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STATISTICS OF THE DISTRIBUTION OF PERSONAL INCOME

(Memorandum by the Secretary-General)

1. Continuing its study of this subject, the Commission at its ninth session examined the practices of countries in the compilation of data on the distribution of personal income, on the basis of a report prepared by the Secretary-General (E/CN.3/208). The Commission concluded that it was premature to attempt to seek uniformity in definitions, methods of collection and forms of publication of these statistics through the recommendation of international standards. The Commission felt it advisable at the current stage to proceed further with the collection of information on country experience in this field as a basis for the analysis of the techniques and methods suitable for the various purposes of particular countries. The Commission requested the Secretary-General:
 - (a) To circulate the report of the Secretary-General (E/CN.3/208) to Governments for comments,
 - (b) To continue to collect information on methods used in statistics of the distribution of income, and
 - (c) To submit a report on this subject to the Commission at its next session.
2. In pursuance of this resolution the Secretary-General circulated a revised version of the report E/CN.3/208 to Governments under the title Statistics of the Distribution of Personal Income (E/CN.3/L.42). This version, while following closely the original, took into account the suggestions for its improvement made by the Commission at its last session. It also included additional information on country practices not available when the original document was prepared. Countries were invited to comment generally.

3. Over thirty replies were received in response to this request for comments. In the majority of cases these replies were devoted essentially to corrections and additions to the accounts of country practices given in the report. The present paper consists of a summary of these comments. It is designed first to indicate the more important errors and omissions which occurred in the report's preparation and secondly to record the opinions expressed on definitions, methods and objectives in this field.

ERRORS AND OMISSIONS

Denmark

4. The reply from Denmark suggests that in Table I the data for Denmark should be omitted. It points out that the figure of income reported on tax returns relates to the aggregate income after taxes and other deductions. If these deductions were not made the figure of "income reported as per cent of personal income" would be at least 73.

5. The significance of the ratios of reported income to income estimated for national accounts is questioned. It is suggested that comparisons of this nature between countries basing personal income estimates on income statistics and countries basing their estimates on statistics of production can scarcely be satisfactory, since there is a general tendency for the second type of estimate to be higher.

6. In Table 3 the data for Denmark should be corrected as follows. The income year should be 1952 rather than 1952/53: note b) should be deleted; and the figure of 26.3 per cent in the fourth column altered to 21.1 per cent. Since 1953 the size classes have been altered and for 1955 the corresponding data for Denmark would read:

Income year	Number of size classes	Largest percentage of income units in one size class	Largest percentage of income in one size class	Number of income size classes with over 10 per cent of:	
				No. of income units	Amount of income
1955	30	8.2	8.8	-	-

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7. Paragraph 38 of the report suggests that Sweden is the only country which publishes tables of data for married couples in which both husband and wife are income earners and report income separately. The reply from Denmark points out that such tables have also been compiled in that country. [Reference 1 in the attached list]

8. With respect to Table 4, while Denmark does not show income-size distributions of "single persons" or "married couples (joint returns)" such distributions are shown for "bread-winners" and "non-bread-winners". The concept of "bread-winner" is defined in the Fiscal Act and comprises in addition to married men, a number of single men who have previously been married.

9. In the case of income-size distributions by "age" of recipient and by "number of children and other dependents" estimates have been published for the years 1945 and 1954 respectively [Refs. 2 and 3]. Distributions for married couples (separate returns) referred to in paragraph 7 above have been compiled for 1952.

10. Finally, the reply points out that the main sources for Denmark of information on distributions of personal income based on tax returns are the annual volumes of Statistiske Meddelelser on Indkomst- og formueansættelserne til Staten (Income and wealth assessments relating to state taxes) and not Ejendoms- og personbeskatningen (Taxes on real property and persons) cited in the original bibliography.

Finland

11. The reply from Finland supplies information relating to Finland for inclusion in Table 2. From top to bottom the column for Finland would read I, I, E, E, E; ND, D, ND, ND. Two footnotes would be required indicating that imputed rent from owner-occupied dwellings is sometimes excluded, and capital gains or losses sometimes included, in defining reported income.

12. With reference to Table 4 income-size distributions are also classified according to marital status - single persons, married couples (joint returns) and married couples (separate returns) - and according to dependency status - number of children and other dependents. Finland has, like Sweden and Denmark, published tables for married couples (separate returns).

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France

13. One of the most important omissions in the review of country practices in document E/CN.3/L.42 is a reference to current work in France. This work has particular interest for the present study since a serious attempt has been made to develop comprehensive statistics of income distribution as an integral part of a general-purpose national accounting system. The most recent results of this work, which is supervised by the "Service des Etudes Economiques et Financières", appeared in 1957 in the report Tableau Economique de l'Année 1951.

14. It proceeds from an initial grouping of the population into households, institutional population and non-residents, to a more detailed sectoring distinguishing twelve socio-economic categories of households. This latter classification is based on the status of the head of the household and is intended to achieve a maximum of homogeneity within groups. For each group an appropriation account is established showing detailed classifications of income and expenditure.

15. The various categories appear as follows:

<u>Socio-economic groups</u>	<u>Income</u>	<u>Expenditure</u>
Farm operators	Gross income from	Consumption
Farm labourers	activities of	Gross salaries and
	households	wages of domestic
Manufacturers and artisans	Gross income of	servants
Business men	industrial	Social security
Liberal professions	entrepreneurs	contributions
Senior officials	Dividends and interest	Direct taxes and duties
Ordinary officials	Net wages and salaries	Private expenditure
Non-manual workers	Social security benefits	abroad
Manual workers	Assistance	Various transfers
Domestic servants	War damage compensation	Financing of investments
Service personnel	Private receipts from	by individual
	abroad	entrepreneurs
Inactive	Various net transfers	Domestic savings
Non-family households		
Non-residents		

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16. This basic tabulation of the income and expenditure of the various socio-economic groups is supplemented by classifications of consumption by function (food, clothing, etc.) and by nature (actual expenditure, auto-consumption and other income in kind).

17. The socio-economic grouping of households, as we have noted, is based solely on the status of the head of the household. The households themselves are defined to consist of one or more persons, generally related by blood or marriage, living normally in the same dwelling and pooling their incomes. An essential supplement to the analysis of the final data is a cross-classification of the total population in each group by socio-economic status of household members, distinguishing children under 14 years of age. This last element of information makes possible the estimation of the number of "consumption units" in each group, and so permits the study in more comparable terms of variations in income and consumption levels between groups.

18. The concept of income utilized in this work is a comprehensive one. Compared with the concept employed in A System of National Accounts and Supporting Tables it includes the gross, rather than the net, income from the productive activities of households and unincorporated enterprises, and it also incorporates transfers of a capital nature. Income in kind included consists mainly of auto-consumption by farm-operator and farm-worker households and the produce of family gardens, together with the value of benefits provided without payment to the institutional population. An interesting feature of the treatment of the first of these two elements is that the value is recorded in terms of both cost prices ("prix à la production") and market prices ("prix à la consommation").

19. It is noteworthy that in the Tableau Economique the distribution of income by income size is virtually ignored. On the other hand, in the Rapport sur les Comptes de la Nation (1955), which presents a preliminary "semi-global" study of the national economy for 1952, the incomes received by four socio-economic groups - farm operators, other entrepreneurs, wage-and salary-earners, and others - were classified by type of income and by size, distinguishing four size classes.

20. A full account of the methods employed in establishing these distributions will be found in the two reports cited. Briefly, it may be noted that for the distributions established for 1951 in the Tableau Economique the Director-General

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of Taxes was asked to make a special study of the progressive sur-tax returns of income for 1951. This made possible an estimate of the components of total income associated with a given type of principal income, and thus with the socio-economic status of the income recipient. The distribution of these incomes between the various socio-economic groupings of households was then estimated with the help of a demographic table showing the total population in each grouping, distributed according to individual socio-economic status. This table was itself compiled from a variety of sources, principally the population censuses and the six-monthly sample surveys of employment of the Institut National de la Statistique et des Etudes Economiques.

Norway

21. In connexion with the section of the report dealing with personal income tax returns as a source of income data, the reply from Norway draws attention to a number of inaccuracies in the references to Norwegian tax statistics. It points out that the statistics cited refer in some instances to unspecified fiscal years and that the amount of information published or otherwise made available to the public in classifications of income data has varied substantially from year to year. For the two most recent fiscal years 1955/56 and 1956/57 the statistics on personal income receivers are grouped by size of income, amount of property, commune of residence and exemption group. In addition to these changes in the classifications, there are frequent changes in the income concept due to modifications in the tax regulations.

22. In Table I the figure of income reported on tax returns actually refers to the year 1949 and not to 1950/51 which is the fiscal year of the State and communes. This figure of reported income is related in the table to a figure of "personal income estimated from national accounts". Actually the latter figure differs from the usual concept of personal income by excluding the income of persons engaged in industry or trade on their own account. A further difficulty noted in this table is that the figure of dependents is based on the distribution of taxpayers by exemption group and can be considered an approximation only, since taxpayers may be placed in a higher group as a result of age or sickness.

23. The information given for Norway in Table 2 also requires some correction. It is pointed out that both old-age pensions and family allowance for military personnel

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must normally be included in reported income. Also, while the treatment of business losses of previous years has varied considerably, in principle such losses have always been recognized as legitimate deductions for certain businesses. Finally, life insurance premiums are deducted only up to a certain amount in estimating reported income.

24. As an addition to the information given on population censuses as a source of income data, the reply from Norway points out that while in the last two censuses no income statistics were compiled, data from the censuses of 1910 and 1930 were combined with tax assessment data. The results were published in two reports.

[Refs. 7 and 8]

United Kingdom

25. In Table 1 the following figures should replace those shown for the United Kingdom.

Year	Dependents	Total tax return population	Total population	Personal income estimated from national accounts	Income reported as per cent of personal income
1952/53	25,806	45,606	50,737	12,989	78

26. With reference to Table 4 the reply from the United Kingdom states that income-size distributions of income recipients are also currently compiled by sex and employment status of the recipient.

United States

27. It is clear from the reply of the United States that the report does not make adequate reference to the scope and diversity of current work on income distribution in that country. Before indicating a number of corrections to existing references to United States practice, a brief survey is made of published materials on this work largely overlooked in drafting the original report.

28. The most comprehensive work on income-size distributions is that undertaken by the National Income Division of the Office of Business Economics (OBE). It has been published in the following three studies:

- (1) "Income Distribution in the United States, by Size, 1944-50", a Supplement to Survey of Current Business, Department of Commerce, Washington, 1953.
- (2) "Income Distribution in the United States, by Size, 1950-53", March 1955 issue of Survey of Current Business, Department of Commerce, Washington.

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(3) "Income Distribution in the United States, 1952-55", June 1956 issue of Survey of Current Business, Department of Commerce, Washington.

Of these three studies the first is a basic document containing a detailed discussion of definitions, data sources and methods.

29. The population covered by these studies is the non-institutional civilian population of the United States grouped into families and unattached individuals. The family is regarded as the ultimate unit of classification appropriate for general purpose estimates of income-size distributions. It is defined, in conformity with the Census Bureau definition as a unit of two or more persons related by blood, marriage or adoption residing together; unattached individuals are persons, other than those in institutions, not living with relations. The total number of families and unattached individuals is estimated as of the end of the calendar year to which the data on income refer.

30. Family income is defined as current income received by families and unattached individuals from all sources, including wage and salary receipts, other labour income, proprietors' and rental income, dividends, personal interest income and transfer payments. In addition to monetary income, it includes certain non-monetary items such as wages in kind, the value of food and fuel produced and consumed on farms, the imputed rental value of owner-occupied dwellings and imputed interest. It is thus closely integrated definitionally with the personal income series published within the national accounting framework by the Office of Business Economics.

31. The latest income-size distributions were developed for the period 1944-52 on the basis of consolidated data from Federal personal income tax returns and information from Census Bureau and Federal Reserve Board sample field surveys of family incomes. The data from these sources were adjusted to agree with independently estimated national totals for each major type of income. For the years 1953-55, for which tax return statistics were not available, the distributions for 1952 were extrapolated by data obtained from the annual sample field surveys of family income.

32. In the later studies the tabulations of data have not altered substantially from those of the original study. They consist essentially of distributions of the total number of "consumer units" and of total income before taxes by income level

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for three types of consumer unit: (i) farm operator families, (ii) non-farm families, and (iii) unattached individuals. Additionally for each year from 1950 there are included, for all consumer units, distributions of the total Federal personal income tax liability by income level before tax, and distributions of the total number of consumer units and of total income after tax by level of income after tax.

33. Further significant omissions from E/CN.3/L.42 are the sample surveys of family income and expenditure undertaken by the Bureau of Labor Statistics and the Department of Agriculture. Of these the Bureau of Labor Statistics Survey of Consumer Expenditure in 1950 is stated to be one of the most widely used sources of statistics on income distribution for urban populations. The following are two major studies from the numerous reports on this survey:

(1) Family Income, Expenditures and Savings in 1950, Bulletin No. 1097, Bureau of Labor Statistics, Department of Labor, Washington, 1953.

(2) Study of Consumer Expenditures, Incomes and Savings, Statistical Tables Urban U.S. - 1950, Vol. XI, Details of Family Accounts for Incomes, Savings, Insurance and Gifts and Contributions, tabulated by the Bureau of Labor Statistics for the Wharton School of Finance and Commerce, University of Pennsylvania, 1957.

34. Of the Department of Agriculture surveys the most important is a detailed study of food consumption in relation to household income, covering both urban and rural families in the United States. A major report on this survey is the following:

Food Consumption of Households in the United States, Household Food Consumption Survey 1955, Report No. 1, Department of Agriculture, Washington, December 1956.

35. Two further studies of the Department of Agriculture should also be mentioned since they contain data on income-size distributions for farm families. They are:

(1) Farms and Farm People, A Special Cooperative Report, Department of Agriculture and Department of Commerce, Washington, 1953.

(2) Farmers' Expenditures, A Special Cooperative Survey, Department of Agriculture and Department of Commerce, Washington, 1956.

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Corrections to references to United States practice

36. In Table 1 the entry for "personal income estimated from national accounts" for the United States should be 227,050 million dollars instead of 232,000 million dollars and "income reported as per cent of personal income" 79 instead of 77.

37. The references in paragraph 23 and Table 2 to the treatment of capital gains and losses in defining taxable income in the United States should be amended. Deductions for net capital losses in recent years are "almost always" limited to a maximum of 1,000 dollars per return, i.e., the statutory limit; net capital gains "in a large number of instances" are included only to the extent of one-half of the realized net amounts.

38. A further footnote should be added to Table 2 to indicate that "certain but not all" expenses incurred in acquiring income are deducted in arriving at "reported income".

39. With reference to Table 4 it is pointed out that size distributions of income are also compiled separately for "married couples (joint returns)". In addition distributions of business and partnership income have been prepared for selected years classified by the "industrial attachment" of the income recipient. The statement in paragraph 40 that classifications by occupational status and industrial status have been entirely omitted is therefore inaccurate.

40. In paragraph 61 it should be made clear that the annual sample survey of the Bureau of the Census records income data separately for family members as well as for families as a whole and unattached individuals.

41. In paragraph 62 it is indicated that income in kind is not reported in the Bureau of the Census surveys. The reply from the United States points out that this is generally true also of all recent surveys undertaken by the Bureau of Labor Statistics, Federal Reserve Board (FRB) and Department of Agriculture. The treatment has, however, varied considerably from one survey to another and for rural families as compared with urban family surveys. Thus, United States practice in this respect constitutes an exception to the generalization made in paragraph 66.

42. With reference to paragraph 63 it is pointed out that single-time gifts and inheritances are recorded as income in BLS surveys. This differs from the treatment in Bureau of the Census surveys which is cited in the report.

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43. In connexion with the discussion in paragraph 65 attention is drawn to the fact that the BLS surveys are the only United States surveys providing extensive treatment of "after-tax" income distributions.

44. Considerable stress is laid on the possible misleading implications of the section of the report dealing with the income unit in sample surveys.

Misinterpretation of the text, it is suggested, may arise as a result of restricting consideration of United States practice to the sample surveys of the Bureau of the Census and the Federal Reserve Board. Actually there are three major definitions of income unit in current use, reflecting the different purposes for which the statistics are designed:

(a) The broad Census definition, which is also used in the OBE series, in which all persons related by blood, marriage or adoption and living together are treated as members of the same family;

(b) The BLS definition employed in the 1950 expenditure study, in which the pooling of income was a further criterion but in which never-married children were always considered members of the family; and

(c) The narrow Federal Reserve Board survey definition of the "spending unit".

45. In paragraph 69 it is suggested that the definition of the income unit in the Canadian 1947-48 Survey is "operationally" close to that employed in the United States annual Census survey. The reply points out that the Census definition of the income unit differs substantially both in the composition of the family and the reference date to which the family composition refers. Furthermore, the report is in error at this point in stating that the Census definition introduces the "pooling of income" as a criterion of the income unit.

46. It is also pointed out in connexion with this paragraph that the annual survey of the Bureau of the Census provides statistics relating to individual incomes of persons fourteen years of age and over, cross-classified by sex, age, residence, occupation and other characteristics, regardless of family membership.

47. With reference to paragraph 73 the figure of 25,000 households employed in the Census survey sample should be related to the April 1957 survey, since the size of the sample has varied from year to year. The 1950 BLS Survey of Consumer Expenditure provided income distributions for about 12,500 urban consumer units.

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48. In the third sentence of paragraph 76 it is asserted that demographic information has been widely sought in sample surveys of income and expenditure partly "to ascertain the extent to which the sample is representative". This statement does not, however, hold true for the Census Bureau surveys, contrary to the reference in the fourth sentence.

49. In Table 5 and in the tabulation on page 41 the United States column should be headed "United States (Census)" to make it clear that the characteristics noted refer to the Census surveys and not those of the FRB or BLS. The table does not, moreover, indicate several types of information that are both collected and published. These include geographic location of the income unit, race or colour and industrial attachment of head of household or family, and finally, employment status and occupation of individual family members.

50. It is suggested that the third sentence in paragraph 81 be supplemented by adding the words "and the survey estimate for wage or salary income amounted to about 94 per cent of the comparable aggregate included in the national income estimate".

Other countries

51. Accounts of, or references to, current practices in compiling statistics of income distribution were also received from Brazil, Chile, China, Colombia, Ecuador, Federal Republic of Germany, Ghana, Greece, Guatemala, Ireland, New Zealand, Pakistan, Panama, Puerto Rico, Federation of Rhodesia and Nyasaland, Sweden, Turkey, Union of South Africa and USSR. For some of these countries the information received amplifies existing references in the text and bibliography of E/CN.3/L.42; for the majority it involves the addition of new material.

52. The reply from the USSR states that the investigation of family income and expenditure is carried out there on a fairly large scale by means of sample surveys. At the present time 20,900 manual and non-manual workers' budgets and 24,200 collective farmers budgets are being regularly investigated. The income unit employed in these surveys is the "family", defined as all members of a group of related persons living together and sharing a common budget. Supplementing these sample surveys, estimates of the incomes of separate population groups are derived from aggregate statistics. Such aggregates exist for wages and salaries of manual and non-manual workers, incomes of peasants from collective farms, and payments and benefits received from the State in the form of pensions, allowances, grants, free education, free medical care, etc.

COMMENTS ON DISCUSSION OF DEFINITIONS

Income unit

53. The most important comment on the discussion of the income unit came from the United States. It relates to paragraphs 67-69 of the report.

54. In the first place, it is pointed out, these paragraphs imply that the problem of defining the income unit is a fairly simple one, while in fact there has been, and still is, considerable controversy on the subject. Differences in the definition can result in substantial differences in the income-size distribution statistics, the more narrowly defined the income unit, the larger the proportion of units in the lower ranges of the income scale.

55. Secondly, the discussion makes no mention of the problem of linking the definition of the income unit to the time period to which the income data apply, rather than to a point of time. In the United States, for example, the 1950 BLS expenditure study collected income data for those persons who comprised the family unit during the calendar year. The Census Bureau and Federal Reserve Board surveys, on the other hand, covered those persons living with the family at the date of interview, early in the following year. This meant that certain members who had lived as members of the family during the year, but were no longer members at the date of interview, were missed and their incomes not counted as part of the family income, while, at the same time, persons not members of the family during the year were counted. In a period of rapid family formation the lack of family "reconstruction" will overstate the proportion of units in the lower ranges of the income scale while in a period of "doubling up" - such as might occur in a depression - the failure to reconstruct will understate this proportion.

56. The United States suggests that in order to bring out the fact and nature of these definitional problems paragraphs 67-69 should be rewritten. It also suggests the inclusion at this point of specific references to the literature on the problem of income unit definition. [Refs. 17-20]

57. In connexion with the grouping of income units the USSR suggests that the attention given in the report to socio-economic stratification of the population is inadequate. For an accurate study of income distribution, the reply states, it is most important to make a clear distinction between the various classes and socio-economic groups of the population, separating such groups as manual workers -

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distinguishing unskilled, semi-skilled and skilled - peasants, non-manual workers, home-workers and craftsmen, and entrepreneurs.

Income

58. The USSR recommends that in the calculation of income, account must be taken not only of the remuneration and benefits forming part of the normal family budget, but also of income in kind received from the State, such as education, medical care, etc. In the case of the agricultural population income in kind represented by produce used for their own consumption should also be included.

59. The objective of comprehensive welfare comparisons is also implicit in a suggestion from the International Labour Office that "fringe-benefits" to employees should in general be included as part of income. The recent study undertaken by the ILO of wages and related elements of labour costs in European industry has shown that such benefits may assume, in total, substantial proportions of overall labour costs.

60. Generally, comments on the income concept stressed the importance of measuring real income, at the same time mentioning the difficulties involved in the valuation of income in kind, and the desirability of segregating such elements. National accounting definitions of income appeared to be essentially adequate as general-purpose standards.

Classifications

61. The recommendation was made in reference to income size distributions that the basic tabulation should consist of two parts: first, distributions of the total number of income units and total income before direct taxes, by size of income before taxes; secondly, distributions of the total number of income units and total income after taxes, by size of income after taxes.

COMMENTS ON DISCUSSION OF METHODS

Income tax returns

62. The inadequacy of income tax returns as a source of data on income distribution, particularly their limited coverage in under-developed countries, was stressed in a number of replies. The fact that individual returns were in most countries not available to the statistical offices severely limited their usefulness.

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Population censuses

63. The United States suggested with respect to paragraph 50 that the importance of the unwillingness of respondents to divulge their income to enumerators was overrated as a major source of response errors in income reporting. In the 1950 United States Census, for example, the outright refusal rate was less than 1 per cent. Lack of knowledge by the housewife of the income of other household members was suggested as a more important factor.

64. In connexion with the reference in paragraph 56 to the use of income brackets in surveys and censuses, a more negative conclusion was indicated by United States experience. In sample surveys and census pre-test experiments the evidence suggested that that use of income-bracket questions tended to reduce the non-response rate. However, it appeared to result in a greater under-reporting of income. The net effect probably was a reduction in overall accuracy.

Sample Surveys

65. The United States stressed the desirability of treating at greater length the traditional source of data on income, namely, sample surveys of family income and expenditure. To take account of the use of multiple sources in estimating income distribution a fourth section should be added to the report. This would cover, among others, the general purpose studies of income distribution undertaken by the Office of Business Economics.

66. A clear preference for the family budget survey as an instrument for measuring income distribution was expressed by a number of countries, including China, Pakistan, and USSR. In such a survey all income both in cash and in kind could be adequately accounted for, while the reliability of the resulting data was enhanced by the fact that the income side of the budget could be verified and checked against the expenditure side.

67. To link income, expenditure and saving household records should be kept for extended periods of up to a year instead of the usual sample periods of single weeks, etc. In practice this consideration imposes a limit to sample size since few households can be induced to keep accounts for lengthy periods. The USSR reply, in noting that the income surveys of different countries covered different periods, pointed out that in the case of agricultural income the survey period should be one year, since that was the length of the productive cycle in

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agriculture. For the non-agricultural population, a shorter survey period was possible but, in this case also, income could be most adequately computed over a one-year period.

68. That did not mean however that income surveys should be made only once a year or that the memory of the persons interviewed could be relied on. With a view to obtaining annual figures, income surveys should be made at quarterly, monthly or even shorter intervals. In such enquiries the information obtained in personal interviews should be checked against the family's records of income and expenditure.

69. In contrast to the suggestion in paragraph 84 of the report, Denmark affirmed the value of a detailed record of expenditure in these surveys. The reply asserted that in the 1955 survey of consumption in wage-earner households a considerable increase in accuracy was achieved by the combination of income, expenditure and saving data. It suggested that the most profitable procedure in these surveys was to achieve a comparatively detailed specification of expenditures and then to specify saving, after which the data on income should be substantiated.

70. Paragraph 84 of the report was also criticized by the United Kingdom. The reply questioned whether total expenditures were "almost as useful" as incomes. For the calculation of income elasticities, income data were obviously more appropriate. The reply also commented on the suggestion that income data should be obtained from enquiries restricted to incomes, gross expenditures and saving. In the United Kingdom experience it was doubtful whether expenditure and saving data should be collected from the same survey, or whether accurate data on total expenditure could be obtained without going into detail.

71. Similar opinions on this paragraph were expressed by the United States. Total expenditures were not as useful as incomes, partly because of the importance of consumer credit in determining certain outlays, and partly because detailed income data made it possible to determine the effect of income sources on patterns of expenditure. Where the objective was improvement of detailed information on incomes, effort might perhaps best be concentrated on that, if necessary with the sacrifice of information on expenditure and saving.

72. In connexion with the reference in paragraph 72 to the account book method of collecting data, the United States suggested that the success of this method was probably closely associated with social and economic conditions in the country

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under study. The use of this procedure in complex societies such as the United States had many limitations, the principal one being that of obtaining a representative sample who would keep the required accounts. These limitations have been examined in a number of reports. [Refs. 21-24]

73. The under-statement of income mentioned in paragraph 81 as common to sample surveys was also the subject of comment. In the United States experience discrepancies between reported income and saving and expenditure were about equally divided between the under-reporting of income and saving and the over-reporting of expenditure.

GENERAL COMMENTS ON DEFINITIONS AND METHODS

74. A number of general comments on the report envisaged a redistribution of emphasis in the discussion. Thus the United States recommends the incorporation of further information on the practices of under-developed countries. It also recommended the extension of the report to include references to private evaluations of definitions and methods employed in government surveys as well as to the discussions of income distribution in the series Studies in Income and Wealth of the National Bureau of Economic Research.^{1/}

75. A suggestion for a more positive approach was contained in the recommendation that guidance should be given to countries in establishing a statistical programme in this field. The primary objective, it was contended, was to lay the foundations for a continuing study of income distribution, so that intertemporal changes could be ascertained with greater accuracy. Thus, the report might concentrate on the provision of practical advice.

76. The reply from China reflected the frequently expressed opinion that a general-purpose analysis of income distribution was both feasible and useful. It stressed the desirability of integrating such work both definitionally and statistically with current work in national accounting and suggested that the results could best be presented as an extension of the supporting tables in these systems. International standards could thus be largely derived from existing studies in this field.

^{1/} Particularly volumes 5, 10 and 13.

CONCLUSIONS

77. A review of the literature on the subject of income distribution suggests that the most appropriate area on which to concentrate further work lies in the development of general-purpose statistics closely integrated with national income statistics. Conceptually there would seem little reason to depart from the already widely accepted concepts of national accounting, while statistically it is clear that the resources and experience of national income offices provide the best environment for the implementation of such work.

78. The most profitable direction for the Secretariat's efforts would thus seem to be a more selective and detailed enquiry into the concepts and methodologies of those countries which currently publish systematic and comprehensive information on income distribution as part of their national income work. This would be considered to include income distributions by size of income as well as distributions by socio-economic status of recipient.

79. An evaluation of these practices in conjunction with an appraisal of expert opinion might well lead to a consensus on three basic questions of income distribution, the definition of the income unit, the income concept and the grouping of units. On the first of these it is recognized that considerable further study of alternative concepts is necessary. A tentative appraisal suggests that the broad definition of the "family" given in paragraph 44 above offers advantages for international comparability.^{2/} The concept of income might be derived from the definitions of A System of National Accounts and Supporting Tables with a number of adjustments to overcome the present consolidation of households with private non-profit institutions. As in national accounting, income in kind would appear to warrant separate consideration in any tabulation. Income units could be grouped initially on the basis of the status of the head of the household or family into (1) households of agricultural entrepreneurs, (2) households of non-agricultural entrepreneurs, and (3) other households (i.e. of employees, etc.). Such a division of the households sector is indeed a current objective in national accounting in

^{2/} For a discussion of international recommendations on related population census concepts, see Household Data in Population Censuses (ST/STAT/P/L.27), a general methodological study with special reference to European census practice, prepared by the Statistical Office.

view of the importance for economic analysis of separating groups with differing income and expenditure patterns.

80. In the light of this summary of comments the Commission may wish the Secretariat,

- (1) to revise the report E/CN.3/L.42 with special reference to practices in those countries compiling and publishing general purpose statistics of income distribution as part of their work on national accounts,
- (2) to make an appraisal of the conceptual and statistical problems encountered in this work on the basis of expert opinion, and
- (3) to formulate a statistical programme of work in the field of income distribution for the guidance of the less-developed countries, which might serve at the same time as a preliminary step in the formulation of standards for international reporting.

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