

Resolution concerning the measurement of employment-related income,  
adopted by the Sixteenth International Conference of Labour Statisticians  
(October 1998)

The Sixteenth International Conference of Labour Statisticians

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Recalling the resolution concerning an integrated system of wages statistics and the resolution concerning household income and expenditure surveys, adopted by the Twelfth International Conference of Labour Statisticians (1973),

Recalling paragraphs 23 and 24 of the resolution concerning statistics of the economically active population, employment, unemployment and underemployment, adopted by the Thirteenth Conference (1982),

Observing that the existing international standards on income statistics may be supplemented by a recommendation concerning the statistical definition and measurement of employment-related income received by persons in paid employment,

Observing that there are no international guidelines on the measurement of income related to self-employment,

Recognizing that the objectives, concepts, definitions, measurement and other issues presented in this resolution are at the developmental stage,

Recognizing that further developmental work and testing will be required in order to evaluate and, if necessary, revise these guidelines,

Recognizing further that international guidelines on the measurement of income related to paid and self-employment will promote the development of these statistics along sound lines and improve their international comparability;

Adopts this fifteenth day of October 1998 the following resolution:

## Objectives

1. Each country should aim at supplementing its programmes of statistics on employment, unemployment, underemployment and wages with statistics that provide insight into the income related to employment, for the purpose of (a) analysing the income-generating capacity of different economic activities and (b) analysing the economic well-being of persons on the basis of the employment opportunities available to them.

2. A programme of statistics on employment-related income should provide for the needs of various users. It should provide information required in economic analysis where the focus is on the identification and creation of productive economic activities, and should contribute to the design, implementation and assessment of employment promotion policies which aim at creating and developing employment that provides adequate income. Statistics of employment-related income should contribute to the development of the analysis of the informal sector for employment and income generation and the measurement of underemployment. The programme of statistics should also be useful for the analysis of the labour force situation in relation to the increased flexibility of the labour market and the structural changes resulting from this flexibility, in particular through the provision of data on the relationship between employment-related income and atypical or non-standard forms of employment. It should provide data on the changes in employment patterns and remuneration practices which have taken place in industrialized, transition and developing countries. Statistics of employment-related income may be used for planning, implementing and evaluating social and economic policies, for assessing the impact of specific policies such as assistance to agricultural workers and access of particular workers such as women and rural-urban migrants to the labour market. Statistics on the level of income from paid and self-employment should be used as an input in the assessment of the consumption capacity of workers and their level of employment-related welfare. Data on the structure and distribution of employment-related income may also be used in

connection with the adjustment of income taxes and social security contributions and the redistribution of income and social security benefits. They should contribute to the compilation of labour and national accounts.

3. In order to fulfil the above objectives, comprehensive, detailed and reliable statistics should, as far as possible, be compiled on (i) the characteristics of paid and self-employment jobs, (ii) the components and amounts of income generated by these jobs, (iii) where relevant, the corresponding volume of labour input and (iv) the socio-economic characteristics of persons holding paid and self-employment jobs.

4. In order to enhance their comparability and usefulness, statistics of employment-related income should, as far as possible, be made compatible with other related economic and social statistics and with national accounts as regards the definitions, classifications and reference periods used, where relevant, by regrouping the components of income related to paid and self-employment.

## Concepts and definitions

### *Employment-related income*

5. Employment-related income consists of the payments, in cash, in kind or in services, which are received by individuals, for themselves or in respect of their family members, as a result of their current or former involvement in paid or self-employment jobs. Employment-related income excludes income derived from other sources such as property, social assistance, transfers, etc., not related to employment.

6. For definitional and measurement purposes, the concept of income related to paid employment should be distinguished from the concept of income related to self-employment.

7. The statistics of employment-related income should cover all persons employed, as defined in the resolution concerning statistics of the economically active population, employment, unemployment and underemployment, adopted by the 13th ICLS (1982). Where feasible, they should also cover working children<sup>1</sup> and youths below the specified minimum age limit adopted for measuring the economically active population.

8. The measurement of employment-related income should relate, separately, to “persons with a paid employment job” and to “persons with a self-employment job”, as further defined in the most recent version of the International Classification of Status in Employment (ICSE).

9. For further analysis, and especially for analysing economic well-being related to employment, statistics of employment-related income should cover those unemployed and not economically active persons who receive an income as a result of their former employment.

### *Income related to paid employment*

10. Income related to paid employment consists of all payments and benefits in cash, kind or services, which are received, over a given reference period, by individuals for themselves or in respect of their family members, by virtue of their involvement in current or former paid employment jobs. Such payments and benefits may be provided by the employer, social security or compulsory insurance schemes or the State.

11. Income related to paid employment should cover all categories of persons in all forms of paid employment, including persons with regular, casual, short-term, intermittent and seasonal jobs, as well as apprentices and trainees, who are classified as being “employees”, in the most recent International Classification of Status in Employment (ICSE).

12. Income related to paid employment includes: total cash remuneration; the value of remuneration in kind and services; profit-related pay; and employment-related social security benefits received either directly from the employer, from social security or compulsory insurance schemes or the State.

(a) Total cash remuneration, excluding employee contributions to compulsory employment-related social security and retirement income provision schemes (in order to avoid subsequent double counting of income), covers:

(i) direct wages and salaries in cash for time worked and work done, including all incentive,

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<sup>1</sup> This inclusion should not be interpreted as condoning child labour.

shift and premium pay (e.g. for responsibility, unsanitary conditions, danger, work at night, weekends and during other unsocial hours); cost-of-living, housing, transport, language and similar allowances; hardship, mobility, non-resident, expatriation, repatriation, post-adjustment and similar allowances; contractual and non-obligatory regular bonuses and premiums; tips and commissions (with and without a retainer); payments for odd jobs and duties and casual work. They also include fees and salaries of managerial staff; remuneration of trainees and apprentices; and other components of direct wages and salaries;

- (ii) remuneration for time not worked comprises: annual vacation and other paid leave; public holidays and other recognized holidays; temporary halt or slow-down of production, short-time working; other time off granted with pay (e.g. for personal and family reasons, civic duties, union responsibilities, training and education); paid sick leave (where not regarded as social security benefit); severance and termination pay (where not regarded as social security benefit);
  - (iii) cash bonuses and gratuities include: all bonuses and gratuities, whether contractual or non-compulsory bonuses and premiums, year-end and seasonal bonuses (13th, 14th or 15th month's salary, additional vacation pay, etc.); exceptional payments for innovative ideas or work methods; and similar ad hoc payments.
- (b) Remuneration in kind and services includes: traditional payments such as food, drink, fuel, clothing, footwear, etc.; the imputed rental value of free or subsidized housing; petrol and/or mileage allowance or the imputed value of free or subsidized similar benefits; the imputed value of business vehicles for employees' private use, telephone, electricity and similar utilities; free or subsidized transport to and from work and free car parking; the value covered by the employer of: union, association and club fees, nurseries, crèches, etc. for employees' children, low- or zero-interest loans, subsidized mortgages, etc., the value of output from employer's process of production;<sup>2</sup> as well as the value of other payments in kind, including flexible benefits and other compensation packages for employees.
- (c) Profit-related pay comprises: traditional profit-sharing bonuses; current receipts from profit-related schemes, participation, savings-related share option schemes and similar schemes; the initial market value of shares distributed to employees; other profit-related receipts.
- (d) Employment-related social security benefits include:
- (i) current receipts from the employer: e.g. family, dependants' and similar allowances; educational allowances; payments in respect of absence from work due to sickness, maternity, occupational injury or disease, etc. (which compensate, in part or in full, for loss of earnings); payments in respect of temporary or partial lay-off or unemployment (which compensate, in part or in full, for loss of earnings); as well as compensation for medical expenditure, provision of free health care (homes, clinics, health services, etc.) and other social security payments received from the employer;
  - (ii) current employment-related social security benefits received from social security or compulsory insurance schemes or the State: e.g. family, dependants', educational and similar allowances; payments in respect of absence from work due to sickness, maternity, occupational injury or disease, etc. (which compensate, in part or in full, for loss of earnings); payments in respect of temporary or partial lay-off or unemployment (which compensate, in part or in full, for loss of earnings); as well as compensation for medical expenditure, provision of free health care (homes, clinics, health services, etc.) and other social security and assimilated payments for which the employment status is a condition of receipt;
  - (iii) current social security benefits received as a result of former employment: e.g. unemployment compensation; severance, termination and redundancy pay; occupational and retirement pensions and assimilated benefits.

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<sup>2</sup> In so far as the provision of this type of benefit is in line with the recommendations contained in the Protection of Wages Convention, 1949 (No. 95).

13. Net income related to paid employment may be derived by deducting employees' direct taxes, union dues and other obligations. Whenever possible, the different types of deductions should be identified and recorded separately.

14. Income related to paid employment excludes income derived from other forms of activity and other sources, such as income related to self-employment, property income in the form of interest, dividends, income attributed to private insurance policyholders, rents and other forms of property income, as well as annuities, remittances, gifts, etc. It also excludes:

- family allowances and other social security benefits or assistance (e.g. food stamps, government or community housing, free health-care assistance, etc.), when paid by social security schemes or the State without regard to the employment status (e.g. under universal schemes with or without means tests);
- indemnities or allowances in cash and in kind paid by the employer purely to cover the employees' cost of work-related expenditure (e.g. tools, equipment, clothing or footwear used exclusively or mainly at work, special housing and meals necessitated by exceptional working conditions, reimbursement of business travel and accommodation expenses, medical examinations or health checks required because of the nature of the work, etc.). However, when indemnities take the form of cash payments over and above the reimbursement of expenses incurred by employees, such payments should be considered as income related to paid employment;
- employers' contributions to social security funds, insurance or other institutional units responsible for social insurance schemes.

15. When the objective is to measure the income-generating capacity of a job, all the components of income related to paid employment provided by the employer should be included. When the objective is to analyse the individual's employment-related well-being, the additional employment-related benefits provided by social security or compulsory insurance schemes or by the State should also be included.

#### *Income related to self-employment*

16. Income related to self-employment is defined as the income which is received, over a given reference period, by individuals, for themselves or in respect of their family members, as a result of their current or former involvement in self-employment jobs.

17. For purposes of measurement of income related to self-employment, the self-employed are primarily the sole owners, or joint owners, of the unincorporated household enterprises in which they work, according to the definition contained in the System of National Accounts. They may also include the owner-managers of corporations and quasi-corporations, according to the ICSE-93.

18. Gross income related to self-employment consists of:

- (a) the profit (or the share of profit) which is generated by the self-employment activity;
- (b) where relevant, the remuneration received by owner-managers of corporations and quasi-corporations; and
- (c) the amount of employment-related social security benefits received by self-employed persons through schemes recognizing the status in employment as a specific condition for membership.

19. The gross profit (or the share of profit) of unincorporated household enterprises is equivalent to gross mixed income as defined in the System of National Accounts. It corresponds to the value of gross output reduced by operating expenses, where:

- the value of gross output may be defined as the value of all goods and services produced for the market as well as for own final use (market output corresponds to the value of goods and services sold, bartered or provided free of charge or at reduced prices as payments in kind to hired labour; production for own final use includes the value of goods and services consumed by the household or retained for use in future production); and
- operating expenses comprise three types of business expenditure: (a) intermediate consumption (excluding, as far as possible, expenditure for purely personal or household purposes), (b) compensation of employees payable, and (c) taxes on production payable, minus subsidies received, if any, as defined in the System of National Accounts.

20. In principle, profit (or mixed income) should be recorded net of consumption of fixed capital, i.e. after deduction of the value of consumption of productive assets (i.e. structures, machinery and equipment, cultivated assets used to produce other products, etc.).

21. Any contributions of the self-employed to compulsory employment-related social security or retirement income provision schemes should be deducted from gross profit or mixed income, in order to avoid subsequent double counting of income.

22. Where the self-employed run their enterprises independently from other partners and contributing family members, with or without employees, the profit corresponds to both the income generated by the enterprise and the entrepreneur's individual income related to self-employment. Where the self-employed run their enterprises in partnership, the profit represents a joint income and income related to self-employment should correspond to the share of income received by each partner.

23. Employment-related social security benefits received by the self-employed comprise those benefits which are paid through schemes organized by social security, insurance institutions or the State, which recognize the status in employment as a specific condition for membership. They may include all or some of the following benefits:

- current employment-related social security benefits received from social security or compulsory insurance schemes or the State; and
- current social security benefits received by individuals as a result of their former self-employment jobs.

24. Net income related to self-employment may be derived by deducting from gross income related to self-employment, personal direct taxes and other employment-related obligations.

25. Income related to self-employment excludes income derived from other forms of activity and other sources, such as income related to paid employment, property income in the form of interest, dividends, income attributed to private insurance policyholders, rents and other forms of property income, as well as annuities, remittances, gifts, etc. It also excludes family allowances and other social security benefits or assistance (e.g. food stamps, government or community housing, free health-care assistance, etc.) paid by social security schemes or the State without regard to the employment status (e.g. under universal schemes with or without means tests).

26. All the components of income related to self-employment noted in paragraph 18 are relevant for the analysis of the employment-related well-being of the self-employed. Where the objective is to measure the income-generating capacity of a self-employment activity, employment-related social security benefits should be excluded.

#### *Employment-related income for particular groups*

27. Certain categories of workers, such as owner-managers of corporations and quasi-corporations, outworkers, contractors, franchisees, dependent contract labour, domestic workers, etc., may be classified in paid employment or in self-employment for the purposes of determining their status in employment according to the ICSE. Where the income received by these workers is similar to that received by other categories of workers in paid employment, it should be measured according to the guidelines formulated for the measurement of income related to paid employment. Otherwise, it should be measured according to the guidelines formulated for the measurement of income related to self-employment.

## Measurement issues

### *Evaluation of benefits in kind received by persons in paid employment*

28. For the purposes of the measurement of income related to paid employment, benefits in kind should be valued in terms of the income accruing to the persons in paid employment. Countries may evaluate these benefits on the basis of retail market prices. When provided free, the value of income in kind is equal to the full value of the goods and services in question. When provided at reduced prices, the value of income in kind is equal to the difference between the full value and the amount paid by the recipient.

### *Treatment of employees' occupational expenditure*

29. Despite the fact that employees may incur specific expenses associated with working, which counterbalance part of the wages and benefits received, income related to paid employment should be recorded gross of employees' occupational expenditure.

### *Operational approach to the measurement of income related to self-employment*

30. In view of the heterogeneity of the self-employed population and the complexity of measurement of net income of unincorporated enterprises, the measurement of income related to self-employment should be phased into national programmes of statistics over an extended period of time. In the initial phase, countries should endeavour to identify and measure the income received by two groups of self-employed workers:

- (a) The first group consists of self-employed persons operating their enterprises with little or negligible capital input, who produce goods and services in a similar way to paid employees (such as those engaged in crafts or services, whether in the formal or the informal sector). The income they receive is mostly a return to their labour input and the gross mixed income of the enterprise is a close estimate of net mixed income.
- (b) The second group consists of self-employed persons whose activities involve an identifiable amount of capital for the production and generation of income (such as professional workers in the formal sector or workshops in the informal sector). In this case, efforts should be made to quantify the amount of capital used to generate the income and to derive net mixed income. For this purpose, data on the consumption of productive assets (i.e. structures, machinery or equipment, cultivated assets such as trees or animals used to produce other products such as fruit or dairy products, etc.) should, in principle, be collected. Consumption of productive assets may be valued through an estimate of depreciation, according to the business accounting rules in force in each country, or according to the methods contained in the System of National Accounts. Due account should also be taken of the source of data and data collection methods. Where it is not possible to obtain reliable data on consumption of fixed capital from the self-employed, net income related to self-employment may have to be derived by means of analytical methods.

31. When measuring income related to self-employment in the informal sector, special attention needs to be paid to the particular problems of collecting income data from enterprises in this sector, due account being taken of the guidelines contained in the resolution concerning statistics of employment in the informal sector adopted by the 15th ICLS.

### *Choice of method for recording income related to self-employment*

32. The choice of an accounting technique to measure income related to self-employment should take into account the circumstances in which the self-employed operate their business and the measurement objective. Two major techniques can be used:

- (i) Accruals accounting, which measures the profit earned during the reference period, by taking into account receipts and expenses relevant to that period, irrespective of whether or not they have actually been received or defrayed. This technique measures the profitability or economic performance of the enterprise and, as such, could be favoured when the objective is to measure the income-generating capacity of self-employment activities. It is also the approach favoured by the SNA.
- (ii) The cash-flow technique, which measures actual cash received (including the value of production for own use) and paid out (including the value of production given out free or at reduced prices) during the reference period. This technique provides a better indicator of the amounts of income actually available to the self-employed to meet living expenses. Where data on employment-related income are furnished by the self-employed themselves in the absence of business accounts, it is generally easier for them to provide a simple summary of cash received and paid in the assessment period (i.e. gross receipts minus expenditure).

33. These different techniques may produce different results. In determining the method used to record income related to self-employment, consideration should be given to the procedures recommended by national tax authorities, the sources of data and the methods of data collection.

### *Evaluation of the self-employed's production for own use*

34. Production for own use or consumption should be valued in terms of the basic prices of similar

products sold on the market or of their cost of production if no suitable basic prices are available, as defined in the SNA. In the absence of these prices, retail market prices could be used.

### *Treatment of self-employment losses*

35. Self-employment activities may, over a given reference period, produce a financial loss instead of income or profit. Losses should be reflected in the measurement of income related to self-employment and evaluated as negative income.

### Statistical units

36. Two basic observation units are relevant to the measurement of income related to paid and self-employment, depending on the objective pursued: the job and the individual person.

37. For the measurement of the income-generating capacity of different economic activities, the *job*, as defined in the most recent version of the ICSE, is the basic entity on which information is to be collected and analysed. Jobs can be “paid employment jobs” and “self-employment jobs”, which can be characterized by industry, occupation and employment status, coded at the most detailed level of national or international classifications. In cases where a job is jointly performed by several individuals (as in the case of unincorporated household enterprises), or when it involves several occupations (as in a farm household enterprise), all activities involved should be considered as part of one single job, classified according to its main characteristics. When compiling the corresponding employment data, all labour input from the different contributing members should be taken into account.

38. When the objective is the analysis of the employment-related well-being of the population concerned, the desirable unit is the *individual person*. The individual is also relevant when analysing the relationship between employment-related income and educational achievements, seniority in employment, work duration, etc. An individual may be engaged in a single job, have multiple jobs in paid or self-employment, or own and operate more than one unincorporated enterprise, simultaneously or consecutively within a given reference period. From the individual’s standpoint, employment-related income corresponds to the sum of all incomes generated by all jobs as well as income from former employment.

### Reference period

39. In measuring income related to paid and self-employment, account should be taken of the seasonal variations which affect the receipt of income, the fluctuations in work intensity of individuals, and the possible combination of multiple activities and periods of activity and inactivity of the population concerned. For this purpose, income related to paid and self-employment should be measured over a long reference period, such as a full year.

40. For data collection purposes, shorter reference periods, such as a month or a quarter, may be used. Different activities and jobs may require different reference periods, such as a month for regular full-time paid employment, complemented by data on additional annual receipts, or a crop season in agricultural self-employment. For analytical purposes, data on employment-related income referring to short reference periods should be aggregated over the long reference period mentioned above.

### Data requirements

41. For the measurement of the income-generating capacity of different jobs, there should be consistency between the data on employment in a given job and the data on income generated by that job. Data should therefore be collected on: (i) the characteristics of the job (industry, occupation, employment status), type of enterprise (individual enterprise, partnership, corporation, etc.), employment size and sector (e.g. informal or formal sector, public or private sector); (ii) the volume of labour input (duration of employment and time worked by all contributing persons); and (iii) the amount of income generated by that job.

42. In order to analyse the relationship between employment and the well-being of individuals, data are needed for each person: (i) separately on each main and secondary job carried out during the reference period; (ii) the income derived from each of these jobs; (iii) the socio-economic characteristics of individuals: age, sex, education and skill level, etc.; and (iv) any spells of unemployment or inactivity that

an individual may have experienced during the given reference period.

## Measurement of volume of employment

43. One of the requirements of the measurement of employment-related income is that the part of the income directly generated by a job be related to the volume of employment which has gone into that job. Income and employment data should therefore refer, or be convertible, to the same reference period.

44. For each job, the volume of employment should be assessed in terms of work duration, expressed in the number of hours, days, weeks, etc., during which the activity has been carried out. Where the activity is carried out by several contributing family workers and income is the result of a joint labour input (e.g. in household enterprises), efforts should be made to measure the share of hours, days, weeks, etc., worked by each member.

45. At the individual level, employment-related income should be measured for each job carried out during the reference period, whether in paid or self-employment, together with the corresponding labour input in each activity. This requires linking the income received to the work experience of the person over the given reference period.

### *Measurement of hours of work*

46. The measurement of hours of work of employees is dealt with in the resolution concerning statistics of hours of work adopted by the Tenth ICLS in 1962 and may be expressed in terms of *normal* hours of work, hours *actually worked* and *hours paid for*. Where data on income and hours of work are derived from labour force sample surveys and other household surveys, hours of work may also be expressed in terms of *usual* hours of work.

47. In the absence of international guidelines on the measurement of hours of work of the self-employed, the measurement of their hours of work should be extensive enough to cover not only the hours during which the self-employed are directly performing the functions of their trade or profession, but also the time spent on all related or complementary activities at the workplace and outside the workplace (such as seeking business or waiting for customers, keeping records, maintaining equipment or being available for business). Where relevant, countries should provide clear guidelines on how to measure hours of work, taking into account the particularities of self-employment activities, in the light of national circumstances.

48. Notwithstanding the definitional issue, hours of work should be identified for each job separately, and at the level of multiple jobholders total hours of work should equal the total number of hours worked at all paid and/or self-employment jobs. Care should be taken in measuring hours of work for individuals who carry out more than one job simultaneously.

### *Measurement of work duration*

49. The measurement of work duration is particularly important to study the relationship between employment and economic well-being, and in particular between full-time and part-time, part-year, casual and intermittent employment and low income.

50. For each job considered, days or weeks worked should refer to the total labour input which has gone into the job during the reference period. Where this refers to the time spent by several household members on the same activity, work duration should also refer to the time worked by all persons concerned.

51. At the individual level, the assessment of employment-related well-being requires linking the employment status of individuals to their work experience over the reference period. During a one-year reference period, individuals may combine periods of employment, unemployment and economic inactivity during which some or no employment-related income accrues. Each of these periods should be identified, account being taken of all jobs performed, including casual or simultaneous employment. The main situations may be classified into broad categories relevant to the measurement of employment-related well-being (or hardship).

## Data sources

52. The collection of data on income related to paid and self-employment should be based on the regular national statistical programmes, using all available sources.



53. One such source could be general or specialized household surveys, with individual household members as observation units.

54. Other sources of data include establishment surveys, administrative records (such as income tax and social security records), informal sector surveys (according to the guidelines contained in the ILO resolution concerning statistics of employment in the informal sector), agricultural surveys, surveys of small economic units and population censuses.

55. The choice of the appropriate sources of data should be based on the results of a cost-benefit analysis, taking into account factors such as the desired accuracy and details required from the results, the availability of different sources, the existence and design of labour force or other household surveys and the feasibility of adding new topics to these surveys or of launching separate surveys, and the response burden.

56. Several sources may be used for the collection of data on employment-related income. The use of different sources equally enables the comparison of the data and the evaluation of its quality.

57. Labour force surveys which collect data on income constitute an essential source of data on the income-generating capacity of jobs and its links to the labour market activities of individuals. Additional variables and appropriate questions accompanied by detailed instructions addressed to all individuals, including those not employed at the survey date, may, in principle, cover nearly all income during a given period, including those employment-related benefits received from sources other than the employer and as a result of current or former employment (e.g. received from social security or insurance schemes or the State). Income data should be linked to each person's educational and other characteristics, for each activity and occupation, in order to establish the link between income and type of occupation, type of contract, skill level, duration of employment and unemployment, seniority in trade or occupation.

58. Household budget and household income and expenditure surveys are particularly suitable for collecting data on all types of income, including income components in cash, in kind and in services, and income deductions. Special care should be taken in such surveys to better identify the relationship between income and employment. In particular, detailed information on income related to paid and self-employment should be collected in respect of each activity performed or job held by each household member, together with the corresponding volume of employment in terms of hours of work and work duration.

59. In order to improve the quality and relevance of income-related questions in labour force and other household surveys, efforts should be made in particular:

- to collect income data directly from the persons concerned and avoid the use of proxy respondents as much as possible;
- to obtain disaggregated data on the components of employment-related income and link income to work duration in each job and for each individual member covered by the survey;
- to reduce recall errors and pinpoint the seasonal characteristics of certain jobs using various solutions, such as conducting repeated surveys or surveys with a sample spread over the year and a shorter reference period such as a quarter or a season; using the month-to-month recall approach to obtain information on each of the 12 months of the reference period; fixing data collection at a time which coincides with the collection of income data for income tax and social security purposes, etc.

One of the limitations of household surveys is that income can usually only be measured net, i.e. after deduction of social security contributions, income taxes, etc.

60. Establishment surveys can also serve as a basis for the collection of data on those components of income related to paid employment received directly from the employer. For the purpose of measuring employment-related income, the coverage of traditional establishment surveys should be extended, or specially designed surveys should be carried out (i) to cover small establishments, own-account workers and household enterprises, and (ii) to include and identify separately all categories of persons in paid employment, and in particular, managerial employees, part-year, part-time and where possible casual and intermittent workers, together with their related volume of employment. Structural surveys of earnings, which enable a cohort of employees to be followed over time and information to be collected on income levels and trends according to detailed employees' characteristics (sex, age, occupation, conditions of employment, etc.) are the most appropriate establishment surveys for the compilation of data on income related to paid employment.

61. When the information collected in establishment surveys is supplemented by data drawn from other sources, such as tax and social security records, the social security benefits should relate to the same set of employees for whom total remuneration data have been collected from the establishments.

62. In order to alleviate the difficulties experienced in field surveys in general, related to the reluctance of interviewed persons to provide income data, the difficulty in quantifying non-monetary income, the relatively heavy workload for the statistical agencies and the risk of inaccurate responses, extra care should be taken in the preparatory phase, i.e. in the conception of appropriate definitions and guidelines, the drafting of directives and the training of officers. At a subsequent stage, special attention should be paid to the analysis and interpretation of the resulting income data and total and item non-response should be partly compensated through adjustment procedures.

## Data compilation

63. In order to measure the income-generating capacity of different jobs or economic activities, employment-related income should be related to the job variables (regular/casual, full/part-time, etc.) and measured within the framework of employment duration and working time.

64. In order to assess employment-related well-being, data should be collected on income derived from all jobs for each person. For each job, income data should be collected along with the individual's status in employment, the length of the reference period to which the income refers, the duration of work in hours, days, months, etc., where relevant.

65. Data should be collected on the components, as well as on the aggregate, of income related to paid and self-employment, along the following lines:

- (a) Gross income related to paid employment, excluding social security contributions as in paragraph 12:
  - total cash remuneration;
  - total imputed value of remuneration in kind and services;
  - profit-related pay;
  - employment-related social security benefits:
    - received from employer;
    - received from social security and insurance schemes or the State.
- (b) Gross income related to self-employment, excluding social security contributions as in paragraph 21:
  - gross profit or where relevant gross output less operating expenses;
  - consumption of fixed capital/depreciation;
  - net profit (or share of profit);
  - employment-related social security benefits.

## Data classification

66. Statistics of employment-related income should be classified by economic activity, status in employment and occupation or occupational group, at least according to the major groups and categories of the most recent version of the relevant international classifications. These statistics should be systematically disaggregated by sex in all analyses. Other important variables for cross-classifications of data on income related to paid and self-employment are age, level of education, level of skill, seniority in job or activity and sector (formal or informal).

67. Disaggregations of the main status in employment categories may be relevant in order to distinguish specific groups such as owners-managers of corporations and quasi-corporations from other self-employed persons, employers from own-account workers, permanent employees from temporary, seasonal or casual employees, etc.

68. In order to measure the relationship between employment and income, account should be taken of all activities performed during the reference year, including simultaneous jobs. The employment experience of individuals during the reference period may be assessed through the identification of spells of full- and part-time employment, unemployment and inactivity. At the aggregate level, the main situations may be regrouped into broad categories relevant to the measurement of employment-related well-being, such as:

- full-year/full-time employment;

- part-year/part-time employment with no unemployment:
  - for voluntary reasons;
  - for involuntary reasons;
- part-year employment with some unemployment;
- mainly unemployment:
  - with some employment;
  - without employment;
- mainly inactive with some employment.

69. Further variables may be introduced, such as length of employment, spells and duration of unemployment, etc. Such classifications would permit the identification of the main types of employment-related hardship, the severity of employment problems and the degree of labour force attachment of persons experiencing economic hardship.

## Periodicity

70. Countries should endeavour to regularly collect, compile and disseminate statistics of employment-related income at least every five years.

## Analytical measures

71. Statistics of average income related to paid and self-employment should be compiled per time unit. The time unit in which average employment-related income is expressed, e.g. hour, day, week or month, should depend mainly on how meaningful the figures would be in the country concerned and on the feasibility of data collection. Where possible, estimates of average annual income related to paid and self-employment should be compiled.

72. Where feasible, estimates of hourly employment-related income should also be developed, based on the annual estimates of income and on the corresponding volume of employment expressed in terms of hours of work and work duration.

## Complementary approach to non-measurable benefits

73. In view of, on the one hand, the importance generally attached to the growth of forms of compensation schemes offering current and deferred entitlements to various benefits to persons in paid employment (e.g. pensions and health plans, life insurance, flexible benefits and the like), and, on the other hand, the measurement difficulties inherent in the assessment of the value of such entitlements, efforts should be made to conduct surveys of employee benefits, in such a way as to provide data on the incidence and characteristics of the benefits received by persons in paid employment (e.g. participation requirements, employers' and employees' contributions (where appropriate), health-care deductibles, pension benefit formulas, paid leave provisions, number of beneficiaries). Data should be compiled and published by size of establishment and various employer and employee characteristics (major industry groups, full-time and part-time employment, etc.).

74. Where relevant, efforts should be made to collect, compile and disseminate similar information on social security and other employment-related benefits which are received by self-employed persons.

## Imputed contribution of contributing family workers

75. In household enterprises, and more generally in self-employment activities, activities may be jointly performed by several members of the household without formal or individualized earnings or income. In that case, the profit or mixed income derived by the self-employed head of the enterprise also rewards the participation of contributing family workers (as defined in the most recent version of ICSE) whose participation in the economic activity is of varying duration and intensity and at different levels of responsibility. It is therefore necessary to assess the contribution of these workers, disaggregated by sex, to the economic development of household enterprises.

76. Contributing family workers generally have jobs whose occupational content and level of

responsibilities differ from that of the owner or partners of the enterprise. The measurement of their participation involves: (i) the measurement of the volume of employment put into the activity, in terms of hours, days, weeks, etc., and (ii) the imputation of an income value to unpaid work. This imputed value can be based on the market rates for equivalent occupations.

77. Several variants may be calculated, using for instance the minimum wage of certain suitable occupations, or the average wage, by sex and occupation or sector, of substitute workers. Wages may be allocated “gross” or “net”. Imputed gross wages (where relevant, including the employer’s imputed contributions to social security and similar schemes) can provide an indication of the expense foregone by the head of the household enterprise, while imputed wages net of taxes and social security contributions appear more suitable since unpaid labour does not generate social security or income tax flows.

## Data dissemination

78. Where possible, statistics of average income related to paid and self-employment should be compiled and disseminated regularly, together with information on the quality of the statistics. Detailed descriptions of the concepts and methods used in the compilation of statistics on income related to paid and self-employment should be disseminated by the responsible statistical office. In particular, the descriptions should mention the nature and types of payments and benefits included in each of the four major groups of components of income related to paid employment, the types of employment-related benefits received by self-employed persons, the source(s) of data and the methodology used in collecting and compiling the statistics on income related to paid and self-employment.

79. Dissemination of the statistics of employment-related income should be in accordance with Article 4 of the Labour Statistics Convention, 1985 (No. 160), which protects the confidentiality of information relating to individuals, households, employers, etc.

80. To facilitate the analysis of the statistical series compiled on income related to paid and self-employment, the results of surveys on employment-related income should be accompanied by information on the various types of schemes and plans covering persons in paid and self-employment, in particular on the financing of statutory social security schemes and the coverage of benefits.

81. The credibility and the relevance of statistics on income related to paid and self-employment will be increased if they can be disseminated as soon as possible after their compilation, fitted into broader statistical systems (such as the national accounts or labour accounts) and used in connection with relevant demographic and economic time series. Countries should therefore endeavour to develop consistent time series showing income dynamics and revealing vulnerable groups of persons.

82. Countries which have carried out studies on the level and composition of income related to paid and self-employment should communicate their results to the International Labour Office in order to facilitate international comparisons and interpretation of the statistics.

## Further action

83. In view of the complexity of the measurement of income related to paid and self-employment, special efforts should be made to improve the use of existing sources of data and to enhance surveys in order to increase response rates and obtain the required information as accurately as possible.

84. The International Labour Office should follow national developments in collecting and compiling statistics of income related to paid and self-employment, carry out a series of field tests and pilot surveys where relevant, disseminate and evaluate information about the lessons learnt from national experiences, and prepare a manual to provide technical guidelines on the contents of this resolution.

85. The International Labour Office should cooperate, as far as possible, with countries in the development of statistics of income related to paid and self-employment by providing technical assistance and training. The Office should report to the next ICLS on the implementation of these guidelines.

