Fourteenth International Conference of Labour Statisticians
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Report I

General Report
First item on the agenda
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CHAPTER I

THE WORK OF THE BUREAU OF STATISTICS

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1. The purpose of this chapter is to provide conference participants with a general view of the current and planned work of the ILO Bureau of Statistics.

A. Staffing of the Bureau

2. The Bureau forms part of the Department of Labour Information and Statistics; its Director is Ralph Turvey, who acts as Chief Statistician. There are some 24 staff in the Bureau, representing 11 nationalities, plus four regional advisers outside Geneva. Despite their linguistic accomplishments, it is evident that a staff of this size cannot deal with all aspects of labour statistics in all major languages. Each professional has to cover several aspects of labour statistics. This makes it difficult to study each topic in depth and to build up a fund of knowledge, though the versatility required has some advantages.

B. The new Convention and Recommendation

3. In 1985, the International Labour Conference adopted a new Convention (No. 160) and Recommendation (No. 170) concerning Labour Statistics. Ratification by member countries which ratified the old Convention concerning Statistics of Wages and Hours of Work (No. 63) automatically releases them from their prior obligations. The Convention will come into force in April 1988. The secretariat will provide up-to-date information about ratifications to the Conference.

4. The full text of the new Convention and Recommendation are available in the Bulletin of Labour Statistics 1985-3 and have been summarised in an article in the International Labour Review, Volume 124, No. 5, September-October 1985, pages 495-497.

C. Regular publications

The Yearbook of Labour Statistics

5. The Yearbook, like the Bulletin, serves to disseminate the basic data on labour produced by some 140 national statistical offices in a multilateral manner to those users of labour statistics all over the world who require data from countries other than their own.

6. The ILO has not been producing the Yearbook as a separate volume for over 50 years. The first computer-based issue appeared in 1981. One major recent addition has been a chapter on labour cost. (A detailed description has been provided in the article "Labour cost: An international comparison of concepts" in the Bulletin of Labour Statistics 1983-4.)

7. A major revision is now being prepared, to be introduced around 1990. The Yearbook will be restructured so that the presentation will be by source rather than by subject, as at present. This will make it clear when data on different but related subjects from a given country come from the same source, have the same coverage and reference periods and apply the same classifications. Thus, in the case of establishment surveys, employment, wages and hours, statistics will be related to each other when they come from the same survey. If countries have the data, we shall collect and publish more data on the non-manufacturing divisions of the International Standard Industrial Classification of all economic activities (ISIC) than at present. It is also hoped to introduce some new types of statistics, notably employment data by duration of work (part- or full-time) and unemployment data by unemployment duration.

8. The restructuring and inclusion of new topics will require the development of revised and new questionnaires. Hence, we shall be asking for the co-operation of a number of countries in testing them. Once they are in use, they should simplify respondents' tasks.
9. Apart from the monthly and quarterly time series on employment, unemployment, hours of work, wages and consumer price indices which the Bulletin regularly provides, most issues also contain articles on the methodology of labour statistics. Besides several on particular problems of price index construction, those published since the last ICLS have included the following: "National computer network of employment statistics: The British example"; two papers on the idea of a labour accounting system; "ILO methodological survey on the measurement of employment, unemployment and underemployment in Costa Rica"; "Notes on the French 'New classification of occupations and of socio-occupational categories'"; "Salient features of the new international standards on statistics of the economically active population"; "Compilation of balance sheets of labour resources in the USSR: Methodological principles"; "Labour flow statistics: An examination of objectives, collection methods and measurement issues"; "Redesign of a major establishment survey in the United States"; "Statistics on employees in the service sector, particularly the public sector: Some experiences with employment statistics from an administrative information system in Norway"; "Coding of occupation and industry".

The October Inquiry

10. The revision of the annual October Inquiry on occupational wages and hours of work and on retail food prices, both of which were discussed at the last ICLS, has been completed. At the end of 1986, the additional issue of the Bulletin containing occupational wage and hours of work data for 1984 and 1985 and food price data for 1985 was published. It contains almost 6,000 prices and over 24,000 occupational wage and hours of work entries. It includes a description of the occupational wage and hours of work data. A detailed account of the prices part was published in the Bulletin of Labour Statistics 1986-2, under the title "Revision of the ILO October Inquiry: Retail prices part".

11. It is hoped to use the prices for producing international comparisons of food price levels. These will be attempted separately for each of a number of groups of countries. Missing prices will first be imputed, using the country product dummy method developed by the International Comparison Project. Prices will then be converted at October exchange rates into a common currency and price relatives calculated with respect to the mean for each food item within the group of countries. These relatives will be weighted by as many sets of food expenditure weights as are available for the countries concerned. If the resulting indices using these different sets of weights do not vary widely, the results may be published as ranges.

Statistical Sources and Methods

12. These four volumes describe in considerable detail the national statistics which appear in the Bulletin and Yearbook. They do not yet cover statistics of labour cost, strikes and industrial injuries.

13. Volume I deals with consumer price indices, and its second edition is available to the Conference. The other three volumes deal with data from establishment surveys, household surveys and administrative sources.

D. Databases

14. Since 1981, data obtained by questionnaire and from statistical publications have been stored and updated in a SAS database called Laborsta on disk, using the IBM 3083 of the International Computing Centre in Geneva as host. The data are used for the computerised production by photocomposition of the Yearbook and Bulletin of Labour Statistics, for the Statistical Sources and Methods series and for ad hoc analytical studies.
15. Laborsta is divided into different SAS data libraries as follows: total and economically active population, employment, unemployment, hours of work, wages, labour cost, consumer prices, occupational injuries and industrial disputes (corresponding to chapters of the Yearbook). Each such data library is further divided into SAS data sets according to the type of data or the international classification, i.e. yearly data, other periodicity, manufacturing by ISIC major groups, ISIC major divisions, ISCO major groups, etc.

16. In Laborsta, the annual data published in the Yearbook begin in 1969, except for total and economically active population, which go back to 1950. The data of greater frequency, published in the Bulletin, go back to 1976. The October Inquiry data, which appear in a special annual issue of the Bulletin, have only recently been computerised. At present, there are some 4 million data items, of which one-third are numerical, while the rest are the codes for defining and accessing them. The total size of the database is about 35 megabytes; its annual growth being some 5-10 per cent.

17. Early this year, a prototype on-line system for consultation and retrieval of Laborsta became operational. The system is implemented with SAS/AF and will be available to all international organisations connected to the International Computing Centre, as well as within the ILO. Users can access and print data (or retrieve them in SAS data sets for statistical analysis) from nearly 5,000 time series. The system is being enlarged to cover all the Laborsta numerical data and to allow downloading in Lotus and sequential files. This prototype is the first part of a major project for restructuring the whole database. Its release on tape and diskettes is also planned.

18. Another database contains the estimates and projections of the economically active population for all countries and continents for 1950 to 2025. These are briefly described below. The database is kept in three SAS data sets, occupying about five megabytes, and contains nearly half a million figures on population, activity rates and labour force. It is available on tape.

E. Manuals

19. In 1979, the manual An integrated system of wages statistics was published in accordance with a recommendation of the Twelfth ICLS. This year, the draft of a second manual on household surveys of the economically active population, employment, unemployment and underemployment will be completed, in accordance with a recommendation of the Thirteenth ICLS. It will deal with the relevant concepts, including labour time disposition, the informal sector and other economic classifications and the relationship between employment and income from employment. Following these chapters on concepts, there will be chapters on survey design, questionnaire design, field operations and data processing, tabulation and analysis and, finally, on data accuracy and evaluation. (In addition, it should be noted that the inter-agency National Household Survey Capability Programme is producing a series of technical reports.)

20. Following the adoption by this conference of a revised International Standard Classification of Occupations (ISCO) and a new resolution on consumer price indices, the Bureau of Statistics will produce a manual on the development and use of a national occupational classification, probably in 1988, and a manual on consumer price indices, probably in 1989.

F. Estimates and projections

Economically active population 1950-2025

21. Like the two previous editions, these six volumes present a set of comparable world-wide, continental and country estimates and projections of population, economically active population and activity rates by sex and age, together with estimates for 1950-80 of the economically active population in agriculture, industry and services. The sixth volume
describes the methodology. The work forms part of a collaborative effort with the United Nations Statistical Office (UNSO), FAO, UNESCO and other international agencies. The population figures are provided by UNSO.

Annual estimates of employment and unemployment

22. The employment and unemployment data collected from countries and published in the Yearbook and Bulletin reflect national definitions. A recently started project aims to provide internationally comparable annual estimates. The OECD, the Statistical Office of the European Communities and the United States Bureau of Labor Statistics already have such programmes. Hence, the aim is primarily to supplement their estimates by covering more countries, especially in Latin America and in some newly industrialised countries and, for employment, in Eastern Europe. For Latin America, this will be done in close co-operation with the regional economic commission of the United Nations and with ILO colleagues who specialise in the employment problems of the region. To the extent possible, the estimates will be classified by age, sex, occupation and industry.

23. The estimates will conform to the ILO definitions, and therefore national definitions must be adjusted accordingly where necessary. The problems that arise include treatment of conscript armed forces and of workers who are laid off, and different definitions of unpaid family workers. The work requires detailed investigation of national concepts and definitions and data sources, often in consultation with national statisticians. The first estimates should appear in the course of 1988.

G. Regional advisers and country missions

Work of regional advisers

24. As has already been noted, the ILO has four regional advisers in statistics. Three of them are based with United Nations regional economic commissions (in Africa, Asia and Latin America) and work within the inter-agency National Household Survey Capability Programme. This programme helps countries to establish and strengthen their capacity to carry out household surveys. With their colleagues in the programme, our experts visit countries to provide advice, especially with respect to labour force and household expenditure surveys, and to formulate projects for setting up survey capability.

25. The fourth regional adviser, based in Dakar, deals with labour statistics in general, visiting many countries in the African region. Like the other three, he not only assists national statistical offices and the statistical units of labour ministries but also helps the Bureau to keep in touch with developments in labour statistics.

Countries visited by Bureau staff

26. Visits by Bureau staff are also extremely useful, though the small size of the Bureau means that the number of such visits is smaller than we would wish. They have included missions to Mauritius, Jamaica, Haiti and Morocco to examine these countries' labour statistics programmes, visits to nine countries to discuss consumer price index problems and visits to a number of countries to discuss the revision of ISCO. In addition, staff members meet statisticians from all over the world at various conferences and seminars. Without such contacts, the staff of the Bureau would lose touch with the practical problems and opportunities that confront labour statisticians. It is unfortunate that we do not have the funds to organise regional seminars on particular topics where there could be a multilateral exchange of experience among the people most closely concerned with specific issues. But it is hoped that the contacts we do have enable us to formulate questionnaires, work on draft recommendations and respond to letters in a way which reflects a real understanding of the work of national statisticians.
H. Other work in progress or planned

27. Important topics not mentioned above are the informal sector and absence from work. In both cases, future activities will be decided in the light of this conference's discussions.

Productivity

28. The topic has not figured in the work of the Bureau of Statistics for a long time. However, in 1969 the Office published (in French as well as English) a book entitled Measuring labour productivity. This reviewed methods of calculation, provided a comparative analysis of national labour productivity statistics, examined problems of international comparability and, in the appendices, gave an account of national statistical series concerned with labour productivity.

29. In June 1985, the International Labour Conference adopted a resolution which requested that high priority in its future programme proposals be given to work on the problems of productivity measurement. Following this, the Governing Body noted that the Office would submit a progress report on the development of concepts, definitions and methodologies in this field during the biennium 1986-87. Consequently, the Bureau of Statistics has re-examined the availability, sources and methods of productivity statistics in a small sample of countries and has again investigated the methodological problems. It transpires that, on the methodological front, there have been two major developments since the 1969 publication, but that their relevance is limited in the present context. One is in the field of multi-factor productivity indices and the econometric estimation of production functions. These relate output to an estimate of the capital stock as well as to labour. Since they require reliable estimates of capital stocks, they are confined to very few countries, at least as regards branch or sectoral calculations. Calculations at the GNP level for the economy as a whole are more common, especially in academic research, but fall outside labour statistics. The other is the International Comparison Project, which makes international comparisons of GDP in a way which is independent of exchange rates. The components of the calculations are expenditure categories (e.g. consumer purchases of durable goods), not output categories (e.g. iron and steel) as is necessary for productivity statistics for branches or sectors.

30. Relevant methodological development has thus been limited. In any case, it is not methodological problems which constrain the computation of productivity statistics. In practice, in the short run at least, it is the nature, availability and comparability of the output and labour input data that are currently collected that determine what can be calculated and published. Our work will therefore consist primarily of ascertaining what productivity indices are published and obtaining sources and methods descriptions. The production of international comparisons of productivity levels would require additional resources.

Household income and expenditure

31. The last publication by the Bureau of Statistics on this topic dates back to 1979 and provides tables on a comparable basis for a large number of countries. In time, we may get back to producing such a publication, but the immediate aim is to locate, analyse, classify and evaluate surveys in detail. We may publish a guide to them instead of publishing the summary data. This work will contribute importantly to the following topic.

Non-standard forms of employment and income

32. Full-time, full-year paid employment is not the sole norm. A number of forms of non-standard employment have been growing in importance in developed countries; they include part-time work, casual and temporary employment and training schemes. In the developing countries, informal sector activities, casual and intermittent employment, out-work, apprenticeship and unpaid family work have long been important. The existing
recommendations do not provide adequate guidance on statistics on these types of employment. Nor do the recommendations on wage statistics cover income from self-employment. The two sets of issues being linked, the Bureau intends to examine them jointly, with a view to preparing draft recommendations for submission to a future meeting of the conference. The immediate objectives are twofold: (1) to compile data and information on sources and methods of statistics relating to these topics; (2) to develop a conceptual framework for delineating the various forms of non-standard employment and income. The Bureau also plans to produce reports on classification by status in employment and on statistics of income from employment.

Unemployment flows and durations

33. The employment-unemployment recommendations relate to numbers at a point in time and do not deal with durations and flows. Yet, statistics on the duration and number of spells of unemployment, for example, are needed in several contexts. Therefore, as with the previous topic, we shall investigate national data and sources and methods in order to produce a report on such statistics with a view to formulating draft recommendations for a future conference to consider. These would supplement or extend the existing recommendations. As in the case of the previous topic, we would hope to discuss the report at a meeting of experts during the biennium 1990-91.
CHAPTER II

EMPLOYMENT IN THE INFORMAL SECTOR

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   - Concealed employment
   - Non-market production

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C. Employment in the informal sector
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Annex: Coverage and definitions of informal sector used in 18 studies in three continents
A. Introduction

In order to account for the informal sector activities, both in developed and developing countries, and the rural non-agricultural activities, generally carried out by households in conjunction with agricultural activities in developing countries, and given the scarcity of statistics on these topics, it is desirable that countries develop appropriate methodologies and data collection programmes on the urban informal sector and the rural non-agricultural activities. In particular, suitable definitions and classifications should be developed in order to identify and classify the economically active population in the urban informal sector and those engaged in the rural non-agricultural activities. [Paragraph 33 of the resolution concerning statistics of the economically active population, employment, unemployment and underemployment, Thirteenth ICLS, 1982.]

1. The need for regular national statistics of employment in the informal sector has long been recognised. Special studies carried out under the ILO World Employment Programme (WEP) in developing countries in the early seventies, have all called for the development of statistics on the informal sector to serve in particular the need for balanced economic planning, promotion of self-employment activities, and employment and income generation policies. Informal sector statistics have also been sought to improve national accounts statistics and to complement labour statistics, particularly with respect to women's economic activities.

2. Referring to a largely uncharted area of statistics, the term "informal sector" has been used in many different senses, giving rise to a multiplicity of concepts, often closely associated with each other and thus difficult to distinguish without further qualifications. For a given concept, there may also be many competing definitions, thus adding another dimension to the complexity of the subject. The elusiveness of the concept, compounded by the formidable measurement problems involved, has contributed to the limited development of informal sector statistics, whether at the national or the international level. However, many empirical studies on the informal sector have been conducted during the past 15 years or so. Most studies in the developing countries were carried out on an ad hoc basis and were often limited to the capital city, covering one or a few branches of economic activity and generally based on a small number of sample units. In industrialised countries, ingenious survey techniques and analytical methods have been developed, also mostly on an experimental basis, and mainly to estimate the size of the informal sector in the context of the so-called "underground economy", primarily for national income account purposes. However, most of these estimates, which may vary greatly even within one country and for a given time period, have been obtained by researchers and do not have the status of secured official statistics. Informal sector statistics have yet to be integrated into the regular national statistical programmes.

3. Because many of the statistical issues are common to a number of countries, the Governing Body of the ILO decided to place this topic for discussion on the agenda of the Fourteenth International Conference of Labour Statisticians, with a view to contributing to the development of international statistical standards. Such standards may serve as points of reference for the development of national definitions and classifications, as well as for limiting unnecessary differences and facilitating international comparisons. There are at present no international standards concerning statistics of the informal sector.

4. The purpose of this chapter is to focus in particular on the statistics of employment in the informal sector and consider certain principles which may be helpful in the development of international standards on the statistics of the informal sector in general (including statistics of production, value added, income, etc.). Section B contains a brief review of the concept of the informal sector and certain related concepts already introduced at the international level: traditional sector, concealed employment and non-market production. Section C defines the concepts of employed population in the informal sector and of the economic unit. It also examines certain measurement issues, namely, the choice of measurement variables and the sources of data collection. Finally, section D brings together certain specific points for discussion.
B. Informal sector and related concepts

Informal sector

5. One of the important findings of the studies undertaken in developing countries in the seventies by the ILO World Employment Programme mentioned earlier, particularly the Kenya report, was that a substantial proportion of urban workers was employed in small-scale self-employed activities and had, typically, significantly lower earnings than those employed in large industrial and commercial establishments and in public services. It was also observed that the overflow of the urban labour force, resulting especially from rural-urban migration which could not be employed in the modern undertakings, tended to be absorbed in such small economic units, many of them creating their own employment, others working as employees in those units while waiting to obtain better and more remunerative jobs in the modern sector.

6. On closer examination, it seemed that these small economic units were subject to severe constraints and restrictive public policies which prevented them, in one way or another, from realising their full growth potential and benefiting satisfactorily from the opportunities provided by the general economic development. The units generally appeared to have limited or no access to modern technology, credit and other resources, facilities for skill development, modern infrastructure and market outlets for their products, etc. The restrictive public policies, notably with regard to their location, also seemed to have, directly or indirectly, inhibited their growth and forced them into slum and squatter areas, with many of them operating under conditions which are not strictly legal. These preliminary findings led to the conclusion that more attention should be focused than in the past on a target group defined in terms of such small-scale, self-employed activities. This target group has been termed the informal sector.5

7. In industrialised countries, the focus of attention on informal sector activities has been somewhat different. A major concern has been the concealed or illegal aspect of these activities, with their many negative consequences, including the loss of taxation revenue and social security contributions, abuse of welfare benefits, unfair competition, incitement to illegal migration, exploitation of workers and erosion of respect for the law.6 Another concern has been the effect of the undeclared aspect of these activities on the reliability of national income and other economic statistics. This has been discussed in the light of the possible impact of distorted data on macro-economic policy formulations and international comparisons.

8. The employment aspect of the informal sector has also been taken into consideration in the industrialised countries, but with a different emphasis. While it is acknowledged that the creation of self-employment activities in the informal sector may absorb to some extent the lack of job opportunities in the formal sector, as is the case in developing countries, the main issue in this respect in industrialised countries, however, has been the extent to which some of the concealed activities may actually be hampering the development of regular employment, at least in certain branches of economic activity.

9. There has also been some concern regarding ecology. Recent criticism of the detrimental ecological consequences of modern industrial activities involved in mass production, has led in some countries to the creation of small-scale, economic units with alternative modes of production and distribution, some of these units bearing similarities to the informal sector.

10. Although the precise meaning of "informal sector" remains elusive, whether in the context of developing or industrialised countries, it might nevertheless be possible to agree on a concept which is sufficiently broad to cover the essential aspects which occur in all countries and to serve as a basis for developing an operational international definition. Such a broad concept may perhaps be formulated along the following lines: The informal sector consists of small-scale, self-employed activities, with or without hired workers, typically operating with a low level of organisation and technology, with the primary objective of generating employment and incomes for their participants; to the extent these activities are carried out without formal approval from the authorities and escape the administrative machinery responsible for enforcing tax and minimum wage legislation and other similar instruments concerning fiscal matters and conditions of work, they are concealed.
11. In the remainder of this section, this concept is contrasted with the related concepts of the traditional sector, concealed employment and non-market production. The discussion should help to clarify the concept of "informal sector" and situate it in relation to the other concepts. A comprehensive framework of statistics on the informal sector should aim at incorporating these related concepts and, if possible, make their inter-relationships explicit.

Traditional sector

12. The United Nations System of National Accounts (SNA 1968) has introduced the term "traditional sector" in relation to "modern sector" to distinguish between traditional and modern modes of production in agriculture, manufacturing, construction and, where relevant, wholesale and retail trade and transport. The proposed criteria for classifying establishments according to mode of production are:

... resources, facilities and technology used in the activities, the manner in which production is organised and managed, and the scale of the operations. All production carried on in household premises should be classed as traditional; traditional-type establishments will often be part of unincorporated units. In the case of mining, manufacturing and construction, the use of power equipment of 2 horsepower or less might also be taken to indicate traditional modes of production. Little power equipment of course indicates a lack of capital equipment and the reliance on hand labour. Though the criterion of size should vary from one kind of activity to another, and perhaps from one country to another, the engagement of less than five persons might frequently be a suitable dividing line between the two modes of production. This criterion should be of value in drawing the distinction between the traditional and modern-type establishments in the case of all of the kinds of activity to which the classification is to be applied.7

13. Note that the three basic criteria mentioned earlier in relation to the informal sector (scale, organisation and technology) can also be found in the above SNA characterisation of the traditional sector. Thus, the two concepts as formulated here are closely related. They have, however, different significance. The concept of "traditional sector" is meant to apply to developing countries, whereas the concept of "informal sector", though equally characterised in terms of scale, organisation and technology, has a broader significance and is to be understood in the context of both developing and industrialised countries. Even with respect to developing countries, the two terms may have different meanings. The term "traditional sector" implies that the economic activities are carried out generation after generation without any significant change in the mode of production, whereas many of the economic activities in the informal sector are new and arise from urbanisation. Furthermore, although both concepts, in principle, cover agricultural as well as non-agricultural activities, "traditional sector" emphasises agriculture whereas "informal sector" emphasises non-agriculture.

Concealed employment

14. The Organisation for Economic Co-operation and Development (OECD) has recently examined the issue of concealed employment because of its perceived growing importance in the industrialised market-economy countries. The OECD report defines concealed employment as:

... employment (in the sense of the current international guidelines on employment statistics) which, while not illegal in itself, has not been declared to one or more administrative authorities to whom it should be made known, thereby leading to the evasion of legal regulations, the evasion of taxes, or the evasion or a reduction of social security entitlements.8

This definition implies that: (a) concealed employment is a characteristic of a job; (b) it arises wittingly in relation to the enforcement of administrative rules and regulations; but (c) the activity is legal in itself though conducted in an illegal context (this is to be distinguished from activities which are illegal in themselves, such as drug pushing, poaching, etc.).
15. The concept of "concealed employment" is different from that of "informal sector". One applies to jobs and the other to economic units. Moreover, they have different scopes. There may exist concealed activities performed in formal economic units. An example is undeclared work of a self-employed dentist. Another example arises when a company in the formal sector hires certain workers without work permits. Conversely, there are many activities performed in informal sector units without necessarily being concealed. This is particularly the case in many developing countries where administrative regulatory schemes are not well rooted. An example is the situation of a rural migrant setting up a small shoe shine stall in the city. He is clearly not expected to know all the relevant regulations. In fact, even if he knew and tried to fulfill the requirements, the administration would probably not be prepared to cope. Thus, this person's activity cannot really be regarded as concealed in the sense described earlier.

16. Though the two concepts of "concealed employment" and "informal sector" differ, a relationship between them may be established. This may be done, first, by introducing the additional concept of "concealed economic unit" (an economic unit which is concealed as a whole); second, by considering all such units as belonging to the informal sector. Then, concealed employment would consist of all employment carried out in concealed economic units belonging to the informal sector and the concealed part of employment carried out in other units, whether in the formal or the informal sector, which are not concealed themselves. It should be noted that though concealed employment may occur both in the formal and the informal sector, it is more likely to be found in the informal. This is because there is a better opportunity to work clandestinely in activities requiring a moderate amount of capital and materials and which are undertaken by small-scale units.

Non-market production

17. The concept of "informal sector" and the informal/formal distinction involves an understanding not only of what is "informal" or "formal", but also of the scope of activities to which the distinction is to apply. One issue is whether production of goods and services for own consumption should fall within the scope of the informal sector. The question also arises of whether the scope should cover non-economic activities, such as housework, do-it-yourself activities, etc.

18. According to the production boundary of the System of National Accounts (SNA 1968), economic activities cover all production for the market as well as certain types of non-market production. "Non-market production" includes production and processing of primary products for own consumption, own-account construction (including production of fixed assets for own use) and that part of production of non-primary products which is kept for own consumption by those who also produce for the market. "Primary production" consists basically of agricultural and allied activities. "Non-primary production" consists of manufacturing, construction, trade, transportation, communication, and all services. These activities carried out for own consumption are generally to be found in the rural areas, but may also arise to a significant degree in urban areas of many developing countries.

19. Units engaged in non-market production are typically household enterprises (farm or non-farm) and are, by nature, small, often operating with low levels of technology and organisation. Thus, they generally have the basic characteristics of the informal sector as formulated earlier. However, to the extent that these activities do not essentially result from lack of job opportunities, and are not intended to be concealed, they do not really fit the two aspects of informal sector measurement mentioned here, namely, concealment and employment generation. Non-market production should, therefore, perhaps be excluded from the scope of informal sector activities; its inclusion could dilute the concept of "informal sector". None the less, it should be added that many economic units that, in addition to market production, also produce for own consumption may actually fall into the informal sector but for reasons other than non-market production.

20. A similar argument may be given for other activities, such as unpaid domestic activities, child care, do-it-yourself, and volunteer community services that fall at present outside the boundary of economic activities, as defined by the SNA (1968). These activities and all non-economic activities in general may thus be excluded from the scope of "informal sector". The various concepts discussed in this section and their relationship are depicted schematically in the following chart.
Chart 2.1: Informal sector and concealed employment: A conceptual framework

ECONOMIC ACTIVITIES (excluding non-market production)

INFORMAL SECTOR

UNCONCEALED UNITS

TRADITIONAL mode of production

UNCONCEALED ACTIVITIES
in the informal sector

CONCEALED UNITS

MODERN mode of production

CONCEALED ACTIVITIES
in the informal sector

FORMAL SECTOR

CONCEALED ACTIVITIES
in the formal sector

UNCONCEALED ACTIVITIES
in the formal sector

CONCEALED EMPLOYMENT

Note: For the sake of simplicity in presentation, it is assumed that the distinction between traditional and modern modes of production applies mainly to unconcealed units in the informal sector and that traditional sector units are generally engaged in unconcealed activities.
**C. Employment in the informal sector**

**Employed population in the informal sector**

21. A fundamental consideration throughout this chapter has been the notion that the characteristic "informal" relates above all to "economic unit", i.e. units which carry out the economic activities. Thus, a person would be considered as employed in the informal sector only if he or she is employed in an economic unit belonging to the informal sector. A corollary to this principle is that two persons working in the same economic unit are to be classified in an identical manner, independently of their personal characteristics, such as income, education, occupation, or status in employment.

22. Another corollary is that a person working at two jobs in different economic units may be in the informal sector with respect to one job and in the formal sector with respect to the other. The employed population in the informal sector may thus be defined as comprising two groups: (a) those whose main employment is in the informal sector; and (b) those whose main employment is in the formal sector, but who have a subsidiary activity in the informal sector.

**The concept of economic unit**

23. Since the informal sector is regarded as a subset of all economic units and not of individuals, the basic unit for informal sector classification is the economic unit. The term "economic unit" is used here essentially in the same sense as that of "establishment-type unit" or "kind-of-activity unit" in the International Standard Industrial Classification of all economic activities (ISIC 1968). According to ISIC 1968, "the establishment is, ideally, an economic unit which engages, under a single ownership or control, i.e. under a single legal entity, in one, or predominantly one, kind of economic activity at a single physical location, e.g., an individual farm, mine, factory, workshop, store or office". The kind-of-activity unit differs from the establishment in that there is no restriction in respect of the geographic area in which a given kind of activities is carried on by a single legal entity." The term "economic unit" is preferred here because of the ambiguity of the concept of "legal entity" in the case of certain economic activities in the informal sector and because of the connotation associated with the term "establishment", which in everyday parlance generally refers to a regular industrial unit, such as a factory, a store or an office.

24. In the context of informal sector measurement, a shoeshine worker, a lottery ticket seller, an itinerant vegetable seller may each constitute an economic unit by himself. A single individual may even constitute two or more economic units. For example, a person working on his own account, both as a shoeshine worker and as a local tourist guide, would constitute two distinct economic units, both of which in this case may belong to the informal sector. Similarly, a carpenter employed during the week in a construction firm and moonlighting on weekends would be creating a new single-person economic unit when moonlighting, as distinct from the construction firm. Although in this example the occupation and industry are the same in both economic units, the construction firm may belong to the formal sector, while the weekend economic unit may be in the informal sector. Note that all the examples given here (shoeshine work, local tourist guide, carpentry on weekends, carpentry in a construction firm) are distinct jobs, as well as distinct economic units. This does not necessarily mean that, in general, each distinct job constitutes a distinct economic unit. Two family members, one baking cakes at home and the other selling the products in the market-place, belong to the same economic unit (the household enterprise), though performing different jobs.

**Measurement variables**

25. The distinction between economic units belonging to the informal sector and other economic units should be based on certain well-defined variables. A review of 18 studies conducted in Africa, Asia and Latin America during the past 15 years or so reveals a wide range of variables used in defining the informal sector (see Annex). The variables most often used, alone or in combination, were: (i) size (e.g. no regular wage earner, less than
five or less than ten employees); (ii) organisation (e.g. no clerical or accounting staff, simple management system with minimum of documented controls, not required to have licence or permit to operate); (iii) skill required (e.g. educational level of most workers low, required technical know-how and operating skills obtained mostly outside the formal education system); (vi) location (e.g. temporary structure or premises; home-based or itinerant); (v) social benefits (e.g. no paid holiday, no pension, not covered by medical service schemes); (vi) and other (e.g. low income, temporary or casual contract, no union affiliation, no access to the capital market or bank credits).

26. Other studies have emphasised the need for parsimony, using a single variable, such as productivity, technology, or size. Others have devised combinations of variables already available in regular household surveys and population censuses, such as, industry, occupation or status in employment.

27. While all of these variables may be relevant, certain ones relate to the individual worker rather than to the economic unit (e.g. income, occupation, status in employment, union affiliation, type of contract); and others are either not specifically indicative of how the economic unit actually functions (e.g. location), or impractical for large-scale application (e.g. productivity). Note that the first three sets of variables (size, organisation and skill required) are essentially the same as the three basic characteristics mentioned earlier, namely, scale of operation, level of organisation and level of technology.

28. These basic characteristics, however, cannot be measured directly. Measurement should be based on one or more proxy variables. An example of such an operational definition, applied by the ILO as part of two methodological surveys on the measurement of employment and unemployment in Costa Rica and Kerala, India, in 1983-84, is the following: employment in the informal sector comprises all persons who were employed during the reference week in either: (a) an unregistered economic unit; or (b) a registered economic unit with characteristics similar to the unregistered economic units in the corresponding branch of economic activity.

29. Registration of an economic unit referred to a legal instrument enacted by a legislative body, for example, the Factories Act, Shops and Establishments Act, and professional groups' regulatory acts. A trade licence or a permit for commerce, issued by municipal and local government authorities under by-laws without legislative acts, was not considered as constituting "registration". "Similarity" of registered economic units with corresponding unregistered units was established at the processing stage on the basis of the three basic characteristics mentioned earlier. The level of organisation was measured on the basis of adherence to a social security or pension scheme (Kerala) or the issuance of invoices (Costa Rica). The scale of operation was measured (both surveys) on the basis of the number of regular employees. The level of technology was measured (both surveys) on the basis of skill required for non-manufacturing activities and type of power used for operating the main productive equipment (manual, mechanical, etc.) for manufacturing activities.

30. Registration was used as the primary discriminatory variable because (a) it was found to correlate highly with the three basic characteristics; (b) it was considered conceptually clear-cut; and (c) based on it, the characteristics of unregistered units would serve to determine the benchmark for devising cut-off points for the level of organisation, scale of operations and level of technology of the registered units which were to be included as part of the informal sector. It was thought that registration might also provide a desired element for linkage with the related concept of concealed employment or, more particularly, of concealed economic units. The two-tier aspect of the definition was designed to safeguard against total dependence on the criterion of registration. The definition, however, does not preclude the possibility of omitting the two-tier feature for certain types of economic activities (e.g. medical services, accounting services).

31. The inclusion in this chapter of the definition used in the two ILO methodological surveys is only meant to serve as a basis for discussion. Its underlying principles should be carefully examined with respect to its applicability, both in household and establishment surveys and in other national or international contexts.
Data collection

32. Household surveys may provide an appropriate source of data to obtain global information on the level and trend of employment in the informal sector and on its economic and socio-demographic structure. They enable a comprehensive measurement of employment in the informal sector covering, in principle, the entire economically-active population. They provide the only single source of data for collecting joint information on main and subsidiary employment of individuals, required for measuring the "employed population in the informal sector", according to the definition given earlier. Furthermore, household surveys allow for the analysis of employment in the informal sector with a wide variety of other personal characteristics, such as sex, age, marital status, occupation, branch of economic activity, status of employment, as well as household and family characteristics, such as consumption expenditures, household income, type of family, etc. Through household surveys, such data can be directly contrasted with corresponding information on individuals working in the formal sector. Another particular advantage of household surveys is the possibility of obtaining data on underemployment in the informal sector and especially on persons seeking employment in the formal sector.

33. Conventional household surveys, such as labour force surveys and household income and expenditure surveys, can provide the starting point for collecting regular data on employment in the informal sector. These surveys are already part of the national statistical system of many countries. Most lend themselves to inclusion of supplementary questions on informal sector employment with relatively low additional cost. The inclusion of informal sector information may even enhance the relevance of conventional labour force and household income and expenditure surveys in developing countries.

34. Such an enlargement of conventional labour force and household income and expenditure surveys would, however, have certain implications on their designs and operations. For example, their sample designs may have to be re-examined to ensure proper representation of non-standard housing units, such as in slum and squatter areas, where most inhabitants are likely to be in the informal sector. Also, their data collection procedures may have to be reviewed so as to minimise problems of obtaining specific information from respondents on the economic units in which they work. This is particularly important in the case of employees and, in general, when proxy responses are involved.

35. In-depth studies of employment in the informal sector may, however, require specially designed surveys with direct inquiry of the economic units. The economic units of the informal sector are not usually covered in the regular establishment surveys of many countries. These surveys are often confined to establishments of a certain size, expressed in terms of employment, capital or sales, and sometimes combined with other criteria, such as use of motor power, maintenance of a formal accounting system, registration with a government administrative agency, etc. The United Nations Statistical Commission is considering draft recommendations for a statistical programme for household and small-scale industries to expand the coverage of regular industrial surveys to cover all industrial units relating to mining, manufacturing, and electricity, gas and water. Since the informal sector covers not only industrial units but, in principle, all branches of economic activity, the household and small-scale industries programme would need to be supplemented accordingly.

36. One possibility would be to use the conventional household surveys to identify the economic units belonging to the informal sector, on the basis of which special surveys could be conducted to obtain the more detailed information necessary. According to whether these economic units are of a household type (household enterprise) or of an establishment type, they may be covered by specially designed household surveys or specially designed establishment surveys. For this purpose, it may be convenient to divide the economy into two mutually exclusive operational sectors: the establishment sector and the household sector. The establishment sector may be defined as comprising all economic activities carried out with the assistance of regular paid employees. The household sector may be residually defined as comprising all economic activities carried out by households or individual members of households on an own-account basis with the possible assistance of unpaid family labour or casual paid employees. This distinction between household and establishment sectors was originally proposed in the context of surveys of household economic activities.
37. Administrative records are another source of data collection but have limited use for obtaining data on the informal sector since, by definition, economic units in the informal sector are generally outside the scope of administrative rules and regulations. Administrative records, based on municipality permits for street vendors, sales licences for shopkeepers and other similar authorisations may, however, be useful where available.

38. In general, the very nature of the informal sector makes data collection difficult. Since they are often small or unregistered, the economic units in the informal sector are not well covered, or not covered at all, in many statistical directories of establishments. Also, the high incidence of births and deaths of these units makes them, in general, intractable for statistical follow-up. Furthermore, many of the units do not have recognisable external features, which makes them hard to locate. The concealed aspect of certain informal sector activities also means that respondents may be reluctant to provide reliable information. When concealed employment is a major measurement objective, particular surveys, such as time-use surveys and users' surveys of concealed activities designed to obtain indirect information on concealed employment, may be the only feasible means of data collection. Even where concealment is not an issue and respondents are willing to provide the required information, they may not be able to do so adequately, due to the lack of record keeping and failure of memory. Various attempts have been made to deal with some of these issues.

D. Conclusions

39. The discussion in this chapter suggests that, although the topic of "informal sector" is complex, it might nevertheless be possible to generate a consensus on the broad outline of the concept and on appropriate strategies for data collection with a view to formulating international standards and incorporating informal sector statistics into the regular national statistical programmes.

40. With this dual aim in mind, certain specific questions arising from the chapter are brought together below to stimulate further discussion (the relevant paragraph numbers of the text are indicated in each question):

(i) Does the formulation of the concept in paragraph 10 adequately describe the essential content of the informal sector? Does the proposal in paragraph 10 to exclude non-market production contribute to sharpening the concept?

(ii) Should a link between "informal sector" and "concealed employment" be established? Is the linkage described in paragraph 16 acceptable?

(iii) Should the informal sector be defined in terms of characteristics of economic units (as opposed to characteristics of individuals, jobs, etc.)? Is the concept of economic unit described in paragraphs 23 and 24 adequate for this purpose?

(iv) Is the definition of "employed population in the informal sector" given in paragraph 22 sufficiently comprehensive?

(v) Can the measurement of the informal sector be based on the criterion of registration, supplemented by other operational variables measuring scale of operation, level of organisation and level of technology of the economic units concerned (paragraphs 28-30)?

(vi) Does the set of proposals made in paragraphs 32-38 provide a feasible strategy for integrating the collection of data on employment in the informal sector into the existing national statistical programmes?
Notes


5. For further details on the origin of the concept and an analysis of the evidence from Africa, Asia and Latin America, see S.V. Sethuraman, (éd.): The urban informal sector in developing countries: Employment, poverty and environment (Geneva, ILO, 1981).


8. OECD, op. cit., Ch. III, p. 67.


Annex

Coverage and definitions of informal sector used in 18 studies in three continents

Africa

1. Congo (Brazzaville) 1979
Coverage: 77 enterprises; agriculture (1); commerce (36); handicraft (19); services (21).
Definition: enterprises having less than ten workers.

2. Ghana (Kumasi) 1975
Coverage: 298 economic units; fitting (74); welding (20); blacksmithing (9); carpentry (34); tailoring (71); wood carving (7); cane-weaving (9); carpet-making (5); footwear (69).
Definition: small-scale, non-factory enterprises with no more than ten wage-earning journey- men (skilled labour), with an internal organisation similar to the traditional artisan system, and with the owner-craftsman in control of all operations, from production to sales, and operating from a fixed recognisable location.

3. Ghana
Coverage: 212 auto-repair enterprises; vehicle repair (general) fitting of engines (102); welding, straightening and body building, vehicle spraying (57); miscellaneous blacksmithing, including coal pots, cutlasses and hoses (30); bicycle repair (4); batteries and auto electric work (6); refrigeration work (2); miscellaneous metalwork, such as bolts and nuts (11).
Definition: enterprises where the mode of production was relatively unorganised, wage- employment was an exception rather than the rule, technology was relatively simple, and work was performed in small, rudimentary workshops with little use of electricity and no clerical or accounting staff.

4. Kenya (Nairobi) 1977
Coverage: 93 enterprises; furniture industry.
Definition: enterprises operating out of temporary structures or premises.

5. Nigeria (Lagos) 1976
Coverage: 2,074 enterprises; primary industries (18); food, beverages and tobacco (17); textiles and leather (549); wood and furniture (108); paper and paper products (58); fabricated metal and machine equipment (51); other manufacturing (48); utilities (44); construction (22); wholesale trade (116); retail trade (526); transport and storage (74); communication and social and personal services (320); undefined (123).
Definition: enterprises employing not more than ten workers, whose owners were not highly educated (the owner, at most, would possess school certificate standard of education) and had no access to the capital market in the formal sector.
6. Rwanda (Kigali) 1977

Coverage: enterprises; woodworking; metalworking; building; mechanical and electrical repairs.

Definition: "modern" informal sector: activities with permanent or semi-permanent location, with characteristics, such as to exclude them from the modern sector: type of construction, internal structure (organisation and management of workplace). The criteria defining the informal sector enterprises concern the composition of the labour force of the enterprise, the level of training of the labour force, the level of capitalisation and production of the enterprise, the rate of growth of the force, the productivity of capital and labour, the method of management, respect of legislation, access to banking facilities and modern sector assistance.

7. Senegal (Dakar) 1974

Coverage: 467 enterprises; metalwork (78); woodwork (74); electrical repair (47); mechanical repair (88); mouldering (19); bricklaying (54); upholstering (45); watch repair (44); other (18).

Definition: artisans, retailers, transporters and those who provide services which are not included in the handicraft sector, including those without legal status as required by the formal industrial sector and those with workers earning less than the legal minimum wage and not benefiting from social security.

8. Sierra Leone (Freetown) 1976

Coverage: 967 enterprises; manufacturing (195); construction (20); trade (628); transport (37); services (87).

Definition: self-employed persons of both sexes, aged ten years and over.

9. Sudan (Khartoum, Khartoum North and Omdurman) 1974

Coverage: based on 2,614 households, from which are sorted out working members of the households who stated that they were self-employed in a business whose activity was connected with manufacturing, repairing or construction.

Definition: enterprises screened according to the following criteria: (a) place of work; (b) location of work (home or elsewhere); (c) number of regular paid workers; and (d) level of education of most of the workers employed in the enterprise.

10. United Republic of Tanzania (Dar es Salaam) 1981

Coverage: 71 establishments; wood processing (21); tailoring (18); leatherwork (14); metalwork (13); food processing (5).

Definition: productive and repair activities employing less than ten persons; the units had to have some fixed capital investment and a significant degree of value added.
11. **Indonesia (Jakarta) 1975**


Definition: economic units that produce goods or services, whether using capital or not, having a fixed or variable location, with ten or fewer workers, including head of enterprise.

12. **Philippines (Manila) 1976**

Coverage: 3,507 enterprises; manufacturing, construction, commerce, trade and services.

Definition: enterprises employing ten or fewer persons.

13. **Sri Lanka (Colombo) 1976-77**

Coverage: 1,200 enterprises; trade, commerce, manufacturing and processing, services, transport, construction, cultivation and sale of leafy vegetables, sea fishing by operators living in northern coastal wards of the city.

Definition: enterprises employing less than five persons, where employment is informal in character, often in family enterprise; investment in buildings and equipment, low and technology labour-intensive; management system simple with minimum of documented controls; technical know-how and operating skills required for enterprise most frequently obtained outside formal educational system.

14. **Thailand (Bangkok) 1981**

Coverage: subsample of 1,000 households with at least one member working in the informal sector - 880 from 14 slums and 120 from seven flats.

Definition: household with at least one of its members having one or more of the following characteristics:

- self-employed or own account;
- in an enterprise or business firm with less than ten employees;
- average pay less than 54 baht per day, the legal minimum wage for Bangkok area in 1981;
- employed not on a permanent basis (as the enterprise or firm hires its workers on a daily basis, or it has no definite job description for its workers and no regular working hours).
15. **Argentina (Córdoba) 1976**

Coverage: about 1,500 establishments with 0-50 persons employed, of which 203 classified as informal sector (and 346 quasi-formal): furniture and woodwork (2); turnery (1); miscellaneous manufacturing (3); retail food, beverages, cigarettes, etc. (73); prepared food (14); retail of wearing apparel and other clothing articles (23); retail of household and electric appliances (1); other retail sales (20); repair of shoes and tyres (13); barber-shop and other personal services (41); other services (12).

**Definition:** establishments with 0-5 employed persons with activities, such as unskilled manual work and sales activities with easy entry. Quasi-informal sector: establishments with 0-5 employed persons with activities requiring skills and some capital accumulation, semi-skilled and sales activities with some oligopolistic incomes, and self-employed professionals. In practice, the informal sector was identified as those activities which generated low income. For establishments with fixed location, gross income was used, while net income was used for those without fixed location. The cut-off point was derived on the basis of an analytical method.

16. **Brazil (Campinas) 1976**

Coverage: 500 units; 21 per cent industry (of which metallurgy 30 per cent, carpentry and woodworking 13 per cent, tailoring and seamstresses 12 per cent, and other 45 per cent); 42 per cent commerce (of which snack bars, bakeries, groceries and greengrocers 44 per cent, news-stands 12 per cent, clothing shops 11.5 per cent, and other 37 per cent); 37 per cent services (of which barber/hairdressers 29 per cent, repair of vehicles and motors in general 18 per cent; shoe-makers 16 per cent, and others 37 per cent).

**Definition:** own-account workers who use their own labour force or unpaid family labour and small enterprises employing from one to ten wage earners.

17. **Costa Rica (San José) 1979**

Coverage: based on an enlarged subsample of the regular household labour force survey; 628 individuals; manufacturing (242); construction (35); commerce (132); services (199); retail of meals (21); mechanical repair (35); transport (27); other services (116).

**Definition:** own-account workers and employers with less than five employees.

18. **Mexico (urban areas) 1976-77**

Coverage: based on household survey with a sample of about 14,000 households, of which about 19,000 are employed persons.

**Definition:** employees and own-account workers with at least three of the five selected characteristics. Unpaid family workers were all included in the informal sector. Employers were excluded because their number was too small in the sample.

(a) The five selected characteristics regarding employees:

- monthly salary less than 110 per cent of the regional minimum monthly wage;
- not covered by medical services scheme;
- no paid holiday, no pension, no right to housing loans, life insurance or other enterprise schemes;
- type of contract; temporary or casual;
- not affiliated to a union.
(b) The five selected characteristics regarding own-account workers:

- net weekly income $\times 4.3$ equals less than 110 per cent of the regional minimum monthly wage;
- no private medical insurance, no life insurance and no social security;
- not affiliated to a union;
- not required to have a licence or permit to operate;
- not utilising bank credits, despite need for credits.
CHAPTER III

STATISTICS OF ABSENCE FROM WORK

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A. Introduction

1. Workers absent themselves from their work for various reasons: leave, illness, accident, strikes, bad weather, etc. Some of these absences are desirable, such as study leave approved by employers so that employees maintain, develop or improve their skills. Others, such as annual leave, are statutory and are defined in national legislation or collective agreements. Finally, there are absences that either employers or workers or both consider as undesirable, such as those resulting from occupational injuries or "unauthorised" absences or absences reported as being due to illness when the real cause may be a psychological reaction to prevailing socio-economic conditions or to bad conditions of work. Some of these absences are avoidable and they can and should be reduced, for example, by raising the standard of occupational safety and health and other general working conditions so as to improve the workers' lot. The fact remains that absences from work impose a cost on enterprises if replacements are recruited and trained, work organisation has to be modified, equipment is underutilised or the quantity or quality of goods produced is adversely affected.

2. This study was initially conceived as an analysis of "absenteeism", however, it soon became clear that the term "absenteeism" tends to have a negative connotation, designating absences which are considered undesirable. Furthermore, the term is ambiguous as there are no objective criteria for identifying such absences. In any case, the reason given for an absence from work may not be the real cause, as when sick leave (certified or not) disguises voluntary absence.

3. Thus, a comprehensive study of the problem would require not only an analysis of employers' records but also a detailed survey of absentees - an expensive operation that should perhaps be envisaged only in particular cases of relatively high absence levels. These cases can be identified by analysing data on the number of absences, the major forms of absence, the industries affected and the duration of absences, and can be used to develop more in-depth studies of absenteeism. For present purposes, these proposals relate to "absence" rather than "absenteeism".

4. The growing interest of national statistical offices, social security agencies, employers' or workers' organisations and others in the problem at hand, has led to the compilation of statistics on absence from work. The Bureau identified and reviewed 45 surveys conducted in 36 countries that collect data on the subject, and noted that there are wide divergencies with respect to concepts, definitions, methods of collection of data and methods of analysis used. It attributes these divergencies to the fact that the use made of the data varies widely from one country to another. Data on absence from work show where absence problems exist and what forms they take. Thus, they can be used to identify industries and occupations with high risks of illness, work accidents or occupational diseases, and pinpoint other forms of absence that could be reduced by improving working conditions or management-labour relations. The data can also be used for personnel planning or for analysing working time in general. The interest of specific users in data on absence from work also varies widely. Some are primarily concerned with the extent and causes of undesirable absences, with a view to defining and implementing measures aimed at reducing absence levels. Social security agencies are primarily concerned with absences that entail financial compensation, such as those due to illness or occupational injuries. Earnings, labour cost and productivity analyses require data on hours of work paid for and payments made to workers though no work has been performed.

5. Although there are no international guide-lines on the development of statistics on absence from work, ILO statistical recommendations do cover certain specific types of absences. Thus, in 1926 the Third International Conference of Labour Statisticians (ICLS) defined absences due to strikes in a resolution concerning statistics of industrial disputes; in 1982, the Thirteenth ICLS defined absences resulting from non-fatal occupational injuries in a resolution concerning statistics of occupational injuries and "persons with a job but not at work" in a resolution concerning statistics of the economically active population, employment, unemployment and underemployment. On a related issue, the Tenth ICLS in 1962 adopted a resolution concerning statistics of hours of work.
6. The aim of this chapter is to propose a framework for the development of national statistics on absence from work that would identify sectors having relatively high absence levels, as compared with other sectors or the same sector in other countries. This framework should integrate relevant concepts that have already been defined in previous ILO recommendations.

B. Absence from work and loss of working time

7. Basically, absence from work is the time during which a person should be at work but is not. Roughly, this corresponds to the difference between normal time available for work and time actually worked.

8. Normal working time and time actually worked have been defined in a resolution adopted by the Tenth ICLS, as follows:

4.(1) Normal hours of work are the hours of work fixed by or in pursuance of laws or regulations, collective agreements or arbitral awards.

(2) Where not fixed by or in pursuance of laws or regulations, collective agreement or arbitral awards, normal hours of work should be taken as meaning the number of hours per day or week in excess of which any time worked is remunerated at overtime rates or forms an exception to the rules or custom of the establishment relating to the classes of workers concerned.

5.(1) Statistics of hours actually worked should include -

(a) hours actually worked during normal periods of work;

(b) time worked in addition to hours worked during normal periods of work, and generally paid at higher rates than normal rates (overtime);

(c) time spent at the place of work on work, such as the preparation of the workplace, repairs and maintenance, preparation and cleaning of tools, and the preparation of receipts, time-sheets and reports;

(d) time spent at the place of work waiting or standing by for such reasons as lack of supply of work, breakdown of machinery, or accidents, or time spent at the place of work during which no work is done but for which payment is made under a guaranteed employment contract;

(e) time corresponding to short rest periods at the workplace, including tea and coffee breaks.

(2) Statistics of hours actually worked should exclude -

(a) hours paid for but not worked, such as paid annual leave, paid public holidays, paid sick leave;

(b) meal breaks;

(c) time spent on travel from home to work and vice versa.

9. Paragraphs 5.(1)(c), (d) and (e) of the resolution stipulate that certain specific periods of inactivity spent at the place of work should be included in time actually worked, for the employee remains at the disposal of the employer. On the other hand, the time corresponding to periods of paid annual leave, paid public holidays, paid sick leave, and meal breaks, as well as time spent on travel from home to work and vice versa (paragraph 5.(2)), should be excluded from hours actually worked.
10. Time spent at the place of work during which no work is done results in the loss of working time, an important element in the analysis of productivity. However, it cannot be considered as absence from work, which literally means being away from the place of work.

11. Another important aspect of the resolution is that periods not worked at the workplace but for which payment is made under a guaranteed employment contract are included in hours actually worked. The phrase "under a guaranteed employment contract" introduces the notion of the existence of a formal employer-employee relationship.

12. This notion reappears in the resolution of the Thirteenth ICLS concerning statistics of the economically active population, employment, unemployment and underemployment, which defines paid employment as including persons with a job but not at work, i.e. "persons who, having already worked in their present job, were temporarily not at work during the reference period and had a formal attachment to their job". The resolution stipulates, moreover, that "persons temporarily not at work because of illness or injury, holiday or vacation, strike or lock-out, educational or training leave, maternity or parental leave, reduction in economic activity, temporary disorganisation or suspension of work due to such reasons as bad weather, mechanical or electrical breakdown, or shortage of raw materials or fuels, or other temporary absence with or without leave should be considered as in paid employment provided they had a formal job attachment".

13. It is the criterion of a "formal job attachment" in this definition that emphasises the need for a formal employer-employee relationship (without which the person could be classified as unemployed under paragraph 10.(5) of the resolution).

14. The application of this criterion is particularly important in the case of absences of long duration, when it can be difficult to distinguish between absence and the discontinuation of employment.

15. In view of the above, it is suggested that absence from work occurs when a worker who ought to be working is neither at the place of work nor at the disposal of his employer, but still maintains a formal attachment to his job.

C. A proposed framework for identifying absence from work

16. A logical starting point in developing a statistical framework identifying absence from work as defined above is the theoretical normal working time available to establishments. This is the time during which the worker ought normally to be at work in accordance with his or her employment contract. The working time of part-time or half-time workers and apprentices would thus reflect the terms of their employment contracts. Working time excludes overtime and other supplementary work done outside normal time.

17. Not all of the theoretical normal working time available to establishments is devoted to work. Planned absences, such as annual leave, statutory rest days, public holidays and free time earned in lieu of compensation for overtime and other supplementary work must be excluded in estimating the time that should have been devoted to work.

18. Time actually worked during normal hours of work (as defined by the Tenth ICLS) is then deducted to arrive at unused working time.

19. Unused working time comprises two categories. The first is absence from work, where the worker is away from the place of work; the other is loss of working time at the place of work; both have a significant impact on productivity, earnings, and labour costs analysis, along with the other forms of loss of working time included in the Tenth ICLS definition of hours actually worked.

20. This chapter concentrates on absence from work as the main subject of analysis; to consider all aspects of lost working time would require a more detailed analysis of labour time disposition.
21. Absence from work as tentatively defined here can be divided into the various forms of absence listed below, which reflect the major categories defined in the national surveys reviewed by the Bureau of Statistics:

(i) illness, including absences due to non-work accidents (broken down if necessary into certified absences and uncertified absences);
(ii) occupational injuries and diseases resulting from work accidents (as defined by the Thirteenth ICLS);
(iii) maternity or paternity leave, which includes statutory leave as well as extended leave approved by the employer;
(iv) leave taken with the employer's consent for personal or family reasons, e.g. caring for a sick child, attending family occasions, funerals or weddings, moving house or unavoidable factors;
(v) strikes and lock-outs (which are also on the agenda of the present conference);
(vi) temporary disorganisation or suspension of work, due to such reasons as strikes in other parts of an establishment or in other establishments, bad weather preventing an establishment from operating or preventing workers from reaching the establishment, mechanical or electrical breakdown, and shortage of raw materials or fuel;
(vii) study or training leave approved by the employer;
(viii) temporary lay-offs when there still exists a formal employer-employee relationship;
(ix) other authorised absences, paid or unpaid, whether the employer's authorisation was given a priori or a posteriori (such as trade union activities, civic duties, etc.);
(x) unauthorised absences.

22. The chart at the end of this chapter provides a graphic illustration of the proposed framework.

D. Measurement problems

Scope and coverage

23. Should data on absence from work be collected for all workers? This approach does not seem particularly easy or practical. The only way to cover all workers would be through questions in labour force sample surveys, assuming a special module of the survey is devoted to absence from work. Even then, it is not meaningful to analyse absences of self-employed, nor is it useful for policy purposes to analyse those in intermittent employment. Absence from work is a problem when those persons who have regular work are not at work when they ought to be. It appears reasonable therefore to limit the statistics to regular employees.

24. It would seem more appropriate to collect data on absences through establishment surveys. Employers' records often contain the basic information needed on absences. In the interest of practicality, surveys on absence from work should be limited to establishments above a certain size, but all types of industries must be surveyed if one objective is to identify all branches of economic activity where absence problems exist.
Reference period

25. For what period should data on absences be collected? It could be a month or more. At any rate, it should not be less than a month because with the introduction of flexible working hours, the number of hours worked may vary from day to day but will balance over a certain period. Other factors must also be taken into consideration when fixing the reference period, such as seasonal variations and annual holidays. Perhaps a period of six months or one year would be more appropriate. In any case, the reference period will depend in part on the system of recording used by employers.

Time unit for analysis of data

26. Should data on absence from work be analysed in terms of hours or days? As our concern is limited to absence from work (and not loss of working time at the place of work), the day (or a half-day) would be a simple unit for analytical purposes. The working time of part-time and half-time workers would have to be converted into equivalent days (or half-days). Similarly, absences of short duration, such as tardiness will have to be converted into days (or half-days).

Time unit for collection of data

27. What time unit should be used to measure duration of absence? The actual duration of an absence may be a matter of hours or days. It may prove more difficult to collect data in terms of hours of absence for non-production workers than for production workers. On the other hand, most records for sick leave, annual leave, etc. are kept in terms of days or half-days. Therefore, a standard time unit for recording absences is not being proposed. The recording time for various groups of workers or various forms of absences will depend on the time unit used in employers' records.

Sources of data

28. What are the best sources of data on absence from work? Household surveys can provide data on "persons with a job but not at work" and on the types of absence. There are two significant problems with data from household surveys: the reference period is generally short, but this problem can be overcome if the sampling is spread over a long period, and sampling errors will be very large for small frequencies of absence. These problems can be avoided in part if a special module of the survey questionnaire is devoted periodically to absence from work.

29. Data on working time and absences can also be collected through establishment surveys, although the data on various types of absence may not be found in a single record or be kept by the same department. Data on time worked would normally be obtained from the Financial Department, while absence or leave data is usually kept by the Personnel Department. This situation requires that employers establish a comprehensive system to compile relevant data.

30. It would be difficult to compare the data on absence collected from household surveys with that from establishment surveys. Apart from differences in reference periods, sampling errors and coverage, the reasons for absence expressed by a household survey respondent may differ from those given to and recorded by employers particularly with regard to "undesirable" absences.

31. Estimates of absence from work can also be derived from administrative records on specific types of absence, such as illness, occupational injuries, maternity leave (social security records) and strikes (Ministry of Labour). But these records would not provide information on other important types of absence.
E. Analytical measures of absence from work

32. The absence frequency rate is the total number of absences divided by the average staff strength. It represents the average number of times that each worker has been absent during the reference period and can be calculated for each type of absence. Thus, one could calculate a sickness absence frequency rate by dividing the number of absences due to sickness by the average staff strength.

33. The time lost per worker through absences is the total number of days lost divided by the average staff strength. It indicates the average time per worker lost through absence of any kind.

34. The average duration of absence is the total time lost through absences divided by the number of absences. An average duration of absence can in this way be calculated for each type of absence.

35. The absence rate is the total number of days absent divided by the actual time available for work. It establishes the proportion of time which should have been devoted to work but which has been lost through absence.

F. Classifications

36. All of the above-mentioned rates can be calculated by industry, region, country, etc. They can also be classified by sex, age group, occupational group, length of service. Distinctions may be drawn between paid and unpaid absences.

G. Conclusions

37. The proposed framework concentrates only on the analysis of absence from work. However, it is possible to extend the framework to cover other forms of loss of working time, or to include it within the wider framework of labour time disposition. The views of the conference on the desirability and feasibility of such an extension would be welcome.

38. Since the Bureau of Statistics needs to plan its continuing investigation of absence from work, the delegates are requested to consider the following priority issues:

(i) Is the definition of absence from work as suggested in this chapter acceptable?

(ii) Should the list of the major reasons of absence be shortened? Or, on the contrary, should it be more detailed?

(iii) Should the data cover all workers or only paid employees in establishments above a specified size?

(iv) For what period should data on absences be collected?

(v) Should data on absence from work be analysed in terms of hours or days?

(vi) What unit of time should be used to measure duration of absence?

(vii) Should data on absence from work be collected from household surveys or establishment surveys? Or should they be estimated from other sources?

(viii) Are the four analytical measures given in this chapter sufficient to identify cases of relatively high absence levels?
Analysis of use of working time to identify absence from work

Chart 3.1
CHAPTER IV

IMPLICATIONS OF EMPLOYMENT PROMOTION SCHEMES ON THE MEASUREMENT OF EMPLOYMENT AND UNEMPLOYMENT

CONTENTS

A. Introduction

B. Schemes
   - Job training schemes
   - Community work
   - Wage and other subsidies
   - Arrangement of working time
   - Assistance to unemployed persons setting up an enterprise
   - Early retirement

C. Statistical implications
   - Work or training?
   - Formal job attachment
   - Criterion of one hour of work
   - Seeking work
   - Visible underemployment
   - Balance sheet of participants in schemes

D. Conclusions

Annex: Resolution concerning statistics of the economically active population, employment, unemployment and underemployment
A. Introduction

1. Faced with increasing unemployment, governments, particularly those of the industrialised countries, have in recent years developed and implemented specific schemes to promote employment, such as youth training programmes, community work, etc. This has implications on the employment and unemployment statistics: on the one hand, it has led to the emergence of population groups whose status with respect to the labour market is often ambiguous, making it difficult to classify them in one of the three main statistical categories (employed, unemployed and inactive); on the other hand, the resulting statistics are increasingly heterogeneous, and therefore difficult to interpret. Since such statistical difficulties occur in a number of countries and can give rise to discrepancies in drawing international comparisons, the ILO considered that this matter should be discussed at the International Conference of Labour Statisticians (ICLS).

2. It should be recalled that in 1985 the Government of France requested the opinion of the ILO on how the beneficiaries of retraining contracts (contrats de formation-conversion) (iron and steel industry) and community work (travaux d'utilité collective - TUC) should be classified in the light of the international definitions of employment and unemployment adopted by the 13th ICLS held in Geneva in October 1982 (see annex). Subsequently, the ILO was asked to comment on the employment and unemployment statistics in France, and in particular on the borderline situations which are now emerging in this country. At the same time, the ILO collaborated with the Statistical Office of the European Communities in drawing up case studies on 16 countries: the 12 Community member States, whose main schemes were summarised in a catalogue, as well as Australia, Finland, Sweden and the United States.

3. These studies, which cover about 200 schemes in all, have been used as the basis for this chapter. Section B briefly describes the main groups of measures, which are job training schemes, community work, wage and other subsidies, arrangement of working hours, assistance to unemployed persons setting up enterprises, and early retirement; it also examines how the beneficiaries of these schemes are classified in national statistics. Section C goes on to discuss the implications of these schemes on international definitions of employment and unemployment. Section D raises some points for discussion.

B. Schemes

Job training schemes

4. This heading covers schemes aimed primarily at completing or improving beneficiaries' level of training in order to make it easier for them to enter or re-enter working life. Target groups are often young persons, who are not economically active or who are seeking employment, but also include adults who are unemployed or threatened with unemployment. There is a wide range of schemes, from training, strictly speaking, in an educational establishment to traditional apprenticeship in an occupation. Two subgroups of training schemes could be identified: those which take place outside the context of the enterprise and those provided within the context of the enterprise. However, the distinction between the two subgroups is not always clear.
5. Training schemes which take place outside the context of the enterprise generally include courses of an institutional type held in regular educational establishments or in specialised training centres. The purposes of such courses vary: some are aimed at completing the initial training of young persons (for example, measures to extend school education); others are intended rather to improve qualifications (for example, initial or further training in specific trades); still others are aimed at retraining (for example, certain types of retraining leave). Most of these courses are full-time, but some are part-time. Nearly all of them are coupled with allowances, which replace or supplement unemployment benefit in the case of beneficiaries who are jobseekers.

6. Training schemes which take place within the context of the enterprise may be even more varied: apprenticeship, sandwich training courses, paid period of training, on-the-job training, introductory work experience, further training, retraining, etc. Training is normally provided within the enterprise, but some courses may take place outside the enterprise. Such training is usually coupled with practical activity in the enterprise, most often in the private sector. Beneficiaries may be taken on for a period ranging from a few months to two or three years. A contract may be concluded, and trainees normally receive a wage or allowance, usually entirely or partly subsidised by the State and paid either to the trainee himself or, more often, to the enterprise in the form of a contribution to the course or to wages, or of a reduction of social security contributions, tax relief, etc.

7. Irrespective of whether the training takes place outside the enterprise or within the context of the enterprise, participants are usually excluded from the administrative statistics on unemployment in the countries studied, with the exception of Belgium (Flemish regions), Italy and Luxembourg. In the Federal Republic of Germany and the Netherlands, only participants in full-time courses are excluded; in Denmark, participants are excluded from such statistics unless they receive unemployment benefit.

8. In household surveys, there are not always clear-cut rules for the statistical treatment of participants in these schemes, which usually depends on the way in which the respondent interprets his/her own situation. However, some instruction manuals for persons conducting surveys refer to the main job training schemes, either supplying a list together with instructions, or giving criteria to be applied in statistical classification, such as the existence of a contract, place of work, whether the work is full-time or part-time, payment of a wage, ratio between training and activity in the enterprise, etc. It is generally to be assumed that such instructions are not applied by the persons carrying out the survey unless the respondent spontaneously gives the relevant information.

Community work

9. This heading covers schemes such as the "Travaux d'utilité collective" in France, the Community Programme in the United Kingdom and the funding of initiatives to develop cultural property (Finanziamento di iniziative destinate alla valorizzazione di beni culturali) in Italy. Such schemes are usually directed at young persons aged under 25 years who have been jobseekers for a certain period. Their purpose is to provide participants with work which, in principle, does not compete with existing economic activities, while supplying training. Community work usually takes the form of maintenance of public facilities, conservation of nature or the environment, administrative work, such as management of supplies of school cafeterias, etc. Work is organised by the local communities, by non-profit
associations, or by social organisations, under agreements concluded with the State. The duration of the programme can vary from a few months to a year or more. Participants often work half-time, to enable them to look for a remunerated activity or to undergo additional training. Remuneration is usually subsidised by the State, but may be supplemented by a lump-sum remuneration paid by the body which organises the work.

10. Beneficiaries of such programmes are generally excluded from administrative statistics on unemployment, but sometimes continue to be treated as jobseekers (Belgium). In household surveys, these persons are normally considered to be employed.

Wage and other subsidies

11. This group includes measures directly subsidising certain activities in the private sector in order to create or maintain jobs. Such subsidies may be paid to employers or directly to individuals, chiefly young jobseekers, but also to employed persons whose job is threatened. The subsidy to employers usually consists of a contribution fully or partly covering wages and sometimes even the cost of supervision, materials and equipment; it may also take the form of tax relief (for example, the Payroll Tax Rebate Schemes in Australia) or a reduction of or exemption from social security contributions (for example, the Waiver of Employers' Share of Pay-Related Social Insurance - PRSI - in Ireland). Subsidies to individuals are usually wage supplements (for example, the Wage Supplement Scheme in the Netherlands), but they also take the form of mobility or relocation bonuses (for example, relocation grants in Sweden), etc.

12. In the countries studied, employees who are beneficiaries of these subsidies are excluded from administrative statistics on unemployment, and household surveys consider them to be employed. An exception is made for beneficiaries of mobility or relocation bonuses, who are considered to be unemployed as long as they have not found a job.

Arrangement of working time

13. These may be divided into two main types of schemes: promotion of part-time work and reduction of weekly hours of work. Part-time work can be stimulated in a number of ways: by measures providing a direct incentive for the creation of part-time jobs; by splitting up a full-time job into two half-time jobs (for example, the Job-Splitting Scheme (JSS) in the United Kingdom); by measures to enable persons employed full-time to keep their jobs by putting them on half-time jobs; or by encouraging jobseekers to accept part-time work (section 5 of Act No. 863/1984 in Italy).

14. The second type of scheme, reduction of weekly hours of work, is aimed at preventing dismissals or encouraging recruitment at times of crisis or in certain sectors, either by legally reducing normal hours of work, or by an appropriate reduction of overall working time in a given sector or enterprise, the reduction being spread over all the workers. Such measures are often coupled with financial compensation or governed by special agreements. For example, in Italy, "solidarity contracts" (Contratti di solidarietà) authorise the Cassa Integrazione Guadagni (Wage Equalisation Fund) to pay employees agreeing to job-sharing compensation of up to 50 per cent of their lost income. In Belgium, under the "3-5-3" agreements, major enterprises may cut wages by 3 per cent in exchange for a 5 per cent reduction in hours of work and 3 per cent additional recruitment.
15. In the countries under study, the persons affected by these measures are not included in administrative statistics on unemployment and are classified as employed in household surveys, although it is true that the reduction in their hours of work is sometimes involuntary.

**Assistance to unemployed persons setting up an enterprise**

16. Under these schemes, unemployed persons wishing to set up an enterprise or take over an enterprise in difficulty receive a lump sum equal to a certain number of months of unemployment benefit, and sometimes a loan in addition. The scope and conditions for the grant of assistance, the amount, the conditions for reimbursement in the event that a business is not continued, increase in assistance where additional jobs are created, as well as other conditions, vary from one country to another.

17. In all cases, unemployed persons receiving such assistance are excluded from administrative statistics on unemployment, and household surveys generally consider them to be employed. This statistical treatment assumes that assistance is granted only after certain initial steps have been taken, such as looking for land, building, machinery or equipment; arranging for financial resources; applying for permits and licences, etc. However, from the documents consulted it is not clear whether assistance is granted when the initial steps are taken or at the final stage, when the business is actually set up or taken over, for example once the new enterprise has been officially registered.

**Early retirement**

18. From the documents under study, several forms of early retirement emerge. The first, which we will call "early retirement", aims to ease the transition from working life for wage earners who have reached a certain age which is lower than the statutory retirement age; it is often coupled with a financial incentive provided by the State on condition that the enterprise recruit a jobseeker to replace the worker retired early (this is the case of the Pre-Retirement Act (Vorruhestandsgesetz) in the Federal Republic of Germany). In the second form of early retirement, termed "early retirement-dismissal", early retirement is offered to employed persons who have just been dismissed or are threatened with dismissal and are nearing statutory retirement age. In this case, the employer's contribution is often supplemented with assistance out of public funds, which may be provided out of unemployment insurance funds (as in the Belgian scheme of pre-retirement pension governed by collective agreement or pre-retirement pension in the event of dismissal - "prépension conventionnelle ou prépension licenciement"). A third form of early retirement is "gradual early retirement". Under this scheme, older workers employed full-time are encouraged to take up part-time work until statutory retirement age, for which they receive, for example, a pension compensating part of their lost earnings ("part-time pension" in Finland). This measure may or may not involve recruitment of a younger worker ("expansive solidarity contract" in Italy).

19. A similar type of scheme involves either older unemployed persons who have exhausted their entitlement to benefit ("early retirement for older persons" in Portugal), or unemployed persons no longer required to seek a job on account of their age ("end of registration obligation" in the Netherlands; this programme applies to registered unemployed who, on reaching the age of 57 1/2, are no longer required to register at the employment office in order
to look for a job, but continue to receive unemployment benefit until the statutory retirement age).

20. In the countries under study, beneficiaries of all of these forms of early retirement are excluded from administrative statistics on unemployment, with rare exceptions. In household surveys, how these persons are classified depends on their situation at the time of the survey, except in the case of beneficiaries of gradual early retirement programmes, who are normally always classified as employed.

C. Statistical implications

21. The employment promotion schemes described above have created an increasing variety of situations on the labour market, which lie on the borderline between employment, unemployment and inactivity. This makes it difficult to classify beneficiaries in one of these three main categories. Existing international definitions make no explicit reference to their statistical treatment, but they do contain elements enabling more precise guidelines to be drawn. This section examines these elements in relation to the different measures.

Work or training?

22. The two criteria of the international definition of employment (see annex) making it possible, in principle, to classify beneficiaries of job training contracts as employed are the fact that their activity contains an element of "work" in the sense of the international definition (as in the case of paid apprentices, explicitly referred to in para. 9(7) of the definition); or the fact that their attachment to the enterprise is "formal" enough to enable them to be considered as being "with a job but not at work" (this is the case of persons who are temporarily not at work because of educational or training leave (see annex, para. 9(3)).

23. According to the international definition of employment, being "at work" means having contributed to the production of goods and services as defined by national accounting, in exchange for a wage or salary, in cash or in kind, for at least one hour during the reference period (one week or one day). If one interprets this definition in the light of job training schemes, one may conclude that if the training takes place outside the context of the enterprise it should not, in principle, be associated with production, and trainees should not be considered as being "at work". On the other hand, if the training does take place within the context of the enterprise, it could be linked to production. The question which then arises is to determine to what extent the element of "production" has to be linked to training for the activity to contain an element of "work" within the meaning of the international definition and for the beneficiaries to be considered as employed. One criterion which could be applied here is the payment of a "wage" or "salary", but in this case one would have to define how far the allowances and income guarantees often included in these measures may be considered as a wage or salary.

Formal job attachment

24. The concept of "formal job attachment" in the international definition of employment (see annex, para. 9(a2)) may be useful in the
statistical classification of beneficiaries of training leave (as well as other schemes such as sandwich training courses). It has already been pointed out that where a beneficiary cannot be considered as "at work", he may nevertheless be deemed to be "with a job but not at work" if he maintains a "formal job attachment". This concept is defined further in terms of one or more of the following criteria: (i) continued receipt of wage or salary; (ii) assurance of return to work following the end of the contingency, or an agreement as to the date of return; (iii) elapsed duration of absence from the job which, wherever relevant, may be that duration for which workers can receive compensation benefits without obligations to accept other jobs. According to the international definition, all of the criteria do not necessarily need to be met and the choice of criteria should be determined "in the light of national circumstances".

25. It should be recalled that these criteria had originally been drawn up mainly for the statistical treatment of lay-offs and partial unemployment. They were later included in the international definition of employment for application to more general situations where the period of temporary absence from work occurs between two periods of work. If training leave could be treated as a situation of this kind, there would have to be a more precise indication of how the criteria should be applied. This is attempted below.

26. The first criterion for a formal job attachment appears to stress the fact that receipt of wage or salary is continued. If this interpretation is correct, one should determine, on the one hand, what proportion of the initial wage or salary constitutes continued receipt of wage or salary and, on the other, the share which should be contributed by the employer. Although the international definition of employment gives no precise indications on this matter, one may assume that the proportion of wage or salary which continues to be received should be fairly substantial (for example, two-thirds, three-quarters, etc.) and should, in any case, include a direct contribution by the employer.

27. The second criterion, that of assurance of return to work following the end of the contingency, reinforced by the first criterion, could be considered as the sine qua non for determining whether there is a formal job attachment, since it essentially means a return to normal conditions. A return to normal conditions following training should mean return to the same job or, in more general terms, return to a job with the same employer.

28. The third and last criterion for determining formal job attachment is that the duration of absence be fairly short. The wording of the definition, which specifies that this duration "wherever relevant, may be that duration for which workers can receive compensation benefits without obligations to accept other jobs", was formulated especially to take into account the special cases of lay-off and partial unemployment. The wording of this criterion should therefore be revised to adapt it to other cases, such as training leave.

Criterion of one hour of work

29. Many employment promotion schemes, such as community work, job training and arrangement of working time, give rise to activities with shorter daily or weekly hours of work than the norm. However, as long as these activities are considered to be "work", the number of hours worked does not affect the classification of beneficiaries, since the existing international definition of employment considers a person to be employed if he/she has worked at least one hour during the reference period.
30. The criterion of one hour of work was adopted at a time when stable, full-time employment was the norm in the industrialised countries and when the overriding concern was to measure unemployment as an extreme situation of total lack of work. This criterion is still generally applied by all of the industrialised countries in household surveys. The only exception is the case of unpaid family workers, for which some countries require minimum hours of work, often 15 hours per week.

31. This criterion is now being contested by some commentators, who feel that it should be revised, taking into account the changes which have occurred on the labour market in recent years and the fact that stable, full-time employment is no longer the only norm. While it might be appropriate to envisage such a revision, it should, however, be borne in mind that the proportion of persons who work only a few hours a week (under five hours) is in fact very small: in the countries under study, except for Australia, they account for under 2 per cent of the working population, as can be seen from the table 4.1. This proportion would be significantly lower if one took into account persons in certain circumstances, such as illness, leave, bad weather, employment beginning or ending during the reference week, as well as persons who do not wish to work more hours (students, baby-sitters, etc).

32. In particular, it would be interesting to know what impact a higher minimum duration of work threshold, for example five hours per week, would have on the measurement of unemployment. While some persons working less than the minimum five hours per week might be classified as unemployed or inactive rather than employed, it is unlikely that this would affect the perception of labour market conditions in different countries.

33. Be that as it may, the choice of a minimum threshold other than that of one hour of work would be difficult and, in any case, arbitrary. If the choice was based on the duration of work applied by current schemes, a fairly high threshold would have to be set, since although beneficiaries of employment promotion schemes generally work less than normal hours of work, they often work 20 hours or more per week. It should also be pointed out that the choice of a threshold of more than one hour would affect the interpretation of the concept of unemployment, which would no longer mean an extreme situation of total lack of work.

Seeking work

34. Many of the schemes studied allow beneficiaries to remain registered with employment exchanges as jobseekers. In some cases, participants may be reclassified as employed, while in others, whether they are classified as unemployed or inactive depends on whether they are available for and actively seeking work. The question which then arises is whether the fact that a person is registered as a jobseeker means in itself that he/she is effectively seeking work. An example of seeking work given by the international definition of unemployment is "registration with a public or private employment exchange". The wording might be more precise if the term "registration" was replaced by "signing on". This new wording could also clarify the statistical classification of older unemployed persons who have retired early, are still registered with employment exchanges and continue to draw unemployment benefit although they are exempt from the obligation of actively seeking work and therefore of signing on. These persons would thus be clearly excluded from statistics on unemployment and classified as inactive.
Table 4.1: Persons working only a few hours per week in nine industrialised countries (yearly averages for 1985 in per cent)

<table>
<thead>
<tr>
<th>Countries</th>
<th>Total</th>
<th>1-4</th>
<th>5-14</th>
<th>15-29</th>
<th>30+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>100.0</td>
<td>2.5</td>
<td>6.3</td>
<td>11.6</td>
<td>79.6</td>
</tr>
<tr>
<td>Canada</td>
<td>100.0</td>
<td>1.7</td>
<td>--15.0--</td>
<td>83.4</td>
<td></td>
</tr>
<tr>
<td>France (March 1986)</td>
<td>100.0</td>
<td>0.4</td>
<td>2.6</td>
<td>10.6</td>
<td>86.4</td>
</tr>
<tr>
<td>Germany, Fed. Rep. (June)</td>
<td>100.0</td>
<td>0.2</td>
<td>2.1</td>
<td>8.5</td>
<td>89.3</td>
</tr>
<tr>
<td>Great Britain (spring)</td>
<td>100.0</td>
<td>1.5</td>
<td>7.6</td>
<td>15.3</td>
<td>74.6</td>
</tr>
<tr>
<td>Norway</td>
<td>100.0</td>
<td>1.6</td>
<td>6.4</td>
<td>14.9</td>
<td>75.4</td>
</tr>
<tr>
<td>Spain</td>
<td>100.0</td>
<td>0.1</td>
<td>1.3</td>
<td>7.3</td>
<td>91.3</td>
</tr>
<tr>
<td>Sweden</td>
<td>100.0</td>
<td>0.8</td>
<td>4.0</td>
<td>16.8</td>
<td>78.3</td>
</tr>
<tr>
<td>United States</td>
<td>100.0</td>
<td>0.8</td>
<td>4.3</td>
<td>12.0</td>
<td>82.8</td>
</tr>
</tbody>
</table>

Notes:

1. Since the figures have been rounded off, they may not add up to the total.

2. Hours actually worked, except for Germany and Canada (usual hours of work).

3. Brackets are as follows: 1-5; 6-15; 16-29; 30+; the 30+ bracket includes full-time workers (about 0.8 per cent) who worked 15 hours or less during the reference period.

4. Brackets are as follows: 1-5; 6-29; 30+.

5. Figures refer to main job.

Source: Household surveys. Special tabulations furnished by certain countries for this study.

35. The criteria of seeking self-employment should also be revised, taking account of the development of schemes to assist unemployed persons wishing to set up an enterprise. The examples of seeking self-employment given in the international definition of unemployment should be recalled here: looking for land, building, machinery or equipment to establish own enterprise, arranging for financial resources, applying for permits and licences, etc. One should check whether these examples are appropriate and whether they are really a precondition for grant of assistance to unemployed persons in order to set up an enterprise and whether this in itself justifies reclassifying these unemployed persons as employed. In general, registration of the enterprise could be viewed as marking the transition between seeking work and self-employment. Thus, all of the steps taken prior to registration would still be considered as seeking self-employment, while the activities following registration, such as buying equipment, hiring staff, etc., would be considered as already constituting self-employment.
Visible underemployment

36. It is clear from this chapter that many of the employment promotion schemes introduced have created more flexible forms of employment often linked to training and with a limited duration and remuneration. This means that the statistical concept of employment is becoming increasingly heterogeneous. In order to reflect more accurately these different types of employment, additional statistics are needed to supplement those on employment and unemployment. One possibility would be to apply at the national level the concept of visible underemployment as defined in the international recommendations (see annex, paras. 17-20).

37. The concept of underemployment was in fact introduced in the international recommendations as early as 1947, in an effort to take into account the different types and extents of economic activity of persons in different national circumstances, mainly in order to measure situations where employment is insufficient with respect to certain norms. This concept was elaborated further, and two main kinds of underemployment emerged: "visible underemployment", linked to insufficient hours of work and "invisible underemployment", related to a low income or productivity, or underutilisation of skill. The current international recommendations state that for operational reasons statistical measurement of underemployment may be limited to visible underemployment.

38. Visible underemployment is defined essentially according to three criteria which must all be met: (i) less than normal duration of work; (ii) involuntary nature of this duration; and (iii) seeking or being available for additional work. It can be seen that these criteria are applied to a great extent in the analysis of situations created by schemes such as community work, some types of job training programmes, arrangement of working hours and some types of gradual early retirement. However, a more detailed analysis would be necessary to judge whether this concept may be applied to these new, differentiated employment situations. Such an analysis could be carried out within the framework of household surveys.

39. If the results of the analysis were positive, the international definition of visible underemployment could be adapted to take into account national circumstances, thus making it possible to regularly gather statistics reflecting situations of partial unemployment, which would supplement unemployment statistics, without being included in them. In order to keep abreast of labour market developments, such statistics should, wherever possible, be on a monthly basis.

Balance sheet of participants in schemes

40. Another possibility of statistical analysis of new employment situations would be to draw a comparison between employment, unemployment and inactivity, on the one hand, and participation in a given scheme, on the other. One example of this is the annual employment-training balance sheet recently drawn up in France for young persons aged from 16 to 25 years. The figures for 1985 are reproduced in table 4.2.

41. This type of balance sheet could be extended to cover the entire working age population, as well as all employment promotion schemes, including training leave, the main types of early retirement, assistance to unemployed persons setting up an enterprise, etc. But it would be necessary first of all to establish a precise definition of participation in a scheme and a model classification of schemes.
Table 4.2: An employment-training balance sheet of young persons aged between 16 and 25 years, France, March 1985

<table>
<thead>
<tr>
<th>Situation</th>
<th>Number of persons</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Thousands</td>
<td>Per cent</td>
<td></td>
</tr>
<tr>
<td>INACTIVE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In school</td>
<td>3 428</td>
<td>40.0</td>
<td></td>
</tr>
<tr>
<td>Job training schemes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AFPA^1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Programme for 16 to 18-year-olds</td>
<td>15</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>Programme for 18 to 21-year-olds,</td>
<td>54</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>then for 18 to 25-year-olds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Programme for adults (State or</td>
<td>30</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>regional level)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other inactive persons</td>
<td>563</td>
<td>6.6</td>
<td></td>
</tr>
<tr>
<td>ACTIVE, EMPLOYED</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL, (demographic estimates)</td>
<td>8 556</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Notes:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Adult vocational training agency (Agence pour la formation professionnelle des adultes).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 This balance is due to the diversity of sources used and to other practical problems encountered in drawing up these figures, such as the fact that the sources are not exhaustive, that they overlap, etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source: Sur les statistiques de l'emploi et du chômage, Malinvaud report, op. cit. Figures taken from different sources and compiled in accordance with the results of the survey on employment carried out in March 1985.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
D. Conclusions

42. It is clear from this chapter that, while there are many different kinds of employment promotion schemes, there is a certain degree of uniformity in the way they are treated by administrative statistics on unemployment in different countries. Such uniformity of treatment, however, does not always appear in household surveys.

43. In addition, certain specific points have been raised regarding international definitions. These points are summarised below for discussion (paragraph numbers are given in brackets at the end of each question):

(i) since many countries, industrialised or not, may encounter statistical difficulties arising out of the development of employment promotion schemes, should international recommendations (a) explicitly refer to these schemes, or (b) merely be adapted in order to deal implicitly with these schemes? (para. 21);

In either case:

(ii) how far can an activity linked to training be considered as "work" in the sense of the international definition of employment? (paras. 22 and 23);

(iii) is the interpretation of the concept of "formal job attachment" with respect to training leave acceptable? If necessary, should the wording of the third criterion be revised? (paras. 24-28);

(iv) should a revision of the "criterion of one hour of work" of the international definition of employment be envisaged? (paras. 29-33);

(v) is the proposed new wording concerning one of the examples of the criterion of seeking work (paid employment) of the international definition of unemployment acceptable? (para. 34);

(vi) should the criteria for seeking self-employment be revised, taking into account the schemes concerning assistance to unemployed persons setting up an enterprise? (para. 35);

(vii) can the concept of "visible underemployment" be adapted to the particular employment situations created with the development of employment promotion schemes? (paras. 36-39);

(viii) would it be desirable for international recommendations to advocate a cross-classification between employment, unemployment and inactivity, on the one hand, and participation in a given measure, on the other? (paras. 40 and 41);

(ix) should other aspects of the current international recommendations be revised or supplemented?
Notes


2. Measures to promote employment and to combat unemployment in the member States of the European Community, Summary Report (Eurostat/EL/86/637 prov., mimeographed); and the following reports prepared for the ILO: on Australia by A. Grant (Feb. 1985); on the United States by D.B. Levine and C.M. Slater (May 1986); on Finland by P. Aulin-Ahmavaara and I. Nio (Helsinki, Jan. 1985); and on Sweden by B. Jonzon (Dec. 1985).

3. This chapter does not cover different measures such as lay-offs, partial unemployment, parental leave and other special leave. For more detailed information on economic aspects, see R.G. Hollister, Jnr.: Aspects of governmental job creation efforts in Western Europe and North America (Geneva, ILO, Sep. 1986; mimeographed World Employment Programme Research Working Paper WEP 2-43/WP.9; restricted).

4. For a detailed description of different forms of apprenticeship in several industrialised countries, see Apprenticeship in foreign countries, R & D Monograph 77 (Washington, DC, United States Department of Labor, Employment and Training Administration, 1980).


ANNEX

RESOLUTION CONCERNING STATISTICS OF THE ECONOMICALLY ACTIVE POPULATION, EMPLOYMENT, UNEMPLOYMENT AND UNDEREMPLOYMENT

(Excerpts from Resolution I, Thirteenth International Conference of Labour Statisticians, Geneva, 18-29 October 1982)

Employment

9.(1) The "employed" comprise all persons above a specified age who during a specified brief period, either one week or one day, were in the following categories:

(a) "paid employment":

(a1) "at work": persons who during the reference period performed some work for wage or salary in cash or in kind;

(a2) "with a job but not at work": persons who having already worked in their present job were temporarily not at work during the reference period and had a formal attachment to their job.

This formal job attachment should be determined in the light of national circumstances according to one or more of the following criteria:

(i) the continued receipt of wage or salary;

(ii) an assurance of return to work following the end of the contingency or an agreement as to the date of return;

(iii) the elapsed duration of absence from the job which wherever relevant may be that duration for which workers can receive compensation benefits without obligations to accept other jobs;

(b) "self-employment":

(b1) "at work": persons who during the reference period performed some work for profit or family gain, in cash or in kind;

(b2) "with an enterprise but not at work": persons with an enterprise which may be a business enterprise, a farm or a service undertaking, who were temporarily not at work during the reference period for any specific reason.

(2) For operational purposes, the notion of "some work" may be interpreted as work for at least one hour.

(3) Persons temporarily not at work because of illness or injury, holiday or vacation, strike or lock-out, educational or training leave, maternity or parental leave, reduction in economic activity, temporary disorganisation or suspension of work due to such reasons as bad weather, mechanical or electrical breakdown or shortage of raw materials or fuels or other temporary absence with or without leave should be considered as in paid employment provided they had a formal job attachment.

(4) Employers' own-account workers and members of producers' co-operatives should be considered as in self-employment and classified as "at work" or "not at work", as the case may be.
(5) Unpaid family workers at work should be considered as in self-employment irrespective of the number of hours worked during the reference period. Countries which prefer for special reasons to set a minimum time criterion for the inclusion of unpaid family workers among the employed should identify and separately classify those who worked less than the prescribed time.

(6) Persons engaged in the production of economic goods and services for own and household consumption should be considered as in self-employment if such production comprises an important contribution to the total consumption of the household.

(7) Apprentices who received pay in cash or in kind should be considered in paid employment and classified as "at work" or "not at work" on the same basis as other persons in paid employment.

(8) Students, homemakers and others mainly engaged in non-economic activities during the reference period who at the same time were in paid employment or self-employment as defined in subparagraph (1) above should be considered as employed on the same basis as other categories of employed persons and be identified separately where possible.

(9) Members of the armed forces should be included among persons in paid employment. The armed forces should include both the regular and the temporary members as specified in the most recent revision of the International Standard Classification of Occupations (ISCO).

Unemployment

10.(1) The "unemployed" comprise all persons above a specified age who during the reference period were:

(a) "without work": i.e. were not in paid employment or self-employment, as defined in paragraph 9;

(b) "currently available for work": i.e. were available for paid employment or self-employment during the reference period; and

(c) "seeking work": i.e. had taken specific steps in a specified recent period to seek paid employment or self-employment. The specific steps may include registration at a public or private employment exchange; application to employers; checking at worksites, farms, factory gates, market or other assembly places; placing or answering newspaper advertisements, seeking assistance of friends or relatives, looking for land, building machinery or equipment to establish own enterprise; arranging for financial resources, applying for permits and licences, etc.

(2) In situations where the conventional means of seeking work are of limited relevance, where the labour market is largely unorganised or of limited scope where labour absorption is at the time inadequate or where the labour force is largely self-employed, the standard definition of unemployment given in subparagraph (1) above may be applied by relaxing the criterion of seeking work.

(3) In the application of the criterion of current availability for work, especially in situations covered by subparagraph (2) above, appropriate tests should be developed to suit national circumstances. Such tests may be based on notions such as present desire for work and previous work experience, willingness to take up work for wage or salary on locally prevailing terms, or readiness to undertake self-employment activity given the necessary resources and facilities.

(4) Notwithstanding the criterion of seeking work embodied in the standard definition of unemployment, persons without work and currently available for work who had made arrangements to take up paid employment or undertake self-employment activity at a date subsequent to the reference period should be considered as unemployed.
(5) Persons temporarily absent from their jobs with no formal job attachment who were currently available for work and seeking work should be regarded as unemployed in accordance with the standard definition of unemployment. Countries may, however, depending on national circumstances and policies, prefer to relax the seeking work criterion in the case of persons temporarily laid off in such cases, persons temporarily laid off who were not seeking work but classified as unemployed should be identified as a separate subcategory.

(6) Students, homemakers and others mainly engaged in non-economic activities during the reference period who satisfy the criteria laid down in subparagraphs (1) and (2) above should be regarded as unemployed on the same basis as other categories of unemployed persons and be identified separately, where possible.

Underemployment

14. Underemployment exists when a person's employment is inadequate in relation to specified norms or alternative employment, account being taken of his or her occupational skill (training and working experience). Two principal forms of underemployment may be distinguished, visible and invisible.

15. (1) Visible underemployment is primarily a statistical concept directly measurable by labour force and other surveys, reflecting an insufficiency in the volume of employment.

(2) Invisible underemployment is primarily an analytical concept reflecting a mis-allocation of labour resources or a fundamental imbalance as between labour and other factors of production. Characteristic symptoms might be low income, underutilisation of skill, low productivity. Analytical studies of invisible underemployment should be directed to the examination and analysis of a wide variety of data, including income and skill levels (disguised underemployment) and productivity measures (potential underemployment).

16. For operational reasons, the statistical measurement of underemployment may be limited to visible underemployment.

Visible underemployment

17. Two elements of the measurement of visible underemployment should be distinguished:

(a) the number of persons visibly underemployed;

(b) the quantum of visible underemployment.

Persons visibly underemployed

18. (1) Persons visibly underemployed comprise all persons in paid or self-employment whether at work or not at work, involuntarily working less than the normal duration at work determined for the activity, who were seeking or available for additional work during the reference period.

(2) For the purpose of classifying persons as visibly underemployed, normal duration of work for an activity should be determined in the light of national circumstances as reflected in national legislation to the extent it is applicable and usual practices in other cases, or in terms of a uniform conventional norm.
Quantum of visible underemployment

19.(1) The quantum of visible underemployment may be measured by aggregating the time available for additional employment during the reference period in respect of each person visibly underemployed. The time available for additional employment may be computed in units of working days, half-days or hours as may be convenient in national circumstances, depending on the nature of data collected. It may be useful to measure separately the part of the quantum of visible underemployment that corresponds to "time lost" defined as the difference between hours usually employed and hours actually employed.

(2) Countries who wish to apply the criterion of seeking work for the measurement of the quantum of visible underemployment may do so by taking into account the duration of work sought.

20. A composite estimate of the quantum of current unemployment and visible underemployment may be compiled on the basis of the labour-time disposition of all persons in the labour force by accounting for the total labour time potentially available for each person in the labour force in terms of time employed, time available for employment and time not available for employment during the reference period. It can be measured for simplicity either in units of working days or half-days, or, more fully, in hours, where feasible.