classifications not at all suited to the requirements of a consistent set of national accounts.

In summary, the data sources are barely adequate for estimating unpublished components of broader profit aggregates. The Cohen and Gainsbrugh proposition that these sources serve as the mainstay for estimating current comprehensive corporate profit and loss statements by industry comes just after their criticism of comparatively moderate errors in our estimates of the aggregate saving ratio. To find such inconsistencies in the thought even of informed users of our data does indeed "strike terror in the hearts of the custodians of the national income accounts"—to borrow their picturesque language.[9]

Finally, adequate consideration of the data problem would have

[9] For the type of study of profit-and-loss statements which does seem to us feasible with existing data, see *Survey of Current Business,* Dept. of Commerce, January 1955.

led to a clarification of the responsibility of the National Income Division for the present state of the estimates and of its opportunities to improve them. As matters are organized at present, the NID can engage hardly at all in the collection of primary data; and this holds also for the Office of Business Economics of which the NID is a part. We construct our estimates from the primary data other agencies choose to collect. This allocation of responsibility is reflected in our annual budget, which is tiny compared to the sums other government and private agencies expend for the collection of primary data for either general informational purposes (e.g. census data) or in connection with administrative programs (e.g. social security and government fiscal operations). Inasmuch as many of the Cohen and Gainsbrugh criticisms and suggestions relate essentially to the collection of primary data, these organizational matters must be clearly understood if we are to avoid ambiguous diagnoses and inadequate prescriptions.

These pitfalls are not avoided by general statements to the effect that additional primary data may be necessary (page 188). For instance, in suggesting that the estimates be made more reliable, Cohen and Gainsbrugh state that "greater accuracy at the earliest possible time should be considered in allocating the NID funds" (page 191). Do they mean that the NID should allocate a larger part of its present funds to this purpose?[10] If this is their point, it is not helpful; within the limits of our resources we take every step we can think of to make the estimates reliable. What specific reallocation of funds would Cohen and Gainsbrugh suggest? If, on the other hand, they are trying to say that more funds should be allocated to the NID to improve the reliability of the estimates, their position is sound enough to be worth stating clearly—although in practice it might be preferable to allocate a large part of these funds to the data-collecting agencies rather than to us.

Some of the other suggestions made in this paper likewise need to be brought into focus by consideration of their broad organizational aspects. In discussing the preparation of a consolidated profit and loss statement for unincorporated enterprise, Cohen and Gainsbrugh have this to say: "the nonfarm unincorporated business sector merits more statistical research and consideration than it has hitherto received from the NID, or from any other branch of the federal government."[11]

[10] A similar ambiguity lurks behind the statement relating to "The business user's plea for devoting greater attention and larger resources to current estimates . . ." (page 192).

[11] Page 201. The reader is invited to turn to the Cohen and Gainsbrugh paper for the full discussion.

I am entirely in sympathy with the suggestion that the federal government should devote larger resources to the collection of statistics on unincorporated enterprise. But any idea that the NID has failed to do in this area something which was in its power to accomplish is preposterous. We already make full use of such primary data as are available in this field, and no alternative allocation of our resources could advance significantly the production of the estimates which the authors have in mind.

The parallel which Cohen and Gainsbrugh draw with the farm income estimates of the Department of Agriculture is institutionally not an apt one. Traditionally, the federal government has devoted large resources to the economic problems of the farm sector of the economy. As a guide in these activities, there has evolved the vast and effective program of current statistical reporting which is the *sine qua non* of the agricultural income and expense estimates. This reporting program has no counterpart for nonfarm unincorporated enterprise; and the NID, with a total appropriation which is minuscule when compared to the funds that support directly and indirectly the agricultural income estimates, is in no position to emulate the Department of Agriculture in any way.[12]

IMPUTATIONS

Cohen and Gainsbrugh explain that imputations are excess baggage as far as the business user of the data is concerned. ("For short-run analysis. . . . money income arising from commercial transactions is far more useful.") I have been unable to reduce this passage to a logical proposition supporting the exclusion of imputations. The argument can hardly consist—although it seems to—of the notion that in studying market

[12] The NID conducts periodic surveys of the incomes of the professions; this is the only collection of primary data in which it is engaged. The quality even of the summary data so obtained is open to question; these surveys could not possibly carry the additional burden of serving as the basis for preparation of comprehensive profit and loss statements.

The following statement (page 190) contains another prescription which, from the standpoint of the NID, is as ambiguous as that just quoted: "More work is needed in utilizing the early reported profits information as collected by the private organizations in collaboration with the sources used by the National Income Division. In particular, the Federal Trade Commission—Securities and Exchange Commission reports on manufacturing profits should be accelerated."

To the extent that this statement urges the speedier collection of basic data, it is to the point. If it implies that we have neglected the exploitation of all the usable data we now have, I enter a demurrer. We have experimented extensively with the "early reported profits information" referred to but have so far not found any way to make it yield reliable results. The existing preliminary estimates of corporate profits, which Cohen and Gainsbrugh regard as unsatisfactory, suggest that we are not alone in this difficulty.

behavior imputations should be dispensed with because no monetary buying power corresponds to them. Surely the matter is more complex than this. To make a case along these lines for the exclusion of imputations, one would have to demonstrate that imputed items do not influence market behavior; for if they do, they will be of interest to business even though they do not themselves represent monetary buying power. There is no demonstration of this type in the Cohen and Gainsbrugh paper.

The dissatisfaction Cohen and Gainsbrugh express here on behalf of business users may reflect an instinctive reaction against the unfamiliar rather than a genuine analysis of the actual usefulness of the data. I think that this is an instance in which business users ought to be protected against harming themselves. Cohen and Gainsbrugh might help by reminding their business associates that imputations, far from being artificial, are the extension of such regular, accepted business practice as the reporting of payrolls inclusive of income in kind for social security purposes. Also, they might encourage the conduct of studies of the extent to which imputed items affect market demand, as an approach more scientific than is the simple view that imputed items should be dropped merely because they do not represent cash.

Incidentally, it seems to me that Cohen and Gainsbrugh do not realize adequately the relative difficulties and disadvantages of disimputation. For instance, I would be interested to know what their concrete proposal would be for a disimputation of life insurance.

BREAKDOWN OF THE PERSONAL ACCOUNT

We are all agreed that high on the priority list of national income research is the preparation of a breakdown of the personal account to distinguish as far as possible the respective transactions of the heterogeneous groups which this account includes. I believe that the segregation of private pension funds[13] and nonprofit institutions which Cohen and Gainsbrugh envisage is within our reach. (I am less certain of the feasibility of segregating private trust funds.) But I should like to point to some other respects in which their discussion might be amended in the interest of a proper diagnosis of the present situation and of future possibilities.

The most difficult single problem in breaking down the personal sector is the segregation of entrepreneurial families. Cohen and Gainsbrugh outline a proposal for such a segregation in the passage "Farm-

[13] Their reference to public retirement systems (other than social security) in this connection (page 193) must be based upon the mistaken belief that these are now part of the personal sector.

ers, landlords, and shopkeepers. . . . as businesses, rather than consumers" (page 194).

The following comments suggest themselves. First, we cannot really say that personal income estimates for the entrepreneurial groups are already published, to provide a starting point for the estimation of saving as residual. Entrepreneurial incomes, which are published, are not the same as the total incomes of entrepreneurial families. Such families receive wage, property, and transfer incomes, in addition. But this is not my major point, since it might be possible to make sufficiently good estimates of the necessary personal income breakdowns on a current basis.

It is on the authors' passing reference to separate consumption expenditure estimates for entrepreneurial families that I want more particularly to focus. It is my strong belief that reliable current estimates of this type are not feasible, at least for the foreseeable future; and that the income-account method which Cohen and Gainsbrugh adumbrate is not the most promising avenue to current estimates of the saving of these families. Irwin Friend's proposal for the sampling of individual savings held by financial institutions,[14] to which Cohen and Gainsbrugh refer, appears to me to be somewhat more promising, but has such grave difficulties of its own that the best professional opinion is in wide disagreement on whether it can be implemented at less than exorbitant cost. An indication of the baffling practical problems that must be faced in advancing further in this field would have added realism to the Cohen and Gainsbrugh analysis.

A statement of my views on the attempt to separate the saving of entrepreneurial families into a business portion and a consumer portion can be found in my paper. I cannot comment adequately on the Cohen and Gainsbrugh proposal relating to this matter, because I do not fully understand the formula they advance. However, to the extent that I do, it appears to me as artificial as all formulas aiming at such separation must be, essentially because they try to establish a distinction that does not exist in reality.

With respect to their call for a segregation of life insurance (pages 195 ff.) I have two points.[15] First, saving in the form of life insurance is already segregated on an annual basis; it is not quite clear what they want done in addition. It seems hardly likely that they consider it es-

[14] Irwin Friend, *Individuals' Savings*, Wiley, 1954, pp. 18-19.

[15] Incidentally, their remark that life insurance companies are "subsumed under the all-embracing total of 'persons' " is inexact. Life insurance companies are part of the business sector, not of the personal sector (see the discussion of life insurance companies in the *National Income Supplement, 1954, Survey of Current Business*, Dept. of Commerce).

sential to have quarterly information on an item that changes quite gradually even from year to year. Secondly, if they feel that premium and claim transactions should appear as components of income and expenditure in the national accounts, I would ask them to frame a satisfactory definition of income and expenditure that includes these transactions. This is a conundrum which to date has defeated the efforts of experts in national income accounting and should not be bypassed in suggestions for the accounting recognition of premiums and claims.

GOVERNMENT TRANSACTIONS

Cohen and Gainsbrugh note that the contribution of government capital to current production and incomes is excluded entirely by the present definition of national income and that compulsory payments are dealt with only in piecemeal fashion. They suggest a table that "would present national income by disposable shares—wages and salaries, corporate income, and so forth. *Government's share would then include disposable government wages and salaries plus all direct items*" (page 204; my italics).

It seems to me that is necessary to distinguish clearly between the two familiar issues which are raised here. One is the problem of measuring the services of government capital. Cohen and Gainsbrugh propose to include government interest other than interest on the war debt in the national income total. My position on this matter is explained in my paper. Briefly, the decision whether given income flows should or should not be included in the national income total (as distinct from the personal or disposable income total, for instance) can be answered only if the function of the national income total is specified. Cohen and Gainsbrugh do not specify such a function; I regard this function as the measurement of output at factor cost. Giving a more concrete interpretation to the latter concept, I come to the conclusion that government interest should not be included because it cannot be taken as a realistic approximation of the value of government property services. I do not know whether Cohen and Gainsbrugh would disagree with this statement, or whether it is even relevant to their argument.

The second issue they raise stems from the circumstance that the present income statement does not bring into focus the incomes actually disposable by the various sectors of the economy, because it does not give a single view of incomes earned in production as modified by transfers and taxes. To remedy this defect, the "nation's budget" rearrangement of income statistics has been devised (originally by Gerhard Colm) to show disposable incomes available to the several sectors of the

economy, the sum of such incomes being equal to the gross national product total. In this rearrangement, government income consists of (all) taxes less transfers. The Cohen and Gainsbrugh suggestion that "Government's share . . . include disposable government wages and salaries plus all direct taxes" I have never encountered before. I cannot see how wages and salaries paid by the government are a part of the government's disposable income any more than wages and salaries paid by corporations are a part of the disposable income of corporations.

SOCIAL ACCOUNTING COMPANION FOR GROSS NATIONAL PRODUCT

In their search for "an alternative income or quasi-income concept that might attain co-equal status with the gross national product" Cohen and Gainsbrugh suggest that "The problem can best be illuminated by considering the consumer sector. Consumer income (in the present accounts, personal income) is of great interest because it is believed to be the primary influence behind consumer expenditures." From this one might infer that they have selected "consumer income" as the companion measure for the consumer expenditure component of gross national product because it is the "primary influence" behind these expenditures, and that they are seeking for similar income measures of the primary influence behind investment and government spending.

But in adverting to the companion measures for investment[16] and government spending[17] they indicate only that these would rest on sources-and-uses-of-funds statements, and they do not comment explicitly on the causal significance of these companion measures. Finally, from their summary statement it would appear that "consumer income" has been abandoned as the companion measure for consumer expenditure, and that a companion measure based on a sources-and-uses-of-funds statement is envisaged for this component of gross national product also.

It would also have been helpful to have a schematic presentation of the proposed companion measure included. In its absence, I venture the following prediction. When subjected to the discipline of social accounting and the test of usefulness, the Cohen and Gainsbrugh idea will reduce to one or the other of two possible presentations. One is essentially the receipts side of the "nation's economic budget."[18] In

[16] "If somehow . . . business behavior" (page 207).

[17] "The element of government borrowing . . . that for business" (page 208).

[18] See, for example, *Economic Report of the President,* January 1956, Table D-5, p. 170.

this statement personal disposable income ("consumer income" after taxes) is the "companion measure" of consumer expenditures, and analogous measures of disposable income (gross undistributed business earnings and net government tax receipts) provide the companions for investment and government spending. The three income components sum to gross national product.

Alternatively, if we take as our cue the Cohen and Gainsbrugh emphasis on information relating to lending and borrowing, we can see their idea shaking down to the supplementation of our present type of accounts by sector saving and investment accounts.[19] Expressed in theoretical terms, what is proposed is the logical elaboration of the conventionally published summary accounts to uncover more of the complete set of production, appropriation, and saving-investment accounts that underlie them. The precise accounting principles involved in this project have been developed at considerable length and illustrated in schematic form in the literature.[20]

If Cohen and Gainsbrugh have this type of elaboration in mind, I certainly agree with them on its desirability. To avoid misunderstanding, however, I should like to note my doubt whether such a set of accounts could be summarized in terms of a total that would serve usefully as an income or quasi-income companion to the gross national product. This doubt springs ultimately from my pessimism about the possibility of finding simple indicators of the "primary influence" behind business or government spending.

MISCELLANEOUS POINTS

It is not practicable to comment exhaustively on a paper so rich in specific suggestions as this one. However, the following additional points are sufficiently important to be mentioned.

1. In connection with the Cohen and Gainsbrugh call for a series on disposable personal income by distributive shares, I note some misunderstanding of our present procedure[21] and refer the reader to my review in my Appendix, Note 1, of the article by Lenore Frane and Lawrence R. Klein which Cohen and Gainsbrugh cite.

2. The Cohen and Gainsbrugh suggestion that we publish data on wages separately from those on salaries can be implemented for manu-

[19] Following the organization plan of the Cohen and Gainsbrugh paper, I have discussed the special problems involved in the sectoring of unincorporated enterprise earlier in these comments.

[20] See also the discussion of Table 1 in my paper.

[21] Property taxes paid on rented dwellings are not classified as personal property taxes in the present series.

facturing and a few other industries. But in most industries it is notoriously difficult to distinguish meaningfully between wages and salaries; it would be helpful if they suggested specific criteria, if they have an all-industry project in mind.

3. Their call for a three-digit industrial classification of the national income should be evaluated in the light of the fact that payroll data are reported on an establishment basis whereas corporate profits data refer to companies. This lack of comparability, for which no satisfactory remedy is in sight, is a serious source of distortion even for a two-digit classification;[22] and would play havoc with a three-digit classification. The Cohen and Gainsbrugh statement that "Certainly, data for the major components of wages and salaries and corporate income can be obtained from existing sources in greater industry detail than is now shown . . ." omits reference to this pons asinorum of national income estimators and accordingly conveys an unduly rosy impression of the data situation in this field.

[22] In this connection see the criticism of our figures by Joseph Lerner in his paper in this volume.

PART III