



Working time in the twenty-first century

**Report for discussion at the
Tripartite Meeting of Experts on Working-time Arrangements
(17–21 October 2011)**

Geneva, 2011

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Part I. Introduction

1. The question of revising international labour standards on working time has given rise to extensive discussions in recent years, such as those in the context of the Working Party on Policy regarding the Revision of Standards. At the centre of this ongoing debate has been an understanding that the instruments in question, although they remain relevant in certain respects, no longer fully reflect modern realities. Nonetheless, there has been a lack of consensus on a possible course of future International Labour Organization (ILO) action on working time.
2. In December 2004, the ILO Committee of Experts on the Application of Conventions and Recommendations completed its *General Survey of the reports concerning the Hours of Work (Industry) Convention, 1919 (No. 1), and the Hours of Work (Commerce and Offices) Convention, 1930 (No. 30)* (ILO, 2005). Based on the conclusions of the General Survey and a subsequent discussion of it by the Committee on the Application of Standards at the 93rd Session of the International Labour Conference in June 2005, the ILO Governing Body agreed to the organization of a Tripartite Meeting of Experts on Working-time Arrangements as a means of moving forward in addressing the issue of working time. Specifically, the 294th Session of the Governing Body (November 2005) agreed in principle to the recommendation of the Committee on Legal Issues and International Labour Standards to convene a tripartite meeting of experts with a view to initiating a comprehensive analysis of the issue of working-time regulation in all its multiple dimensions. At its 306th Session (November 2009), the Governing Body approved the recommendation of the Programme, Financial and Administrative Committee that the Meeting be funded from the Technical Meetings Reserve in the Programme and Budget for 2010–11. Finally, at its 309th Session in November 2010, the Governing Body fixed the composition, agenda and dates of the Meeting, which will be convened from 17 to 21 October 2011.¹
3. The aim of this Tripartite Meeting of Experts on Working-time Arrangements is to review and advise on modern working-time arrangements, which includes identifying the main policy issues that would need to be addressed to develop future ILO guidance for advancing decent work in the area of working time. The results of this Meeting might also serve as the basis for a discussion on working time at a future session of the International Labour Conference.
4. This discussion report is based on the assumption that international working-time policy needs to find an appropriate, widely acceptable balance between female and male workers' needs (which should include protections with regard to workers' health, safety and their personal/family lives) and the requirements of enterprises, while also considering the needs of the community, including gender equality. In this context, it is understood that there are minimum standards regarding working time that are human rights and should not be subject to economic considerations, such as those which are essential to the protection of workers' health.
5. Starting from this key assumption, this report will analyse recent trends and developments relating to both the duration and organization of working time, drawing on the most recent literature and statistical data available from a variety of sources. Part II will focus on hours of work, beginning with an overview of key provisions of ILO standards governing working time, from the Hours of Work (Industry) Convention, 1919 (No. 1), to the

¹ GB.294/LILS/7/1, para. 17; GB.306/PFA/9 and GB.306/9/1(Rev.); GB.309/21, paras 16–22.

Maritime Labour Convention, 2006 (MLC, 2006). It will then review recent trends and developments regarding hours of work, including national regulation of working time, collective bargaining, and key statistical indicators on actual working hours in a range of countries. These indicators cover subjects such as average weekly hours, including by major industry and occupational groups, and usual weekly hours of work by bands of standardized hours. The data on bands of hours also permit analysis of excessive hours (more than 48 per week) and short or part-time hours (typically fewer than 35 per week). The data will also be disaggregated by sex and employment status,² providing insights into important gender differences in working hours, many of which also have major implications for working-time policies. Part II will conclude with a review of the most recent empirical evidence on the effects of the length of working hours on workers' health and well-being, workplace safety, work–life balance, enterprise productivity, employee satisfaction and performance, absenteeism, and staff recruitment and turnover.

6. Part III focuses on the organization of working time, better known as work schedules. It begins with an overview of recent developments in work schedules, including the rationale for using different kinds of schedules, and how these schedules are developed. It looks at various types of working-time flexibility, such as overtime work, shift work, including night and weekend work, part-time work, flexitime arrangements, time-saving account arrangements (which are more commonly called “time banking”) and annualized hours. It considers certain types of working-time arrangements that are widely viewed as “atypical” and/or “precarious”, such as marginal part-time work (short hours) and zero-hour contracts, and it also presents some examples of innovative working-time arrangements that appear to do a good job of balancing male and female workers' needs (beyond the minimum levels of protection) with enterprises' requirements. Part III also considers the potential advantages and disadvantages of working-time flexibility for both workers and employers. It concludes with a review of the most recent empirical evidence on the effects of contemporary work schedules on workers' health and well-being, workplace safety, work–life balance, productivity, employee satisfaction and performance, absenteeism, and staff recruitment and turnover.
7. Part IV narrows the focus to the recent global economic and jobs crisis and the working-time policy measures developed and implemented in response to the crisis. It analyses working-time adjustments as crisis-response measures in various countries, in particular policies, programmes and collective agreements on work sharing. It attempts to draw some important lessons from the successes of these policies and to consider how these lessons might be applied to a broader range of working-time policy issues.
8. Based on the empirical analyses presented in the preceding sections, Part V attempts to identify and present for the discussion of the experts the main policy issues regarding working time in the twenty-first century. It is suggested that those issues are the ones which, if appropriately addressed, would advance decent work in the area of working time to the benefit of both workers and enterprises.
9. Part VI contains the conclusions of the report and also presents the points for discussion by the experts during the Meeting.

² It should be noted that the lack of age-disaggregated data in many countries is a serious barrier to understanding the hours of work and work schedules of male and female workers in different age groups.

Part II. Hours of work: Standards, trends and effects

10. Part II of the report focuses on hours of work. It begins by discussing ILO labour standards regarding hours of work. This is followed by a discussion of recent trends and developments regarding hours of work, both in terms of the legal and regulatory framework at the national level and statistical indicators on the number of hours actually worked in different countries, disaggregated by sex where such data exist. It concludes with a review of evidence on the effects of the length of hours of work on both workers and enterprises.

A. An overview of ILO standards governing working time

Introduction

11. The ILO Constitution, which formed Part XIII of the Treaty of Versailles, specifically recognized that the regulation of hours of work, including the establishment of a maximum working day and week, was among the measures that were urgently needed for the improvement of the conditions of labour prevailing at the time. This also echoed one of the demands of the labour movement of the first quarter of the twentieth century. Conscious of this urgency, the International Labour Conference established the first international labour standard ever adopted, the Hours of Work (Industry) Convention, 1919 (No. 1).¹ Since then, standard-setting activities in the area of working time have continued, with the adoption of instruments covering specific branches of economic activity or particular aspects of the issue, such as weekly rest and paid annual leave.

Hours of work

12. Convention No. 1 regulates daily and weekly working hours in industry. Similar rules were established by the Hours of Work (Commerce and Offices) Convention, 1930 (No. 30).² These two instruments, as a general rule, limit working hours to eight per day and 48 per week. The maximum hours of work in the week may be unevenly distributed, provided that the working day does not exceed nine hours under Convention No. 1 or ten hours under Convention No. 30.

¹ Convention No. 1 entered into force on 13 June 1921 and, to date, it has been ratified by 47 member States. It applies to public or private industrial undertakings, such as mines and quarries; industries in which articles are manufactured or materials are transformed, such as shipbuilding and energy generation; construction, maintenance and demolition of roads, bridges and tunnels; and transport of passengers or goods by road, rail, sea or inland waterway.

² Convention No. 30 entered into force on 29 August 1933 and, to date, it has been ratified by 27 member States. It applies to commercial establishments, and establishments and administrative services in which the persons employed are mainly engaged in office work. It does not apply to hospitals and similar institutions, hotels, restaurants, cafes or theatres. The combined scope of application of Conventions Nos 1 and 30, although very wide, does not cover all branches of economic activity; in particular, agricultural and domestic workers are excluded.

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13. Since the definitions of the exceptions to the normal scheme of working hours authorized by these Conventions are narrow, the possibilities for the flexible arrangement of working time are very limited. Some of these exceptions are directly related to the form of work organization, for instance shift work, in which case it is permissible to work beyond the normal limits of hours of work, provided that the average number of working hours over a period of three weeks or less does not exceed eight per day and 48 per week. In addition, if shift work is rendered necessary by the continuous operation of an industrial plant, hours of work can reach 56 hours per week on average, without prejudice to the compensatory rest that may be provided for in national legislation.
 14. The two Conventions permit the averaging of hours of work over a period of time longer than a week only in exceptional cases where it is recognized that the normal limits of eight hours per day and 48 hours per week cannot be applied. In industry, such an arrangement of working time requires the conclusion of a collective agreement that is given the force of a regulation by the national authorities. In commerce and offices, regulations to this effect must be adopted after consultation with the employers' and workers' organizations concerned. In any event, average working hours cannot exceed 48 hours per week.
 15. Moreover, Conventions Nos 1 and 30 allow the introduction of permanent exceptions to normal limits on hours of work for persons who perform preparatory or complementary work that must necessarily be carried out outside the normal hours of operation of an establishment (e.g. cleaning or maintenance services) or whose work is essentially intermittent (e.g. caretaker), after consultation with the employers' and workers' organizations concerned and provided that the number of authorized additional hours is fixed. Convention No. 30 further permits exceptions in shops and other establishments where the nature of work, the size of the population or the number of persons employed render inapplicable the normal limits of eight hours per day and 48 hours per week.
 16. Overtime work as a temporary exception is also strictly regulated by these two instruments. As regards industrial undertakings, regulations may be adopted, after consultation with the employers' and workers' organizations concerned, to allow the performance of overtime in order to help enterprises cope with an exceptional workload. Temporary exceptions are also authorized in commercial establishments in order to prevent the loss of perishable goods, avoid endangering the technical results of their work or allow for special work such as stocktaking. In all these cases, the workers concerned must benefit from a pay increase of at least 25 per cent and the number of additional hours that can be carried out must be specified. Conventions Nos 1 and 30 do not provide for specific limits to the number of additional hours that are authorized; however, the Committee of Experts on the Application of Conventions and Recommendations (hereinafter referred to as the Committee of Experts) regularly points out in its comments that such a limit must be reasonable, so as not to jeopardize the principle of limiting working hours. Finally, temporary deviations from normal limits on hours of work are also allowed in case of accident, urgent work to machinery or plant and force majeure.
 17. Even though the primary objective of Conventions Nos 1 and 30 was the social protection of workers, the economic crisis of the 1930s led to the reduction of working hours also being seen as a tool to fight unemployment. As the Preamble of the Forty-Hour Week Convention, 1935 (No. 47),³ points out, "unemployment has become so widespread and long continued that there are at the present time many millions of workers throughout the world suffering hardship and privation for which they are not themselves responsible and from which they are justly entitled to be relieved". In this perspective, Convention No. 47

³ Convention No. 47 entered into force on 23 June 1957 and, to date, it has been ratified by 14 member States.

calls on member States to declare their approval of the principle of a 40-hour week applied in such a manner that the standard of living is not reduced in consequence, and to apply this principle to classes of employment in accordance with the detailed provisions to be prescribed by other Conventions ratified by them on this subject. It is a promotional instrument that does not set out detailed rules and that establishes, as stated in the Preamble of the Reduction of Hours of Work Recommendation, 1962 (No. 116), a social standard to be reached by stages if necessary, taking into account the different economic and social conditions in the different countries, as well as the variety of national practices for the regulation of hours and other conditions of work.

- 18.** At a later stage, efforts to protect and promote the necessary balance between work and family life also had a direct impact on the regulation of working time. The Workers with Family Responsibilities Convention, 1981 (No. 156),⁴ provides that, with a view to creating effective equality of opportunity and treatment for male and female workers, each Member shall make it an aim of national policy to enable persons with family responsibilities who are engaged or wish to engage in employment to exercise their right to do so without being subject to discrimination and, to the extent possible, without conflict between their employment and family responsibilities. Since women are most often the primary caregivers, this Convention was extremely favourable to female workers. The Workers with Family Responsibilities Recommendation, 1981 (No. 165), which supplements Convention No. 156, recommends that particular attention should be given to general measures for improving working conditions and the quality of working life, including measures aiming at the progressive reduction of daily hours of work and the reduction of overtime, and more flexible arrangements as regards working schedules, rest periods and holidays, account being taken of the stage of development and the particular needs of the country and of different sectors of activity.
- 19.** It should also be noted that a number of sectoral ILO instruments contain provisions on hours of work, for instance the Hours of Work and Rest Periods (Road Transport) Convention, 1979 (No. 153),⁵ which focuses on the regulation of maximum driving time but also addresses issues such as mandatory breaks and daily rest.⁶ Similarly, the regulation of working time is of particular importance for the maritime sector, owing to the risk of fatigue-related accidents. The Maritime Labour Convention, 2006 (MLC, 2006),⁷ follows a specific approach in this area – also followed in the Seafarers’ Hours of Work and the Seafarers’ Hours of Work and the Manning of Ships Convention, 1996 (No. 180) – in view of the particular characteristics of maritime work. It provides that each member State that ratifies it must set either a maximum number of hours of work (not more than 14 hours in any 24-hour period and 72 hours in any seven-day period) or a minimum

⁴ Convention No. 156 entered into force on 11 August 1983 and, to date, it has been ratified by 41 member States.

⁵ Convention No. 153 entered into force on 10 February 1983 and, to date, it has been ratified by nine member States.

⁶ The Hours of Work and Rest Periods (Road Transport) Recommendation, 1979 (No. 161), which supplements Convention No. 153, contains more detailed provisions on hours of work and sets 40 hours as the limit of normal weekly hours of work. Provisions on working time are also included in the Working Conditions (Hotels and Restaurants) Convention, 1991 (No. 172), the Nursing Personnel Recommendation, 1977 (No. 157), and the Plantations Convention, 1958 (No. 110).

⁷ The MLC, 2006, has not yet entered into force. As of 11 April, it had been ratified by 12 member States.

number of hours of rest (not less than ten hours in any 24-hour period and 77 hours in any seven-day period).⁸

Weekly rest

- 20.** The limits on hours of work prescribed by Conventions Nos 1 and 30 correspond to a work week consisting of six eight-hour days with one day off per week. The Weekly Rest (Industry) Convention, 1921 (No. 14),⁹ and the Weekly Rest (Commerce and Offices) Convention, 1957 (No. 106),¹⁰ whose scopes of application largely correspond to those of Conventions Nos 1 and 30, regulate workers' right to weekly rest in detail. These Conventions provide that workers must, in principle, enjoy in every period of seven days a period of rest comprising at least 24 consecutive hours.¹¹ Wherever possible, this period of rest must be granted simultaneously to the whole of the staff of the industrial or commercial undertaking and must coincide with the days already established by the traditions or customs of the country in question. In its comments, the Committee of Experts frequently refers to the principles of regularity, continuity and uniformity as encapsulating the requirements of Conventions Nos 14 and 106 on weekly rest.
- 21.** Convention No. 14 offers a certain degree of flexibility by allowing the introduction of total or partial exceptions to normal weekly rest, provided that special regard is had to all proper humanitarian and economic considerations and after consultation with responsible associations of employers and workers. In this case, provision should be made, as far as possible, for compensatory periods of rest for the workers concerned. Exceptions are permitted under much stricter conditions under Convention No. 106. Temporary exemptions, which also require prior consultations with the employers' and workers' organizations concerned, are permitted only in case of accident, force majeure or urgent work to premises and equipment, in the event of abnormal pressure of work, and in order to prevent the loss of perishable goods. Moreover, where temporary exemptions are made, there is an obligation to grant compensatory rest of a total duration of at least 24 hours. Convention No. 106 also provides for the possibility of applying special weekly rest schemes where the nature of service performed, the size of the population to be served or the number of persons employed is such that the normal weekly rest regime cannot be applied. In this case, the national authorities must pay regard to all proper social and economic considerations before specifying the categories of persons or the types of establishments that may be subject to special weekly rest schemes and this decision must be taken in consultation with the representative employers' and workers' organizations

⁸ In addition, hours of rest may be divided into no more than two periods, one of which must be at least six hours in length, and the interval between consecutive periods of rest must not exceed 14 hours. The MLC, 2006, further regulates the case of seafarers on call and the suspension of the working-time schedule in emergency situations, and also provides guidance on working hours of young seafarers. With respect to the fishing sector, the Work in Fishing Convention, 2007 (No. 188), provides that fishers must be given regular periods of rest of sufficient length to ensure safety and health. In the case of fishing vessels remaining at sea for more than three days, the minimum hours of rest cannot be less than ten hours in any 24-hour period and 77 hours in any seven-day period.

⁹ Convention No. 14 entered into force on 19 June 1923 and, to date, it has been ratified by 119 member States.

¹⁰ Convention No. 106 entered into force on 4 March 1959 and, to date, it has been ratified by 63 member States.

¹¹ The Weekly Rest (Commerce and Offices) Recommendation, 1957 (No. 103), recommends the extension of weekly rest to 36 hours, if possible uninterrupted.

concerned. Finally, all persons to whom these special schemes apply must be entitled, in respect of each period of seven days, to rest of a total duration at least equivalent to the normal 24-hour period.

Paid annual leave

22. The most recent ILO Convention in the area of paid leave is the Holidays with Pay Convention (Revised), 1970 (No. 132),¹² which applies to all employed persons, with the exception of seafarers. This Convention establishes the right of every person to whom it applies to an annual paid leave of at least three working weeks for one year of service. The time at which the holiday is to be taken is determined by the employer, after consultation with the employed person concerned, and taking into consideration the opportunities for rest and relaxation available to the employed person. Workers must receive, in advance of the leave, at least their normal or average remuneration for the corresponding period. The competent national authorities must specify the minimum period of service required for entitlement to paid annual leave but this may not exceed six months. Persons whose length of service is less than the qualifying period in any year must nevertheless be entitled in respect of that year to a holiday with pay proportionate to their length of service during that year.¹³
23. To ensure that workers receive adequate rest, Convention No. 132 prohibits agreements by which workers might accept to relinquish their right to the minimum annual holiday with pay, including in exchange for monetary compensation. Such agreements must be declared null and void or be prohibited in accordance with national law. The division of the leave period into parts may be authorized but one of the parts must in principle consist of at least two uninterrupted working weeks. This uninterrupted part of the annual holiday with pay must be granted and taken no later than one year, and the remainder no later than 18 months, from the end of the year in respect of which the holiday entitlement has arisen. It is also possible to postpone for a limited period, with the consent of the employed person concerned, any part of annual leave exceeding a stated minimum. Finally, upon termination of employment, employed persons must receive a holiday with pay proportionate to the length of service for which they have not received such a holiday, or compensation in lieu thereof, or the equivalent holiday credit.

Part-time work

24. As indicated in the Preamble of the Part-Time Work Convention, 1994 (No. 175),¹⁴ part-time work is important for the economy and facilitates additional employment opportunities but, at the same time, it is important that workers have access to productive

¹² Convention No. 132 entered into force on 30 June 1973 and, to date, it has been ratified by 36 member States. It revises the Holidays with Pay Convention, 1936 (No. 52), and the Holidays with Pay (Agriculture) Convention, 1952 (No. 101), both of which are considered as outdated instruments by the ILO Governing Body. Paid leave for seafarers is regulated by the Seafarers' Annual Leave with Pay Convention, 1976 (No. 146), and by Rule 2.4, Standard A2.4 and Guideline B2.4 of the MLC, 2006.

¹³ Under conditions to be determined by the national authorities, periods of incapacity for work resulting from sickness or injury must be counted as part of the period of service and cannot be deducted from the minimum annual holiday. In addition, public and customary holidays cannot be counted as part of the minimum annual holiday.

¹⁴ Convention No. 175 entered into force on 28 February 1998 and, to date, it has been ratified by 13 member States.

and freely chosen employment and it is necessary to ensure protection for part-time workers in the areas of access to employment, working conditions and social security. Within the meaning of Convention No. 175, the term “part-time worker” means an employed person whose normal hours of work are fewer than those of comparable full-time workers.

25. Convention No. 175 aims to protect part-time workers against the risk of discrimination that they might suffer in comparison to comparable full-time workers. Thus, the Convention calls for measures to be taken to ensure that part-time workers receive the same protection as that accorded to comparable full-time workers in respect of: the right to organize, the right to bargain collectively and the right to act as workers’ representatives; occupational safety and health; and discrimination in employment and occupation. Measures appropriate to national law and practice must also be taken to ensure that part-time workers do not, solely because they work part time, receive a basic wage which, calculated proportionately on an hourly, performance-related, or piece-rate basis, is lower than the basic wage of comparable full-time workers.
26. In addition, the Convention requires measures to be taken to ensure that part-time workers receive conditions equivalent to those of comparable full-time workers in the fields of: maternity protection; termination of employment; paid annual leave and paid public holidays; and sick leave. Finally, it requires the adaptation of statutory social security schemes which are based on occupational activity so that part-time workers enjoy conditions equivalent to those of comparable full-time workers; these conditions may be determined in proportion to hours of work, contributions or earnings, or through other methods consistent with national law and practice. Part-time workers whose hours of work or earnings are below specified thresholds may be excluded from the scope of statutory social security schemes, except in regard to employment injury benefits. The thresholds must, nonetheless, be sufficiently low as not to exclude an unduly large percentage of part-time workers, and they must be reviewed periodically. In addition, the most representative organizations of employers and workers must be consulted on the establishment, review and revision of those thresholds.
27. Convention No. 175 also addresses part-time work from the point of view of employment policy. It requires, in particular, the adoption of measures to facilitate access to productive and freely chosen part-time work which meets the needs of both employers and workers, provided that the protection described above is ensured. In employment policies, special attention must be paid to the needs and preferences of specific groups such as the unemployed, workers with family responsibilities, older workers, workers with disabilities and workers undergoing education or training.

Night work

28. In the early years of its existence, the ILO took the approach that night employment in industrial undertakings should be prohibited altogether for “vulnerable” categories of workers, that is to say women and children. This approach was reflected in the Night Work (Women) Convention, 1919 (No. 4), and the Night Work of Young Persons (Industry) Convention, 1919 (No. 6).¹⁵ Since the 1970s, however, a growing number of voices have argued that the gender-specific prohibition is contrary to the fundamental principle of

¹⁵ Standards with similar provisions include the Night Work of Women (Agriculture) Recommendation, 1921 (No. 13), the Night Work (Women) Convention (Revised), 1934 (No. 41), the Night Work of Young Persons (Non-Industrial Occupations) Convention, 1946 (No. 79), and the Night Work (Women) Convention (Revised), 1948 (No. 89), and its Protocol.

equality of opportunity and treatment for men and women in employment. After lengthy debate, the International Labour Conference adopted the Night Work Convention, 1990 (No. 171),¹⁶ which regulates night work for all workers, irrespective of sex, in all industries and occupations. Some specific provisions still concern female workers, but only those provisions relating to maternity protection.

29. Convention No. 171 sets out a series of measures that States parties must implement, progressively if necessary, in order to protect the health of night workers, assist them to meet their family and social responsibilities, provide opportunities for occupational advancement, and compensate them appropriately. These measures include a periodic health assessment and special arrangements in case of medically certified unfitness for night work; the introduction of alternatives to night work for a certain period during pregnancy and after childbirth and other protective measures for the female workers concerned; compensation in the form of working time, pay or similar benefits that recognize the nature of night work; and regular consultations with workers' representatives on work schedules and the forms of organization of night work that are best adapted to the establishment and its personnel, as well as on the occupational health measures and social services which are required.¹⁷

Current status of ILO standards on working time

30. The Working Party on Policy regarding the Revision of Standards – established by the Governing Body in 1995 – conducted an in-depth review of almost all ILO Conventions and Recommendations on working time, and the Governing Body took decisions on the status of these instruments on the basis of the Working Party's recommendations. Conventions Nos 171 and 175, having been adopted after 1985, fell outside the scope of the Working Party's mandate and were considered as fully up to date.
31. In November 1996, on the recommendation of the Working Party, the Governing Body decided to request the Committee of Experts to carry out a General Survey on Conventions Nos 1 and 30, which was submitted to the 2005 session of the Conference (ILO, 2005). In this General Survey, the Committee of Experts concluded that “to reflect the ‘human rights’ perspective in the international regulation of hours of work continues to be valid today” and that “every worker in the global economy should be entitled to a certain standard concerning maximum duration of her or his work as well as minimum duration of rest, and should be entitled to such protection regardless of where she or he happens to be born or to live” (paragraph 317).¹⁸ It pointed out that “the need for internationally accepted standards on hours of work has been further increased by the process of globalization, with its corresponding requirements to create and implement universal ‘rules of the game’ for a global marketplace” (paragraph 321). The Committee of Experts acknowledged, however, in light of reports received from governments and employers' and workers' organizations, that “Conventions Nos 1 and 30 do not fully reflect modern realities in the regulation of working time” (paragraph 322) and that “there are elements of

¹⁶ Convention No. 171 entered into force on 4 January 1995 and, to date, it has been ratified by 11 member States.

¹⁷ The Night Work Recommendation, 1990 (No. 178), which supplements Convention No. 171, recommends additional measures concerning working time, for instance, that the normal hours of work of night workers should generally be less on average than and, in any case, not exceed on average those of workers performing the same work to the same requirements by day in the branch of activity or the undertaking concerned.

¹⁸ It is interesting to note that the language used was gender inclusive.

the Conventions that are clearly outdated”. It also noted that “these two instruments are viewed in an increasing number of countries as prescribing overly rigid standards” and that “the ‘fixed’ working hours system adopted by both Conventions as a cornerstone for the regulation of working time conflicts with today’s demands for more flexibility” (paragraph 323).

- 32.** Based on these considerations, the Committee of Experts expressed the view that “it remains important and relevant to provide for minimum standards of working hours” but that “the changes that have taken place since these two instruments were adopted warrant their revision” (paragraph 328). Pointing out that it did not have the mandate to make concrete proposals in this respect, the Committee of Experts identified certain parameters that could be taken into account by the appropriate bodies of the ILO if and when a revision process was launched. It made reference to the possibility of adopting a single instrument revising both Conventions Nos 1 and 30 and covering working time as well as non-working time (in particular weekly rest and annual leave with pay) (paragraph 329). It also suggested that a number of elements be taken into account in any new instrument, in particular: providing effective protection for workers’ safety and health; allowing for a fair balance between work and family lives; ensuring that the new instrument does not result in a reduction of the level of protection currently afforded by existing instruments; providing for more flexible working-time arrangements, including regarding averaging hours over reasonable periods in exchange for reductions in average weekly hours of work; and ensuring consultations between employers and workers and their organizations on working time and permitting individual workers to exercise a degree of choice over their working hours, as well as allowing flexibility for employers (paragraph 332).
- 33.** The discussion of this General Survey by the Conference Committee on the Application of Standards gave rise to a lively debate on several issues: the present-day relevance of Conventions Nos 1 and 30; the need for a balance between flexibility and the protection of workers’ safety and health and family life; and the importance of the role of a regulatory framework and collective bargaining, and the role of the social partners.¹⁹
- 34.** Since the scope of the abovementioned General Survey was limited to Conventions Nos 1 and 30, the most recent review of Conventions Nos 14 and 106 took place in the context of the work of the Working Party on Policy regarding the Revision of Standards. In March 1997, the Governing Body concluded that these two Conventions were up to date and invited member States to ratify them.²⁰ In fact, in its 1984 General Survey of the reports relating to the Reduction of Hours of Work Recommendation (No. 116), the Weekly Rest (Industry) Convention (No. 14), the Weekly Rest (Commerce and Offices) Convention (No. 106) and Recommendation (No. 103), and the Holidays with Pay Convention (Revised) (No. 132) (ILO, 1984), the Committee of Experts concluded that weekly rest was certainly one of the best observed of workers’ rights and a principle which had often been accepted since time immemorial. It noted, however, that arranging weekly rest so as to conform to Convention No. 106 could be something of a problem, especially in such sectors as the hotel industry and the retail trade. Today, many comments made by the Committee of Experts still relate to derogations in force in the retail sector. The limited number of ratifications of this Convention compared to that of ratifications registered for Convention No. 14 could be explained by the more restrictive nature of its provisions, and in particular the strict conditions prescribed for the application of special weekly rest schemes.

¹⁹ International Labour Conference, 93rd Session, 2005, *Provisional Record* No. 22, Part One, paras 73–131.

²⁰ GB.268/LILS/5(Rev.1), paras 71 and 72.

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35. Convention No. 132 was also not examined in the 2005 General Survey. The Committee of Experts noted in its 1984 General Survey that annual paid leave had shown important developments in most countries in the previous years. This trend was particularly marked, in many countries, by an increase in the length of paid annual leave and a reduction in the minimum period of service required. The Committee of Experts was optimistic about the prospects for ratification of Convention No. 132 (ILO, 1984, paragraphs 306–308; 317). This Convention was the subject of intense discussions within the Working Party on Policy regarding the Revision of Standards. Based on these discussions, the Governing Body decided, in November 1996 and March 1997, to invite States parties to the earlier Conventions on annual leave with pay, i.e. Conventions Nos 52 and 101, to contemplate ratifying Convention No. 132. This invitation was accompanied by a request for information on possible obstacles to its ratification. Tripartite consensus has proved difficult to reach on the status of the Convention following the presentation by the Office of the outcome of these consultations in March 1998. Finally, after two additional discussions in March and November 2000, the Governing Body decided to maintain the status quo with regard to Convention No. 132, “it being understood that any subsequent development [would] be taken into account in due time”, which reserved the possibility of a future review if necessary.²¹

Conclusion

36. Regulation of hours of work and working-time arrangements is a fundamental issue for the ILO and its tripartite constituents because it lies at the heart of the employment relationship and because of its direct and crucial impact on the protection of the health and well-being of workers; the quest for balance between work and personal life, leading to conditions of equality of opportunity between men and women in employment; the protection of wages, including a fair remuneration for overtime; and employment policy and the way enterprises adapt themselves to changes in economic circumstances. ILO standards on working time, adopted throughout the history of the Organization, are of course a reflection of the underlying changes in human perceptions about workers’ rights and social protection. Some of these standards are indeed very old and can no longer be regarded as being fully up to date.
37. Notwithstanding, however, any reservations about the continued relevance of particular provisions of certain standards, a few key principles can certainly be identified as points for any discussion on the role of the ILO in the field of working time: (i) the need for daily, weekly and maybe annual limits on normal working hours; (ii) maintaining the exceptional nature of overtime, the limitation of the number of additional hours and the adoption of compensatory measures; (iii) the principle of a regular and uninterrupted weekly rest that allows workers to participate fully in family and social life; (iv) the right to paid annual leave, ensuring workers and their families a sufficient rest period, if possible uninterrupted, taken at the desired time and which workers cannot renounce in exchange for financial compensation; (v) the recognition of the atypical nature of night work and its potentially adverse impact on workers’ health, warranting special protection; (vi) the promotion of productive and freely chosen part-time work, with conditions equivalent to those of full-time employment, including maternity protection, thus ensuring equality of opportunity and treatment for the workers concerned; (vii) taking into account the needs of enterprises, especially as regards the introduction of more flexible forms of working-time arrangements; (viii) the recognition of the importance of collective bargaining and of the need for full and genuine consultations with the representative organizations of employers and workers on working-time regulation; and (ix) the need for an effective inspection

²¹ GB.279/LILS/3(Rev.1), para. 50. See also GB.279/LILS/WP/PRS/1/2.

system or other enforcement measures to prevent and punish any abusive practices. Full account should be taken of these parameters in any discussion of modern working-time arrangements, including any debates concerning the current status of ILO working-time standards and their possible revision.

B. Recent trends and developments regarding hours of work across the world

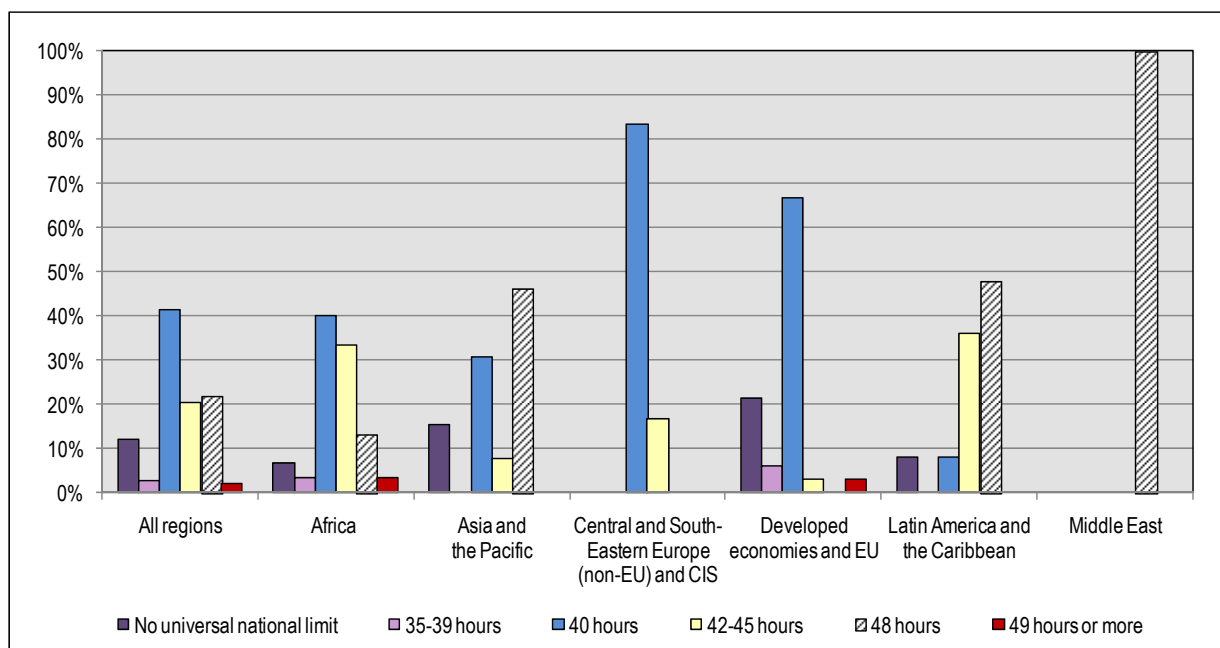
Working-time regulation: A global review

- 38.** The reduction of working hours was one of the original objectives of employment regulation. A number of instruments have been used to help implement this regulatory framework in countries, including, as previously discussed, international labour standards. National legislation is a second instrument of working-time regulation, and collective agreements are a third. Such agreements generate approaches that are later transferred to legislative measures. As collective agreements are considered legal documents in some countries, such as Denmark and Sweden, they themselves might act as a legislative measure that can influence working-time regulation in an industry, sector or occupational group.
- 39.** While there are a number of legal instruments to address working time, the emphasis of this report is on national legislation to regulate different aspects of working time. Since the inception of labour codes in the late nineteenth and early twentieth centuries in many countries, addressing working-time-related issues has occupied an important place in law. The following section will examine some key legal provisions in national working-time laws and provide information on global trends on how these issues are regulated.

Normal weekly working hours

- 40.** Weekly working-time limits are one of the most obvious measures for reducing the negative effects of excessive working hours. Globally, a large number of countries have reduced their statutory normal working hours from 48 hours to 40 hours in recent decades. As a result, 41 per cent of countries provide for a regular 40-hour workweek, as shown in figure 1. However, a norm exceeding 40 hours is still maintained by another 44 per cent of countries, of which more than half have a regulated 48-hour limit.
- 41.** A closer examination at the regional level indicates where and how the regulation of weekly working time has been accomplished. For example, in Africa, 40 per cent of countries have implemented a 40-hour limit, but nearly half have limits that exceed 40 hours (between 42 and 48-hour limits). In a similar fashion, in Latin America and the Caribbean, 48 per cent of countries have a 48-hour limit, while 36 per cent have limits of between 42 and 45-hour workweeks. In Asia and the Pacific, the 48-hour weekly working-time limit is used in a majority of countries (46 per cent), while most of the remaining countries (31 per cent) have implemented a 40-hour limit. By contrast, the highest incidence of countries with a 40-hour weekly limit can be found in countries in Central and South-Eastern Europe; 67 per cent of developed and European Union (EU) countries have likewise stipulated a statutory 40-hour workweek.

Figure 1. Weekly hours limits by region, 2009

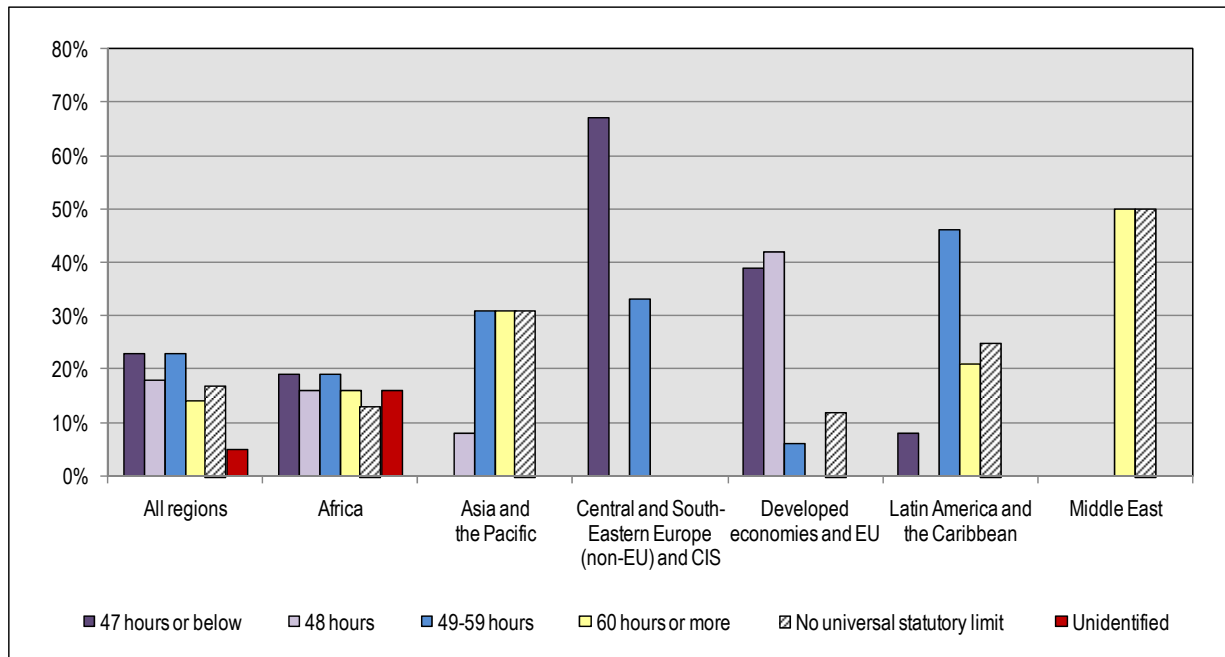


Source: ILO TRAVAIL Database of Conditions of Work and Employment Laws.

Overtime limits

- 42.** Another means of regulating excessively long working hours is by establishing upper limits on overtime hours. Overtime refers to all hours worked in excess of the normal hours, unless they are taken into account in fixing remuneration in accordance with custom, as stated in Recommendation No. 116. Legislative provisions to limit overtime can be formulated in the form of maximum weekly working hours (including overtime) or stipulated separately as maximum overtime hours allowed per day, week, month or year.
- 43.** Around the world, almost 80 per cent of countries have legislative provisions applying some kind of maximum limit on weekly working hours, including overtime. Most countries fall into one of two main groups: those that establish maximum weekly working hours at 48 hours or less (41 per cent of countries) and those that establish maximum working-time limits of 49 hours or more per week (37 per cent). A large proportion (14 per cent) of those permitting 49 or more hours allow for weekly working limits of 60 hours or more, with some countries permitting upwards of 72 working hours per week. In some countries (18 per cent), no statutory maximum weekly working hours are established or applied.
- 44.** Different regions display significant variations in respect of the prevailing maximum limit on working hours (see figure 2). In most developed and EU countries, this limit is approximately 48 hours per week. In contrast, in Asia and the Pacific, legal working-time standards either do not exist (31 per cent) or have exceptionally high limits of 60 hours a week or more (31 per cent).

Figure 2. Maximum weekly hours limits by region, 2009

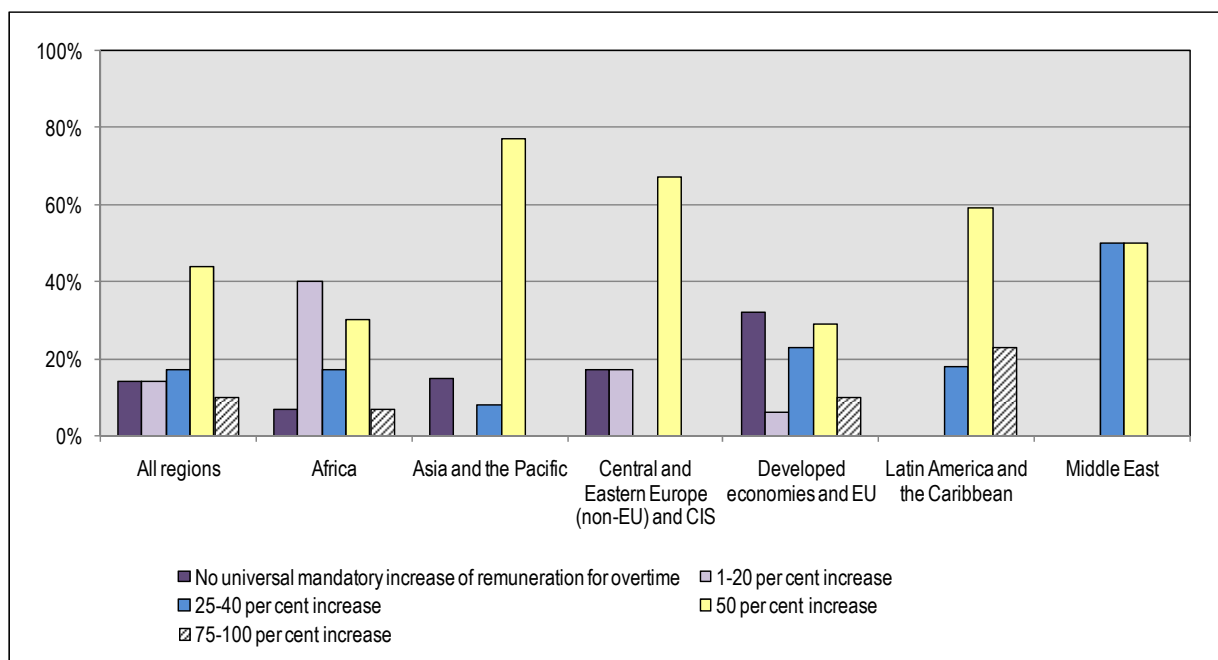


Source: ILO TRAVAIL Database of Conditions of Work and Employment Laws.

Overtime remuneration

- 45.** In the event that a worker is asked to work beyond the normal daily or weekly hours of work, overtime remuneration is considered a way of compensating them. Yet legal provisions on overtime remuneration, in addition to providing for higher compensation per hour, are also meant to function as a barrier to unhealthy and unsocial hours of work by reducing the incentives for an employer to request overtime. However, in practice, overtime payments in some countries constitute a regular element of wage packages that workers rely upon to ensure a certain standard of living (see the discussion of overtime in Part III).
- 46.** A vast majority of countries (71 per cent) have legislation that provides for at least a 25 per cent increase in remuneration for overtime hours; 44 per cent of countries have legislation that increases overtime remuneration by 50 per cent of the hourly wage; and 10 per cent have laws that extend overtime premiums by between 75 and 100 per cent of the hourly wage. By contrast, 14 per cent of countries have legal provisions that require overtime premiums of less than 20 per cent of the hourly wage and another 14 per cent of countries do not regulate overtime payments at all (see figure 3 for details on minimum overtime remuneration by region).

Figure 3. Minimum overtime remuneration by region, 2009



Source: ILO TRAVAIL Database of Conditions of Work and Employment Laws.

47. However, overtime payments are not the only way to compensate workers for overtime. Compensatory rest in lieu of time worked can also be used in conjunction with or in replacement of overtime pay. A number of countries around the world provide for compensatory rest but do not specify the exact amount that is legally available. In other countries, legislation provides that compensatory rest may be taken by mutual agreement or that is regulated by collective bargaining agreements.

48. Regionally, there is much more variation as to how overtime issues are addressed in law.

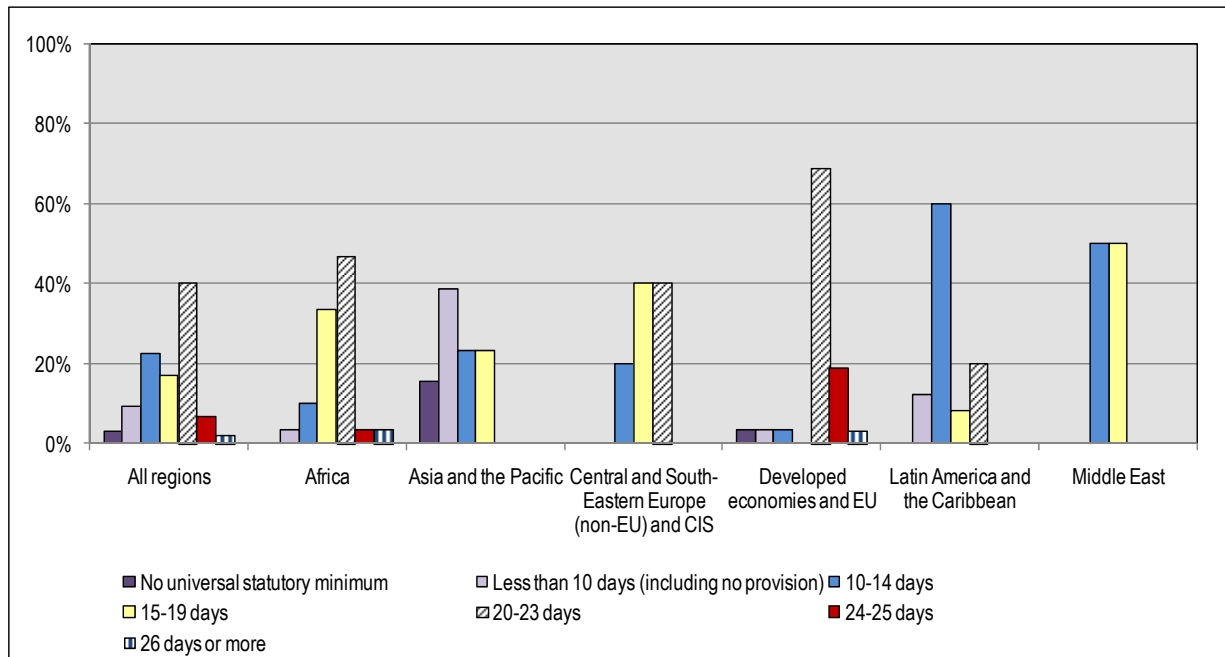
Paid annual leave

49. Paid annual leave is very important in the regulation of working time for two reasons: protecting the health and well-being of workers and helping them to be more productive; and limiting working time over the course of a year. It is the period during which workers have time away to rest and recuperate from the accumulated stresses and strains of the workplace. In recent years, many countries have revised their legislation on the duration of paid annual leave, often to increase the amount of time workers can take away from work.

50. Globally, almost all countries enshrine the right to a minimum period of paid annual leave in their legislation. Overall, 97 per cent of countries around the world have this form of legislation (the United States is a prominent exception). Roughly half (49 per cent) of all countries provide for 20 working days of paid annual leave or more.

51. As shown in figure 4, the highest standard of paid annual leave provisions can be found in developed economies and EU countries. By contrast, among countries in Asia and the Pacific and Latin America and the Caribbean, 57 per cent of countries do not have legal provisions requiring at least 15 working days of paid annual leave; roughly 38 per cent provide for fewer than ten days of annual leave.

Figure 4. Minimum annual leave by region, 2009



Source: ILO TRAVAIL Database of Conditions of Work and Employment Laws.

Regulation of working-time flexibility: Hours averaging and annualized hours

52. Over the last 20 years, flexible working-time arrangements have become increasingly popular with both employers and workers (although for different reasons – see the discussion in Part III) and, as a result, the standard workweek has become less of a workplace norm. While overtime schemes have been and continue to be among the most prominent arrangements for providing working-time flexibility, an alternative approach to extending operating hours to enable firms to react to changes in market demands for goods and services has been to engage in regulated hours averaging arrangements. Statutory hours averaging arrangements allow for variable daily or weekly working hours, while requiring that an average number of weekly hours are maintained over a period that is longer than the traditional working day or working week. These variations have to respect daily and/or weekly maximum legal thresholds, but so long as the maximum limits and weekly averages are respected, no overtime premium is payable for hours worked beyond the statutory normal hours. The so-called “annualization” of working hours, a term which is often used synonymously with hours averaging, may be thought of as a special case of “averaging”, in which the reference period is one year and/or the fixed total number of working hours is distributed over the year. Only when this total is exceeded do overtime premiums become payable. In addition, remuneration is generally not calculated on the basis of the actual hours worked per week, but is a fixed sum that corresponds to remuneration for the average working week or for a fixed amount of hours over the reference period.

53. In general, there are four key elements that comprise annualized hours or hours averaging arrangements in national laws and regulations. These elements are: a reference period (or adjustment period), over which the averaging is to be executed; a working-time measure, which refers to the working-time unit that has to be averaged over the reference period; the limitations, which are the maximum working hours in a single day or in a single week; and the conditions required for introducing such an arrangement, such as collective bargaining (see table 1).

Table 1. Statutory hours averaging schemes in selected countries

Country	Reference period	Working-time measure	Limitations	Conditions
Germany	Up to six months: collective agreements can specify a longer period	Normal working day (eight hours)	Ten hours per day, 60 hours per week	Consent of the works council; collective agreement required for an increase in the reference period
Mongolia	Unspecified period	Normal working day/week (eight hours per day, 40 hours per week)	12 hours per day; 60 hours per week (derived from the minimum 12 hours daily and days weekly rest)	Hours averaging is allowed if the nature of the work or the manufacturing process make it impossible to follow normal working conditions
Netherlands	16 weeks; up to 12 months by collective agreement	Maximum working hours (48 hours)	12 hours per day; 60 hours per week, 55 hours on average in each four-week period	Collective agreements can extend the reference period to 12 months ¹
Singapore	One week (for averaging of daily working time); two weeks (for averaging of weekly working time)	Normal working day/week (eight hours per day, 44 hours per week)	Nine hours per day (for averaging of daily working time); 48 hours per week (for averaging of weekly working time)	Agreement between the individual workers and employer required for introduction of scheme
United Republic of Tanzania (Mainland)	Up to one year	Normal working week (45 hours)	12 hours per day	Collective agreement required for introduction

¹ Collective agreements may allow that 55 hours over a four-week period are exceeded, provided that 60 hours per week and 48 hours on average over a 16-week period are respected. Collective agreements may establish that 48 hours per week are averaged over a longer period than 16 weeks (up to 52 weeks) if unforeseen circumstances or the nature of the work causes fluctuations in work volume, provided that this cannot be reasonably prevented by another work organization or if the employee mainly supervises other employees on behalf of the employer.

Source: ILO TRAVAIL Database of Conditions of Work and Employment Laws.

Collective bargaining: Adapting working-time rules to sectoral and enterprise requirements

- 54.** Despite the obvious importance of working-time legislation, national laws can, at best, provide a framework for regulating working time, in particular for ensuring that certain minimum standards are established for key parameters such as those discussed above (e.g. normal hours, overtime limits, paid annual leave). Within the frameworks established by national laws, there is often substantial space within which specific working-time arrangements can be negotiated by workers and employers. Indeed, working time (along with wages and other working conditions) is one of the oldest and most important areas in which collective bargaining occurs at both the sectoral (industry) and inter-sectoral levels, and at the establishment or enterprise level as well. And, of course, the ILO Declaration on Social Justice for a Fair Globalization (2008) reaffirms the importance of social dialogue and collective bargaining, and places them at the centre of efforts to promote a fair globalization with decent work for all.
- 55.** Collective bargaining is a vast domain in and of itself, and recent developments regarding collective bargaining in the context of globalization are discussed at length in a forthcoming ILO volume (Hayter, forthcoming). While the treatment in this report cannot be nearly as expansive, it should be emphasized that the extent to which collective bargaining is an appropriate method for determining hours of work and work schedules depends to an important degree on the level of development of collective bargaining

institutions in each country.²² In countries with well-developed systems of collective bargaining and strong social partners, such as a number of European countries, collective bargaining at all levels can play a critical role in complementing existing statutory standards. In this context: “Collective bargaining can be an important tool for balancing employer interests for flexible work practices with worker interests for worker-oriented forms of flexibility. The *process* of collective bargaining enables employers and trade unions to arrive at creative and innovative agreements that balance these respective interests.” (Hayter, forthcoming, page 421.)

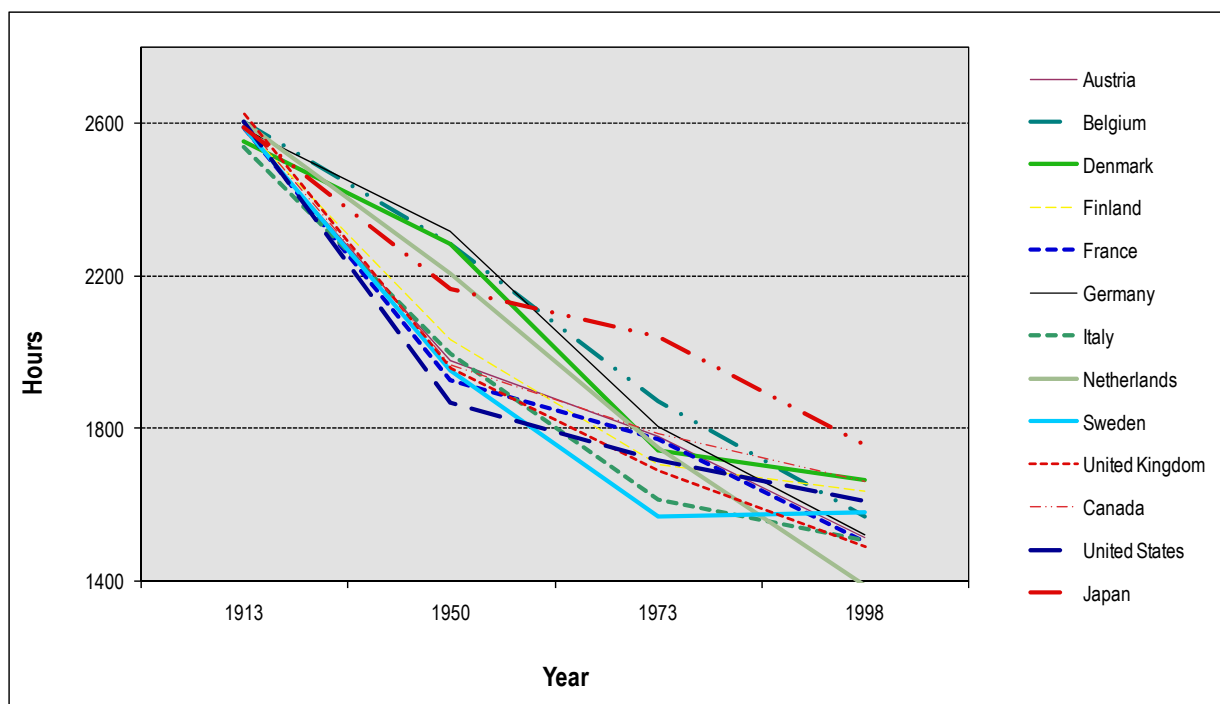
56. Two examples of such innovative collective agreements regarding working-time (time saving) accounts in Germany are discussed in Part III of this report. Social dialogue and collective bargaining at all levels also played a critical role in developing working-time adjustments in response to the global jobs crisis, as is discussed in Part IV.
57. However, in countries in which collective bargaining institutions are weak (e.g. low levels of collective bargaining coverage), such as many developing countries, the role that collective bargaining can play appears to be more limited. For example, a case study in the Republic of Korea found that revisions to working-time laws introduced in the country in an effort to provide “space” for innovative enterprise-level agreements instead resulted in a growing “working-time divide” between unionized and non-unionized establishments (see Lee and McCann, forthcoming). The authors argue that in such a context it is essential to “scale up” social dialogue regarding working time to the national level. An example of such national-level negotiation on flexible work schedules in Singapore is presented in Part III of this report.

Review of statistical indicators regarding hours of work

58. The evolution of hours of work has followed a downward trend since the beginning of the Industrial Revolution, and this pattern continued over much of the twentieth century across the industrialized world. From a base of between 2,500 and 3,000 hours per worker per year at the beginning of the twentieth century, on average, working hours have gradually declined in the industrialized countries. By the end of the twentieth century, average annual hours of work were below 2,000 per worker in nearly all developed countries, and in many such countries (e.g. the Netherlands) average annual hours were substantially lower, closer to 1,500 hours per year. Figure 5 illustrates this phenomenon.

²² Women’s participation in collective bargaining and as leaders of workers’ organizations has been low, until recently. One reason was that countries excluded the so-called “essential” sectors (public service, education, and health and social services), where large numbers of women have entered the labour force, from the right to organize (and hence collective bargaining). Another reason was that sectors with mostly female workers (agriculture, housework, domestic work and the informal economy) were more difficult to organize for practical reasons. Nevertheless, much progress has been achieved in those sectors in many member States.

Figure 5. Annual hours worked per person employed (total employment)



Source: Maddison 2001, p. 347.

Average hours of work

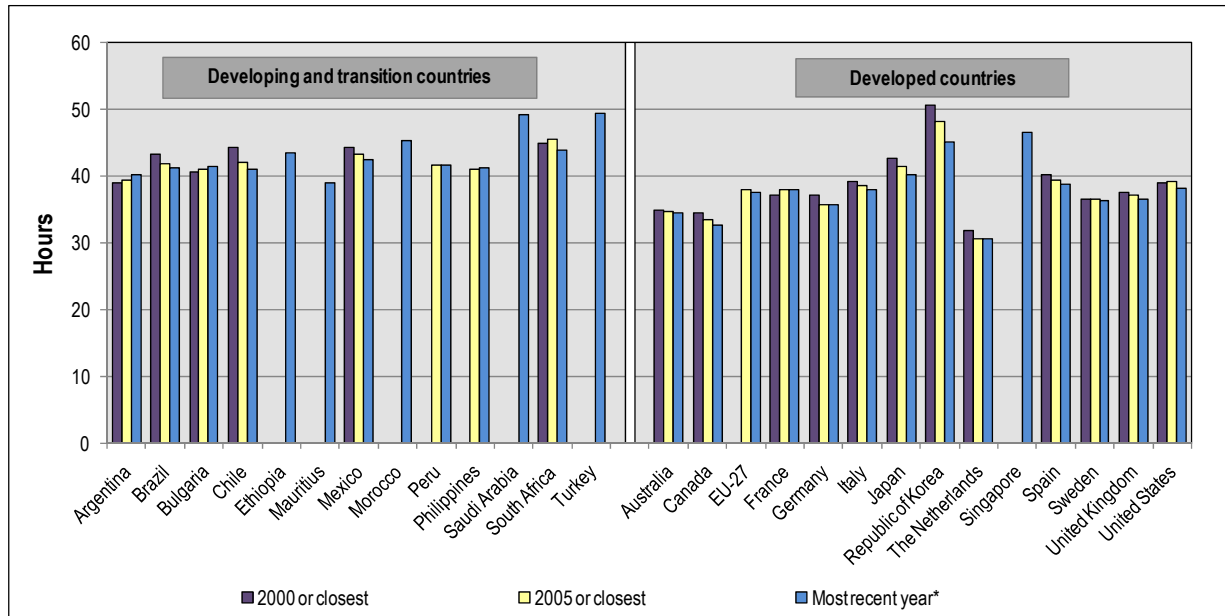
59. The remainder of this subsection illustrates working-time trends since the beginning of the twenty-first century, starting with average hours. Average hours can be considered over almost any time period, but the most common reference periods are the week and the year. The weekly reference period is particularly useful, since the vast majority of work schedules operate on a weekly basis. However, statistics on annual hours are also useful, particularly for obtaining a view of hours of work that includes both hours per week and also the number of weeks worked per year. The latter is largely determined by the paid annual leave and public holidays in each country.

60. Figure 6 presents data on average weekly hours of work (usual hours) in developed, developing and transition countries during the first decade of the twenty-first century.²³ This figure indicates that average weekly hours slowly declined from rather moderate levels in most of the developed countries during the decade (even prior to the onset of the crisis), with the exception of Australia and France. However, average weekly hours in the Republic of Korea (45.1) and Singapore (46.6) remain relatively high. Likewise, several of the developing and transition countries presented in this figure show a modest decline in average weekly hours of work over the decade, although from a higher baseline. The average weekly hours in Saudi Arabia (49.2) and Turkey (49.4) remain in the excessive hours range (see the discussion on excessively long hours of work later in this part). However, there are some obvious exceptions, such as Argentina, where average hours

²³ The working hours data presented in this figure and the figures that follow include the G20 countries and selected additional countries covering all regions of the world (based on data available and collected from the websites of the national statistical offices of these countries). Among the G20 countries, nationally representative data on average weekly hours of work is not available for India, Indonesia, the People's Republic of China and the Russian Federation.

increased following the economic crisis of 2002–03, and Bulgaria, where average weekly hours increased modestly over the period.²⁴

Figure 6. Average weekly hours, 2000 to present



* Whenever possible, data for the years 2009 or 2010 have been used; for Australia, Brazil, Mauritius, Morocco and Peru, only data for 2008 were available.

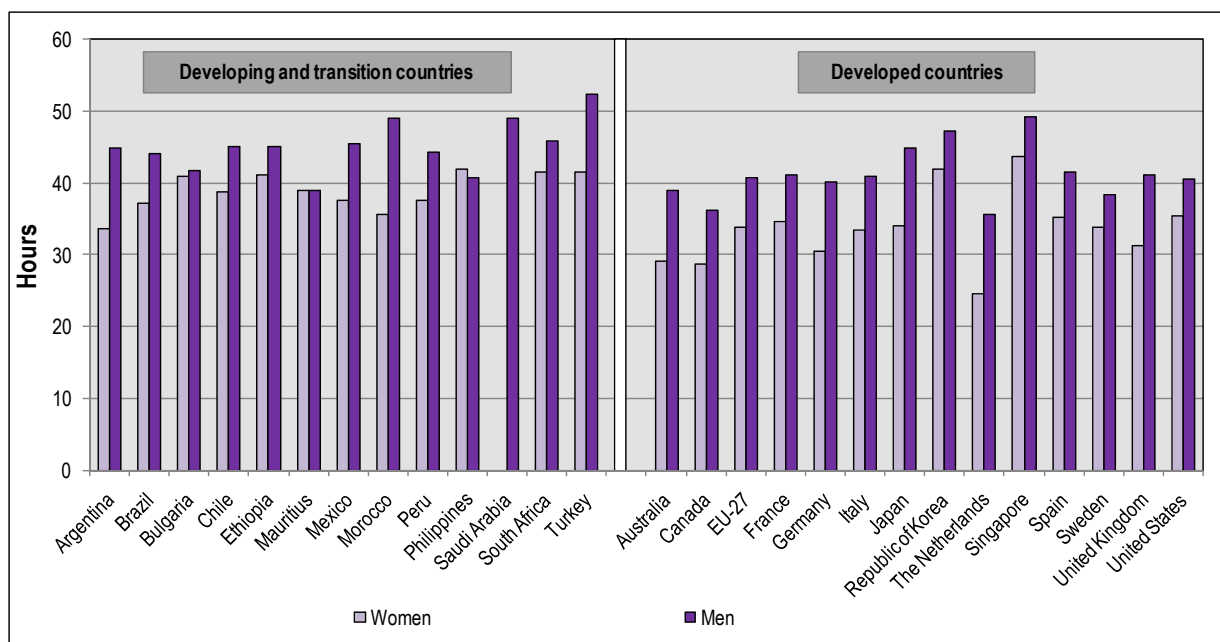
Source: Eurostat, National Statistical Offices.

61. Figure 7 presents the same data on average weekly hours of work (usual hours), disaggregated by sex for the most recent year for which data is available. This data shows how average weekly hours of work differ by sex, and the pattern is crystal clear: on average, men work more hours in paid labour than women in all the countries shown, with the sole exception of the Philippines. However, it should be noted that, when data on hours spent in both paid and unpaid work²⁵ are available and are included in the calculation of working hours, women’s total hours of work typically exceed men’s total hours of work (see e.g. Riedmann et al., 2006). This is why more countries are beginning to collect data on time use of women and men (see the box below).

²⁴ It should be noted that in a number of these countries, comparable data is available for the most recent year only (2008 or 2009). This is the case for Ethiopia, Mauritius, Morocco, Saudi Arabia, Singapore and Turkey.

²⁵ The terms “unpaid work”, “care work”, and “unpaid care work” are often used interchangeably, which can lead to confusion when analysing gender inequalities in employment, including working time. While this report focuses primarily on paid work, it is important to understand that unpaid work – which is primarily performed by women – includes meal preparation, shopping, laundry, cleaning, activities for family consumption, and the unpaid portion of care work (Razavi, 2007, p. 6).

Figure 7. Average weekly hours by sex, most recent year



* Whenever possible, data for the years 2009 or 2010 have been used; for Australia, Brazil, Mauritius, Morocco and Peru, only data for 2008 were available.

Source: Eurostat, National Statistical Offices.

The 2009 pilot time use survey in Brazil

Time use surveys are one of the instruments available for investigating how the use of time differs between the sexes, between age groups or between individuals from different social backgrounds. This kind of survey provides information on the range of activities an individual is engaged in during a specified time period, usually 24 hours. Time use survey data are especially important for the analysis of gender-related issues regarding hours of work. For example, they provide information on the extent of the segregation of paid work by gender, the lack of equal opportunities between the sexes, and differences in the amount of unpaid work performed by women and men.

Time use surveys are carried out on a regular basis in an increasing number of countries all over the world. For example, the Brazilian national statistical office, the *Instituto Brasileiro de Geografia e Estatística* (IBGE), conducted a pilot survey on time use in 2009 and is planning to incorporate the topic of time use into its regular schedule of household surveys. The pilot was part of a bigger effort to test an integrated system of household surveys that includes all of the household surveys conducted by the IBGE.

The Brazilian time use survey sample included about 11,000 households from six different states in Brazil. In each household, one person aged 10 or over was selected to report the activities carried out by them during a specific day of the week by filling in a paper diary. A face-to-face interview using a personal digital assistant was conducted afterwards as well. One of the innovative elements of the personal digital assistant was a tool that made it easier to find and select the activities reported in a list of options, while also allowing the interviewers to code the activities during the interview. The purpose of this procedure was to facilitate the compilation of the data after its collection. The pilot survey was developed by the IBGE with the support of the Brazilian Committee on Gender Studies and Time Use, which is composed of members of the Government and representatives of international organizations, including the ILO.

Source: Cavalcanti, Hany, Paulo, 2010a, p. 1; Cavalcanti, Hany, Paulo, 2010b, p. 1.

62. Average weekly hours of work also vary by industry and occupation. Average weekly hours are typically longer in services than in manufacturing; hours are the longest in the following major service industry groups (based on the International Standard Industrial Classification of All Economic Activities (ISIC-Rev. 3)): wholesale and retail trade; hotels and restaurants; and transport, storage and communications (Lee, McCann, and Messenger, 2007, pages 89–96). Average weekly hours are relatively short in the education subsector

and also in the industry group that includes public administration, defence and compulsory social security (ibid.). Recent data on average weekly hours by major industry group in developing and transition countries and developed countries are presented in tables 2 and 3. These tables show (with a caveat owing to a change in ISIC categories) patterns similar to those described above in terms of working hours by industry in developing and transition countries, such as generally longer weekly hours in transportation and storage, accommodation and food service activities, wholesale and retail trade and, in some cases (e.g. Argentina, Chile and Turkey), in mining and quarrying. The industries with the shortest weekly hours are, once again, public administration and defence and education.

- 63.** However, the developed countries, in addition to their generally shorter hours, present a quite different picture in terms of average weekly hours by major industry group. First, unlike in many developing countries, weekly hours in the transportation and storage industry are not especially long and weekly hours in accommodation (hotels and similar establishments) and food service activities and the wholesale and retail trade are actually quite short (Singapore is a notable exception). This is most likely because of the extensive reliance on part-time workers in these industries in many developed countries (see e.g. Riedmann et al., 2010). The only major industry groups in the developed countries shown in table 3 in which average weekly hours appear to be relatively long are agriculture, forestry, fishing, mining and quarrying (in particular in the United Kingdom and the United States). The shortest weekly hours among the major industry groups are once again in public sector activities, such as public administration and defence, education, and human health and social work activities.²⁶ The category “activities of households as employers”, which mainly includes domestic workers, has the shortest average weekly hours among all sectors in developed countries – fewer than 30 hours per week – while it has quite long average hours in some developing and transition countries (e.g. Ethiopia, Philippines and Saudi Arabia).
- 64.** In respect of average weekly hours by major occupational group (based on the International Standard Classification of Occupations ISCO-88) in developed, developing and transition countries, table 4 shows that legislators, senior officials and managers tend to work the longest weekly hours, which is perhaps not surprising given that these types of positions tend to be exempt from the coverage of working-time laws in many countries. Service, shop and market sales workers and plant and machine operators and assemblers also tend to work long hours, but only in developing countries (and Singapore). Technicians and associate professionals, clerks and workers in elementary occupations tend to have relatively short weekly hours in most countries, with a few exceptions (e.g. Turkey).

²⁶ Although the health-care professions are well known for their long (and often non-standard) hours of work, human health and social work activities is not limited to these occupations, but rather is a broad industry group encompassing many different occupations.

Table 2. Average weekly hours in developing and transition countries by industry, most recent year (ISIC Rev. 4, unless otherwise stated)

	Argentina*	Brazil*	Bulgaria	Chile*	Ethiopia*	Mauritius*	Mexico**	Philippines*	Saudi Arabia*	South Africa*	Turkey
Agriculture, forestry and fishing (A)	39.7	41.9	43.6	42.7	32.6	–	38.1	30.8	52	46.5	42.7
Mining and quarrying (B)	57.6	45.5	40.1	49.4	41.8	32		39.7	45.7	45.8	52.9
Manufacturing (C)	43.8	41.8	41.1	43.3	39.2	43		43.4	53.9	43.6	51.9
Electricity, gas, steam and air conditioning supply (D)	43.4	–	40.1	46.1	43.8	39	44.1	44.3	45.2	43.5	44.9
Water supply; sewerage, waste management and remediation activities (E)	–	–	39.9	–	–	–		–	–	–	50.2
Construction (F)	42.2	43.6	42.5	43.9	41.9	38		43.0	54.2	43.3	53.2
Wholesale and retail trade; repair of motor vehicles and motorcycles (G)	46.7	44.1	42.9	42.2	45.9	44		49.9	55.7	48.2	57.5
Transportation and storage (H)	51.7	47.4	41.7	48.9	52.9	42		49.6	47.6	50.7	54.1
Accommodation and food service activities (I)	45.7	46.3	43.1	43.7	50	43		48.9	62	–	61.7
Information and communication (J)	–	–	39.9	–	–	–		–	–	–	48.7
Financial and insurance activities (K)	40.7	–	40.0	43.7	41.6	38		42.6	44.1	45.6	44.8
Real estate activities (L)	40.9	–	40.2	41.7	43.6	45		47.3	50	–	55.5
Professional, scientific and technical activities (M)	–	–	40.3	–	–	–		–	–	–	49.2
Administrative and support service activities (N)	–	–	40.6	–	–	–	42.8	–	–	–	49.5
Public administration and defence (O)	37.7	39	39.9	45.3	43.3	38		38.5	39.1	–	43.7
Education (P)	26.6	33	39.0	38.5	36.1	27		39.1	34.4	–	38.0
Human health and social work activities (Q)	37.9	38.8	40.2	43.4	43.6	41		42.2	43.4	–	45.2
Arts, entertainment and recreation (R)	–	–	39.2	–	–	–		–	–	–	54.0
Other service activities (S)	36.6	–	40.7	36.3	41.2	39		36.6	51	–	54.9
Activities of households as employers (T)	25.2	–	–	36.1	57.9	26		53.2	63.7	34.4	33.0
Activities of extraterritorial organizations and bodies (U)	39	38.3	–	40.1	46	38		44.1	45.3	–	42.2

Whenever possible, data for the years 2009 or 2010 have been used; for Australia, only data for 2008 were available.

* (Modified) ISIC Rev. 3 or other used. ** For Mexico, figures are averages covering the following industry categories: A–C; D–M; and N–U.

Source: Eurostat, National Statistical Offices.

Table 3. Average weekly hours in developed countries by industry, most recent year (ISIC Rev. 4, unless otherwise stated)

	Australia*	EU-27	France	Germany	Italy	Japan	Netherlands	Singapore	Spain	Sweden	United Kingdom	United States
Agriculture, forestry and fishing (A)	42.2	41.9	48.9	42.6	43.1	37.4	37.0	–	44.9	41.0	48.9	–
Mining and quarrying (B)	44.4	41.6	40.6	39.7	41.4	45.2	38.7	–	41.7	38.8	49.4	49.4
Manufacturing (C)	37.7	39.5	39.2	37.8	40.1	42	35.1	46.9	40.6	38.2	40.6	41.8
Electricity, gas, steam and air conditioning supply (D)	36.8	39.5	38.8	38.6	39.6	41.2	36.1	–	40.1	38.1	39.9	–
Water supply; sewerage, waste management and remediation activities (E)	–	39.1	37.6	38.5	37.6	–	36.9	–	38.8	38.8	41.7	–
Construction (F)	38.3	41.3	40.5	39.8	40.7	44.2	38.6	49	41.5	40.0	41.9	39.1
Wholesale and retail trade; repair of motor vehicles and motorcycles (G)	32.5	37.6	38.7	34.2	40.4	39.9	27.8	46.7	40.1	35.5	33.2	36.9
Transportation and storage (H)	38.1	40.3	39.2	38.4	40.3	45.5	32.3	50.1	41.3	37.3	41.4	–
Accommodation and food service activities (I)	28.6	37.6	41.2	33.5	39.7	36.9	23.7	47.3	41.3	33.2	31.0	–
Information and communication (J)	–	38.9	40.5	36.1	39.5	44.5	34.1	46.1	39.8	37.9	40.5	–
Financial and insurance activities (K)	36.2	38.7	39.2	37.7	39.1	41.4	33.3	47.3	39.8	36.9	38.8	40.1
Real estate activities (L)	35.4	36.8	38.7	34.3	38.2	37.5	31.4	44.6	38.5	35.4	35.2	–
Professional, scientific and technical activities (M)	–	38.7	40.8	37.2	39.1	41.7	33.4	46	39.8	37.2	38.5	–
Administrative and support service activities (N)	–	34.6	35.1	32.3	33.2	–	28.9	46.5	34.9	35.2	35.5	–
Public administration and defence (O)	34.1	37.5	37.2	37.1	36.6	42.3	33.8	44.2	36.8	37.2	37.6	40.4
Education (P)	32.4	32.8	34.1	32.2	27.3	37.8	28.9		32.7	36.3	33.1	33.2
Human health and social work activities (Q)	30.4	34.3	35.9	32.8	34.9	37.2	25.2	44.3	36.1	33.6	33.7	
Arts, entertainment and recreation (R)	–	33.7	34.6	33.0	34.2	–	26.6	43.8	34.8	31.5	31.7	–
Other service activities (S)	31.6	35.1	35.5	31.8	36.2	37.1	27.9	43.6	38.5	34.3	33.9	36.2
Activities of households as employers (T)	19.7	27.0	23.8	15.2	28.5	–	9.9	–	28.8	–	28.1	–
Activities of extraterritorial organizations and bodies (U)	–	39.7	39.7	37.9	37.4	–	–	–	–	–	42.7	–

Whenever possible, data for the years 2009 or 2010 have been used; for Australia, only data for 2008 were available. For the US, data is for wage and salary workers only. * (Modified) ISIC Rev. 3 or other used.

Source: Eurostat, National Statistical Offices.

Table 4. Average weekly hours by occupation, most recent year (ISCO 88 or comparable)

	Legislators, senior officials and managers (1)	Professionals (2)	Technicians and associate professionals (3)	Clerks (4)	Service workers and shop and market sales workers (5)	Skilled agricultural and fishery workers (6)	Craft and related trade workers (7)	Plant and machine operators and assemblers (8)	Elementary occupations (9)	Armed forces (0)
Developing and transition countries										
Brazil	46.3	35.7	38.4	40.5	40.1	41.7	43.9	45.6	45.2	44.3
Bulgaria	42.7	40.0	39.9	40.7	42.5	44.5	41.6	41.6	41.0	40.0
Chile	48.7	40.8	43.0	43.2	44.4	40.6	41.5	49.5	39.4	–
Ethiopia	44	39.4	39.9	42.3	47.7	32.6	38.4	51.3	46.6	–
Mauritius	43.9	35.1	37.3	39.3	47.1	35.1	41.7	45.6	38.2	–
Philippines	51.4	40.7	37.7	44.4	46.9	32.0	41.8	49.6	37.8	–
Saudi Arabia	44	42.6	38.6	42.1	–	52.2	–	–	–	–
South Africa	46.6	41.9	40.5	42.4	49.6*	44.6	44	48.4	44.3	–
Turkey	58.1	40.9	47.2	48.7	56.2	41.3	52.7	54.1	48.6	–
Developed countries										
EU-27	44.9	37.9	37.0	34.5	34.2	42.0	40.6	40.4	32.4	41.3
France	47.3	40.1	37.2	34.2	35.2	46.9	40.0	38.2	30.4	45.1
Germany	45.3	38.7	35.7	32.8	30.3	42.8	39.2	38.7	26.6	42.0
Italy	46.6	35.3	36.9	35.7	36.1	44.9	40.1	40.3	34.1	38.2
Netherlands	39.8	32.9	30.9	26.5	23.1	28.5	38.2	35.8	20.4	38.1
Singapore**	49	47.2	44.5	43.4	47.2	–	48.3	51.6	41.7	–
Spain	47.2	37.1	38.3	36.6	37.5	47.8	41.2	41.6	33.9	39.0
Sweden	41.7	38.0	36.6	33.7	32.4	41.3	39.7	38.5	30.4	41.6
United Kingdom	43.3	39.6	36.6	31.9	28.4	44.8	42.2	41.5	32.6	45.7

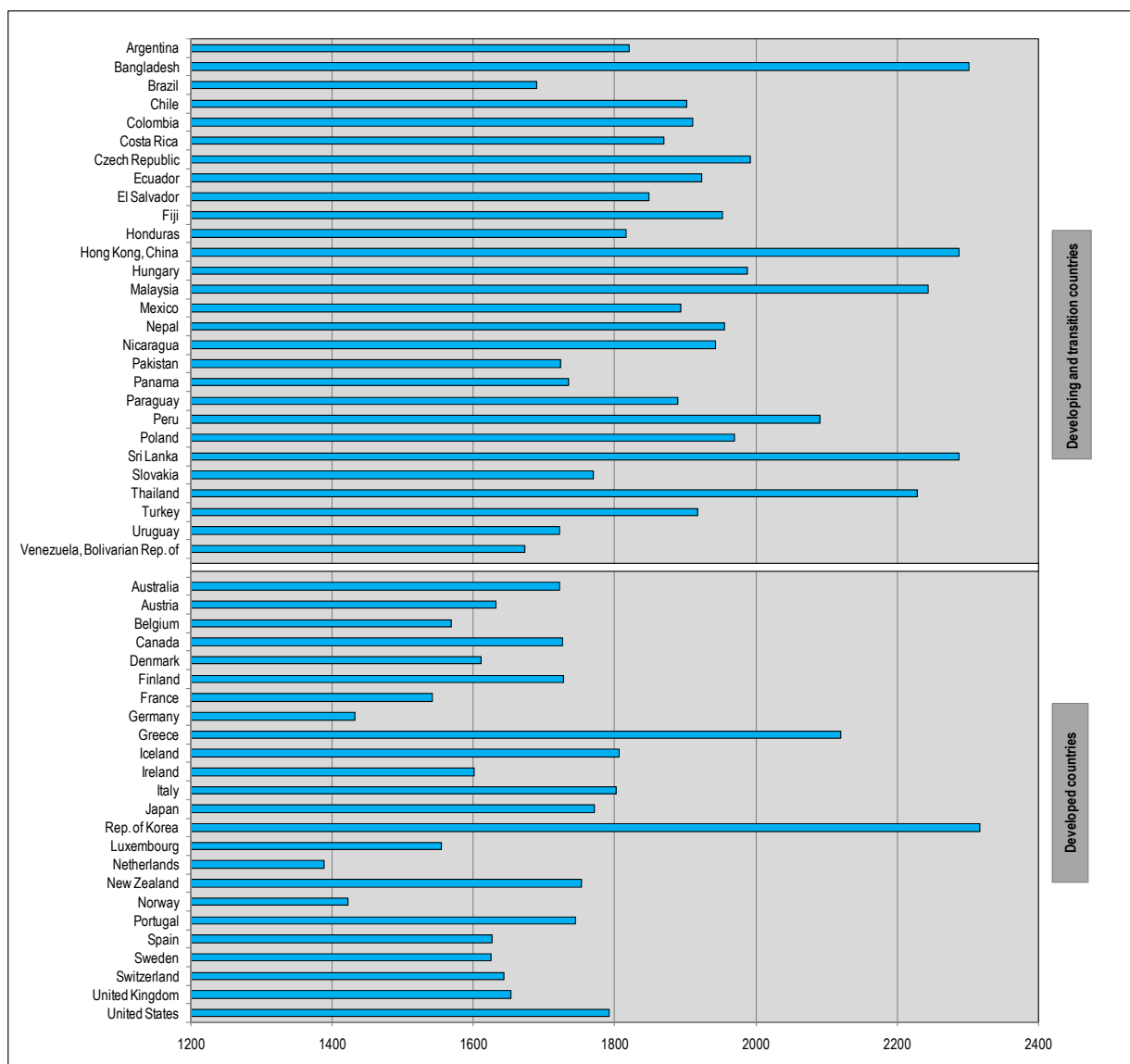
Whenever possible, data for the years 2009 or 2010 have been used; for Brazil only data for 2008, for Mauritius only data for 2007 were available. * Excluding domestic workers. ** Excluding working proprietors.

Source: Eurostat, National Statistical Offices.

65. While data on average weekly working time provides a reasonably accurate picture of a typical working week, annual working-time data provides a better overall picture of total hours worked, when the number of weeks worked per year is also taken into consideration. In other words, annual working-time data picks up differences in working hours arising from differences in paid annual leave and public holidays that weekly working-time data does not. For example, comparing weekly working hours in the EU – especially countries in Western Europe, such as France, Germany and the Netherlands – with those in Canada and the United States shows that weekly hours in Europe are slightly lower than in Canada and the United States, but not markedly so. However, comparing the differences in annual hours between Western Europe and Canada and the United States shows that Canadian and, in particular, American workers are actually working much longer hours (roughly 300 hours a year more) than their counterparts in many Western European countries. This difference is mainly because of the higher number of weeks of paid annual leave available to European workers: a minimum of four weeks per year under the EU Working Time Directive, but usually five or six weeks, compared to two or three weeks in practice in Canada and the United States²⁷ (see the previous section on working-time regulation). Based on the data on average annual hours per person shown in figure 8, the overall pattern is clear: people work longer annual hours in developing and transition countries than in developed ones.

²⁷ United States law does not provide for any minimum entitlement to paid annual leave.

Figure 8. Annual hours worked per person, most recent year



Source: ILO 2009d.

Distribution of weekly hours of work: The importance of standardized hour bands

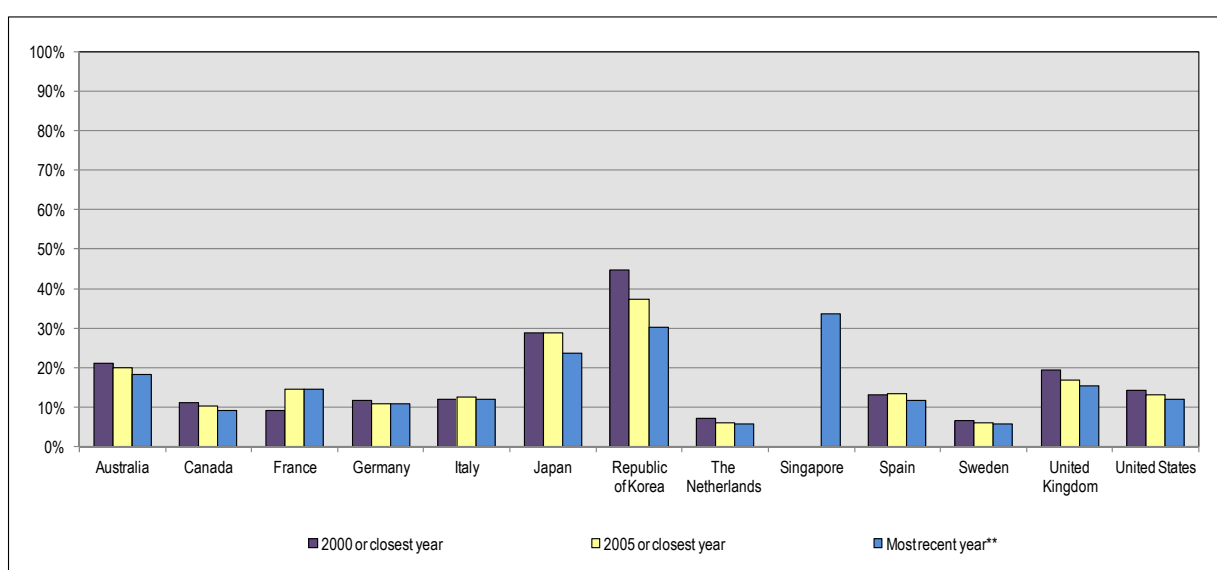
66. To the extent that the distribution of hours worked is reasonably tightly clustered around the average (mean), average hours can provide a reasonably good indicator of working hours in a country or an industry. However, when there is a diversification in the distribution of working hours – especially when there are substantial portions of the workforce who are working very long and/or short (part-time) hours – average hours of work are misleading. In such cases, the best measure to use is a distribution of weekly hours of work for employed persons using standardized hour bands. Distributional data provide an important tool for digging beneath the surface of the trends in average hours to find out what factors are driving those trends. For the purposes of the *Working time around the world* study (Lee, McCann, and Messenger, 2007), data were collected from national statistical offices during an ILO data collection in 2005–06. However, such data on the distribution of hours of work is not routinely collected for the ILO database on labour

statistics (LABORSTA); therefore, it was necessary to collect and compile more recent data for this report.²⁸

Excessively long hours of work

67. Figures 9 and 10 show the percentage of workers working excessively long hours in developed, developing and transition countries. Excessive hours of work are defined as usual hours of more than 48 per week, as was recommended by the Tripartite Meeting of Experts on the Measurement of Decent Work (ILO, 2008, page 8). It should be noted that regularly working more than 48 hours per week is associated with a range of safety and health risks, as well as increased reported work–family interference, as will be discussed later in this report. The data in figure 9 shows that excessive hours have been steadily decreasing in nearly all the developed countries included during the first decade of the twenty-first century, even prior to the crisis, which undoubtedly accounted for some of the reduction in long hours in 2009–10.

Figure 9. Percentage of workers working long hours* in developed countries, 2000 to present



* Whenever possible, working more than 48 hours per week was considered as long hours; this is in line with the recommendations of the Tripartite Meeting of Experts on the Measurement of Decent Work. Due to the availability of data, for the Republic of Korea the cutoff used is 53 hours, for Australia, Canada, Singapore and the United States 49 hours. For the same reason, information for the United States is for dependent employed workers only.

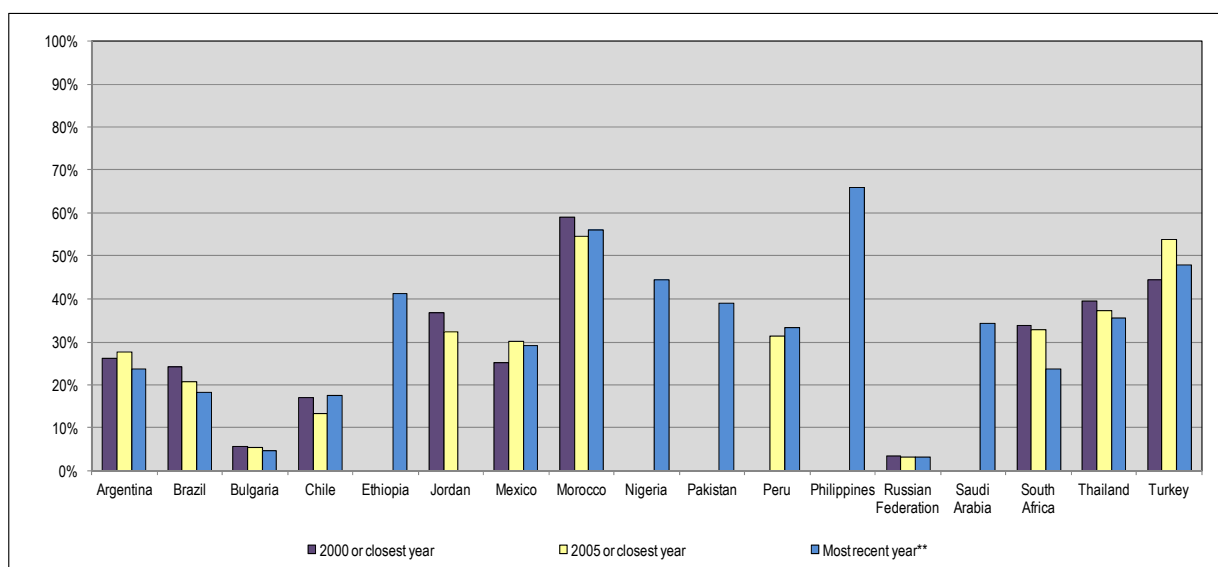
** 2010 or 2009. The global economic crisis might have had an impact on the 2009 data.

Source: Eurostat, National Statistical Offices, OECD.

68. By contrast, the data on developing and transition countries in figure 10 presents a much more mixed picture, with some countries, such as Argentina, Brazil, South Africa and Thailand, exhibiting a clear downward trend in excessive hours, while in other countries, such as Chile, Morocco and Turkey, long hours appear to have remained relatively unchanged. Moreover, the proportion of workers working excessive hours is substantially higher in developing countries (e.g. Ethiopia, Jordan, Morocco, Thailand and Turkey) than in nearly all developed countries, with the notable exceptions of the Republic of Korea and Singapore. In contrast, excessive hours (at least in the main job) barely exist in many transition economies, such as Bulgaria and the Russian Federation.

²⁸ More recent data on the distribution of working hours by hour bands for this report was obtained from national statistical office websites, Eurostat and the Organisation for Economic Co-operation and Development (OECD) for the G20 countries and selected additional countries covering all regions of the world.

Figure 10. Percentage of workers working long hours* in developing and transition countries, 2000 to present



* Whenever possible, working more than 48 hours per week was considered as long hours; this is in line with the recommendations of the Tripartite Meeting of Experts on the Measurement of Decent Work. Due to the availability of data, for Saudi Arabia the cutoff used is 54, for the Russian Federation 51, for Jordan 50, for Chile 49 (in 2010: 50), for Mexico 49 (in 2000), for Thailand and Turkey 49, for Morocco and Nigeria 47, for the Philippines 40.

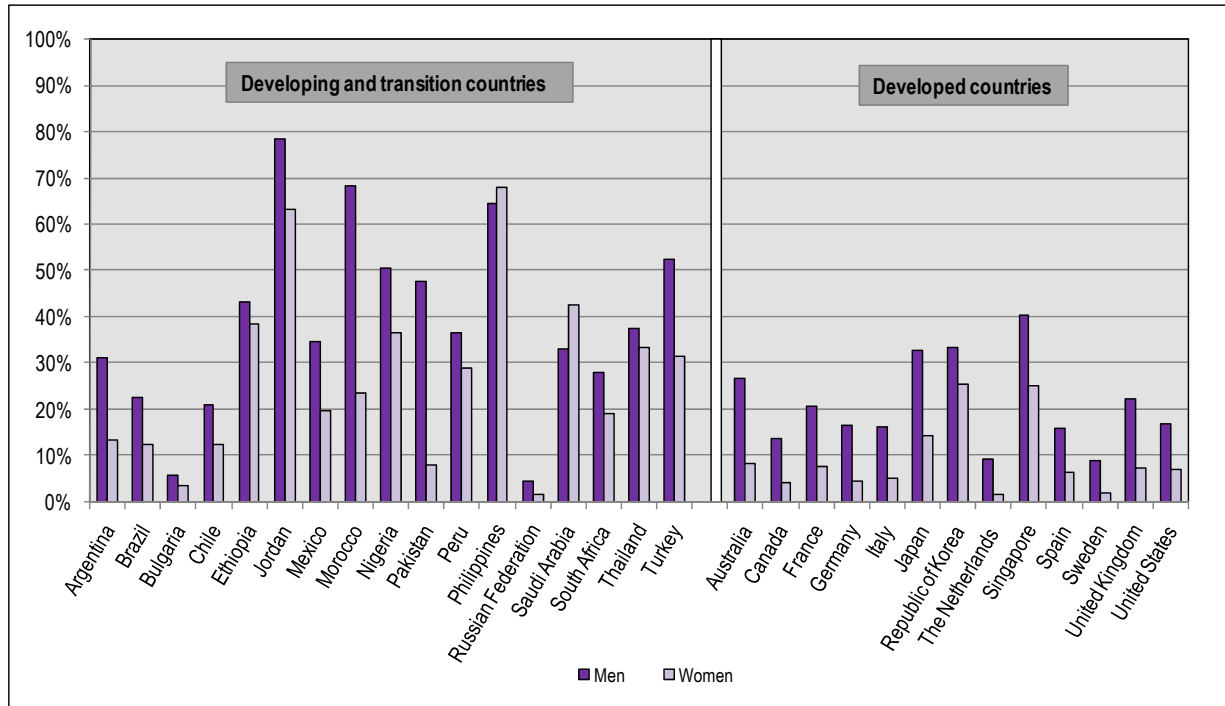
** Whenever possible, data for the years 2010 or 2009 have been used. Due to the availability of data, for Brazil, Morocco, Peru and the Russian Federation 2008 has been used. The global economic crisis might have had an impact on the 2009 data.

Source: Eurostat, National Statistical Offices, OECD.

- 69.** In addition, the *Working time around the world* study makes a global estimate of the number of workers in the world who are working more than 48 hours per week, taking into account national incomes and the total volume of employment. The resulting estimate indicates that approximately 22 per cent of the world’s workforce – or slightly over 600 million workers – are working excessively long hours (Lee, McCann, and Messenger, 2007, pages 53–54).
- 70.** When examining excessively long hours of work disaggregated by sex in developed countries and developing and transition countries, excessive hours among men parallels the trend for all workers discussed above. Some countries, such as Argentina, Brazil, South Africa and Thailand, exhibit a clear downward trend in excessive hours among men, while in other countries, such as Chile, Morocco and Turkey, the proportion of men working long hours has either remained relatively unchanged or has increased (e.g. Peru).
- 71.** Conversely, such long hours barely exist among women in developed countries (Japan, the Republic of Korea and Singapore are notable exceptions), but, as shown in figure 11, they do affect substantial portions of women in many developing and transition countries (e.g. Ethiopia, Jordan, Nigeria, Peru, Philippines, Saudi Arabia, Thailand and Turkey). Finally, men are more likely than women to work long hours in paid work in all countries, except for the Philippines and Saudi Arabia. Unpaid work is a different story (as discussed earlier) owing to the unequal gender division of labour.²⁹

²⁹ However, changing the gender division of labour in the household to a more equitable division of tasks and investing in labour-saving technology has had significant benefits for productivity. Men in particular stand to gain in dual-income partnerships, with a better work–life balance, more contact with children and inclusion in family life, and less vulnerability to economic shocks.

Figure 11. Percentage of workers working long hours* (2010 or most recent year, by sex)**



* Whenever possible, working more than 48 hours per week was considered as long hours; this is in line with the recommendations of the Tripartite Meeting of Experts on the Measurement of Decent Work. Due to the availability of data, for the Republic of Korea the cutoff used is 53, for the Russian Federation 51, for Chile 50, for Australia, Canada, Singapore, Thailand, Turkey and the United States 49, for Morocco and Nigeria 47, for the Philippines 40, for Jordan 39. For the same reason, information for the United States is for dependent employed workers only.

** Whenever possible, data for the years 2010 or 2009 have been used. Due to the availability of data, for Brazil, Morocco, Peru and the Russian Federation 2008 has been used. The global economic crisis might have had an impact on the 2009 data.

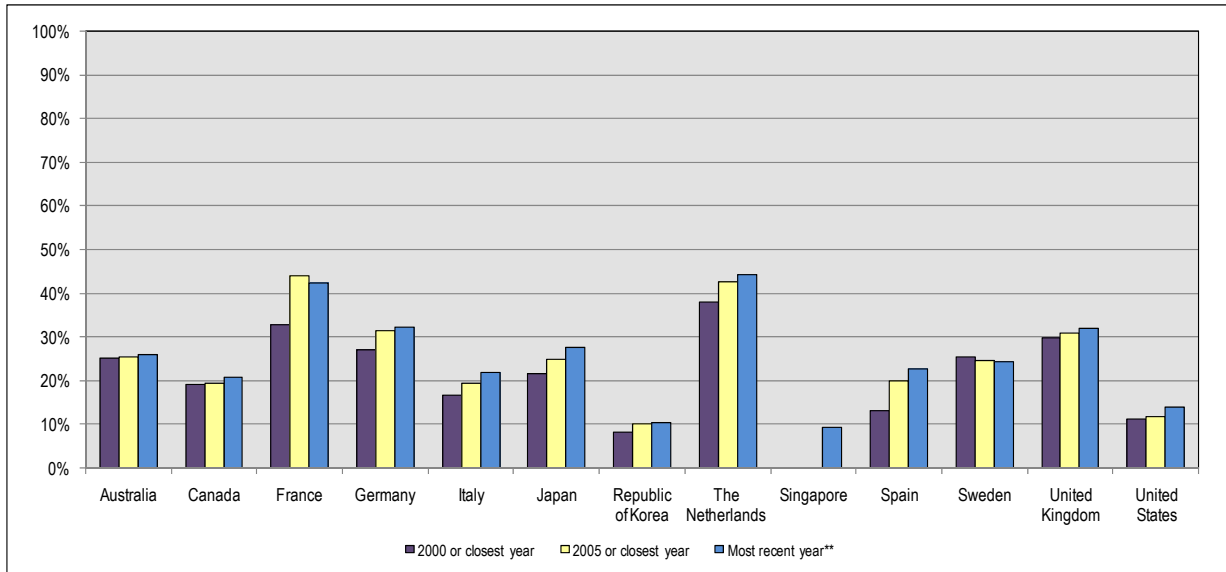
Source: Eurostat, National Statistical Offices, OECD.

Short or part-time hours of work

72. Under ILO Convention No. 175, a part-time worker is an “employed person whose normal hours of work are less than those of comparable full-time workers”. However, most statistical definitions of part-time work focus on the number of hours worked per week, with thresholds of less than 35, or sometimes 30, hours per week used as the basis for determining which workers are working part time. Based on this definition, figure 12 indicates that short, or part-time, hours of work,³⁰ have been gradually increasing in most developed countries, where short hours are widely seen as a mechanism for promoting work–family reconciliation and work–life balance in general. Sweden is a notable exception to this trend; it is instead typical of the rather unique situation in the Nordic countries, where part-time work, which was once an important mechanism to promote women’s entry into the paid workforce, is starting to decline in favour of a full-time, dual-earner norm (Anxo, 2009, page 64).

³⁰ Part-time hours of work should be distinguished from the contractual arrangements associated with part-time employment, which (as will be discussed in the next section) are often inferior to the contractual arrangements for those workers in full-time employment.

Figure 12. Percentage of workers working short hours* in developed countries, 2000 to present



* Whenever possible, working less than 35 hours per week was considered as short or part-time hours. Due to the availability of data, for France, Germany, Italy, the Netherlands, Spain, Sweden and the United Kingdom the cutoff used is 36 hours. For the same reason, information for the United States is for dependent employed workers only.

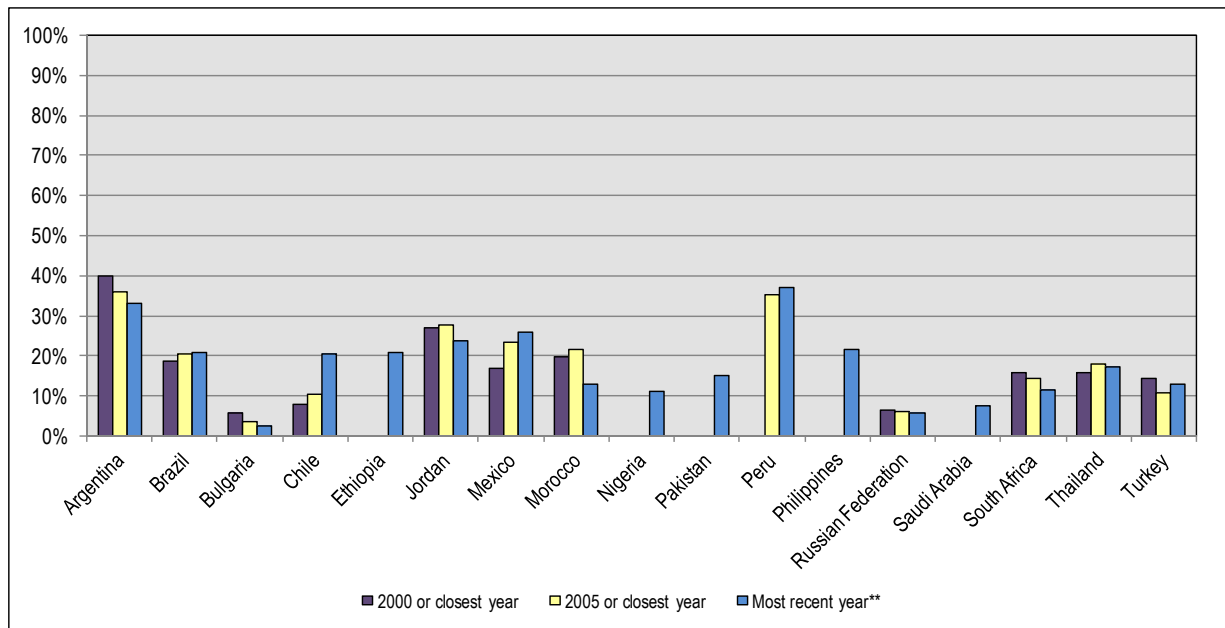
** 2010 or 2009. The global economic crisis might have had an impact on the 2009 data.

Source: Eurostat, National Statistical Offices, OECD.

73. As with long hours of work, the data on short hours in the developing and transition countries shown in figure 13 present a markedly different picture. First, there does not appear to be any consistent trend in short hours either increasing or decreasing. Moreover, the proportion of workers working short hours in many of these countries is much lower than in most of the developed countries, and short hours are almost non-existent in transition economies such as Bulgaria and the Russian Federation. The most likely explanation for this situation is that, in most developing countries, short hours are more likely to be the result of time-related underemployment;³¹ typically, workers who are working part time would prefer to work full time. Relatively low wages for many workers in these countries mean that they typically need to work full time, and perhaps even excessively long hours, in order to earn an adequate income (see Lee, McCann, and Messenger, 2007).

³¹ According to the 1998 resolution of the ICLS, time-related underemployment can be defined as a situation in which “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” (para. 7). Time-related underemployment can be measured directly, but this requires data not only on the number of hours worked with appropriate hour bands to identify short (or part-time) hours, but also information from workers regarding whether or not they are working such short hours voluntarily or involuntarily.

Figure 13. Percentage of workers working short hours* in developing and transition countries, 2000 to present



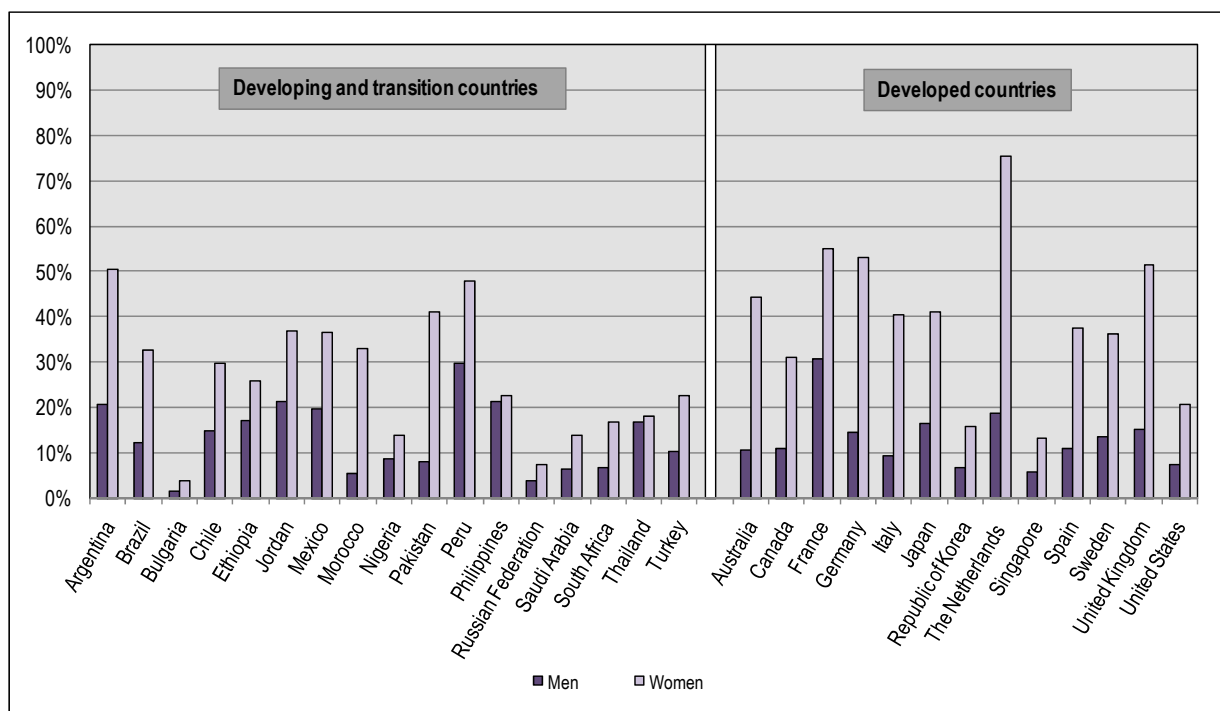
* Whenever possible, working less than 35 hours per week was considered as short or part-time hours. Due to the availability of data, for the Philippines the cutoff used is 30 hours, for Chile 31 (2010), for Ethiopia and the Russian Federation 31, for Morocco 32, for Bulgaria and Turkey 36, for Jordan 37 (2009: 40), for Nigeria 40.

** Whenever possible, data for the years 2010 or 2009 have been used. Due to the availability of data, for Brazil, Morocco, Peru and the Russian Federation 2008 has been used. The global economic crisis might have had an impact on the 2009 data.

Source: Eurostat, National Statistical Offices, OECD.

74. Disaggregating the data on short (part-time) hours by sex results in a consistent pattern for both developed and developing countries: women are more likely than men to work such hours in all of these countries (see figure 14). In the case of developed countries, it is clear that such short hours are being used as a mechanism for many women to reconcile their work and family responsibilities, although there is often a “penalty” for this type of flexibility in terms of wages, employee benefits and access to social protection (see Part III of the report). In developing countries, it is less clear whether short hours among women are a result of time-related underemployment, a strategy for reconciling paid work with their family responsibilities, or a combination of these factors (see the discussion on the differences between paid employment and self-employment in the next paragraph). In the case of the transition economies, the very small proportion of workers working fewer than 35 hours per week (which is also observed in most of the other Eastern European countries) is most likely a pattern remaining from the full-time norm that prevailed during the Communist era.

Figure 14. Percentage of workers working short hours* (2010 or most recent year, by sex)**



* Whenever possible, working less than 35 hours per week was considered as short or part-time hours. Due to the availability of data, for the Philippines the cutoff used is 30 hours, for Chile, Ethiopia and the Russian Federation 31, for Morocco 32, for Bulgaria, France, Germany, Italy, the Netherlands, Spain, Sweden, Turkey and the United Kingdom 36, for Jordan and Nigeria 40. For the same reason, information for the United States is for dependent employed workers only.

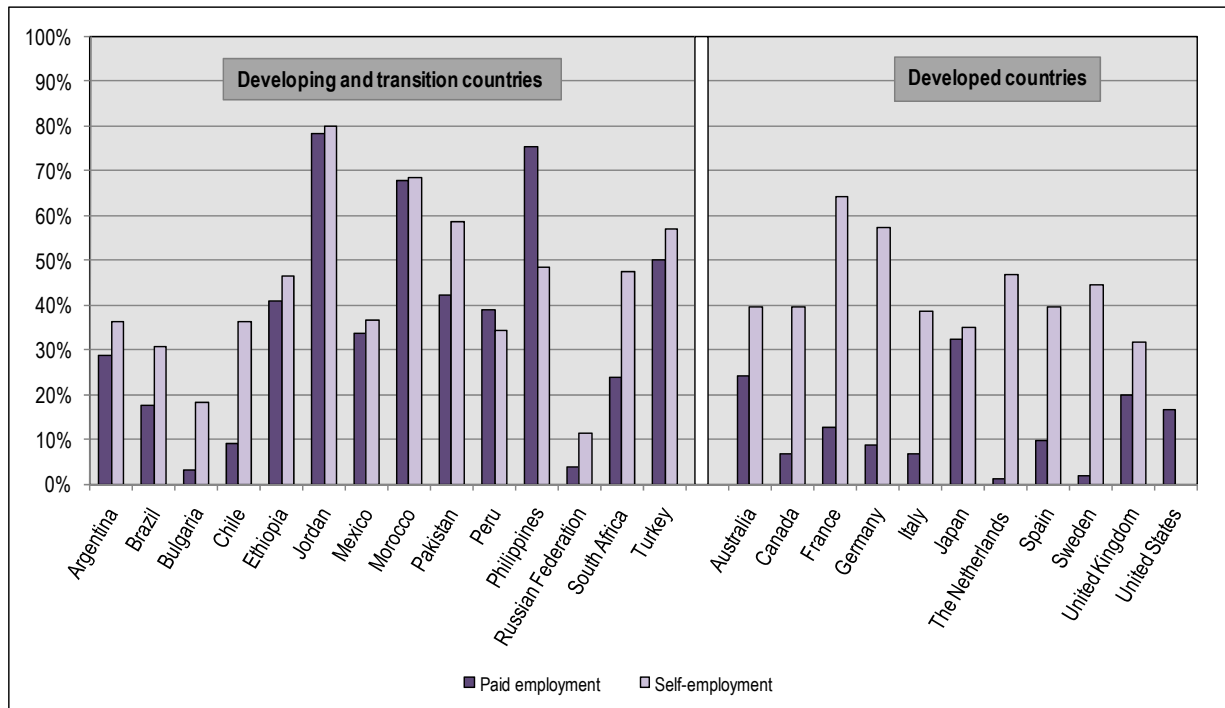
** Whenever possible, data for the year 2010 or 2009 have been used. Due to the availability of data, for Brazil, Morocco, Peru and the Russian Federation 2008 has been used. The global economic crisis might have had an impact on the 2009 data.

Source: Eurostat, National Statistical Offices, OECD.

Differences between hours of work in paid employment and self-employment

75. It is important to consider the differences in hours of work between workers in paid (waged) employment and those who are self-employed. It is useful to recall that an ILO global estimate has indicated that the self-employed comprise three-fifths of the informal economy across all regions of the developing world (ILO, 2002, table 2.2). Given the lack of data on hours of work in the informal economy, the working hours of the self-employed can be used as a rough proxy for working hours in the informal economies of developing countries, an approach that was first used in *Working time around the world*. Turning to the data on hours by employment status, figures 15 and 16 show that the proportions of workers working excessively long hours are higher in self-employment than in paid (waged) employment for both men and women and in both developed and developing countries. Developed countries, in particular France, Germany and the Netherlands, show dramatic differences in the hours worked by paid employees and the self-employed, while in developing countries, long hours are common for men in both paid employment and self-employment.

Figure 15. Percentage of men working long hours* (2010 or most recent year, paid v. self-employment)**

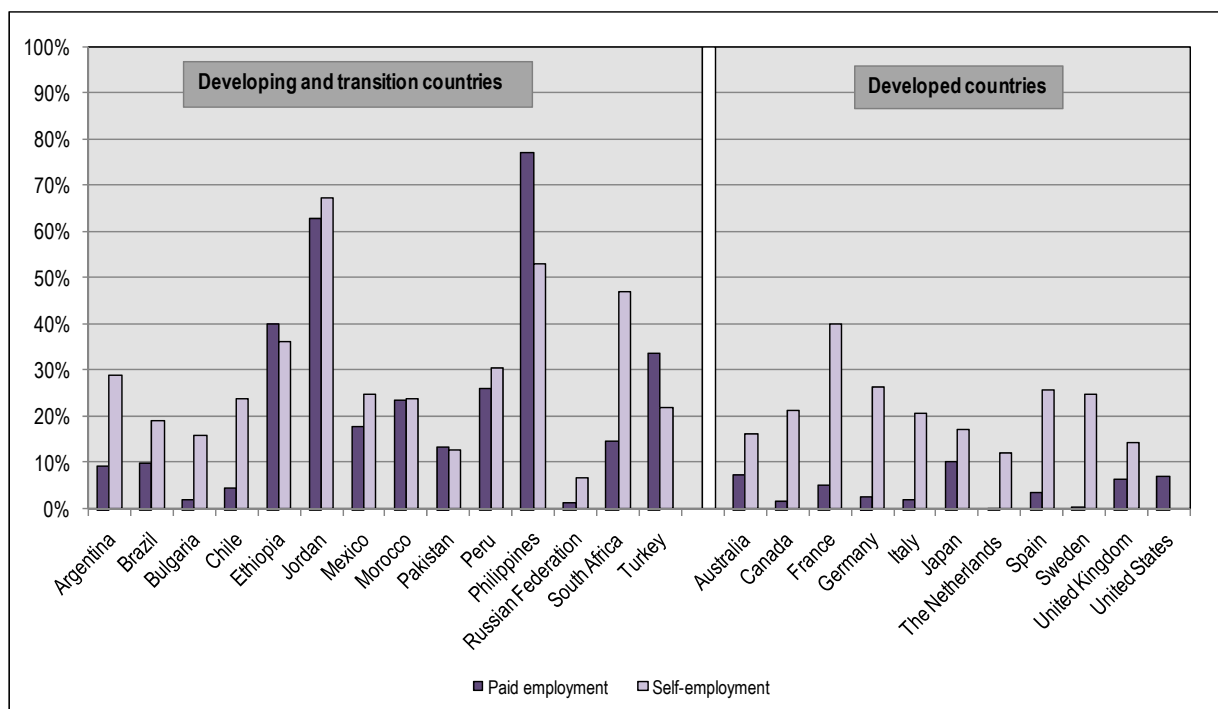


* Whenever possible, working more than 48 hours per week was considered as long hours; this is in line with the recommendations of the Tripartite Meeting of Experts on the Measurement of Decent Work. Due to the availability of data, for the Republic of Korea the cutoff used is 53 hours, for the Russian Federation 51, for Chile 50, for Australia, Canada, Singapore, Thailand, Turkey and the United States 49, for Morocco 47, for the Philippines 40, for Jordan 39. For the same reason, information for the United States is for dependent employed workers only.

** Whenever possible, data for the year 2010 or 2009 have been used. Due to the availability of data, for the Brazil, Morocco, Peru and the Russian Federation 2008 has been used instead of 2010. The global economic crisis might have had an impact on the 2009 data.

Source: Eurostat, National Statistical Offices, OECD.

Figure 16. Percentage of women working long hours* (2010 or most recent year, paid v. self-employment)**



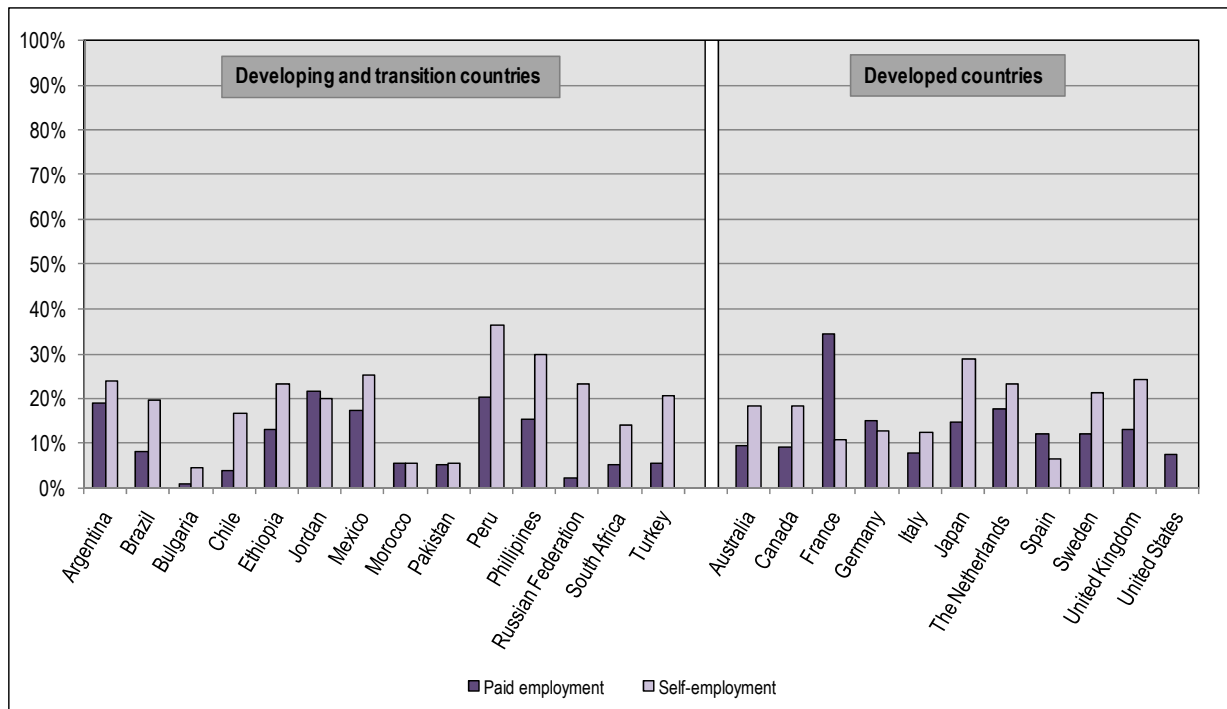
* Whenever possible, working more than 48 hours per week was considered as long hours; this is in line with the recommendations of the Tripartite Meeting of Experts on the Measurement of Decent Work. Due to the availability of data, for the Republic of Korea the cutoff used is 53 hours, for the Russian Federation 51, for Chile 50, for Australia, Canada, Singapore, Thailand, Turkey and the United States 49, for Morocco 47, for the Philippines 40, for Jordan 39. For the same reason, information for the United States is for dependent employed workers only.

** Whenever possible, data for the year 2010 or 2009 have been used. Due to the availability of data, for the Brazil, Morocco, Peru and the Russian Federation 2008 has been used instead of 2010. The global economic crisis might have had an impact on the 2009 data.

Source: Eurostat, National Statistical Offices, OECD.

76. Regarding short (part-time) hours, figure 17 shows higher numbers of men working short hours in self-employment than in paid employment in most developed and developing countries (except for paid employees in France and, to a lesser extent, Germany). The explanation for this pattern is almost certainly that self-employed men are more likely to suffer from time-related underemployment (owing to a lack of orders) than male employees. For women, however, figure 18 shows that, while substantial proportions of women are working short hours in both paid employment and self-employment in most of the developed countries, in the developing countries short hours among female workers are much more typical in self-employment than in paid employment (Argentina is a notable exception). A possible explanation for this phenomenon is that in developing countries the lack of part-time opportunities in the formal economy forces women to resort to self-employment as a means of obtaining reduced hours. This strategy allows these women to better reconcile their need for earnings with their family responsibilities, although this often means working informally, with all the disadvantages that this entails. However, more attention also needs to be paid to the needs of men in reconciling their need for earnings from paid work with their family responsibilities.

Figure 17. Percentage of men working short hours* (2010 or most recent year, paid v. self-employment)**

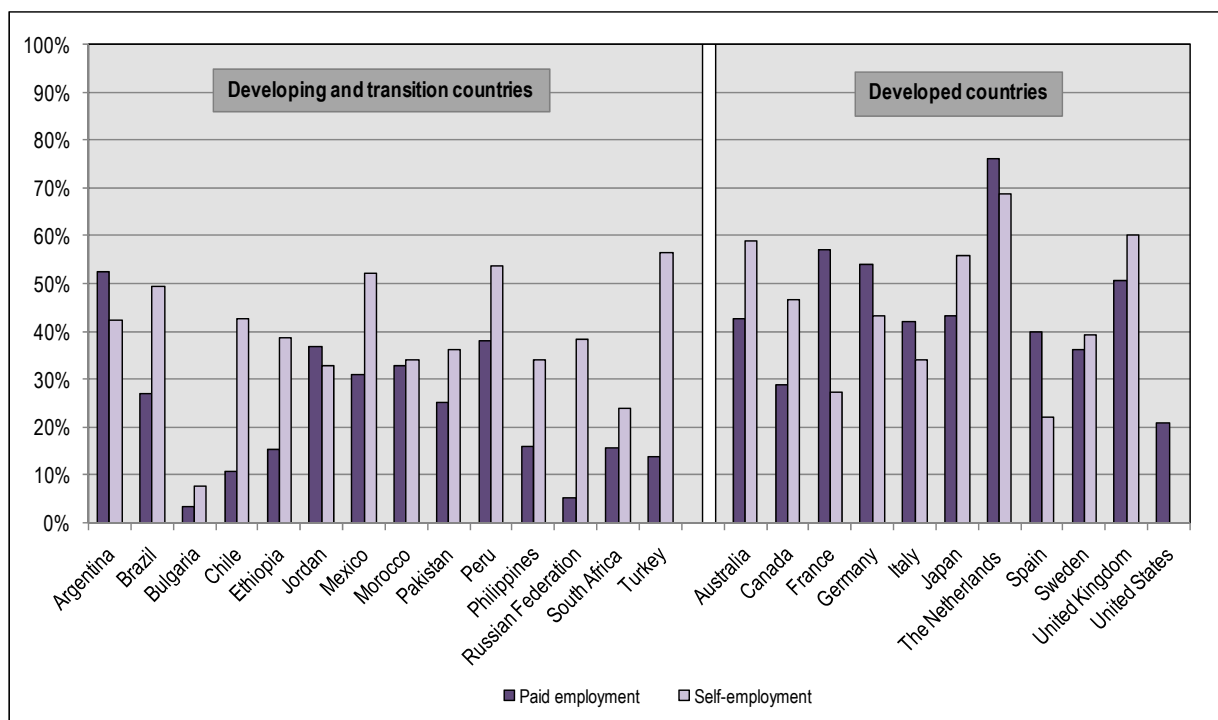


* Whenever possible, working less than 35 hours per week was considered as short or part-time hours. Due to the availability of data, for the Philippines the cutoff used is 30 hours, for Chile, Ethiopia and the Russian Federation 31, for Morocco 32, for Bulgaria, France, Germany, Italy, the Netherlands, Spain, Sweden, Turkey and the United Kingdom 36, for Jordan and Nigeria 40. For the same reason, information for the United States is for dependent employed workers only.

** Whenever possible, data for the year 2010 or 2009 have been used. Due to the availability of data, for the Brazil, Morocco, Peru and the Russian Federation 2008 has been used instead of 2010. The global economic crisis might have had an impact on the 2009 data.

Source: Eurostat, National Statistical Offices, OECD.

Figure 18. Percentage of women working short hours* (2010 or most recent year, paid v. self-employment)**



* Whenever possible, working less than 35 hours per week was considered as short or part-time hours. Due to the availability of data, for the Philippines the cutoff used is 30 hours, for Chile, Ethiopia and the Russian Federation 31, for Morocco 32, for Bulgaria, France, Germany, Italy, the Netherlands, Spain, Sweden, Turkey and the United Kingdom 36, for Jordan and Nigeria 40. For the same reason, information for the United States is for dependent employed workers only.

** Whenever possible, data for the year 2010 or 2009 have been used. Due to the availability of data, for the Brazil, Morocco, Peru and the Russian Federation 2008 has been used instead of 2010. The global economic crisis might have had an impact on the 2009 data.

Source: Eurostat, National Statistical Offices, OECD.

C. Recent evidence regarding the effects of hours of work on workers and enterprises

77. This section reviews the empirical evidence regarding the effects of the length of working hours. It is based on three research papers summarizing the current empirical evidence on the following topics: the effects of working time on occupational safety and health (Tucker and Folkard, 2011); the effects of working time on work–life balance, including work and family reconciliation (Fagan et al., 2011); and the effects of working time on productivity and other factors which can affect enterprise performance, such as the adaptation of working hours to market demands, employee satisfaction and performance, absenteeism, and the recruitment of new employees and the retention of existing staff (Golden, 2011).

78. When measuring the effects of working hours, a fundamental concept is that of fatigue. Fatigue can be defined as the biological drive for recuperative rest, which might or might not involve a period of sleeping (see Williamson et al., 2011). Fatigue may take several forms, for example sleepiness or mental, physical or muscular fatigue. If no safe recovery is possible, the result of fatigue is a decrease in performance ability, which might also lead to an adverse safety outcome (Tucker and Folkard, 2011, page 10).

79. There are two interacting determinants of the effect of working hours: the number of hours that are worked in a day (daily hours), and the number of hours accumulated across the week (weekly hours). While long daily hours tend to be more often associated with the acute effects of fatigue (i.e. sleepiness and inattention, leading to increased risk of mistakes and accidents), long weekly hours tend to be associated with both acute and chronic

outcomes such as health problems and increased work–life conflict. Nevertheless, the distinction is far from clear-cut and there are overlaps in both directions. In the following overview, both daily and weekly hours will be considered, whenever possible.

- 80.** With regard to the effects of daily and weekly working hours on sleep and the sleepiness of workers, there are mixed findings when comparing the effects of 8- and 12-hour shifts. Some studies have found that measures of sleep and sleepiness vary between favouring 8- or 12-hour shifts, depending on the time of day; sleepiness might be higher, for example, at the end of the night shift, and 12-hour shifts might be associated with poorer sleep quality in certain highly demanding work environments. In contrast, looking at the effects of long weekly hours on sleep and the sleepiness of workers, research indicates that long weekly working hours are associated with shorter and more disturbed sleep, perhaps as a result of the more limited time available for sleeping and relaxation during leisure time (*ibid.*, page 16).
- 81.** In terms of physical and psychological health outcomes, it appears likely that the overall relatively benign effects of a longer working day combined with fewer working days (i.e. compressed workweeks, see the discussion in Part III), are a result of well-designed work schedules that minimize circadian disruption (*ibid.*). However, it must be kept in mind that there is a potential bias of self-reported health problems: because workers often tend to prefer working fewer longer shifts each week, they might (unintentionally) misreport their health problems in favour of such working-time arrangements. Interestingly, two studies whose methodologies were less likely to be influenced by this issue both found some negative impacts of extended working days on health (*ibid.*, page 13). For example, they reported more health complaints and sleep disturbances (Martens et al., 1999, page 35) and weight gains of 1 kg on average after changing from an 8-hour to a 12-hour shift schedule (Yamada et al., 2001, page 318).
- 82.** As noted earlier, unlike longer working days, work schedules with many hours worked per week often involve limited opportunities for recovery during free time. In this context, several studies have suggested that there is a relationship between the impairment of recovery and many of the health problems associated with long weekly working hours. Most of the studies conducted between 1996 and 2003 found either a relationship between long weekly working hours and adverse health outcomes (e.g. a negative effect on health outcomes) or no association (see Van der Hulst, 2003). For example, long weekly hours (more than 48 hours per week) were positively associated with rates of mortality, cardiovascular heart disease, non-insulin dependent diabetes; risk of disability retirement; decreases in cognitive function; and some specific measures of self-reported physical health and fatigue. Furthermore, weak positive associations were found between long weekly working hours and physiological outcomes, such as cardiovascular, biochemical and immunological indices. Looking at the effects of long weekly hours on health and well-being in a broader sense, other studies (Caruso, 2006, and Caruso et al., 2004) have identified links between such long hours and decreases in neuro-cognitive and physiological functioning, illnesses, adverse reproductive outcomes, delayed marriage and childbearing, and obesity in children (Tucker and Folkard, 2011, pages 16–17).

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- 83.** However, long weekly working hours do not always have adverse effects on the health of workers. In fact, there seem to be moderating and mediating factors that influence this relationship. Examples are: work environments in which workers have control over their work schedules and enjoy high rewards: and low demands or an absence of supervisory pressure to work overtime. In line with this, other findings suggest that workers who enjoy their work may be motivated to work overtime. Tucker and Folkard (2011) point out that “it seems likely that long work hours are not intrinsically harmful in many cases. Rather, the harm often results from other factors which tend to coincide with long work hours, e.g. high workload ... and the inability to unwind and detach from work”. Nevertheless, even if the well-being of some particularly motivated workers may not be affected if they regularly work overtime, the risk of fatigue-related errors remains even if overtime is performed on a voluntary basis (*ibid.*, pages 17–18).
- 84.** With regard to safety issues, some studies have found that long shifts can lead to acute fatigue that increases the risk of accidents, in particular at the end of extended shifts. For example, a meta-analysis of accident data from previous studies found a substantial increase in accident risk in the last three hours of a 12-hour shift, resulting in an accident risk that was more than double in the 12th hour of a shift, as compared with the average risk during the first eight hours (*ibid.*, pages 14–15; see also European Commission, 2010). However, most of these studies fail to distinguish between the effect of extending the shift length while keeping the weekly working hours constant (i.e. compression of the workweek) and the effects of extending the length of the workweek (i.e. working more hours per week). Interestingly, an epidemiological study of medical workers’ injuries by Dembe et al. (2009) found that while working more than 60 hours per week was associated with an increased risk of injuries, working 12 or more hours per day was not (Tucker and Folkard, 2011, pages 14–15). This is in line with previous studies that identified a strong positive association between long weekly work hours and the risk of occupational injuries and illnesses (see Dembe et al., 2005). In addition, it should be emphasized that occupational accidents and illnesses are extremely costly, not only for the workers affected, but for enterprises as well. For example, the EU has estimated that the total cost of occupational accidents from all sources is €55 billion per year in the EU-15 alone (European Commission, 2004, page 14).
- 85.** Summing up the research findings regarding the duration of working hours on occupational safety and health, the effects of extended daily shifts of up to 12 hours (compared with eight-hour shifts) appear to be inconsistent; they vary based on a number of factors, such as the work environment, occupation or job tasks, workload, rest breaks, etc. Nonetheless, it is recommended that daily shifts should not exceed 12 hours (Tucker and Folkard, 2011, p. 15). Regarding weekly hours of work, Tucker and Folkard (2011) conclude that “the question of what constitutes a healthy and safe maximum for weekly work hours is a vexed issue. Among full-time employees (i.e. working 40 hours or more per week), both sleep problems and risk increase approximately linearly with the number of hours worked per week ... On the balance of evidence, it is recommended that workers should not be scheduled to work more than 48 hours in any single week” (*ibid.*, pages 20–21).
- 86.** Concerning work–life balance, several studies have identified long working hours as an important predictor of work–life conflict (Fagan et al., 2011, page 17). For example, the Third and the Fourth European Working Conditions Surveys have shown that a high proportion of men and women who work more than 48 hours per week report incompatibility between working hours and family life (*ibid.*, page 24). In developed countries, where long hours of work are more common among managers and professional staff than other workers, reported work–life conflict is generally also higher among professionals, in particular those in dual-professional households (*ibid.*, pages 26–27). Although working time autonomy has been shown to buffer to a certain extent the adverse effects of longer and “unsocial” (i.e. non-standard) working hours on work–family interference, it does not fully offset their negative impact (*ibid.*, page 51). While in general

long working hours represent a source of work–family conflict and related stress and subsequent health problems, it has also been shown that they have negative effects on work productivity, job and life satisfaction, personal effectiveness, child–parent relationships and even child development (ibid., page 33).

- 87.** Nevertheless, with regard to the link between long working hours and relationship stress and breakdown of the family, the evidence is mixed. Many studies have found a negative impact of long working hours on marital relations (ibid., 2011, pages 21–22). However, in the United States and Australia, long hours have been associated with neutral or even positive marital outcomes (see Crouter et al., 2001; Weston et al., 2004). Authors suggest that these results may be an effect of increased wages as a result of overtime work, or that they might reflect personality differences or selection effects. For example, couples who view one partner’s long work hours as problematic may reduce their working hours or may have already separated or divorced and are therefore no longer in the sample.
- 88.** Although in almost all countries men usually work longer hours than women, women still bear the main responsibility for housework and childcare, irrespective of their labour force status (Fagan et al., 2011). In this context, there is some evidence of gender differences in levels of fatigue and a higher risk of accidents, most likely arising from women’s “double burden” of combining paid employment with unpaid work in the household (Tucker and Folkard, 2011, page 20). Among parents surveyed across Europe in the Third European Working Conditions Survey (see Fagan and Burchell, 2002), women working part time were most likely to report compatibility between their job and family life, even when compared with women and men without dependent children (Fagan et al., 2011, page 23). Studies that included domestic labour in the comparison of the overall effect of working hours between the sexes found that, when compared to unpaid household chores, paid employment was usually associated with lower levels of depression, until working hours reached an upper limit. In general, time spent doing housework was associated with increased depression, suggesting that women might be at particular risk (ibid, page 12). Other studies have also shown a link between long working weeks and poor mental health, for example anxiety and depression (ibid., pages 12–13).
- 89.** Four types of hours reductions have been identified that can have a positive impact on individual and enterprise productivity, while offsetting much or even all of the initial costs associated with shorter hours (see White, 1987). These are: reductions in excessive hours; gradual reductions in standard hours; accelerated reductions in standard hours; and individualized options for workers to reduce their own working hours. The potential improvements in productivity would arise from the physiological benefits of shorter hours (reduced physical and/or mental fatigue) or managerial and organizational improvements in time use, which also include more flexible work schedules that minimize slack time and waiting time. Since extended working time for full-time workers often produces less-than-proportionate gains in output, measures to prevent hours from becoming excessive can produce less-than-proportionate reductions in output, therefore leaving scope for improving output per hour. Such reductions would need to be carefully targeted to those workers and jobs that are experiencing “overwork”, which can be defined as the length of working hours which begins to negatively affect the health and safety of workers, families, organizations and the general public (Golden, 2011, page 10).
- 90.** As for the length of working hours and labour productivity nexus, it has been shown that manufacturing productivity does not necessarily increase when hours are lengthened. Empirical results suggest that the use of overtime hours lowers average productivity in 18 manufacturing industries in the United States: on average, a 10 per cent increase in overtime resulted in a 2.4 per cent decrease in productivity measured by hourly output (Golden, 2011, page 6).
- 91.** In many industries, it appears that shorter hours are associated with higher output rates per hour. Referring to the productivity growth per hour observed in a number of United States

industries between 1995 and 2005, Golden concludes that the relatively shorter hours might have contributed to this phenomenon (*ibid.*, pages 6–7). In addition, comparing several OECD countries, an ILO analysis found that the relationship between the amount of hours worked annually per person and labour productivity (measured as GDP per hour worked) was strongly negative (see ILO, 2009a). Although most of the literature examining reduced-hour work arrangements has focused on employers’ interest in retaining firm-specific human capital, the few studies that have taken a wider view have found that reduced hours improved workers’ self-reported performance on the job, while better work–life balance practices are associated with significantly higher productivity and employee satisfaction (Golden, 2011, page 8).

Part III. Organization of working time: Patterns of work schedules and their effects

A. Recent developments regarding work schedules

92. In addition to hours of work, the other major dimension of working time is the organization of working time which is often referred to either as “work schedules” or as “working-time arrangements”. Any given number of hours of work can, at least theoretically, be organized in an almost infinite number of ways, and how those hours are organized can have important consequences for both workers and enterprises. Comparing a 40-hour workweek that is worked as a regular daytime shift and the same 40-hour workweek that is worked as a permanent night shift shows what a major difference work schedules can make. Part III of this report will consider patterns of work schedules, their advantages and disadvantages from the perspectives of workers and employers, and the effects of various types of schedules on both workers and enterprises.
93. Comparable international data on actual work schedules or working-time arrangements (as opposed to arrangements as defined in national laws or regulations) is non-existent outside the EU. In fact, it was only in 2008 that the 18th International Conference of Labour Statisticians (ICLS) established a formal definition of working-time arrangements, as well as a corresponding typology of the different arrangements, such as fixed working arrangements, flexible working-time arrangements, shift-work arrangements, annualized (or mensualized) hours arrangements, compressed workweek arrangements, part-time work arrangements, etc., thereby providing a conceptual foundation for the collection of internationally comparable data on work schedules (see ICLS, 2008). According to the ICLS 2008: “Working-time arrangement is the term to describe measurable characteristics that refer to the organization (length and timing) and scheduling (stability or flexibility) of work and non-work periods for all jobs during a specified reference day, week, month or longer period”. It should be further noted that “Multiple characteristics (such as a part-time, flexible schedule) may apply as they are not mutually exclusive” (ibid., page 57).
94. Despite the lack of internationally agreed definitions of working-time arrangements until very recently, a number of developed countries have established their own statistical definitions. The most advanced research and data collection is being carried out in Europe, both by EU agencies, such as the European Commission’s Directorate-General for Employment, Social Affairs and Inclusion and by European-wide research bodies, most prominently the European Foundation for the Improvement of Living and Working Conditions (Eurofound), whose survey research now covers 30 countries (the 27 EU Member States plus the three candidate countries, Croatia, The former Yugoslav Republic of Macedonia, and Turkey). In addition, *Working time around the world* is one of the few sources that can offer some, albeit limited, insights into working-time arrangements in developing countries, drawing on country studies conducted by local research teams for the purpose of contributing to this volume.
95. The remainder of this section will review the limited information available on patterns of work schedules and important recent developments, most prominently the expanding use of various types of working-time flexibility, including some so-called “atypical” and “precarious” working-time arrangements. In this context, working time or “temporal” flexibility needs to be distinguished from other forms of flexibility, such as numerical or contractual flexibility (e.g. fixed-term contracts and temporary agency work), wage flexibility and functional flexibility. Working time can be made more flexible by a variation in one or more of the following four elements: the number of hours worked each working day; the number of hours worked each week; the specific hours worked during a working day; and the specific days of the week on which work is performed.

Standard workweek

96. In discussing work schedules, it makes sense to begin by discussing the traditional work schedule, which has long been dominant in the formal economies of most of the world: the so-called “standard workweek”, consisting of fixed working hours each day for a fixed number of days, usually Monday to Friday (for a 40-hour normal workweek) or Monday to Saturday (for normal workweeks longer than 40 hours). While the classic 9 a.m. to 5 p.m. standard workweek appears to be slowly declining – particularly in many developed countries – the available data suggests that this traditional pattern remains the dominant work schedule in most of these countries. For example, in the United States, which is often cited as the “prototype” of the 24/7 economy, more than 80 per cent of waged and salaried employees still work a regular daytime schedule between the hours of 6 a.m. and 6 p.m.; two-thirds (66.3 per cent) of all waged and salaried employees work only on weekdays during those hours (McMenamin, 2007, page 11). In Japan, 69 per cent of all workers still work under the “ordinary working hours system” with its fixed, daytime hours of work (Ogura, 2010, page 102). Similarly, in Australia, 71 per cent of workers work weekdays only (Australian Bureau of Statistics, 2010, page 3) and 62.7 per cent of workers in New Zealand work all of their hours between Monday and Friday and between 7 a.m. and 7 p.m. (Statistics New Zealand, 2008, page 1). Finally, in the EU, overall working hours have remained “remarkably standard” according to Eurofound, with 67 per cent of workers working the same number of hours every week, while only 17 per cent of workers perform shift work (down from 20 per cent in 2000); 26 per cent work at least one Sunday a month (down from 30 per cent in 1995); and 18 per cent work at night (Eurofound, 2010a, page 4).
97. From a gender perspective, women in the EU are more likely to work regular schedules than men, and are also less likely to work at night; this reflects in part continuing gender segregation in different industries, with women remaining dominant in services, such as education, health and social work, and public administration, while men comprise a large majority of the workforce in the construction and manufacturing industries (*ibid.*, page 2). In Australia, men who are single jobholders are more likely than comparable women to work Monday to Friday (72 per cent compared to 54 per cent), while women who are single jobholders were slightly more likely than men to work on weekends (73 per cent compared to 69 per cent) (Australian Bureau of Statistics, 2010, page 3). In the United States, men are more likely than women to work a schedule other than a regular daytime shift (McMenamin, 2007, page 9).

Overtime

98. Of course, not all workers have always worked a standard workweek. In fact, there are at least two traditional forms of work schedules that deviate from the standard workweek, and thus constitute traditional forms of “flexibility” regarding work schedules. The first of these traditional flexibility instruments is extending daily or weekly operating hours using overtime. Overtime can be defined as “All hours worked in excess of the normal hours ... unless they are taken into account in fixing remuneration in accordance with custom” (Recommendation No. 116, Paragraph 16). In practice, however, overtime definitions differ. First, the specific threshold used for the identification of what constitutes overtime varies depending on the institutional setting. It can be based on, for example, the statutory daily and/or weekly working hours defined in labour laws; the contractual or collectively agreed working hours; or the usual hours of work. Second, overtime is not always linked with compensation in practice, or at least not with additional compensation, which is why studies on overtime often distinguish between paid and unpaid overtime.
99. Statutory provisions of national laws concerning overtime hours were discussed in Part II of this report. In addition, the discussion of excessively long hours reflects, at least to some degree, differences in the amount of overtime work among countries, although, obviously, in the (mostly developing) countries where statutory normal hours of work are higher than

the 40-hour global “norm”, a large portion of the workforce may work long hours even if they do not work overtime. Nonetheless, it seems safe to say that overtime work is probably the most common deviation from the standard workweek.¹ For example, across the EU, approximately two-thirds of all establishments work overtime hours at some point over a one-year period, with nearly half of all employees in these establishments, on average, working overtime; the proportion of workers doing overtime, however, varies substantially across establishments (Riedmann et al., 2010, page 11). The use of overtime is close to the overall EU average in nearly all industries, varying only between 61 and 74 per cent; however, establishments in some countries, such as France, Germany, Ireland, the Netherlands, the Nordic countries, and the United Kingdom, are more likely to use overtime, while countries in southern Europe (except Italy and Malta) and in Central and Eastern Europe (except the Czech Republic) are the least likely to do so (ibid., page 11).

100. Overtime is also common in developed countries outside the EU, in particular those with relatively high proportions of workers working long hours, such as Australia, where 38 per cent of employees usually work “extra hours or overtime” and in particular Japan, where 54.2 per cent of employees “often” work overtime and another 33.7 per cent do so on an occasional basis (Australian Bureau of Statistics, 2010, page 3; What Japan Thinks, 2010). In fact, in Japan overtime working is so extensive that there is even a well-known Japanese term for death from overwork: *karoshi*. Overtime is also widespread in many developing countries, where “overtime payments often constitute a regular and substantial element of wage packages and are relied on to ensure a decent standard of living” (Lee, McCann and Messenger, 2007, page 121).

101. In addition to the frequency of overtime work, there is also the issue of overtime payments. While this report is focused primarily on working-time trends and issues, there are obviously important overlaps between working time and wage issues, in particular since, as noted above, overtime work and the resulting payments are often a substantial element of total worker compensation. This is the case in a number of countries, including China, the Czech Republic, the Republic of Korea and Mexico (ibid., page 121). However, overtime hours are not always compensated with monetary payments. In the EU, 35 per cent of establishments compensate overtime with payment, but 23 per cent provide compensatory time off and a further 37 per cent use both forms of compensation to some extent (Riedmann et al., 2010, page 12). In 4 per cent of EU establishments, however, overtime is not compensated at all; this is particularly the case in establishments with a high proportion of workers in “highly skilled positions”² because unpaid overtime is most common among managers and senior professionals, many of whose salary levels assume a certain amount of overtime work (see Incomes Data Services, 2010). In some countries, such as the United States, labour laws provide a specific exemption from overtime payment requirements for many so-called “white-collar” employees, who are primarily managerial and professional staff and skilled technicians (see the Fair Labor Standards Act of 1938). In the case of developing countries, unpaid overtime for workers who are legally entitled to overtime payments appears (despite limited information) to be a broader concern. In this context, piece-rate workers appear to be especially vulnerable, and might end up working overtime hours just to earn the minimum wage. However, in this context, unpaid overtime is but one facet of the broader issue of unpaid wages, and it highlights the need for adequate wage protection and enforcement, an issue which is beyond the scope of this report (see Ghosheh, forthcoming).

¹ Data on overtime hours were not systematically collected from national statistical offices for this report.

² It should be noted that in establishments that use time-saving account arrangements, overtime hours are not calculated on a weekly basis, but only for the time “credits” remaining in the account at the end of the reference period.

Shift work, including night work and weekend work

- 102.** The second traditional working time “flexibility” instrument, which actually consists of a wide array of different work schedules, is shift work. Shift work can be defined as “a method of organization of working time in which workers succeed one another at the workplace so that the establishment can operate longer than the hours of work of individual workers” (ILO, 2004a, page 1).
- 103.** Shift work allows companies to extend their operating hours beyond the working time of individual workers, and to better accommodate peak periods of demand (e.g. the “stacking” of multiple part-time work shifts in the retail trade). Shift systems can take a nearly infinite variety of forms, but they fall into two basic categories: fixed shift systems, in which a particular group of workers always works the same shift; and rotating shift systems, in which workers are assigned to work shifts that vary regularly over time and “rotate” around the clock (e.g. from morning to afternoon/evening to night shift). The most common shift systems are the two-shift fixed (morning/afternoon and afternoon/evening) and three-shift fixed (morning, afternoon/evening and night) systems. If a firm is operating non-stop during the week, shift operations are considered to be “continuous”. Such continuous shift operations, by their very nature, require night work and weekend work for at least some groups of workers, often based on three-shift fixed systems of eight hours per shift or alternatively rotating shifts, but also in two-shift operations, given the increasing deployment of 12-hour shifts in enterprises.
- 104.** The specific incidence of shift work is closely linked to the sectoral composition of national economies, and is particularly prevalent in industries such as health and social work, hotels and restaurants, manufacturing and transport, storage and communications (see e.g. Parent-Thirion et al., 2007, page 22). In the EU as a whole, 17 per cent of workers are engaged in shift work, which is actually a decline from 20 per cent of workers in 2000 (Eurofound, 2010a, page 4). In the United States, a very similar proportion of workers, 17.7 per cent, work “alternate shifts” outside of the normal daytime hours of 6 a.m. to 6 p.m., with the highest proportion in the leisure and hospitality industry, such as restaurants and bars, where 52.7 per cent of all workers usually work alternate schedules (McMenamin, 2007, page 9). Likewise, in Australia, 16 per cent of workers usually perform shift work (Australian Bureau of Statistics, 2010, page 3), mostly in mining, accommodation and food services, and health care and social assistance. In Japan, a slightly lower proportion of workers, 10.5 per cent, work under a shift-work system (Ogura, 2010, page 102). By comparison, the data available for developing countries suggests that shift work is quite common in the formal economies of many of these countries, such as Chile, China, Malaysia, Mauritius, Republic of Korea, Senegal and Tunisia. Shift work is most common in hotels and restaurants, wholesale and retail trade, and transport, storage and communications, with the exception of China, where it is highly concentrated in manufacturing (Lee, McCann, and Messenger, 2007, pages 96–98).
- 105.** In terms of the types of shift pattern, there are broad categories of shift schedules, such as those involving night and weekend work or rotating shifts.³ These shift patterns require workers to regularly work outside the boundaries of the standard workweek; in addition, night shifts also have potentially serious negative occupational safety and health implications because they require workers to work in opposition to their biological clock (these and other effects of night work will be discussed in the next section). According to ILO Convention No. 171, which prescribes a range of protections for night workers, night work is defined as “all work which is performed during a period of not less than seven consecutive hours, including the interval from midnight to 5 a.m.” (article 1(a)). According

³ Rotating shifts are shift patterns that change over time. For example, a three-shift system moves from a daytime shift to an afternoon/evening shift to a night shift.

to research by Eurofound (2010a), 18 per cent of European workers work during the night. Night work in the EU (including candidate countries) is most common in Turkey, Latvia, Malta, Poland and United Kingdom, and in health and social work and hotels and restaurants (Riedmann et al., 2010, page 20). Outside of the EU, between 15 and 20 per cent of all employees perform night work in countries such as Chile, China and Senegal (in the formal economy), while less than 10 per cent of employees in Brazil and New Zealand work at night (Lee, McCann, and Messenger, 2007, page 98; Statistics New Zealand, 2008, page 9). Despite its so-called “24/7 economy”, a very small proportion of workers in the United States perform night work: a mere 3.1 per cent work permanent night shifts and 2.7 per cent work rotating shifts, which involve some night work (McMenamin, 2007, page 8).

106. Weekend work is any work occurring on normal days of rest. While in many Western countries, the weekend commonly refers to Sunday and/or Saturday, in most Arab countries the traditional weekly rest day is Friday. Compared with night work, work schedules involving some weekend work appear to be more common. For example, the most commonly used type of non-standard work schedule across Europe is work on Saturdays: 40 per cent of establishments across the EU (including candidate countries) operate on Saturdays (Riedmann et al., 2010, page 20). Sunday work in the EU is less frequent, with 24 per cent of establishments operating on Sundays and 26 per cent of workers working a minimum of one Sunday a month, although this is a slight decrease since 1995, when the figure was 30 per cent (ibid.; Eurofound, 2010a, page 4). Weekend work (on both Saturdays and Sundays) in the EU (including candidate countries) is most common in establishments in Latvia, Malta, Poland, Turkey and United Kingdom and, like night work, occurs most frequently in health and social work and in hotels and restaurants (Riedmann et al., 2010, page 20). The extensive use of weekend work in hotels and restaurants and in wholesale and retail trade is a pattern that also appears in China, Hungary and Jamaica (Lee, McCann, and Messenger, 2007, page 99). By contrast, Sunday work is rare in establishments in a number of EU Member States (ibid.). Outside of the EU, 15 and 9 per cent of Australian workers usually work on Saturdays and Sundays, respectively (the figure is much higher for multiple jobholders) and 15.8 per cent of American workers usually work on at least one weekend day (Australian Bureau of Statistics, 2010, page 3; McMenamin, 2007, page 8).

107. Looking at these non-standard work schedules from a gender perspective, it is clear that men are more likely to both perform shift work and work at night, while women and men are equally likely to work on weekends. This pattern can be clearly seen in the EU-27, as shown in table 5. It can also be seen in other developed countries, such as New Zealand, where men are more likely than women to work evenings, nights and weekends (Statistics New Zealand, 2008, page 1) and in the United States where, as noted earlier, men are more likely than women to work an “alternate shift” (McMenamin, 2007, page 9).

Table 5. Share of persons working atypical hours in the EU-27

	2000		2007	
	Men	Women	Men	Women
Shift	16.3	13.2	19.0	16.2
Saturday	27.6	27.1	27.3	27.2
Sunday	11.3	11.5	13.2	13.3
Night	9.3	5.3	9.4	5.3
Evening	19.3	15.6	21.5	18.0

Source: Plantenga and Remery, 2010, p. 59.

Part-time work arrangements

- 108.** Other forms of working-time flexibility are of more recent origin, and of these other forms, by far the most widespread is part-time work arrangements. Part-time work arrangements are also one of the most complex and multifaceted forms. In Part II of the report, one important aspect of part-time work was reviewed: shorter hours and the incidence of short or part-time hours in different countries. Here in Part III, the focus is on part-time work schedules – that is, how short (or part-time) hours are organized – and the quality of part-time jobs.
- 109.** Part-time work can be organized in a variety of different ways, but the most common model, at least in the EU, is the one that establishes some fixed hours of work for each working day. Part-time work is at least partly organized in this manner in 78 per cent of all establishments across the EU-27 and the three candidate countries (Riedmann et al., 2010, page 15). Other methods of organizing part-time work also exist (see table 6). These methods include fixed working days with full-time hours on some days and entire days off; variable working hours on demand, with working hours fixed with limited advance notice based on establishments' needs; and other forms adapted to specific situations, such as partial retirement schemes. Statistics on the work schedules of part-time workers are rare outside the EU, but it is known that part-time workers in the United States are more likely to work on “alternate shifts” that fall outside of the normal daytime schedule of 6 a.m. to 6 p.m. than full-time workers (McMenamin, 2007, page 10). On the surface, these differences in how part-time hours are scheduled may seem insignificant but, as we shall see in the next section, they can make a big difference to how part-time work affects workers and enterprises.

Table 6. Organization of part-time work, by country (%)

	Some fixed daily working hours	Other fixed cycles	Flexible working hours on demand	Other forms
Austria	83	36	33	10
Belgium	65	73	29	18
Bulgaria	72	29	34	23
Cyprus	78	42	41	15
Czech Republic	78	25	31	18
Germany	80	47	47	17
Denmark	81	57	35	15
Estonia	49	38	26	24
Greece	75	38	25	2
Spain	87	20	34	9
Finland	45	54	45	36
France	76	52	25	13
Hungary	79	29	23	9
Ireland	73	69	53	18
Italy	88	23	17	3
Lithuania	79	35	26	6
Luxembourg	72	57	38	10
Latvia	64	49	48	10
Malta	61	30	56	7
Netherlands	67	87	30	14
Poland	81	32	21	9

	Some fixed daily working hours	Other fixed cycles	Flexible working hours on demand	Other forms
Portugal	74	15	26	5
Romania	84	18	28	3
Sweden	72	60	34	18
Slovenia	80	12	16	7
Slovakia	82	13	20	6
United Kingdom	76	56	48	16
Croatia	45	12	16	32
Macedonia	81	32	40	13
Turkey	75	53	57	27
EU-27	78	45	35	13
All 30 countries	78	45	36	13

Note: Base = establishments with 10 employees or more with part-time staff.

Source: Riedmann et al., 2010, p. 16.

- 110.** There is now a large body of research demonstrating that part-time jobs are typically of lesser quality than similar full-time jobs in their terms and conditions of employment: hourly wages, contractual arrangements, non-wage employee benefits, social protection coverage, including maternity protection, and even training and career development opportunities. This evidence has been summarized in a recent OECD report (OECD, 2010, see text box below).

The quality of part-time work in OECD countries

In recent years, part-time work has become more widespread in OECD countries, particularly as certain groups with traditionally low labour force participation have started to take up paid work in greater numbers. At present, about 25 per cent of the female and almost 10 per cent of the male workers in the OECD countries are working part time, most of them on a voluntary basis.

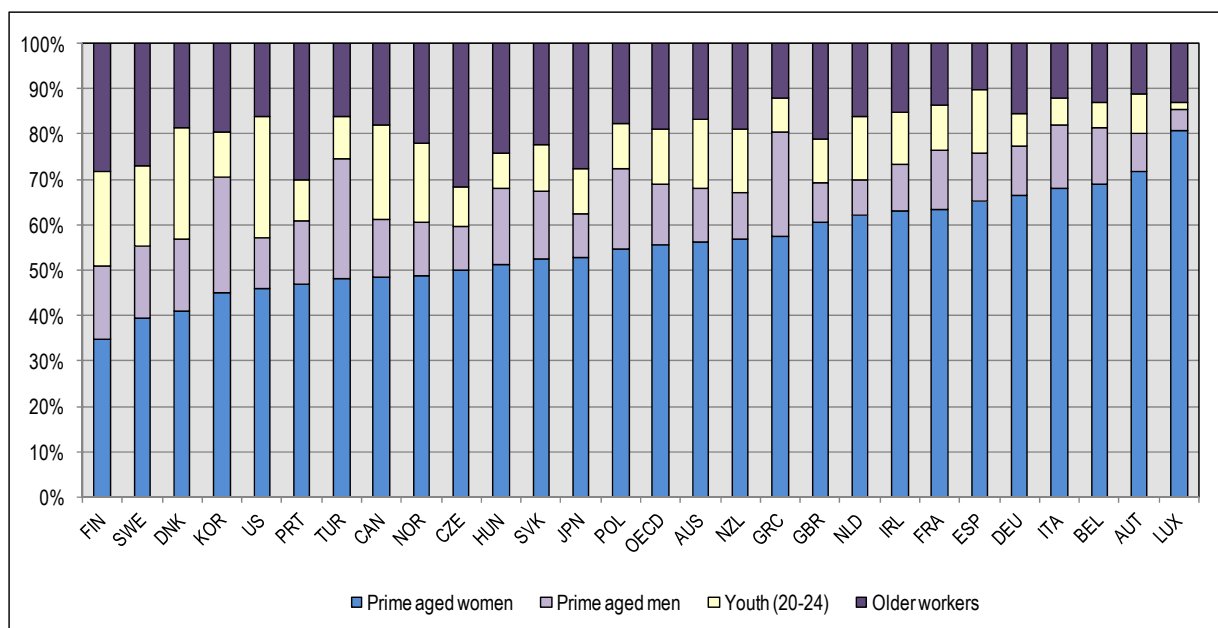
Nevertheless, despite recent efforts to improve the quality of these jobs, part-time workers often face a penalty in terms of wages, job security, training and promotion. Furthermore, these workers have a higher risk of poverty and are less likely to have access to unemployment benefits and re-employment assistance if they become unemployed. Taking into account individual and job characteristics, it has been shown that this penalty tends to be lower in countries with a high prevalence of part-time work, such as the Netherlands. Interestingly, in such countries, many workers stay in part-time jobs for long periods and only a few of them move to full-time employment.

Another concern is that, as described in Part II of this report, part-time work is dominated by women in nearly all of the countries in which it exists (see figure 19). In addition, there is the issue of the extent to which part-time work reflects a voluntary choice on the part of workers – that is they prefer to work part time – or whether it is instead an involuntary situation resulting from their inability to find a suitable full-time job.

However, according to the OECD, the disadvantages of part-time work mentioned above appear to be offset to some degree by higher job satisfaction as a result of more family friendly working-time arrangements and better occupational health and safety.

Source: OECD, 2010, pp. 211–216; p. 264.

Figure 19. Share of various demographic groups in total part-time employment, 2007 (%)



Source: OECD, 2010, p. 264.

Overview of other types of working-time flexibility

111. Beyond overtime, shift work and part-time work, a number of other types of working-time flexibility have also emerged in recent decades. This report will focus on the most commonly used instruments, including staggered hours, compressed workweeks, “flexi-time arrangements” (which are covered under the category of “flexible working-time arrangements” in the ICLS 2008),⁴ time-saving account arrangements (which are also known as “time banking”), and annualized hours arrangements (hours averaging), mainly in developed countries. However, available data on the extent to which these arrangements are used by enterprises and the number and/or proportion of employees affected is very limited, with the notable exception of the EU Member States. Interest in these newer forms of working-time flexibility has been more limited in many developing and transition countries. The relatively limited use of these arrangements appears to be the result of a reliance on more traditional forms of working-time flexibility such as overtime and shift work, and the existence of extensive informal economies (see Lee, McCann and Messenger, 2007). Nonetheless, some of these newer types of working-time flexibility also exist in a number of Latin American countries, such as Brazil, Colombia, Ecuador, Guatemala, Peru and Uruguay and in developed enclaves within developing countries, such as Hong Kong, China (see, e.g. Hendriks, León, and Chinchilla, 2006; and Community Business, 2010).

⁴ It should be noted that the ICLS 2008 definition of “flexible working-time arrangements” also includes flexi-time arrangements that permit workers to accumulate additional hours which can later be taken as paid time off. This is not permitted under more basic types of flexi-time that only allow workers to vary the times at which they begin and end work. Generally, however, working-time arrangements that allow for the accumulation of additional hours that can later be taken as paid time off are called “time-saving account arrangements” or simply “time banking”.

Alternative fixed schedules: Staggered hours and compressed workweeks

- 112.** The first category of working-time flexibility includes arrangements that involve some changes to the standard workweek, but nonetheless result in work schedules that are fixed, rather than flexible, for specific groups of employees. The most typical working-time arrangements in this category are staggered hours (which are also called “block working arrangements” in the ICLS 2008) and compressed workweek arrangements (or CWWs). Under staggered hours arrangements, different starting and finishing times are established for different groups of workers in the same establishment; however, once these starting and finishing times have been chosen (or fixed by the employer), they remain unchanged. Staggered hours represent one way of easing problems of traffic congestion and over-burdened public transport at certain peak hours, as well as assisting workers with family responsibilities (e.g. with school pickup times). Instead of having all their workers start and finish work at the same time, different firms (or even different industries) can adopt different starting and finishing times. In this way, traffic can flow more smoothly, public transportation is less crowded, and physical and psychological strain is lessened for everyone in the community. Staggered hours are widely used in a number of European countries such as Italy, Slovenia and Sweden. Several successful cases of staggered hours can also be found in Singapore, where traffic congestion has often caused long commuting times. One example is at the National University Hospital (see ILO, 2004b).
- 113.** CWWs involve the same number of working hours being scheduled over fewer days than is typical in a standard workweek, which also results in longer working days. CWWs typically extend the workday beyond eight hours, but reduce the number of consecutive days worked to fewer than five. For example, with a CWW, a 40-hour workweek that is normally worked as five eight-hour days can be worked as four ten-hour days instead. This is called a “4 x 3” CWW arrangement (four consecutive working days followed by three consecutive days of rest). The logic underlying CWWs varies by organization, but such CWW arrangements are often used in office environments to reduce the costs of starting up operations, as well as energy and other variable operating costs. More extreme forms of CWWs can be found in jobs that involve commuting long distances between the workers’ home and the workplace, such as in the offshore oil industry and mining in remote areas; in such cases, periods of continuous work can extend from a minimum of seven to a maximum of 35 consecutive days, immediately followed by the same amount of off-duty days at home.
- 114.** While national statistics on the incidence of CWWs among enterprises are not generally available, the few studies available suggest that the incidence of CWWs is rather small. One Canadian study found that approximately 3 per cent of Canadian employees compressed their workweeks (ILO 2004c, page 1). However, there is some indication that CWWs may be more widespread, such as in Colombia, where nearly half (46 per cent) of the respondents to a survey on work–family reconciliation measures reported that their enterprises used CWWs for at least part of their workforce (Carlier, 2006, page 57). In the 2010 India Benchmarking Report, which included 56 organizations representing eight different industries, 32 per cent of the participating organizations reported having CWW programmes, although these arrangements typically covered less than 15 per cent of the organization’s workforce (Bagati, 2011, pages 15–16).

Flexi-time and time-saving account arrangements (time banking)

- 115.** The second category of newer types of working-time flexibility consists of two similar working-time arrangements: flexi-time arrangements (called “flexible working-time arrangements” in the ICLS, 2008) and time-saving account arrangements, which are more commonly known as time banking. Basic flexi-time arrangements allow workers to choose

when to start and finish work, based on their individual needs (within specified limits) and, in some cases, even the number of hours that they work in a particular week. In addition to formal flexi-time arrangements, some employers who do not have formal programmes may offer flexible hours on an informal basis. In the other direction, some of the more complex forms of flexi-time arrangements blur into time-saving-account arrangements (also called working-time accounts), as they may allow workers to accumulate credit hours and, in some cases, even allow them to use their “banked” hours to take full days off. In general, formal flexi-time programmes involve establishing a period of core hours when all employees are required to be at work (e.g. 10 a.m. to 4 p.m.), although some flexi-time programmes have no core hours at all. These core hours are bracketed on either side by periods of flexible hours (e.g. 7 a.m. to 10 a.m. and 4 p.m. to 7 p.m.) when employees can choose which hours they prefer to work, as long as the contractually required hours are worked for a specified work period. Flexi-time arrangements are typically introduced in enterprises with the objective of providing a tool to facilitate employees’ work–life balance, rather than for specific business reasons.

- 116.** Time-saving account arrangements (time banking) permit workers to build up “credits” or to accumulate “debits” in hours worked, up to a maximum amount; the periods over which the credits or debits are calculated are much longer than with flexi-time, ranging from several months to a year or even longer. The rules of the specific time-saving-account arrangement determine how and when the “banked” hours accumulated in the account can be spent. In general, in the case of shorter term working-time accounts, hours worked which are above contractually agreed hours can be taken as paid time off. In the case of long-term accounts, which are much rarer, time-saving accounts begin to take on some of the characteristics of annualized hours arrangements (see para. 119 below). In these long-term accounts, accumulated credit hours can be used for longer paid holidays, sabbaticals or, in some cases, even early retirement. In some cases, however, there are significant restrictions on the use of these accounts based on enterprises’ operational needs (e.g. the amount of advance notice required to take time off). This is in line with the dual logic of working-time accounts: they are designed both as a tool to facilitate employees’ work–life balance (similar to flexi-time), but also as a tool to help enterprises to better adapt working hours to the establishment’s workload (see e.g. Plantenga and Remery, 2010, page 54). Which of these objectives takes precedence – or whether there is a balance between them – depends on the structure of the particular time-saving-account arrangement.
- 117.** Flexi-time arrangements are widespread throughout the industrialized world, although they have slightly different names and take somewhat different forms in different countries and in different enterprises. In the EU-27, for example, 56 per cent of all establishments offer flexi-time arrangements of some kind – ranging all the way from formalized working-time accounts to more basic arrangements (both formal and informal), which allow employees to vary their starting and ending times each day, but not to accumulate hours (Riedmann et al., 2010, page 5). Two-thirds of these schemes offer workers the possibility of accumulating hours in time savings accounts (*ibid.*, page 6). Access to working time-saving accounts (time banking) is widespread in Germany (see text box). Interestingly, despite the vast country differences in access to various forms of flexible work schedules, there are only very minor gender differences in access to flexible schedules within nearly all of the EU-27 countries.

Working-time accounts in Germany – The cases of Airbus Germany and the ERGO Insurance Group

In Germany, a wide variety of different working-time arrangements are in use: for example, Airbus Germany and the ERGO Insurance Group offer innovative working-time account systems developed through collective bargaining that benefit both workers and the enterprises.

In order to secure employment and increase flexibility in production to meet the fluctuations in demand that are fairly common in the aircraft industry, in 2003, Airbus Germany introduced a new working-time model for its workers. It contains three different working-time accounts: (a normal overtime account) *Arbeitszeitkonto*, (a security account) *Sicherheitskonto* and (a working-life account) *Lebensarbeitszeitkonto*. The overtime account is similar to a flexi-time account and is used to deposit overtime hours. The security account allows the enterprise to take hours out of the workers' accounts when there are not enough orders to employ the entire workforce, thereby helping to secure employment in the plant; all hours the company takes out of this account are compensated by adding a 15 per cent increment in return. The working-life account enables workers to invest in an "intelligent" investment fund that yields interest over time and allows them to retire earlier from their working life.

The ERGO Insurance Group offers its workers a flexible life-working-time account which can be adapted to the needs of the individual worker and the company. Workers can deposit overtime hours, unused annual leave and special leave into this working-time account, as well as converted annual leave pay, Christmas bonuses or other special payments, and even parts of their usual salary. The conversion of these payments into working-time credits is done on the basis of the gross value of these payments before taxes and contributions to social security, thereby benefiting both the company and the worker. Workers can use their accumulated working-time credits for early retirement, sabbaticals or for the company's pension scheme, for example.

Source: Jeske et al., 2006, Executive summary; and Deutsche Versicherungsbörse, 2007.

- 118.** In the United States, the proportion of workers with access to some type of flexible work schedules that allow them to vary their hours based on their individual needs is approximately 30 per cent; roughly equal proportions of women and men have access to flexible work schedules (McMenamin, 2007, pages 3–4). In Japan, 10.2 per cent of employees work under flexible working hours systems that resemble flexi-time arrangements, with an additional 3.8 per cent of employees working under the so-called discretionary labour and de facto working hours systems, under which they are permitted to set their own hours, and another 3.4 per cent working under systems without management of working hours at all (Ogura, 2010, page 102). Flexible work schedules also appear to be relatively common in a number of countries in Latin America, including Brazil, Colombia, Guatemala, Mexico and Peru, where over half of companies responding to a survey on work–family reconciliation measures reported that their enterprises used flexi-time arrangements (flexible starting and finishing times only) for at least part of their workforce (Hendriks, León and Chinchilla, 2006).

Annualized hours and other types of hours-averaging schemes

- 119.** Annualized hours and other types of hours-averaging schemes (e.g. mensualized hours or hours averaged over a period of one month) allow for variations in daily and weekly hours of work within specified legal limits, such as maximum daily and weekly hours (see the section on working-time regulation in Part II for details), while requiring that working hours either achieve a specified weekly average over the period within which the hours are averaged, or remain within a fixed annual total. As long as the maximum limits are respected, including the weekly average or annual total, no overtime premium is payable for hours worked beyond the statutory normal hours. Other important provisions of annualized hours or other types of hours-averaging arrangements include the notice period for changes in work schedules; the periods of time over which hours worked are averaged (called "reference periods"); and the conditions under which overtime will be paid (e.g. if the total annual hours are exceeded). In some cases, the annual total includes some "reserve hours", which are worked only if needed (see Incomes Data Services, 2009). Under fully annualized hours arrangements, wages are typically kept constant and are paid

on an average basis throughout the year. Annualized hours arrangements and other types of hours averaging are particularly useful for enterprises in industries which have strong, predictable seasonal variations in demand (e.g. ski resorts). However, annualized hours arrangements are among the most complex work scheduling systems that exist and, to be successful, careful planning and implementation are essential.

- 120.** Within the EU, annualized hours and similar arrangements appear to be the most common. The Aubry laws in France introduced the 35-hour workweek in combination with the annualization of working hours, so that the 35-hour limit on normal hours can be calculated as an annual average. Annualized hours and similar arrangements are also widely employed by enterprises in several of the Nordic countries, including Denmark and Finland (Kouzis and Kretsos, 2003). In the developing world, annualized hours arrangements appear to be rare, but they do exist in Brazil and China, where they are called the “modulation of the working week” and “comprehensive working time”, respectively (Lee, McCann and Messenger, 2007, page 100).

Tripartite guidelines on flexible work schedules in Singapore

In order to provide greater adaptability to employers dealing with rapidly changing market demands and volatile business conditions, the Government of Singapore has allowed variations from the legal provisions of the Employment Act on overtime work and work on rest days and public holidays since 2004.

Ever since, on the approval of the Commissioner of Labour, an employer facing volatile business conditions is allowed to compute the average weekly working hours over a longer period than the usual one- to three-week cycle. If the situation warrants it, an employer can also be exempted from cash payments or be allowed to pay a rate different from those prescribed for overtime or rest day or public holiday work.

To ensure that these measures benefit both workers and employers, a national tripartite workgroup formulated a set of tripartite guidelines on the implementation of flexible work schedules. According to these guidelines, a company needs to prove a compelling need for such measures and to seek the consent of the union or the majority of the affected employees (in the case of non-unionized companies). Furthermore, the employer needs to ensure workers' income stability and to keep a good track record in respect of workers' health and safety. Except in special circumstances where the Commissioner of Labour agrees to it, the maximum 12-hour daily working limit and the monthly 72-hour overtime limit must not be exceeded. A profit-sharing or incentive scheme to share efficiency and productivity gains derived from the flexibility measures must be put in place, too. The exemptions from the provisions of the Employment Act are subject to regular reviews and renewals after a predefined period of time.

Source: Ministry of Manpower, Singapore, 2004.

Atypical or precarious working-time arrangements

- 121.** Some types of working-time arrangements, like some types of contracts, are often considered to be “non-standard” or “atypical” because they deviate from normal hours or from the standard workweek. For example, part-time work is often considered to be non-standard or atypical because the number of hours involved is lower than the normal hours of full-time workers (also, as was discussed in an earlier section, the quality of part-time work is typically poorer than of comparable full-time positions). However, certain types of working-time arrangements, particularly those involving very short part-time hours (e.g. fewer than 15 hours per week) or those with no fixed hours at all, such as on call work and zero-hours contracts, are so unusual that some authors have defined them as being very atypical working-time arrangements (see Broughton, Biletta, and Kullandar, 2010).
- 122.** “Marginal” part-time work involves very short hours, which can be defined as fewer than 15 per week (in some cases, even lower thresholds are used, for example fewer than ten hours per week). Both on call working (not to be confused with on call hours, i.e. workers with regular work schedules, for example doctors, who are required to be available during specific periods to work additional hours if needed) and zero-hours contracts are working-time arrangements under which workers are not entitled to any

minimum number of hours of work; in some countries, this type of arrangement is also known as casual work. These particular forms of working-time arrangements share at least two common characteristics that make them likely to be precarious: a very low number of working hours, which means that these workers also have very low earnings, and a very high level of unpredictability regarding if and when work will be required, which makes it extremely difficult for workers to schedule their personal affairs, much less to plan for the future (ibid.).

123. Regarding the incidence of very atypical or precarious working-time arrangements, in the EU, marginal part-time work is most widespread in Germany, Ireland, Malta, Netherlands and United Kingdom; more than 40 per cent of the establishments in these countries employ at least some of their workforce for fewer than 15 hours per week (Riedmann et al., 2010, page 17). One example of marginal part-time work is the so-called “mini-jobs” in Germany, which (by definition) pay wages of under €400 and are excluded from social security coverage; therefore “the status of the persons is precarious” (Plantenga and Remery, 2010, page 44). Zero-hours contracts and on call working are not legal in some countries,⁵ and statistics on the incidence of such arrangements are not available, even for many EU Member States. However, for the countries in which data are available, the highest incidence of these types of arrangements is found in Austria and the United Kingdom – where they affect approximately 5 per cent of the workforce – and they are particularly common in the retail trade (Broughton, Biletta and Kullander, 2010, page 11). Although no specific figures are available, on call working is widely practiced in Sweden, in particular in hotels and restaurants and in personal care services for the elderly and persons with disabilities (ibid.).
124. Finally, perhaps the ultimate form of precarious working-time arrangement is work in the informal economy of many developing countries. As part of the informal economy, women account for a considerable part of GDP, both as employees in global production chains or small businesses, which are often not captured by national accounts, and as independent entrepreneurs, as can be seen in the data on hours of work in self-employment in Part II, (see United Nations Population Fund, 2000). According to different estimates, the informal economy accounts for around 41 per cent of non-agricultural GDP in sub-Saharan Africa (see Blackden et al., 2006). While there is little or no statistical information available on work schedules in the informal economy, Chapter 5 of *Working time around the world* reviewed working time in the informal economy. Regarding work schedules, that analysis concluded, based primarily on a country study conducted in Senegal, that everything depends on the volume of work: that is, workers in the informal economy work if and when work is available (Ndiaye, 2006, page 40).

Advantages and disadvantages of schedules for workers and employers

125. The variety of work schedules that exist offers advantages and disadvantages for both workers and employers; some temporal flexibility⁶ is orientated towards workers’ needs (beyond the minimum standards required for workers’ protection) and some is focused on

⁵ For example, zero hours working is not legally recognized in four EU Member States: Belgium, Bulgaria, Lithuania and Luxembourg.

⁶ There is considerable confusion regarding the concept of working time, or temporal flexibility, particularly in the context of the ongoing EU debate on *flexicurity*. This report focuses solely on temporal flexibility, which is defined as flexibility in the ways in which working hours are arranged over a specified period of reference. This type of flexibility assumes a fixed number of workers with variable or flexible working hours, and should not be confused with numerical or contractual flexibility, which by definition focus on obtaining flexibility through a variable number of workers.

meeting the needs of enterprises (this is often called “variability” in working time literature, as discussed in the next section). That is not to say that working-time arrangements cannot be beneficial to both workers and employers; it is only to say that both the type of working time arrangement and its structure affect the extent to which the arrangement will meet the needs of workers, the needs of enterprises, or a combination of both. Table 7 summarizes the advantages and disadvantages of different types of working-time arrangements from the perspectives of both workers and employers.

Table 7. Advantages and disadvantages of different types of working-time arrangements for workers and employers

	Workers		Employers	
	Advantages	Disadvantages	Advantages	Disadvantages
Overtime	<ul style="list-style-type: none"> ■ Higher earnings (if overtime is paid) or ■ Longer periods of paid leave (if compensatory time off is granted instead) 	<ul style="list-style-type: none"> ■ Potential negative effects on workers' health and safety and on work–life balance 	<ul style="list-style-type: none"> ■ Increase production immediately to respond to increased demand ■ Extended operating or shop opening hours (more intensive use of facilities and equipment) 	<ul style="list-style-type: none"> ■ Extra costs of overtime payments ■ Potentially reduced marginal productivity ■ Increased risk of occupational diseases and accidents
Shift work	<ul style="list-style-type: none"> ■ Higher earnings (in case of premium wages for certain types of shifts) or ■ Longer periods of paid leave (if compensatory time off is granted instead) 	<ul style="list-style-type: none"> ■ Potential negative effects on workers' health and safety and on work–life balance, especially in the case of night work ■ Other difficulties (e.g. lack of transportation and training) 	<ul style="list-style-type: none"> ■ Extended operating or shop opening hours (more intensive use of facilities and equipment, including (semi)continuous production processes) ■ Better coping with perishable goods 	<ul style="list-style-type: none"> ■ Higher administrative and labour costs ■ Higher complexity ■ Potential negative effects on workplace safety and health, especially in the case of night work
Part-time arrangements	<ul style="list-style-type: none"> ■ Improved work–life balance due to shorter hours ■ Point of (re)entry to the labour market for women and youth ■ Gradual transition from full-time paid work to retirement 	<ul style="list-style-type: none"> ■ Poorer job quality in terms of pay, job security, training, promotion and social protection coverage ■ Higher risk of in-work poverty 	<ul style="list-style-type: none"> ■ Improved adaptation to fluctuations in customer demand ■ More flexible work planning ■ In some cases tax incentives 	<ul style="list-style-type: none"> ■ Potentially higher administrative costs ■ Higher taxes and social contributions if part-timers cover the same hours as full-timers
Staggered hours arrangements	<ul style="list-style-type: none"> ■ Easier commuting (less traffic congestion and less overburdening of public transport during peak hours) 	<ul style="list-style-type: none"> ■ Potential inconveniences for some workers due to new schedules 	<ul style="list-style-type: none"> ■ Extended operating or shop-opening hours (more intensive use of facilities and equipment) 	<ul style="list-style-type: none"> ■ Record-keeping difficulties and administrative difficulties due to “overlapping” starting and finishing times
Compressed work weeks	<ul style="list-style-type: none"> ■ Fewer working days ■ Reduced commuting time and transport expenses 	<ul style="list-style-type: none"> ■ Longer working days ■ Increased fatigue and risk of workplace accidents 	<ul style="list-style-type: none"> ■ Reduced costs, e.g. regarding starting up operations and energy 	<ul style="list-style-type: none"> ■ Increased fatigue and risk of workplace accidents ■ Lower productivity
Flexi-time arrangements and time-saving accounts	<ul style="list-style-type: none"> ■ Time sovereignty for workers, therefore positive effects on their health and well-being ■ Additional days off for further training, children or holidays ■ Better balance between work, family and private life 	<ul style="list-style-type: none"> ■ Potential risk of overloaded time-saving accounts (limiting the degree of time sovereignty) 	<ul style="list-style-type: none"> ■ Cost savings on overtime and other premium payments ■ Better adaptation to variations in workload ■ Increases in workers' motivation and performance 	<ul style="list-style-type: none"> ■ Greater complexity of work scheduling (creating additional costs) ■ Loss of direct supervision over working hours
Annualized hours arrangements/other forms of hours averaging	<ul style="list-style-type: none"> ■ Stable income regardless of variations of hours worked ■ Potentially increased influence of workers over their working hours 	<ul style="list-style-type: none"> ■ Irregular and unpredictable working hours ■ Varying workloads ■ Reduced total earnings if overtime pay is eliminated 	<ul style="list-style-type: none"> ■ Better adaptation to variations in production or service delivery requirements ■ Reduction in labour costs if overtime pay is eliminated 	<ul style="list-style-type: none"> ■ Complicated administrative procedures and associated costs

126. It is important to note that different forms of flexibility can interact: for example, numerical or contractual flexibility (e.g. temporary employment) can be used by enterprises in combination with temporal (working time) flexibility. More commonly, however, while the same enterprise may use different forms of flexibility, employers respond to fluctuations in market demands by increasing or decreasing the number of employees in the enterprise or its subunits (the so-called “extensive margin”) or by increasing or decreasing the working hours of employees in the enterprise (the so-called “intensive margin”). In fact, the recent experience of the global economic crisis (which will be discussed in Part IV) clearly shows how a focus on working-time flexibility can promote job stability, as there were substantially fewer job losses in the enterprises and countries (e.g. Germany and Netherlands) that emphasized making adjustments to reduced demand on the intensive rather than the extensive margin (see Part IV for evidence on this point).

B. Recent evidence regarding the effects of work schedules on workers and enterprises

127. This section summarizes the latest available empirical evidence regarding the effects of different types of work schedules on both workers and enterprises, based on three research papers (discussed in Part II) summarizing the current empirical evidence regarding the effects of working time on occupational safety and health, work–life balance and productivity and enterprise performance.

128. Tucker and Folkard (2011) review and synthesize the vast literature regarding the effects of work schedules, in particular various types of shift patterns, on occupational safety and health. They emphasize the “almost infinite number of shift systems in operation” (page 23), with variance among shift systems taking the following forms, among others: the number and length of shifts; shift starting and ending times; whether shifts rotate or not and, if so, the direction of rotation; and the number of days off and whether those days off are consecutive or not. They also emphasize that the health effects of work schedules may take years to become apparent. Nonetheless, they find an association between shift work and a number of cardiovascular diseases (e.g. angina pectoris, myocardial infarction, and higher mortality rates owing to heart diseases), digestive disorders and other problems with workers’ physical health. Night workers may be at greater risk of these types of occupational diseases than other shift workers and, in addition, the risk of accidents and injuries increases over four or more night shifts in a row (*ibid.*, pages 23–24).

129. Very rapidly rotating shift systems are preferable to more slowly rotating ones, and forward rotating (clockwise) shift systems are better than backward rotating ones (page 25). However, with respect to night work, it is not clear whether or not rotating shifts that include night work are less harmful than permanent night shifts, although there appear to be important gender differences in this respect. Both rotating shifts with some night work and permanent night shifts result in a substantially higher risk of a compensated work injury for both women and men; however, these two increased rates are quite similar for women, while for men the injury risk is six times higher for permanent night workers than for those workers on rotating shifts (Wong, McLeod and Demers, 2010, page 58). This leads Tucker and Folkard (2011, page 24) to conclude that, “at least for males, fixed or permanent night shifts should be avoided in most circumstances”.

130. In terms of rest days and rest breaks during the working day, “[t]he main key to minimizing the accumulation of excessive fatigue is the provision of adequate opportunities for rest and recovery, during shifts, ... between successive shifts ... and between blocks of shifts (i.e. rest days)” (Tucker and Folkard, 2011, page 26). A single rest day is generally insufficient to avoid impairments in workers’ alertness and performance,

and it is recommended that it may be appropriate to limit spans of successive work days to not more than six and to require a minimum of two successive rest days (Tucker and Folkard, 2011, citing Spencer, Robertson, and Folkard, 2006, page 40). They also conclude that, to minimize the build up of fatigue and work-related stress, frequent, short breaks (e.g. 15 minutes every two hours) should be incorporated into work schedules (Tucker and Folkard, 2011, page 28). Finally, while split shifts are not problematic per se from an occupational safety and health perspective, they often incorporate other features that are likely to be problematic, such as unpredictable or irregular schedules (ibid., page 29).

- 131.** It is important to distinguish between flexible working-hours arrangements controlled by the employer (“employer-led variability”) and those which permit employees to have discretion regarding their work schedules (“employee-led flexibility”) (ibid., page 29). Research studies regarding flexible working-hours arrangements based on employer-led variability tend to show negative impacts on workers’ health and well-being, while those based on employee-led flexibility typically show positive effects on a range of measures, not only related to occupational safety and health but also to work–life balance and organizational performance. For example, variability in work schedules has been associated with negative effects on self-reported health and well-being (including psychological well-being), as well as reductions in sleep quality and leisure time (see e.g. Janssen and Nachreiner, 2004).
- 132.** In terms of work–life balance, atypical (i.e. non-standard) work schedules increase work–family incompatibility: nearly double the proportion of workers working evenings and nights report work–family incompatibility than those working during the day; nearly double the proportion of workers working shifts report incompatibility than those not engaged in shift work; and nearly three times as many workers who work weekends (either Saturdays or Sundays) report work–family incompatibility, compared with those workers who do not work on weekends (Fagan et al., 2011, page 44). From a gender perspective, men are more likely than women to report work–family incompatibility for all of these non-standard work schedules (ibid.). Also, higher satisfaction with work–life balance is found among workers working standard daytime schedules than among those working unsocial (non-standard) schedules, long hours, shift work or irregular schedules (see Parent-Thirion et al., 2007). Workers in lower level occupations are more likely to work non-standard schedules, and less likely to have autonomy or control over their working time that could help offset the negative effects of these schedules on work–life balance (Fagan et al., page 51). Finally, such non-standard work schedules can also impact negatively on community social and civic life, since such activities tend to take place mainly in the evenings and on weekends (see e.g. Morris and Madsen, 2007).
- 133.** In addition, Golden (2011, page 5) identifies two separate categories of flexible work arrangements with respect to their potential effects on enterprise performance: “Those [flexible work arrangements] that enhance individual or organizational productivity, and thus directly restrain unit labour costs of production; and those that improve employee health and well-being and satisfaction with the job or life, without raising current labour costs, and thus [result in] a long-run suppression of labour costs, to the extent that it saves the relatively more hidden costs associated with job dissatisfaction and human capital investment.”
- 134.** Specifically, both flexi-time arrangements and compressed workweeks have positive effects on productivity, employee job satisfaction and satisfaction with work schedules; in addition, flexi-time has a strong positive impact on absenteeism as well (see Baltes et al., 1999). These positive effects appear to be the result of a better match between employees’ working hours and their circadian rhythms, as well as greater job autonomy and reduced work–life conflict. In fact, a number of studies find that employees who have greater flexibility regarding their work schedules also report lower levels of work–life conflict, stress and burnout (see e.g. Byron, 2005). A more recent international study of business

practices and productivity in firms (see Bloom, Kretschmer and Van Reenen, 2009) also reported that better work–life balance practices, such as providing workers with flexibility regarding their work schedules, are associated with significantly higher productivity. There is also substantial evidence that employers who offer work schedule flexibility to their employees are likely to improve the recruitment of new staff and retention of existing staff, resulting in cost savings to the enterprise (see e.g. Kossek and Michel, 2010). Nonetheless, it should be noted that the benefits of flexible schedules depend on the extent to which enterprise policies offering employees access to such arrangements are supported, or undermined, by supervisory practices.

- 135.** The current empirical evidence regarding the various forms of working-time flexibility can be summarized as follows: “A substantial body of evidence indicates that providing employees with flexibility and control over their working time is associated with positive outcomes in terms of health and well-being, as well as positive organizational outcomes such as increased productivity and reduced absenteeism and turnover. At the same time, it is evident that denying workers schedule control and imposing variability of work hours results in negative health and well-being outcomes” (Tucker and Folkard, 2011, page 34).
- 136.** Nonetheless, it is possible to have flexible working-hours arrangements in which employer-led variability and employee-led flexibility “co-exist in more or less equal measure”, such as in some annualized hours arrangements. However, there is little empirical evidence regarding how to achieve an effective balance of flexibility between employers and workers. Therefore, the development of a “set of guiding principles for the implantation of [flexible working hours], which may be used as the basis for practitioners to advise individual client organizations”, is suggested (*ibid.*, page 35).

Part IV. Working time adjustments: A key policy response to the global jobs crisis

A. Work-sharing as a job-preservation strategy

137. Working-time adjustments offer an important strategy for limiting or avoiding job losses and supporting companies in retaining their workforce in economic downturns. One important tool for adjusting working hours to changes in demand is work-sharing. Work-sharing is a reduction of working time that is intended to spread a reduced volume of work over the same (or similar) number of workers in order to avoid lay-offs;¹ alternatively, it can be a measure intended to create new employment (see Messenger, 2009).² This reduced working time may take a variety of forms, most typically shorter working weeks (for example, three- or four-day working weeks, instead of the more usual five-day working week), but also reduced daily hours or temporary plant shutdowns for periods of several weeks or even months. The concept of work-sharing originated during the Great Depression and is reflected in the spirit of Convention No. 47, adopted at the height of the Great Depression, which established the principle of the 40-hour week and advocated that, owing to the widespread unemployment prevailing at that time, “a continuous effort should be made to reduce hours of work in all forms of employment to such extent as is possible”.

138. In the context of the recent global economic recession and the global jobs crisis that it spawned, there has been tremendous interest in work-sharing as a labour market policy tool for preserving existing jobs. Under national work-sharing programmes, enterprises receive benefits when they refrain from the use of lay-offs and instead “share” the lower amount of available work by reducing the working hours of all employees or all members of a work unit. The reduction in working hours under work-sharing is often (although not always) coupled with reductions in wages, which are typically proportional to the reduction in workers’ working hours (although this may not always be the case). This important constraint can be alleviated by government wage supplements, which are often provided through partial unemployment compensation, although they can also be funded from general government revenues. If work-sharing policies are properly designed and implemented, the result is a “win-win-win” solution: workers keep their jobs and prepare for the future; companies can not only survive the crisis, but be well positioned to prosper when growth returns (e.g. because they retain their existing workforce with their firm-specific skills); and the costs of social transfer payments and, ultimately, social exclusion are minimized for governments and society as a whole. Work-sharing not only helps to avoid mass lay-offs, it also allows businesses to retain their workforces, thus minimizing firing and (re)hiring costs, preserving functioning plants and bolstering staff morale during difficult times.

¹ This type of work-sharing is also known as short-time work and as partial or technical unemployment.

² Work-sharing should not be confused with job-sharing, which refers to a voluntary arrangement whereby two persons take joint responsibility for one full-time job. For example, a common form of job-sharing is to split one full-time job into two part-time jobs.

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- 139.** Work-sharing and partial unemployment benefits are policy responses suggested by the Global Jobs Pact, adopted by the ILO's tripartite constituents in June 2009, for limiting or avoiding job losses and supporting enterprises in retaining their workforce (ILO, 2009b, paragraph 11(4)). Likewise, various EU bodies have highlighted the use of temporary short-time working arrangements as one of the measures that can help to manage the impact of the global jobs crisis and maintain employment, in particular if accompanied by financial support to mitigate workers' income losses and training measures (see e.g. European Commission, 2009; Council of the European Union, 2009).
- 140.** There are five key elements that may be included in work-sharing policies and programmes designed to avoid lay-offs, not all of which are present in every work-sharing measure (see Messenger, 2009). These key elements are as follows: the reduction of working hours for all workers in a company or a specific work unit within a company, in lieu of lay-offs; a corresponding (pro-rata) reduction in earnings (total wages); the provision of wage supplements to affected workers to cushion the effects of temporary reductions in earnings; the establishment of specific time limits on the period of work-sharing (to ensure that the programme is a temporary measure in response to an economic crisis); and the creation of links between work-sharing programmes and training/retraining activities. In addition to these five elements, engaging workers' and employers' organizations in the design and implementation of government-sponsored work-sharing programmes is common and can increase the likelihood of their success.

B. National experiences of work-sharing and other working-time adjustments

- 141.** Work-sharing programmes had already been implemented in a number of countries in the industrialized world prior to the onset of the global economic crisis. These included: Austria, Belgium, Canada, France, Germany, Netherlands and Switzerland, in addition to small programmes in a number of states in the United States. The German Federal work-sharing programme, *Kurzarbeit*, was by far the largest work-sharing programme in the world during the recent crisis, reaching a participation of approximately 64,000 establishments and 1.5 million employees at the height of the crisis in mid-2009³ (see Crimmann, Wießner and Bellmann, 2010). Many of these existing work-sharing programmes were revised and expanded during the crisis. For example, the French *chômage partiel* programme extended the upper limit of non-worked hours covered by the partial unemployment contractual allowance from 600 to 800 hours per year, and up to 1,000 hours for firms in particularly vulnerable industries, such as textiles, garments and automobiles. For further information on work-sharing programmes in developed countries, see Messenger, 2009.
- 142.** Preserving jobs during the global crisis was also a priority in many middle-income countries, which were particularly hard hit by job losses in their formal economy, often in export-oriented or consumer goods industries. As a result, during 2009, a number of these countries acted to discuss, negotiate and implement some basic forms of work-sharing or similar working time adjustments, often (but not always) with links to training. These countries included: Argentina, Chile, Mexico and Uruguay in Latin America; Bulgaria, Croatia, Czech Republic, Hungary, Poland, Romania, Serbia (company level only), Slovakia, Slovenia and Turkey in Eastern Europe; and South Africa. Despite the differences among the work-sharing measures in these countries, some common principles prevail. One important similarity is that the work-sharing programmes in Latin America

³ Several other working-time adjustment measures were also widely used in Germany during the crisis, for example working-time accounts and establishment-level agreements.

and Eastern Europe were mainly developed and implemented at the national level. Another similarity is that many countries have made efforts to extend unemployment benefit schemes and/or expand their coverage to workers with reduced hours; for example, some countries have expanded the application, eligibility and coverage of partial unemployment benefits. For further information regarding work-sharing measures in middle-income countries, see Messenger and Rodríguez, 2010.

143. There are a number of different approaches for implementing work-sharing. First, national laws (and subnational laws in federal systems) often promote – but do not mandate – the implementation of work-sharing schemes, and provide companies with incentives for adopting them. For example, Germany’s *Kurzarbeit* is available to establishments facing a temporary, unavoidable loss of employment as a result of economic factors (see Wießner et al., 2009). Work-sharing has also been commonly used in the Republic of Korea, based on their experiments with different forms of work-sharing during the financial crisis of 1997–98. The Korean Government actively promoted work-sharing in individual companies during the crisis by introducing a wide range of financial incentives (see Korea International Labour Foundation, 2009).
144. Second, national framework agreements can provide an overall framework for action at the enterprise level. The example of Japan shows how a tripartite agreement at the national level can promote the adoption of work-sharing schemes in specific companies, providing both strong normative encouragement and financial incentives: a tripartite agreement to attain employment security and employment creation was concluded on 23 March 2009 by the Prime Minister, Nippon Keidanren (Japan Business Federation), the Japan Chamber of Commerce and Industry, the National Federation of Small Business Associations and the Japanese Trade Union Confederation (RENGO). This agreement included four components, one of which was the maintenance of employment through promoting the “Japanese model” of work-sharing.
145. Finally, work-sharing can be adopted and implemented through collective bargaining at both the industry and establishment level and, not surprisingly, it was one of the top collective bargaining issues in Europe during 2009 (see Eurofound, 2010c). In Germany, most industry-level and establishment-level collective agreements already contained provisions allowing enterprises to reduce working hours by as much as 20 per cent in order to avoid the loss of employment (see Bosch, 2009). However, even in the absence of national work-sharing programmes or national tripartite framework agreements, work-sharing measures can nonetheless be adopted and implemented through collective agreements at the sectoral and enterprise levels. For example, while there is no statutory work-sharing programme in Sweden, a collective agreement in the manufacturing sector in March 2009 allowed the introduction of reduced working hours and temporary lay-offs with compensation to ensure that workers received at least 80 per cent of their regular wages (Eurofound, 2010c, page 18.) Likewise, in Denmark, a large number of manufacturing firms concluded enterprise-level work-sharing agreements during the crisis based on a sectoral collective agreement from 2007, which provided for a period of work-sharing from 13 to a maximum of 26 weeks (Glassner and Keune, 2010, page 15).

C. Trade-offs and constraints

146. A distinctive characteristic of this type of policy measure is its countercyclical nature. While work-sharing is generally available during all phases of the economic cycle, it is far more widely used during recessions, helping to cushion any immediate increase in unemployment. One objection to schemes of this type is that they may only postpone lay-offs that are inevitable at some point in the future and are thus a waste of resources. Although this may create some uncertainty about the merits of the scheme, in times of crisis, when job opportunities are scarce, the preservation of existing jobs is not the only

benefit: unemployment is postponed until recovery is under way, reducing the likelihood of workers joining the ranks of the long-term unemployed. Another objection has been that such schemes may have the effect of keeping economically non-viable enterprises on “life support”, thereby interfering inefficiently in the normal processes under which enterprises are created or go out of business. This is why work-sharing programmes should be targeted at firms experiencing temporary problems resulting from a cyclical downturn, rather than those facing structural economic adjustments; it is recognized that this can be a difficult distinction to make in practice.

147. While several different approaches have been used for targeting work-sharing measures, the targeting approach that seems to be the most effective is setting time limits on work-sharing subsidies to ensure that the schemes do not block inevitable structural adjustments. Such time limits help ensure that a work-sharing programme is a temporary measure in response to an economic crisis or to facilitate mutually agreed changes and not a permanent reduction in hours and pay. Making such measures temporary limits the “deadweight” loss (i.e. providing public subsidies to firms that would not have engaged in lay-offs). This approach also limits any potential displacement effects that might arise as a result of work-sharing, essentially the crowding out of emerging businesses and industries by existing inefficient ones, as a result of public subsidies.

D. Effectiveness, costs and benefits

148. There is substantial evidence from previous recessionary periods that work-sharing programmes can avoid lay-offs (see e.g. Messenger, 2009). There is also some evidence that such programmes may not always prevent dismissals in the long run, but rather, may simply postpone redundancies in times of severe economic difficulties (see e.g. Calavrezo, Duhautois and Walkowiak, 2009). Nonetheless, even the latter result can be considered a positive outcome if the work-sharing measure is linked to training and if the work-sharing period is used to prepare workers to move to new jobs when the economy recovers. It is perhaps in this respect that existing work-sharing measures could most use improvement: participation in training has been quite limited in practice, even in Germany (see e.g. Eurofound, 2010b; Crimmann, Wießner, and Bellmann, 2010).
149. A number of very recent studies specifically investigating the effects of work-sharing measures on job preservation have concluded that these programmes do in fact reduce lay-offs by increasing per capita reductions in working hours (Arpaia et al., 2010, page 40; Crimmann, Wießner, and Bellmann, 2010, page 35; OECD, 2010, page 15; Hijzen and Venn, 2011, page 4). In addition, other types of working-time arrangements – most notably working-time accounts – may have contributed to positive employment effects in countries such as Germany, since these accounts must be drawn down to zero before an enterprise is eligible to apply for *Kurzarbeit* (see Crimmann, Wießner and Bellmann, 2010).

Part V. Main policy issues regarding working time today

150. As noted at the beginning of this report, the starting point for a discussion on working-time policy in the twenty-first century is based on the assumption that international working-time policy needs to find an appropriate, widely acceptable balance between workers' needs (which should include protections with regard to their health, safety and personal/family lives) and the requirements of enterprises, while also considering the needs of the community. In this context, it is understood that there are certain minimum standards regarding working time that are human rights and should not be subject to economic considerations, such as those which are essential to the protection of workers' health.
151. This overarching objective can, in turn, be broken down into a number of specific policy issues that have implications for nearly all types of working-time arrangements. Based on the analyses presented in this report, Part V presents a list of the main policy issues regarding working time today. It is suggested that these issues need to be discussed by the ILO's tripartite constituents and addressed in developing any future ILO guidance for advancing decent work in the area of working time. These issues include:
- **Limits on daily hours of work/maximum shift length/minimum daily rest periods.** The issue of limiting the length of the working day dates back to the beginning of the Industrial Revolution, the rise of the international labour movement and the movement's fight for an eight-hour working day. As discussed earlier in this report, the very first international labour standard, Convention No. 1, enshrined the eight-hour day into international law through a general limit of eight hours on the daily hours of work in the industrial sector. This eight-hour daily limit was later extended to the service sector with Convention No. 30. However, in the twenty-first century, shift patterns and other types of working-time arrangements have become extraordinarily complex in many enterprises for workers not working a standard workweek. Based on the available empirical evidence, daily hours of work should not be seen in isolation; the entire shift system (or other work schedule) has to be taken into account simultaneously, not one feature at a time. Different features in these systems (e.g. shift length, shift timing, number of consecutive shifts, etc.) interact and their effects may offset one another (see paras 80, 81 and 84 for specific findings). In summary, it is clear that a maximum limit on daily hours of work remains essential to ensure that workers have a minimum amount of daily rest, as well as time for their families and other aspects of their personal lives.
 - **Limits on weekly hours of work.** The issue of limiting the length of the working week also dates back to the founding of the ILO and the very first international labour standard, Convention No. 1, which established a general limit of 48 hours on the weekly hours of work. This 48-hour weekly limit was later extended to the service sector through Convention No. 30. While excessively long weekly hours of work are declining in most developed countries, they remain a major concern in most developing countries (as shown in Part II) and in certain sectors, such as hotels and restaurants and transportation and storage. Moreover, the preponderance of the available empirical evidence suggests that regularly working more than 48 hours per week appears to be detrimental to the health, safety and well-being of most workers, as well as for minimizing conflict between work and family life. Long weekly hours are also less productive than shorter hours and can generate additional occupational safety and health risks and substantial costs for enterprises. Given all of this evidence, the reduction of excessively long weekly hours of work remains an important issue.

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- **Minimum weekly rest periods/maximum number of successive shifts.** The principle of a regular, uninterrupted period of weekly rest (i.e. the weekly rest day) dates back even further than that of the eight-hour working day, and has its foundation in many of the world's major religions. This issue is already addressed by two up-to-date international labour standards, Conventions Nos 14 and 106, both of which provide for a period of uninterrupted weekly rest of not less than 24 consecutive hours.¹ Nonetheless, the preponderance of the available empirical evidence suggests that a single weekly rest day is generally insufficient to avoid impairments in workers' alertness and performance, and that a minimum of two successive rest days might be appropriate. Although weekly rest should be granted simultaneously to all persons concerned in each establishment wherever possible, as prescribed in Convention No. 106, if types of working-time flexibility such as shift work and certain types of compressed workweeks are contemplated, the scheduling of weekly rest may become a significant issue.
 - **Rest breaks during the working day.** Rest breaks at regular, minimum intervals during the working day are essential for minimizing the build-up of fatigue. Such intra-shift rest breaks are an important, if sometimes overlooked, issue. And if working days become longer, even if workweeks become shorter (e.g. through compressed workweeks), this issue takes on even greater importance. It should also be noted that this issue, despite its importance, is not covered by any existing international labour standards.
 - **Averaging of working hours over multi-week periods, including annualized hours.** The traditional basis for calculating hours of work (the reference period) has been, with some very limited exceptions (such as the three-week average of working hours for shift work specified in Convention No. 1), either daily or, more commonly, weekly. The concept of hours averaging changes that fundamental assumption and raises the issue of what alternative reference period (or periods) should be established and under what conditions such an alternative period would be permitted. For example, should a collective agreement be required in order to extend the reference period? There is also the question of how this issue intersects with the issue of atypical or precarious working-time arrangements (see below), in that such arrangements may undermine the potential for any meaningful extension of the reference period.
 - **Paid annual leave.** The available evidence regarding the appropriate amount of paid annual leave from the perspective of ensuring adequate rest and recovery and avoiding burnout is extremely limited. The most recent international labour standard regarding paid annual leave, Convention No. 132, provides for a period of paid annual leave of three weeks for one year of service, and there is no solid empirical basis for determining the adequacy of this period. Nonetheless, when certain types of working-time flexibility (e.g. annualized hours) are contemplated, the scheduling of paid annual leave may be a significant issue.
 - **Protection of night workers.** Night work has been and remains an important working time issue, owing to its exceptional nature. Night work requires workers to act in opposition to their biological clocks – that is, to remain awake, alert and productive during the period when the human biological drive for sleep is at its strongest. The result (as discussed earlier in this report) is a greater risk of occupational diseases, accidents and injuries, as well as increased work–family

¹ Recommendation No. 103 recommends the extension of weekly rest to 36 hours, if possible uninterrupted.

conflict. For these reasons, night work requires special protections (e.g. regular health assessments), such as those provided for in Convention No. 171. It should also be noted that this has been a challenge for women working night shifts. On the one hand, protective legislation to ban night work is not proscribed; on the other hand, however, care has to be taken to provide reasonable accommodation to ensure the safety of all night workers, in particular women (e.g. safe transport, well-lit public spaces).

- **Equal treatment of part-time workers.** One of the most important trends in hours of work in recent history is the dramatic increase in short or part-time hours – an increase which parallels women’s increasing participation in the paid workforce. Equality of opportunity and treatment for part-time workers in relation to comparable full-time workers is the key issue in this regard. This issue appears to be especially acute for workers with very short hours of work. While equal treatment is explicitly addressed by Convention No. 175, practical guidance for governments and enterprises on how to work towards achieving this objective may be beneficial.
- **Atypical or precarious working-time arrangements.** Certain types of working-time arrangements, in particular those arrangements involving very short or “marginal” part-time hours (e.g. less than 15 hours per week) or those which have no fixed hours at all, such as on call work and zero-hours contracts, are so unusual that (as discussed in Part III of the report) they have been defined as being atypical working-time arrangements. This issue is closely linked with the issue of equal treatment for part-time workers, since many of these workers are essentially working part-time hours, even if they lack regular employment contracts. There is obviously a contractual aspect to many precarious working-time arrangements; however, this question should not be confused with precarious employment, which is a much broader issue. The question of hours of work (and also work schedules) in the informal economy is also included under this issue, although in this case working hours in the informal economy may be either short or excessively long, often depending on sex (as discussed in Part II of the report).
- **Achieving balanced working-time flexibility.** “Whose flexibility?” is a fundamental issue when it comes to working time in the twenty-first century. With the increasing use of various forms of working-time flexibility, the question is how to balance employer-determined variability in working hours with workers’ ability to choose, or at least influence, their working hours. In this respect, the available empirical evidence indicates that, if properly structured, flexible work schedules can accommodate the needs of individual workers, including their family responsibilities, while meeting enterprises’ business requirements. This “win-win” approach takes into account both workers’ and employers’ preferences, as suggested in Recommendation No. 116. However, given the lack of evidence on how to achieve such balanced working-time flexibility, a set of guiding principles for the development and implementation of working-time flexibility might be beneficial.
- **Work-sharing.** As discussed in Part IV, the recent experience of the recession and the global jobs crisis has sparked new interest in the concept of work-sharing, which, also as discussed in Part IV, emerged during the Great Depression of the 1930s and is reflected in the spirit of Convention No. 47. A number of very recent studies specifically investigating the effects of work-sharing schemes on job preservation have concluded that these programmes do in fact reduce lay-offs by increasing per capita reductions in working hours. However, the key question for future working time policy goes beyond this relatively limited role: the question is whether work-sharing can be something more than a crisis-response measure. Can it be a tool to help enterprises address restructuring issues? Can it be a tool to help increase employment in a global context of growing concerns over the environmental sustainability of current economic policies?

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- **Social dialogue and collective bargaining on working time.** National laws can, at best, provide a framework within which various types of working-time arrangements can be negotiated. Hence, the importance of social dialogue and collective bargaining on working time cannot be underestimated, including in ensuring that women's voices are heard. Successful tripartite cooperation in many countries on crisis-response measures, such as work-sharing, may provide a new foundation for future tripartite cooperation on working time-related issues.
 - **Data on working time.** A major issue that emerged from the consultations on the draft version of this report is the need for valid, reliable data on working time, both hours of work and (to the extent possible) working-time arrangements. Both the Workers' group and the Employers' group expressed concerns over the adequacy of existing ILO data on working time, in particular for developing countries. Data on the distribution of employed persons by their hours of paid work, such as those collected from national statistical offices in a special ILO data collection for the *Working time around the world* report, would provide a good first step towards improving ILO data on working time to permit more regular analyses of working-time trends and developments. Data on unpaid hours of work (which are already being collected by some national statistical offices) would also be useful for highlighting the gender division of household and care work, as a complement to data on paid work.
 - **Cross-cutting issues.** As the analysis in this report has shown, there are substantial differences in hours of work and, to a lesser extent, work schedules, between women and men. Thus, gender is an important cross-cutting issue with regard to working time, and it has substantial implications for many of the other issues discussed above, such as part-time work. Age is another cross-cutting issue, but the lack of age-disaggregated data is a serious barrier to understanding the hours of work and work schedules of young and older workers.

Part VI. Conclusion and points for discussion

- 152.** As discussed at the beginning of this report, the objective of the Tripartite Meeting of Experts on Working-time Arrangements is to review and advise on modern working-time arrangements, which includes identifying the main policy issues that would need to be addressed in developing future ILO guidance for advancing decent work in the area of working time. This report has analysed recent trends and developments with regard to both the duration of working time (hours of work) and its organization (work schedules), despite the serious limitations of current ILO statistics on working time. It has reviewed the latest empirical evidence regarding the effects of both hours of work and various types of work schedules on occupational safety and health; work–life balance, including work and family reconciliation; and productivity and enterprise performance. It has also summarized the impact of the recent global economic and jobs crisis, focusing on the working-time policy measures, such as work-sharing, which were developed and implemented in response to the crisis. Finally, this report has attempted to identify and present for the discussion of the experts the main policy issues regarding working time in the twenty-first century.
- 153.** In light of the information contained in this report, the Tripartite Meeting of Experts on Working-time Arrangements might consider the following points for discussion:
- (a) What are the most important recent trends and developments with regard to hours of work? What are their implications for working-time policies, both for the protection of workers and the promotion of sustainable enterprises? What are the effects of hours of work on different groups of workers, including female workers, young workers and older workers, and on different types of enterprises (i.e. different sectors or industry groups)? What are the implications of these effects for working-time policies?
 - (b) ILO Conventions and Recommendations on hours of work, in particular Conventions Nos 1 and 30, provide a broad overall framework for regulating working time at the international level. To what extent are these standards still relevant to modern working-time arrangements? What about the other international labour standards relating to working time discussed in Part II of this report? What is needed to ensure that the relevant provisions of existing Conventions are properly implemented?
 - (c) What are the most important recent developments regarding work schedules? What are the implications of these developments for working-time policies, both for the protection of workers and the promotion of sustainable enterprises? What are the effects of various types of work schedules, in particular those involving flexible or variable hours, on different groups of workers, different types of enterprises (i.e. different sectors or industry groups), and communities and societies as a whole?
 - (d) Taking into account the Global Jobs Pact and the information provided in this report on working time crisis-response measures, in particular work-sharing, what are the implications of the crisis experience for future ILO work in the area of working time?
 - (e) What are the main policy issues that would need to be addressed in developing any future ILO guidance on advancing decent work for female and male workers in the area of working time?
 - (f) What future action should the ILO take to address the major issues regarding working time in the twenty-first century? What concrete proposals should be submitted to the Governing Body with regard to the follow-up to this Meeting?

Data bibliography

In order to make the data comparable between different countries, in many cases statistical calculations and aggregations have been undertaken. In particular, this was the case if only a complete data set was available (marked ¹); if the range of the working hour bands differed between countries (marked ²); if the information on the employment status of workers was provided on a high level of disaggregation; and if only quarterly data instead of annual data or total numbers instead of percentages were available (marked ³). Therefore, the numbers and figures from the raw data sources referenced below in many cases do not correspond directly to the figures presented in the discussion report.

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