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**A quantitative evaluation of change in work in Scandinavia**

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# The transformation of work?

*WP15 – A quantitative evaluation of changes in work in Scandinavia*

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**works**  
CHANGES IN WORK

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# Contents

<b>1</b>	Introduction	7
1.1	About this report	7
1.2	On the problems of analyzing Scandinavia as a single country	8
<b>2</b>	Economic performance of Scandinavia relative to EU-15	9
<b>3</b>	Work flexibility	13
3.1	Time use	14
3.2	Part-time work	16
3.3	Temporary employment	17
3.4	Self employment	19
<b>4</b>	Trends in work organisation	21
<b>5</b>	Occupational change	25
<b>6</b>	Employments in business function	29
6.1	The general conclusions from WP 9	29
6.2	On Data from Scandinavian countries	30
6.3	The general conclusions and Scandinavia	30
<b>7</b>	Conclusions	31
	Bibliography	33



# 1 Introduction

## 1.1 About this report

The core focus of the WORKS project is changes in work caused by global restructuring. These changes concern, among other things, shifts in employment (job growth, job decline), working conditions and quality of life issues and occupational changes. Earlier reports from the quantitative pillar of the WORKS project have showed that there is a high level of national specificity regarding how these changes occur. Hence the need for more detailed country reports that can provide more in depth information on that particular country.

This report then, will comment on earlier WORKS reports on European level and analyse how the situation in a the 'nation' Scandinavia fits and differs with the conclusions on the European level. The reports analysed here will be:

- D8.2: Literature review of secondary analysis by Monique Ramioul and Rik Huys, HIVA-K.U.Leuven, Belgium (Ramioul & Huys, 2007);
- D9.2.1 - Tracing employment in business functions. A sectoral and occupational approach by Karen Geurts, Laura Coppin and Monique Ramioul, HIVA-K.U.Leuven, Belgium (Geurts, Coppin & Ramioul, 2007);
- D9.2.2 - Trends in work organization by Nathalie Greenan, Ekaterina Kalugina and Emmanuelle Walkowiak, CEE, France (Greenan, Kalugina & Walkowiak, 2007);
- D9.2.3 Work flexibility in Europe: a sectoral and occupational description of trends in work hours, part-time work, temporary work, and self-employment by Lorenzo Birindelli and Emiliano Rustichelli, IRES, Italy (Birindelli & Rustichelli, 2007);
- D9.2.4 - Occupational change in Europe by Malcolm Brynin and Simonetta Longhi, ISER, The University of Essex, United Kingdom (Brynin & Longhi, 2007);
- D9.2.5 - A quantitative evaluation of the shape of employment in Europe: Introduction and executive summaries by Lorenzo Birindelli - IRES, Malcolm Brynin - ISER, Laura Coppin - HIVA-K.U.Leuven, Karen Geurts - HIVA-K.U.Leuven, Nathalie Greenan - CEE, Ekaterina Kalugina - CEE, Simonetta Longhi - ISER, Monique Ramioul - HIVA-K.U.Leuven, Emiliano Rusticelli - IRES, Emmanuelle Walkowiak - CE (Brynin & Longhi, 2007).

For most of the reports there will be a separate chapter dealing with that report, however for the literature review and the executive summaries there will not be separate chapters. Before the analysis proper start some comments on Scandinavia as a unit will be made.

## 1.2 On the problems of analyzing Scandinavia as a single country

This report focuses on Scandinavia. Although the three Scandinavian countries (Denmark, Norway and Sweden) are geographically, linguistically, historically and culturally very close they are still different countries, and their work life differs in important respects. An important legal and technical difference is EU membership; Denmark and Sweden are members, while Norway is not. While Norway follows most of the rules of the European Union, including production of various labour statistics, Norway did not participate in the Fourth European Working Condition survey. Hence it is necessary to either ignore Norway or use data from national Norwegian sources several places. Neither solution is optimal.

EU membership is of course not the only difference between the countries. Their economic situation is different in several other respects. Norway has a raw material based economy, with oil and gas and fish as the most important export commodities. Sweden has a much stronger industrial base, while Denmark has a strong agricultural sector. The work life laws and regulations also differs between Denmark and Norway/Sweden, Denmark

There are differences between the three countries, and these differences will be visible through out the report. However, as mentioned above there are several similarities between the three countries. They have shared a common labour market since the fifties (Nordic agreement), they all have strong labour unions and strong social democratic traditions, and they are committed to co-determination, partnership and participation as ideals for work life. Work life researchers talk about a Scandinavian model of management which includes the following (Schramm-Nielsen, Sivesind & Lawrence, 2004):

- informal, involving, restrained and equality based management style;
- flat hierarchies, small differences in pay;
- consensus oriented, and willing to give access to decisions making arenas;
- avoidance of use of formal authority, preference for persuasion;
- market and costumer across divisional borders.

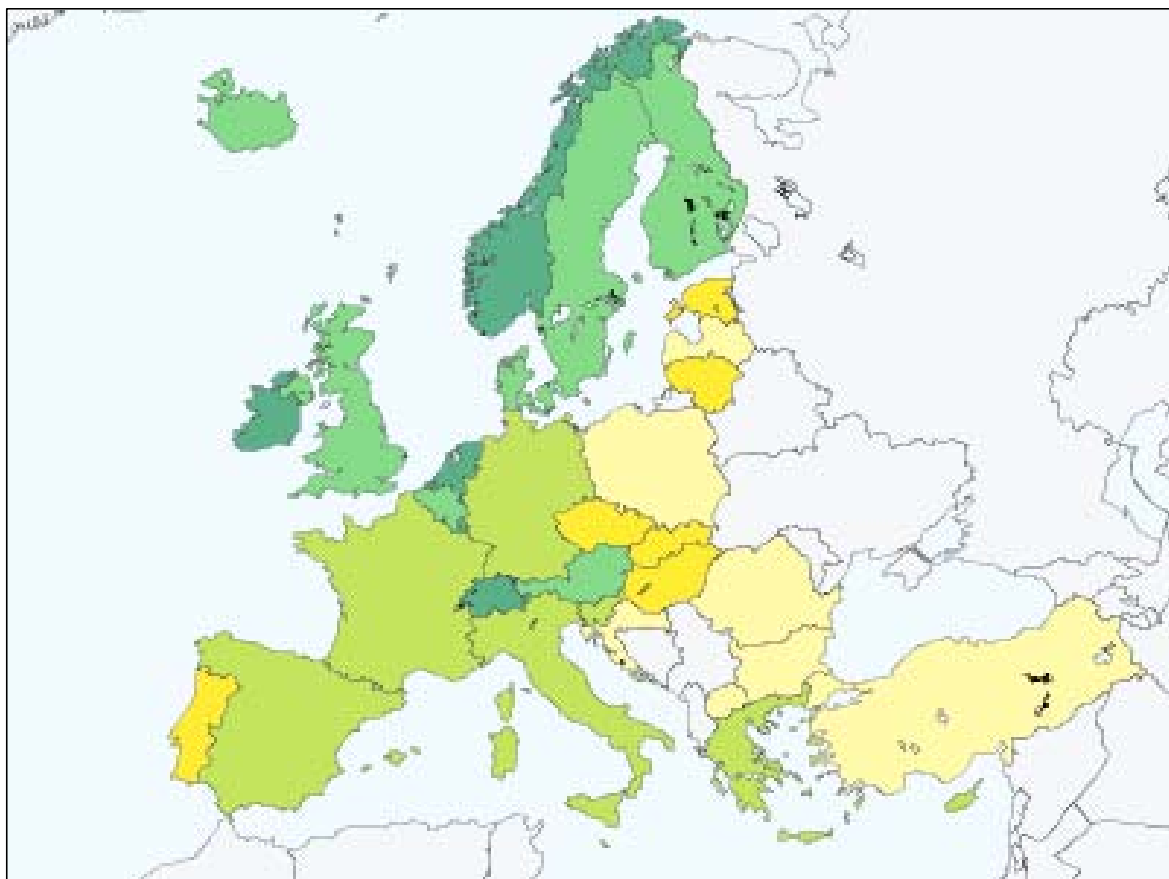
The three countries are also egalitarian countries with a high degree of female participation in work life. On the balance the similarities are strong enough to warrant a joint treatment, however where there are important differences these will be commented upon.

The report will present individual statistics for each country (where such statistics exists) but they will be grouped together as Scandinavia for readability purposes. Comparison will be made with EU-15 mostly, both Sweden and Denmark belongs to that group.

## 2 Economic performance of Scandinavia relative to EU-15

The single most used indicator for economic performance is Gross Domestic Product, GDP per capita. Eurostat provides data for most of Europe updated on a monthly basis. The map below provides a snap shot of GDP in Europe in January 2008:

**Figure 2.1** GDP in Purchasing Power Standards per capita in Europe. January 2008



Legend	GDP per capita	Cases
Light yellow	29.4-61.2	7
Yellow	61.2-82.1	7
Light green	82.1-113.1	7
Green	113.1-126.8	7
Dark green	126.8-285.2	5

As we can see from the map above the three Scandinavian countries all have GDP per capita well above 100. Norway is among the five top countries, with Sweden and Denmark in the next tier.

While this snapshot shows us that the Scandinavian economies are healthy it does not show us development over time, neither do we get any information on the work life. Some other key indicators for economic performance of Scandinavia is shown in:

**Table 2.1** Some macroeconomic indicators EU-14 and Norway

Geo- \time	Growth rate GDP <sup>1</sup>		Total Employ- ment <sup>2</sup>		Unemployment <sup>3</sup>		Labour produc- tivity <sup>4</sup>		R&D spending <sup>5</sup>	
	2005	2000	2005	2000	2005	2000	2005	2000	2005	2000
EU-15	0.9	3.6	65.3	63.4	8.1	7.7	1.2	2.7	1.91	1.92
AT	1.1	3.1	68.6	68.5	5.2	3.6	1.1	2.7	2.41	1.91
BE	0.4	3.4	61.1	60.5	10.7	7.5	-0.3	1.7	1.84	1.97
DE	0.8	2.8	66.0	65.6	4.8	4.3	1.3	2.6	2.48	2.45
ES	2.0	4.5	63.3	56.3	8.4	9.8	0.9	0.1	1.12	0.91
FI	2.6	4.7	68.4	67.2	9.2	9.0	1.9	3.6	3.48	3.34
FR	1.3	3.2	63.1	62.1	9.8	11.2	1.8	3.7	2.13	2.15
GR	3.5	4.3	60.1	56.5	4.3	4.2		4.0	0.58	
IE	3.7	7.6	67.6	65.2	7.7	10.1	1.2	4.5	1.26	1.12
IT	-0.6	3.1	57.6	53.7	4.5	2.3	0.4	2.4	1.1	1.05
LU	3.4	7.0	63.6	62.7	4.7	2.8	3.0	3.0	1.57	1.65
NL	1.2	2.9	73.2	72.9	4.6	3.4		3.9	1.73	1.82
PT	0.0	3.0	67.5	68.4	7.6	4.0	1.1	4.6	0.81	0.76
UK	1.6	3.6	71.7	71.2	4.8	5.3	0.3	3.0	1.76	1.85
Scandinavia										
DK	2.9	3.1	75.9	76.3	9.2	11.1	1.3	2.1	2.45	2.24
NO	1.9	2.7	74.8	77.5	7.6	4.0			1.52	
SE	2.2	4.1	72.5	73.0	7.4	5.6	2.3	3.3	3.89	3.45 <sup>6</sup>

1 Growth rate of real GDP per inhabitant – *per cent*.

2 The employment rate is calculated by dividing the number of persons aged 15 to 64 in employment by the total population of the same age group.

3 Unemployment rates represent unemployed persons as a percentage of the labour force.

4 Labour productivity per hour worked is calculated as real output (GDP measured in constant prices or chain-linked prices of previous year) per unit of labour input (measured by the total number of hours worked).

5 The indicator is defined as the percentage share of GERD (Gross domestic expenditure on R&D) in GDP.

6 The figure is for 1995.

If we compare the three Scandinavian countries to EU-15 we find that GDP growth is higher than EU-15 average in 2005 for all three countries, while in 2000 only Sweden had a better performance. Since 2000 the Scandinavian countries are performing better relatively than EU-15 average. The total employment level (*per cent*) is higher in all three Scandinavian countries at all times, indicating a higher proportion of the eligible population participating in work life. The unemployment is below EU-15 average for Norway and Sweden, but above for Denmark. The Scandinavian countries thus combine a high percentage of the population as active participants in the work force with a low unemployment level.

The high percentage of the population as work participants is due to the high proportion of women in the work force.

It should also here be noted that universal participation in work life is a stated goal in all three countries, and maybe especially so in Norway and Sweden. This is followed up in welfare policies where most of your welfare support is based on your income from previous work. The welfare system is relatively generous to those who have worked, and are trying to get back in work. If you have not worked there is very support forthcoming, unless you can prove that you are medically unfit for work. The exact rules and regulations on this differ between the three countries on this, but the basic idea is the same: It should pay to work. The governments try to put pressure on the population to work, while at the same time use law and regulations and financial support to create a working life that is inclusive for all interested.

Labour productivity is on or above EU-15 level for Sweden and Denmark, Eurostat has no figures for Norway. R&D spending as part of the GDP is above EU-15 average for Sweden and Denmark, while below for Norway.

Summed up the three Scandinavian economies have better or EU-15 average score on these macroeconomic indicators. The three countries have relatively robust economies. Relatively to the rest of EU-15 the Scandinavian countries have performed as well, or better in 2005 compared to 2000. The most important difference between Scandinavian countries and EU-15 is the combination of high participation rate in work life and low unemployment. The high participation rate in work life is due to the high participation rate of women. In all three countries women participation are higher than EU-15 average:

**Table 2.2** Female participation in work life, EU-15 and Norway, 2000 and 2005

	2000	2005
EU-15	54.1	57.8
Austria	59.6	62.0
Belgium	51.5	53.8
Finland	64.2	66.5
France	55.2	58.5
Germany	58.1	60.6
Greece	41.7	46.1
Ireland	53.9	58.3
Italy	39.6	45.3
Luxembourg	50.1	53.7
Netherlands	63.5	66.4
Portugal	60.5	61.7
Spain	41.3	51.2
United Kingdom	64.7	65.9
Scandinavia		
Denmark	71.6	71.9
Norway	73.6	71.7
Sweden	70.9	70.4

As Table 2.2 shows the Scandinavian countries are the top three countries in EU-15 both in 2000 and 2005, with more than 70 *per cent* of the female population in the work force. EU-15 on average has 58 *per cent* in 2005, Italy and Greece below 50 *per cent*.

The WORKS project focus more on change and transformation than on the current status of various macroeconomic indicators. Are there any changes taking place in these five years in the Scandinavian countries?

The overall answer must be no. The Scandinavian economies in general seem to perform as well in 2005 as they did in 2000, participation in work life is on the same level, but labour productivity has declined in Sweden and Denmark (figures for Norway are missing). Sweden and Denmark has increased their R&D spending in the last years. Historical figures for Norway are lacking on Eurostat, but the official goal in Norway has for several years been to have a 3 *per cent* level. This has not increased, and Norway seems to be lagging behind regarding research spending.

### 3 Work flexibility

Work flexibility is a key issue in WORKS. The report Lorenzo Birindelli and Emiliano Rustichelli (2007) discuss trends in work hours, part-time work, temporary work and self employment. They conclude that there has been no, or little change in time use was report. in addition five key findings were presented:

1. there has been a substantial increase in temporary employment in the EU-15 in the period 1997-2005;
2. in the EU-15 countries part-time work as a percentage of total employment increased slightly from 1995-2005, from 16 *per cent* to 20 *per cent*. However, cross country variation is even greater;
3. the percentage of female part-time work in total employment was also fairly stable over this period on average. Again there were cross country variations, with increase in Austria and Belgium, but reduction in Sweden;
4. from 1995-2005 there was roughly 50 *per cent* increase in the proportion on employees on shift-work in the EU-15;
5. self-employment, which could be considered both an indicator of insecure employment and an indicator of increasing entrepreneurship, remained stable in EU-15.

Hence this report will discuss time use, part-time work, temporary employment, self employment and tenure/mobility and compare development in Scandinavia with EU-15.

### 3.1 Time use

Time use is shown in two tables below:

**Table 3.1** Average working hours, full time employees, EU-15 and Norway

Area\Year	2005	2004	2003	2002	2001	2000
EU-15	41.8	41.7	41.5	41.4	41.6	41.7
Austria	44.3	44.8	41.5	41.6	41.7	41.8
Belgium	41.1	41.0	41.3	41.4	41.2	38.5
Finland	40.5	40.4	40.6	40.6	40.7	40.9
France	41.0	40.7	40.7	38.9	39.6	40.2
Germany	41.5	41.3	41.0	41.4	41.6	41.8
Greece	44.2	44.1	44.3	44.2	44.2	44.3
Ireland	40.6	40.7	40.9	41.3	41.5	42.0
Italy	41.2	41.4	40.5	40.5	40.6	40.6
Luxemburg	40.9	40.9	40.8	40.2	40.3	40.7
Netherlands	40.7	40.6	40.6	40.7	40.9	41.0
Portugal	41.6	41.8	41.6	41.9	41.9	42.0
Spain	42.3	41.7	41.6	41.8	42.0	42.1
United Kingdom	43.2	43.4	43.7	43.9	44.2	44.2
Scandinavia						
Denmark	40.3	40.3	40.3	40.3	40.3	40.6
Norway	39.3	39.3	39.4	39.2	39.2	39.3
Sweden	41.1	40.8	40.8	41.0	41.0	41.2

Source: Eurostat

Working hours for full time workers have not changed much in the last five years, neither among EU-15 countries nor in Scandinavia. The three Scandinavian countries have shorter working hours than EU-15 average, with Norway having the shortest of all 16 countries in the sample. Among the three Scandinavian countries Sweden has the longest working hours, almost two hours more per week than Norway. For part-time workers the figures are given below:

**Table 3.2** Working hours, part-time workers, all

Area\Year	2005	2004	2003	2002	2001	2000
EU-15	19.6	19.4	19.6	19.6	19.7	19.6
Austria	20.5	20.6	22.0	21.8	22.0	22.0
Belgium	23.1	22.9	22.7	22.5	22.0	22.5
Finland	20.0	20.6	20.3	20.3	20.3	20.5
France	23.3	23.1	23.4	23.1	23.3	23.1
Germany	17.4	17.4	17.6	17.6	17.8	17.8
Greece	21.2	21.0	21.5	21.6	21.6	21.8
Ireland	18.6	18.6	18.5	18.8	18.9	18.7
Italy	21.1	20.7	23.3	23.9	23.9	24.0
Luxembourg	21.2	21.1	20.5	21.0	20.9	21.3
Netherlands	19.0	19.1	19.1	18.9	18.8	18.7
Portugal	19.4	19.2	19.8	19.9	20.3	20.6
Spain	19.2	18.4	18.2	18.3	18.3	18.2
United Kingdom	18.8	18.6	18.5	18.5	18.5	18.2
Scandinavia						
Denmark	18.6	18.9	19.1	18.5	19.9	19.8
Norway	19.5	19.4	19.5	22.2	22.1	22.1
Sweden	24.8	22.3	22.3	22.0	21.8	22.2

Source: Eurostat

As for fulltime workers the average working hours for part-time workers in EU-15 has not changed much since 2000. In Scandinavia the picture is different. Both in Denmark and Norway the average working hours is reduced, in Denmark with one hour, and in Norway with more than 2.5 hours. Here Sweden differs from its neighbours, working time has increased for part-time workers, all of this the last year. This is probably due to another calculation method, in 2006 the figure for Sweden was again 24.8. Thus Sweden is probably at the same level in 2006 as in 2000, while Denmark and Norway have reduced their working hours for part-time workers.

What about the average working hours for the whole work life? Since the total work force in all countries always consists of both full time and part-time workers the answer to this question depends on the composition of full time and part-time workers. In the situation we have above, where both full time and part-time workers work on average about the same in 2006 as they did in 2000, there will be a reduction in overall working hours if the percentage of part-time workers increase.

## 3.2 Part-time work

Eurostats figures on part-time work in Europe is given below:

**Table 3.3** Part-time workers in *per cent*, all workers

Area/year	2005	2004	2003	2002	2001	2000
EU-15	20.3	19.4	18.5	18.1	17.9	17.7
Austria	21.1	19.8	18.7	19.0	18.2	16.3
Belgium	22.0	21.4	20.5	19.1	18.5	18.9
Finland	13.7	13.5	13.0	12.8	12.2	12.3
France	17.1	16.7	16.5	16.4	16.3	16.7
Germany	24.0	22.3	21.7	20.8	20.3	19.4
Greece	5.0	4.6	4.3	4.4	4.0	4.5
Ireland	-	16.8	16.9	16.5	16.5	16.4
Italy	12.8	12.7	8.5	8.6	8.4	8.4
Luxembourg	17.4	16.4	13.4	10.7	10.4	10.4
Netherlands	46.1	45.5	45.0	43.9	42.2	41.5
Portugal	11.2	11.3	11.7	11.2	11.1	10.9
Spain	12.4	8.7	8.2	8.0	8.0	7.9
United Kingdom	25.4	25.8	25.8	25.4	25.1	25.2
Scandinavia						
Denmark	22.1	22.2	21.3	20.0	20.1	21.3
Norway	28.2	29.2	28.8	26.4	26.0	25.8
Sweden	24.7	23.6	22.9	21.5	21.1	19.5

Source: Eurostat

As we can see the general trend is an increase in part-time work in Europe. The over all increase is 2.5 *per cent* points (from 17.7 to 20.3) in EU-15. In the Scandinavian countries the increase is also marked, but the three countries differ. Denmark has a relatively small increase, 1 *per cent* point, Norway has an increase of 3.4 *per cent* points, and Sweden has an even higher increase, 5.2 *per cent* points. Only Germany with an increase in 5 *per cent* points is close to that increase in part-time work. Also note that all countries are well above EU-15 average at all times. Only Netherlands and UK have a general higher part-time work than Norway and Sweden.

Part-time work is gendered. In general there is a higher percentage of women having part-time work than men. Therefore we need to investigate the situation for female workers.

**Table 3.4** Percentage of female part-time workers, 2000-2005

	2000	2001	2002	2003	2004	2005
EU-15	33.2	33.3	33.3	33.8	35.1	36.1
Austria	32.2	35.0	35.9	36.0	38.0	39.3
Belgium	37.4	36.9	37.4	39.1	40.5	40.5
Finland	17.0	16.8	17.5	17.7	18.4	18.6
France	30.8	30.1	29.8	29.6	29.9	30.2
Germany	37.9	39.3	39.5	40.8	41.6	43.5
Greece	7.8	7.2	8.0	7.7	8.5	9.3
Ireland	30.3	30.7	30.6	31.0	31.5	
Italy	16.5	16.6	16.9	17.3	25.0	25.6
Luxembourg	25.1	25.8	25.3	30.7	36.3	38.2
Netherlands	71.0	71.3	73.1	74.1	74.7	75.1
Portugal	16.4	16.4	16.4	16.9	16.3	16.2
Spain	16.8	16.8	16.8	17.1	17.9	24.2
United Kingdom	44.3	43.9	43.8	44.0	43.9	42.7
Scandinavia						
Denmark	34.1	31.6	30.3	32.7	33.8	33.0
Norway	43.0	42.9	43.3	45.3	45.4	44.2
Sweden	32.3	33.0	33.1	35.5	36.3	39.6

Source: Eurostat

If we compare Table 3.4 with Table 2.2 (percentage of female workers) we can see a clear picture. Those countries (Netherlands, United Kingdom, the Scandinavian countries) with a high proportion of female workers also have a high proportion of part-time work among female workers. An increase in female participation could then be expected to lead to an increase in percentage of female part-time work. However, note also that the relationship can not be completely linear, Netherlands has an almost twice as high proportion of female part-time workers than Denmark, while Denmark has a higher proportion of female participation in work life than Netherlands. The same goes for Finland. Thus, female participation in work does not have to be part-time.

Regarding development over time for female workers it is, on the whole rather stable, but with a an increase of 3 *per cent* points. That is also true in Scandinavia. Denmark and Norway have small variations, however note that in the period 2000-2005 Sweden increased its proportion of female part-time work, this is the opposite to the findings by Birindelli and Rustichelli.

### 3.3 Temporary employment

One of the major problems in comparing temporary work between various countries is exactly what constitutes temporary work. There is not necessarily any important differences between permanent and temporary work, if it is easy to hire and fire people it does not matter much whether somebody is hired permanent or not.

In the Scandinavian countries the costs of firing people is high. The ideal work contract is the permanent, and it is difficult and expensive to fire a worker. Temporary contracts could thus be seen as a tool for flexibility for Scandinavian employers. The various countries have different attitudes towards this. Denmark is in general more positive towards

this than the other two, with Norway being the most sceptical. The Norwegian authorities have regulated temporary contracts heavily, and in general tried to use legislation to 'force' permanent contracts. If a person is on a temporary contract in the same position for three years or more he or she may demand a permanent contract.

Employing data from Eurostat the percentage of workers on contract of limited duration is shown in Table 3.5 below:

**Table 3.5** Contract of limited duration in *per cent*

Area/year	2005	2004	2003	2002	2001	2000
EU-15	14.4	13.7	13.2	13.1	13.5	13.7
Austria	9.1	9.6	6.9	7.4	7.9	8.0
Belgium	8.9	8.7	8.4	8.1	8.8	9.1
Finland	16.5	16.1	16.3	16.0	16.4	16.3
France	14.1	13.5	13.6	13.5	14.6	15.2
Germany	14.1	12.4	12.2	12.0	12.4	12.7
Greece	11.8	11.9	11.2	11.7	13.2	13.5
Ireland	3.7	4.1	5.2	5.3	5.3	5.9
Italy	12.3	11.8	9.9	9.9	9.8	10.1
Luxembourg	5.3	4.8	3.1	5.1	5.6	5.3
Netherlands	15.5	14.8	14.5	14.4	14.3	13.7
Portugal	19.5	19.8	20.6	21.5	20.3	19.9
Spain	33.3	32.5	31.8	31.8	32.2	32.2
United Kingdom	5.7	6.0	6.1	6.4	6.7	6.9
Scandinavia						
Denmark	9.8	9.5	9.3	9.1	9.2	9.7
Norway	9.5	10.0	9.5	2.8	2.5	2.6
Sweden	16.0	15.5	15.1	15.2	15.3	15.8

Source: Eurostat

The use of temporary contracts varies considerably between the EU-15 countries, from Spain and Portugal with 20 *per cent* or more of the employers on temporary contracts, to United Kingdom and Luxembourg with 5 to 6 *per cent*. In the period 2000 to 2005 there is very little change. There is an increase of 0.7 *per cent* points in the whole EU-15, but as we can see from Table this change might simply be random fluctuations. Over all the countries with a high (relatively) rate of temporary work contracts have this during the whole period, while those countries with a low (relatively) keep that.

There is almost no change in the Scandinavian countries in the period. The table shows a radical increase for Norway in 2003. Although Eurostat does not provide any information on this, the increase must be some kind of break in statistics/adjustment to European standard of defining what is temporary work. There is no change before or after the increase in 2003, and no particular reason (change of laws, *etc.*) that could cause an increase. Neither has the author heard about such an increase, which would be likely to cause some discussion if it signified an underlying structural change. Sweden and Denmark are both stable. We can also note that although Denmark and Norway differs in their attitude towards contractual work they end up at the same level.

### 3.4 Self employment

IRES found no change in self-employment as a percentage of all work was stable in the period 1997-2005. Below is the table for the period 2000-2005 with Norway added:

**Table 3.6** Self employed as percentage of total employment, EU-15 and Norway

Country/year	2005	2004	2003	2002	2001	2000
EU-15	14.7	14.7	14.3	14.1	14.1	14.3
Austria	11.5	12.0	10.9	10.9	10.8	10.8
Belgium	13.5	13.0	13.5	13.6	13.2	14.0
Finland	12.1	12.0	12.3	12.3	12.3	12.9
France	9.9	9.9	10.2	9.7	9.8	10.1
Germany	11.2	10.9	10.4	10.0	9.9	10.1
Greece	30.0	30.2	31.0	31.3	31.5	32.2
Ireland	16.3	17.2	16.7	17.1	17.3	17.8
Italy	24.9	25.5	23.2	23.4	23.7	24.2
Luxembourg	7.7	7.9	7.7	7.3	6.7	8.9
Netherlands	11.8	11.6	10.9	11.1	10.8	10.3
Portugal	24.1	24.4	25.6	25.6	25.5	23.6
Spain	16.5	16.7	16.6	17.3	18.0	18.0
United Kingdom	12.7	12.8	12.5	12.0	11.8	11.9
Scandinavia						
Denmark	8.1	7.9	8.4	8.0	8.0	8.2
Norway	7.1	7.1	7.0	6.8	6.8	7.0
Sweden	10.3	10.1	10.0	10.2	10.2	10.6

Source: Eurostat and Statistics Norway

Overall there is a slight increase in self-employment in EU-15 in the period 2000-2005. However, the increase is from 14.3 to 14.7 *per cent* and could simply also be random fluctuations. The overall picture that emerges from Table is one of stability, those countries with a high percent of self-employed in 2000 has a high percent in 2005. The same goes for those with a low *per cent*.

Regarding the Scandinavian countries they are also quite stable. Sweden has the highest percentage the whole period, with Norway having the lowest. The Scandinavian countries have the same development as EU-15.



## 4 Trends in work organisation

The primary data source for CEE analysis (Greenan, Kalugina & Walkowiak, 2007) is the European Working Conditions Survey (EWCS). They presented the following main results on trends in work organisation:

1. mapping a number of indicators (work complexity, independence in time allocation, etc.) shows little consistency suggesting that national groupings are difficult to discern. However, Denmark and Sweden and Netherlands provide an exception, in these countries jobs are complex, provide learning opportunities and the quality of working conditions is high;
2. the distribution of some work features show that there are considerable differences in work organization between EU-15 and the 12 candidate and acceding countries. In general jobs in the latter countries are less complex, intense and the quality of working conditions is lower;
3. on average in EU-15 there was a significant decrease in complexity of work between 1995 and 2005. Jobs became more routine on average in the EU-15;
4. at the same time, work in EU-15 has become more intense. The intensification is mainly market driven;
5. overall there is no deterioration of quality of working conditions in the EU-15 in the period;
6. the determinants of work experience depend relatively little on national institutional differences but seem rather to derive from individual level characteristics.

As mentioned earlier Norway did not participate in the fourth round of EWCS, analysing Scandinavia therefore is more difficult than when we can employ Eurostat data directly.

However both the EWCS and the CEE analysis builds on Robert Karasek's model of work stress. As stated in the EWCS report (Parent-Thirion, Fernández Macías, Hurley & Vermeylen, 2007: 58): *Although Karasek's model was originally developed to explain stress at work, it provides a useful conceptual framework for linking work organisation and working conditions. By looking simultaneously at job demands and job control, it is possible to divide the different forms of work organisation into four categories: active work organisation, characterised by high demands and high control; high-strain work organisation (high demands and low control); low-strain work organisation (low demands and high control); and passive work organisation (low demands and low control).* Thus the interest in complexity and intensity.

Although Norway was not part of EWCS 4 in the report on that survey the European Foundation places (Figure 6.12 on p. 609 places Norway together with Sweden, Denmark, Finland and Malta in the 'High demands, high control quadrant of Karasek's model'.

The Karasek model has however been influential in Norway as well. And although Norway did not participate in the Fourth EWCS Norway does carry out its own national surveys on labour conditions, similar, but not exactly the same as EWCS. Since 1989 five such surveys has been carried out in 1989, 1993, 1996, 2000 and 2003. In 2002 Torvatn and

Dahl-Jørgensen (Torvatn & Dahl-Jørgensen, 2002) carried out an analysis of the available data from Statistics Norway, a large scale representative survey on working conditions in 2001 (Torvatn & Molden, 2001), and a summary report on working conditions in the nineties (Torvatn, 2001) and concluded on these issues that in Norway:

1. there has been a perceived intensification in work from 1989-2000;
2. actors outside the enterprises (costumers, technology) have increased their influence on work pace;
3. control over work is high, and increasing;
4. complexity and learning opportunities are high and increasing;
5. in general the quality of working life was stable.

Statistics Norway has since then changed their questions so it is impossible to continue the analysis on intensity, control and complexity. Based on other surveys and studies of work life in Norway these three conclusions should still be valid. An analysis by Torvatn (Torvatn, Saksvik & Hammer, 2005) including 2003 data supported the fifth point. With this information on the Norwegian situation, what can be added to CEEs findings?

Regarding the first finding, on national groupings and complexity, the three Scandinavian countries form a group where learning opportunities are high, jobs complex and working conditions in general are good. This supports CE finding.

Adding Norway to the analysis does not provide any additional insight on the second finding, that jobs in the candidate and acceding countries are less complex and intense than in the EU-15.

The third finding was decrease in complexity. According to CEE (p. 32): Here, on average there was a significant reduction in complexity of jobs between 1995 and 2005. However, the degree of complexity of jobs has significantly decreased only in three countries: Great Britain, Spain and Germany. There are six countries where complex work has increased: Austria, Belgium, Denmark, Greece, Ireland and Luxembourg. As we have seen above, Norway as a sixteenth country would add one more country to the group of countries where complexity has increased. That would probably not change the overall conclusions of CEE, since Norway is a small country, but it seems that Scandinavia as a group experience an increase in complexity (Increase in Norway and Denmark, stability in Sweden). Here Scandinavia differs from EU-15, and we can see a regional group of countries.

The fourth finding was an increase in intensity. CEE observes that work intensification was a widespread phenomenon in Europe during the 1990's, though not ubiquitous. Work intensity rose faster over 1991 to 1996 in Britain than in all other EU countries. It persisted in the later period (1995-2000) in Belgium, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, and Sweden. In Denmark and Spain there was little change in work effort, while it declined in Austria, Britain, Finland, and Portugal. If we add Norway to that picture we find an intensification of work in two out of three Scandinavian countries (Denmark and Norway) while the situation is stable in Sweden. As a group the Scandinavian countries experience an increase.

The fifth finding was that overall there was no deterioration of quality of work life in EU in the period. The Norwegian situation was the same as Denmark and Sweden (See Chapter 3.1.3 in CFEE report), stable. Thus the three Scandinavian countries formed a stable group of countries on this issue.

The sixth finding was that determinants of work experience depend relatively little on national institutional differences but seem rather to derive from individual level charac-

teristics. Adding Norway to the group of Scandinavian countries to some degree opposes that finding. The three Scandinavian countries have roughly similar development of working conditions and they do form a group of countries. They also have relatively similar working life, governmental institutions and managerial style, as pointed out earlier.



## 5 Occupational change

Report D9.2.4 (Brynin & Longhi, 2007) analyses occupational change in Europe. The analysis in the report utilises household panel data in order to measure change in people's working circumstances over their career. It makes use of the European Community Household Panel, the British Household Panel Study, and the German Socio-Economic Panel. The focus of the research is the widespread argument that the nature of work is changing, in particular becoming less stable, and more intense. The research adds to the more common analysis of trends in aspects of work such as unsocial working hours, job intensification, and reduced job tenure, analysis using a measure of relative skills (over qualification) and career flexibility. It also includes measures of job satisfaction. The aim is to see whether over qualification and rapid career moves are a significant part of the occupational scene in Europe, and whether career changes are associated with change in job satisfaction. Their main findings are:

1. the results show no decrease in job satisfaction at the aggregate level over time in any country, with the possible exception of Italy. Factors which explain dissatisfaction with work, in virtually all countries, especially include the nature of employment contracts. People with fixed-term contracts or in casual work are especially likely to be dissatisfied with their work, but this improves if they move to other jobs;
2. a high proportion of workers in Europe feel overqualified for the work they do. This is especially high amongst people with fixed-term contracts or in casual work;
3. there is a very high degree of occupational change in Europe in the aggregate and, on average, over people's careers. This varies enormously by country, being especially high in Belgium, especially low in France. Most of this movement is sideways or upwards but some is also downwards. The factors associated with such occupational moves, whether sideways or up or down, again in particular include being in fixed term contract or in casual work;
4. IT workers were isolated in the final analysis because IT work is deemed by some to be the epitome of highly flexible work. This was not found to be the case in either Germany or Britain - the two countries for which this could be tested - relative to some other professions. Further, while it is possible (in Britain) to enter IT with lower than average skills for the job, suggesting some downgrading of the work these people do, this did not apply to IT workers more than to workers in some other professions.

How do these findings fit into the Scandinavian work life? First of all we can note that Norway is generally not included in the data set, so once more we might have to rely on particular Norwegian data to compare the findings. Second, sometimes Sweden is not part, making Denmark (as one of the EU-12 countries) the only Scandinavian country. And of course none of the Scandinavian countries are part of German or British panel stu-

dies. Thus commenting on Scandinavia is in general difficult, and must be limited to what ever analysis have been carried out on similar questions here.

Regarding the first finding, job satisfaction, Norway is similar to the rest of Europe. Job satisfaction, which has been measured by Statistics Norway since 1989, was stable at 89-90 *per cent* of the work force satisfied. The factors explaining dissatisfaction is likely to be the same in Norway (and the whole Scandinavia) as the rest of Europe, there is a strong legal and cultural bias towards establishing proper and tenured work contracts, not having them puts the worker in an unsecured an 'culturally wrong' type of work.

Regarding the second finding, a high proportion feeling over qualified, Denmark and Norway are reported on in different settings. Norway is part of a group of four countries (Germany, UK, Italy, Norway) who provide data to the Framework 6 eLiving survey. Here 22 *per cent* of the Norwegian works are defined as over qualified. This is not a very high level of over qualification, both Germany and UK have higher levels (28 and 33 respectively), while Italy is below with 19.

Denmark is one of the countries where workers feeling of being overqualified is measured, 60 *per cent* of the workers feel over qualified. This is one of the highest levels of perceived over qualification in the ECHP group. If we compare the number of Italians who are measured as over qualified with the number who perceive they are (19 *versus* 46) Norway should have at least 50 *per cent* who feel they are over qualified. Thus Norway is likely to fall into the general picture of having a high proportion of workers feeling over qualified. There is no reason Swedish workers should not experience the same. However, there is relatively little to add on this point, one of the reasons seems to be that over qualification is not a much researched area in Norway. Literature search and searches in Statistics Norway find no hits on the subject.

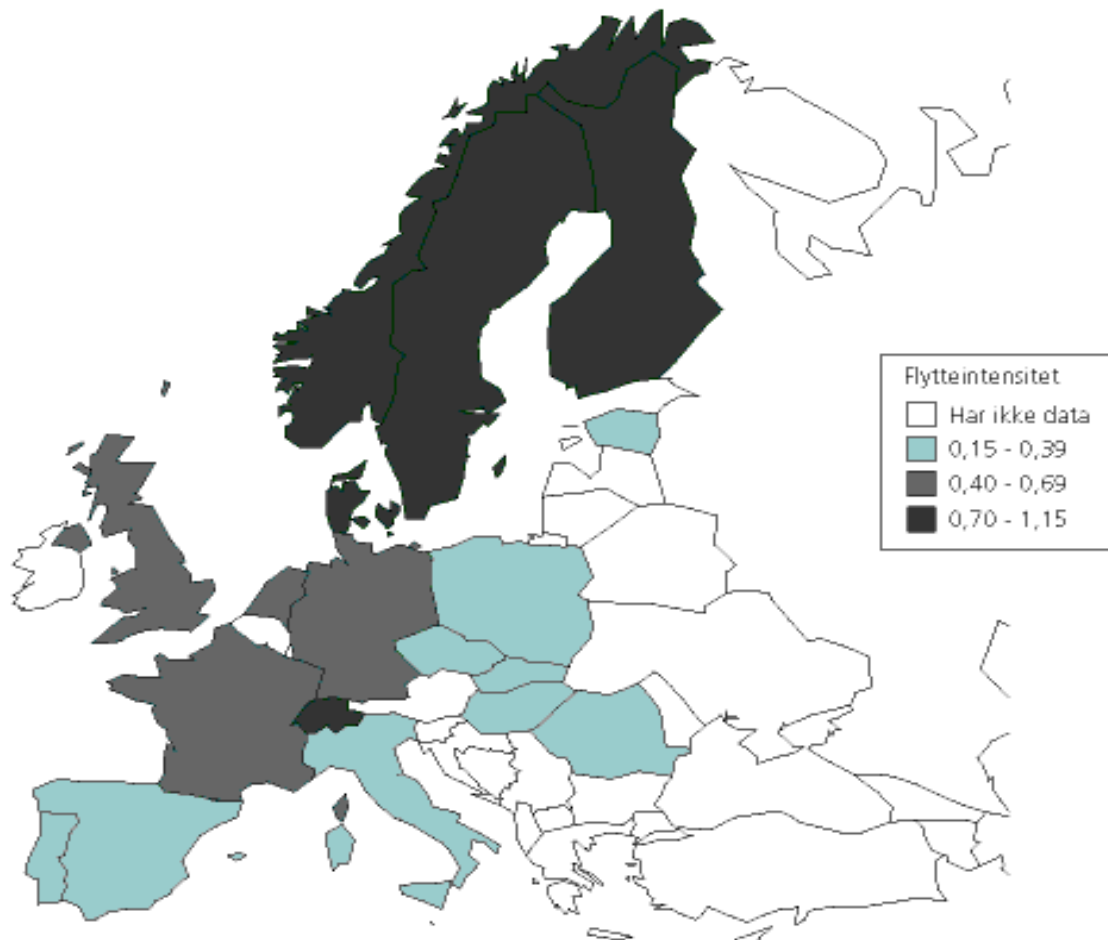
The third finding was that there is a high degree of occupational change. Denmark is the only Scandinavian country in the reports analysis. In Denmark 8.5 *per cent* of the working-age population change occupation each year, the second highest in the sample. UK being the highest. Norwegian and Swedish statistical bureaus have very little information on this topic.<sup>1</sup>

However, there exists an international study on geographical mobility in Europe. In this study, conducted by professor Phil Reese at Leeds University (Rees & Kupiszewski, 2001). Geographical mobility is of course not the same as occupational mobility. However, it is reasonable to assume some kind of correlation. A new job is often physically located a different place than the previous, moving physically opens for new possibilities for finding a new job, a new job might be better paid an open for moving from an undesired part of a city/county to a more desirable one. Hence geographical mobility should provide some information on occupational mobility.

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<sup>1</sup> Inquiries to both Norwegian and Swedish Statistics have confirmed this.

**Figure 5.1** Intensity of geographical mobility



Source: Rees and Kupiszewski, 2001 in Østby, 2002

Geographical mobility increases as the darkness of the legend increases. White legend is no data.

Figure 5.1, from Østby (2002), shows that the Scandinavian countries had the highest geographical mobility rate in Europe in mid nineties. If the assumption we have on a correlation between geographical mobility and occupational mobility is correct then the Scandinavian countries should have a high occupational mobility as well. The data we have on Denmark and United Kingdom fits well with that assumption, both countries have a high occupational mobility and high geographical mobility. Also Belgium fits that picture.

Thus, although we have very limited data on this, we may assume that Scandinavian countries have a high occupational mobility. Otherwise it is difficult to add to the analysis by Brynin and Longi.

The fourth finding by Brinin and Longhi was that IT-workers are not 'the epitome of highly flexible work'. This analysis did not include any Scandinavian countries at all, only UK and Germany. Again there is little to add on this analysis from a Scandinavian perspective.



## 6 Employments in business function

### 6.1 The general conclusions from WP 9

Report D.9.2.1 'Tracing employment in business function- a sectorial and occupational approach' (Geurts, Coppin & Ramioul, 2007) had as its aim to analyse the EU Labour Force Survey to measure the effects of global value chain restructuring on employment in the European Union. In line with the qualitative research of the WORKS project, the business function is used as the main unit of analysis. A business function is defined as a unit of activity that can be categorised within a value chain: a cluster of technologically and economically distinct activities which are usually performed together. Business functions refer to both core and support activities in value chains. The main findings are as follows:

1. the main conclusion that can be drawn from the analysis is that several business functions are increasingly performed within specialised service sectors. Evidence has been found of a shift of specific business functions from sectors in which they are 'peripheral' to the production process, towards sectors in which they constitute the core activity. The most obvious example of this trend has been found in IT services and logistics, but this shift can be observed also in marketing and sales, and legal and financial services;
2. in the sectors and occupations under study no evidence is found of a major shift of business activities from the old to the new member states. However, this is partly due to the limitations of the data which do not permit the tracing of a sector or country to which a business service is supplied;
3. in several sectors the core occupations were traced and the employment evolutions in these activities estimated. A growing share of employment in core activities within a sector indicates the increasing importance of these activities in the sectors, a decreasing share a growing relative importance of secondary activities. A growth in the importance of core activities is found in several sectors, for example, in the IT sector in both the old and the new member states. Evidence of a decreasing share of core activities has been found in Textile and clothing. Figures show that the huge employment decline in this sector goes together with a considerable reduction of the share of core production workers within the sector. This means that for Textile and clothing companies located in Europe, the importance of previously supporting activities has increased in terms of employment. Most prominent in this respect is the growth of R&D related employment.

## 6.2 On Data from Scandinavian countries

The report on business functions provide a detailed analysis of employment development in a set of six business functions:

- operations:
  - textile;
  - food;
  - IT industry.
- logistics;
- marketing and sales;
- costumers services:
  - costumer services in public administration;
  - costumer service railway and post;
- general management;
- technology development IT.

Further, the report analysis differences between old and new member states. Adding a specific Scandinavian picture to the analysis is however very difficult, because frequently we lack data from one or more Scandinavian countries. Norway is not a member yet, and is usually lacking; Sweden belongs to the EU-15 group, but frequently in the report data is missing from Sweden. Denmark is an EU-12 member, and is member in all the periods analysed, but also Denmark is sometimes left out of the analysis. Hence we will not add any detailed quantitative analysis.

## 6.3 The general conclusions and Scandinavia

The first general conclusion was specialisation of business functions. This trend can be found in Scandinavia as well, as both public and private enterprises identify their core and peripheral activities and reorganize themselves accordingly. The result is outsourcing, privatizations, mergers and a question, processes going on everywhere in Europe. The growth of IT services takes place in Scandinavia as well.

The second general conclusion was that there were no evidence for a major shift of business activities from the old to the new member states. Again Scandinavia would fit the general picture, Sweden and Denmark both does in the report, and no research from Norway challenges this finding.

The third general conclusion focused on employment evolution in core activities within a set of sectors: Textile, Food, IT industry, Public administration. Again Scandinavia follows the general picture of old member states: A decline of employment in Textile,<sup>2</sup> an increase in IT, stability in Public administration and food industry.

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<sup>2</sup> In Norway 2005 there are less than 5,000 employees in the Textile sector. Production is almost non-existent.

## 7 Conclusions

To the degree that the Scandinavian countries form a unit within the larger set of European Union countries the transformations and changes follows the larger European picture. Overall the differences are surprisingly few, and well known. To be sure there are some (substantial) differences between the Scandinavian countries and the rest of Europe, but many of these differences have been there for a long term.

Regarding economic performance the Scandinavian countries still have GDP growth above EU-15 average, female participation in work life above EU-15 average, labour productivity on EU-15 average. This has been the general situation at least the last decade.

Regarding work flexibility there are some 'new' differences: The Scandinavian countries have reduced the average working hours for part-time workers, increased the use of part-time workers and Sweden has increased its proportion of part-time female workers, in opposition to the general findings. There is no change in use of temporary contracts or self employment in the Scandinavian picture.

Regarding trends in the work organisation Scandinavia experiences the same increase in intensity as the rest of EU. Changes are market driven and oriented towards customer satisfaction in Scandinavia as elsewhere. However, Scandinavia differs from the rest of the EU regarding complexity, in Scandinavia there is a growing degree of complexity, and Scandinavia remains within the 'High demands, high control quadrant' of Karseks model.

Regarding occupational change Scandinavian employees are still satisfied with their jobs, as is rest of Europe. The Scandinavian countries have a higher proportion of over qualified workers than the rest of Europe, a possible explanation of this could simply be a high educational level. However there has been little research in this area in Scandinavia and how over qualification affects occupational changes is not well understood. Mobility seems to be higher in Scandinavia than EU-average, at least in Denmark. Direct comparable data from Norway and Sweden lacks, but assuming a correlation between geographical mobility and occupational mobility (or that people on average tend to change jobs and house at the same time) we find high occupational mobility in these countries as well.

Finally the main three conclusions from the analysis of employments in the business sections fits the Scandinavian countries.

This overall picture of stability within the geographical region Scandinavia, when we also know that there are large transformation going on in work life suggests that we might find more information by looking at sectoral than national differences.



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