



# Investing in the Future of Jobs and Skills

Scenarios, implications and options in  
anticipation of future skills and knowledge needs

## Data Annex Health and Social Services

### **Authors:**

Dr W. Manshanden (TNO Innovation and Environment)  
E. Rietveld (TNO Innovation and Environment)  
A. Bouman-Eijs (TNO Innovation and Environment)



May 2009

Lot 16, Health and Social Services

This report is published as part of a series of forward-looking sector studies on New Skills and New Jobs in the frame of the project *Comprehensive Sectoral Analysis of Emerging Competences and Economic Activities in the European Union*.

DG EMPL project VC/2007/0866

This report is published as part of a series of forward-looking sector studies on New Skills and New Jobs in the frame of the project *Comprehensive Sectoral Analysis of Emerging Competences and Economic Activities in the European Union*.

This publication was commissioned under the European Community Programme for Employment and Social Solidarity - PROGRESS (2007-2013).

*For more information: see at the back cover of this report, or:*  
[http://ec.europa.eu/employment\\_social/progress/index\\_en.html](http://ec.europa.eu/employment_social/progress/index_en.html)

The information contained in this publication does not necessarily reflect the position or opinion of the European Commission.

## **NOTE TO THE READER**

The data presented in this annex provides an overall consistent picture of the state of play and developments in the sector. It constitutes the backbone of the quantitative part of the mapping exercise in Part I of the report.

The key data collected in this study are derived from various, mostly comparable sources. The first source concerns the input-output (I/O) tables published by Eurostat. These tables conform to the ESA95 standard; they provide data on value added for sectors, exports and imports (from the respective supply and use tables) and are the only source providing value added data at the 2-digit NACE level. GDP data (country totals) were derived from the OECD. Employment data were also obtained from Eurostat, partly from the National Accounts. The main part of the employment data was provided by the Structural Business Statistics (SBS) from Eurostat, both at the NACE 2 digit and the NACE 3 digit level. This source required estimations for missing values; these were made under responsibility of TNO. Micro-data on developments in the sector by job occupation were derived Eurostat's Labour Force Survey (LFS), as provided by Alphametrics and further processed by TNO. Due to sample size restrictions, the representativeness of country LFS data should be interpreted with caution and as indicative only, and presented in italics. Data on country groupings EU, EU 6, EU 9, EU 15 and NMS pool country data together and can be judged to be representative. EU 6 refers to the founding fathers of the then European Community, EU 9 to the Member States that accessed in the years thereafter, and the EU 15 as the sum of the two. The NMS or new Member States include the last wave of accession and includes Romania and Bulgaria, unless otherwise stated. It should however be borne in mind that the Labour Force Survey is based on a sample (n) rather than on the full statistical population (N).

In case a blank space appears in the data tables data are not available, either because the (sub)sector did not exist in a particular country, because of lack of information applied or because the underlying information was statistically insignificant. In general, data is lacking for some of the new Member States. This especially applies to Malta and Cyprus. Some sources did also not provide data for Bulgaria, Romania and Latvia. The aggregation of the countries is roughly based on the length in number of years of EU membership. Besides the entire EU, we distinguish the following sets of country blocks:

- EU-6: Belgium, Germany, France, Italy, Luxembourg, the Netherlands
- EU-9: Austria, Denmark, Finland, Greece, Ireland, Portugal, Spain, Sweden, United Kingdom
- EU-7: Czech Republic, Estonia, Hungary, Lithuania, Poland, Slovenia, Slovakia
- New Member States (NMS): Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovenia, Slovakia.

Data on value added and trade is lacking for Malta, Cyprus, Bulgaria, Romania and Latvia. Data on employment is missing for Malta and Cyprus, and data on skills is lacking for Malta, Cyprus and Poland.

The data is presented in 8 sections. In coherence with the main report this data annex refers throughout to health and social work (NACE 85 in Classification Rev 1.1). The first section presents data on value added, the second on trade, and the third on knowledge intensity. The remaining sections present data on various variables of employment. Section 4 presents absolute numbers of employment and growth rates by country. Section 5 up to 8 are based on Labour Force Survey data. Section 5 presents employment by occupation and relative changes over time therein. Section 6 relates occupations to gender, section 7 to the level of education and section 8 to age groups.

## **Table of contents**

1. Value added .....	5
2. Trade .....	7
3. Knowledge intensity .....	9
4. Employment, employment growth and concentration.....	10
5. Employment and occupations .....	11
6. Occupations and gender .....	14
7. Occupations and level of education .....	18
8. Occupations and age .....	24

## 1. Value added

Table 1.1 GDP and GDP growth: overall economy and health and social work (NACE 85)

	Health and Social work (NACE 85)				Overall economy			
	GDP 2006	1995-2000	2000-2006	1995-2006	GDP 2006	1995-2000	2000-2006	1995-2006
	m€		%*		m€		%*	
EU	818 864	2.9	2.7	<b>2.8</b>	11 468 970	2.8	2.0	<b>2.3</b>
EU6	498 786	3.2	3.0	<b>3.1</b>	6 480 204	2.2	1.3	<b>1.7</b>
EU9	294 136	2.7	2.3	<b>2.5</b>	4 403 041	3.7	2.8	<b>3.2</b>
EU15	792 922	3.0	2.7	<b>2.9</b>	10 883 245	2.8	1.9	<b>2.3</b>
NMS	25 943	0.2	2.1	<b>1.2</b>	585 725	2.7	3.7	<b>3.2</b>
Belgium	22 619	2.2	2.2	<b>2.2</b>	316 622	2.4	1.8	<b>2.1</b>
France	163 302	1.6	2.9	<b>2.3</b>	1 792 140	2.5	1.8	<b>2.1</b>
Germany	179 374	5.1	4.1	<b>4.6</b>	2 322 200	2.1	1.0	<b>1.5</b>
Italy	84 324	3.4	1.2	<b>2.2</b>	1 480 007	1.6	0.7	<b>1.1</b>
Luxemburg	1 523	6.5	4.9	<b>5.6</b>	33 852	5.9	3.9	<b>4.8</b>
Netherlands	47 644	2.4	3.3	<b>2.9</b>	535 382	3.9	1.7	<b>2.7</b>
Austria	15 509	1.9	4.7	<b>3.4</b>	257 897	3.0	1.8	<b>2.3</b>
Denmark	23 970	3.3	2.0	<b>2.6</b>	220 069	2.8	1.9	<b>2.3</b>
Finland	13 288	1.6	-0.5	<b>0.4</b>	167 178	4.3	2.8	<b>3.5</b>
Greece	12 599	2.4	4.0	<b>3.3</b>	214 203	3.5	3.7	<b>3.6</b>
Ireland	10 468	8.3	7.4	<b>7.8</b>	177 281	9.2	6.0	<b>7.4</b>
Portugal	10 279	1.7	3.0	<b>2.4</b>	155 324	3.5	1.1	<b>2.1</b>
Spain	46 675	3.9	1.8	<b>2.7</b>	981 777	4.3	3.2	<b>3.7</b>
Sweden	35 047	1.2	3.0	<b>2.2</b>	316 435	2.4	3.1	<b>2.8</b>
United Kingdom	126 301	2.6	1.8	<b>2.2</b>	1 912 877	3.4	2.5	<b>2.9</b>
Bulgaria								
Cyprus								
Czech Republic	4 794	-7.6	2.4	<b>-2.3</b>	114 060	-0.3	3.9	<b>2.0</b>
Estonia	304	6.2	-2.7	<b>1.2</b>	13 223	6.3	8.3	<b>7.4</b>
Hungary	4 831	9.5	4.7	<b>6.8</b>	89 908	3.3	3.6	<b>3.5</b>
Latvia								
Lithuania	586	-1.9	-2.3	<b>-2.1</b>	23 748	4.4	7.5	<b>6.1</b>
Malta								
Poland	12 503	1.1	1.9	<b>1.6</b>	269 756	3.5	3.0	<b>3.2</b>
Romania								
Slovenia	1 413	0.0	0.6	<b>0.4</b>	30 455	3.3	4.1	<b>3.7</b>
Slovakia	1 513	4.2	-0.4	<b>1.7</b>	44 574	2.9	4.1	<b>3.6</b>

\*Percentage is calculated as the cumulative annual average growth rate (CAGR)

Source: Eurostat/TNO

Table 1.2 Share of health and social work (NACE 85) in GDP, share in sectoral GDP EU and concentration index\* in 2006 and change 1995-2006 (percentage points)

	Share in GDP by country		Share in EU		Concentration index	
	2006	1995-2006 (change)	2006	1995-2006 (change)	2006	1995-2006 (change)
	%	%	%	%	%	%
EU	7.1	0.4	100	0	100	0
EU6	7.6	1.0	61	2	107	9
EU9	6.7	-0.4	36	-1	94	-11
EU15	7.2	0.4	97	1	102	1
NMS	4.5	-0.9	3	-1	63	-16
Belgium	7.1	0.2	3	0	100	-3
France	9.0	0.4	20	0	126	-1
Germany	7.5	1.8	21	3	106	21
Italy	5.8	0.6	11	-1	82	4
Luxemburg	0.0	0.0	0	0	0	0
Netherlands	8.8	0.3	6	0	125	-3
Austria	5.8	0.7	2	0	82	6
Denmark	10.8	0.2	3	0	153	-6
Finland	8.2	-2.6	2	0	116	-44
Greece	5.8	-0.1	2	0	82	-6
Ireland	5.9	0.2	1	0	83	-1
Portugal	6.5	0.3	1	0	92	-1
Spain	4.8	-0.4	6	0	68	-10
Sweden	11.0	-0.6	4	0	155	-17
United Kingdom	6.6	-0.5	16	-1	93	-12
Bulgaria	0.0	0.0	0	0	0	0
Cyprus	0.0	0.0	0	0	0	0
Czech Republic	4.4	-1.7	1	0	62	-29
Estonia	2.6	-1.9	0	0	37	-30
Hungary	5.0	1.0	1	0	70	11
Latvia	0.0	0.0	0	0	0	0
Lithuania	2.8	-2.7	0	0	40	-41
Malta	0.0	0.0	0	0	0	0
Poland	4.7	-0.7	2	0	67	-14
Romania	0.0	0.0	0	0	0	0
Slovenia	4.8	-1.7	0	0	68	-28
Slovakia	3.4	-0.9	0	0	48	-16

\*defined as share in country divided by share in EU, times 100

Source: Eurostat/TNO

## 2. Trade

Table 2.1 Exports, export growth, share of exports in value added, and change over time: health and social work (NACE 85)

	Exports 2006	Annual growth rate* 1995-2006	Exports as share of value added 2006	Change of share in value added, 1995-2006
	m€	%	%	%
EU	1 060	2.6	0	0
EU6	578	5.6	0	0
EU9	121	3.9	0	0
EU15	699	5.3	0	0
NMS	361	-0.9	1	0
Belgium	14	-6.0	0	0
France	563	6.3	0	0
Germany	0		0	0
Italy	1	-4.4	0	0
Luxemburg	0	0.0		
Netherlands	0		0	0
Austria	0		0	0
Denmark	9	5.0	0	0
Finland	43	-2.9	0	0
Greece	56	13.4	0	3
Ireland	0		0	0
Portugal	12		0	0
Spain	0		0	0
Sweden	0		0	0
United Kingdom	0		0	0
Bulgaria	0	0.0		0
Cyprus	0	0.0		0
Czech Republic	179	-7.1	4	1
Estonia	0	-15.8	0	0
Hungary	4	8.9	0	0
Latvia	0	0.0		0
Lithuania	4		1	0
Malta	0	0.0		0
Poland	66		1	0
Romania	0	0.0		0
Slovenia			-1	0
Slovakia	121	34.3	8	-1

\*calculated as the cumulative annual average growth rate (CAGR) Source: Eurostat/TNO

Table 2.2 Imports, import growth, exports/imports ratio, and change over time: health and social work (NACE 85)

	<b>Imports 2006</b>	<b>Annual growth rate* 1995-2006</b>	<b>Exports/imports ratio 2006</b>	<b>Change of exports/imports ratio 1995-2006</b>
	m€	%	%	%
EU	1 903	9.5	56	-54
EU6	542	18.0	107	-343
EU9	1 256	7.7	10	-6
EU15	1 799	9.8	39	-23
NMS	104	5.9	346	-302
Belgium	17	3.8	83	-439
France	444		127	
Germany	0			
Italy	2	-1.9	28	
Luxemburg	79	0.0	0	0
Netherlands	0			
Austria	1	-5.0	0	0
Denmark	4	-0.2	238	96
Finland	0			
Greece	576	15.2	10	-2
Ireland	0			
Portugal	43		29	
Spain	0			
Sweden	0			
United Kingdom	632	3.5	0	0
Bulgaria	0	0.0		0
Cyprus	0	0.0		0
Czech Republic	64	11.4	281	
Estonia				
Hungary	0			
Latvia	0	0.0		0
Lithuania	0		12962	
Malta	0	0.0		0
Poland	20	1.6	334	382
Romania	0	0.0		0
Slovenia	0			
Slovakia	22	1.4	559	387

\*calculated as the cumulative annual average growth rate (CAGR) Source: Eurostat/TNO

### 3. Knowledge intensity

Table 3.1 Knowledge intensity\* in health and social work (NACE 85) and the total economy

	Health and social work		Economy		Difference	
	% high educated	Change 2000-2006	% high educated	Change 2000-2006	% high educated	Difference in change
EU 25	39	1	26	3	13	-2
EU6	35	0	35	0	0	0
EU9	46	3	46	3	0	0
EU15	40	1	27	3	13	-2
EU	32	2	32	2	0	0
Belgium	54	1	37	4	16	-3
Germany	32	-3	26	0	6	-2
France	36	-3	30	4	6	-7
Italy	38	6	15	3	23	3
Luxembourg	26	3	27	6	-1	-3
Netherlands	37	5	30	6	6	-1
Denmark	45	6	33	8	12	-2
Ireland	51	6	33	8	18	-2
Greece	55	7	25	5	30	2
Spain	58	1	32	5	26	-4
Austria	26	4	18	3	8	1
Portugal	33	4	14	4	19	-1
Finland	43	0	35	2	8	-2
Sweden	38	1	30	0	8	1
United Kingdom	45	1	32	3	13	-2
Bulgaria	60	-1	25	3	35	-4
Czech Republic	23	3	15	2	8	0
Estonia	54	6	35	3	19	3
Cyprus						
Latvia	35	5	23	2	12	3
Lithuania	45	-22	31	-15	14	-8
Hungary	28	6	21	4	6	1
Malta						
Poland	32		22		10	
Romania	26	6	13	5	13	1
Slovenia	41	5	23	6	17	-1
Slovakia	23	6	17	5	6	1

\*Here defined as share of high educated employees in the sector.

Source: Alphametrics/Eurostat/TNO

## 4. Employment, employment growth and concentration

Table 4.1 Employment\*in health and social work (NACE 85)

Health and Social work (NACE 85)	Growth 2000-2006	Share in EU 2006	Total change of share 2000-2006	
	Absolute (times 1,000)	Average annual change of %	%	% points
EU	20 303	1.9	100.0	0.0
EU6	10 262	1.8	50.5	0.5
EU9	7 727	2.8	38.1	-1.8
EU15	17 989	2.2	88.6	-1.3
NMS	2 314	0.1	11.4	1.3
Belgium	476	2.5	2.3	-0.1
Germany	4 088	1.8	20.1	0.2
France	2 889	0.9	14.2	0.9
Italy	1 603	1.7	7.9	0.1
Luxembourg	25	6.6	0.1	0.0
Netherlands	1 181	3.8	5.8	-0.6
Denmark	490	0.9	2.4	0.2
Ireland	207	7.4	1.0	-0.3
Greece	240	4.3	1.2	-0.1
Spain	1 294	6.0	6.4	-1.3
Austria	383	2.1	1.9	0.0
Portugal	286	2.0	1.4	0.0
Finland	357	2.3	1.8	0.0
Sweden	751	0.8	3.7	0.3
United Kingdom	3 718	2.3	18.3	-0.4
Bulgaria	157	0.9	0.8	0.1
Czech Republic	279	0.7	1.4	0.1
Estonia	37	4.8	0.2	0.0
Cyprus	0		0.0	0.0
Latvia	53	0.3	0.3	0.0
Lithuania	106	1.5	0.5	0.0
Hungary	272	1.5	1.3	0.0
Malta	0		0.0	0.0
Poland	696	-4.8	3.4	1.8
Romania	520	7.3	2.6	-0.7
Slovenia	52	2.4	0.3	0.0
Slovakia	143	0.4	0.7	0.1

\* Employers and employees

Source: Eurostat/TNO

## 5. Employment and occupations

Table 5.1 Employment by occupation in health and social work (NACE 85), 2006 (in thousands)

	Total	Managers	Health professionals (excl. nursing)	Nursing and midwifery prof.	Health associate profs. (exc. nursing)	Social science profs.	Other professionals & technicians	Clerks	Personal care and related workers	Other service workers	Craft trades workers, machine operators	Domestic helpers, cleaners, launderers	Elementary occupations
EU	20.3	0.6	2.0	3.3	1.8	1.5	2.0	1.5	5.1	0.6	0.5	1.1	0.4
EU6	10.3	0.2	1.0	1.6	1.0	0.9	1.2	0.7	2.3	0.3	0.3	0.6	0.2
EU9	7.7	0.4	0.7	1.2	0.4	0.5	0.6	0.7	2.5	0.2	0.1	0.4	0.1
EU15	18.0	0.6	1.6	2.8	1.5	1.4	1.8	1.4	4.8	0.5	0.4	0.9	0.3
NMS	2.3	0.1	0.4	0.5	0.4	0.1	0.2	0.1	0.3	0.1	0.1	0.1	0.0
Belgium	0.5	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Germany	4.1	0.0	0.4	0.8	0.3	0.6	0.4	0.2	0.8	0.2	0.1	0.2	0.1
France	2.9	0.0	0.2	0.4	0.1	0.1	0.3	0.2	1.0	0.0	0.1	0.3	0.0
Italy	1.6	0.0	0.3	0.0	0.5	0.1	0.2	0.1	0.2	0.0	0.0	0.0	0.0
Luxemb.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Netherl.	1.2	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.2	0.0	0.0	0.1	0.0
Denmark	0.5	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0
Ireland	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Greece	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Spain	1.3	0.0	0.2	0.2	0.1	0.1	0.1	0.1	0.4	0.0	0.0	0.1	0.0
Austria	0.4	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Portugal	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Finland	0.4	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Sweden	0.8	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
UK	3.7	0.3	0.2	0.5	0.2	0.3	0.2	0.5	1.1	0.1	0.0	0.2	0.0
Bulgaria	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Czech Rep.	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Estonia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cyprus	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Latvia	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lithuania	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hungary	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Malta	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Poland	0.7	0.0	0.1	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0
Romania	0.5	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Slovenia	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Slovakia	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Alphametrics/Eurostat/TNO

Table 5.2 Share of employment by occupation in health and social work (NACE 85), 2006 (in %)

	Total	Managers	Health professionals (excl. nursing)	Nursing and midwifery prof.	Health associate profs. (exc. nursing)	Social science profs.	Other professionals & technicians	Clerks	Personal care and related workers	Other service workers	Craft trades workers, machine operators	Domestic helpers, cleaners laundlers	Elementary occupations
EU	100	3	10	16	9	8	10	7	25	3	2	5	2
EU6	100	2	9	16	10	9	11	6	22	3	3	6	2
EU9	100	5	9	15	6	6	8	9	32	2	2	5	1
EU15	100	3	9	16	8	8	10	8	27	3	2	5	2
NMS	100	3	16	21	15	4	9	4	13	3	5	6	2
Belgium	100	3	9	29	6	7	10	9	12	3	2	5	4
Germany	100	1	10	19	7	14	11	5	19	5	3	4	3
France	100	1	8	15	4	3	12	7	35	2	3	10	2
Italy	100	2	16	1	32	6	13	7	15	2	3	3	1
Luxemb.	100	1	7	18	6	14	8	12	14	2	3	11	4
Netherl.	100	4	5	24	8	12	11	7	19	2	1	6	1
Denmark	100	2	5	12	5	3	20	6	39	2	1	4	1
Ireland	100	4	6	26	5	6	8	8	23	4	1	7	2
Greece	100	1	29	21	6	3	8	9	10	5	3	4	1
Spain	100	2	15	16	7	5	8	8	29	3	3	5	1
Austria	100	2	10	18	8	8	9	7	24	3	4	6	2
Portugal	100	2	10	10	3	2	9	11	34	9	2	5	3
Finland	100	3	5	19	4	9	7	4	37	2	1	8	1
Sweden	100	2	6	14	6	5	5	4	53	1	0	2	1
UK	100	9	7	14	5	7	6	12	30	2	1	5	1
Bulgaria	100	2	21	26	6	2	6	5	22	2	6	1	2
Czech Rep.	100	2	14	30	8	3	11	2	16	4	4	4	1
Estonia	100	6	19	19	4	6	7	4	20	4	2	8	2
Cyprus													
Latvia	100	4	19	23	9	5	6	3	14	3	7	4	2
Lithuania	100	5	18	11	24	3	8	2	11	5	6	4	2
Hungary	100	5	11	21	16	3	8	6	12	2	6	8	2
Malta													
Poland	100	2	16	28	7	6	13	6	5	3	4	8	2
Romania	100	1	18	2	35	4	6	3	18	3	5	4	2
Slovenia	100	5	15	27	8	3	10	5	11	4	4	7	2
Slovakia	100	2	14	33	4	2	6	2	20	4	4	8	2

Source: Alphametrics/Eurostat/TNO

Table 5.3 Change in share of employment by occupation in health and social work (NACE 85), 2000-2006 (in %)

	Managers	Health professionals (excl. nursing)	Nursing and midwifery prof.	Health associate profs. (exc. nursing)	Social science profs.	Other professionals & technicians	Clerks	Personal care and related workers	Other service workers	Craft trades workers, machine operators	Domestic helpers, cleaners laundlers	Elementary occupations
EU	1	0	-4	3	0	-1	0	2	-1	0	1	0
EU6	0	-1	-5	4	1	1	-1	0	0	0	2	0
EU9	1	0	-4	1	-1	0	1	5	0	0	-1	0
EU15	1	-1	-5	3	0	0	0	2	0	0	1	0
NMS	0	4	0	6	2	-12	0	7	-5	-1	0	-2
Belgium	0	0	5	-2	0	0	1	-3	0	0	1	-3
Germany	0	-1	-3	1	1	0	0	0	0	0	0	1
France	0	-1	-1	0	-1	1	-3	-1	-1	-2	7	0
Italy	1	-4	-25	23	2	2	-2	1	1	1	0	1
Luxemb.	1	-7	-1	2	11	-4	2	2	-3	1	-4	1
Netherl.	0	0	-1	0	1	0	1	0	0	0	0	0
Denmark	0	1	0	1	1	1	0	-2	1	0	-2	-1
Ireland	0	-2	-4	0	1	3	-1	4	0	-1	1	0
Greece	0	1	2	2	2	1	-2	-4	1	-2	-1	-1
Spain	0	-3	-1	1	1	1	0	2	0	0	-1	0
Austria	1	-1	-11	-1	0	3	3	8	0	0	-2	0
Portugal	2	-11	10	0	0	-2	-1	6	3	-1	-3	-3
Finland	1	-2	-24	0	1	1	-2	20	1	0	5	0
Sweden	0	2	1	3	1	-7	0	1	-1	0	0	-1
U. K.	2	1	-6	0	-2	0	1	6	-1	0	-1	0
Bulgaria	1	0	-2	-6	0	1	2	7	0	0	-2	0
Czech R.	1	-1	-2	0	1	-2	-2	9	0	-2	-3	0
Estonia	1	3	-12	0	2	-3	-2	11	2	-2	3	-3
Cyprus												
Latvia	0	-1	-3	3	5	-3	0	1	-3	3	1	-1
Lithuania	-2	6	-17	16	2	4	-3	1	3	0	-10	1
Hungary	1	-3	2	-5	0	3	-1	6	0	0	-1	-2
Malta												
Poland												
Romania	0	18	2	35	4	-56	0	18	-20	2	4	-6
Slovenia	2	1	3	-1	0	1	-3	7	0	-4	-3	-1
Slovakia	0	2	-3	-3	-1	-4	-2	11	1	-3	0	1

Source: Alphametrics/Eurostat/TNO

## 6. Occupations and gender

Table 6.1 Share of males in employment by occupation in health and social work (NACE 85), 2006 (in %)

	Total	Managers	Health professionals (excl. nursing)	Nursing and midwifery prof.	Health associate profs. (exc. nursing)	Social science profs.	Clerks	Personal care and related workers	Other service workers	Craft trades workers, machine operators	Domestic helpers, cleaners	Elementary occupations	
EU	22	36	55	10	22	21	26	12	11	21	74	4	65
EU6	23	45	60	12	26	21	28	14	10	21	67	7	61
EU9	21	32	56	10	21	22	26	10	12	18	76	14	72
EU15	22	36	59	11	25	21	27	12	11	20	70	9	64
NMS	20	33	40	3	14	11	19	8	13	26	88	2	69
Belgium	22	54	61	11	31	27	31	14	4	18	72	12	26
Germany	23	54	57	13	24	21	25	14	10	14	62	4	68
France	20	26	60	11	41	16	27	10	11	44	77	3	66
Italy	34	66	68	5	25	18	34	25	17	29	66	33	42
Luxemb.	26	70	69	16	23	16	43	17	7	34	71	5	90
Netherl.	18	35	55	10	16	22	31	13	2	35	70	10	66
Denmark	16	24	54	4	7	27	21	1	11	6	61	12	77
Ireland	17	30	56	8	22	18	16	10	13	14	82	11	61
Greece	35	73	62	11	43	25	17	25	28	19	83	10	70
Spain	25	44	55	13	28	24	24	17	13	26	82	4	57
Austria	23	48	61	10	15	31	29	9	12	31	52	5	73
Portugal	18	33	48	18	25	15	12	17	6	14	80	5	47
Finland	12	24	45	5	15	19	12	8	6	12	70	4	66
Sweden	18	30	54	10	10	23	28	5	14	11	72	11	76
UK	20	32	57	10	22	21	32	9	11	17	77	23	81
Bulgaria	22	46	41	0	37	2	17	6	12	18	88	7	56
Czech Rep.	20	34	48	2	16	26	21	4	14	14	89	1	58
Estonia	13	24	26	1	0	23	8	0	3	18	100	0	66
Cyprus													
Latvia	14	36	26	0	0	0	13	9	7	29	60	0	25
Lithuania	16	35	31	1	1	5	2	0	6	24	76	0	57
Hungary	22	26	51	9	5	16	18	8	18	43	85	1	62
Malta													
Poland	20	35	38	2	30	7	19	6	21	24	90	2	89
Romania	23	38	39	6	12	15	28	21	9	32	93	3	62
Slovenia	19	23	31	9	12	4	21	8	20	32	75	1	64
Slovakia	19	44	45	2	14	25	14	7	15	26	96	5	70

Source: Alphametrics/Eurostat/TNO

Table 6.2 Change in share of male employment by occupation in health and social work (NACE 85), 2000-2006 (in %)

	Managers	Health professionals (excl. nursing)	Nursing and midwifery prof.	Health associate profs. (exc. nursing)	Social science profs.	Other professionals & technicians	Clerks	Personal care and related workers	Other service workers	Craft trades workers, machine operators	Domestic helpers, cleaners laundlers	Elementary occupations	Total
EU	-4	-4	-2	-1	-2	-1	0	0	-1	0	0	7	-1
EU6	-8	-2	-3	-3	-1	-5	-1	-1	-9	0	-1	-1	-2
EU9	-1	-1	0	4	-3	4	1	1	3	-7	4	16	1
EU15	-4	-2	-2	0	-2	-1	0	0	-4	-2	0	5	-1
NMS	-6	-1	0	1	-1	0	2	0	17	3	-1	29	1
Belgium	8	-1	1	6	-2	-10	3	-1	-18	3	2	5	-1
Germany	-6	-2	0	-3	0	-1	2	1	0	5	2	-3	0
France	-29	-1	0	8	-2	-9	2	1	-14	3	-5	-7	-3
Italy	-3	-3	-22	-11	0	-9	-12	-10	-17	-10	6	-18	-7
Luxemb.	30	-1	-12	-8	16	21	6	-3	3	3	5	13	-1
Netherl.	-3	-5	-2	2	-5	1	3	-2	-19	-3	-2	10	-2
Denmark	-11	4	-2	-2	-6	0	-1	2	4	-8	7	15	1
Ireland	3	-8	-2	-1	-4	-9	-1	-1	1	9	-1	-9	-3
Greece	55	-2	2	19	4	1	-2	6	-1	-3	6	-21	0
Spain	-18	-7	-5	0	-8	2	-8	-3	11	-4	-1	-12	-5
Austria	9	1	-1	-2	4	-3	2	-9	6	-20	-3	-5	-2
Portugal	-29	10	18	2	8	-8	-2	-3	5	-1	4	17	-3
Finland	6	10	-1	1	1	1	7	4	6	1	-1	-8	1
Sweden	-9	3	3	-13	-9	18	4	6	9	-13	11	50	5
U. K.	1	-3	1	8	-3	6	2	2	-1	-7	8	17	2
Bulgaria	19	-5	0	8	-3	4	-4	4	-4	-7	7	-31	-1
Czech R.	-34	2	1	5	0	7	0	3	-5	12	-3	-1	1
Estonia	-37	11	1	0	23	-22	0	3	18	16	0	66	1
Cyprus													
Latvia	0	8	-2	-3	-20	5	9	-2	22	-18	0	-1	2
Lithuania	-20	17	1	-7	5	-8	0	2	12	2	-3	7	3
Hungary	-4	6	0	-3	3	-6	1	-15	9	-9	-1	0	-3
Malta													
Poland													
Romania	26					7	17		27	1		33	3
Slovenia	-10	-12	9	-1	-9	-6	-13	13	13	18	-2	20	-1
Slovakia	-2	-2	-1	-1	14	8	-5	1	0	14	1	24	1

Source: Alphametrics/Eurostat/TNO

Table 6.3 Share of females in employment by occupation in health and social work (NACE 85), 2006 (in %)

	Total	Managers	Health professionals (excl. nursing)	Nursing and midwifery prof.	Health associate profs. (exc. nursing)	Social science profs.	Other professionals & technicians	Clerks	Personal care and related workers	Other service workers	Craft trades workers, machine operators	Domestic helpers, cleaners laundurers	Elementary occupations
EU	78	64	45	90	78	79	74	88	89	79	26	91	35
EU6	77	55	40	88	74	79	72	86	90	79	33	93	39
EU9	79	68	44	90	79	78	74	90	88	82	24	86	28
EU15	78	64	41	89	75	79	73	88	89	80	30	91	36
NMS	80	67	60	97	86	89	81	92	87	74	12	98	31
Belgium	78	46	39	89	69	73	69	86	96	82	28	88	74
Germany	77	46	43	87	76	79	75	86	90	86	38	96	32
France	80	74	40	89	59	84	73	90	89	56	23	97	34
Italy	66	34	32	95	75	82	66	75	83	71	34	67	58
Luxemb.	74	30	31	84	77	84	57	83	93	66	29	95	10
Netherl.	82	65	45	90	84	78	69	87	98	65	30	90	34
Denmark	84	76	46	96	93	73	79	99	89	94	39	88	23
Ireland	83	70	44	92	78	82	84	90	87	86	18	89	39
Greece	65	27	38	89	57	75	83	75	72	81	17	90	30
Spain	75	56	45	87	72	76	76	83	87	74	18	96	43
Austria	77	52	39	90	85	69	71	91	88	69	48	95	27
Portugal	82	67	52	82	75	85	88	83	94	86	20	95	53
Finland	88	76	55	95	85	81	88	92	94	88	30	96	34
Sweden	82	70	46	90	90	77	72	95	86	89	28	89	24
UK	80	68	43	90	78	79	68	91	89	83	23	77	19
Bulgaria	78	54	59	100	63	98	83	94	88	82	12	93	44
Czech Rep.	80	66	52	98	84	74	79	96	86	86	11	99	42
Estonia	87	76	74	99	100	77	92	100	97	82	0	100	34
Cyprus													
Latvia	86	64	74	100	100	100	87	91	93	71	40	100	75
Lithuania	84	65	69	99	99	95	98	100	94	76	24	100	43
Hungary	78	74	49	91	95	84	82	92	82	57	15	99	38
Malta													
Poland	80	65	62	98	70	93	81	94	79	76	10	98	11
Romania	77	62	61	94	88	85	72	79	91	68	7	97	38
Slovenia	81	77	69	91	88	96	79	92	80	68	25	99	36
Slovakia	81	56	55	98	86	75	86	93	85	74	4	95	30

Source: Alphametrics/Eurostat/TNO

Table 6.4 Change in share of female employment in health and social work (NACE 85), 2000-2006 (in %)

	Managers	Health professionals (excl. nursing)	Nursing and midwifery prof.	Health associate profs. (exc. nursing)	Social science profs.	Other professionals & technicians	Clerks	Personal care and related workers	Other service workers	Craft trades workers, machine operators	Domestic helpers, cleaners laundlers	Elementary occupations	Total
EU	4	4	2	1	2	1	0	0	1	0	0	-7	1
EU6	8	2	3	3	1	5	1	1	9	0	1	1	2
EU9	1	1	0	-4	3	-4	-1	-1	-3	7	-4	-16	-1
EU15	4	2	2	0	2	1	0	0	4	2	0	-5	1
NMS	6	1	0	-1	1	0	-2	0	-17	-3	1	-29	-1
Belgium	-8	1	-1	-6	2	10	-3	1	18	-3	-2	-5	1
Germany	6	2	0	3	0	1	-2	-1	0	-5	-2	3	0
France	29	1	0	-8	2	9	-2	-1	14	-3	5	7	3
Italy	3	3	22	11	0	9	12	10	17	10	-6	18	7
Luxemb.	-30	1	12	8	-16	-21	-6	3	-3	-3	-5	-13	1
Netherl.	3	5	2	-2	5	-1	-3	2	19	3	2	-10	2
Denmark	11	-4	2	2	6	0	1	-2	-4	8	-7	-15	-1
Ireland	-3	8	2	1	4	9	1	1	-1	-9	1	9	3
Greece	-55	2	-2	-19	-4	-1	2	-6	1	3	-6	21	0
Spain	18	7	5	0	8	-2	8	3	-11	4	1	12	5
Austria	-9	-1	1	2	-4	3	-2	9	-6	20	3	5	2
Portugal	29	-10	-18	-2	-8	8	2	3	-5	1	-4	-17	3
Finland	-6	-10	1	-1	-1	-1	-7	-4	-6	-1	1	8	-1
Sweden	9	-3	-3	13	9	-18	-4	-6	-9	13	-11	-50	-5
U. K.	-1	3	-1	-8	3	-6	-2	-2	1	7	-8	-17	-2
Bulgaria	-19	5	0	-8	3	-4	4	-4	4	7	-7	31	1
Czech R.	34	-2	-1	-5	0	-7	0	-3	5	-12	3	1	-1
Estonia	37	-11	-1	0	-23	22	0	-3	-18	-16	0	-66	-1
Cyprus													
Latvia	0	-8	2	3	20	-5	-9	2	-22	18	0	1	-2
Lithuania	20	-17	-1	7	-5	8	0	-2	-12	-2	3	-7	-3
Hungary	4	-6	0	3	-3	6	-1	15	-9	9	1	0	3
Malta													
Poland													
Romania	-26					-7	-17		-27	-1		-33	-3
Slovenia	10	12	-9	1	9	6	13	-13	-13	-18	2	-20	1
Slovakia	2	2	1	1	-14	-8	5	-1	0	-14	-1	-24	-1

Source: Alphametrics/Eurostat/TNO

## 7. Occupations and level of education

Table 7.1 Share of low educated\* in employment by occupation in employment by occupation in health and social work (NACE 85), 2006 (in %)

	Total	Managers	Health professionals (excl. nursing)	Nursing and midwifery prof.	Health associate profs. (exc. nursing)	Social science profs.	Other professionals & technicians	Clerks	Personal care and related workers	Other service workers	Craft trades workers, machine operators	Domestic helpers, cleaners laundurers	Elementary occupations
EU	16	6	0	3	6	8	6	21	27	36	39	31	52
EU6	19	3	0	5	9	9	6	19	32	37	49	57	63
EU9	17	8	0	1	6	6	6	25	24	45	41	59	40
EU15	18	7	0	3	8	8	6	22	28	40	47	57	57
NMS	6	0	0	1	0	1	0	3	18	13	10	36	21
Belgium	15	1	0	7	2	3	8	11	27	38	45	59	58
Germany	15	5	0	7	4	11	7	13	19	32	43	50	59
France	25	3	0	2	3	6	8	21	39	49	60	56	71
Italy	21	1	0	5	14	10	5	25	47	55	60	77	73
Luxemb.	26	0	0	2	5	5	9	37	32	23	21	96	78
Netherl.	15	4	0	5	3	5	5	19	30	35	28	61	53
Denmark	15	2	0	0	3	4	3	8	26	20	27	58	46
Ireland	20	9	1	2	4	10	10	13	37	48	54	68	52
Greece	15	0	0	2	3	1	1	11	47	70	45	76	70
Spain	17	9	0	0	7	2	6	18	23	56	60	75	54
Austria	14	7	0	1	3	8	5	8	24	32	29	54	37
Portugal	52	19	0	3	18	1	14	41	86	80	87	91	83
Finland	10	2	0	0	1	4	4	15	14	8	22	31	36
Sweden	9	6	0	0	2	3	3	9	13	18	28	39	36
UK	16	9	0	1	7	7	8	30	23	34	22	55	24
Bulgaria	8	0	0	0	0	0	0	0	29	19	16	32	16
Czech Rep.	5	0	0	0	1	7	0	6	16	6	5	31	23
Estonia	8	0	0	1	9	0	3	10	16	18	22	27	42
Cyprus													
Latvia	6	0	0	1	0	12	0	21	10	15	7	29	24
Lithuania	4	2	0	1	0	0	0	5	17	6	17	8	0
Hungary	10	1	0	3	1	0	1	9	18	17	16	58	34
Malta													
Poland	4	0	0	0	0	0	0	1	17	9	8	28	10
Romania	7	0	0	3	0	1	1	4	18	23	6	44	31
Slovenia	7	0	0	0	0	0	1	3	9	5	12	58	48
Slovakia	7	0	0	0	0	0	1	1	15	6	2	33	22

\* low education (ISCED level 1+2). Source: Alphametrics/Eurostat/TNO

Table 7.2 Change in share of low educated\* employees by occupation in health and social work (NACE 85), 2000-2006 (in %)

	Managers	Health professionals (excl. nursing)	Nursing and midwifery prof.	Health associate profs. (exc. nursing)	Social science profs.	Other professionals & technicians	Clerks	Personal care and related workers	Other service workers	Craft trades workers, machine operators	Domestic helpers, cleaners laundlers	Elementary occupations	Total
EU	-2	0	-4	0	-3	-1	-5	-8	-3	-4	-12	-8	-4
EU6	0	0	-3	2	0	-2	-2	-3	1	-1	-8	-2	-1
EU9	-4	-1	-5	-1	-7	-3	-9	-11	-9	0	-14	-25	-7
EU15	-2	0	-4	1	-2	-2	-4	-6	-3	-1	-13	-8	-3
NMS	0	0	-2	-3	-7	0	-5	-6	-15	-5	-14	-15	-4
Belgium	-6	0	5	-2	0	-4	3	-7	-26	-23	-34	-17	-5
Germany	2	0	-3	-1	0	0	1	-1	-2	7	-5	4	0
France	1	-1	0	0	-2	-2	0	-3	18	1	-15	-5	0
Italy	-2	0	-12	1	7	-4	-4	-9	14	-9	4	-5	-1
Luxemb.	0	0	2	5	5	1	14	4	-53	-40	5	-22	-3
Netherl.	2	-1	-2	-2	-3	-2	-9	-3	-11	-26	-5	7	-3
Denmark	2	0	0	0	4	1	-7	7	2	27	-4	-21	1
Ireland	-3	0	-3	-2	-1	1	-3	-5	-12	5	-11	-13	-2
Greece	0	0	2	3	1	1	4	8	-3	-7	0	1	-2
Spain	-2	0	0	1	1	-6	-8	-8	-22	-6	-6	-6	-5
Austria	3	0	0	-1	-4	4	0	-5	16	5	-10	-14	0
Portugal	-16	-6	3	-34	1	-4	-19	2	-8	-13	-6	-8	-4
Finland	-1	0	-4	-5	-6	-2	3	-22	-5	-17	-2	-15	-2
Sweden	2	0	0	2	-5	0	1	-5	-8	-7	-18	-19	-4
U. K.	-6	0	-9	0	-9	-7	-12	-22	-18	-1	-18	-35	-11
Bulgaria	0	0	0	-1	-5	-3	-2	-6	-8	-6	-8	-6	-1
Czech R.	0	0	-1	-1	7	-2	-2	-6	-11	-6	-12	1	-2
Estonia	0	0	1	9	0	3	10	8	18	-58	-5	42	3
Cyprus													
Latvia	0	0	1	0	-60	-6	13	-4	0	-16	8	17	-1
Lithuania	2	0	1	0	0	0	5	8	-27	-2	-21	-27	-4
Hungary	-1	0	-8	-5	-17	-4	-7	-9	-10	1	-18	-34	-7
Malta													
Poland													
Romania	0						1	-4	-7	-1		-1	-3
Slovenia	0	0	0	0	0	1	-1	-16	-23	3	4	-16	-4
Slovakia	0	0	-1	0	0	1	-2	-9	-9	-6	-11	13	-1

\* low education (ISCED level 1+2). Source: Alphametrics/Eurostat/TNO

Table 7.3 Share of medium educated\*employees by occupation in health and social work (NACE 85), 2006 (in %)

	Total	Managers	Health professionals (excl. nursing)	Nursing and midwifery prof.	Health associate profs. (exc. nursing)	Social science profs.	Other professionals & technicians	Clerks	Personal care and related workers	Other service workers	Craft trades workers, machine operators	Domestic helpers, cleaners laundurers	Elementary occupations
EU	45	27	3	39	49	36	42	60	62	57	54	43	42
EU6	46	28	4	47	46	41	47	64	62	57	45	40	33
EU9	38	27	3	13	27	26	25	54	61	46	48	38	49
EU15	42	27	4	33	41	36	40	59	61	53	46	40	37
NMS	62	30	1	80	84	41	56	83	79	83	88	64	76
Belgium	32	12	1	30	7	16	29	43	66	55	51	37	40
Germany	54	38	3	64	51	48	57	73	71	60	49	47	36
France	39	33	11	10	12	26	36	60	57	50	37	41	24
Italy	41	21	1	23	54	25	57	65	46	43	37	23	26
Luxemb.	48	27	1	84	23	37	54	62	68	72	79	4	19
Netherl.	49	26	3	66	42	36	36	62	62	57	60	36	41
Denmark	40	19	2	3	36	8	11	82	67	71	67	38	46
Ireland	28	30	3	16	13	19	26	63	42	37	31	28	26
Greece	30	13	0	41	43	1	43	74	49	29	48	24	30
Spain	25	17	0	0	18	8	20	42	53	31	26	17	33
Austria	60	56	1	94	45	36	53	86	71	60	64	43	60
Portugal	14	10	1	2	22	1	16	50	12	12	13	8	17
Finland	47	10	6	5	8	42	19	48	79	74	73	65	56
Sweden	53	19	0	2	32	25	30	80	79	72	70	59	62
UK	38	28	7	9	28	29	30	51	60	60	65	43	60
Bulgaria	31	10	0	6	11	26	30	81	68	80	77	66	69
Czech Rep.	72	55	1	95	84	48	72	87	82	94	95	69	77
Estonia	38	15	1	39	56	7	22	47	69	70	78	66	29
Cyprus													
Latvia	60	55	3	83	78	36	45	62	90	77	73	71	76
Lithuania	51	12	4	70	53	47	55	58	69	83	75	91	100
Hungary	62	38	1	80	83	22	57	82	77	82	83	42	64
Malta													
Poland	64	33	0	90	84	45	55	82	78	87	91	71	86
Romania	67	20	0	86	93	51	54	91	81	72	92	55	69
Slovenia	53	3	1	68	56	0	47	94	90	82	88	42	47
Slovakia	70	11	2	90	78	9	72	99	82	94	94	67	78

\*medium educated (ISCED level 3+4) Source: Alphametrics/Eurostat/TNO

Table 7.4 Change in share of medium educated\* employees by occupation in health and social work (NACE 85), 2000-2006 (in % points)

	Managers	Health professionals (excl. nursing)	Nursing and midwifery prof.	Health associate profs. (exc. nursing)	Social science profs.	Other professionals & technicians	Clerks	Personal care and related workers	Other service workers	Craft trades workers, machine operators	Domestic helpers, cleaners laundlers	Elementary occupations	Total
EU	-2	1	-1	9	-1	0	1	6	2	4	12	5	3
EU6	-1	2	-2	5	0	4	-3	3	-1	3	7	1	1
EU9	-3	2	-8	0	-4	0	7	8	6	-4	14	18	4
EU15	-2	2	-5	4	-1	3	1	4	2	1	12	6	2
NMS	5	-2	8	15	-11	-12	1	8	12	6	17	13	2
Belgium	9	1	6	-5	6	-1	-13	5	26	21	32	18	5
Germany	2	0	8	4	1	8	-3	2	3	-1	5	-4	3
France	6	7	4	4	7	1	-3	2	-18	-1	13	1	2
Italy	4	1	-52	-9	-35	10	-1	7	-12	11	1	11	-5
Luxemb.	0	1	-1	-21	-10	-18	-14	-4	48	40	-5	19	0
Netherl.	-11	-3	-6	-3	4	-9	3	3	8	19	3	-7	-2
Denmark	-3	1	-10	-5	-10	-10	3	-8	-11	-33	7	24	-7
Ireland	-6	-1	-12	1	-4	-1	-5	-2	9	-13	9	-4	-4
Greece	-24	0	-6	1	-6	3	-8	-11	3	1	2	7	-5
Spain	-8	0	0	-1	2	-2	2	7	15	4	6	0	4
Austria	12	1	4	-12	-25	-19	3	1	-23	-4	8	11	-3
Portugal	-12	-4	2	5	0	-6	13	-2	2	13	5	8	0
Finland	2	3	-41	-67	8	1	-7	21	6	17	-1	11	2
Sweden	-4	0	-4	20	-1	12	2	3	0	5	16	17	3
U. K.	-3	6	-2	5	-2	2	10	16	18	-5	19	24	9
Bulgaria	10	-1	-9	-3	-7	-23	-4	5	11	6	8	-2	2
Czech R.	12	-2	-3	1	-13	-9	-5	6	11	6	13	2	0
Estonia	6	-2	-21	20	-48	-30	-12	24	-30	58	-2	-71	-8
Cyprus													
Latvia	26	3	-13	-17	8	-15	-10	4	6	5	-8	-17	-5
Lithuania	7	4	63	46	7	46	30	2	38	21	36	27	26
Hungary	-2	-2	-5	-3	-40	-5	1	4	9	1	18	34	2
Malta													
Poland													
Romania	7					-15	-2		3	0		1	-3
Slovenia	0	-2	-4	-14	-5	6	5	16	10	-3	-1	11	-1
Slovakia	-38	-6	-6	-10	-46	-6	7	8	9	1	12	-13	-5

\*medium educated (ISCED level 3+4) Source: Alphametrics/Eurostat/TNO

Table 7.5 Share of high educated\* employees by occupation in health and social work (NACE 85), 2006 (in %)

	Total	Managers	Health professionals (excl. nursing)	Nursing and midwifery prof.	Health associate profs. (exc. nursing)	Social science profs.	Other professionals & technicians	Clerks	Personal care and related workers	Other service workers	Craft trades workers, machine operators	Domestic helpers, cleaners laundurers	Elementary occupations
EU	39	67	97	58	44	56	52	19	10	7	7	1	6
EU6	35	69	96	48	45	50	46	17	7	6	6	3	4
EU9	46	65	97	87	67	69	68	21	15	9	10	3	11
EU15	40	66	96	64	52	56	53	19	11	7	7	3	6
NMS	32	70	99	19	16	58	43	14	3	4	3	1	3
Belgium	54	87	99	63	91	81	64	45	8	7	4	3	3
Germany	32	57	97	30	45	41	36	13	10	8	8	3	5
France	36	64	89	88	85	67	56	19	4	1	4	3	5
Italy	38	78	99	72	32	64	38	10	7	2	3	1	1
Luxemb.	26	73	99	14	72	58	37	1	0	5	0	0	2
Netherl.	37	70	97	28	55	59	59	18	9	8	13	3	6
Denmark	45	80	98	96	60	88	85	10	7	9	5	4	8
Ireland	51	61	97	82	83	71	64	24	22	15	16	5	22
Greece	55	87	100	58	54	98	56	15	4	1	7	0	0
Spain	58	74	100	100	75	90	75	40	24	13	13	8	13
Austria	26	38	98	5	52	56	42	6	5	7	7	3	3
Portugal	33	72	99	95	61	98	70	9	2	8	0	1	0
Finland	43	88	94	95	91	54	77	37	7	18	5	4	9
Sweden	38	76	99	98	66	72	67	11	8	10	2	2	2
UK	45	63	92	90	66	64	62	19	18	7	12	2	16
Bulgaria	60	90	100	94	89	74	70	19	4	1	8	2	15
Czech Rep.	23	45	99	5	15	46	27	8	2	1	0	0	1
Estonia	54	85	99	59	35	93	74	43	15	12	0	8	29
Cyprus													
Latvia	35	45	97	16	22	52	55	17	0	7	19	0	0
Lithuania	45	86	96	29	47	53	45	37	14	11	8	2	0
Hungary	28	62	99	18	16	78	41	9	5	1	1	0	2
Malta													
Poland	32	67	100	10	16	55	45	18	5	4	1	1	3
Romania	26	80	100	11	7	48	45	6	1	4	2	1	0
Slovenia	41	97	99	32	44	100	52	3	1	14	0	0	5
Slovakia	23	89	98	10	22	91	27	0	3	0	5	0	0

\*high educated (ISCED level 5+6) Source: Alphametrics/Eurostat/TNO

Table 7.6 Change in share of high educated\* workers in employment by occupation in health and social work (NACE 85), 2000-2006 (in % points)

	Managers	Health professionals (excl. nursing)	Nursing and midwifery prof.	Health associate profs. (exc. nursing)	Social science profs.	Other professionals & technicians	Clerks	Personal care and related workers	Other service workers	Craft trades workers, machine operators	Domestic helpers, cleaners laundlers	Elementary occupations	Total
EU	4	-1	5	-9	4	2	4	2	2	0	0	2	1
EU6	1	-2	5	-7	0	-3	4	0	0	-2	1	0	0
EU9	7	-1	13	1	11	3	3	4	3	4	0	7	3
EU15	5	-1	9	-6	3	-1	4	2	1	0	0	2	1
NMS	-5	2	-6	-12	18	13	3	-2	2	-1	-3	2	2
Belgium	-2	-1	-11	6	-6	4	10	2	0	2	2	-1	1
Germany	-4	0	-5	-3	0	-8	2	0	-1	-6	0	0	-3
France	-7	-7	-4	-4	-5	1	3	0	0	0	3	4	-3
Italy	-1	-1	64	8	28	-6	5	3	-2	-2	-5	-6	6
Luxemb.	0	-1	0	16	5	17	0	0	5	0	0	2	3
Netherl.	9	4	7	5	-1	11	6	0	3	6	2	0	5
Denmark	1	-1	10	5	6	10	5	1	9	5	-3	-4	6
Ireland	9	1	15	1	5	-1	8	6	3	8	3	17	6
Greece	24	0	5	-4	5	-4	4	3	0	6	-2	-8	7
Spain	11	0	0	0	-3	7	5	2	7	2	0	6	1
Austria	-15	-2	-4	13	30	15	-3	4	6	-1	3	3	4
Portugal	29	11	-5	28	-1	10	6	0	6	0	1	0	4
Finland	-1	-3	45	73	-2	1	4	1	-2	0	3	4	0
Sweden	2	-1	4	-22	5	-12	-3	2	8	2	2	2	1
U. K.	9	-6	11	-5	11	4	2	6	-1	7	0	11	1
Bulgaria	-10	1	9	4	12	25	6	1	-2	0	0	8	-1
Czech R.	-12	2	4	1	6	11	8	0	1	0	-1	-3	3
Estonia	-6	2	20	-28	48	27	2	-32	12	0	8	29	6
Cyprus													
Latvia	-26	-3	12	17	52	21	-3	0	-6	12	0	0	5
Lithuania	-9	-4	-63	-46	-7	-46	-35	-11	-11	-19	-14	0	-22
Hungary	3	2	13	8	57	9	6	5	1	-1	0	0	6
Malta													
Poland													
Romania	-7					14	6		4	2		0	6
Slovenia	0	2	4	14	5	-7	-4	1	14	0	-3	5	5
Slovakia	38	6	7	10	46	5	-5	0	0	5	-1	0	6

\*high educated (ISCED level 5+6) Source: Alphametrics/Eurostat/TNO

## 8. Occupations and age

Table 8.1 Share of younger workers (15-39 years) in employment by occupation in health and social work (NACE 85), 2006 (in %)

	Total	Managers	Health professionals (excl. nursing)	Nursing and midwifery prof.	Health associate profs. (exc. nursing)	Social science profs.	Clerks	Personal care and related workers	Other service workers	Craft trades workers, machine operators	Domestic helpers, cleaners	Elementary occupations	
EU	43	27	35	48	51	45	44	40	47	35	39	31	36
EU6	44	24	30	52	49	44	43	41	49	36	43	32	41
EU9	43	28	40	44	52	45	46	38	47	32	33	32	30
EU15	43	27	34	49	50	44	44	40	48	35	40	32	38
NMS	43	24	38	47	55	57	42	42	40	40	34	29	26
Belgium	52	2	36	68	48	65	46	43	55	42	47	38	42
Germany	45	26	32	51	51	41	44	35	58	33	44	29	45
France	43	32	31	52	50	43	42	49	43	46	47	31	34
Italy	40	16	22	37	49	49	43	42	43	36	34	31	30
Luxemb.	49	43	30	62	60	59	44	43	48	31	49	32	71
Netherl.	43	27	41	47	46	49	40	34	47	35	31	43	35
Denmark	43	21	27	45	49	31	44	35	47	44	32	40	32
Ireland	48	44	48	49	52	58	63	50	50	40	31	23	40
Greece	46	28	41	59	57	59	52	43	44	31	28	25	25
Spain	46	46	38	50	65	65	57	50	43	31	39	29	37
Austria	48	33	32	58	56	50	57	41	49	50	60	33	33
Portugal	47	47	41	53	70	74	60	55	44	42	16	34	26
Finland	37	18	36	42	46	45	43	21	36	23	30	28	47
Sweden	38	16	34	34	37	29	28	25	45	20	20	42	26
UK	41	28	43	40	49	42	39	35	49	25	25	32	26
Bulgaria	31	20	28	37	37	29	28	31	29	20	28	21	31
Czech Rep.	43	14	37	49	55	56	37	35	42	55	35	28	12
Estonia	33	23	42	39	41	28	28	41	27	41	13	34	0
Cyprus													
Latvia	28	5	18	36	40	34	51	24	21	30	27	36	0
Lithuania	37	34	38	33	48	62	41	43	33	17	25	12	21
Hungary	42	21	27	53	47	69	41	37	45	50	31	24	35
Malta													
Poland	44	28	41	47	52	57	46	47	40	45	34	27	33
Romania	50	26	44	48	61	65	46	42	47	37	37	39	32
Slovenia	46	37	41	48	49	50	37	55	56	56	51	36	22
Slovakia	40	12	39	51	40	46	36	36	36	28	40	35	5

Source: Alphametrics/Eurostat/TNO

Table 8.2 Change in share of younger workers (15-39 years) in employment by occupation in health and social work (NACE 85), 2000-2006 (in % points)

	Managers	Health professionals (excl. nursing)	Nursing and midwifery prof.	Health associate profs. (exc. nursing)	Social science profs.	Other professionals & technicians	Clerks	Personal care and related workers	Other service workers	Craft trades workers, machine operators	Domestic helpers, cleaners laundlers	Elementary occupations	Total
EU	-3	-4	-6	-4	-2	-5	-5	-5	-9	-5	-8	-12	-5
EU6	-1	-5	-6	-8	-5	-5	-5	-6	-11	-4	-8	-12	-6
EU9	-4	-6	-6	-1	0	-5	-5	-3	-7	-6	-7	-13	-4
EU15	-3	-5	-5	-6	-3	-5	-5	-5	-9	-5	-7	-12	-5
NMS	-3	2	-4	9	7	-6	2	-6	-6	-3	-8	-14	-2
Belgium	-41	-13	3	-14	3	-13	-11	-1	-19	-3	-5	-13	-6
Germany	2	-5	-9	-7	-5	-2	-8	-8	-9	-2	-7	-6	-7
France	4	-3	2	2	-8	-6	-1	-4	-10	-3	-7	-25	-4
Italy	1	-8	-22	-15	-7	-5	-1	-2	-14	-7	-18	-7	-7
Luxemb.	10	-2	-4	-16	-4	-30	-19	-22	-20	-5	-12	35	-8
Netherl.	1	-1	-10	-6	-2	-10	-11	-10	-2	-8	-2	-11	-7
Denmark	4	-9	-3	2	-10	1	-6	-4	-22	9	2	-12	-3
Ireland	-8	1	3	-5	9	3	-1	-5	-10	-7	-11	-8	-1
Greece	-10	-1	-15	-23	-9	-20	-15	-9	-4	-8	-16	-13	-9
Spain	12	-8	-5	5	-1	-1	-9	-11	3	-21	-6	-7	-6
Austria	-23	-4	-7	-9	-8	0	-13	-12	-13	4	-10	-31	-9
Portugal	25	-8	53	-3	14	1	2	-9	-4	-19	-15	-20	-5
Finland	1	-8	-2	2	3	-13	-17	6	-15	-15	-15	10	-4
Sweden	-3	-1	-5	-14	-2	-9	0	-1	-7	-18	6	-2	-2
U. K.	-7	-7	-8	-1	-1	-15	-4	0	-13	-2	-7	-14	-4
Bulgaria	-31	-15	-4	-8	-15	-19	-20	-7	-23	-17	-21	12	-11
Czech R.	-23	1	2	10	23	-5	-4	-5	17	1	-4	-11	1
Estonia	-30	35	-14	-59	-58	-23	41	-8	41	-3	20	0	-4
Cyprus													
Latvia	-40	-32	-1	-3	-38	12	-4	-28	-29	-3	-9	-32	-15
Lithuania	6	10	-19	23	-38	-26	7	-13	-25	-12	-46	-14	-8
Hungary	1	-4	-10	-2	21	10	-7	-14	24	-8	-1	-9	-2
Malta													
Poland													
Romania	14					-5	2		-13	2		-12	2
Slovenia	37	-2	-13	-4	-2	-8	26	-11	-2	14	-24	-62	-4
Slovakia	-26	-2	-4	-9	-4	-12	-5	-8	-6	7	0	-26	-6

Source: Alphametrics/Eurostat/TNO

Table 8.3 Share of workers (40-49 years) in employment by occupation in health and social work (NACE 85), 2006 (in %)

	Total	Managers	Health professionals (excl. nursing)	Nursing and midwifery prof.	Health associate profs. (exc. nursing)	Social science profs.	Other professionals & technicians	Clerks	Personal care and related workers	Other service workers	Craft trades workers, machine operators	Domestic helpers, cleaners laundurers	Elementary occupations
EU	30	34	30	31	27	30	30	30	29	32	29	19	31
EU6	31	37	32	30	31	32	31	31	30	34	30	36	33
EU9	29	33	29	33	26	28	29	29	27	29	28	28	26
EU15	30	34	31	31	29	31	30	30	29	32	30	33	31
NMS	30	30	27	32	20	25	31	34	34	34	29	37	31
Belgium	29	54	30	21	26	24	33	33	30	36	26	41	39
Germany	31	36	32	32	31	34	31	34	26	34	29	35	31
France	31	37	30	27	25	33	30	25	32	27	31	38	38
Italy	33	27	37	37	32	31	32	33	36	34	33	33	29
Luxemb.	31	32	39	25	22	26	37	37	35	38	39	35	18
Netherl.	30	40	28	32	31	26	32	34	28	36	31	28	35
Denmark	27	33	30	30	30	27	30	25	25	26	38	20	23
Ireland	25	33	27	25	26	20	18	23	23	30	24	30	27
Greece	34	12	30	34	31	28	40	43	32	28	38	42	29
Spain	30	33	30	28	22	23	27	31	34	31	29	37	39
Austria	32	32	37	29	25	30	28	41	33	19	25	39	40
Portugal	28	25	19	30	17	13	23	26	33	31	34	25	32
Finland	29	32	31	30	32	27	31	32	27	40	38	26	27
Sweden	26	26	27	29	27	28	26	26	25	27	25	24	25
UK	29	34	29	38	26	29	30	28	26	27	24	25	18
Bulgaria	36	41	43	29	30	54	41	36	35	35	34	39	30
Czech Rep.	25	28	24	27	18	20	26	32	28	20	23	24	39
Estonia	25	38	27	29	32	31	21	24	15	24	31	13	33
Cyprus													
Latvia	32	32	41	32	18	26	38	35	37	29	25	24	0
Lithuania	31	30	24	36	32	25	36	36	30	38	21	49	42
Hungary	27	28	28	26	28	18	26	34	32	26	18	32	13
Malta													
Poland	34	30	28	37	25	28	32	32	39	41	39	45	28
Romania	24	27	24	16	15	21	26	39	35	36	31	33	38
Slovenia	32	36	26	38	26	10	37	28	30	36	30	34	53
Slovakia	31	33	14	31	36	27	46	37	36	43	30	34	35

Source: Alphametrics/Eurostat/TNO

Table 8.4 Change in share of workers (40-49 years) in employment by occupation in health and social work (NACE 85), 2000-2006 (in % points)

	Managers	Health professionals (excl. nursing)	Nursing and midwifery prof.	Health associate profs. (exc. nursing)	Social science profs.	Other professionals & technicians	Clerks	Personal care and related workers	Other service workers	Craft trades workers, machine operators	Domestic helpers, cleaners laundlers	Elementary occupations	Total
EU	-4	-5	2	0	-1	-1	0	1	1	-2	3	3	0
EU6	-3	-6	1	3	1	-2	0	1	2	-2	3	4	0
EU9	-3	-3	3	-1	-3	1	1	0	1	3	2	1	0
EU15	-3	-5	1	2	-1	-1	0	1	2	-1	3	4	0
NMS	-10	-6	1	-13	-10	0	-1	3	0	-5	2	-2	-3
Belgium	20	-6	-5	-1	-6	2	-2	-4	4	-8	0	10	-2
Germany	-2	0	4	5	1	-1	5	3	1	-5	1	5	2
France	-4	-8	-8	-7	5	-3	-5	-1	1	-1	8	7	-2
Italy	-3	-13	11	6	4	-4	-1	6	9	6	2	-5	0
Luxemb.	-36	6	-1	4	-5	20	10	12	-2	-7	2	-41	2
Netherl.	-6	-2	2	0	-3	0	3	3	0	-5	-3	6	0
Denmark	-9	-19	-3	2	2	-5	8	-3	-1	-6	-5	7	-3
Ireland	6	1	-4	0	-9	-4	-4	-3	0	0	6	6	-2
Greece	-21	-2	15	12	1	18	8	1	-13	-3	3	-15	4
Spain	-3	-8	-7	-3	-4	-2	4	2	5	10	4	8	-2
Austria	5	1	5	0	0	2	11	8	-10	2	10	23	5
Portugal	3	-10	30	-3	-11	-3	-5	2	15	-1	0	-3	0
Finland	-12	2	-3	-3	-8	5	3	-8	10	13	3	-12	-3
Sweden	-24	-3	-3	4	-6	-8	-13	-1	-4	11	6	-5	-3
UK	-1	3	9	-1	-2	7	0	0	-2	-1	0	3	1
Bulgaria	9	6	-9	-6	16	3	6	-2	9	5	18	-21	0
Czech Rep.	2	-15	-5	-13	-5	-3	6	-1	-18	-5	-11	15	-7
Estonia	2	-13	-3	32	17	-20	-13	-24	-13	-8	-55	20	-10
Cyprus													
Latvia	11	30	5	-14	17	0	-5	17	5	-13	-12	-52	6
Lithuania	-33	-13	6	-22	25	19	8	10	3	8	35	42	2
Hungary	-11	-6	0	-5	-25	-4	-4	12	-5	-23	-13	-17	-6
Malta													
Poland													
Romania	-24					-5	1		2	-6		2	-8
Slovenia	26	8	10	-8	-28	-1	-16	-1	-1	-11	-2	41	1
Slovakia	11	-16	-1	8	-19	9	-3	-10	-9	-15	-13	-7	-5

Source: Alphametrics/Eurostat/TNO

Table 8.5 Share of older workers (50+ years) in employment by occupation in health and social work (NACE 85), 2006 (in %)

	Total	Managers	Health professionals (excl. nursing)	Nursing and midwifery prof.	Health associate profs. (exc. nursing)	Social science profs.	Other professionals & technicians	Clerks	Personal care and related workers	Other service workers	Craft trades workers, machine operators	Domestic helpers, cleaners laundurers	Elementary occupations
EU	27	39	35	20	21	25	26	30	24	33	32	35	33
EU6	25	39	38	19	20	24	26	28	21	30	27	32	26
EU9	28	39	31	23	22	27	26	33	26	39	38	40	44
EU15	26	39	35	20	21	25	26	31	24	33	31	35	31
NMS	27	46	35	21	24	18	27	24	26	25	37	34	43
Belgium	19	44	34	11	26	12	21	24	15	21	26	21	19
Germany	24	38	36	17	18	25	25	31	16	32	27	36	23
France	27	31	39	21	25	25	28	26	25	26	22	31	28
Italy	27	57	42	26	20	20	25	26	21	30	33	37	40
Luxemb.	20	26	31	13	18	15	19	20	18	30	12	33	11
Netherl.	26	32	31	22	24	24	28	32	25	29	38	29	30
Denmark	30	46	43	25	21	42	27	40	28	30	31	39	45
Ireland	27	23	25	25	23	22	19	26	27	30	45	48	33
Greece	21	59	29	7	12	13	8	14	24	41	33	34	46
Spain	23	21	31	22	13	12	16	19	23	37	32	34	23
Austria	20	35	30	14	19	20	15	17	19	30	16	28	27
Portugal	25	27	40	17	12	13	17	19	24	27	50	40	43
Finland	34	50	33	28	22	28	26	47	37	37	32	46	25
Sweden	36	57	39	37	36	43	46	49	30	54	55	35	49
UK	30	39	28	21	25	29	30	37	25	48	51	44	57
Bulgaria	33	39	28	34	33	17	31	33	36	45	38	40	40
Czech Rep.	32	57	39	24	26	24	37	34	30	24	42	49	49
Estonia	42	39	31	32	27	41	51	35	58	35	56	53	67
Cyprus													
Latvia	40	63	41	32	42	40	12	40	42	41	47	40	100
Lithuania	32	36	38	31	21	13	24	21	37	45	54	38	37
Hungary	31	50	45	21	25	13	33	29	23	24	51	44	52
Malta													
Poland	23	43	31	16	22	15	22	21	22	14	27	29	39
Romania	25	46	32	36	24	14	29	19	18	27	32	28	31
Slovenia	21	26	33	14	24	40	26	17	14	8	19	29	25
Slovakia	28	55	48	18	24	27	17	27	28	29	29	32	60

Source: Alphametrics/Eurostat/TNO

Table 8.6 Change in share of older workers (50+ years) in employment by occupation in health and social work (NACE 85), 2000-2006 (in % points)

	Managers	Health professionals (excl. nursing)	Nursing and midwifery prof.	Health associate profs. (exc. nursing)	Social science profs.	Other professionals & technicians	Clerks	Personal care and related workers	Other service workers	Craft trades workers, machine operators	Domestic helpers, cleaners laundlers	Elementary occupations	Total
EU	7	9	4	4	3	6	5	4	8	7	4	9	5
EU6	4	11	5	5	4	7	5	5	8	7	5	7	6
EU9	7	9	3	2	3	4	4	3	6	4	5	12	4
EU15	6	10	4	4	4	6	5	4	7	6	4	8	5
NMS	13	4	3	4	2	7	-1	3	6	8	7	16	5
Belgium	20	19	1	15	3	11	13	5	15	11	5	2	8
Germany	-1	5	5	2	5	3	3	5	8	8	6	1	5
France	0	10	6	5	4	10	5	5	9	4	0	19	7
Italy	2	21	12	9	4	9	2	-4	5	1	16	11	7
Luxemb.	26	-4	5	12	9	11	9	10	21	12	10	6	6
Netherl.	6	3	8	6	5	10	8	7	2	13	4	5	7
Denmark	4	28	6	-4	8	4	-3	7	23	-2	3	4	6
Ireland	2	-2	2	4	0	2	4	7	10	7	4	2	3
Greece	31	3	-1	10	8	2	7	8	17	11	13	28	5
Spain	-9	16	12	-2	5	3	6	9	-8	11	2	-1	7
Austria	18	3	3	9	8	-2	2	5	22	-5	0	7	4
Portugal	-28	18	-83	6	-3	3	3	7	-11	20	15	23	5
Finland	11	5	5	1	4	8	14	2	6	1	13	2	8
Sweden	26	4	8	11	8	18	13	2	11	7	-13	6	6
UK	8	4	0	1	3	7	4	-1	15	2	6	12	3
Bulgaria	21	8	13	14	-1	15	14	9	14	12	3	9	11
Czech Rep.	20	14	4	3	-18	8	-2	6	1	4	15	-4	5
Estonia	27	-22	18	27	41	43	-28	32	-28	11	35	-20	14
Cyprus													
Latvia	29	2	-4	17	21	-12	9	10	24	16	21	84	9
Lithuania	27	3	13	-1	13	7	-15	3	23	3	10	-28	6
Hungary	10	9	9	7	4	-6	12	2	-19	31	14	26	8
Malta													
Poland													
Romania	10					10	-3		10	4		11	6
Slovenia	-63	-6	3	13	30	9	-10	11	3	-2	27	21	3
Slovakia	15	17	5	1	22	2	9	19	15	8	14	33	11

Source: Alphametrics/Eurostat/TNO