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Treatment of Distributive Shares

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CLASSIFICATION OF DISTRIBUTIVE SHARES

ULTIMATELY, the national income may be viewed as the value created by the use of productive services supplied by real resources or "factors of production."¹ Functional classifications of income shares rely essentially on the character or type of productive service supplied, in contrast with what might be characterized as institutional or legal classifications, which depend on the form of property right or claim to income held by individuals and groups.

The basic problem faced in national income accounting with respect to functional share classifications is that the supplying of productive services is associated with a monetary transaction involving an actual purchase and sale only in the case of wage and salary payments and a limited number of rents. In most cases, physical assets are owned and controlled directly by business firms and no monetary payment corresponds with their current use. The same is true for self-employed labor in unincorporated enterprises. Some type of imputation for the absence of such transactions is required for any degree of precision in a factor classification of income.

On the other hand, there are many other types of income payments made in an economy which are not accompanied by a return flow of productive services as a part of the transaction. Examples of such transfer payments are interest payments, which the creditor receives as a matter of legal right and not because he is currently furnishing the services of real resources to the debtor; dividends, which represent a distribution of a firm's earnings in accordance with claims held by its owners; taxes, which are not accompanied by governmental services rendered as part of such a compulsory payment; gifts; and insurance benefits. There is a temptation to use some of these transfer flows, for example interest, to represent underlying factor incomes in a classifica-

¹ Or, using the terminology of the National Income Division: "Underlying the definition of national income in terms of factor cost is the general idea that the output of the Nation is the result of services rendered by agents of production." *National Income Supplement, 1954, Survey of Current Business*, Dept. of Commerce, p. 39.

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tion of functional shares, whereas they are relevant only to some form of "institutional" classification, which lists shares according to the type of property right held by the income recipient.

One example of a functional share breakdown is that developed by Raymond T. Bowman and Richard A. Easterlin, between "labor" (representing presumably income from the services of human resources) on the one hand, and "capital" (income from the services of physical assets) on the other. Though seldom explicitly rationalized, this twofold division is, perhaps, based on the notion that the welfare of labor must be considered in assessing the results of economic activity in a manner in which the welfare of owners of property need not, since labor involves the expenditure of time and effort by human beings. Moreover, inequality in the size distribution of income is accentuated by the receipt of property income by households. These facts, however, do not justify classifying the population into workers and capitalists, as Bowman and Easterlin suggest. The distribution of income by factors is not the same as the distribution of income to persons.

How well can the above-mentioned classification be approximated from the distributive shares used by the National Income Division? At present, the labor income of self-employed workers is included in the total income of unincorporated enterprise. A crude allowance for the labor income of independent proprietors of unincorporated enterprises can now be made on the basis of NID data on their number and on average annual earnings of employees, but a better basis could be provided by data on earnings of hired workers in jobs most closely approximating those performed by the self-employed. The problem of segregating factor shares also enters other income items. For example, a small amount of labor income may be included in rental income of persons and in corporate profits; conversely, some distribution of profits may be reflected in the compensation of corporate executives. Such items are probably so small that they may be ignored.

Property income, on the other hand, must be treated in the Department of Commerce accounts essentially as a residual—the difference between total income (whether defined net or gross, or at market prices or factor costs) and labor income (imputed as well as realized). If one is interested in a broad concept of property income (i.e. as any income not accruing to labor), this procedure may be quite satisfactory. If, on the other hand, one wants to restrict the concept to some type of "normal" return on real capital (e.g. as a factor cost measure) it must be recognized that property income treated as a residual will include returns resulting from monopoly positions (broadly construed) and hence imputable to intangible assets (goodwill) rather than to real phy-

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sical resources, as well as the effects of various types of windfall gains and losses. Imputations to cover such elements, however desirable on conceptual grounds, are impossible in any practical sense. Despite these problems, however, Department of Commerce data retain their usefulness for statistical studies of labor and property shares, as Bowman and Easterlin, in company with other users, have shown.²

The division between labor and property income certainly does not exhaust the possibilities of the factor earnings approach for the classification of income shares. The NID mentions itself the time-hallowed classification of the "agents of production [as] the labor and capital, the entrepreneurial ability and natural resources which are used in the productive process,"³ although it does not suggest that its own system of classification corresponds to such a division. Statistical difficulties, as well as conceptual problems, obviously preclude any division of property income between the value of services supplied by natural resources (rent) and that supplied by reproducible capital (interest).

The item of "entrepreneurial ability," insofar as it represents a particular class of productive services rendered by human beings (e.g. managerial and executive services),⁴ suggests the need for a further classification of labor income. Thus, Morris Cohen and Martin R. Gainsbrugh recommend a division of employee compensation into wages, salary income, and executive compensation, a distinction whose usefulness would undoubtedly outweigh both the conceptual and statistical difficulties involved in putting it into practice. Current income accounts provide separate information obtained from the Internal Revenue Service only for the compensation of corporate officers. Even here there is an unfortunate two-year lag in publishing the data.

The usefulness of a classification of income shares in terms of factor earnings is greatly enhanced if it is accompanied by data on factor inputs and supplies. With respect to labor, NID now furnishes data on numbers of workers (both employees and self-employed proprietors, although omitting unpaid family workers), measured in terms of equivalent units of full-time employment. As Cohen and Gainsbrugh point out, additional information is needed on average hours worked per week or per year, since full-time equivalent employment is not based on a work year of a fixed number of hours, but "is defined simply in terms of the number of hours which is customary at a particular time and place."⁵

² See the discussion in their paper in this volume.

³ *Loc. cit.*

⁴ And insofar as it does not, the writer doubts that it is capable of precise definition even analytically, much less statistically.

⁵ *Ibid.*, p. 196.

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Users must now fit other data on average weekly hours to Commerce figures in order to derive estimates of labor input.

Users also need data, now omitted by the NID, on factor supplies relating to the property share. It must be conceded that formidable difficulties, both theoretical and empirical, are presented in any attempt to measure capital services. Data on the private reproducible capital stock and government capital, which would be required to implement some of Everett E. Hagen's and my suggestions concerning the measurement of depreciation and the services of government-owned capital, might well be a first goal.⁶ Alternatively, capital consumption allowances valued in constant dollars might be used as such a measure. Goldsmith has already made considerable progress in these directions.

Classification of income shares need not be restricted to the functional type just discussed. Institutional or legal distinctions are also useful for some purposes, and are certainly easier to approximate statistically. The separation between the income of corporations and of unincorporated enterprises, though largely a legal one, is not without interest in itself.

Another institutional classification, referred to earlier in connection with the factor earnings breakdown, would be between what might be characterized as "initial" or "original" incomes on the one hand, and transfer payments representing redistributions of such initial incomes to various individuals or groups on the other.⁷ Data on such transfers as interest and dividends, for example, are important in de-

⁶ Clearly, difficulties are involved in attempting to use the real value of the capital stock as an index of capital services. For example, the degree of utilization of capital may vary, or there may be changes over time in the durability of the stock.

⁷ The basis for such a classification lies in the distinction between the ownership of real resources (human as well as physical) and control over the disposition of their services within any given accounting period. Income accrues initially to those groups who are in a position to decide on the current use of such resources; these groups are then viewed as making "transfer payments" to those who, while maintaining certain ownership rights in the underlying assets, cannot control their current use. This classification clearly depends on the type of contract and the time period for which the contract is made. If, for example, under certain arrangements and for certain periods, particular workers do not have the right to terminate their employment or decide on the hours worked at specified wage rates, their wage payments under this scheme should be considered as transfers.

The "services of real resources" are those services which enter as inputs into the technological input-output relations of individual firms. It is in this sense that financial transactions (e.g. borrowing and lending, purchase and sale of securities, and payment of interest to creditors) cannot be viewed as productive services which enter into production functions. Legitimate differences of opinion may arise as to the usefulness of this framework for analyzing various problems. Nevertheless, it seems to me that the classification between initial or basic incomes and transfer incomes can be formulated in a consistent and non-arbitrary fashion.

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termining the manner in which the structure of financial claims and property rights results in the redistribution of income received initially by those, such as business firms, in immediate control of factor supplies. These transfers, together with data on employee compensation, may be useful in distinguishing further between contractual and residually determined incomes.

Nevertheless, it can be argued that it would be preferable in listing national income by distributive shares (as is done by NID in its Table 1), to include private transfer incomes in the income of the initial recipient instead of giving the transfer separate status, when listing national income by distributive shares. Such a practice is now followed with respect to dividends, which are included within the total of corporate profits, and also for taxes (assuming the factor cost distribution). The same might also be done for interest, on the basis of information now given in NID Table 12.⁸ This procedure would have the advantage of warning the unwary user that he is not dealing with a particular type of factor income, as connotations of the term "interest" might suggest. In fact, the interpretation of the "net interest" share even for the informed user is one of the most perplexing in the whole of the NID accounts. The inclusion of imputed interest flows which form such a substantial fraction of the total, the "netting" of both monetary and imputed interest flows in various sectors, and the contrasting treatments of household and government interest leave one somewhat puzzled as to the precise meaning to be attached to the aggregate.⁹

The "rental income of persons" is likewise a rather heterogeneous aggregate, and must be understood in terms of distinctions which are primarily institutional in nature. It seems to me that little is gained by preserving this as a separate "distributive" share. For unincorporated enterprises the category depends largely on a rather arbitrary distinction between "persons" and "business enterprises," based on whether the rent receipt is a major or merely a supplementary source of income to the recipients. Since, however, landlords of residential housing and home owners (in the case of imputed rent) are in effect treated as little firms, their rental income, which comprises over three-fifths of all rent, might well be listed as a third category under proprietary income, in addition to "farm" and "business and professional" income. The cur-

⁸ Such a procedure would involve treating interest originating in households as a pure transfer within the household sector and thus, in accordance with the position the author has taken in one of the main papers, excluding it from national income (and GNP).

⁹ Bowman and Easterlin make a similar observation with respect to net interest.

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rent division of net rent originating on farms, between proprietary (farm) income and rental income of persons, seems quite artificial, depending as it does merely on where the landlord lives and not on the character of his property right. Such rent might well be combined with proprietary farm income. The remaining component, net royalties and net rent on business and industrial property, is relatively minor (comprising only a quarter of rental income). Income from long-term rental contracts could be handled as transfers and included within the share of the payer. Rents involving current sales of the services of assets could, on the other hand, be included in the proprietary share. This might permit a more adequate separation of purely contractual elements in rental income. Nevertheless, no great harm is involved in the present treatment, provided the user is furnished with the information he needs to modify the classification in a manner relevant to his purposes.¹⁰

I would also like to underline the recommendation by Bowman and Easterlin for an industrial breakdown of rent. The "real estate industry" ought to be limited to net income originating in residential dwellings, with farm rents assigned to the farm sector, and business and industrial rents and royalties allocated to the originating sector, and classified according to industry or by major industrial groups.¹¹

As a summary of the preceding comments on share classifications, an alternative classification of national income by distributive shares for 1952, is given in Table 1. A few additional comments on this table may be in order. Under compensation of employees, supplements are listed separately; if separate data were ever furnished on wages, salaries, and executive compensation, however, it would be desirable to allocate the supplements to these three shares. For the "compensation of executives," I use the NID figure for the compensation of corporate officers only because it is available and not because it represents the most appropriate definition of executive compensation. The labor income of proprietors is imputed on the basis of average annual earnings of employees, with average earnings (including supplements) and the number of proprietors taken separately for each major industrial division.

For private property income, net interest is treated as a transfer and assigned to the legal sector in which it originates, and interest originating in households excluded. The allocation of net interest is some-

¹⁰ In this connection, much of the detail incorporated in an article by H. D. Osborne, "Rental Income and Outlay in the United States" (*Survey of Current Business*, June 1953, pp. 17-24) could well be included as an integral part of the accounts.

¹¹ For certain purposes, however, it might be desirable to allocate net rent on farm dwellings to the real estate sector rather than to the farm sector.

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what crude, since data are not available for a precise apportionment. Thus, net interest originating from abroad is combined with net corporate interest, and interest paid by landlords and home owners with the property income of persons (admittedly an incomplete allowance). The term "property income of persons" is used, rather than NID "rental income of persons," in order to avoid some of the misleading connotations of the word "rent." If the earlier suggestion for eliminating this category is accepted, this share should be apportioned among the two succeeding ones. The property income of unincorpo-

TABLE 1
National Income by Distributive Shares, 1952
(billions of dollars)

I. Labor income		221.0
A. Compensation of employees	195.3	
1. wages	} 176.7	
2. salaries		
3. compensation of executives	8.4	
4. supplements to wages and salaries	10.2	
B. Labor income of proprietors (imputed)	25.7	
1. business and professional	19.3	
2. farm	6.4	
II. Property income		66.4
A. Property income of persons	12.8	
B. Property income of unincorporated enterprises	15.4	
1. business and professional (including I.V.A.)	6.8	
2. farm	8.6	
C. Property income of corporations	38.2	
1. corporate profits tax liability	19.8	
2. net interest of corporations	.9	
3. dividends	9.0	
4. other corporate transfer payments	.4	
5. corporate saving (including I.V.A.)	8.1	
D. Property income of government (imputed)	...	
National income (at factor cost)		287.4

rated enterprises is shown net of the imputed labor income of proprietors. In accordance with Bowman and Easterlin's suggestion, I include in corporate income, other corporate transfer payments. The allowance, however, is restricted to corporate gifts: the case for treating bad debts in the same way is admittedly not clear cut.

If the recommendations of a number of the papers are accepted and an imputed return on government owned capital is included in output, than a new distributive share, labeled the "property income of govern-

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ment," in Table 1, must be incorporated in national income. I have not followed Bowman and Easterlin's proposal of including the current surplus of government enterprises in this share. The issue here, it seems to me, is not whether such enterprises are analogous to private enterprises in their purchase-sale arrangements, but whether the prices they charge are sufficiently analogous to private market prices so that they can constitute a means for measuring the services of capital controlled by government enterprises. Since the prices are likely to be merely nominal and the subsidy element large, more meaningful results for a factor cost measure would be achieved by direct imputation.

For subclassifications within property income, I have largely followed the NID breakdowns. Nevertheless, it should be observed that the NID uses a modified form of industrial classification under unincorporated enterprise. Under corporate income, an entirely different classification is used—apparently based on the type of transfer payment (or accrual) within the corporate share. A treatment for the proprietary share similar to that for corporations would require a separate listing of net interest, and, say, (imputed) entrepreneurial withdrawals and net saving.¹² If certain personal taxes paid by proprietors were to be treated as business taxes, they could also be shown separately under this share.

MEASUREMENT OF DISTRIBUTIVE SHARES

The preceding discussion of share classifications was based largely on the NID "factor cost" total. Clearly, it would be useful to have income shares measured in alternative income totals, so that the user could select the concept most relevant to his particular purpose. Thus, Bowman and Easterlin emphasize the importance of a distribution of the market value of final product (i.e. net national product) rather than a distribution of final product valued at factor cost, for measuring, in a welfare sense, the relative shares of "labor" and "capital."

However, the justification offered by Bowman and Easterlin for selecting the "market price distribution of payments" as the one most relevant to their problem is not quite clear to this writer. I find it impossible to interpret their rationale for the market price total, which is that "the suppliers of property [or one type of factor] could have bought the goods going to labor [suppliers of the other factor], but chose not to, preferring the goods actually purchased." (page 181). It

¹² The purpose of this comment is merely to point out the dissimilarity in treatment of the two sectors and not to recommend the estimation of "entrepreneurial withdrawals." Where separation of ownership and control does not exist, as in the entrepreneurial sector and in closed corporations, the concept of business saving loses its usefulness either for measures of welfare or for explanations of behavior.

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would seem to me that what is pertinent for a measure of welfare is the disposable income of owners of property and laborers, plus possibly some allowance for capital gains and for certain government services furnished free to each group. I see no reason for supposing that such an income total as this must of necessity be identical to NNP (at market prices). Their criterion could still be fulfilled even in the absence of equality between such a "welfare" income total and NNP.

Bowman and Easterlin's whole approach in terms of market value is in fact equivalent to asking how disposable income and corporate saving (the sum of these two might be characterized as "private disposable income"), government final product, and the government's surplus (on income and product transactions) are apportioned between labor and property income (or between laborers and capitalists), since the sum of these items is identically equal to NNP. The distribution of disposable income by factor shares would undoubtedly be useful for many purposes, and its importance is also emphasized by Cohen and Gainsbrugh. The NID should certainly be urged to extend its study of the allocation of taxes and transfers by income shares to additional years beyond 1929 and 1948. Nevertheless, the limitations of such data should be recognized by users. The way to allocate social insurance benefits and interest payments to factor shares may seem obvious, but the difficulties involved in allocating other transfers (e.g. veteran's benefits, direct relief) are so serious that it would be best not to allocate them at all.¹³ Taxes present similar difficulties. The personal income tax is a tax on persons rather than on sources of income. In view of the existence of progressive rates and the fact that many taxpayers have more than one source of income, any method of apportionment must remain somewhat arbitrary.¹⁴ Parenthetically, it might be observed that a similar—and perhaps even more significant—element of arbitrariness would be involved in estimates of personal saving by distributive shares, in which Cohen and Gainsbrugh express an interest.

The allocation of government final product by distributive shares would seem to be even more debatable. Studies have, of course, been made of the effects on the size distribution of including in personal

¹³ In their "second approach," Bowman and Easterlin argue that such transfers as veterans' benefits and assistance to the blind should be included in labor income, since they affect the supply of labor. Since such payments are not in return for labor services currently rendered, they would operate on supply only through an income effect, and, if leisure is a normal good, would reduce supply. But since property income payments (e.g. interest) would have exactly the same effect on the supply of labor, such payments on these grounds would then have to be classified as labor income.

¹⁴ This point is, of course, well recognized by the NID (cf. Edward F. Denison's comment in *Survey of Current Business*, June 1952, p. 23).

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income an imputation for the benefits of government expenditures; since data exist on the receipt of income by type at various income levels, a basis might be found for reallocating such benefits by distributive shares. Even for government final services to consumers, such a procedure would involve many arbitrary assumptions. For the indivisible, collective services of government (e.g. military, legislative) and for government capital formation, no rational basis for apportionment would appear to exist.¹⁵

Government saving, the final item in the Bowman and Easterlin valuation of NNP, is equivalent to NID "government surplus on income and product transactions" and hence excludes the increase in the government's stock of capital assets, which Bowman and Easterlin incorporate in government final product. Such saving (positive or negative) measures, therefore, the net change in the government's indebtedness to the private (household and business) sector. If government saving is allocated to private groups, it means in effect that the change in private net worth resulting from production must be taken as identically equal to private net investment. A government deficit must be viewed as a "loss" from the standpoint of the private sector, whose "true" net saving has been overstated by the value of its increased claims on the government.

There are two main objections to this approach to saving. In the first place, people do not generally view their net worth as net of some undefined liability they may have for the government debt, or their net saving as net of their "share" of the government deficit. They normally consider themselves better off when they have gained at the expense of (i.e. acquired net claims against) the government. In the second place, statistical implementation of the Bowman and Easterlin proposal would be virtually impossible; any method of allocating government surpluses and deficits would be even more arbitrary than those used for allocating government final product. The "thorny conceptual questions" referred to by Bowman and Easterlin should certainly be resolved before NID devotes any of its scarce resources to the allocation of government saving to private groups.

Unless the user wishes to treat the government itself as an income

¹⁵ In accordance with the position taken in another paper, I am considering the collective (or "non-product specific," Bowman and Easterlin's term for an apparently analogous concept) services of government to be final products and counted separately in NNP. The difficulties with respect to obtaining merely a size distribution of these (and other) government benefits are well recognized by two investigators in this field. Cf. John H. Adler and Eugene Schlesinger, "The Fiscal System, the Distribution of Income, and Public Welfare," in *Fiscal Policies and the American Economy*, K. E. Poole, editor, Prentice-Hall, 1951, pp. 386-389.

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receiver separate from the private sector,¹⁶ a procedure to which Bowman and Easterlin object, a secondary share distribution of NNP in which each private income share would be shown after all transfers (monetary and imputed) thus appears to be out of the question statistically, even if its conceptual meaning could be made clear. In view of the extensive platter of proposals for extension and improvement of national income data that have been served up in the various papers and the rather obvious budgetary limitations facing the Commerce Department, it might be well to confine work on secondary distributions of income to the extension of estimates already started by the NID of private disposable income by distributive shares.

If a classification of distributive shares adding up to NNP is desired, it would seem preferable to use share income before monetary and imputed transfers (especially those relating to the government). All that would be required to go from the distributive share breakdown of national income at factor cost to that at market prices would be the addition of indirect taxes to and the subtraction of subsidies from the property income of the private sector (apportioned, as previously suggested, among persons, unincorporated enterprises, and corporations). If intermediate government services are to be excluded from NNP, as recommended by several of the papers, either they could be considered as subsidies in kind and treated in the same manner as monetary subsidies to business, or they could be viewed as a type of "collective" loss and deducted from government property income. The only new information required would be a breakdown of indirect taxes (and subsidies) according to the type of business paying (and receiving) them.¹⁷ Data on the industrial breakdown of indirect taxes (according to the industry paying the tax) would probably be needed as well. Even this information would be much cheaper to provide than that called for by the Bowman and Easterlin approach.

Measures of distributive shares in national income, NNP, and disposable income do not exhaust the measures which would be helpful to users of NID data. In particular, there is a need for information

¹⁶ A secondary share distribution of NNP based on such a treatment would not, of course, be difficult to achieve, since the only additional information required would be the factor share breakdown of disposable income referred to above. The government's secondary income share would be equal to all taxes minus transfers (including in the latter, government interest payments and subsidies).

NID utilizes an almost identical income scheme in classifying GNP by "type of receipt," among disposable income, gross business saving, "net government receipts," and the statistical discrepancy (*National Income Supplement, 1954*, p. 22), although its basic tables are not presented in this quite useful form.

¹⁷ A similar breakdown for intermediate government services would be necessary if these services were to be treated as subsidies in kind.

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required to develop alternative definitions of business profits. Reference has already been made to the desirability of having data on indirect taxes and subsidies by type of business organization and by industrial origin. The same need exists for information on capital consumption allowances. Depreciation by form of business can now be gleaned only very imperfectly from NID Table 6. An industrial breakdown of depreciation, not now available, would certainly prove useful.¹⁸ Such information would permit users to employ a concept of gross profits by type of business and industry.

Since national income estimates are fundamentally concerned with measuring income from production, or factor activity, estimates of capital gains and losses are omitted from the accounts. While this omission is undoubtedly correct for measuring such totals as NNP and national income, it would undoubtedly be useful, as Cohen and Gainsbrugh suggest, to have supplementary information on certain types of capital gains and losses. The relative welfare of certain classes or groups cannot be answered fully by considering only gains accruing to labor and capital from production, as measured by either NNP or national income. For this and other types of studies, property income may need to be defined to include capital gains (in some cases, unrealized as well as realized gains).¹⁹

None of the measures so far discussed appears to be fully relevant to the "cost of productive services" concept developed by Bowman and Easterlin, which they characterize as "the amount necessary to induce the provision of productive services." Such a "supply price" concept would call for measuring factor returns per unit of input, net of tax liability directly incurred. Taxes paid and transfers received (whether monetary, or imputed, as in the case of free government services), which are levied or furnished independently of the amount of productive services supplied, should not enter into the supply price itself, since their influence is confined to an income effect. Rather than being relevant to the slope of a factor supply curve, they affect merely its position. With respect to labor, for example, if leisure is considered a normal good, such independently determined taxes (transfers) will always operate to increase (decrease) the supply of labor, whereas taxes (transfers) directly related to income earned from factor activity may

¹⁸ Data on the industrial origin of depreciation allowances, while perhaps less reliable than aggregate depreciation allowances, since errors may to some extent be compensating, would probably be as reliable as present data on the industrial origin of business net profits. The latter are, after all, computed as residuals, after deducting depreciation within the individual firm or industry.

¹⁹ In such a case, the inclusion of corporate saving in "private disposable income" would have to be re-examined.

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have the opposite effect. In fact, if income effects fully offset or even outweigh substitution effects, and the relevant supply curve of the productive service is vertical or backward-sloping, the whole "cost of productive services" concept loses its meaning, and the question of whether it can be approximated in the national accounts becomes unimportant. That approach is perhaps more useful in a micro-economic setting, for analyzing questions of factor movements among different industries, rather than in a macro-economic framework relating to such problems as aggregate labor supply. In this more restricted framework, the deduction of those direct taxes which apply uniformly regardless of the industry in which the factor is employed becomes less important. One serious difficulty in taking unit factor returns net of income taxes (and other taxes varying with the amount supplied or earned) relates to the selection of the tax rate applicable to the factor price in question, since different individuals are subject to differing tax rates, independently of the industrial employment of the resources they own. One case, however, in which an allowance for differential tax treatment ought to be made in computing the unit factor return in a specific industry concerns imputed income (e.g. the tax-free status of food and fuel produced and consumed on the farm).²⁰

Finally, it should be emphasized that the presentation of supplementary information on various magnitudes related to the national accounts is just as important as refinement of the over-all totals by various exclusions and inclusions, a matter on which some of the papers have tended to concentrate. While the uninitiated may rely heavily on a few carefully defined and presented aggregates, the informed user is more in need of detailed, supplementary information which will permit him to "roll his own" concepts for the problem in hand.

C O M M E N T

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On the Schelling Paper

T. C. Schelling's *leitmotiv* is that the accounting approach to the measurement of national income has dangers as well as advantages.

²⁰ Further conceptual difficulties are, of course, involved in interpreting the figures once they are derived. If an industry differential in the after-tax return to a factor appears, is it to be interpreted as measuring the nonmonetary preferences for having the factor used in one industry rather than another, or can it be attributed to either short-run or long-run economic and social barriers to mobility? Furthermore, in the case of labor supply, Commerce Department classifications measure industrial earnings differentials rather than occupational differentials, and the latter may well be the more important element.

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As can be seen from my paper, I do not disagree with this conclusion. Although I believe that the conventional case in favor of the accounting approach remains essentially valid, I can see that this approach has already led to a good deal of sterile and formalistic thinking; that it could lead to a disadvantageous presentation of the data; and that it could become a handicap to efficient statistical research. However, I disagree sufficiently with Schelling's precise diagnosis of the situation to make the following comments.

For instance, he appears to argue that the usefulness of statistics presented in the framework of accounting systems is overrated because a great deal of the use that is made of national income statistics does not involve the simultaneous use of both sides of a given account (page 325). But the fact that people use one side at a time of a given account does not preclude interest in interrelationships among the several accounts. Even if extensive use is made of national accounts series which does not involve the study of their interrelationships and hence does not require an accounting framework, this does not diminish the importance of a comprehensive accounting system, because in general the uses that do involve study of interrelationships, and hence require accounts, are of greater intrinsic worth. From an intellectual standpoint a somnolent after-dinner speech in which the personal income total is cited as an evidence of business prosperity cannot be balanced against an analytical study that attempts to trace the propagation of a change in investment or government expenditures through the economic system.

Schelling's view that the statistical uses of accounting systems are relatively unimportant and that their value is largely pedagogical leads him to his main conclusion "that the fully integrated accounts should mainly be designed for their theoretical, rather than their statistical, use." I am not sure what the precise implications of this statement are. At one stage he suggests that the accounts should be drawn up according to a system of classification which is theoretically ideal even though the statistical information to fill the empty boxes is not available. To my mind there is a grain of truth in this proposition, but not much more. After all, we want our public to understand the interrelation of the magnitudes that we do estimate. It would be sterile to draw up a set of accounts on a basis of classification which differs so radically from the magnitudes we actually measure that it would not promote an understanding of the interrelationships among these magnitudes.

A more subtle point may also be mentioned. Schelling's advice implies that a determinate system which in some sense is theoretically satisfactory can be drawn up without reference to the empirical infor-

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mation that actually exists. I do not think that this can be done. Theoretical accounting systems cannot be divorced from what is empirically measurable. They can and should be one step ahead of it.

In other passages the implication of Schelling's main conclusion appears to be somewhat different. All he seems to suggest is that the structure of the accounts should be kept relatively simple, with the detail left to supporting tables. I quite sympathize with this view, and we have tried to implement it. We carry the vast bulk of our statistical information in supporting tables without cluttering up the accounts. Some detail of limited intrinsic interest is left in the accounts, but a set of accounts which suppressed it would show the structure of the economy less clearly. For instance, suppose we decide that a presentation of wages paid to domestics in the summary accounts is not warranted because the item is comparatively small. We can eliminate it only by consolidating all sector production accounts. But this results in an accounting system in which the institutional structure of the economy is obscured. As I have indicated in my paper, I am nevertheless inclined on balance to proceed in the direction of further simplification. I only want to make clear that this simplification is not obtained without cost.

Schelling outlines "the ill effects that an internally consistent, comprehensive set of national accounts can have on the development of statistical information and analytical concepts." I am receptive to this proposition. However, the particular evidence Schelling adduces is unconvincing to me.

Under the heading of "excessive comprehensiveness," he observes a certain hesitancy to introduce categories which cannot be estimated in total. For instance, we are reluctant to present an item labeled "government investment" because the total cannot be determined.

Two comments occur to me. First, I do not see that this hesitancy is a result of the comprehensive accounting approach. Even if this approach had never been invented, and national income statistics consisted of an array of unintegrated tables, one might well hesitate to show one labeled government investment unless it were reasonably comprehensive. Also, I am not sure whether the observed reluctance is an ill effect. I find it very annoying to find in some national income tabulations an entry entitled government investment and to discover subsequently, and only after patient digging, that it represents merely the tail of the proverbial dog.

Schelling mentions the tendency to derive estimates for items on which no direct current information exists by interpolating and extrapolating benchmarks, using information only remotely related. He

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illustrates his point in terms of a monthly gross national product estimate based on interpolation and extrapolation of the quarterly figures by means of the index of industrial production. Most readers of this volume know that actually no such monstrosity exists. But this is not the main point. Similar creatures do exist. However, their parentage cannot be attributed to the comprehensive accounting approach, for the simple reason that they antedate it in historical origin. National income and product totals, many components of which were based upon interpolation and extrapolation of shaky benchmarks by tenuously related information, existed long before the comprehensive accounting approach emerged.

Under the heading of "excessive balance" (consistency), Schelling mentions that the accounting approach discourages the registering of certain taxes as capital outgoes in the accounts of the payor and as current income in the accounts of the recipient, even if that treatment would conform to the underlying economic realities. There is a tendency in this direction, but the case is overstated. If economic analysts could isolate these asymmetrical items and agree on their treatment, national income accountants would be ingenious enough to devise a proper way of handling them in the framework of the accounts. In the absence of agreement among economic analysts, the national accountants have naturally been hesitant to complicate their accounting systems.¹

My comment on capital gains is similar. Capital gains and losses are omitted from the accounts not because they cannot be accommodated in the accounting framework but, rather, because economic analysts do not agree on a definition and because there are substantial statistical difficulties in assembling such information. Again, it is pertinent to note that the wrangle about capital gains is of much earlier origin than the comprehensive accounting approach.

Nor does the comprehensive accounting approach bar a proper treatment of depreciation. It has not even been a factor in the delay of such a treatment. If both book and revalued depreciation are of interest, as Schelling maintains, all we have to do is to introduce a "depreciation valuation adjustment" analogous to the inventory valuation adjustment, and the two definitions of depreciation can peacefully coexist in the same set of accounts.

Schelling next examines our treatment of insurance and related

¹I do not understand Schelling's next point, which is that "'disposable income' reflects the reasonable inconsistency of treating transfer payments as 'like income earned in production' for certain purposes but unlike it for the estimation of net product."

items, to trace the ill-effects of the accounting approach in this area. With respect to the outline he gives of our procedure, I wish to note in passing that we do not treat social security saving as personal saving. In fact, our varied treatment of the various forms of institutional saving is the clearest evidence that no set procedure is dictated by the accounting approach. If enough sectors were to be distinguished, each form would emerge separately. The fact that they do not do so is the result of summarization rather than of consistent accounting per se. With respect to life insurance proper, I do not grasp Schelling's precise meaning sufficiently to comment directly on his remarks. However, I do concur in what appears to be the broad implication of his statement: that a genuine difficulty arises if we try to show premiums and benefits explicitly within the framework of the national accounts.

I find myself in close agreement with Schelling's proposition that a comprehensive national accounting system in real terms is not possible. Incidentally, he does not give us sufficient credit in saying that we recognize this impossibility "implicitly." I have stated it explicitly at the last annual meeting of this Conference, and earlier in a paper published in the September 1951 *Journal of the American Statistical Association*.

However, it would be wrong to think (and I am not at all sure Schelling thinks so) that anything we have done or left undone about deflation has represented the ill effects of the accounting approach. We have deflated product at market price. We have not deflated product at factor cost, because it would show virtually the same movement. We have not gone far in the deflation of income flows by indexes of purchasing power (the only item we have deflated is disposable income) because the appropriate choice among available indexes varies according to the analytical purpose in view. We have not made much progress in the deflation of product by industry (incidentally, this is a branch of deflation in which the framework of the accounting approach is extremely useful) because of the statistical difficulties involved. Finally, we have not attempted a deflation of factor inputs because of formidable conceptual and statistical problems. None of these commissions and omissions in the area of deflation have been attributable to the ill effects of the accounting approach.

On the Lusher Paper

It would be helpful if David W. Lusher would make more specific the following suggestions for the elaboration of our data.

1. He envisages certain changes in the design of the accounts which

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"would permit the construction of a summary set more homogeneous in purpose and better balanced than the present one."

Specifically, what changes does he have in mind?

2. He refers to "materials [that] are left to stand by themselves because they cannot be comfortably fitted into the present accounts."

What are these materials and what changes should be made in the accounts to fit them in?

3. He states that "somewhere between the expenditures and the distribution of proceeds the streams go underground, and cannot be traced at all."

What is the type of information which he would like to see developed, in the short run and in the long run, to trace these flows?

4. He notes that "In making the statement that one can trace flows between the condition of purchasers and expenditures I carefully put in some qualifying phrases."

What "flows" does he envisage between these two points? What are the deficiencies here, concretely, and along what lines should we proceed to remedy them within the framework of national economic accounting?

On the Copeland Paper

I concur in Morris A. Copeland's broad aim of introducing information on changes in financial assets and liabilities into the national income and product accounts, as well as in some of his specific suggestions bearing on the presentation of data we now publish. Among these suggestions is the elimination of the business income and product account from the summary set of accounts, to leave a five-account system in place of the six-account system now used. I also like his presentation of international transactions, if I understand it correctly, and I share his preference for the "domestic" in contrast to the "national" definition of production.²

His proposal for incorporating financial transactions into the accounts is embodied mainly in his points relating to personal saving and corporation outside funds, and in the Accounts II, VI, and VII which he proposes. In summary, I think that his remarks on corporation outside funds point in the right direction. I would adopt a different approach, however, to the problem of distinguishing entrepreneurial

² I also take sympathetic note of his suggestion that we present a regular reconciliation of published federal budgetary statistics with the statement of federal finances shown in the income and product accounts.

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saving and financial transactions from those of persons generally. Finally, I question whether the accounting devices he suggests are sufficient even as an intermediate step; the minimum requirements of analysis in this area call for a more systematic and far-reaching elaboration of accounts.

In connection with personal saving, Copeland suggests that we substitute the (conceptually identical) estimate of the Securities and Exchange Commission³ for the one derived from the national income and product accounts, and that we segregate the saving of unincorporated enterprises from that of consumers, on the basis of the SEC data. (I neglect his suggestion for nonprofit institutions in order to focus on what I regard as the important conceptual point.)

I am not prepared to implement the first suggestion, since I am not convinced that the SEC data are consistently superior. But this is a statistical matter which I do not intend to argue here.

I discussed in my paper the central issue involved in his second suggestion. I do not believe that a realistic, useful segregation of consumer saving from entrepreneurial saving can be achieved by breaking the saving of entrepreneurial families into a business part and a consumer part. Rather we should strive to separate the total saving of entrepreneurial families from that of other households, even though the statistical problems of data collection are tremendous. If we cannot implement the latter approach, I prefer the present personal saving total to what would be produced by such a vivisection as he proposes.

In the accounts which Copeland actually sets up he does not try to implement the treatment of unincorporated enterprises which he basically favors. Instead he retains our present convention of considering all entrepreneurial income to be realized by persons and hence showing all entrepreneurial saving as personal saving. It is therefore not surprising to find that his accounts do not provide new information on the financial transactions of noncorporate business.

His Account VII appears to be the vehicle for introducing these transactions. As one of the set of accounts proposed, it must be intended to reflect the transactions of all persons and not merely those of entrepreneurs, since no capital account is provided for registering the transactions of other groups included in the personal sector.⁴ In effect, it is a condensation of our Table 6, designed to isolate a composite

³ See *National Income Supplement, 1954, Survey of Current Business*, Dept. of Commerce, Table 6.

⁴ If this is so, the presentation strikes me as infelicitous, because it might create the impression that the account is confined to noncorporate business. This impression is fostered by the reference to it as applying to "other [noncorporate] private enterprises" (page 345; my italics).

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residual, the "net new capital funds of unincorporated enterprises"⁵—item 7 in his account.

This looks like the noncorporate analogue of item 6 in Account VI, "funds raised by corporations." In fact, however, the two are very different. Item 6 implements the distinction—extremely useful in financial analysis—between internal and external sources of corporate funds, and lends itself to a breakdown in terms of actual financial transactions between corporations and noncorporate transactors.

Item 7, in contrast, is automatically equal to net noncorporate capital formation and contributes nothing of comparable significance. As a fund source it represents the net balance of all items, other than net noncorporate capital formation, that enter a statement of personal saving and its disposition among personal assets and liabilities. It thus involves numerous transactions having nothing to do with noncorporate business. For instance, it reflects the transfer of securities and commercial bank deposits from families of wage earners to corporations—to mention only two transactions that one might be surprised to find among the components of an item entitled "net new capital funds of unincorporated enterprise." To my mind this indicates clearly that Account VII is a sheep in wolf's clothing, and that it raises expectations which it does not fulfill.

Setting aside the treatment of unincorporated enterprise, I do not think that Copeland's system goes far enough or entirely in the right direction to make room for financial transactions. I miss a sector saving-investment ("capital") account to detail the financial transactions of government, and a similar account for financial intermediaries; these additions I believe to be a minimum requirement for financial analysis. I see little advantage in the Net Financial Transactions Account (II), which is a memorandum (rather than a sector account or consolidation of sector accounts) and results in an undesirable segregation of financial transactions from their saving and investment context.

As I explained in my paper, I prefer a comprehensive breakdown of the consolidated Gross Saving and Investment Account (III), in the form of a set of accounts supporting the summary five-account system, as a vehicle for introducing financial information. This plan is somewhat more difficult to implement than Copeland's, because it involves the introduction of a comparatively large amount of additional empirical information. But it would add greatly to the usefulness of the data in practical analysis.

My proposal would also afford a pedagogical vehicle for tracing systematically the interrelationships in the system. Copeland gives a

⁵ I quote the full title as it appears in Account II.

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low rating to our present accounts on this score. I consider his set of accounts the least transparent of the three alternatives.

On the Budd Paper

I sympathize with the intention that lies behind Edward C. Budd's special calculation to separate the returns of labor from those of property and share his interest in the development of correlative measures of factor input. I want to add two points. First, we must recognize the somewhat speculative nature of the project of separating the shares, and the extent of legitimate disagreement to which calculations of this type may be subject. These attributes of the proposed estimates raise some administrative problems for a government agency.

My second point is more basic. Appended to Budd's discussion of the proposed allocation of income shares to labor and property is the thought that we might undertake a broad reclassification of the various forms of income that we now distinguish as originating in the private economy. What he envisages is a substantial broadening of the category of transfer payments and a correlative narrowing of that of "basic incomes" (my phrase). For reasons detailed in my paper, I am very doubtful whether such a change in our present distinction between factor incomes and transfers would be meaningful.

Budd's remarks on the Bowman and Easterlin proposals for measuring the distribution of output among economic groups appear to support my own somewhat negative conclusions. On the other hand, I cannot sympathize with some of his own positive suggestions. For instance, I cannot see that an allocation of indirect taxes among the various categories of property income would be useful.

RAYMOND W. GOLDSMITH, National Bureau of Economic Research

WHERE DO WE GO FROM HERE?

For the first time an entire meeting of the Conference on Research in Income and Wealth has been devoted to the examination of the national income accounts of the United States prepared by the National Income Division of the Department of Commerce. Specific aspects of the NID's work have been discussed before, and Volume Ten contains a paper by Edward F. Denison on "Proposed Changes in the Measurement of National Product by the Department of Commerce" which is close to this year's subject. However, we have never before paid as much attention as we should to the only statistics of national income that we now have in the United States.

It is now about a decade since the present framework of our national

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income statistics was developed—obviously before the postwar changes in our arsenal of basic statistical data could be known. Eight years have passed during which the national income accounts have been published in essentially the same form. We may therefore assume that a revision of the national income statistics is under consideration and hope that it will be carried into effect in the not too distant future. Our Conference would be failing in its duty if in this situation it did not give articulate expression to the suggestions of academic and business users of national income statistics, suggestions based on nearly a decade's experience.

The meeting, and the papers underlying it, have abounded—quite rightly—with tributes to the competence, ingenuity, and the hard work of the staff of the NID, and their ability to squeeze the last ounce of information out of the available, often refractory, statistical raw material. The contribution by George Jaszi to this volume is as good evidence of the quality of the NID's work as are these testimonials.

This endorsement of the work of the NID and, on a less personal level, the general acceptance of our existing national income statistics does not mean that no criticism has been leveled at the details of the conceptual structure, at the methods of presentation, and, less often, because few outsiders have the necessary detailed knowledge of both NID practice and feasible alternatives, at the actual estimates of specific items in the accounts. Nor should broad approval of the accounts as they stand be taken to indicate that no further changes in the present system are expected. In this situation I should like to make three suggestions for the direction of our efforts during the next decade, even though they will probably be regarded as heretical by some workers in the field, particularly by the estimators themselves.

USES OF ELECTRONIC ACCOUNTING

First, we must take full advantage of the potentialities of electronic computers in national income work. This suggestion refers not to the use of electronic computers in putting together the national accounts (although this may be helpful, for example in adjusting a large number of component series for seasonal variation), but to the need of so modifying the accounts that they will fully exploit the shift to electronic accounting in business and government which can be expected to occur during the next ten to twenty years. Once this shift is well advanced, the basis will be provided almost automatically for national income and related estimates that can be prepared in a detail, with a rapidity, and with a reliability not easily envisaged so long as our eyes are glued to our present difficulties which reflect today's state of the

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records of the representative firm—the state of the leading organizations' accounts half a generation ago.

We must not sit by and wait for electronic accounting to become a common feature. When that happens it will be too late to influence the nature of the data that can be obtained as by-products of electronic accounting. What is called for is active participation with the assistance of the agencies that collect economic data, normally as a by-product of their administrative activities, in the early stage of the transition to electronic accounting, a stage that is already with us. It is now that we have a chance to influence the form of the new system so that it may furnish, at little additional cost to business and government, figures that fit a system of national accounts, quite possibly a system somewhat modified from the one we have now, to take account of the characteristics of electronic accounting. Once the new system becomes frozen in its essentials, it may be even more difficult to change than are the present accounting records from which we draw much of the basic data for national income work.

I cannot suggest exactly what new data we may expect or what data we may hope to obtain much more rapidly than now. However if we are able to ensure a modicum of uniformity in the industry, commodity, and transaction classifications adopted by the users of electronic accounting, the business and government units responsible for much of the relevant data should be able to furnish information on items like sales, cost of sales including wages and salaries paid and capital consumption allowances, profits, inventory changes, and capital expenditures—to limit enumeration to data entering into ex post national accounts. Most of these data would be on an establishment basis, and thus available in regional and product detail beyond present statistical dreams, and they would be available a few days after the end of an accounting period that may easily be as short as a week.

This type of information, of course, will be provided only for large units. We will still have with us the problems, possibly even in more acute form than now, of blowing up the detailed high quality data for one part of the economy to national totals and of combining them with the much poorer estimates for those items in the national accounts not likely to be covered, directly or indirectly, by electronic accounting, particularly transactions among small business enterprises, agriculture, and households. (Fortunately most of the transactions of these groups also involve large business or government units and thus will be included indirectly within the scope of electronic accounting.) To reap the full benefit of electronic accounting by large units, we shall therefore need a great expansion of sample reporting for smaller business

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units and for households, particularly at shorter intervals than are now common.

NATIONAL BALANCE SHEET

My second suggestion concerns national income statistics only indirectly. I hope that during the next decade an annual national balance sheet can be made an integral part of our national accounts. If this comes to pass, a few modifications in the income account will be indicated to facilitate the integration of these two components of a complete set of accounts for the nation and its main economic sectors. In particular, the income estimates must be prepared so that on an original or base-period cost basis, national saving is equal to the change in national wealth. More important, once a national balance sheet in current prices is prepared, it will become possible and advisable to develop estimates of realized and unrealized capital gains and losses for various sectors of the economy. The significance of these figures in influencing economic behavior has often been stressed, and at least one of the papers in this volume suggests their addition to present national income estimates.

NEED FOR A SECOND SET OF ACCOUNTS

The third suggestion, I am afraid, will meet more opposition because it affects the present organization of national income statistics rather than only their future potentialities, and it runs counter to the desire for simplicity and uniformity in national accounts which is particularly understandable on the part of the estimators themselves. However, this suggestion is intended to apply only for the next ten to twenty years, and will lose much of its relevance after the general introduction of electronic accounting.

We should reconsider the attempt to satisfy all demands made on national income and related statistics by one, and only one, set of national accounts, a set which tries to serve at the same time the needs of the short-term and the long-term analyst, the business and the academic user, the historian of the past and the historian of the future (the forecaster). It may be advisable instead to develop side by side at least two sets of accounts.

The first set would be prepared leisurely, on an annual basis only, but in as much detail and as closely in accord with the principles of national accounting as possible. This set would therefore include many imputed items—possibly even the value of housewives' services—and would deviate freely from the figures found in the books of business wherever necessary (e.g. in the calculation of capital consumption al-

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lowances). It would be fully integrated with a national balance sheet and would provide a tie-in with an input-output statement, would be expressed throughout both in current and base-period prices, and would often provide alternative figures reflecting different treatments of a specific transaction. This set of statistics is intended primarily for the economic analyst and historian. Since its chief use would be in long-term and structural analysis and in international comparisons, its value would not be seriously impaired if it became available only as much as a full year, or even more, after the event, and if it were subject to revision as additional benchmark data came to hand.

The second set of national income statistics would have almost the opposite characteristics. It would be calculated quarterly and possibly even monthly, should be available about one month after the end of the period covered, would correspond as far as possible to the concepts familiar to business and government users, would not tie in with a national balance sheet, and would be guided throughout by its primary objective to reflect short-term movements in the economy as rapidly and accurately as possible. This set, therefore, would be limited in sector and product detail except where such detail is essential for business cycle analysis, would not make adjustments for price changes, would embody only a minimum of imputations if any, and would not provide for alternative calculations. On the other hand, this set would go beyond present practice by attempting a systematic connection, wherever possible, with anticipation data to permit a current confrontation of *ex ante* and *ex post* values for critical over-all magnitudes.

This version of the estimates, once issued, need not be revised. In other words, this would be a "popular" preliminary edition of the national income accounts, destined primarily for ephemeral use and not for the construction of long time series. It would not try to come as close as possible to the "true" figures—whatever they may mean in national accounting—but would be designed to provide the means of short-term observation and forecasting of a combination of series, including only a minimum of blow-ups, extrapolations, and similar devices, series that would be treated "as if" they reflected accurately the movements in the aggregates they are supposed to measure. The test of this version of the estimates would be its ability to assist in the diagnosis and prognosis of business fluctuations and nothing else.

REPLY BY MR. COPELAND

One of the purposes I had in mind in proposing a revised set of Roman numeral accounts—and by far the most important one—was to bring out clearly the financial flows of funds that are implicit in the

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present national income and product accounts and thereby to facilitate spelling out in this system of economic measurements its interconnections with the Federal Reserve's flow of funds measurements.¹ Only if we have this kind of spelling out of interconnections developed in the presentations of both measurement systems can we understand the relations between them.

I gather from George Jaszi's comments on my paper that he concurs in this purpose but objects to the means I have suggested as a start toward its achievement.

Jaszi's objection is that the eight Roman numeral accounts I have proposed do not go "far enough or entirely in the right direction to make room for financial transactions" meaning by "right direction" that they do not move toward a separation of "the total saving of entrepreneurial families from that of other households." Such a separation he foresees would "add greatly to the usefulness" of the national income and product accounts "in practical analysis."

We will doubtless have to wait until we get this separation to find out whether Jaszi is right in his forecast of its usefulness. However, let us assume its correctness. We have then an excellent reason for seeking to develop the separation. But this is no reason for objecting to my proposals, though by his use of the words "right direction" Jaszi manages to suggest it is. One cannot move in two divergent directions at once, but there is nothing incompatible in moving both toward a separation of the personal accounts of entrepreneurial and other households and moving in the direction I propose. My eight Roman numeral accounts leave the personal account intact; they should in no wise hamper the subdivision of it Jaszi has in mind.

The two moves are compatible; they are not both proposed for the same prompt action. My proposals are immediate; Jaszi's are so ambitious that no immediate steps seem to be contemplated. It would be unfortunate then if advocacy of such an ambitious subdivision of the personal account were to be accepted as a convincing argument against doing anything at all now.

A part of Jaszi's objection to my proposals is that they "do not go far enough." Naturally they don't. They were explicitly confined to what is immediately feasible without any additional computations of consequence—and he apparently accepts their immediate feasibility. But of course I had a number of further steps in mind. If Jaszi had visualized these as I hoped he would, I do not think he would have spoken so disparagingly of my net financial transactions account or

¹ References here and below are to *Flow of Funds in the United States, 1939-53*, Board of Governors of the Federal Reserve System, December 1955.

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made the mistake of calling it a mere memorandum account. It is in fact one of the interlocking set of accounts I propose—a summary of the financial sources and uses of funds of all the sectors of the economy, a summary too of the market demands and market supplies of all the various kinds of loanable funds.

If such a summary is to be really useful, obviously it must be supported by detailed tables that analyze its five substantive items into their positive and negative components. My further steps would provide for rounding out this kind of supporting detail. We already have such a table for item 12, personal saving, and it should be fairly easy to expand the present three component analysis for item 8, net foreign investment,² using balance of payments data.

If my immediate proposals do not go very far there is one respect in which they go further than Jaszi seems to realize. He speaks of missing, in my proposals, one that calls for detailing the financial transactions of government. Certainly I think item 16, government surplus (or deficit), should be construed to mean net debt repayment (or net borrowing) and analyzed into positive and negative components so that we can relate it to data on government debt and on government cash balances and other financial assets. Moreover for the federal government I mean this as an immediate proposal. And as for the analysis of the state and local surplus or deficit item—this could hardly be called an ambitious undertaking.

It remains to consider the other two net financial transactions items. I think plus-and-minus component analyses could be provided for both of them in the next few years. Jaszi and I apparently visualize the same general type of analysis for item 6, funds raised by corporations. I would hope the analysis would be so designed that a number of the components could be identified as items in the Federal Reserve flow of funds accounts. This would substantially enhance the usefulness of both the NID and the Federal Reserve compilations. And it is reasonable to expect that at least the financial flows of nonfinancial corporations can presently be so identified.

Much of Jaszi's objection to my proposed Roman numeral accounts is directed against the other net financial transactions item 7, net new capital funds of unincorporated enterprises, and the sector account in which it occurs as a source of funds. But the account is hardly the "sheep in wolf's clothing" he tries to make it out to be. Conceptually, the sector to which it refers includes all unincorporated businesses, private nonprofit institutions and in their capacity as putative lessors

² Counting the discrepancy and the adjustment there are five components shown in Table 11.

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the owners of owner-occupied houses; except for such putative lessors it does not, as Jaszi seems to think, include any households. Nor should item 7, net new noncorporate capital funds, be considered as having any of the surprising components—household financial transactions—he attributes to it. It is, Jaszi's statement to the contrary notwithstanding, like item 6, net funds raised by corporations, in that it "lends itself to a breakdown in terms of actual financial transactions between" the transactors in the sector and those outside it. Like item 6, too, it is conceptually a sector balance sheet increment computation plus an adjustment for sector existing asset transactions. Thus three of its main components are: (1) increase in the net worths of unincorporated businesses and nonprofit institutions, (2) increase in the excess of debts over financial assets for these transactors, and (3) their sales minus their purchases of real estate. It is reasonable to expect that we can presently have not only direct estimates for item 7 and these three main components but also a detailing of (2) into such subcomponents that some of them can be identified as financial flows shown in the flow of funds accounts.

Thus the net financial transactions account I have proposed not only brings out clearly the financial flows implicit in the national income and product accounts but also each of the four substantive items in this account other than the awkward item, personal saving, lends itself to a breakdown in terms of the actual financial transactions of a separate, clearly defined economic sector. And for each of these four items it should shortly be possible to provide a breakdown such that some of the components could be identified as financial items in the flow of funds accounts.

A definitely secondary but still quite significant purpose of my proposed Roman numeral accounts was pedagogical. Jaszi gives them a low pedagogical rating. But there are three points in their favor that he overlooks. First, there is the streamlining by grouping related items and substituting item groups for a good many of the present detailed items. Jaszi contemplates changes in this direction; but I think my proposals go further. Not counting the consolidated business income and product account there are sixty-four items in the present Roman numeral exhibit; my proposals, not counting my Account III, reduce the number to thirty-four. Second, my proposals make it easy to see what can only be laboriously demonstrated with the present accounts: Each flow appears twice and only twice, once as a source of funds in one account and once as a use in some other. Only twenty-four source items are shown and the corresponding use items have identical or corresponding labels and are pointed out by the item numbers. Third, my proposals

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would make it immediately possible to explain conceptually the place of flow of funds financial items in the national income and product accounts and this is an explanation every newcomer to the field of social accounting now wants.

In view of this fuller statement of what my proposed system of Roman numeral accounts would involve, I hope Jaszi will be willing to reconsider the direction in which I suggest moving and perhaps be willing to move at least some of the way in that direction.

PART V

