

## 2 Flexible Working Patterns and Factor Utilisation: A Cross-country Comparison

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### 2.1 Introduction

Rigidities in the labour and products markets are often considered to adversely affect the economic equilibrium and to be one of the causes of the variation in employment rates across the industrialised economies (OECD, 2006). Empirical analyses of the labour market have essentially focused on rigidities caused by strict employment protection legislation (OECD, 2004). They conclude that these rigidities have a direct effect on the labour market equilibrium but also an indirect impact because they affect investment behaviour and lead to the search for higher productivity gains (OECD, 2003). However, to our knowledge, very few studies have aimed at comparing rigidities in working patterns among countries. Yet these rigidities have a direct effect on the so-called productive efficiency, i.e. the utilisation of production factors capital and labour.

This chapter proposes a cross-country analysis of flexible working patterns. We compare and analyse the use of different flexibility patterns that enable the decoupling of working time and operating time, such as shift (work) or staggered working times.<sup>1</sup> In this chapter, a flexible working pattern is defined as a working pattern where working hours and operating hours are decoupled.

Previous comparisons among countries or economic sectors based on aggregated or establishment data (Anxo *et al.*, 1995a; 1995b; Foss, 1997;

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1 Shift work is defined as the succession of different teams on the same workstation. In companies using staggered working time, there are different teams but they do not necessarily work on the same workstation; they can also work at the same or at different times. See Appendix 1.

Bauer, Groß and Sieglen, 2002; Delsen *et al.*, 2007) highlight great and significant differences in the use of shift work and in the level of capital operating time. But they do not provide any clear information about the reasons for these differences. Whether they arise from differences in the structure of production or stem from differences in regulation that may favour or restrict flexible working patterns is not clear.

Studies on decoupling mainly deal with shift work and industry. They generally distinguish between structural and cyclical determinants of shift work (see Cette, 2002 for a detailed review of the literature):

- The first structural determinant of shift work is the cost structure of companies. All other things being equal, the use of shift work makes it possible to increase capital operating time and therefore to save productive capital. The more production techniques are capital intensive, the more the impact on cost is potentially significant. Using company data, Cette (1989) and Heyer (1998) have shown a strong and significant positive correlation between the use of shift work and capital intensity. Another structural determinant is company size. Developing shift work may be complex and entails very high fixed costs. Cette (1989) and Heyer (1998) have also found a positive correlation between the use of shift work and company size. The final determinant of shift work is its specific cost. The latter can be financial and due to night work, weekend work, or specific bonuses associated with shift work (Lanfranchi, Ohlsson and Skalli, 2004); the cost may also be impacted upon by regulatory measures;
- The use of shift work also depends on cyclical factors. For instance, as shown by previous studies on aggregated data (Anxo *et al.*, 1995a; 1995b; Cette and Taddei, 1995; Foss, 1997 or Bauer, Groß and Sieglen, 2002) or individual data (Heyer, 1998), the capital utilisation rate is positively correlated with the cost incentive to develop shift work. Furthermore, given the short term immobility of productive capital, increasing capital operating time and the use of shift work are means for companies to cope with unexpected demand shocks (Shapiro, 1993; Heyer, 1998).

Theoretical approaches to the use of shift work and the relationship between decoupling and economic fluctuations have also been proposed by Dupaigne (1998; 2002) who shows that, if decoupling can be considered as a buffer between volatile demand and rigid supply and hence as a flexibility option, it can also increase output volatility in response to aggregate shocks and the persistence of these shocks.

Our cross-country comparison of flexible working patterns uses individual data from the 2003 EUCOWE survey. This survey covers thousands of companies from different economic sectors and different countries (see Delsen *et al.*, Chapter 1, this volume). The countries considered in our analysis are France, Germany, the Netherlands and the United Kingdom.

The analysis of decoupling uses cross-section regressions based on the year 2003 and solely concerns structural flexibility. The study of flexible working patterns to address fluctuations in the business cycle does not come within the scope of this chapter. Nonetheless, we need to ensure that the business cycles in the different countries under review are synchronised or at least that there is no significant difference in their cyclical positions. Otherwise, these differences may incorrectly be assumed to be structural in the regressions.

The cyclical positions of France, Germany, the United Kingdom and the Netherlands for the years 2002 and 2003 are compared using different indicators: two output gap indicators from the OECD and the European Commission and capacity utilisation rates from Eurostat (Table 2.1).

**Table 2.1** Cyclical positions of France, Germany, the United Kingdom and the Netherlands. Year 2002 and 2003

	Output gap (%) OECD		Output gap (%) European Commission		Capacity utilisation rate (%)	
	2002	2003	2002	2003	2002	2003
France	-0.3	-1.3	1.2	-0.1	85.3	84.8
Germany	0.2	-1.4	-0.1	-1.2	83.6	83.4
Netherlands	-0.2	-2.2	-0.1	-1.9	84.5	83.4
United Kingdom	-0.1	-0.1	0.2	0.1	82.7	82.0

Sources: (i) Output gap, OECD: Economic Outlook, June 2006; (ii) Output Gap, European Commission: Spring 2006 forecasts; (iii) Capacity utilisation rates: Eurostat. To be compared, capacity utilisation rates are mean centred rates over the period 2002-2005. Capacity utilisation rates refer only to Industry.

In 2002, cyclical positions in the four countries were similar except for France which was closer to a cyclical peak according to the European Commission's output gap indicator. In 2003, cyclical positions worsened except for the United Kingdom where it stabilised. Over the two years 2002-2003 there is no clear sign of significant divergence between any of the four countries' cyclical positions. Therefore, cyclical positions should not bias cross-section regressions.

The chapter is divided into four sections. Section 2.2 discusses our use of the EUCOWE dataset and describes the variables used in regression analyses. Section 2.3 outlines the regression methodology. Estimation

results of country models and of the overall model are presented in Section 2.4 together with a specific focus on the existence of structural differences among countries. Since they may have a negative impact on the macroeconomic equilibrium, it may prove efficient to reduce such differences. Conclusions are drawn in Section 2.5.

## **2.2 The EUCOWE survey and the indicators used in regression analyses**

A detailed description of this survey can be found in Delsen *et al.* (2007) (see also Delsen *et al.*, Chapter 1, this volume). The indicators to be explained (the dependent variables in regressions) summarise the use of flexible working patterns.<sup>2</sup> Six binary indicators are computed at company level:

- The use of shift work (yes/no): indicator is set to 1 if the company uses shift work; it is 0 if there is no shift;
- The use of staggered working times (yes/no): indicator is set to 1 if the company uses staggered working times; it is 0 if there is no staggered working times;
- The existence of a decoupling of working time and operating time through shift work and/or staggered working times (yes/no): the indicator is 1 if the company uses shift work and/or staggered working times. It is set to 0 if there is neither shift work nor staggered working times;
- Daily operating time,<sup>3</sup> weekly operating time and annual operating time. These indicators are set to 1 if corresponding operating times are higher than the sample median. They are set to 0 if operating times are below or equal to the median sample.

These six indicators do not entirely summarise flexible working patterns. By focusing on the relationship between (capital) operating time or opening hours and working time, they cover the different dimensions of decoupling. While incomplete, the analysis of decoupling alone is however crucial since it may enable better equipment efficiency and adjustment to consumer needs.

Table 2.2 shows the distribution of the first three indicators. The proportions of establishments using decoupling through staggered working

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2 See Appendix 1 for more details on the definition of the variables.

3 Operating time is also used to mean opening hours.

times or shift work are fairly similar across the selected countries. Whatever the indicator, proportions are higher in Germany and lower in the Netherlands. France and the UK lie in-between with similar proportions (see Delsen *et al.* (2007) for an extensive descriptive analysis of decoupling).

**Table 2.2** Distribution of dependant variables (% of establishments)

	Germany	France	Netherlands	United Kingdom
Shift work	38.2	28.8	18.5	27.6
Staggered working time	39.6	26.8	22.0	28.4
Decoupling	59.3	47.0	33.0	45.2

It is important to ensure that the selected indicators are all useful and not redundant. To do so, concordance indices are computed for every pair of indicators. Given any pair of indicators within a country, the concordant index corresponds to the percentage of establishments for which both indicators share the same value. In the case of no redundancy, the index indicator equals 0.5. Detailed results of the comparison of indicators by pairs are presented in Cette, Kocoglu, Sylvain (2006). These results, which tend to justify the use of six different indicators, can be summarised as follow:

- Shift work and staggered working times are two distinct aspects of decoupling: in every country, the concordance index is below 0.6 except for the Netherlands where it reaches 0.75;
- Concordance indices for the decoupling indicator and each of the three operating time indicators lie between 0.55 and 0.65. They exceed 0.7 only in three cases;
- Concordance indices for either the shift work indicator or the staggered working times indicator and each of the three operating time indicators are close to 0.7. However, they never exceed 0.76. Redundancy is thus limited;
- Concordant indexes based on the three operating time indicators are between 0.8 and 0.9 except for the Netherlands where they are close to 0.75. While it is not complete, the redundancy between these indicators is high.

### 2.3 A “*ceteris paribus*” analysis

Since regressions are not intended to describe average behaviours, they are performed on gross samples. Regressions based on logistical models enable us to highlight the statistical relationship between numerous independent variables and the dependant variable, “all other things being equal”. As previously mentioned, the explained (or dependant) variable is one of the following:

1. Use of shift work;
2. Use of staggered working times;
3. Decoupling of working time and operating time;
4. Daily operating time;
5. Weekly operating time;
6. Annual operating time.

The explanatory variables are divided into five groups:

1. Establishment-related variables: type of establishment (enterprise, non-profit organisation, public institution, other) and economic sector;
2. Variables related to employment: number of employees and structure of employment (share of women, share of part-time employees, share of “managerial staff”);
3. Degree of competition: local, national, international;
4. A variable indicating whether or not the establishment is covered by a collective agreement on working time and/or operating hours;
5. Variables reflecting fluctuations in activity: daily, weekly and annual fluctuations are distinguished.

One category of each explanatory variable has to be defined as the reference category. Since variables in groups 1, 3, 4 and 5 are discrete, the choice of a reference category is straightforward. To define a reference category for continuous variables in group 2, these variables are transformed into discrete variables. The reference modality is the lowest one.

The capital/labour ratio has previously been highlighted as a major determinant of shift work and the decoupling of working time and operating hours. Unfortunately, there is no such variable in the survey. This determinant is therefore taken into account using sectoral dummy variables which may be considered as proxies for the average sectoral capital/labour ratio in competitive sectors (under the restrictive assumption that competition leads to a convergence in production techniques within sectors of economic activity). In non-competitive sectors, sectoral dummies may

capture the need for continuity in public services. To make these sectoral dummies as precise as possible, establishments are grouped into 21 sectors of economic activities in country regressions and 39 sectors are distinguished in estimations based on the overall sample.

## 2.4 Estimation results

First, logistic regressions are computed considering six dependant variables and four countries. These country analyses are aimed at (1) defining the significant determinants of flexible working patterns in each country and (2) comparing the relative influence of these determinants among countries.

Second, logistical regressions are performed on the overall sample. In this instance, an additional country dummy is added as explanatory variable (the reference category is France). Regressions on the overall sample allow us to assess the existence of country specific effects that may represent national rigidities.

The variables are described in the Appendix. For an overview of logistic regression, see Appendix 4 in Cette, Kocoglu and Sylvain (2006). Our results are globally consistent with those of Zagelmeyer and Smith (2005) who used the EUCOWE survey to explore the relationship between operating hours, working patterns and pay bonuses.

### 2.4.1 Country regressions

Table 2.3 summarises country regression results of the binary model explaining the impact of different variables on the use of flexible working patterns. Detailed results are in Appendix 2.4. Country regressions lead to the following common results:

- Compared to other legal forms of organisation, flexible working patterns are more frequent in enterprises compared to non-profit organisation or public institutions. Operating time is on average also greater in enterprises;
- Decoupling increases with the size of the establishment. This relationship is strongly significant and consistent with previous results from Cette (1989) and Heyer (1998). In our specific case, this relationship may indicate that flexible working patterns are associated with fixed costs that are easier to handle in larger establishments;

**Table 2.3** Country regression results (summary)

Independent variables	Impact of independent variables on flexibility indicators	
	All flexibility indicators except staggered working hours	Staggered working hours
Legal form of organisation: enterprise		+
Size of establishment		+++
Share of women in employment	--	--
Share of "managerial staff" in employment <sup>a</sup>	SME: ++; LF: --	SME: ++; LF: --
Share of part-timers in employment		+
Competitive environment	+	+
Intensity of competition <sup>b</sup>	++	++
Collective agreement on working time or capital operating time	+	+
Fluctuations in demand	++	++
Medium term fluctuations <sup>c</sup>	+	+
Foreseeable fluctuations		
Capital intensity <sup>d</sup>	+++	+++
Need for long opening hours <sup>e</sup>	+++	+++
Retail or wholesale trade	++	++

- + and – signs indicate significant positive and negative effects. ++ and -- indicate strong significance of the variables. +++ and --- indicate very strong significance.
- a: SME are small and medium establishments; LF: Large firms; b: National rather than local competition and international rather than national competition; c: Weekly rather than daily fluctuations and annual rather than weekly fluctuations; d: Sectors of economic activity with higher capital intensity are "manufacture of refined petroleum products", "manufacture of chemical and chemical products", "manufacture of basic metal" and "manufacture of fabricated metal products"; e: Sectors particularly concerned are health care, hotels and restaurants and transport equipment.
- Details on the model can be found in Appendix 4 of Cette, Kocoglu and Sylvain (2006).
- Table 2.3 summarises country regression results of the binary models explaining the impact of different variables on the use of flexible working patterns. Detailed results are in the Appendix 2.4.

Note: all other things being equal, the use of different types of flexible working patterns increases with the size of the establishment.

- With the exception for staggered working hours, decoupling of working time and operating time is more frequent in economic sectors where capital intensity is high. This result is statistically significant and consistent with previous studies (Cette, 1989; Heyer, 1998). It may indicate that the reduction in cost associated with an increase in (capital) operating time rises with capital intensity. On the other hand, the rise of staggered working is independent from the sector of economic activity. Flexible working patterns are also widespread in sectors where long opening hours (at least above average working time) are needed;
- The relationship between the share of women in employment and flexible working patterns differs according to the dependant variable:

- The share of women in employment is negatively linked with the use of shift work. Women may be more reluctant to work unsocial hours because of the need to reconcile private and professional life. There may also be the legacy of legal restrictions;
  - But the share of women in employment is positively linked with the use of staggered working hours. The fact that staggered working hours do not necessarily involve working unsocial hours might explain that result. It is also possible that staggered working hours are associated with part-time work (the majority of part-time employees are women).
- The relationship between flexible working patterns and the share of “managerial staff” is complex: with the exception of staggered working hours, flexible working patterns are more developed when the proportion of “managerial staff” is around the median proportion and less developed when this share is high. This might be explained by the fact that flexibility requires a certain level of management which would represent a sort of a fixed cost. On the other hand, where the proportion of managerial, technical or administrative staff is high the white-collar nature of the work may not require shift working. Staggered working hours are weakly linked to the proportion of “managerial staff”.
- Flexible working patterns increase with the share of part-time employees. Two types of explanations can be provided to interpret this result:
  - Combined with decoupling, part-time work allows greater flexibility, *i.e.* better adjustment to opening hours or operating time.
  - Part-time work may also be a corollary to the unsocial hours entailed by flexibility. Furthermore, it has to be remembered that part-time work is defined as a weekly working time below 35 hours so this definition may include some short hours full-timers.
- With the exception of staggered working hours, flexibility is more developed when establishments face competition. Flexibility is more frequent where the establishment experiences international competition than when it is at domestic or local level. This is an important result: competition could require flexibility in working time to increase efficiency. On the other hand, staggered working times are more frequent when competition is local.
- Flexible working patterns are more frequent when there is a collective agreement on working time or capital operating time: the corollaries of the unsocial hours entailed by flexibility (in financial terms or in terms of working time reduction) may require a collective agreement. The use of staggered working is independent from this variable;

- Flexible working patterns are more frequent when establishments face fluctuations in demand. This relationship is stronger with staggered working hours. Concerning the five other indicators this relationship is more significant when fluctuations are monthly or annual, which can be explained by the reorganisation costs implied by these types of flexibility. Whether or not these fluctuations are foreseeable has no impact on the use of flexible working patterns.

## 2.4.2 Regressions on the overall sample

These estimations are aimed at comparing the use of flexible working patterns among countries. If we assume that the impact of variables are identical and that the differences among countries can be simply summarised through a country dummy, the grouping of national samples allows us to increase the number of sectoral dummies (39 in the overall estimations, 21 in country regressions).

Detailed results are set out in Appendix 2.4b. Regressions results on the overall sample are consistent with those on national samples. Focusing on country dummies, (Table 2.4), it appears that the use of flexible working patterns is significantly greater in Germany and the UK than in the Netherlands and France. Germany has the highest score on five of the six indicators for flexibility. In every case, Germany and the UK are the first two countries in terms of development of flexibility. This may suggest that rigidities on the goods and labour markets would prevent companies from using some flexible working patterns in the Netherlands and France more than in Germany and the UK.

**Table 2.4** Regression results, overall sample (summary). Country dummies: country ranking

	Shift work	Staggered hours	Decoupling	Daily operating time	Weekly operating time	Annual operating time	Mean
Germany	2	1	1	1	1	1	1.1
United Kingdom	1	2	2	2	2	2	1.8
France	3	2	3	2	3	3	2.6
Netherlands	4	3	4	3	4	4	3.6

Table 2.4 summarises regression results of binary models (on the overall sample) explaining the impact of different variables on the use of flexible working patterns. Detailed results are presented in Appendix 2.4b.

Note: The figures give each country's ranking with regard to the dependant variable. All other things being equal, shift work is more frequent in the UK than in Germany, France and the Netherlands.

## 2.5 Conclusions

Our analysis corroborates previous studies regarding the main determinants of decoupling of working time and operating time. It shows that these determinants are identical across the four countries considered. Nonetheless, all other things being equal, the extent of decoupling differs greatly between these four countries. Irrespective of the indicator considered, the ranking of the four countries in terms of the development of flexible working patterns is very similar, which may strengthen our results. Germany and the UK are the countries in which flexible working patterns are most frequent; these types of flexibility are less widespread in the Netherlands; France lies between these two groups. In France and the Netherlands, these results highlight the need for reforms aimed at promoting of flexible working patterns.

Differences between countries may imply differences in rigidities on their respective goods and labour markets which would limit the use of flexible working patterns. However, this conclusion is based on the radical assumption that country dummies only reflect institutional (and not economic) rigidities. This finding should therefore be treated with caution and needs to be substantiated by further research.

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## Appendix 2.1 The variables

All variables are based on the EUCOWE survey.

### 2.1.1 The flexibility indicators

Each of the six flexibility indicators highlights a specific aspect of the decoupling of working hours and operating hours. Flexibility is understood as a decoupling between working hours and operating hours.

**Shift work** is defined as different shifts working successively on *the same piece of equipment* whatever the number of shifts. This variable is taken directly from the EUCOWE survey. This binary variable is 1 if the establishment reports shift work.

**Staggered working hours** are defined as a working organisation whereby different teams work at different overlapping periods (which involves working on different piece of equipment). For instance, some employees may work from 8 am to 4 pm and others from 11 am to 7 pm with operating time from 8 am to 7 pm. This variable is also directly taken from the EUCOWE survey. It is 1 if establishment declares staggered working hours.

**Decoupling of working time and operating time:** this variable is based on the shift work variable and the staggered working hours variable. It is a binary variable which equals 1 if the establishment reports staggered working hours or/and shift work *i.e.* if there is a decoupling of working time and operating time.

**Daily operating time:** the EUCOWE survey provides information on daily operating time. This variable is continuous and converted into a binary variable using the following conversion: it is 1 if daily operating time is above the sample median (national sample).

**Weekly operating time** is the product of daily operating time and the number of operating days in a week. These two variables come directly from the EUCOWE survey. This continuous variable is then converted into a binary variable as in the case of daily operating time.

**Annual operating time** is the product of daily operating time and the average number of operating days across the year (EUCOWE survey variable). It is converted into a binary variable in the same way as daily and weekly operating times.

### 2.2.2 The explanatory variables

The explanatory variables are the following:

**Legal form of organisation** is a four category variable: enterprise, public institution, non-profit organisation, other. The reference category is “enterprise”.

**Employment:** the number of establishment employees comes directly from the EUCOWE survey. It is transformed into a 5 categories variable: 1 to 9 employees;

10 to 19 employees; 20 to 49 employees; 50 to 249 employees; 250 and more employees. The reference category is “1 to 9 employees”.

The ***Share of women in employment*** is an EUCOWE survey question. The four modality variable used in the estimations is based on quartiles of the corresponding distribution: share of women below the first quartile; equal or above the first quartile and below the median; equal or above the median and below the third quartile; above the third quartile. The reference category is “share of women below the first quartile”.

The ***Share of “managerial staff” in employment*** is also an EUCOWE survey question. The variable used in estimation is constructed as for the share of women in employment.

The ***Share of part-time workers in employment*** is an EUCOWE survey question. Part-time is defined as a weekly working time below 34/35 hours. Variable used in estimations is a five category variable. First category is “no part-time work” and the four others are based on quartiles. The reference category is “no part-time work”.

***Competition***: EUCOWE survey distinguishes three degrees of competition: local, national and international. Each degree is used in estimations through binary variables. Another binary variable concerning the relevance of any degree of competition is also used.

***Collective agreement on working hours or operating time***: this binary variable corresponds to the survey question on the existence of a collective agreement on working time and/or operating hours. The reference category is “no collective agreement”.

***Fluctuations in demand***: the EUCOWE survey identifies three kinds of fluctuations: daily, weekly and annual. Each kind of fluctuation is transformed into a binary variable (fluctuations/no fluctuations). Reference category is “no fluctuations”.

***Sector of economic activity***: based on available data, the largest number of sectors is distinguished in the estimations. In national estimations, samples are divided into 21 economic sectors (see appendix 2.3a). Estimations based on the overall sample uses 39 sectors of economic activity (see appendix 2.3b). The reference category is “primary sector”.

## Appendix 2.2 Distribution of variables

**Table A2.2** Distribution of variables (% of national establishments)

	Germany	France	Netherlands	UK
<b>Flexibility indicators</b>				
Shift work	38.2	28.8	18.5	27.6
Staggered working times	39.6	26.8	22.0	28.4
Decoupling	59.3	47.0	33.0	45.2
Daily operating time	54.4	57.1	49.3	49.2
Weekly operating time	58.8	49.6	53.9	50.2
Annual operating time	49.4	42.9	49.9	37.1
Legal form of organisation				
Enterprise	69.5	76.6	72.4	62.2
Public institution	13.8	13.4	9.7	6.3
Non-profit organisation	9.5	7.8	13.3	20.0
Other	7.2	2.2	4.6	11.5
<b>Company size (number of employees)</b>				
1-9	17.5	20.5	27.8	26.0
10-19	6.6	8.8	11.4	15.4
20-49	20.2	24.8	22.6	26.9
50-249	17.3	19.6	17.0	19.0
≥ 250s	38.4	26.3	21.2	12.7
<b>Share of women in employment</b>				
<Q1	28.5	26.8	30.7	25.7
Q1≤ share of women <Q2	24.1	24.8	23.2	25.1
Q2≤ share of women <Q3	23.8	24.5	23.9	25.4
≥ Q3	23.6	23.9	22.2	23.8
<b>Share of "managerial staff" in employment</b>				
<Q1	37.6	32.1	36.6	37.0
Q1≤ share of "managerial staff" <Q2	20.1	22.6	21.6	21.9
Q2≤ share of "managerial staff" <Q3	21.2	22.7	21.3	19.9
≥ Q3	21.1	22.6	20.5	21.2
<b>Share of part-time workers in employment</b>				
No part-time work	25.6	43.1	18.0	29.1
<Q1	18.8	14.6	21.0	18.2
Q1≤ share of part-time workers <Q2	18.9	14.2	19.8	17.5
Q2≤ share of part-time workers < Q3	18.8	14.2	20.6	18.4
≥ Q3	17.9	13.9	20.6	16.8
<b>Degree of competition</b>				
Local	52.1	47.1	51.8	60.8
National	35.4	27.3	49.1	52.7
International	29.7	31.8	27.9	25.1
Relevance of the questions on competition	87.2	83.5	84.4	88.4
<b>Collective agreement on working time and/or operating time</b>	71.6	67.6	79.0	53.2
<b>Fluctuations in demand</b>				
Daily fluctuations (foreseeable)	8.4	9.3	9.5	12.2
Daily fluctuations (unforeseeable)	11.7	14.6	8.9	16.0
Weekly fluctuations (foreseeable)	10.8	14.6	12.7	17.5
Weekly fluctuations (unforeseeable)	16.0	17.0	10.8	19.8
Annual fluctuations (foreseeable)	21.4	24.8	16.0	23.7
Annual fluctuations (unforeseeable)	22.8	18.3	13.4	25.3
<b>Number of observations</b>	2,862	2,225	1,866	1,355

## Appendix 2.3 Sectoral distribution

**Table A2.3.A** Country models (% of establishments)

Sector of economic activity	NACE codes (two-digits)	Germany	France	Netherlands	UK
Primary sector	1 to 14	2.6	8.8	8.3	4.8
Manufacture of food products, beverages and tobacco	15 and 16	2.0	3.1	1.8	0.2
Manufacture of textile and textile products leather and leather products wood and wood products pulp, paper and paper products	17 to 21	2.0	2.3	1.6	1.4
Publishing, printing and reproduction of recorded media	22	0.9	1.9	1.8	2.0
Manufacture of coke, refined petroleum products and nuclear fuel chemicals, chemical products and man-made fibres rubber and plastic products other non-metallic mineral products	23 to 26	3.8	4.8	3.0	2.3
Manufacture of basic metals and fabricated metal products	27 and 28	3.8	3.9	2.7	2.9
Manufacture of machinery and equipment n.e.c electrical and optical equipment transport equipment Manufacturing n.e.c	29 to 37	10.2	8.1	7.9	12.6
Electricity, gas and water supply	40 and 41	1.0	1.0	0.3	0.6
Construction	45	6.2	7.4	9.2	7.5
Sale, maintenance and repair of motor vehicles and motorcycles; retail trade of automotive fuel	50	2.7	1.6	1.2	0.2
Wholesale trade and commission trade, except of motor vehicles and motorcycles	51	4.9	4.1	5.0	3.9
Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	52	4.9	7.0	5.3	0.8
Hotels and restaurants	55	2.5	4.6	3.0	0.4
Transport and storage	60 to 63	4.6	2.6	3.8	15.6
Post and telecommunications	64	0.8	2.0	0.8	1.6
Financial intermediation	65 to 67	4.3	2.3	2.9	6.1
Real estate, renting and business activities	70 to 74	10.9	10.2	11.6	17.5
Public administration and defence; compulsory social security	75	9.3	8.8	4.5	0.1
Education	80	4.4	0.9	6.1	0.1
Health and social work	85	12.9	9.8	13.4	11.5
Other community, social and per- sonal service activities; activities of households	90 to 95	5.5	5.0	5.9	8.2
Number of observations		2,862	2,225	1,866	1,355

**Table. A2.3.B** Overall sample (% of establishments)

Sector of economic activity	NACE codes (two-digits)	
Primary sector	1 to 14	5.9
Manufacture of food products, beverages and tobacco	15 and 16	2.0
Manufacture of textile and textile products, leather and leather products, wood and wood products, pulp, paper and paper products	17 to 21	1.9
Publishing, printing and reproduction of recorded media	22	1.5
Manufacture of coke, refined petroleum products and nuclear fuel, chemi- cals, chemical products and man-made fibres, other non-metallic mineral products	23 and 24	1.6
Manufacture of rubber and plastic products	25	1.1
Manufacture of other non metallic mineral product	26	1.0
Manufacture of basic metals	27	0.9
Manufacture of fabricated metal products, except machinery and equipment	28	2.6
Manufacture of machine and equipment, n.e.c	29	2.6
Manufacture of office machinery and computers, electrical machinery and apparatus n.e.c	30 and 31	1.2
Manufacture of radio, television and communication equipment and appara- tus	32	0.9
Manufacture of medical, precision and optical instruments, watches and clocks	33	1.0
Manufacture of motor vehicles, trailers and semi-trailers	34	1.0
manufacture of other transport equipment	35	1.1
Manufacturing n.e.c	36 and 37	1.8
Electricity, gas and water supply	40 and 41	0.8
Construction	45	7.4
Sale, maintenance and repair of motor vehicles and motorcycles; retail trade of automotive fuel	50	1.7
Wholesale trade and commission trade, except of motor vehicles and mo- torcycles	51	4.5
Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	52	4.9
Hotels and restaurants	55	2.8
Transport and storage	60 to 63	5.7
Post and telecommunications	64	1.3
Financial intermediation, except insurance and pension funding	65	2.2
Insurance and pension funding, except compulsory social security	66	0.9
Activities auxiliary to financial intermediation	67	0.6
Real estate activities	70	1.2
Computer and related activities	72	1.5
Research and development	73	0.6
Renting of machinery and equipment without operator and of persona land household goods;	71 and 74	8.6
Other business activities		
Public administration and defence; compulsory social security	75	6.6
Education	80	3.1
Health and social work	85	11.9
Sewage and refuse disposal, sanitation and similar activities	90	0.4
Activities of membership organisations n.e.c	91	2.0
Recreational, cultural and sporting activities	92	1.8
Other personal activities	93	1.7
Number of observations		8,308

## Appendix 2.4 The regression results

### A – national samples

Table A2.4.1 Shift work (yes/no)

	France	Germany	Netherlands	UK
<b>Legal form of organisation</b>				
Enterprise	Ref.	Ref.	Ref.	Ref.
Public institution		-0.456 (0.296)		
Non-profit organisation	-0.839 (0.354)**	-0.551 (0.245)**	0.522 (0.323)	
Other				
<b>Company size (number of employees)</b>				
1-9	Ref.	Ref.	Ref.	Ref.
10-19	0.847 (0.416)**	1.138 (0.348)***	0.704 (0.512)	1.159 (0.341)**
20-49	1.314 (0.346)***	1.905 (0.271)***	1.428 (0.442)***	1.925 (0.299)***
50-249	2.401 (0.354)***	2.927 (0.280)***	2.615 (0.445)***	3.083 (0.317)***
≥ 250	3.333 (0.360)***	4.075 (0.283)***	3.766 (0.449)***	4.582 (0.360)***
<b>Share of women in employment</b>				
<Q1 <sup>a</sup>	Ref.	Ref.	Ref.	Ref.
Q1≤ share of women <Q2 <sup>a</sup>	-0.645 (0.199)***			-0.331 (0.232)
Q2≤ share of women <Q3 <sup>a</sup>	-0.988 (0.219)***		-1.082 (0.310)***	-0.361 (0.261)
≥ Q3 <sup>a</sup>	-1.238 (0.244)***		-0.505 (0.377)	0.712 (0.280)**
<b>Share of “managerial staff ” in employment</b>				
<Q1 <sup>a</sup>	Ref.	Ref.	Ref.	Ref.
Q1≤ share of “managerial staff” <Q2 <sup>a</sup>	0.667 (0.192)***	0.210 (0.148)		-0.277 (0.203)
Q2≤ share of “managerial staff” <Q3 <sup>a</sup>				-0.860 (0.238)***
≥ Q3 <sup>a</sup>	-0.831 (0.231)***	-0.515 (0.167)***		-1.951 (0.291)***
<b>Share of part-time workers in employment</b>				
No part-time work	Ref.	Ref.	Ref.	Ref.
<Q1 <sup>a</sup>	0.293 (0.188)			
Q1≤ share of part-time workers <Q2 <sup>a</sup>				0.391 (0.261)
Q2≤ share of part-time workers < Q3 <sup>a</sup>		-0.340 (0.187)*		0.984 (0.286)***
≥ Q3 <sup>a</sup>		-0.291 (0.193)		0.766 (0.302)**

	France	Germany	Netherlands	UK
<b>Degree of competition</b>				
Absence of local competition	Ref.	Ref.	Ref.	Ref.
Local competition	-0.518 (0.194)***	-0.345 (0.146)**		-0.465 (0.193)**
Absence of national competition	Ref.	Ref.	Ref.	Ref.
National competition	-0.228 (0.163)		-0.275 (0.201)	
Absence of international competition	Ref.	Ref.	Ref.	Ref.
International competition	0.786 (0.189)***	0.508 (0.156)***	0.769 (0.220)***	
Irrelevant questions	Ref.	Ref.	Ref.	Ref.
Relevant questions				-0.730 (0.350)**
<b>Collective agreement on working time and/or operating time</b>				
No	Ref.	Ref.	Ref.	Ref.
Yes	0.593 (0.173)***			0.450 (0.163)***
<b>Fluctuations in demand</b>				
Absence of daily fluctuations	Ref.	Ref.	Ref.	Ref.
Daily fluctuations (foreseeable)				
Daily fluctuations (unforeseeable)				
Absence of weekly fluctuations	Ref.	Ref.	Ref.	Ref.
Weekly fluctuations (foreseeable)			0.562 (0.325)*	
Weekly fluctuations (unforeseeable)				0.582 (0.300)*
Absence of annual fluctuations	Ref.	Ref.	Ref.	Ref.
Annual fluctuations (foreseeable)	0.306 (0.175)*	0.216 (0.151)		
Annual fluctuations (unforeseeable)	0.289 (0.197)			
<b>Sector of economic activity</b>				
Primary sector	Ref.	Ref.	Ref.	Ref.
Manufacture of food products, beverages and tobacco	1.403 (0.428)***		2.784 (0.710)***	
Manufacture of textile and textile products, leather and leather products, wood and wood products, pulp, paper and paper products			1.465 (0.789)*	-1.725 (0.801)**
Publishing, printing and reproduction of recorded media	1.358 (0.493)***		3.099 (0.759)***	
Manufacture of coke, refined petroleum products and nuclear fuel, chemicals, chemical products and man-made fibres, rubber and plastic products, other non-metallic mineral products.	1.591 (0.374)***		2.995 (0.644)***	-1.573 (0.619)**
Manufacture of basic metals and fabricated metal products	0.658 (0.371)*		1.770 (0.659)***	-0.924 (0.581)
Manufacture of machinery and equipment n.e.c, electrical and optical equipment, transport equipment, Manufacturing n.e.c.			1.010 (0.588)*	-0.868 (0.387)**

	France	Germany	Netherlands	UK
Electricity, gas and water supply			2.785 (1.243)**	
Construction	-2.173 (0.453)***	-2.147 (0.525)***	-1.098 (0.825)	-1.275 (0.445)***
Sale, maintenance and repair of motor vehicles and motorcycles; retail trade of automotive fuel	-1.448 (0.842)*			
Wholesale trade and commission trade, except of motor vehicles and motorcycles	-0.624 (0.451)	-1.634 (0.439)***		-0.724 (0.508)
Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods		-1.628 (0.475)***	1.895 (0.701)***	-2.791 (1.401)**
Hotels and restaurants	2.312 (0.367)***	1.335 (0.474)***	3.360 (0.688)***	-2.488 (1.357)*
Transport and storage			2.754 (0.619)***	-1.068 (0.381)***
Post and telecommunications				
Financial intermediation		-2.975 (0.491)***		
Real estate, renting and business activities		-1.565 (0.401)***	1.185 (0.602)**	-1.072 (0.372)***
Public administration and defence; compulsory social security		-1.452 (0.482)***	1.513 (0.710)**	
Education		-1.300 (0.470)***		
Health and social work	3.151 (0.409)***	1.789 (0.422)***	2.613 (0.662)***	-0.589 (0.390)
Other community, social and personal service activities; activities of households	0.668 (0.436)		2.132 (0.665)***	-1.011 (0.426)**
Intercept	-3.467 (0.417)***	-2.555 (0.435)***	-5.530 (0.710)***	-2.188 (0.523)***
Number of observations	2,211	2,799	1,820	1,313
P-value LR	<.0001	<.0001	<.0001	<.0001
P-value Score	<.0001	<.0001	<.0001	<.0001
P-value Wald	<.0001	<.0001	<.0001	<.0001
Concordance	90.2	89.1	90.7	86.7

a Samples on which medians and quartiles are computed differ from samples used in estimation since independent variables may be missing; "Ref.", reference situation; \*\*\* 1% significance level; \*\* 5% significance level; \* 10% significance level; coefficients not reported if significance level >20%.

**Table A2.4.2** Staggered working times (yes/no)

	France	Germany	Netherlands	UK
<b>Legal form of organisation</b>				
Enterprise	Ref.	Ref.	Ref.	Ref.
Public institution			-1.042 (0.388)***	
Non-profit organisation				
Other				-0.420 (0.243)*
<b>Company size (number of employees)</b>				
1-9	Ref.	Ref.	Ref.	Ref.
10-19	0.352 (0.223)	0.346 (0.206)*	1.176 (0.261)***	0.590 (0.223)***
20-49	0.585 (0.191)***	0.533 (0.164)***	0.720 (0.254)***	0.521 (0.202)***
50-249		0.712 (0.177)***	1.136 (0.279)***	0.731 (0.219)***
≥ 250	0.395 (0.216)*	0.786 (0.175)***	1.455 (0.279)***	0.808 (0.256)***
<b>Share of women in employment</b>				
<Q1 <sup>a</sup>	Ref.	Ref.	Ref.	Ref.
Q1 ≤ share of women < Q2 <sup>a</sup>			0.651 (0.206)***	0.427 (0.197)**
Q2 ≤ share of women < Q3 <sup>a</sup>	0.396 (0.186)**		0.341 (0.238)	
≥ Q3 <sup>a</sup>		0.546 (0.157)***		
<b>Share of "managerial staff" in employment</b>				
<Q1 <sup>a</sup>	Ref.	Ref.	Ref.	Ref.
Q1 ≤ share of "managerial staff" < Q2 <sup>a</sup>	0.351 (0.168)**		0.436 (0.209)**	
Q2 ≤ share of "managerial staff" < Q3 <sup>a</sup>	0.271 (0.163)*			
≥ Q3 <sup>a</sup>		0.180 (0.123)		
<b>Share of part-time workers in employment</b>				
No part-time work	Ref.	Ref.	Ref.	Ref.
<Q1 <sup>a</sup>				0.409 (0.213)*
Q1 ≤ share of part-time workers < Q2 <sup>a</sup>				0.694 (0.206)***
Q2 ≤ share of part-time workers < Q3 <sup>a</sup>				0.696 (0.232)***
≥ Q3 <sup>a</sup>				0.721 (0.247)***
<b>Degree of competition</b>				
Absence of local competition	Ref.	Ref.	Ref.	Ref.
Local competition	0.315 (0.170)*	0.294 (0.123)**		
Absence of national competition	Ref.	Ref.	Ref.	Ref.
National competition		0.273 (0.101)***		

	France	Germany	Netherlands	UK
Absence of international competition	Ref.	Ref.	Ref.	Ref.
International competition				
Irrelevant questions	Ref.	Ref.	Ref.	Ref.
Relevant questions				
<b>Collective agreement on working time and/or operating time</b>				
No	Ref.	Ref.	Ref.	Ref.
Yes	0.203 (0.130)		0.444 (0.205)**	
<b>Fluctuations in demand</b>				
Absence of daily fluctuations	Ref.	Ref.	Ref.	Ref.
Daily fluctuations (foreseeable)	0.451 (0.232)*	0.344 (0.216)	1.141 (0.285)***	
Daily fluctuations (unforeseeable)	0.327 (0.205)	0.279 (0.191)	0.600 (0.301)**	0.893 (0.261)***
Absence of weekly fluctuations	Ref.	Ref.	Ref.	Ref.
Weekly fluctuations (foreseeable)	0.267 (0.206)	0.393 (0.204)*		
Weekly fluctuations (unforeseeable)	0.563 (0.199)***	0.370 (0.174)**		
Absence of annual fluctuations	Ref.	Ref.	Ref.	Ref.
Annual fluctuations (foreseeable)	0.335 (0.146)**	0.474 (0.119)***		
Annual fluctuations (unforeseeable)				
<b>Sector of economic activity</b>				
Primary sector	Ref.	Ref.	Ref.	Ref.
Manufacture of food products, beverages and tobacco	0.925 (0.327)***	0.825 (0.412)**	0.672 (0.523)	1.972 (1.313)
Manufacture of textile and textile products, leather and leather products, wood and wood products, pulp, paper and paper products	-0.816 (0.467)*			
Publishing, printing and reproduction of recorded media				
Manufacture of coke, refined petroleum products and nuclear fuel, chemicals, chemical products and man-made fibres, rubber and plastic products, other non-metallic mineral products.				
Manufacture of basic metals and fabricated metal products	-0.762 (0.397)*			
Manufacture of machinery and equipment n.e.c, electrical and optical equipment, transport equipment, Manufacturing n.e.c.	-0.505 (0.301)*			0.559 (0.343)
Electricity, gas and water supply	1.117 (0.502)**			
Construction	-1.154 (0.339)***	-0.685 (0.360)*		
Sale, maintenance and repair of motor vehicles and motorcycles; retail trade of automotive fuel	0.899 (0.406)**	1.744 (0.386)***		
Wholesale trade and commission trade, except of motor vehicles and motorcycles		0.529 (0.341)	0.981 (0.401)**	

	France	Germany	Netherlands	UK
Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	0.440 (0.285)	0.742 (0.347)**	2.140 (0.394)***	1.364 (0.766)*
Hotels and restaurants	1.204 (0.308)***	0.901 (0.402)**	2.170 (0.448)***	
Transport and storage	0.575 (0.358)		0.945 (0.417)**	
Post and telecommunications	1.911 (0.439)***		1.047 (0.707)	
Financial intermediation				
Real estate, renting and business activities			0.803 (0.359)**	
Public administration and defence; compulsory social security	0.573 (0.383)		1.701 (0.549)***	
Education	1.515 (0.568)***			
Health and social work	0.724 (0.334)**	0.560 (0.340)*	1.988 (0.413)***	
Other community, social and personal service activities; activities of households	0.914 (0.319)***	0.692 (0.349)**	1.979 (0.410)***	
Intercept	- 2.522 (0.298)***	- 2.035 (0.334)***	- 4.004 (0.425)***	- 2.168 (0.433)***
Number of observations	2,099	2,589	1,714	1,230
P-value LR	<.0001	<.0001	<.0001	<.0001
P-value Score	<.0001	<.0001	<.0001	<.0001
P-value Wald	<.0001	<.0001	<.0001	.0002
Concordance	73.3	69.2	78.0	67.8

a Samples on which medians and quartiles are computed differ from samples used in estimation since independent variables may be missing; "Ref.", reference situation; \*\*\* 1% significance level; \*\* 5% significance level; \* 10% significance level; coefficients not reported if significance level >20%.

**Table A2.4.3** Decoupling (yes/no)

	France	Germany	Netherlands	UK
<b>Legal form of organisation</b>				
Enterprise	Ref.	Ref.	Ref.	Ref.
Public institution			-0.887 (0.346)**	
Non-profit organisation	-0.372 (0.283)	-0.464 (0.224)**		
Other			-0.713 (0.384)*	-0.379 (0.226)*
<b>Company size (number of employees)</b>				
1-9	Ref.	Ref.	Ref.	Ref.
10-19		0.581 (0.213)***	1.067 (0.259)***	0.791 (0.218)***
20-49	0.404 (0.191)**	0.926 (0.173)***	0.884 (0.247)***	0.974 (0.196)***
50-249	0.755 (0.207)***	1.538 (0.191)***	1.678 (0.272)***	1.704 (0.217)***
≥ 250	1.566 (0.215)***	2.259 (0.195)***	2.610 (0.278)***	2.868 (0.286)***
<b>Share of women in employment</b>				
<Q1 <sup>a</sup>	Ref.	Ref.	Ref.	Ref.
Q1 ≤ share of women < Q2 <sup>a</sup>			0.404 (0.197)**	0.272 (0.194)
Q2 ≤ share of women < Q3 <sup>a</sup>				
≥ Q3 <sup>a</sup>	-0.312 (0.198)	0.512 (0.173)***		0.642 (0.241)***
<b>Share of "managerial staff" in employment</b>				
<Q1 <sup>a</sup>	Ref.	Ref.	Ref.	Ref.
Q1 ≤ share of "managerial staff" < Q2 <sup>a</sup>	0.872 (0.170)***	0.334 (0.143)**	0.334 (0.205)	
Q2 ≤ share of "managerial staff" < Q3 <sup>a</sup>	0.429 (0.160)***			-0.323 (0.195)*
≥ Q3 <sup>a</sup>	-0.355 (0.168)**			-0.679 (0.197)***
<b>Share of part-time workers in employment</b>				
No part-time work	Ref.	Ref.	Ref.	Ref.
<Q1 <sup>a</sup>			0.366 (0.253)	0.459 (0.206)**
Q1 ≤ share of part-time workers < Q2 <sup>a</sup>	0.372 (0.166)**			0.534 (0.203)***
Q2 ≤ share of part-time workers < Q3 <sup>a</sup>				0.797 (0.229)***
≥ Q3 <sup>a</sup>				0.833 (0.240)***
<b>Degree of competition</b>				
Absence of local competition	Ref.	Ref.	Ref.	Ref.
Local competition				-0.349 (0.164)**
Absence of national competition	Ref.	Ref.	Ref.	Ref.
National competition		0.228 (0.114)**		

	France	Germany	Netherlands	UK
Absence of international competition	Ref.	Ref.	Ref.	Ref.
International competition	0.573 (0.159)***	0.263 (0.147)*	0.313 (0.176)*	
Irrelevant questions	Ref.	Ref.	Ref.	Ref.
Relevant questions				-0.564 (0.280)**
<b>Collective agreement on working time and/or operating time</b>				
No	Ref.	Ref.	Ref.	Ref.
Yes	0.521 (0.128)***		0.551 (0.200)***	0.272 (0.136)**
<b>Fluctuations in demand</b>				
Absence of daily fluctuations	Ref.	Ref.	Ref.	Ref.
Daily fluctuations (foreseeable)			1.181 (0.297)***	0.396 (0.298)
Daily fluctuations (unforeseeable)				0.480 (0.265)*
Absence of weekly fluctuations	Ref.	Ref.	Ref.	Ref.
Weekly fluctuations (foreseeable)	0.283 (0.215)	0.363 (0.259)		
Weekly fluctuations (unforeseeable)	0.517 (0.209)**	0.689 (0.218)***		
Absence of annual fluctuations	Ref.	Ref.	Ref.	Ref.
Annual fluctuations (foreseeable)	0.397 (0.146)***	0.590 (0.139)***	0.403 (0.207)*	
Annual fluctuations (unforeseeable)	0.218 (0.169)			
<b>Sector of economic activity</b>				
Primary sector	Ref.	Ref.	Ref.	Ref.
Manufacture of food products, beverages and tobacco	1.975 (0.371)***		1.578 (0.508)***	
Manufacture of textile and textile products, leather and leather products, wood and wood products, pulp, paper and paper products				-0.954 (0.643)
Publishing, printing and reproduction of recorded media	1.315 (0.407)***		1.427 (0.533)***	
Manufacture of coke, refined petroleum products and nuclear fuel, chemicals, chemical products and man-made fibers, rubber and plastic products, other non-metallic mineral products.	1.814 (0.348)***		1.856 (0.449)***	-1.267 (0.541)**
Manufacture of basic metals and fabricated metal products	0.607 (0.315)*		1.328 (0.438)***	
Manufacture of machinery and equipment n.e.c, electrical and optical equipment, transport equipment, Manufacturing n.e.c.	0.474 (0.263)*			
Electricity, gas and water supply			2.023 (1.150)*	-1.707 (1.196)
Construction	-1.566 (0.312)***	-1.669 (0.353)***	-0.956 (0.447)**	-0.600 (0.382)

	France	Germany	Netherlands	UK
Sale, maintenance and repair of motor vehicles and motorcycles; retail trade of automotive fuel	0.882 (0.419)**	0.957 (0.398)**		
Wholesale trade and commission trade, except of motor vehicles and motorcycles		-0.634 (0.338)*	0.935 (0.400)**	-0.755 (0.455)*
Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	0.441 (0.289)		2.474 (0.389)***	
Hotels and restaurants	2.123 (0.326)***		2.722 (0.454)***	
Transport and storage			1.575 (0.408)***	
Post and telecommunications	1.391 (0.479)***		1.803 (0.758)**	-0.809 (0.622)
Financial intermediation		-1.475 (0.363)***		
Real estate, renting and business activities		-0.671 (0.308)**	0.924 (0.345)***	-0.582 (0.334)*
Public administration and defence; compulsory social security		-0.990 (0.392)**	1.414 (0.509)***	
Education	1.951 (0.600)***	-0.542 (0.367)	0.468	
Health and social work	1.893 (0.340)***	0.924 (0.343)***	2.285 (0.400)***	
Other community, social and personal service activities; activities of households	1.218 (0.323)***		2.271 (0.404)***	-0.641 (0.375)*
Intercept	-2.239 (0.285)***	-1.089 (0.327)***	-3.889 (0.407)***	-1.305 (0.420)***
Number of observations	2,093	2,555	1,699	1,218
P-value LR	<.0001	<.0001	<.0001	<.0001
P-value Score	<.0001	<.0001	<.0001	<.0001
P-value Wald	<.0001	<.0001	<.0001	<.0001
Concordance	82.4	80.5	84.3	76.9

a Samples on which medians and quartiles are computed differ from samples used in estimation since independent variables may be missing; "Ref.", reference situation; \*\*\* 1% significance level; \*\* 5% significance level; \* 10% significance level; coefficients not reported if significance level > 20%.

**Table A2.4.4** Daily operating time (greater than national median, yes/no)

	France	Germany	Netherlands	UK
<b>Legal form of organisation</b>				
Enterprise	Ref.	Ref.	Ref.	Ref.
Public institution	-0.907 (0.285)***			
Non-profit organisation	-0.389 (0.278)	-0.611 (0.211)***		-0.432 (0.191)**
Other	-0.547 (0.369)			
<b>Company size (number of employees)</b>				
1-9	Ref.	Ref.	Ref.	Ref.
10-19	0.665 (0.208)***	0.833 (0.207)***	0.297 (0.190)	0.625 (0.203)**
20-49	0.781 (0.178)***	0.753 (0.168)***	0.298 (0.179)*	1.215 (0.181)***
50-249	1.325 (0.196)***	1.457 (0.182)***	0.330 (0.207)	1.634 (0.203)***
≥ 250	2.160 (0.210)***	2.378 (0.186)***	0.786 (0.210)***	2.131 (0.249)***
<b>Share of women in employment</b>				
<Q1 <sup>a</sup>	Ref.	Ref.	Ref.	Ref.
Q1 ≤ share of women <Q2 <sup>a</sup>		-0.215 (0.134)		
Q2 ≤ share of women <Q3 <sup>a</sup>	-0.339 (0.176)*			-0.350 (0.197)*
≥ Q3 <sup>a</sup>	-0.247 (0.189)			
<b>Share of "managerial staff" in employment</b>				
<Q1 <sup>a</sup>	Ref.	Ref.	Ref.	Ref.
Q1 ≤ share of "managerial staff" <Q2 <sup>a</sup>	0.467 (0.161)***	0.194 (0.131)	0.277 (0.168)*	
Q2 ≤ share of "managerial staff" <Q3 <sup>a</sup>	0.383 (0.155)**			-0.550 (0.183)***
≥ Q3 <sup>a</sup>	0.326 (0.154)**		-0.358 (0.151)**	-0.821 (0.182)***
<b>Share of part-time workers in employment</b>				
No part-time work	Ref.	Ref.	Ref.	Ref.
<Q1 <sup>a</sup>			-0.345 (0.188)*	
Q1 ≤ share of part-time workers <Q2 <sup>a</sup>				
Q2 ≤ share of part-time workers <Q3 <sup>a</sup>	0.331 (0.174)*			
≥ Q3 <sup>a</sup>				0.412 (0.222)*
<b>Degree of competition</b>				
Absence of local competition	Ref.	Ref.	Ref.	Ref.
Local competition		-0.169 (0.128)		
Absence of national competition	Ref.	Ref.	Ref.	Ref.
National competition		0.200 (0.106)*		

	France	Germany	Netherlands	UK
Absence of international competition	Ref.	Ref.	Ref.	Ref.
International competition	0.486 (0.152)***	0.379 (0.139)***	0.347 (0.143)**	0.220 (0.164)
Irrelevant questions	Ref.	Ref.	Ref.	Ref.
Relevant questions				
<b>Collective agreement on working time and/or operating time</b>				
No	Ref.	Ref.	Ref.	Ref.
Yes			0.244 (0.143)*	
<b>Fluctuations in demand</b>				
Absence of daily fluctuations	Ref.	Ref.	Ref.	Ref.
Daily fluctuations (foreseeable)	0.553 (0.248)**			
Daily fluctuations (unforeseeable)	0.403 (0.213)*			0.407 (0.251)
Absence of weekly fluctuations	Ref.	Ref.	Ref.	Ref.
Weekly fluctuations (foreseeable)			0.387 (0.230)*	
Weekly fluctuations (unforeseeable)		0.312 (0.192)	0.375 (0.242)	
Absence of annual fluctuations	Ref.	Ref.	Ref.	Ref.
Annual fluctuations (foreseeable)		0.482 (0.130)***		
Annual fluctuations (unforeseeable)	0.390 (0.162)**	0.318 (0.130)**	0.301 (0.185)	0.261 (0.187)
<b>Sector of economic activity</b>				
Primary sector	Ref.	Ref.	Ref.	Ref.
Manufacture of food products, beverages and tobacco	2.318 (0.397)***	1.336 (0.447)***	1.662 (0.455)***	
Manufacture of textile and textile products, leather and leather products, wood and wood products, pulp, paper and paper products				
Publishing, printing and reproduction of recorded media	1.433 (0.424)***	-0.772 (0.523)		
Manufacture of coke, refined petroleum products and nuclear fuel, chemicals, chemical products and man-made fibres, rubber and plastic products, other non-metallic mineral products.	1.385 (0.338)***		0.759 (0.339)**	
Manufacture of basic metals and fabricated metal products				
Manufacture of machinery and equipment n.e.c, electrical and optical equipment, transport equipment, Manufacturing n.e.c.		-0.684 (0.312)**	-0.372 (0.263)	
Electricity, gas and water supply				
Construction	-0.452 (0.252)*	-1.038 (0.330)***	-0.353 (0.261)	
Sale, maintenance and repair of motor vehicles and motorcycles; retail trade of automotive fuel		0.905 (0.376)**		

	France	Germany	Netherlands	UK
Wholesale trade and commission trade, except of motor vehicles and motorcycles		-0.836 (0.330)**	0.427 (0.289)	
Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	0.487 (0.271)*	-0.548 (0.341)	1.447 (0.302)***	
Hotels and restaurants	3.177 (0.396)***	1.928 (0.432)***	1.397 (0.361)***	
Transport and storage	0.986 (0.354)***	1.303 (0.372)***	0.873 (0.312)***	
Post and telecommunications	1.648 (0.513)***		1.534 (0.689)**	0.757 (0.560)
Financial intermediation		-1.368 (0.355)***		
Real estate, renting and business activities	0.584 (0.240)**	-0.643 (0.301)**	0.637 (0.243)***	
Public administration and defence; compulsory social security		-1.430 (0.387)***	1.003 (0.393)**	
Education	2.537 (0.641)***	-1.327 (0.373)***	1.371 (0.325)***	
Health and social work	2.562 (0.335)***	1.141 (0.330)***	1.379 (0.289)***	
Other community, social and personal service activities; activities of households	1.248 (0.312)***	-0.444 (0.338)	1.024 (0.294)***	
Intercept	-1.829 (0.269)***	-1.054 (0.318)***	-1.326 (0.267)***	-0.850 (0.394)**
Number of observations	2,221	2,847	1,850	1,335
P-value LR	<.0001	<.0001	<.0001	<.0001
P-value Score	<.0001	<.0001	<.0001	<.0001
P-value Wald	<.0001	<.0001	<.0001	<.0001
Concordance	81.1	80.8	71.0	75.2

a Samples on which medians and quartiles are computed differ from samples used in estimation since independent variables may be missing; "Ref.", reference situation; \*\*\* 1% significance level; \*\* 5% significance level; \* 10% significance level; coefficients not reported if significance level > 20%.

**Table A2.4.5** Weekly operating time (greater than national median, yes/no)

	France	Germany	Netherlands	UK
<b>Legal form of organisation</b>				
Enterprise	Ref.	Ref.	Ref.	Ref.
Public institution	- 0.422 (0.294)		-0.938 (0.290)***	-0.523 (0.271)*
Non-profit organisation	- 0.786 (0.281)***	-0.422 (0.207)**		-0.410 (0.191)**
Other	- 0.753 (0.392)*	-0.296 (0.194)		
<b>Company size (number of employees)</b>				
1-9	Ref.	Ref.	Ref.	Ref.
10-19	0.295 (0.222)	0.559 (0.201)***		0.462 (0.203)**
20-49	0.406 (0.187)**	0.664 (0.164)***	0.290 (0.188)	0.995 (0.181)***
50-249	1.215 (0.203)***	1.386 (0.181)***	0.835 (0.219)***	1.179 (0.202)***
≥ 250	2.045 (0.215)***	2.402 (0.186)***	1.781 (0.228)***	1.985 (0.254)***
<b>Share of women in employment</b>				
<Q1 <sup>a</sup>	Ref.	Ref.	Ref.	Ref.
Q1≤ share of women <Q2 <sup>a</sup>	-0.325 (0.160)**			
Q2≤ share of women <Q3 <sup>a</sup>	-0.484 (0.178)***			-0.719 (0.199)***
≥ Q3 <sup>a</sup>	-0.639 (0.192)***		-0.416 (0.217)*	
<b>Share of "managerial staff" in employment</b>				
<Q1 <sup>a</sup>	Ref.	Ref.	Ref.	Ref.
Q1≤ share of "managerial staff" <Q2 <sup>a</sup>	0.544 (0.165)***	0.210 (0.134)	0.246 (0.179)	
Q2≤ share of "managerial staff" <Q3 <sup>a</sup>				-0.365 (0.181)**
≥ Q3 <sup>a</sup>		0.251 (0.127)**		-1.076 (0.185)***
<b>Share of part-time workers in employment</b>				
No part-time work	Ref.	Ref.	Ref.	Ref.
<Q1 <sup>a</sup>				
Q1≤ share of part-time workers <Q2 <sup>a</sup>				
Q2≤ share of part-time workers <Q3 <sup>a</sup>	0.368 (0.176)**			0.363 (0.210)*
≥ Q3 <sup>a</sup>				0.361 (0.222)
<b>Degree of competition</b>				
Absence of local competition	Ref.	Ref.	Ref.	Ref.
Local competition		-0.220 (0.130)*	0.205 (0.138)	
Absence of national competition	Ref.	Ref.	Ref.	Ref.
National competition		0.226 (0.108)**		-0.186 (0.142)
Absence of international competition	Ref.	Ref.	Ref.	Ref.

	France	Germany	Netherlands	UK
International competition	0.532 (0.156)***	0.197 (0.142)		
Irrelevant questions	Ref.	Ref.	Ref.	Ref.
Relevant questions		-0.317 (0.206)		-0.424 (0.262)
<b>Collective agreement on working time and/or operating time</b>				
No	Ref.	Ref.	Ref.	Ref.
Yes	0.194 (0.126)			
<b>Fluctuations in demand</b>				
Absence of daily fluctuations	Ref.	Ref.	Ref.	Ref.
Daily fluctuations (foreseeable)	0.385 (0.246)	0.378 (0.253)		
Daily fluctuations (unforeseeable)				0.500 (0.257)*
Absence of weekly fluctuations	Ref.	Ref.	Ref.	Ref.
Weekly fluctuations (foreseeable)	0.270 (0.210)		0.434 (0.250)*	
Weekly fluctuations (unforeseeable)	0.453 (0.200)**	0.343 (0.195)*	0.468 (0.265)*	
Absence of annual fluctuations	Ref.	Ref.	Ref.	Ref.
Annual fluctuations (foreseeable)	0.220 (0.143)	0.428 (0.131)***		0.326 (0.178)*
Annual fluctuations (unforeseeable)	0.337 (0.162)**		0.291 (0.198)	
<b>Sector of economic activity</b>				
Primary sector	Ref.	Ref.	Ref.	Ref.
Manufacture of food products, beverages and tobacco	2.145 (0.377)***	0.677 (0.465)		
Manufacture of textile and textile products, leather and leather products, wood and wood products, pulp, paper and paper products	-0.537 (0.363)	-1.247 (0.416)***	-0.722 (0.437)*	
Publishing, printing and reproduction of recorded media	1.170 (0.408)***	-1.880 (0.527)***	-0.987 (0.437)**	
Manufacture of coke, refined petroleum products and nuclear fuel, chemicals, chemical products and man-made fibres, rubber and plastic products, other non-metallic mineral products.	1.089 (0.319)***	-0.802 (0.381)**		
Manufacture of basic metals and fabricated metal products		-1.202 (0.360)***	-0.709 (0.364)*	
Manufacture of machinery and equipment n.e.c, electrical and optical equipment, transport equipment, Manufacturing n.e.c.		-1.473 (0.319)***	-1.425 (0.268)***	
Electricity, gas and water supply		-1.761 (0.509)***		
Construction	-1.251 (0.283)***	-1.568 (0.326)***	-1.064 (0.254)***	
Sale, maintenance and repair of motor vehicles and motorcycles; retail trade of automotive fuel	0.842 (0.411)**	1.011 (0.433)**		

	France	Germany	Netherlands	UK
Wholesale trade and commission trade, except of motor vehicles and motorcycles		-1.293 (0.334)***	-0.417 (0.293)	
Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	1.021 (0.276)***		1.378 (0.334)***	
Hotels and restaurants	3.166 (0.370)***	0.862 (0.427)**	1.472 (0.441)***	
Transport and storage	1.034 (0.358)***	0.774 (0.396)*		
Post and telecommunications	1.720 (0.485)***			
Financial intermediation		-2.412 (0.362)***	-1.072 (0.372)***	
Real estate, renting and business activities	0.396 (0.248)	-1.377 (0.305)***	-0.758 (0.247)***	
Public administration and defence; compulsory social security		-2.052 (0.388)***		
Education	1.953 (0.562)***	-1.926 (0.371)***	-0.522 (0.334)	
Health and social work	2.732 (0.338)***		0.385 (0.295)	
Other community, social and personal service activities; activities of households	1.213 (0.318)***	-0.679 (0.341)**	0.534 (0.305)*	
Intercept	- 1.772 (0.275)***		-0.411 (0.270)	
Number of observations	2,221	2,847	1,850	1,335
P-value LR	<.0001	<.0001	<.0001	<.0001
P-value Score	<.0001	<.0001	<.0001	<.0001
P-value Wald	<.0001	<.0001	<.0001	<.0001
Concordance	83.0	80.7	76.4	76.5

a Samples on which medians and quartiles are computed differ from samples used in estimation since independent variables may be missing; "Ref.." reference situation; \*\*\* 1% significance level; \*\* 5% significance level; \* 10% significance level; coefficients not reported if significance level > 20%.

**Table A2.4.6** Annual operating time (greater than national median, yes/no)

	France	Germany	Netherlands	UK
<b>Legal form of organisation</b>				
Enterprise	Ref.	Ref.	Ref.	Ref.
Public institution			-0.618 (0.272)**	-0.478 (0.291)
Non-profit organisation	-0.679 (0.285)**			-0.448 (0.206)**
Other				
<b>Company size (number of employees)</b>				
1-9	Ref.	Ref.	Ref.	Ref.
10-19		0.693 (0.215)***		0.652 (0.225)***
20-49	0.565 (0.197)***	1.057 (0.169)***		1.041 (0.198)***
50-249	1.237 (0.213)***	1.683 (0.182)***	0.425 (0.203)**	1.361 (0.218)***
≥ 250	2.019 (0.222)***	2.337 (0.184)***	0.902 (0.208)***	2.270 (0.257)***
<b>Share of women in employment</b>				
<Q1 <sup>a</sup>	Ref.	Ref.	Ref.	Ref.
Q1 ≤ share of women < Q2 <sup>a</sup>	-0.412 (0.163)**	-0.170 (0.130)		
Q2 ≤ share of women < Q3 <sup>a</sup>	-0.542 (0.180)***			-0.361 (0.210)*
≥ Q3 <sup>a</sup>	-0.714 (0.196)***			
<b>Share of "managerial staff" in employment</b>				
<Q1 <sup>a</sup>	Ref.	Ref.	Ref.	Ref.
Q1 ≤ share of "managerial staff" < Q2 <sup>a</sup>	0.548 (0.165)***			-0.361 (0.173)**
Q2 ≤ share of "managerial staff" < Q3 <sup>a</sup>	0.259 (0.161)			-0.431 (0.187)**
≥ Q3 <sup>a</sup>	-0.237 (0.169)		-0.233 (0.148)	-1.465 (0.214)***
<b>Share of part-time workers in employment</b>				
No part-time work	Ref.	Ref.	Ref.	Ref.
<Q1 <sup>a</sup>				
Q1 ≤ share of part-time workers < Q2 <sup>a</sup>	0.236 (0.169)			0.267 (0.204)
Q2 ≤ share of part-time workers < Q3 <sup>a</sup>	0.417 (0.180)**			0.552 (0.226)**
≥ Q3 <sup>a</sup>				0.868 (0.237)***
<b>Degree of competition</b>				
Absence of local competition	Ref.	Ref.	Ref.	Ref.
Local competition				
Absence of national competition	Ref.	Ref.	Ref.	Ref.
National competition		0.286 (0.102)***		
Absence of international competition	Ref.	Ref.	Ref.	Ref.
International competition	0.499 (0.160)***	0.306 (0.134)**		-0.232 (0.172)
Irrelevant questions	Ref.	Ref.	Ref.	Ref.

	France	Germany	Netherlands UK
Relevant questions			-0.815 (0.289)***
<b>Collective agreement on working time and/or operating time</b>			
No	Ref.	Ref.	
Yes		-0.202 (0.110)*	
<b>Fluctuations in demand</b>			
Absence of daily fluctuations	Ref.	Ref.	
Daily fluctuations (foreseeable)			
Daily fluctuations (unforeseeable)			
Absence of weekly fluctuations	Ref.	Ref.	
Weekly fluctuations (foreseeable)	0.421 (0.208)**		
Weekly fluctuations (unforeseeable)	0.309 (0.200)	0.255 (0.181)	
Absence of annual fluctuations	Ref.	Ref.	
Annual fluctuations (foreseeable)	0.512 (0.145)***		
Annual fluctuations (unforeseeable)	0.641 (0.163)***	-0.293 (0.127)**	
<b>Sector of economic activity</b>			
Primary sector	Ref.	Ref.	
Manufacture of food products, beverages and tobacco	1.890 (0.359)***	1.228 (0.434)***	
Manufacture of textile and textile products, leather and leather products, wood and wood products, pulp, paper and paper products			
Publishing, printing and reproduction of recorded media	0.916 (0.404)**		
Manufacture of coke, refined petroleum products and nuclear fuel, chemicals, chemical products and man-made fibres, rubber and plastic products, other non-metallic mineral products.	1.029 (0.312)***		
Manufacture of basic metals and fabricated metal products			
Manufacture of machinery and equipment n.e.c, electrical and optical equipment, transport equipment, Manufacturing n.e.c.		-0.702 (0.307)**	
Electricity, gas and water supply		-1.051 (0.492)**	
Construction	-1.371 (0.300)***	-1.436 (0.345)***	
Sale, maintenance and repair of motor vehicles and motorcycles; retail trade of automotive fuel		0.565 (0.366)	
Wholesale trade and commission trade, except of motor vehicles and motorcycles	-0.489 (0.337)	-0.848 (0.328)***	
Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	0.849 (0.285)***	-0.526 (0.336)	

	France	Germany	Netherlands	UK
Hotels and restaurants	2.897 (0.341)***	1.410 (0.401)***		
Transport and storage	1.034 (0.351)***	0.897 (0.350)**		
Post and telecommunications	1.416 (0.456)***			
Financial intermediation		-1.443 (0.350)***		
Real estate, renting and business activities		-1.007 (0.300)***		
Public administration and defence; compulsory social security	-0.636 (0.406)	-1.607 (0.381)***	0.559 (0.391)	
Education	0.925 (0.589)	-1.330 (0.364)***		
Health and social work	2.610 (0.337)***	0.653 (0.324)**	0.903 (0.284)***	
Other community, social and personal service activities; activities of households	1.180 (0.325)***	-0.582 (0.333)*		
Intercept	-2.131 (0.285)***	-0.902 (0.313)***	-0.430 (0.256)*	-1.329 (0.415)***
Number of observations	2,221	2,847	1,850	1,335
P-value LR	< .0001	< .0001	< .0001	< .0001
P-value Score	< .0001	< .0001	< .0001	< .0001
P-value Wald	< .0001	< .0001	< .0001	< .0001
Concordance	83.9	79.3	66.7	78.0

a Samples on which medians and quartiles are computed differ from samples used in estimation since independent variables may be missing; "Ref. " reference situation; \*\*\* 1% significance level;

\*\* 5% significance level; \* 10% significance level; coefficients not reported if significance level > 20%.

## B – Overall sample

	Shift work	Staggered working times	De- coupling	Daily operating time	Weekly operating time	Annual operat- ing time
<b>Legal form of organisation</b>						
Enterprise	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Public institution				-0.553 (0.129)***	-0.175 (0.131)	-0.214 (0.129)*
Non-profit organisation	0.201 (0.127)			-0.304 (0.103)***	-0.151 (0.103)	-0.141 (0.103)
Other						
<b>Company size (number of employees)</b>						
1-9	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
10-19	0.941 (0.186)***	0.601 (0.108)***	0.651 (0.108)***	0.553 (0.098)***	0.291 (0.102)***	0.299 (0.104)***
20-49	1.672 (0.152)***	0.609 (0.091)***	0.846 (0.091)***	0.850 (0.083)***	0.607 (0.084)***	0.652 (0.085)***
50-249	2.650 (0.154)***	0.744 (0.099)***	1.444 (0.099)***	1.320 (0.092)***	1.187 (0.092)***	1.041 (0.093)***
≥ 250	3.713 (0.157)***	0.843 (0.102)***	2.227 (0.105)***	2.018 (0.097)***	2.127 (0.098)***	1.720 (0.096)***
<b>Share of women in employment</b>						
<Q1 <sup>a</sup>	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Q1≤ share of women	-0.140 (0.094)	0.372 (0.081)***	0.150 (0.082)*		-0.127 (0.077)*	-0.156 (0.076)**
Q2≤ share of women < Q3 <sup>a</sup>	-0.594 (0.107)***	0.359 (0.090)***		-0.112 (0.084)	-0.282 (0.085)***	-0.283 (0.084)***
≥ Q3 <sup>a</sup>		0.502 (0.096)***	0.280 (0.098)***		-0.219 (0.092)**	-0.126 (0.090)
<b>Share of "managerial staff" in employment</b>						
<Q1 <sup>a</sup>	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Q1≤ share of "managerial staff" < Q2 <sup>a</sup>	0.224 (0.086)***	0.121 (0.078)	0.275 (0.081)***	0.136 (0.076)*	0.145 (0.076)*	0.157 (0.074)**
Q2≤ share of "managerial staff" < Q3 <sup>a</sup>			0.104 (0.080)			
≥ Q3 <sup>a</sup>	-0.953 (0.111)***		-0.261 (0.083)***	-0.100 (0.076)	-0.280 (0.078)***	-0.383 (0.078)***
<b>Share of part-time workers in employment</b>						
No part-time work	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
<Q1 <sup>a</sup>	0.135 (0.096)		0.191 (0.087)**		-0.111 (0.083)	
Q1≤ share of part-time workers < Q2 <sup>a</sup>		0.219 (0.084)***	0.145 (0.085)*	0.124 (0.080)		
Q2≤ share of part-time workers < Q3 <sup>a</sup>	0.142 (0.109)**	0.137 (0.089)	0.252 (0.091)***	0.112 (0.085)	0.126 (0.086)	0.240 (0.085)***
≥ Q3 <sup>a</sup>			0.164 (0.097)*	0.130 (0.089)	0.119 (0.089)	0.230 (0.089)***

	Shift work	Staggered working times	De- coupling	Daily operating time	Weekly operating time	Annual operating time
<b>Degree of competition</b>						
Absence of local competi- tion	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Local competition	-0.343 (0.084)***	0.217 (0.074)***				
Absence of national compe- tition	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
National competition	-0.181 (0.074)**	0.178 (0.064)***				
Absence of international competition	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
International competition	0.464 (0.088)***		0.250 (0.078)***	0.242 (0.074)***	0.290 (0.074)***	0.230 (0.073)***
Irrelevant questions	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Relevant questions	-0.183 (0.138)		-0.167 (0.121)			
<b>Collective agreement on working time and/or operating time</b>						
No	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Yes	0.229 (0.080)***		0.208 (0.064)***			
<b>Fluctuations in demand</b>						
Absence of daily fluctua- tions	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Daily fluctuations (foresee- able)		0.490 (0.119)***	0.384 (0.132)***		0.273 (0.124)**	0.194 (0.119)
Daily fluctuations (unfore- seeable)		0.477 (0.109)***	0.238 (0.119)**	0.221 (0.113)*	0.271 (0.112)**	0.161 (0.109)
Absence of weekly fluctua- tions	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Weekly fluctuations (fore- seeable)		0.189 (0.111)*		0.158 (0.112)	0.164 (0.112)	0.190 (0.108)*
Weekly fluctuations (unfore- seeable)	0.196 (0.123)	0.280 (0.105)***	0.439 (0.113)***	0.185 (0.106)*	0.313 (0.106)***	0.269 (0.103)***
Absence of annual fluctua- tions	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Annual fluctuations (fore- seeable)	0.168 (0.089)*	0.281 (0.075)***	0.385 (0.078)***	0.148 (0.074)**	0.243 (0.074)***	0.105 (0.073)
Annual fluctuations (unfore- seeable)				0.270 (0.079)***	0.136 (0.079)*	
<b>Country</b>						
France	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Germany	0.407 (0.086)***	0.588 (0.071)***	0.517 (0.074)***	0.557 (0.069)***	0.376 (0.069)***	0.878 (0.068)***
UK	0.954 (0.115)***		0.326 (0.096)***		0.143 (0.091)	0.129 (0.091)
Netherlands	-0.539 (0.106)***	-0.189 (0.088)**	-0.530 (0.087)***	-0.909 (0.079)***	-0.611 (0.081)***	-0.353 (0.080)***

	Shift work	Staggered working times	De- coupling	Daily operating time	Weekly operating time	Annual operat- ing time
<b>Sector of economic activity</b>						
Primary sector	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Manufacture of food products, beverages and tobacco	1.049 (0.254)***	0.830 (0.213)***	1.309 (0.230)***	1.411 (0.232)***	1.173 (0.224)***	1.205 (0.213)***
Manufacture of textile and textile products, leather and leather products, wood and wood products, pulp, paper and paper products	0.347 (0.250)		0.320 (0.218)		-0.538 (0.208)***	
Publishing, printing and reproduction of recorded media	0.938 (0.273)***		0.553 (0.236)**	0.410 (0.227)*		
Manufacture of coke, refined petroleum products and nuclear fuel, chemicals, chemical products and man-made fibres, other non-metallic mineral products	1.041 (0.277)***	0.394 (0.241)	1.189 (0.282)***	0.703 (0.263)***		0.540 (0.235)**
Manufacture of rubber and plastic products	2.235 (0.356)***		1.635 (0.335)***	0.737 (0.292)**	0.808 (0.300)***	0.901 (0.278)***
Manufacture of other non metallic mineral product	0.517 (0.324)			0.358 (0.277)		
Manufacture of basic metals	1.630 (0.402)***		1.770 (0.442)***	0.440 (0.335)	0.611 (0.361)*	0.787 (0.329)**
Manufacture of fabricated metal products, except machinery and equipment	0.333 (0.230)		0.345 (0.195)*	-0.246 (0.185)	-0.726 (0.187)***	
Manufacture of machine and equipment, n.e.c	0.479 (0.229)**		0.550 (0.204)***		-0.616 (0.190)***	
Manufacture of office machinery and computers, electrical machinery and apparatus n.e.c	0.426 (0.287)			0.426 (0.274)		0.458 (0.257)*
Manufacture of radio, television and communication equipment and apparatus			0.402 (0.311)		-0.391 (0.284)	
Manufacture of medical, precision and optical instruments, watches and clocks					-0.681 (0.279)**	-0.432 (0.278)
Manufacture of motor vehicles, trailers and semi-trailers						
manufacture of other transport equipment		0.622 (0.270)**	0.617 (0.288)**			
Manufacturing n.e.c	-0.427 (0.259)*	-0.347 (0.257)	-0.426 (0.225)*	-0.882 (0.218)***	-1.473 (0.226)***	-0.840 (0.223)***

	Shift work	Staggered working times	De- coupling	Daily operating time	Weekly operating time	Annual operat- ing time
Electricity, gas and water supply						
Construction	-1.487 (0.229)***	-0.547 (0.176)***	-1.072 (0.164)***	-0.348 (0.139)**	-0.972 (0.142)***	-0.740 (0.147)***
Sale, maintenance and repair of motor vehicles and motorcycles; retail trade of automotive fuel	-0.476 (0.319)	1.211 (0.221)***	0.876 (0.227)***	0.797 (0.225)***	0.892 (0.222)***	0.668 (0.217)***
Wholesale trade and commission trade, except of motor vehicles and motorcycles	-0.816 (0.223)***	0.382 (0.170)**			-0.619 (0.157)***	-0.222 (0.159)
Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	-0.909 (0.241)***	0.830 (0.170)***	0.574 (0.170)***	0.371 (0.158)**	0.542 (0.157)***	0.510 (0.158)***
Hotels and restaurants	1.500 (0.224)***	1.259 (0.195)***	1.480 (0.201)***	2.040 (0.214)***	1.948 (0.211)***	1.811 (0.194)***
Transport and storage	0.325 (0.187)*	0.429 (0.165)***	0.457 (0.159)***	0.655 (0.150)***	0.336 (0.148)**	0.562 (0.148)***
Post and telecommunications		0.890 (0.261)***	0.738 (0.283)***	1.067 (0.281)***	0.596 (0.269)**	1.053 (0.261)***
Financial intermediation, except insurance and pension funding	-1.456 (0.283)***		-0.890 (0.220)***	-0.530 (0.205)***	-1.390 (0.212)***	-0.810 (0.211)***
Insurance and pension funding, except compulsory social security	-1.882 (0.414)***		-0.617 (0.306)**		-0.397 (0.296)	-0.498 (0.295)*
Activities auxiliary to financial intermediation			0.483 (0.351)			
Real estate activities	-1.140 (0.440)***				-0.963 (0.279)***	
Computer and related activities	-0.780 (0.326)**		-0.340 (0.248)		-0.388 (0.230)*	
Research and development	-1.385 (0.457)***		-0.922 (0.360)**		-0.548 (0.343)	-0.619 (0.352)*
Renting of machinery and equipment without operator and of personal and household goods; Other business activities	-0.433 (0.188)**				-0.305 (0.135)**	
Public administration and defence; compulsory social security	-1.296 (0.237)***		-0.688 (0.201)***	-0.277 (0.186)	-1.064 (0.189)***	-0.813 (0.191)***
Education	-1.088 (0.273)***		-0.372 (0.204)*		-0.894 (0.197)***	-0.333 (0.193)*
Health and social work	1.200 (0.182)***	0.542 (0.157)***	0.946 (0.152)***	1.125 (0.142)***	0.806 (0.139)***	1.029 (0.141)***
Sewage and refuse disposal, sanitation and similar activities	0.727 (0.469)					

	Shift work	Staggered working times	De- coupling	Daily operating time	Weekly operating time	Annual operat- ing time
Activities of membership organisations n.e.c	-1.008 (0.317)***	0.312 (0.228)			-0.466 (0.214)**	-0.520 (0.224)**
Recreational, cultural and sporting activities	0.468 (0.281)*	0.980 (0.222)***	0.995 (0.227)***	1.288 (0.220)***	1.081 (0.217)***	1.023 (0.213)***
Other personal activities		0.473 (0.240)**	0.368 (0.240)	0.371 (0.215)*		
Intercept	-3.441 (0.221)***	-2.740 (0.167)***	-2.180 (0.159)***	-1.160 (0.144)***	-0.949 (0.143)***	-1.466 (0.146)***
Number of observations	8,143	7,632	7,565	8,253	8,253	8,253
P-value LR	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
P-value Score	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
P-value Wald	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
Concordance	88.1	71.0	80.4	78.4	79.3	78.0

"Ref.", reference situation; \*\*\* 1% significance level; \*\* 5% significance level; \* 10% significance level; coefficients not reported if significance level > 20%.

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