International definitions and prospects of Underemployment Statistics[1]

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Introduction

Statistics of underemployment complement statistics of employment and unemployment. It is not enough to measure unemployment to understand the deficiencies in the labour market. Many workers around the world tend to work less hours, earn less income or use their occupational skills incompletely; in other words, they tend to carry out an activity which is less productive than they could and would like to carry out. Unemployment statistics, defined as a situation of a total lack of work, do not cover such workers, even if their situation is affected by similar causes than those which affect the unemployed, and even if they behave in very similar ways.

Thus, in developing countries unemployment tends to be low, but this does not mean that the labour market is efficient but rather, that unemployment is only part of the problem because of:

- *the lack of assistance programmes for the unemployed*: when workers are out of work it is impossible for them to remain idle, but they have work in order to survive, even if they work only for a few hours, in a job that does not use their skills fully or which generates an income which is insufficient for a decent living;
- *the high proportion of self employed workers*: when these workers face periods of slack economic activity, they tend to dedicate themselves to alternative activities even if these do not generate the same level of income, rather than stay idle;
- *the existence of traditional modes of work organisation*: rural communities tend to absorb the available tasks between members at the cost of reducing the hours of work and the income of all or of most of the population's members.

In more developed countries, underemployment arises because of reductions and reorganisations in the demand for labour: many workers face not only a total lack of work opportunities, but also a lack of *adequate* work opportunities, giving rise to situations in which persons in employment are often obliged to use their skills only partially, to earn hourly incomes which are lower or to work less hours than those they are willing and able to work.

The measurement of underemployment was discussed at the 16th International Conference of

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Labour Statisticians (ICLS), which was celebrated in Geneva in 1998. This Conference discusses and adopts international recommendations, known as “resolutions”, which deal with the statistical definitions and measurement of the various topics related to work. The topic of underemployment had already been discussed by the ICLS on six previous occasions. In 1925, the second ICLS was the first to examine the issues together with unemployment statistics. In 1947, the sixth ICLS referred explicitly to the need to measure underemployment and, in 1954 the eight ICLS discussed for the first time a proposal to define it. However, it was not until 1957 that the ninth ICLS adopted the first international statistical definition of underemployment. This definition set the bases for the following international guidelines on the subject, adopted by the 11th ICLS in 1966 and by the 13th ICLS in 1982, which revised some parts of the previous resolution.

Although the topics had been discussed so many times, the international statistical guidelines had only succeeded in adopting recommendations on what is know as *visible underemployment*, which is due to insufficient hours of work. Not only was this international definition imprecise, which made the production of regular and internationally comparable statistics difficult, but also this form of underemployment tends to affect less workers than *other forms of underemployment*, which are due to other limitations in the labour market, including, for example, the bad distribution of human resources or an imbalance between labour and other production factors. This is why the 16th ICLS in 1998 decided to revise again the international recommendations on the subject adopting a series of new definitions which cover not only underemployment due to insufficient hours but also other forms of inadequate employment.

Current international recommendations

The 16th ICLS adopted a Resolution concerning the measurement of Underemployment and Situations of Inadequate Employment[2], which is presented as an annex to this paper. According to these guidelines, underemployment affects only persons in employment and reflects under utilization of workers' productive capacity. It is about persons who have not attained their *full employment* level in the sense of the Employment Policy Convention adopted by the International Labour Conference in 1964. According to this Convention, full employment ensures that (i) there is work for all persons who are available for and seeking work; (ii) that such work is as productive as possible; and (iii) that it is freely chosen by workers, who should have the fullest possibility to qualify and use their skills and endowments in a job for which they are well suited (ILO, 1985). The situations which do not fulfil the objective (i) relate to unemployment, and those that do not satisfy objectives (ii) or (iii) refer mainly to underemployment.

The main characteristic of this resolution is that the measurement of underemployment is understood within the *conceptual framework for measuring the labour force*. This makes sense because underemployed persons are affected by similar causes to those that affect the unemployed persons and tend to behave similarly as well. Underemployment is defined using criteria which are analogous to those used to define employment and unemployment, and is a separate category within this framework. (More specifically, it is a subcategory of employment.) More important still, these criteria are already being applied in various

[2]This resolution, and others, can be browsed at http://www.ilo.org/stat

national household surveys, both in developed and developing countries alike[3].

The conceptual framework for measuring the labour force was adopted by the 13th ICLS in 1982. It sets the measurement standards to classify persons according to their activities during a short reference period, such as a week[4], in three categories, which are mutually exclusive and exhaustive of the population in a country. These are:

- the employed population
- the unemployed population and
- the economically inactive population.

This framework is widely recognised at the international level and this has allowed the increased production of regular and internationally comparable statistics on employment and unemployment in a significant number of countries. In the labour force framework there are three classification criteria to determine whether a person is employed, unemployed or economically inactive:

- to work or to have a job,
- to be willing to work, and
- to be available for work,

(See Graph 1 below). Unemployment, for example, includes persons who during the reference week did not work nor had a job but who were willing to work (they show that they are willing to work by actively seeking work) and were available to work. By analogy, underemployment includes persons who even though they worked or had a job during the reference week, they were willing and available to work "better" or "more adequately". This is the essence of the international definition of underemployment. Underemployment then is identified by comparing the current employment situation of a person with an alternative employment situation, that is, an employment situation that he or she is willing and available to carry out.

[3] Including Colombia, France, Japan, Kenya, Martinca, Nigeria, Spain, Turkey, Uruguay and Venezuela.
[4] In this document we refer to reference "week".

Graph 1. Conceptual framework to measure the labour force

	is willing and available for work	is not willing or is not available for work
works or has a job	**underemployed**	**other employed**
does not work not has a job	**unemployed**	**Inactive**

The measurement of underemployment uses a *labour supply approach*, which is based on workers' *current* capacities and wishes, as expressed by themselves. This is in contrast with a *labour demand approach,* used previously to measure other forms of (or "invisible) underemployment, which is based on theoretical models about workers' *potential* capacities and wishes. This approach compares current levels of the labour force utilization with a benchmark level relating to what the population is potentially capable of providing if their circumstances were improved. This benchmark is estimated exogenously on the basis of hypothesis related to the potential capacities and desires of workers, to their possible mobility across occupations, industries, regions, etc. It tends to be a norm or unique value, inspired by national legislation or which arises from policy or analytical circumstances. With this approach underemployment tends to include all persons whose current levels of utilization are below this selected benchmark.

This resolution includes definitions for the measurement of *time-related underemployment* and for particular types of *inadequate employment situations*. The first is related to situations in which the hours of work of a person are insufficient for him or her while the second is related to more general labour restrictions which limit the capacities and well being of workers. The following paragraphs describe these two forms of underemployment.

Time-related underemployment

According to the international recommendations adopted by the 16th ICLS, persons in time-related underemployment are those who during the short reference period

- were willing to work additional hours
- were available to do so, and
- had worked less hours than a selected number of hours.

This definition is circumscribed to a short reference period, which must be the same as the one used to measure employment and unemployment (usually one week).

The *willingness to work additional hours* is the main criterion and relates to persons who, independently of the number of hours already worked during the reference week in all their jobs, express a desire or preference to work more hours. Persons in this situation may wish to increase the number of hours worked in a usual way or only during the reference week.

They include persons who were willing to:

- change their paid or self-employment job or jobs for another job with more hours of work;
- obtain another job or jobs in addition to the current job or jobs;
- work more hours in their current job or jobs; or
- a combination of any of the above.

This criterion is similar to the seeking work criterion used to measure unemployment. In contrast with this criterion however, the persons does not need to actively seek additional hours of work but only to express a willingness to do so. This is because, for the measurement of time-related underemployment, the seeking work criterion has a number of disadvantages as compared to the criterion of wishing to work additional hours:

- it is less sensitive to economic changes, especially when the demand for labour is low, or when it is common that workers who want to work more hours do not actively seek work[5]
- it is too restrictive to identify the time related underemployed because few workers who wish to work additional hours actually seek to do so.

On the other hand, it also has the following advantages:

- it is clearer;
- it allows to harmonize the definition of time-related underemployment with the definition of unemployment;
- it is less sensitive to the way in which questions are formulated.

For these reasons, even though the international definition is based on the willingness to work additional hours, it is also recommended to separately identify those workers who actively sought to work additional hours[6]

The *availability to work additional hours* than the hours actually worked aims at identifying those persons who are ready to work additional hours within a subsequent period, if they had the opportunity to do so, from those that are not available. This criterion has three components:

- The first is that workers should be *ready*, which means that they should have the time to work additional hours.
- The second is that they should be ready to work additional hours *within a subsequent period*, that is, they should be ready immediately or after carrying out specific arrangements to substitute their current jobs, to resolve the caring of children, to find

[5]For example, when self-employed workers lack information about better production methods, or do not have access to them; when paid employees are not aware of work opportunities
[6] To apply the seeking work criterion, it is recommended to use the same definition of seeking work which is used to identify the unemployed in national definitions.

a new dwelling if they need to move to a new location and to take care of similar affairs. The length of this subsequent period is not specified but should cover a sufficiently long period to take into account that workers may need to leave one job to start another. This period should probably be extended beyond the period conventionally used in the definition of unemployment to determine work availability.

- The third is that workers should have the *opportunity to work the type of additional hours they want or seek*, which means that they should have the possibility to work additional hours in the same job, for example, if this is the way they wish to increase their working hours.

The criterion of *having worked less than a threshold relating to working time* aims to exclude those workers who want to work additional hours and are available to do so, but who already work a “sufficient” number of hours and who therefore, for policy purposes, are considered to have reached their full employment level. This criterion is necessary when time-related underemployed population needs to be linked to employment policies.

The international definition does not specify a value for this threshold but allows it to be determined according to national realities as a median value, the mode or the average of the working hours as specified in national legislation or collective agreements.

But selecting a valid threshold at the country level, that is, one that reflects full employment for all those employed is complex because each worker may have a different threshold. For practical reasons, countries chose a common value for all workers and this value tends to be low, and thus underemployment is usually identified with persons who work few hours. It tends to exclude those workers whose income is very low and would want to increase it by working more hours, if they already work more hours than the (low) threshold, thus ignoring the important pressure that these workers exert in the labour market. These persons can be numerous in certain countries and most of these workers are men, resulting in a bias from the point of view of gender.

Selecting a threshold hinders international variability because it varies from country to country. Therefore, for international reporting, the resolution recommends that as much as possible, countries should:

- provide the methodology used to determine this threshold; and
- identify all workers who want and are available to work additional hours, independently of the hours actually worked.

This implies that household surveys should request information to all workers about their willingness to work additional hours and their availability to do so. The exclusion of workers whose hours worked is above the selected threshold should be carried out only during the data processing stage.

The international resolution also provides guidelines on other measures associated with time-related underemployment, such as:

- *the "usual" underemployed* (and the others): those time-related underemployed who usually work less hours than the selected threshold (and the others);

- *the volume of time-related underemployment*: the additional hours that the time-related underemployed want and are available to work up to the chosen threshold (the resolution also allows this threshold to be ignored);

- *the duration of time-related underemployment*: the days, weeks, months or years that time-related underemployed persons have been continuously in this situation;

- *the rate of time-related underemployment*: as a percentage of the employed populations (or of the economically active population);

- *the rate of the volume of time-related underemployment*: the volume of time-related underemployment as a percentage of the potential time for work of persons in employment (that is, the hours actually worked by all the employed plus the volume of time-related underemployment)

It also proposes the *classification* of time-related underemployment according to typical variables that describe demographic, social and economic characteristics (that is, sex, age, education level, occupation, industry and status in employment, etc.) and according to less typical variables, including the classification by the *informal sector* and by the *presence of young children and adults requiring care*. These two variables are very important in relation to time-related underemployment (and also to inadequate employment situations). This is because there is a high correlation between the number of persons working in the informal sector, especially if the jobs are precarious, and the insufficient hours of work and other aspects of inadequate employment. Similarly, and especially for women, the presence of young children and other adults requiring care constrains their availability for work.

To identify persons in time-related underemployment in household surveys, three (sets of) questions are needed: about the willingness (and active search) to work additional hours, about the availability to work additional hours, and about the hours worked during the reference week. A good questionnaire will ensure that the answers provided by interviewees are as independent as possible from their own perceptions and evaluations. It will emphasize all those aspects that tend to be forgotten and clarify those that could be misunderstood, it will obtain information by "components" and will use indirect questions to obtain information about those topics that tend to be badly reported. Regarding the measurement of time-related underemployment,

- The question(s) concerning the willingness to work additional hours should allow to know whether, during the reference week, workers wanted one or more additional jobs, another job with more hours of work to replace the current job(s), more hours in the current job(s) or a combination of these alternatives. The question(s) should convey the idea that the person could want to work additional hours in a paid or a self employment job(s) and should be formulated in relation to all the jobs held by the worker. They should be addressed to all employed persons, regardless of the hours actually worked during the reference week. This question could also request information about the preference to work less hours than currently.

- The question(s) concerning workers' availability to work additional hours should inquire whether workers are ready to work additional hours during a subsequent specified reference period. To allow a greater flexibility for data analysis, it is better not to specify the subsequent period during the data collection stage but to obtain information about availability for various periods or with an open question.

- The question(s) about actual hours of work should be obtained separately for the main and secondary jobs. To help the interviewee to remember unusual events such as overtime, weekend work, sick absences, etc. Information should be obtained separately for each day of the week. This technique is very useful to obtain the hours actually worked of casual workers and for the self employed workers as well as of workers whose working schedules are irregular. To minimize the possibility that respondents give information about the normal hours instead of the hours actually worked, it is also recommended to ask a question on normal or contractual hours before the question on hours actually worked. In areas where workers are not able to provide information in "hours", it is also possible to request the number of "days" or "half-days" worked. The question should be worded so that it is clear that certain activities, especially those that tend to be ignored or forgotten, are included (or excluded). Even better, separate questions can be made to highlight each of the activities that tend to be wrongly included or excluded from hours actually worked.

The inadequate employment situations

According to international recommendations, persons are in an inadequate employment situation when, during the reference period they

- Wanted to change their current work situation,

- For reasons that limit their capacities and well-being, and

- Were available to do so.

The *willingness to change* their current work situation serves to distinguish persons whose full employment level and work quality, (from the point of view of productivity and as assessed by workers themselves) is above their current level of productivity, and therefore want to change their current work situation. This criterion is equivalent to the *willingness to work additional hours* in the definition of time-related underemployment and is similar to the active job search in the unemployment definition. It covers all persons who during the reference period wanted to:

- Replace one of their current paid or self employment jobs for another;

- Transform their activities and/or the way in which they are carried out, either by reorganising the work, by improving the quality of the working tools, the machinery or equipment, diversifying the type of goods and services produced, innovating in commercial strategies, etc. In any of their paid or self employment jobs. This type of change will tend to be more frequent among self employed workers.; or

- The two options simultaneously.

As with time-related underemployment, it is important to separately identify those workers who took active steps to change their current work situation (that is, who actively looked for work) from other workers.

The *reasons* that qualify a persons for classification among persons in inadequate employment situations identify, on the basis of workers' own evaluation of their own work situation, the potential that they have to increase their productivity and quality of work. It is proposed to take into account at least three response categories:

- The inadequate or insufficient use of workers occupational skills: this reason gives way to the identification of persons in *skill-related inadequate employment*, who are persons who during the reference week wanted to change their current employment situation in order to use their occupational skills more fully and were available to do so. This form of inadequate employment can be interpreted as a job with tasks that require greater complexity and diversity than the current job.

- The inadequate income in the current job(s): this reasons gives way to persons in *income-related inadequate employment*, who during the reference week wanted and were available to change their current employment situations in order to increase their income[7] and were available to do so. Ideally, the potential for earning more should be linked to an improved work organisation, productivity, tools, equipment or training or in the infrastructure. Countries may use a threshold for current income earned, above which persons are excluded.

- Excessive hours of work: this reason gives way to persons in *inadequate employment related to excessive hours*, who during the reference week wanted to work less hours than they worked during the reference week (in all their jobs). Persons may want to have another job with less hours of work or decrease the hours worked in the current job. In both cases, it should be clear that the decrease in the hours worked implies a reduction in income earned. As with income-related inadequate employment, countries may want to use a threshold for hours of work, under which persons are excluded.

Other reasons identified by the international definition of *inadequate employment situations* include, for example, precarious job(s), inadequate tools, equipment or training for the assigned tasks, inadequate social services, travel to work difficulties, variable, arbitrary or inconvenient work schedules, recurring work stoppages because of delivery failures of raw materials or energy; prolonged non-payment of wages, long overdue payments from customers, etc.

The resolution stated that the definitions of the various types of inadequate employment situations, as well as the statistical methods to measure these situations, required further development in order to arrive at more precise recommendations.

To identify workers in other inadequate employment situations in household surveys three (sets of) questions are needed: questions relating to the willingness (and active search) for an

[7] It is here understood htat this means income related to all their jobs without increasing the number of hours worked.

alternative employment situation and/or a change in the current work activities, questions on availability for such changes, and questions about the reasons for wanting such changes.

- The question(s) on the willingness (and active job search) to change the current work situation, should reflect the worker's preferences for a change or transformation of (at least one of) their paid or self employment job(s). They should also serve to signal the type of change wanted, that is, whether they wanted to replace one of their current jobs, modify them or the two simultaneously.

- To identify the reasons related with inadequate employment situations the question(s) that need to be raised in household surveys should distinguish between reasons linked to an increase of the hourly income, the improved utilisation of current occupational skills, the excessive hours, etc. In particular, the reasons related to income should aim to distinguish the factors that generate an increase in the income. This is because the hourly income reflects the level of utilisation of the labour force, given its direct relation with workers' occupational skills and personal efficiency, and the establishment's productivity, in itself a function of the production methods and organisation. Nevertheless, income per hour also reflects, and perhaps to a greater extent, institutional, geographic and demographic factors, which bear no relation to issues of labour force utilisation. Income may vary between men and women, economic activities, urban and rural areas, export oriented establishments and domestic oriented establishments, etc., regardless of the productivity level of the activity. Questions in order to make this distinction, however, have not been examined nor applied in any country to our knowledge.

What have countries done

The resolution concerning the measurement of underemployment and inadequate employment situations is one year old. A number of countries, when redesigning their labour force surveys or others which are in the process of revising their surveys have considered applying the current international definitions of underemployment. These countries include Costa Rica, Chile, Jordan, Palestine, South Africa, the countries in Eastern Europe and in the European Union, etc.

A number of countries already measured time-related underemployment and some inadequate employment before this resolution was adopted were already using similar definitions. This include countries like Colombia, Japan, Argentina, Kenya and Turkey.

Efforts being carried out in the European Union deserve special attention. Countries in this region strive to have continuous and comparable statistics. The Statistical Office of the European Union, EUROSTAT, has paid close attention to the measurement of time-related underemployment, and discussed this topic at a Working Group in June 1999-. The objective was to measure this form of underemployment strictly following the criteria of the current international definition, and developing more specific recommendations where the international definition allowed national variations.

The main debate at the Working Group was the selection of a threshold concerning hours of work, above which workers should be excluded from time-related underemployment, because their hours of work are different in the various member countries, and a single value is not equally significant in all countries. But allowing that each country to select their own threshold, even if they all used the same methodology to obtain it, was not a better option. For the moment, therefore, it was decided to use a sufficiently high value (for European standards) to exclude a minimum number of workers willing and able to work additional hours.

Even though more discussion is still needed in this area to reach full agreement, it seems useful to present the current interpretation of the definition of persons in time-related underemployment in the European Union[8]:

"Persons in time-related underemployment comprise all employed persons aged 15 and over who:

(i) during the reference week were willing to work additional hours,. To work additional hours means that (s)he wanted to increase the total number of hours worked in their current job(s), wanted a second job in addition to her/his current job or wanted another job with more hours instead of the/his current job,

(ii) were available to work additional hours within a period corresponding with the usual term of notice, given opportunities for additional work and

(iii) actually worked less (in the reference week) than a threshold relating to working time. In accordance with the ILO recommendation to identify – as much as possible – all employed persons who were willing and available to work additional hours regardless of the hours actually worked, a threshold is applied only to full time employed persons. It is set purely for practical reasons at 40 hours usually worked (in the firs job)."

The remainder of this section presents some examples of question formulations used in national household surveys in countries which apply similar criteria to those in international guidelines, to measure time-related underemployment and some of the other forms of inadequate employment situations[9]:

Kenya (2 question)

- Would you prefer a different job? Yes/No
- If yes, reasons:
  - want full time job
  - pay too low
  - want to move
  - working unsatisfactory
  - other (specify)

Malawi (2 questions)

- Hours actually worked
- If less than 30: Do you want to take up work/additional work/another work now?
  - Yes, wage or salaried work, if one is offered
  - Yes, self-employment, if resources are made available

8 In Eurostat 1999: EU interpretation of ILO employment and unemployment definitions, Doc. E1/EMPL/8/99, Luxembourg 1999.

9 Translations from the author (where applicable)

    - Yes, either type of work
    - No, do not want additional or other work
    - Do not know

Nigeria (2 questions)

- Do you want to continue in your job?
    - Want to continue
    - Want to have additional job
    - Want to change job
    - Want to stop working
- Reasons for change/additional job:
    - Work is temporary
    - Small income
    - Poor prospects
    - Want to use knowledge
    - Want to utilize spare time
    - Not conductive with health
    - Others

Argentina (2questions)

- Would you wish to work more hours?
- Are you looking for another job?

Colombia (2 questions)

- Wants to work more hours or is looking for another job? Yes/No
- (If Yes): For what reasons wants to work more hours or looks for another job?
    - Has extra time
    - Has problems at work
    - Does not like current job
    - Wants to use better capacities
    - Income is low
    - Job is temporary
    - Another reason, specify:

Martinique (2 questions)

- Do you wish to change your job? Yes/No
- Why do you want to change your job? (give main reason)
    - Job is casual or seasonal
    - Insufficient income, no job promotion possibilities
    - The number of hours is insufficient
    - The working conditions are bad
    - Skills are underutilized
    - It is impossible to work part-time
    - Another reason (specify):

Uruguay (6 questions)

- Even though you have a job, are you currently looking another one)?
- (If yes) What did you do mainly to look for another job? Search activities

- This job, is to substitute the current one? Yes/No
- What is the main reason to look for another job?
  - Has time to work more
  - The current job does not use experience or knowledge
  - The current job is not stable
  - The current job has bad working conditions
  - Other, specify:
- Considering your current work, home and study duties, are you willing to work additional hours and is available to do so? Yes/No
- (If Yes): How many additional hours are you willing to work per week?

Venezuela (3 questions)

- Are you looking for another job? Yes/No
- (If Yes): For what reasons are you looking for additional work or another job?
  - Works part time
  - Income is low
  - Is tired of the same job
  - Does not use fully knowledge and capacities
  - Has problems at work
  - Has transport problems
  - Another reason

Japan (3 questions)

- Do you wish to change jobs or to have another job in addition to the present one?
  - Wish to change jobs
  - Wish to have another job in additional to the present one
  - Wish to increase work time in the present job
  - Wish to decrease work time in the present job
  - Do not wish to change jobs, etc.
- (If wish to change jobs): Why do you wish to change jobs?
  - Want to have more income
  - Want to have a more stable job
  - Want a job which fits own abilities
  - The present job is too demanding physically or in terms of working time
  - Other
- Are you looking for such a job or preparing to start such a business? Yes/No

France (2 questions)

- Does the person seek another job? Yes/No
- Why does ... seek another job?
  - There is a fear or a certainty that will lose the current job
  - Wishes to find a job that corresponds better to qualifications or training
  - Wishes to find a better paying job
  - Wishes to find a job that is closer to their home
  - Wishes to find a job that is more adapted for health reasons
  - Wishes t o find better work conditions (schedules, hazards)
  - Wishes to find a job in another region

- Wishes to work more hours (in a secondary activity or in a job with longer hours)
- Another reason. Specify:.

Future prospects

The resolution concerning the measurement of underemployment and inadequate employment situations recommended to carry out a programme to implement the international definitions adopted, in developed, transition and developing countries. It also recommended that the ILO should cooperate with countries in their plans to apply the international definitions in their household surveys and disseminate statistics as well as experiences acquired in this field.

All these recommendations are subject to the availability of financial resources and these unfortunately have been insufficient to carry out these activities so far. Similarly, the plan to carry out a series of methodological surveys to evaluate the applications of the new international definitions, especially those related to inadequate employment situations in different settings, has not been carried out either, for the same reasons. Only when part of a more general programme of technical assistance to countries have the new guidelines on underemployment been disseminated and applied. Nevertheless, the resolution is only one year old and these surveys could be carried out in the future.

Another plan for the future is to develop a database on time-related underemployment, based on sufficiently homogenous definitions. It would contain statistics on number of persons in time-related underemployment classified by sex, occupations, industry and status in employment.

Annex

Resolution concerning the measurement of underemployment and inadequate employment situations, adopted by the Sixteenth International Conference of Labour Statisticians (October 1998)

The Sixteenth International Conference of Labour Statisticians,

....

Having reviewed the relevant texts of resolution III adopted by the Eleventh International Conference of Labour Statisticians concerning measurement and analysis of underemployment and underutilization of manpower (1966), and of resolution I adopted by the Thirteenth International Conference of Labour Statisticians concerning statistics of the economically active population, employment, unemployment and underemployment (1982),

Having acknowledged that resolution I adopted by the Thirteenth International Conference of Labour Statisticians provides the framework within which the present resolution is formulated,

Recognizing the need to revise the existing standards on the measurement of underemployment and to broaden the scope to cover also inadequate employment situations, in order to enhance the standards' usefulness as technical guidelines to countries and improving the international comparability of the statistics,

Acknowledging that the relevance of underemployment and inadequate employment situations in a given country depends on the nature of its labour markets and that the decision to measure one or both of these is therefore determined by national circumstances;

Adopts this fifteenth day of October 1998 the following resolution in substitution for resolution III of the Eleventh International Conference of Labour Statisticians and paragraphs 14 to 20 and 21(5) of resolution I of the Thirteenth International Conference of Labour Statisticians:

Objectives

1. The primary objective of measuring underemployment and inadequate employment situations is to improve the analysis of employment problems and contribute towards formulating and evaluating short-term and long-term policies and measures designed to promote full, productive and freely chosen employment as specified in the Employment Policy Convention (No. 122) and Recommendations (Nos. 122 and 169) adopted by the International Labour Conference in 1964 and 1984. In this context, statistics on underemployment and indicators of inadequate employment situations should be used to complement statistics on employment, unemployment and inactivity and the circumstances of the economically active population in a country.

2. The measurement of underemployment is an integral part of the framework for measuring the labour force established in current international guidelines regarding statistics of the economically active population; and the indicators of inadequate employment situations should as far as possible be consistent with this framework.

Scope and concepts

3. In line with the framework for measuring the labour force, the measurement of underemployment and indicators of inadequate employment should be based primarily on the current capacities and work situations as described by those employed. Outside the scope of this resolution is the concept of underemployment based upon theoretical models about the potential capacities and desires for work of the working age population.

4. Underemployment reflects underutilization of the productive capacity of the employed population, including those which arise from a deficient national or local economic system. It relates to an alternative employment situation in which persons are willing and available to engage. In this resolution, recommendations concerning the measurement of underemployment are limited to time-related underemployment, as defined in subparagraph 8(1) below.

5. Indicators of inadequate employment situations that affect the capacities and well-being of workers and which may differ according to national conditions, relate to aspects of the work situation such as use of occupational skills, degree and type of economic risks, schedule of and travel to work, occupational safety and health and general working conditions. To a large extent, the statistical concepts to describe such situations have not been sufficiently developed.

6. Employed persons may be simultaneously in underemployment and inadequate employment situations.

Measures of time-related underemployment

7. Time-related underemployment exists when the hours of work of an employed person are insufficient in relation to an alternative employment situation in which the person is willing and available to engage.

8. (1) Persons in time-related underemployment comprise all persons in employment, as defined in current international guidelines regarding employment statistics, who satisfy the following three criteria during the reference period used to define employment:

(a) “willing to work additional hours”, i.e. wanted another job (or jobs) in addition to their current job (or jobs) to increase their total hours of work; to replace any of their current jobs with another job (or jobs) with increased hours of work; to increase the hours of work in any of their current jobs; or a combination of the above. In order to show how “willingness to work additional hours” is expressed in terms of action which is meaningful under national circumstances, those who have actively sought to work additional hours should be distinguished from those who have not. Actively seeking to work additional hours is to be defined according to the criteria used in the definition of job search used for the measurement of the economically active population, also taking into account activities needed to increase the hours of work in the current job;

(b) “available to work additional hours”, i.e. are ready, within a specified subsequent period, to work additional hours, given opportunities for additional work. The subsequent period to be specified when determining workers’ availability to work additional hours should be chosen in light of national circumstances and comprise the period generally required for workers to leave one job in order to start another;

(c) “worked less than a threshold relating to working time”, i.e. persons whose “hours actually worked” in all jobs during the reference period, as defined in current international guidelines regarding working time statistics, were below a threshold, to be chosen according to national circumstances. This threshold may be determined by e.g. the boundary between full-time and part-time employment, median values, averages, or norms for hours of work as specified in relevant legislation, collective agreements, agreements on working time arrangements or labour practices in countries.

(2) To provide analytical flexibility for policy formulation and evaluation, as well as for international comparability, countries should endeavour to identify all workers who during the reference period were willing and available to work additional hours, regardless of the hours they actually worked during the reference period.

Analytical groups within time-related underemployment

9. (1) Among time-related underemployed persons, countries may want to identify separately the following two groups: (a) persons who usually work part-time schedules and want to work additional hours; (b) persons who during the reference period worked less than their normal hours of work.

(2) Countries may want to study the relationship between the size and composition of these groups of workers and the economically active population at different points in time.

Volume of time-related underemployment

10. The volume of time-related underemployment relates to the additional time that persons in time-related underemployment were willing and available to work during the reference period up to the chosen threshold, as described in paragraph 8(1)(c) above. It may be computed in units of working days, half-days or hours as may be convenient in national circumstances. In addition, countries may want to estimate the volume of time-related underemployment by aggregating the number of days, half-days or hours that each person in time-related underemployment is willing and available to work in addition to the hours actually worked during the reference period without reference to a threshold.

Analytical indicators on time-related underemployment

11. Based on the concepts and definitions given in paragraphs 7 to 10 above, a variety of analytical measures can be derived. For instance: (a) a rate of time-related underemployment may be calculated as the ratio between the population in time-related underemployment and in employment. Wherever considered useful, the ratio between the population in time-related underemployment and the economically active population may also be calculated; (b) a rate of the volume of time-related underemployment may be obtained as the ratio between the volume of time-related underemployment and the potential time for work of persons in employment, calculated as the sum of the “hours actually worked” by the employed population and the volume of time-related underemployment.

Topics related to time-related underemployment

12. Statistics may be collected on the “duration of time-related underemployment”, understood as the number of days, weeks, months or years that time-related underemployed persons have been continuously in this situation, i.e. willing and available to work additional hours and working less than the chosen threshold. Information about the number of days or weeks of employment, unemployment and time-related underemployment experienced by a worker throughout the year may also be instructive.

13. In countries where multiple jobholding is common, it may be useful to produce statistics on the reasons for having more than one job, covering all multiple jobholders.

Classifications for time-related underemployment

14. (a) The time-related underemployed population should be classified by significant demographic, social and economic characteristics. Appropriate cross-classifications should be used with due regard to the need for confidentiality and statistical significance.

(b) The number of persons in time-related underemployment, and the rates suggested in paragraph 11 above, should be classified by sex in respect of specified age groups and levels of education, and for each branch of economic activity, occupational group, institutional sector (including a category on the informal sector, where relevant) and status in employment categories. The classification by presence of young children and of adults requiring care would also be useful.

(c) For the purpose of classification by branch of economic activity, occupation, institutional sector and status in employment, reference should be made to the main job. The main job should be understood as the job at which the worker has worked the longest hours or which has provided the highest income from employment during the period, or which can be expected to provide the highest income from work carried out in that period, if payment can only be expected in the future.

(d) In order to provide flexibility for analysis, it is important to classify persons, where possible, by the component groups covered in the definition of time-related underemployment, i.e. by whether they wanted to work additional hours, by whether they had actively sought to work additional hours, were available to work additional hours, and by the hours they actually worked during the reference period.

Inadequate employment situations

15. Indicators of inadequate employment situations describe situations in the workplace which reduce the capacities and well-being of workers as compared to an alternative employment situation. To a large extent, the statistical definitions and methods necessary to describe such situations still have to be developed further.

16. Countries may want to consider as persons in inadequate employment situations, all those in employment who during the reference period, wanted to change their current work situation, or (particularly for the self-employed) to make changes to their work activities and/or environment, for any of a set of reasons, chosen according to national circumstances. Such reasons might include, for example: inadequate use and mismatch of occupational skills; inadequate income in current job(s); excessive hours of work; precarious job(s); inadequate tools, equipment or training for the assigned tasks; inadequate social services; travel to work difficulties; variable, arbitrary or inconvenient work schedules; recurring work stoppages because of delivery failures of raw material or energy; prolonged non-payment of wages; long overdue payments from customers. It should be noted that these reasons will not be mutually exclusive nor exhaustive of inadequate employment situations. Workers' availability to change their current work situation, as well as their active job search, as understood in the definition of time-related underemployment, may also be applied.

Particular types of inadequate employment situations

17. Countries may in particular wish to consider, among the various types of inadequate employment situations, whether it is important to produce separate indicators for:

(a) skill-related inadequate employment, characterized by inadequate utilization and mismatch of occupational skills, thus signifying poor utilization of human capital. Persons in this form of inadequate employment may be understood to include all persons in employment who during the reference period wanted or sought to change their current work situation in order to use their current occupational skills more fully, and were available to do so;

(b) income-related inadequate employment, resulting from low levels of organization of work or productivity, insufficient tools and equipment and training or deficient infrastructure. Persons in this form of inadequate employment may be understood to include all persons in employment who during the reference period wanted or sought to change their current work situation in order to increase income limited by factors such as those mentioned above, and were available to do so. Countries may wish to apply a threshold, chosen according to national circumstances, above which persons do not qualify for inclusion;

(c) inadequate employment related to excessive hours, may be understood to refer to a situation where persons in employment wanted or sought to work less hours than they did during the reference period, either in the same job or in another job, with a corresponding reduction of income. Countries may wish to apply a threshold of hours below which persons do not qualify for inclusion.

Analytical indicators associated with inadequate employment situations

18. For persons in the various inadequate employment situations separately identified according to national circumstances, countries may want to derive analytical indicators such as the following: (a) persons in each chosen type of inadequate employment situation, expressed as a percentage of the employed; (b) persons simultaneously in two or more inadequate employment situations, expressed as a percentage of the employed.

Classifications for inadequate employment situations

19. The analysis of the various inadequate employment situations may include their classification by significant demographic, social and economic characteristics, as well as appropriate cross-classifications with due regard to the need for confidentiality and statistical significance.

Data collection and international reporting

20. The use of household surveys, and in particular specialized labour force sample surveys, has advantages when producing statistics on time-related underemployment and indicators of inadequate employment situations. Other sources, such as those based on administrative records, may also provide an adequate basis for such statistics. When a household-based survey exists in a country, its results may be used to calibrate the results from other sources.

21. In order to enhance international comparability, it is recommended that countries, as far as possible, design their data collection and processing procedures so that they will be able to report: (a) estimates on the time-related underemployed population, as defined in subparagraph 8(1) above, who wanted to work additional hours, regardless of whether or not they sought to do so; (b) estimates on the sub-group of the time-related underemployed population, as defined in subparagraph 8(1) above, who sought to work additional hours; (c) information on the manner in which the threshold, mentioned in subparagraph 8(1)(c) above, has been determined; (d) where feasible, information on workers who during the reference period satisfy the criteria mentioned in subparagraphs 8(1)(a) and (b), without reference to a threshold, i.e. criterion 8(1)(c).

Further action

22. Subject to the availability of funds, a programme of work should be sponsored by the ILO to refine the measurement of time-related underemployment and to further develop concepts and definitions for the indicators of inadequate employment situations. The ILO should also sponsor work relating to the measurement and presentation of these statistics in a number of developing, transition and industrialized countries and evaluate and document the results.

23. As far as possible, the ILO should cooperate with countries in the implementation of the definition of time-related underemployment and in the development and application of methods to describe indicators of inadequate employment situations as recommended in this resolution, and disseminate the information about the experiences gained.