Working time patterns in the UK, France, Denmark and Sweden

By Kate Bishop, Labour Market Division, Office for National Statistics

Key points

- The UK has a higher proportion of employees working 45 hours and over a week than France, Denmark and Sweden. However, the number of people working long hours in the UK has declined over the past decade.
- Men worked longer hours than women in all four countries in the study.
- Part-time work continues to be a characteristic of working time patterns with 24 per cent of employees working part-time in the UK and 19 per cent in Sweden.
- Of the four countries, the UK had the highest proportion of part-time female workers.
- France had the lowest proportion of men working part-time: Denmark had the highest.
- Part-time work is most prevalent in the services sector in all four countries.
- Swedish workers were the least likely to work long hours, with only 2 per cent of female workers and 9 per cent of male workers working 50 hours or more a week.

This article examines working time patterns in several European countries with different institutional arrangements. Part-time and full-time working practices are compared by industry sector and sex.

Introduction

As working practices become more varied, so the measurement of working hours has become a more pressing topic for debate. This article compares working time patterns in several European countries: UK, France, Sweden and Denmark. Traditionally, usual European working hours are shorter than in other parts of the world, such as Japan and the USA.

The four countries examined were chosen because they appeared to exhibit both different trends and similarities. The analysis highlights the importance of legislation in France, Denmark and Sweden, as well as some variation and similitude in the distribution of hours worked across industry sectors. The analysis of working patterns looked at usual hours worked by people in employment in their main job by industry and sex for each country. A previous article summarised the different uses of actual and usual hours worked, along with measurement issues concerning working time arrangements (see pp15-17, Labour Market Trends, January 2004).
What are the determinants of hours worked?

Regulations and legislation

There are different regulatory and institutional contexts affecting hours worked across the OECD countries. Bollé (2001) divides countries into three groups: those associated with ‘individual flexibility’ based on individual relations between employers and workers (the UK and Ireland), ‘state driven flexibility’ where a legislator or governing body plays a crucial role in setting regulations concerning working hours (France, Spain and Finland), and finally ‘negotiated flexibility’ where actual working time is set by bargaining between workers and enterprises (Denmark, Netherlands and Germany).

The Working Time Directive sets a maximum working week of 48 hours throughout the EU, but national systems also exist which impose shorter hours such as the Aubry Laws in France, the Metal Working Industry Agreement (which later spread to other sectors) in Denmark, the Working Hours Act in Sweden and the Working Time Regulations in the UK. Along with other factors described in this section, these all have an impact on the distribution of hours worked. Nevertheless in some cases opt-outs of these regulations exist, which allows workers (in particular, those in the transport and fishing industry) to work longer hours than the prescribed number.

Preferences and culture

Fagan (2000) notes that, in the UK, working time arrangements are determined to some degree by personal preference. However, other factors are also important such as the level of social security and taxation. For example, certain income and hours thresholds within the social security system create incentives for employers to design part-time jobs and short hours of work. In addition, the availability of childcare facilities and the prominence of work-life balance policies can affect hours worked.

Culture may also play a role in determining working hours. In the UK and most other countries, there is a cultural presumption that it is more appropriate for family care work to be undertaken by female family members than by public provision. Fagan also analyses employer motivations for certain non-standard work arrangements, and finds that increased uncertainty in markets is the main source of motivation for firms to adapt their practices. In some cases pressure from peers and management may lead workers to put in extra hours and cause ‘competitive presenteeism’ (Simpson, 1998); alternatively long hours may be worked in anticipation of promotion.

Wages

Wages may also affect the levels of hours worked. In some cases higher wages may induce people to offer extra hours of labour. However this result is not clear cut as this relationship depends upon the magnitude of the ‘income effect’ and the ‘substitution effect’. There are two effects of a wage rise. Firstly, the individual has a higher income and so is more able to afford leisure time. In economics this is known as the income effect and may lead the individual to increase their consumption of leisure. However, the wage rise also means that the cost of consuming leisure has risen in terms of forgone income. This may lead the individual to switch his activity from leisure to work, and is known as the substitution effect. The actual outcome will depend on which effect is stronger.

As Juster and Stafford (1991) point out, if wages are high enough the income effect will generally dominate and workers will consume more leisure as opposed to supplying labour. On the other hand, they provide the example of the former Soviet Union to illustrate the income effect, whereby low wages led workers to offer more of their labour supply to the market.

Tax rates

Changes in tax rates may have a substantial effect upon the allocation of time between market and non-market activities. In theory, when labour income is taxed, less will be supplied at each wage rate, and thus the labour supply diminishes. In an empirical study, Juster and Stafford (1991) found that changes to marginal tax rates in developed countries often led to changes in time allocation between work and leisure.

Business cycle effects

It is generally accepted that labour market variables are affected by movements in the business cycle. In particular, Millard et al. (1997) found that growth in total hours is positive in expansion and negative in recession.

For the UK, Haskel et al. (1997) examined the impact of demand shocks on UK firms’ responses, by using data from the Workplace Employee Relations Survey for 1990. Their key findings show that, firstly, labour input is aligned to the business cycle. Secondly, firms with more flexibility are more likely to adjust employment or hours worked than price or capacity, and thirdly, manufacturing firms with a high proportion of part-time workers are most likely to adjust hours worked. They also note that trade union presence may affect the level of hours worked, as trade unions encourage the adjustment of hours, rather than employment, in order to protect the insider power of existing workers.

Kodz et al. (2003) reviewed the literature on the effects of unionisation on hours worked, overtime and holiday entitlement. For example, Green (1988) using the General Household Survey found that union presence was associated with reduced hours worked in the UK.

Structural changes in the economy

General changes in the structure of the economy such as the move from an industrial to postindustrial knowledge-based economy, can also make an impact on working hours (Handy, 1997). For example, industrial jobs tend to have set patterns of working time, while jobs in the knowledge-based economy tend to be more flexible with varied working hours.

Measuring hours worked: the issues

One of the problems with comparing hours worked across countries is that
labour statistics may not be internationally comparable due to different concepts, definitions, classification systems and survey methodology. Adding to these issues, there is no internationally agreed definition of part-time work, and as a result the OECD and EU use very different measures. The EU classification is based on self-assessment by the respondent, while the OECD uses a threshold approach. Another definition proposed by the International Labour Organisation (ILO) states that part-time work is regular employment in which working time is substantially less than normal. In contrast, the Statistical Office of the European communities (Eurostat) has developed an informal definition stating that part-time work seldom exceeds 35 hours, and that full-time work starts at about 30 hours per week (van Bastelaer et al., 1997). Furthermore each country appearing in this study has its own national definition, which is summarised in Table 1.

As there is little guidance on an international basis for how to measure and classify part-time work, there is a wide heterogeneity in the quantity and quality of national statistics on working hours. The Paris Group (see p93) and the ILO are working together to develop new international standards for measuring working time arrangements. There is also a debate concerning the use of usual versus actual hours. Actual hours include overtime, and can be used as an economic indicator as it is responsive to the general economic cycle, whereas usual hours do not contain such short-term fluctuations. This article aims to examine working patterns rather than economic indicators from usual hours are analysed.

Figures 1 to 5 show the distributions of working hours for various groups of workers in the four countries: the UK, France, Sweden and Denmark. Each chart shows the proportion of people aged 15 to 64 that reports usual hours within a given range (from 1 to 50 hours and over) for the spring quarter of 2002. The data come from the EU LFS supplied by Eurostat, and have been harmonised. The Eurostat guidelines for publication of data from the EU LFS are aimed at avoiding publication of unreliable statistics. However the EU LFS is based on a sample of the population and is therefore subject to sampling errors.

Table 1 Definitions of part-time working hours; France, Denmark, Sweden and United Kingdom; 1997 and 2001

<table>
<thead>
<tr>
<th>Country</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>The distinction is based on self-assessment, but those who work more than 40 hours a week are classified as full-timers. a</td>
</tr>
<tr>
<td>France</td>
<td>Up to 1981, people working less than 30 hours during the reference week were classified as part-time workers. From 1982 the distinction is based on self-perception of the respondent.</td>
</tr>
<tr>
<td>Sweden</td>
<td>Part-timers are those people who usually work less than 35 hours a week.</td>
</tr>
<tr>
<td>Denmark</td>
<td>There is no official definition of part-time work in Denmark. In the LFS the distinction is based on the respondent’s own assessment.</td>
</tr>
</tbody>
</table>

Sources: van Bastelaer et al. (1997); Evans et al. (2001)

a LFS interviewer guidance notes state that if a respondent says that they work full-time but claim that their usual basic working hours are less than 16 hours per week, the interviewer must query the hours worked, if correct the respondent is reclassified as part-time.

France

There are clear differences in the distribution of usual hours worked between the four countries. Figure 1 shows that the majority of the French population works full-time (based on the Eurostat definition of 30 hours per week or more), as shown on the two clear spikes at 31-35 hours and 36-40 hours, and then at 39 hours in Figure 2.

Recent policies such as the Aubry Law and RTT (Réduction du temps du travail) which have been implemented in order to reduce working time to 35 hours per week, have had an impact on the proportion of people working in excess of 40 hours a week. France had one of the lowest proportions of this (16 per cent of all workers, compared with 20 per cent in Denmark, 10 per cent in Sweden and 40 per cent in the UK). Afsa et al.’s (2003) study shows that the Aubry Laws have had some impact in reducing working hours. They record that average weekly working hours were 41 hours and 10 minutes in 1995, and 39 hours and 50 minutes in 2001.

Moreover, in 2000 the reduction of working time appears to have begun to affect job creation positively. DARES, the Statistical Office of the Ministry of Labour, states that the 35 hour week has led to the creation of some 300,000 new jobs, although as yet there is no consensus on the long term effects (IDS Employment Europe, 2003) and the Aubry laws have been credited with reducing unemployment. The effect of the reduction in working hours on unemployment is only a minor element: other sources could be economic growth or the introduction of the Euro. As Charpentier (2000) points out, GDP growth of 3.2 per cent in 1998 led to job creation.

There have been other efforts to reform the labour market over the past ten years, such as the promotion of part-time work. As a result, part-time employment as a proportion of total employment increased from 4.7 per cent to 5.2 per cent for men during the period 1992-2002, and from 22.7 per cent to 24.1 per cent for women.

Denmark

Figure 2 shows a very different situation in Denmark from that of
Working time patterns in the UK, France, Denmark and Sweden

France and the UK. In Denmark there is a clear peak in usual weekly hours at 37 hours, with 45 per cent of all employees usually working this number of hours. This is the result of the 1987 agreement in the metal working industry (which later spread to other sectors), which aimed to reduce working hours to 37 per week. Blumensaadt and Möller (2000) document that the agreed normal week has very few exceptions. However, there has been a tendency in practice for the 37 hours to be viewed as an average over a period of six or eight weeks, and in some cases up to six months. One interesting finding from the European LFS is the decreasing incidence of part-time employment. Hoffman and Walwei (2000) refer to this as the “renaissance of standard working time arrangements” in Denmark, with an increase in permanent full-time employment and a decrease in self-employment and part-time employment.

Sweden
The Swedish case exhibits a relatively similar picture to Denmark, with one clear peak at 40 hours (see Figure 2), with 52 per cent of all workers reporting this as usual hours worked in their main job. Some small peaks at 16-20, 26-30 and 50 and over hours a week can also be seen (as shown in Figure 1). However, while the Danish case is due to an institutional agreement, for Sweden the cause is legislation. The main factors affecting working time in Sweden are government regulations – laws which set standards and maximum working time – while collective agreements are set at the industry or regional level. In Sweden the Working Hours Act stipulates a standard week of 40 hours.

The UK
The UK exhibits a very unusual distribution of hours usually worked compared with the other three countries. Rather than displaying a clear peak, the distributions appear non-uniform (see Figures 1 and 2). This result is corroborated by Kodz’s (2003) results, which show that working hours for the UK are unstandardised compared with other EU member states. The patterns of hours worked are dissimilar to those in France, Sweden...
and Denmark. One possible reason for this could be the lack of trade union presence. As Kodz (2003) notes, decentralised negotiations over working hours has led to a dispersion of working hours.

Nevertheless, since the change of Government in 1997 there have been a number of policies initiated to govern working time, part-time work and parental leave. For example, the 1998 Working Time Regulation implemented the EU Working Time Directive, representing the first legislation in the UK on working time and annual leave entitlements. This provided guidelines for a maximum 48-hour week, four weeks paid leave, daily and weekly rest periods and night work regulations (Fagan, 2000).

However, the UK is distinguished by a higher incidence of long hours for full-time workers, especially men. As the Social Situation in the EU (2003) points out, in 2001 full-time employees in the EU worked on average 40 hours a week. In contrast, the UK average was 44. Figure 1 shows similar findings as the UK has the highest proportion of all employees working 45 hours and over a week. However, the proportion of all workers usually working longer than 45 hours a week has fallen in the past decade.

On the other hand, the UK is also characterised by a high proportion of jobs which are part-time, representing greater flexibility and choice in the labour market. In fact, 24 per cent of UK employment is in part-time jobs and moreover the majority of this is by choice. An earlier article (see pp25-35, Labour Market Trends, January 2004) found that part-time employment among women remained stable at 44 per cent over the period 1993 to 2003, while part-time working for men has shown an increase from 7 per cent to 10 per cent. For men, the most common reason for part-time work was because they were studying; another reason cited was that they could afford not to work full-time. In total, only 8 per cent of part-time workers worked part-time because they were unable to find full-time employment. The UK is also characterised by the polarisation of working hours with some groups working longer hours and others working shorter hours (Kodz, 2003).
Usually hours worked in each country by sex

Table 2 shows that in all four countries part-time work (defined here as 30 hours and under per week) is highest for women. Part-time work among females in the UK was particularly high, reflecting a diverse range of employment opportunities. Also worthy of note is the low proportion of French men that worked part-time (6 per cent).

In contrast, long hours were more common among men than women in all four countries. One point of interest is the difference in the incidence of long hours between Sweden and the UK. In the UK 56 per cent of men worked in excess of 40 hours a week compared with just 14 per cent of men in Sweden. Sweden also had the lowest incidence of men working in excess of 50 hours per week (at just under 10 per cent) compared with 14 per cent in Denmark, 27 per cent in the UK and 13 per cent in France. Similarly, there were very few women working long hours in Sweden –
only 6 per cent reported working over 40 hours per week.

A more detailed analysis of the EU LFS data reveals several other interesting findings. In France, Denmark and Sweden, usual hours worked for men and women were similar. In France 31-35 and 39 hours were the most commonly reported working hours for both men and women. In Denmark 47 per cent of men and 43 per cent of women reported 37 as their usual hours of work, while in Sweden the most common reported usual hours were around 40. This reflects the nature of the institutional arrangements in these countries.

However, the UK is the only one of the four countries examined where there are distinct differences in usual hours reported by men and women. For men, 31-35, 38, 40 and over 50 hours were the most common working hours, compared with 16-20 and 31-35 hours for women.

### Usual hours worked in each country by industry sector

Data are only easily available from Eurostat on a broad industry grouping, namely industry (for example, manufacturing and construction), services, and agriculture and fishing. This limits the analysis, but again there are both similarities and differences across sectors (see Figures 3, 4 and 5). For example, in each country the longest hours are reported in agriculture and fishing, and the greatest amount of part-time work is reported in the services sector. Services is the largest sector and the agriculture and fishing sector is the smallest in all four countries.

A key point from this analysis is the incidence of long hours in the agriculture and fishing sector and the prevalence of part-time work in the services sector. For example, even countries where working long hours is not widespread, such as Sweden and Denmark, have a high proportion of employees in the agriculture and fishing sector reporting hours in excess of 50 hours per week (see Figure 4). In Sweden 35 per cent of these employees usually work in excess of 50 hours a week, along with 32 per cent in Denmark.

In contrast, the UK has a relatively high proportion of workers reporting...
usual hours in excess of 50 hours a week in both the agriculture and fishing sector and the industry sector. This is not the case in the services sector as only 15 per cent of service sector workers reported hours in excess of 50 a week. This is similar to the case in Denmark, Sweden and France, in which 8 per cent, 5 per cent and 9 per cent respectively of employees in the services sector usually work in excess of 50 hours per week. Another point of interest is the finding that Sweden had the lowest proportion of employees reporting usual hours of over 40 hours, at just 6 per cent, compared with 51 per cent in the UK, 19 per cent in Denmark and 13 per cent in France (see Table 3). The Swedish services sector also had the lowest proportion of employees reporting working more than 50 hours per week, at just 5 per cent of all employees.

At the other end of the spectrum the UK appeared to have the largest proportion of workers working in excess of 40 hours a week in all three sectors. Yet simultaneously a relatively large proportion of employees in all sectors in the UK usually work 30 hours or under a week (see Table 4), representing greater flexibility in the workplace. Part-time employment in France was particularly low in all three sectors and was as low as 5 per cent of all employees in the industrial sector.

Working long hours and the incidence of part-time work

The Swedish industrial sector had the lowest proportion of people usually working in excess of 40 hours, at just 6 per cent, compared with 51 per cent in the UK, 19 per cent in Denmark and 13 per cent in France (see Table 3). The Swedish services sector also had the lowest proportion of employees reporting working more than 50 hours per week, at just 5 per cent of all employees. Part-time work was concentrated in the services sector in all four countries. Some 19 per cent, 21 per cent, 23 per cent and 34 per cent of all employees in

<table>
<thead>
<tr>
<th>Hours</th>
<th>France</th>
<th>Denmark</th>
<th>Sweden</th>
<th>United Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
</tr>
<tr>
<td>6-10</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
</tr>
<tr>
<td>11-15</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
</tr>
<tr>
<td>16-20</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
</tr>
<tr>
<td>21-25</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
</tr>
<tr>
<td>26-30</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
</tr>
<tr>
<td>31-35</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
</tr>
<tr>
<td>36-40</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
</tr>
<tr>
<td>41-44</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
</tr>
<tr>
<td>45-49</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
</tr>
<tr>
<td>50+</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
</tr>
</tbody>
</table>

Source: Eurostat

Aged 15 to 64

**Figure 5** Proportions of people in employmenta in their main job in services by usual weekly hours worked; France, Denmark, Sweden and United Kingdom; 2002
To summarise, the Swedish workforce is characterised by a very low incidence of long hours in stark contrast to the situation of the UK. However, flexibility is more common in the UK labour market, with many part-time opportunities. Part-time work is especially prevalent in the service sector for all four countries.

**Conclusion**

In France, Denmark and Sweden, the effects of institutional arrangements on usual hours worked has been apparent throughout the analysis. In France, the Aubry laws have had an impact on people working over 35 hours a week. In Denmark, the 1987 agreement on working time has led to 45 per cent of all employees reporting working 37 hours per week, while the Swedish Working Hours Act sets a standard working week of 40 hours, and, as a result, as many as 52 per cent of all workers report 40 usual working hours. However, opt-outs exist in all four countries in this study, which leads to some deviation from these stipulated working time standards. For example, in Sweden workers in certain steel companies may opt to work a six-hour day instead of an eight-hour day, while in Denmark some white collar workers can work up to 45 hours per week (Blumensaadt and Möller, 2000).

Analysis of usual hours data by sex has also revealed several interesting patterns. Long hours are more common among men for all four countries. For example, in Denmark 29 per cent of men work in excess of 40 hours, compared with just 10 per cent of women. Yet part-time work is much more widespread among women across the four countries, and is particularly high in the UK and Sweden. French men have one of the lowest levels of part-time employment, at just 6 per cent.

The high incidence of long hours in the agriculture and fishing sector and prevalence of part-time work in the service sector are common to all four countries. The exception is the UK, which has a relatively high proportion of workers reporting usual hours in excess of 50 hours per week in both the agriculture and fishing and industry sectors. Analysis of the Swedish data reveals a very different situation from that of the UK as Sweden has a very low proportion of employees reporting long hours in all three sectors.

**Notes**

1 The IRS Employment Review notes that there has been an increase in flexible working practices such as flexi-time, the compressed working week and staggered working hours. Watson (1994) notes that in 1993, 38 per cent of the workforce was flexible, compared with 30 per cent in 1981. These flexible working time practices are in contrast to a standard working week, which can be defined as office based, from Monday to Friday, consisting of eight hours of work during daylight hours (see Allen et al. 1998).

2 According to Eurostat, the distinction between full-time and part-time employment in the LFS “should be based on a spontaneous response by the declarant. It is impossible to make a more precise distinction between full-time and part-time employment, since working hours differ from one member state to the next and from one branch of activity to the next” (Taylor, 2002).

3 The French unemployment rate fell from 12 per cent in 1997 to 8.8 per cent in 2002 (OECD, Main Economic Indicators, 2003).


5 Reasons given for long working hours are increases in project-based working, greater emphasis on customer focus, meetings culture, e-mail/IT overload and anticipation of career enhancement, http://www.dti.gov.uk/er/emar/longhours.htm.

6 See http://www.statistics.gov.uk/downloads/theme_labour/LFS_FR_HS/Table08.xls.

7 Of course part-time employment may involve underemployment, and in some cases may not be voluntary. As Houseman (1997) points out for the USA case, there are two sides to part-time employment and other flexible arrangements. On the negative side these employees usually receive low wages, few benefits and little job security; on the plus side these flexible working arrangements can benefit both staff and employers by allowing child and elder care.
Working time patterns in the UK, France, Denmark and Sweden

References

‘France, the SGP and the 35-hour week: time’s up?’ IDS Employment Europe (2003), http://www.incomesdata.co.uk/europe/ep503.htm
Main Economic Indicators, OECD, September 2003.
‘Overview of the literature on working time and the distribution of work’, Canadian Labour Market and Productivity Centre for Evaluation and Data Development, Branch background document (1997).
The way we work now’, IRS Employment Review (July 2002).

Further information

For further information, contact:
Kate Bishop,
Room B3/02,
Office for National Statistics,
1 Drummond Gate,
London SW1V 2QQ,
e-mail kate.bishop@ons.gov.uk,
tel.020 7533 6086.

122 Labour Market trends March 2004