

Resolution I

Resolution concerning household income and expenditure statistics

The Seventeenth International Conference of Labour Statisticians,

Recognizing the need to revise and supplement the recommendations concerning household income and expenditure surveys contained in the resolution of the Twelfth International Conference of Labour Statisticians (1973),

Wishing to promote the development and use of household income and household expenditure statistics along sound lines and also to promote consistency in their measurement as well as improvement in their quality and international comparability,

Recalling the resolutions concerning: (a) an integrated system of wages statistics; and (b) the measurement of employment-related income, adopted respectively by the Twelfth and Sixteenth International Conferences of Labour Statisticians (1973 and 1998),

Recognizing also that, in the interests of promoting the coordination and integration of international statistical standards, new recommendations concerning household income and expenditure statistics should be consistent, so far as possible, with relevant existing standards of statistics, including those within the System of National Accounts;

Adopts this third day of December 2003 the following resolution:

Objectives and uses

1. Household income and expenditure statistics may serve as a basis for the description and analysis of a wide range of economic, social and other issues among which its most important uses are:

- (a) to assess the level, structure and trends of the economic well-being of households and individuals in terms of the distribution of income/consumption expenditure across households and individuals for various population subgroups of interest;
- (b) to determine baskets of goods and services as well as to obtain weights and other useful information for the compilation of consumer price indices, cost of living indices, indices of comparative costliness, etc.;
- (c) to compile the sequence of accounts for the household sector, to check the quality of estimates produced from other sources, and to reconcile national account estimates with micro-level data;
- (d) to formulate, implement, monitor and evaluate social and economic policies;
- (e) to carry out studies of the relationship between income and expenditure statistics and various socio-economic characteristics of individuals and households;
- (f) to study consumer behaviour among socio-economic groups;
- (g) to develop and monitor policies relating for example to tourism, nutrition, food security, housing, migration, education, labour market and health;
- (h) to contribute to the study of poverty and social exclusion.

2. These various uses may not all be served equally well from a single source and, in some instances, it will be necessary to combine statistics and information from different sources, for example administrative records, through statistical matching or modelling.

3. Household income and expenditure statistics should be produced in such a way as to enhance their international comparability and consistency with other statistics on income and expenditure and related economic and social statistics. Therefore, to the extent possible, the collection of income and expenditure data should be such that income and expenditure aggregates consistent with all international guidelines may be derived.

Income

Concept and definition

4. **Household income** consists of all receipts whether monetary or in kind (goods and services) that are received by the household or by individual members of the household at annual or more frequent intervals, but excludes windfall gains and other such irregular and typically one-time receipts. Household income receipts are available for current consumption and do not reduce the net worth of the household through a reduction of its cash, the disposal of its other financial or non-financial assets or an increase in its liabilities.

5. Household income may be defined to cover: (i) income from employment (both paid and self-employment); (ii) property income; (iii) income from the production of household services for own consumption; and (iv) current transfers received.

Income from employment

6. Income from employment comprises receipts for participation in economic activities in a strictly employment-related capacity, as defined in the resolution adopted by the Thirteenth International Conference of Labour Statisticians (1982) concerning statistics of the economically active population, employment, unemployment and underemployment. It consists of: (a) employee income; and (b) income from self-employment.

7. **Employee income** comprises direct wages and salaries for time worked and work done, cash bonuses and gratuities, commissions and tips, directors' fees, profit-sharing bonuses and other forms of profit-related pay, remuneration for time not worked as well as free or subsidized goods and services from an employer. It may include severance and termination pay as well as employers' social insurance contributions. These items should be reported separately, when included. The definition of these terms is consistent with their use in the resolution concerning statistics of employment-related income adopted by the Sixteenth International Conference of Labour Statisticians (1998).

8. Employee income may be received in cash (monetary) or in kind as goods or services. Those receipts in kind that are outputs of the employer's production process should be included only in so far as they are in line with the recommendations contained in the Protection of Wages Convention, 1949 (No. 95), of the International Labour Organization. Otherwise, they are imposed payments in kind that should be excluded from employee income or valued at zero.

9. **Income from self-employment** is income received by individuals, over a given reference period, as a result of their involvement in self-employment jobs as defined in the resolution concerning the International Classification of Status in Employment adopted by the Fifteenth International Conference of Labour Statisticians (1993). In particular, income from self-employment concerns primarily owners of unincorporated enterprises who work in these enterprises. It excludes profits from capital investment of partners who do not work in these enterprises ("sleeping partners"), dividends and directors' fees paid to owners of incorporated enterprises. Income from self-employment includes the estimated value of goods and services produced for barter as well as goods produced for own consumption, less expenses.

10. The basis for the measurement of income from self-employment is the concept of mixed income defined by the System of National Accounts. Mixed income consists of the value of gross output less operating costs and after adjustment for depreciation of assets used in production, where these terms are as defined in the resolution concerning the measurement of employment-related income adopted by the Sixteenth International Conference of Labour Statisticians (1998).

Property income

11. Property income is defined as receipts that arise from the ownership of assets (return for use of assets) that are provided to others for their use. These are returns, usually monetary, from financial assets (interests, dividends), from non-financial assets (rents) and from royalties (return for services of patented or copyright material).

12. Interest receipts are payments received from accounts with banks, building societies, credit unions and other financial institutions, certificates of deposit, government bonds/loans, securities, debentures and loans to non-household members.

13. Dividends are receipts from investment in an enterprise in which the investor does not work. Pensions and annuities in the form of dividends from voluntary private insurance schemes are also included.

14. Rents are payments received for the use of both unproduced assets (i.e. natural resources), such as land, and for produced assets, such as houses. Rents should be recorded net of expenses.

15. Royalties are receipts from writings, right to make use of inventions, etc. (i.e. patented or copyright materials).

Income from household production of services for own consumption

16. Income from household production of services for own consumption consists of the net estimated value of housing services provided by owner-occupied dwellings, of unpaid domestic services and of services from household consumer durables. These are services that fall under the general production boundary of the system of national accounts. Because of measurement issues, owner-occupied dwellings may be the only part of this component that could be included for now. The operational definition of this component should be clearly described when estimates for it are presented or included in estimates of the total income of households. The net estimated values of housing services from owner-occupied dwellings should be presented separately from the estimates for other services. Estimates of the values of these services should be made in a consistent manner in producing household income and household expenditure statistics when these are to be analysed jointly.

Transfer incomes

17. Transfers are receipts for which the recipient does not give anything to the donor in direct return for the receipts. Transfers can consist of cash (in the monetary sense), of goods or of services. Current transfers are those that usually recur regularly (relative to the reference period used for income), tend to be small and are also mostly available for use during the reference period.

18. Regarded as income are all current transfers received in cash and as goods as follows:

- (a) social security pensions, insurance benefits and allowances generated from government-sponsored social insurance schemes (compulsory/legal schemes) such as pensions (including military and overseas pensions), unemployment benefits, sickness benefits;

- (b) pensions and other insurance benefits from employer-sponsored social insurance schemes not covered by social security legislation (both funded and unfunded) such as education allowance, medical expenses;
- (c) social assistance benefits from governments (universal or means-tested) which provide the same benefits as social security schemes but which are not provided for under such schemes;
- (d) current transfers from non-profit institutions (e.g. charities, trade unions, religious bodies) in the form of regular gifts and financial support such as scholarships, union strike pay, union's sickness benefits, relief payments;
- (e) current transfers from other households in the form of family support payments (such as alimony, child and parental support), regular receipts from inheritances and trust funds, regular gifts, financial support or transfer in kind of goods.

19. Transfer of housing services between households should be considered as income for the recipient household. Although income includes current transfers received in the form of services from governments and non-profit institutions (social transfers in kind) and in the form of other services from households, the operational definition of income should exclude such transfers until methods exist for valuing them that are widely acceptable.

Exclusions

20. Holding gains/losses, resulting from changes in the value of financial and non-financial assets and liabilities, should be excluded from the operational definition of income.

21. All irregular, non-recurring receipts are excluded from the definition of income. They include lottery prizes, gambling winnings, non-life insurance claims, inheritances, lump-sum retirement benefits, life insurance claims (except annuities), windfall gains, legal/injury compensation (except those in lieu of foregone earnings) and loan repayments.

22. Other receipts that result from a reduction in net worth are excluded from income. These include sale of assets, withdrawals from savings and loans obtained.

23. For analytical and other purposes, data may be collected wherever possible on receipts that are excluded from the concept of income as well as from the operational definition of income.

Aggregation

24. The sum of income from employment and income from household production of services for own consumption is referred to as **income from production**. When this is added to property income and transfer income, the sum is **total income**. **Disposable income** is total income less direct taxes (net of refunds), compulsory fees and fines, social security contributions as well as compulsory and quasi-compulsory inter-household transfers paid. Whenever it is possible to also compute social transfers in kind, the sum of these receipts and disposable income constitutes **adjusted disposable income**. Total income, if aggregated across households, leads to double counting.

Expenditure

Concepts and basic definitions

25. **Consumer goods and services** are those used by a household to directly satisfy the personal needs and wants of its members. **Household consumption expenditure** is the value of consumer goods and services acquired, used or paid for by a household through direct monetary purchases, own-account production, barter or as income in-kind for the satisfaction of the needs and wants of its members.

26. The **actual final consumption** of a household is the sum of its household consumption expenditure and the value of consumer goods and services acquired or used by the household through transfers from government, non-profit institutions or other households. This is the most appropriate concept for welfare analysis as it takes into account all consumer goods and services available to a household for the satisfaction of the needs and wants of its members.

27. **Household expenditure** is defined as the sum of household consumption expenditure and the **non-consumption expenditures** of the household. The latter are those expenditures incurred by a household as transfers made to government, non-profit institutions and other households, without acquiring any goods or services in return for the satisfaction of the needs of its members. Household expenditure represents the total outlay that a household has to make to satisfy its needs and meet its “legal” commitments.

Measurement

28. For purposes of registering their expenditures, services may be regarded as consumed at the time of acquisition or at the time of payment. For goods, the choice is between the time of acquisition and the time of use. The decision depends on the main purpose for compiling the consumption expenditure aggregate. In particular, if it is intended for the estimation of weights for consumer price indices, the choices made should be the same in producing the aggregate and compiling the consumer price indices.

29. Consumption expenditure may be measured in terms of:

- (a) the purchase values of the goods and services (referred to as the acquisition approach);
- (b) the cash outflows resulting from ownership of the goods or benefiting from the services (referred to as the payment approach); or
- (c) the estimated values of the service flow from the goods and the values of the actual services (referred to as the consumption costs approach).

The first two approaches are jointly referred to as the **expenditure basis** for measuring consumption expenditure while the last is the **consumption costs basis**.

30. Consumer goods that are completely consumed on acquisition or gradually consumed over a period of time after acquisition (including bulk purchases) are referred to as **non-durable goods**. Consumer goods that are used many times over a long period of time without reducing their capacity to satisfy needs and wants are referred to as **durable goods**. In some instances, the notion of semi-durable goods (relatively shorter expected lifetime) may also be useful.

31. For services acquired from the market and non-durable goods, consumption expenditure measured on an expenditure basis is a good approximation for measurement on a consumption costs basis. Consumption expenditure on services and non-durable goods may therefore be measured using the acquisition approach, where this approach is extended to include the estimated values of own production of non-durable goods and those received as income in kind or through barter.

32. Consumption expenditure on durable goods when estimated using the acquisition approach, is in general different from the value obtained using the consumption costs approach. For use in the compilation of weights for a consumer price index to be used to monitor inflation, the acquisition approach is often used, especially when restricted only to monetary purchases. When the purpose is for use in welfare analysis or to compile weights for a cost-of-living index, the consumption approach may be preferable.

33. These different approaches may be combined for computing consumption expenditure on goods by using one or other for different expenditure items. In particular, to be consistent with the conventions of the System of National Accounts, consumption expenditure on owner-occupied dwellings may be valued on the consumption costs basis while the acquisitions approach is used for durable goods, non-durable goods and services.

34. The consumption costs approach may also be used for durable goods for the purpose of welfare analysis and the production of tourism statistics. This use may be limited to major durable goods, since the consumption costs of other durable goods do not differ greatly from their acquisition costs. For this purpose, major durable goods may be defined in terms of a long expected lifetime, such as beyond five years, combined with a relatively high value (e.g. a car or bicycle but not socks or a hammer).

35. Whichever of the above approaches is adopted for estimating consumption expenditure for durable goods and owner-occupied dwellings, it should be consistent with that used for estimating their contribution to household income whenever these statistics are to be analysed jointly.

Operational definitions

36. Expenditure on non-durable goods is measured as the purchase value of these goods or the estimated value of those received as income in kind, through barter, from own production, from stocks of household enterprises and from transfers from outside the household. Typical examples of non-durable goods include food items, personal care items (toiletries, make-up and medical products, etc.), fuel (firewood, heating oil, coal), education and entertainment (newspapers, books, etc.), household items (cleaning products, etc.).

37. Expenditure on durable goods is assessed in the same way as for non-durable goods under the acquisitions approach. Typical examples of durable goods are household kitchen appliances (cookers, refrigerators, dishwashers, microwave ovens, etc.), household entertainment appliances (hi-fi equipment, televisions, cameras, etc.), other household appliances (washing machines, vacuum cleaners, dryers, etc.), household transportation equipment (cars, bicycles, etc.), other household items (furniture, soft furnishings, etc.), clothing, utensils, etc.

38. The purchase value of second-hand goods should be recorded in the same way as for new goods. The value of any direct sales of used goods or their indirect sales ("trade-ins") should be recorded separately. Consumption expenditure on second-hand goods may then be computed net or gross of these sales to satisfy the requirements of both compilation of consumer price indices (or national accounts) and analysis of households' welfare and behaviour.

39. In principle, expenditure on non-monetary gifts should be recorded as part of actual final consumption for the recipient household. However, in practice, for consistency with the above recommendation to include them as income for the recipient household, they could be treated as part of household consumption expenditure for this household. They should be recorded as non-consumption expenditure of the donor household in either case.

40. Consumption expenditure on services is measured as the amount paid for the services acquired from the market or the estimated value of those received as income in kind. However, in some circumstances, for example in the case of utilities, it may be necessary for practical reasons to use payments made for the services irrespective of when they were acquired. Any reimbursement for overpayment should then be treated as negative consumption expenditure.

41. Financial services such as accounting fees, bank service charges and credit card service fees should be included in household consumption expenditure as payment for services. Some of these may however be difficult to measure at the household level.

42. Interest payment consists of two components: a service charge and a return to capital. Interest payments on consumer credit should in principle be included as household consumption expenditure consistent with the assumption that the greater part of interest is a charge for the services in administering the credit scheme. However, particularly in high inflationary circumstances, these interest payments may be considered as non-consumption expenditures on the grounds that the greater part of interest is compensation to the original owner of the borrowed money for the high inflation.

43. Non-life insurance premiums are those taken out against property risks such as fire, theft and water damage; health risks such as accident and sickness; risks in transportation such as

personal transport, travel and luggage; and others such as civil liability. Premiums should be recorded gross as household consumption expenditure. Reimbursements and claims arising out of any such insurance may be recorded separately so that aggregate consumption expenditure could be computed gross or net of them to satisfy the needs of both compilation of consumer price indices and the analysis of households' welfare and behaviour.

44. Expenditures on gambling should be recorded as consumption expenditure. Any winnings may be separately recorded so that household consumption expenditure could be computed gross or net of winnings to satisfy various analytical demands. For compilation of consumer price indices, use in national accounts and for joint analysis of consumption expenditure and household income, computing this expenditure net may be preferable.

45. Housing decoration, repairs and maintenance normally carried out by tenants should be recorded as consumption expenditures by tenants as well as by owner-occupiers. Other major repairs and home improvements should be regarded as capital expenditures. Since there are differences between countries in the legal obligations of tenants in this respect, expenditures on these items should be recorded separately to allow for flexibility in their treatment in cross-country analysis.

46. Payments (e.g. subscriptions, membership fees) to non-profit institutions such as religious bodies, trade unions and political parties should be recorded as consumption expenditure when they give rise to the provisions of goods and services acquired by the donor household.

47. Licences and fees paid to governments that generate the delivery of specific individual services to households should be treated as consumption expenditures. Examples include testing, inspecting and licensing the use of certain equipment (TVs, radios, firearms, etc.); providing passports, court services, access to museums, garbage collection, driving or piloting licences; and so on. In those instances where payments for licences to own or use a vehicle, boat or aircraft go towards providing for or enhancing their use (e.g. maintaining roads), they should also be included as consumption expenditure.

48. Consumption expenditure on services from owner-occupied dwellings should be assessed as the gross estimated value of the flow of services from these dwellings. This should extend to all dwellings owned including vacation and weekend homes.

49. When the consumption costs approach is used for stocks of any category of durable goods, their consumption expenditure is assessed as the estimated value of their service flow. In these instances the purchase value or estimated value of acquiring this category of goods should not be included in any previous or current estimate of household consumption expenditure. This treatment of the stocks of durable goods facilitates apportioning expenditure when goods have multiple uses.

50. Complementary to the inclusion as income of housing services received as transfers from other households, these services should also be considered as consumption expenditure of the recipient household. Services from unpaid household work, social transfers in-kind and transfers of in-kind services from other households should be excluded from household consumption expenditure and from actual final consumption until such time when the valuation of these services is based on agreed principles.

51. In principle, expenditures on goods and services that may be illegal or considered undesirable or luxury items, are consumption expenditures. However they may be measured only as far as it is feasible in practice, given the peculiar circumstances relating to the collection of the data.

Household expenditure

52. The non-consumption expenditures of households include current transfers of cash, goods and services to other households such as gifts donated, remittances, alimony, child support, etc. Other items included are contributions to non-profit institutions that do not give rise to the provision of goods and services to the donor household; compulsory transfers to governments such

as income and other direct taxes (e.g. wealth taxes), compulsory fees and fines; and pension and social security contributions.

53. Expenditures on goods and services for use in the operation of unincorporated enterprises as well as the occupational expenses of employees are excluded from the measurement of household expenditure. In addition, capital expenditures such as savings, reduction of liabilities, amounts loaned, purchase of financial assets, life insurance premiums are excluded. Expenditures on valuables (works of art, jewellery, gemstones, etc.) are also excluded from household expenditure. The identification of goods to be treated as valuables depends on national circumstances. However, they are generally defined as goods of relatively high value, the main purpose of which is to serve as a form of savings and not for use in production or for consumption.

Measurement issues

Statistical units

54. The statistical units for the collection and analysis of statistics on income and on expenditures are defined as follows:

- (a) *Household*: The concept of household should be consistent with the one adopted in the latest version of the *Principles and recommendations for population and housing censuses of the United Nations*.

A household may be either:

- a one-person household, i.e. a person who makes provision for his or her own food or other essentials for living without combining with any other person, or
 - a multi-person household, that is to say, a group of two or more persons living together who make some common provision for food or other essentials for living. The persons in the group may pool their incomes and may, to a greater or lesser extent, have a common budget; they may be related or unrelated persons or a combination of both.
- (b) *Family*: A family within a household is defined as those members of the household who are related, to a specified degree, through blood, adoption, marriage or other legal/social arrangements (including cohabiting partners of the same or different sex).
- (c) *Income unit*: An income unit consists of a subset of a multi-person household with shared command over income (either by pooling their income or having access to the pooled income) or a one-person household.
- (d) *Dwelling unit*: All persons living together in a housing unit or a set of collective living quarters.
- (e) *Person unit*: Individual members of households.

55. Members of a multi-person household may be identified based on any of the following criteria:

- (a) sharing in housing facilities (either contributing to housing costs or benefiting from costs paid by others);
- (b) sharing of at least one meal each week; or
- (c) financially dependent for at least two out of these three types of items: food, housing or other expenditures. In this case the household is referred to as a “consumer unit”.

56. The household is the basic sampling unit and unit of enumeration. The dwelling unit or the individual may also be used as the sampling unit, as may the postal or physical address.

57. From the standpoint of statistics on consumption expenditures, the household is the appropriate unit of analysis while, for income statistics, the income unit may be used as a unit for further analysis. For policy analysis focused on the family, a unit for further analysis may be the family. Where appropriate, the dwelling unit and the individual may also be used as units of analysis.

58. Household income and household expenditure statistics should cover all persons living in private households in a country, including students sharing accommodation, and lodgers. Collective households, such as retirement homes, university/school accommodation, etc. may be included provided the members are involved in decision making about their consumption, including the consumption of housing services. Other collective households like boarding houses, hotels, etc. and institutions such as military installations, hospitals, penal institutions, university/school accommodation where students are not involved in decision-making about their consumption, and so on, should be excluded from the coverage of these statistics. However, identifiable households within the institutions may be included.

Household characterization

59. The membership of a household consists of all persons usually resident in the household, where usual residence should be defined in a manner consistent with the provisions in the latest version of the *Principles and recommendations for population and housing censuses of the United Nations*. A minimum duration of six months may be used as one of the criteria for determining usual residence within the household.

60. In order to identify relationships between household members at the data collection stage, an easy-to-use criterion may be applied to select a unique person against whom these relationships could be established. Examples include the person recognized as head, the person taking important decisions, the oldest adult present, the person with the main income, etc. Alternatively, all pair-wise relationships between members of the household may be identified at the data collection stage, thereby eliminating the need to have a unique person. However this may be difficult to implement in practice.

61. For some analytical purposes, it may be necessary to describe a household in terms of the characteristics of one of its members, i.e. a reference person. The choice of a reference person would depend on the purpose of the analysis. Criteria linked to employment status, economic activity, demographic factors, and so on may be used.

Reference period

62. Household income and household expenditure statistics should relate to a full-year **accounting period** to take into account seasonal variations in incomes and expenditures. For the purpose of compiling consumer price indices, the accounting period should as much as possible be a normal year with respect to economic and social factors. When data for these statistics are collected or compiled based on administrative sources and/or when the survey period is short and occurs not long after the accounting period, a fixed accounting period should be used. (The **survey period** is the period over which the data as a whole are collected or compiled.) Otherwise, the accounting period should be a 12-month moving reference period relative to the survey period. A moving reference period reduces the risk of recall errors, especially when the survey period is also long.

63. The **reference period** for collecting data for components of income and expenditure that are available only annually, for example annual dividends, mixed income, etc., should be the full 12-month accounting period. The same period should also be used for data relating to components that have an annual cycle, that is seasonal, or occur infrequently.

64. To assure good quality data and minimize recall errors, the reference period for data relating to some components of income and expenditure should be based on a duration that makes less demand on the memory of respondents and avoids unnecessary computations. For example, information about weekly wages and consumption expenditure on some food items and personal care products should be collected using a short reference period. However, the use of short

reference periods may introduce instability into the statistics, leading to greater observed inequality in the distributions of income and expenditures between households than with the use of longer reference periods.

65. The choice of appropriate reference periods should be made on the basis of careful experimentation in the practical application of the concepts and definitions and investigation of respondents' ability to provide the information. Analysis of data derived in past household surveys will frequently assist in determining the optimum reference periods.

66. Data collected using a short reference period should be adjusted to obtain estimates for the full accounting period. This should be done using a suitable temporal scaling factor. It should be noted, however, that such an adjustment introduces some non-comparability into the aggregates, and assumes that the data collected are typical for all non-observed periods during the accounting period.

Surveys of income and of expenditure statistics

Data collection

67. Data on household income and expenditures may be collected using income surveys or household income and expenditure surveys. These surveys may be conducted through interviews and/or completion of questionnaires by households (the retrospective method). They may also be implemented using the diary method, in which households are requested to regularly enter into a diary all or some of their receipts and expenditures for a given period.

68. The retrospective method, with relatively long reference and recall periods, is best suited for large infrequent or irregular purchases, especially of durable goods, and for regular expenditures such as rent, utility bills, etc. Diaries are preferable for those items that are frequently purchased such as food, personal care products and household supplies. Income data are mostly collected using the retrospective method with varying reference periods. The relative advantages of using the retrospective method, or the diary method, or a combination of the two, in the particular circumstances of the inquiry should be carefully investigated. Different methods of collection may be used for different components to obtain results of optimum quality. Useful information to guide these choices, including the various recall/reference periods to use for the various components, may be obtained from past experience, experimentation and cognitive testing.

69. Income data should be collected directly from each relevant household member and separately for each type of income at a level that is as disaggregated as possible. Expenditure data should be collected at the household level from a person knowledgeable about the household's expenditures and capable of completing the instruments. However, some items, especially those collected using diaries, may be collected from different household members. In this case a record should be kept about these persons and the responses for which they were responsible.

70. When a short reference period is used, a decision should be made as to whether to collect the actual value of the income/expenditure item or its usual value. Alternatively, the "last payment/purchase" approach may be used. For income data, the amount received most recently is recorded along with the period that the payment covers. For expenditure data, the most recent expenditure made on an item is recorded. The frequency of the components of these receipts/expenditures during the accounting period should be determined to assist in compiling estimates for the full accounting period. Amounts that are not paid in every payment period may result in acceptable estimates of household sector incomes across the full accounting period. However, this may result in a significant understatement or overstatement of the estimates of individual household incomes for the full accounting period, thereby distorting income distribution and other microeconomic analysis.

71. Questionnaires should have as detailed a list of goods and services as possible to obtain accurate estimates of household consumption expenditure. However this has to be balanced against increased costs and the likelihood of falsification and non-response that it may entail. Diaries may be open-ended or structured to varying degrees up to being fully pre-coded. Supplementary methods that may facilitate data collection include the use of the Internet, outlet receipts and

electronic equipment (hand-held radio cassette tapes or mobile telephones) for real-time recording of expenditures.

Scope

72. The scope of these surveys should, as much as possible, include all types of specified receipts and outgoings, as detailed as possible, including separate identification of all components of household income and expenditure. When income is to be used as a classificatory variable for analysing expenditure statistics, income data may be collected at an aggregated level.

73. Data should be collected to estimate the income of the self-employed as mixed income. However, for certain categories of self-employed, such as own-account artisans, their income may be more appropriately determined by requesting from them the same data as for employees. When direct reliable estimates of mixed income are not available or are inappropriate, data on the drawings from the enterprise of the self-employed or the value of the consumption expenditure of their households may be used to impute values for their income. When using this method, one should be aware of the shortcomings in directly using drawings or consumption expenditure as the income measurement.

74. For non-monetary receipts and expenditures, relevant information should be collected to enable their valuation. To the extent possible, quantity data on all expenditure items should be collected, especially for food items including those consumed away from home.

75. Information on the membership of the household (socio-demographic and employment characteristics) and on the household characteristics (geographical location, level of urbanization, dwelling characteristics) should be collected. Other variables such as health situation, educational attainment may be collected for analytical purposes.

76. To the extent possible, data should be collected in such a way that various aggregates of household consumption expenditure, household expenditure, actual final consumption and household income may be computed to satisfy users' needs for national account estimates, compilation of consumer price indices, welfare analysis and other analytical contexts. In particular, to the extent possible, data should be obtained from households or from other sources on:

- (a) the consumption of social transfers in kind and other in-kind services;
- (b) outlays for investments, net changes over the reference period in savings (including valuables) and in household or personal liabilities and other such disbursements;
- (c) direct taxes, social contributions and transfers paid; and
- (d) the place of acquisition (e.g. location, type), for expenditures incurred while on tourism-related trips, where required for domestic tourism statistics.

To ensure the quality and usefulness of the data, special data collection mechanisms may need to be adopted other than those used for household expenditure statistics.

Survey design

77. Income surveys and household income and expenditure surveys should use a design that produces reliable and valid estimates at reasonable cost and that is easy to implement. The designs may be cross-sectional, in which inquiries are made to each household in the sample only once through interviews, diaries or both methods. They may also be panel designs in which inquiries are made to each household more than once. Cross-sectional and panel designs may be used with a single sample of households. It is also possible to have a series of cross-sectional or panel designs applied to representative and independent sub-samples staggered over the survey period.

78. Surveys with a short data collection period are not advisable. If this is done, special care should be taken to ensure that the estimates should be based on periods with normal household income and expenditures.

Sample design

79. The design of the sample and the selection of sample households should be made in accordance with appropriate sampling techniques in order to obtain results that are as accurate as possible with the resources available, taking into account circumstances such as availability of suitable sampling frames. As far as possible, the sampling method employed should permit the calculation of sampling errors. Thorough research should be carried out to find and clearly identify the most suitable sampling frame, to determine the number of stages, the optimum stratification and other salient features of the sample to be used, as well as the best procedures for selection of the sample units.

80. The sample size should be determined on the basis of the accuracy required, i.e. the magnitude of the acceptable level of the sampling error for key estimates, and the resources available. It should be sufficient to ensure adequate representation of households of different sizes and compositions, income classes, demographic and socio-economic groups, as well as urban and rural areas and, where relevant, different climatic zones within the country.

81. Effort should be made to identify the main sources of non-sampling errors in the surveys and to determine through experimental studies how best to minimize these errors. It is particularly important in the case of low response rates, which may adversely affect the representativeness of the survey.

Frequency

82. A major sample survey of household expenditures, so far as possible representing all private households in the country, should be undertaken preferably at intervals not exceeding five years. Under conditions of fast-changing socio-economic and political situations, lifestyles of the population and availability of different types of goods and services, the surveys should be undertaken more frequently. Where monetary income constitutes most of total household income, income surveys may be as frequent as annual.

83. Smaller-scale surveys or other sources of statistics could be used to estimate changes in important aggregates during the interval between two large-scale surveys.

84. In certain circumstances, a continuing survey with a smaller annual sample but covering the full scope of a major survey may be undertaken. The average of its results over several successive years may provide a satisfactory substitute for a large-scale survey. While this approach may reduce the volume of work compared to large-scale surveys, it may have implications for the statistical infrastructure, particularly the need to have a permanent field structure.

Other sources of income statistics

85. Some components of income may be collected through establishment surveys or from administrative systems. These data are usually of good quality for the units and types of income covered. Issues of coverage of households as well as types of income, reference periods, timeliness, definitions and units of analysis should, however, be considered when using such sources.

86. Wherever possible, a combination of sources including an income survey and relevant administrative records, such as tax records and social security records, is recommended to ensure optimal coverage, completeness and accuracy of the data.

Classification, valuation, estimation, analysis and dissemination

Classification

87. Income should be classified by types of source, at as detailed a level as relevant and, to the extent possible, by means of payment so that users would have the option of including or excluding in-kind receipts, e.g. to facilitate international comparisons. Wages and salaries packaging that is negotiated at the discretion of the employee and is to be delivered as goods and services should be considered as monetary income and not in-kind income.

88. Household expenditures should be reported in such a way as to permit their classification in various ways to meet different analytical and descriptive purposes. They should be classified in a way that is meaningful for analysis at national level, especially for purposes of compiling consumer price indices. However, to enhance international comparability, national classification systems of household expenditures should, as much as possible, be compatible with the Classification of Individual Consumption according to Purpose (COICOP), at least at the division level. Wherever possible, information should be available for regrouping expenditures into relevant COICOP categories at least at the group (three-digit) level.

Valuation

89. Income in kind (goods and services) and other goods received as transfers in kind should be valued at market prices for equivalent goods and services. Own-produced goods for own consumption should be valued at market prices for equivalent goods when estimating consumption expenditure, and at producer or basic prices when estimating household income. Where this is not possible or not advisable, self-evaluation by the respondent may be used in both instances. Data should be collected on the quantities acquired and the relevant prices, unless self-evaluation is being used.

90. For consistency with the System of National Accounts, the services of owner-occupied dwellings should be valued as the rental equivalence when estimating consumption expenditure. For the estimation of household income, those housing costs normally paid by landlords should be deducted from the rental equivalence. These costs may include property taxes, property and liability insurance, mortgage interest, water and sewerage charges, repairs and maintenance of the dwelling. Details of the costs should be made available to facilitate different analytical and descriptive needs, e.g. international comparability.

91. Depending on national circumstances, the user-costs approach may be adopted for consumption expenditure of owner-occupied dwellings and the interest on home equity may be used for the corresponding measurement of household income. In particular, if rental markets are limited or do not exist, this approach or the out-of-pocket expenditures of owner-occupiers may be used. In the case of the latter, it should be noted that the estimated housing expenditure derived includes some non-consumption costs and that there are no corresponding additions to household income.

92. Where rents are subsidized, rental flows should be evaluated at market value for an equivalent dwelling.

93. To estimate consumption expenditure of owner-occupied dwellings, data should be collected on:

- (a) housing characteristics (age, size, type of construction and facilities, maintenance and repair costs, status of neighbourhood);
- (b) rents for rented dwellings (from the survey or from other sources) and market value of dwellings;
- (c) housing costs normally paid by landlords for dwellings; and

(d) the owner's assessment of the rental value for owner-occupied dwellings, where relevant.

Where alternative sources are not available and ownership of a second home is an issue, data on duration of use for vacation and weekend homes should also be collected.

94. When the flow of services from (major) durable goods is used, the value that is determined should be the same for household income and expenditure. Data on the initial purchase price, age and other important characteristics of these durable goods may be collected.

95. Social transfers in kind should be valued from time to time because of their importance for welfare analysis using a suitable methodology. Data should be collected regularly from the surveys on the take-up of the different services while data on the total cost to the providers and number of beneficiaries should be obtained from other sources.

Estimation

96. Zeros and negative values for income or expenditures are legitimate values and should be used in computing household income or household expenditure. Households reporting such values should be included in the total number of households when computing means and other such statistics. Statistical techniques may be used for the treatment of outliers.

97. In order to facilitate the analysis of the statistics, efforts should be made to impute missing values of variables (item non-response) for individual households, provided the number of these is not unduly large and there is a reasonable basis for making the imputations.

98. When a moving accounting reference period is used, in circumstances such as periods of high inflation, the estimation of aggregated values may need to take into account possible differences in expenditure patterns arising from differences in prices and/or volumes over the full survey and accounting periods.

99. Appropriate weights may be used to adjust for selection probabilities, non-response (assuming this is related to the factors used for probability sampling) and benchmarking with respect to the distribution of demographic, geographic and employment characteristics.

Analysis

100. The possible existence and extent of bias due to: (a) under-reporting of purchases of certain types of products such as alcohol; (b) over-reporting of purchases of luxury goods; (c) under-reporting of income; and (d) unsatisfactory estimation of self-employment income or the income of poor households, should be investigated. Zeros and negative values may need special treatment in the analysis.

101. Sampling errors should be computed and reported for estimates of parameters for key variables and important subgroups using a formula appropriate to the sampling and weighting schemes used for the survey.

102. In analysing the data, the effects of the size and composition of households should be taken into consideration through separate analysis of households with different compositions and/or through the use of an appropriate equivalence scale. In the case of the latter, this should be used with either the income or the expenditure estimates but not both when they are being analysed jointly.

103. The summary statistics presented in basic tables should include, as appropriate:

- (a) counts (persons or households);
- (b) averages (means and medians), totals and ratios relating to income and expenditure statistics and, where possible, their standard errors.

104. Basic tables should be produced relating to the level and structure (component shares) of consumption expenditures of households (total and subgroups of major items):

- (a) by household income group/income quantiles (e.g. quintiles and deciles);
- (b) by principal sources of income;
- (c) by household characteristics such as size, composition (age and sex), typology (e.g. employee households);
- (d) by characteristics of individuals (demographic, educational, socio-economic status, employment status, etc.); and
- (e) by housing characteristics (age, tenure, occupancy rate, etc.).

Where appropriate, the tables from (c) to (e) should also be produced for the level of household income.

105. In addition, basic tables describing the situation of households may be useful. These may include tables relating the number of households (or household members) to the characteristics of household members, characteristics of the household, principal sources of income as well as income and expenditure groups.

106. As far as possible, these basic tables should also be presented by geographical location, level of urbanization and sex of the reference person or head (where applicable) and, if possible, separately for monetary and non-monetary (estimated) values. The number or proportion of households with zero expenditure on tabulated components should also be reported.

107. Where alternative sources of data are not available, the analysis of distributions of income and/or consumption expenditure, including measuring poverty, inequality and social exclusion, may be carried out for the whole population as well as for key subgroups. Other types of analysis may be made of indebtedness, food insecurity, housing, health, education, tourism, etc.

108. To the extent possible, the analysis should reflect the extent to which the various strata of the population access the different services provided through social transfers in kind and received free from other households. Savings and liabilities should also be taken into account when analysing expenditure statistics.

109. When comparing income and expenditure statistics from micro sources with macro aggregates from national accounts, account should be taken of the different objectives of the sources and the conceptual and measurement differences of some of their components. Such comparisons may be useful for mutual checking between these sources, as a service to users and as an attempt to identify and explain discrepancies.

Dissemination

110. The main statistical report should contain basic tables and aggregates. It should include a summary presentation of the methodology used, including basic concepts and definitions, the sample and survey design as well as details on data collection and data processing. An assessment of the quality of the data, sampling and non-sampling errors, non-response rates and any other major issues relating to the statistics should also be provided. An indication of the extent of and the method used for the imputations should also be made available when the statistics are published, and imputed values should be identified when micro data sets are distributed.

111. As much as possible and without breaching the confidentiality of the information collected or contractual agreements, public-use files (anonymised confidentialized micro data sets) should be made available to analysts and other interested users. They should always be accompanied by clear and comprehensive documentation of all aspects of the data collection process. In particular, if top-coding (restricting the maximum value disseminated for a variable) is

used to protect the confidentiality of information, the details should be documented and the values should be identified.

112. In addition to the dissemination of the statistical report and possible distribution of public-use files, the main results from the survey should be publicized through conferences, seminars, the media (interviews, popular articles and press releases), etc. Focused, in-depth reports and analytical papers should be produced for policy-makers. Outputs for public dissemination should be made available in appropriate media, whether in paper publications or in electronic formats such as diskettes, tapes, CD-ROMs, micro data laboratories and the Internet.

113. As a source of institutional memory for future exercises and for consultation by others who would need such information, a detailed methodological report should be prepared including full details of the procedures used as well as lessons learned and conclusions reached from the whole exercise.

114. The dissemination of these statistics should adhere to the Fundamental Principles of Official Statistics adopted by the Special Session of the United Nations Statistical Commission (1994) and the guidelines concerning dissemination practices for labour statistics adopted by the Sixteenth International Conference of Labour Statisticians (1998).

