

KILM 6. Hours of work

Introduction

Two measurements related to working time are included in KILM 6 in order to give an overall picture of the time that the employed throughout the world devote to work activities. The first measure relates to the hours employed persons work per week (table 6a) while the second measure is the annual hours of work per person (table 6b). The statistics in both tables are presented separately for men and women whenever possible, and in 6a according to the following hour bands: less than 20 hours worked per week, between 20 and 29 hours, between 30 and 39 hours, 40 hours and over and 50 hours and over, as available. Generally the statistics come from national household surveys. Regional coverage is limited; no information relating to hours of work is available for the regions of sub-Saharan Africa, the Middle East or North Africa. Currently 53 economies are presented in table 6a and 50 economies in table 6b.

Use of the indicator

In recent years interest in issues related to working time has intensified. The number of hours worked has an impact on the health and well-being of workers.¹ Persons working full-time in some developed and developing economies have expressed concern about long working hours and their effects on family and community life.² At the same time the number

1. A. Spurgeon: *Working Time: Its Impact on Safety and Health* (Geneva, ILO, 2003); website: <http://www.ilo.org/public/english/protection/condtra v/pdf/wtwo-as-03.pdf>.

2. Policy suggestions that preserve health and safety, are family friendly, promote gender equality, enhance productivity and facilitate workers' choice and influence their working hours are provided in: S. Lee, D. McCann and J. Messenger: *Working Time Around the World* (Geneva, ILO, 2007).

of hours worked impacts productivity and labour costs of establishments. Measuring the level and trends in the hours worked in a society, for different groups of persons and for individuals, is therefore important when monitoring working and living conditions as well as when analysing economic developments.³

Employers have also shown interest in enhancing the flexibility of working arrangements and are increasingly negotiating non-standard working arrangements. Employees may work only part of the year or part of the week, work at night or on weekends, or enter or leave the workplace at different times of the day. They may have variable daily or weekly schedules, perhaps as part of a scheme that fixes total working hours over a longer period, such as one month or one year. Consequently, the daily or weekly working time of employed persons may show large variations, and a simple count of the number of people in employment or the weekly hours of work is insufficient to indicate the level and trend in the volume of work.

Table 6b, which presents estimates of actual annual hours of work, considers individual working schedules more fully. These estimates are particularly useful for investigating the extent to which reductions in weekly working hours are correlated with increases in the number of employed persons and reductions in the number of unemployed persons, and in estimating the net effect on the total number of hours worked by all employed persons.

“Excessive” hours of work, indicated by the share of persons working greater than 40

3. A. Mata-Greenwood: “The hours that we work: The data we need, the data we get”, in *Bulletin of Labour Statistics 2001-1* (Geneva, ILO), 2001; website: <http://www.ilo.org/public/english/bureau/stat/download/articles/2001-1.pdf>.

hours (50 hours and over is available for a limited number of countries), may be a concern when individuals work more than a normal workweek because of inadequate wages earned in the job or jobs they hold. Long hours can be voluntary or involuntary (imposed by employers). “Inadequate employment related to excessive hours”, also called “over-employment”, has been defined as “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, accepting a corresponding reduction of income”.⁴ Few countries have measured “over-employment”, therefore the measure of persons employed for more than 40 hours a week could be used as a proxy for persons in employment who usually work beyond what many countries consider “normal hours”. However, whether or not this situation is actually desired cannot be assessed so nothing can be assumed about how many hours people might wish to work. Clearly, the number of hours worked will vary across countries and depends on, other than personal choice, such important aspects as cultural norms, real wages and levels of development.

Definitions and sources

Statistics on the percentage of persons in employment by hours worked per week are calculated on the basis of information on employment by usual-hour band provided primarily by household surveys which cover all persons in employment. Exceptions are identified in the notes to KILM 6. In all cases persons totally absent from work during the reference period are excluded. Annual hours of work are estimated from the results of both household-based and establishment surveys. For the most part, coverage comprises salaried employment and self-employment.⁵

4. ILO: *Final Report*, 16th International Conference of Labour Statisticians, Geneva, October 1998; website: <http://www.ilo.org/public/english/bureau/stat/download/16thicls/repconf.pdf>.

5. The present international definition of “hours actually worked”, adopted in 1962 by the

“Usual hours of work” per week identifies the most common weekly working schedule of a person in employment over a selected period. While no international statistical definition of “usual hours of work” has yet been adopted, it has been defined as the hours worked in an activity during a typical week,⁶ or more technically, as the modal value of the “hours actually worked” per week over a long period. This definition is applicable to all workers with regular schedules, even those who do not possess a working contract – for example, in small-scale or family enterprises and to self-employed workers. For persons who do not work regular schedules, a measure of average “hours actually worked” per week over a long period is sometimes used.

When compared with “normal hours of work”, the “usual hours of work” includes the overtime that occurs systematically every day or week and excludes time not worked on a usual basis. This measure is not affected by unusual absence or by irregular or unusual overtime, whether worked for premium pay, regular pay, or without compensation.

“Hours actually worked” includes time spent at the workplace on productive activities and on other activities that are part of the tasks and duties of the job concerned (for example, cleaning and preparing working tools).⁷ It also

10th ICLS, related only to workers in paid employment, mainly in manufacturing establishments; a serious limitation given the increasing importance of self-employment in many countries, and one of the reasons why it is currently being revised for presentation to the next ICLS in 2008. For the full text, see: website: <http://www.ilo.org/public/english/bureau/stat/download/res/hours.pdf> (“Resolution concerning statistics of hours of work”, 10th International Conference of Labour Statisticians, Geneva, 1962).

6. ILO: *Surveys of Economically Active Population, Employment, Unemployment and Underemployment: An ILO Manual on Concepts and Methods* (Geneva, 1990).

7. Current international discussions are working towards a definition of “hours actually worked” that relates to all types of workers – whether in salaried or self-employment, paid or unpaid, and carried out in any location, including the street, field, home, etc. The proposal includes

includes time spent at the place of work when the person is inactive for reasons linked to the production process or work organization (for example, standby time), as during these periods paid workers remain at the disposal of their employer. “Hours actually worked” also includes short rest periods spent at the place of work because they are difficult to distinguish separately, even if workers are not “at the disposal” of their employer during those periods. Explicitly excluded are lunch breaks, as they are normally sufficiently long to be easily distinguished from work periods.

Annual hours worked, as presented in table 6b, is a measure of the total number of hours actually worked during a year per employed person. The measure incorporates variations in part-time and part-year employment, in annual leave, paid sick leave and other types of leave, as well as in flexible daily and weekly working schedules whereas conventional measures of employment and weekly hours worked (as in table 6a) do not. Household-based surveys are rarely able to measure accurately the hours actually worked by the population for a long reference period, such as a year.⁸ Establishment surveys may use longer reference periods than household surveys but do not cover the whole working population unlike household surveys. Consequently, the “average annual hours” worked is usually estimated on the basis of statistics from both sources.

Two estimation procedures for average annual hours are commonly used. The first is

based on statistics for time actually worked for each week of the year, derived from a continuous household survey. When used, statistics for a month or quarter need to be adjusted for the number of working days in that period. Further adjustments are made for public holidays and strike activity, normally on the basis of information obtained from administrative sources. The resulting estimates may then be added up to obtain the total annual “hours actually worked”, which is then divided by the average number of employed persons during the year.⁹

The second procedure for estimating annual working time is based on information from legislation or collective agreements that concern “normal hours”. It consists of multiplying the weekly “normal hours” by the number of weeks workers have been in employment during the year.¹⁰ Annual leave and public holidays are subtracted to obtain a net amount of “annual normal time”. Estimates of overtime obtained from sources such as household or establishment surveys are added, and estimates of time taken in substantial forms of absences, obtained from household surveys or administrative sources, are then subtracted. In practice, some additional adjustments may be needed when the “normal hours” vary over the year. Because of the complexity of calculation methodologies, the notes accompanying table 6b offer more detail than those associated with other indicators.

time spent at the workplace directly on production, on activities to facilitate production that are part of the tasks and duties of the job concerned and some of the time spent in between the main activities or that enhance a person’s performance.

8. Additional documentation regarding national practices by country in the collection of statistics is provided in ILO: *Sources and Methods: Labour Statistics*, Vol. 3: *Economically Active Population, Employment, Unemployment and Hours of Work (Household Surveys)* and available online at: <http://laborsta.ilo.org>.

9. An alternative measure often used by national accountants for the calculation of productivity (output per work-hour), according to the 1993 System of National Accounts, also currently being revised, is the “volume of employment” which relates to total hours worked by all persons employed in the year.

10. This is the method applied for the OECD estimates of annual hours worked for Austria, Belgium, Denmark, Greece, Ireland, Italy, the Netherlands (after 2002) and Portugal based on the European Labour Force Survey.

Box 6a. Resolution concerning statistics of hours of work, adopted by the 10th International Conference of Labour Statisticians, October 1962 [relevant paragraphs]

General objectives

1. This resolution applies to wage earners and salaried employees.
2. Each country should aim to develop a comprehensive system of statistics of hours of work in order to provide an adequate statistical basis for the analysis of conditions of work, the study of trends of economic activity, the analysis of partial employment and underemployment, the study of productivity, the computation of industrial accident rates and the computation of average hourly earnings.
3. These statistics should be developed in accordance with the specific needs of each country in the light of its social and economic structure and in accordance with international standards, in order to promote comparability among countries. Some countries will encounter difficulties in implementing this resolution at the present stage. These countries should envisage the resolution as a first attempt towards the improvement of international comparability in the field of statistics of hours of work. It is expected that at a later stage the resolution will be revised, taking into account the experience gained in its implementation.

Definitions

4. (1) Normal hours of work are the hours of work fixed by or in pursuance of laws and regulations, collective agreements or arbitral awards.
 - (2) Where not fixed by or in pursuance of laws and regulations, collective agreements 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.
6. Because of the wide difference among countries with respect to wage payments for holidays and other periods when no work is performed, it does not seem feasible at this time to adopt international definitions of hours paid for. Many countries will find, however, that statistics of hours paid for, while not suitable as a substitute for hours actually worked, can be useful for internal purposes and that they will commonly be readily available from payrolls and other records.

Limitations to comparability

Statistics based on hours usually worked are not strictly comparable to statistics based on hours actually worked. A criterion using actual hours will generally yield a higher weekly average than usual hours, particularly if there are temporary reductions in working time as a result of holiday, illness, etc. that will have an impact on the measure of average weekly hours. Seasonal effects will also play an important role in fluctuations in actual hours worked. In addition, the specification of main job or all jobs may be an important one. In some countries, the time cut-off is based on hours spent in the main job; in others on total hours spent in all jobs. Measures may therefore reflect usual or actual hours worked in the main job or in all jobs. Because of these and other differences that may be specific to a particular country, cross-country comparisons in table 6a should be made with great care.¹¹

The different estimation methods for annual hours of work depend to a large extent on the type and quality of the information available and may lead to estimates that are not comparable. All estimates presented are derivations from numbers gathered from surveys and other sources, usually produced within the national statistical agency. It is difficult to evaluate the impact of estimation differences on their comparability across countries.

The various data collection methods also represent an important source of variation in the hours of work estimates. Household-based surveys (including the population census) that obtain data from working persons or from other household members can and often cover the whole population, thus including the self-employed. As they use the information respondents provide, their response error may

11. All developed economies in table 6a report usual hours of work with the exception of Australia, prior to 2000, and Poland. The majority of countries in Central America & the Caribbean report on actual hours of work per week.

be substantial. On the other hand, the data obtained from establishment surveys depend on the type, range and quality of their records on attendance and payment. While consistency in reporting overtime may be higher, the information may contain undetected biases. Furthermore, their worker coverage is never complete, as these surveys tend to cover medium-to-large establishments in the formal sector with regular employees, and exclude managerial and peripheral staff as well as self-employed persons. (Hungary and the Republic of Korea are two countries that report on hours of wage and salaried employees only.) Comparability of statistics on hours of work is complicated even further by the fact that estimates may be based on more than one source – results may be taken primarily from a household survey and supplemented with information from an establishment survey (or other administrative source) or vice versa. In such cases, more than one survey type is noted in the corresponding column of the notes. For these reasons, the OECD, which provided the majority of the national estimates presented, is careful to note that “the data [on average annual hours worked per person] are intended for comparisons of trends over time; they are unsuitable for comparisons of the level of average annual hours of work for a given year, because of differences in their sources”.¹² This also applies to data consistent with national accounts concepts (annotated with OECDNA as the source), for which the sources vary by country as well.

Trends

The percentage of men and women working 40 hours or more varied between economies but, in 52 of the 54 economies covered, men were more likely to work long hours than women (hence most data points fall below the 1:1 diagonal in figure 6a). The two exceptions were Aruba and Chile.

12. OECD: *Employment Outlook 2005*, Statistical Annex (Paris, 2005), p. 256.

Most developed economies had decreases in the percentage of employed persons working at least 40 hours per week from 1996 to 2006 (see figure 6b). Among them was the Czech Republic, which maintained one of the highest percentages of employed persons working “excessive” hours (40 hours or more) despite a 9.1 percentage point decrease over the decade. Another two countries showed even larger shares of workers in the “excessive” hours category – Hungary (93.9 per cent) and Slovakia (87.4 per cent). Of the developed economies – excluding the new Member States of the EU – Luxembourg and the United States had the largest shares of persons working at least 40 hours (78.8 and 76.6 per cent, respectively). While lower than a decade ago for Luxembourg, this represented a slight increase for the United States. A majority of employed persons also worked 40 hours or more per week in many developed countries, with notable exceptions in Belgium, Denmark, France and Norway, where the majority of workers worked between 30 and 39 hours per week, probably as a result of stricter working hour legislation in these countries (see box 6b).

The share of persons working less than 20 hours per week varied from 0.6 per cent in

Hungary and Slovakia to 33.5 per cent in the Netherlands. In all economies for which data are available, women had a higher percentage working less than 20 hours per week than men. More than 80 per cent of those working less than 20 hours were women in Belgium, Chile, Luxembourg and Switzerland.

Annual hours worked per person surpassed 2,200 in six Asian economies – the Republic of Korea leads the group, followed by Bangladesh, Sri Lanka, Hong Kong (China), Malaysia, and Thailand (see figure 6c). At the other end of the spectrum, most European Union countries (excluding new members) had much lower hours, especially in Belgium, Denmark, France, Germany, the Netherlands and Sweden, where workers put in less than 1,600 hours per year. There was a decreasing trend in the number of annual hours worked for most of the countries for which enough data are available for time trend analysis (35 out of 43). The largest of these decreases was found in the Republic of Korea, followed by Ireland, Japan, France and Spain. Six of the eight countries that exhibited an increasing trend are in Latin America & the Caribbean.

Box 6b. ILO Working time database

The ILO working time database is a searchable database providing information on the working time laws of more than 100 countries around the world. It covers laws that: protect the health and well-being of workers; facilitate a balance between work and family life; ensure workers have adequate time to devote to their other responsibilities and interests; and prevent discrimination against part-time workers. The database provides summaries of the primary working time laws in each country including:

- Hour limits: the number of hours a worker is permitted to perform each day, week or year.
- Overtime work: including limits on overtime hours, the amount of advance notice required, and the additional pay or time-off for overtime work.
- Rest periods: the amount of rest to which workers are entitled during the day, between working days and at weekends.
- Annual leave and public holidays: the number of holiday days and the entitlement to payment during these periods.
- Night work: prohibitions on performing night work and protection for night workers, including health assessments and the right to transfer to day work; extra pay or time-off for night workers; and protection for specific groups, such as pregnant workers.
- Part-time work: rights for part-time workers to equal treatment with full-timers.
- Employee choice over working hours: rights for workers to influence the length and scheduling of their working hours, including to work part time.
- The database is available at website: <http://www.ilo.org/travaildatabase/servlet/workingtime>.

Figure 6a. Percentage of males and females working more than 40 hours per week, latest years

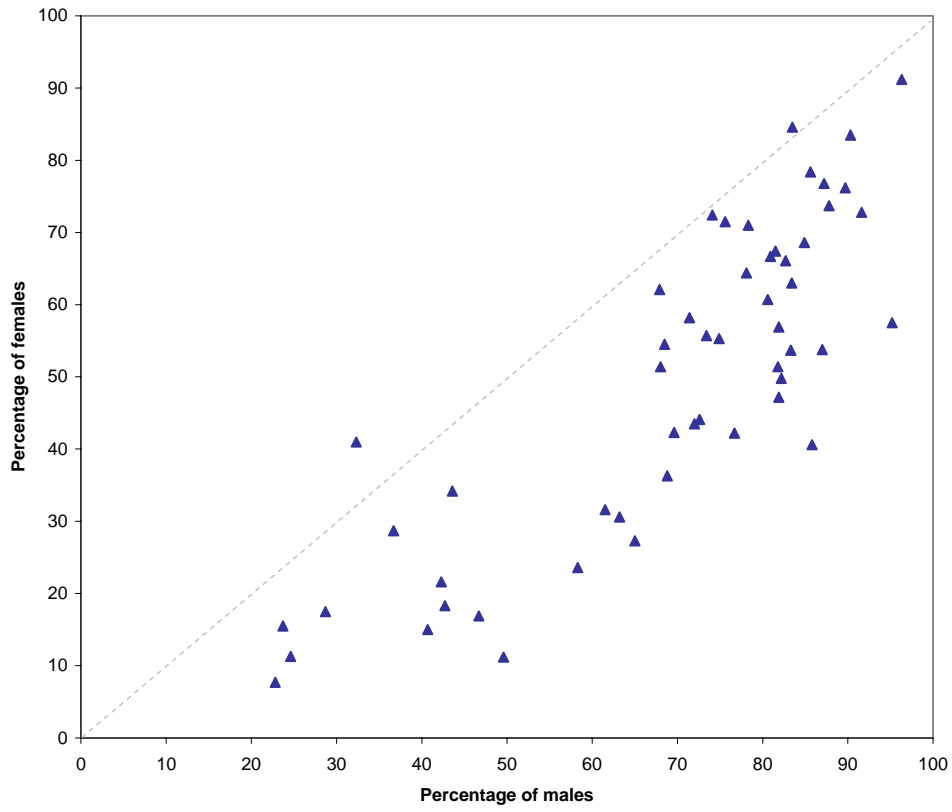


Figure 6b. Distribution of total employment by usual weekly hours worked, selected developed economies, 1996 and 2006

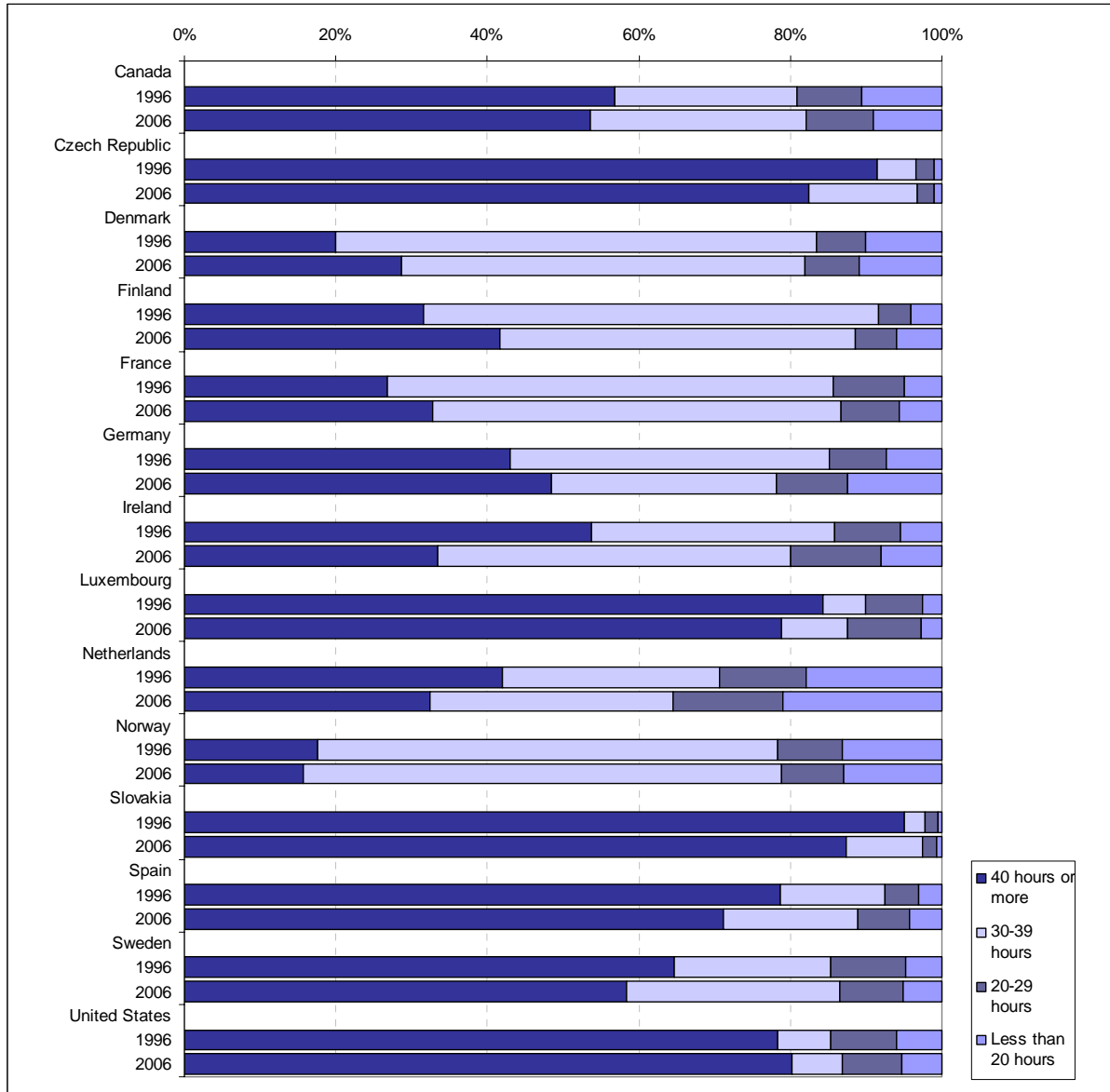


Figure 6c. Annual hours worked per person, latest years

