

# European employment increasing in services and especially in knowledge-intensive services

## Statistics in focus

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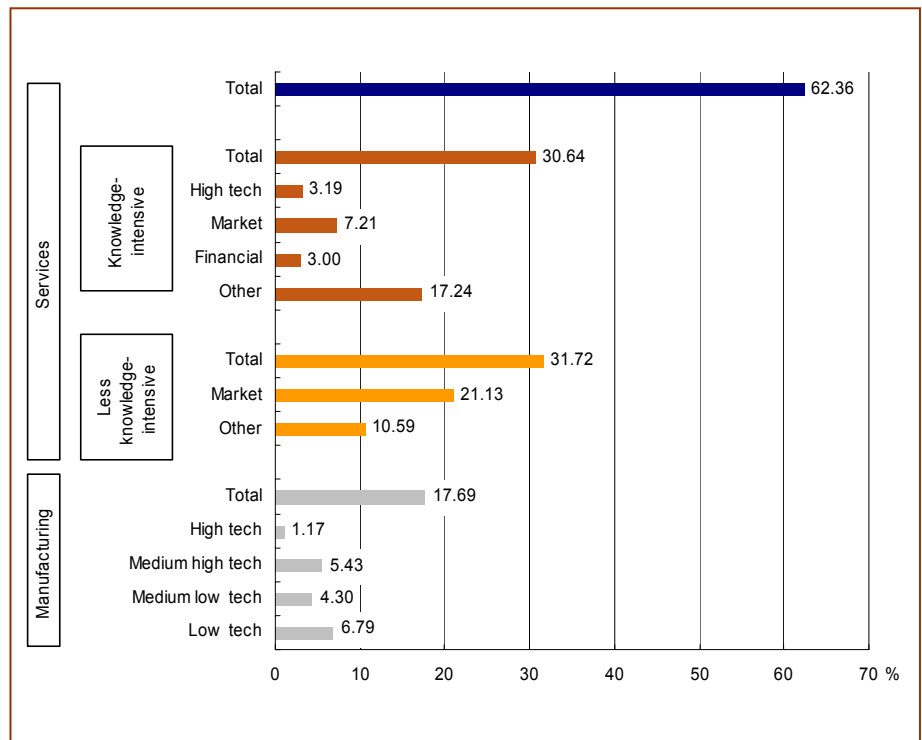
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Figure 1: Employment in manufacturing and services as a % of total employment and broken down by sector, EU-25 — 2003 <sup>(1)</sup>



(1) EU-25 excludes Poland, Eurostat estimate.

- In 2003 at the EU-25 level, a little more than 120 million people were employed in services and 34 million in the manufacturing sector. This represents 62.4% and 17.7% respectively of total employment.
- As well as being the most important employment sector in the EU-25, services also increased between 2000 and 2003 at an annual average growth rate of 1.7%. On the contrary, the manufacturing sector decreased during the same period (-1.2% per annum on average).
- One half of workers in services are employed in knowledge-intensive services. At EU-25 level, this sector increased with an annual average growth rate of 2.3% between 2000 and 2003. Furthermore, all sub-sectors of KIS grew during this period.
- Less knowledge-intensive services accounted for the other half of total employment in services and less knowledge-intensive market services employed more than 40 million people in 2003 or more than 20% of total employment.
- Luxembourg is the country where the proportion of services is the most important, with 78% of total employment. It is followed by the United Kingdom, Sweden, Norway and Denmark.
- Among the top 30 regions with the highest proportion of persons employed in knowledge-intensive services, 14 are regions from the United Kingdom, five from Germany, four from France and three from Sweden. Furthermore, all these regions saw the KIS share increase between 2000 and 2003.

## In Europe, more than 120 million people are employed in services, of which 50% are in knowledge-intensive services

In 2003, services accounted for 62.4% of total employment in the European Union — see Figure 1 or Table 1. That represents a little more than 120 million people. Among these, one half are employed in knowledge-intensive services — KIS and the other half in less knowledge-intensive services — LKIS. In other terms, each of these sectors accounted for approximately 31% of total employment in 2003, or close to 60 million employed people.

By comparison, the manufacturing sector accounted for 17.7% of total EU-25 employment in 2003, or roughly 34.1 million people. Among those, 12.7 million were employed in high and medium high tech manufacturing (6.6% of total employment) — Figure 1 and Table 1.

As well as being the most important sector in EU-25 employment, services also increased between 2000 and 2003. Employment in services increased at an annual average growth rate of 1.7%. The sub-sector knowledge-intensive services grew even faster, at an annual average growth rate of 2.3% — Table 1.

But while employment grew in services, and especially in KIS, the manufacturing sector experienced a reduction in the number of people it employed.

During the same period, the manufacturing sector had an annual average employment reduction of 1.2%. High and medium high tech manufacturing also decreased with an annual average decline of 1.2%.

However, as shown in Table 1, the distribution across sectors and their evolution show large differences among Member States. For example, employment in manufacturing accounted for more than 25% of total employment in the Czech Republic, Slovenia and Slovakia (EU-25 average = 17.7%). Other countries are more active in services. This is the case for Belgium, Denmark, France, Cyprus, Luxembourg, Sweden and the United Kingdom, where services accounted for more than 70% of total employment in 2003.

Whereas, at EU-25 level, employment in the manufacturing sector decreased between 2000 and 2003, it increased for some countries such as the Czech Republic, Spain, Hungary, Italy and Slovakia.

Services, meanwhile, increased at the EU-25 in general, but decreased in Belgium and Lithuania. However, services increased with an annual average growth rate of over 3% in Estonia, Spain, Cyprus and Ireland.

*Table 1: Total employment in manufacturing, high tech and medium high tech manufacturing, services, knowledge-intensive and less knowledge-intensive services, in 1000s and as a % of total employment — 2003 and AAGR — 2000-2003 <sup>(1, 2)</sup>*

Country	Manufacturing			High and medium high technology manufacturing			Services			Knowledge-intensive services			Less knowledge-intensive services		
	1000s	% of employment	AAGR 2000-2003	1000s	% of employment	AAGR 2000-2003	1000s	% of employment	AAGR 2000-2003	1000s	% of employment	AAGR 2000-2003	1000s	% of employment	AAGR 2000-2003
<b>EU-25</b>	<b>34 069</b>	<b>17.69</b>	<b>-1.24</b>	<b>12 714</b>	<b>6.60</b>	<b>-1.19</b>	<b>120 104</b>	<b>62.36</b>	<b>1.66</b>	<b>59 009</b>	<b>30.64</b>	<b>2.28</b>	<b>61 095</b>	<b>31.72</b>	<b>1.08</b>
<b>EU-15</b>	<b>30 381</b>	<b>18.56</b>	<b>-1.40</b>	<b>11 631</b>	<b>7.10</b>	<b>-1.42</b>	<b>111 303</b>	<b>67.99</b>	<b>1.70</b>	<b>55 107</b>	<b>33.66</b>	<b>2.35</b>	<b>56 197</b>	<b>34.33</b>	<b>1.08</b>
BE	720	17.76	-2.32	260	6.42	-2.89	2 974	73.36	-0.04	1 570	38.71	1.17	1 405	34.65	-1.32
CZ	1 306	27.76	0.67	410	8.71	-0.78	2 615	55.61	0.70	1 151	24.47	0.78	1 464	31.14	0.63
DK	425	15.72	-4.62	165	6.12	-1.88	1 985	73.41	1.09	1 169	43.21	0.70	817	30.20	1.65
DE	8 257	22.98	-1.46	3 966	11.04	-0.80	23 782	66.20	0.85	11 852	32.99	2.42	11 930	33.21	-0.62
EE	130	22.05	-0.17	20	3.35	-6.50	368	62.48	3.35	186	31.61	6.81	182	30.87	0.23
EL	514	12.80	-2.64	80	1.99	-2.95	2 479	61.75	1.27	909	22.65	1.30	1 570	39.11	1.25
ES	2 969	17.81	0.98	858	5.15	1.32	10 594	63.56	3.54	4 317	25.90	4.75	6 277	37.66	2.74
FR	4 075	16.95	-2.04	1 562	6.50	-2.24	16 965	70.57	1.80	8 540	35.52	2.12	8 425	35.04	1.47
IE	283	15.93	-1.03	112	6.28	-1.30	1 166	65.54	3.48	595	33.43	3.95	571	32.11	2.99
IT	4 949	22.44	0.85	1 637	7.42	0.86	14 010	63.52	2.05	6 051	27.43	2.73	7 960	36.09	1.55
CY	36	10.97	-0.07	4	1.24	7.85	235	71.94	6.12	88	26.97	7.87	147	44.97	5.13
LV	164	16.37	-2.89	19	1.85	44.09	588	58.58	1.12	241	23.97	0.10	347	34.61	1.85
LT	266	18.05	-2.12	45	3.03	-2.30	796	54.05	-1.24	357	24.22	-3.77	439	29.83	1.03
LU	18	9.69	-4.44	3	1.36	-11.36	147	78.00	1.87	72	38.59	4.13	74	39.41	-0.16
HU	926	23.59	0.13	324	8.27	1.82	2 402	61.22	1.83	1 097	27.95	2.83	1 306	33.28	1.03
MT	29	19.33	:	9	6.14	:	101	67.66	:	43	28.77	:	58	38.88	:
NL	1 031	12.61	-2.96	332	4.06	-2.57	5 637	68.95	0.94	3 168	38.75	1.37	2 469	30.20	0.39
AT	713	19.31	-2.01	230	6.21	-2.71	2 428	65.74	1.03	1 118	30.26	2.55	1 310	35.48	-0.20
PL	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
PT	1 016	20.05	-1.77	159	3.14	-3.86	2 748	54.23	2.18	1 007	19.88	2.90	1 740	34.35	1.78
SI	264	29.47	-0.58	80	8.94	1.07	485	54.07	1.15	217	24.19	2.25	268	29.87	0.30
SK	568	26.20	1.82	173	8.00	6.60	1 210	55.82	1.35	524	24.16	0.91	686	31.66	1.70
FI	454	18.91	-1.89	165	6.85	-1.30	1 626	67.75	1.51	954	39.72	2.04	673	28.03	0.78
SE	702	16.14	-1.86	306	7.03	-2.09	3 254	74.77	2.77	2 055	47.23	2.91	1 199	27.54	2.52
UK	4 254	14.85	-3.57	1 797	6.27	-4.19	21 507	75.10	1.91	11 730	40.96	2.00	9 777	34.14	1.81
IS	22	14.09	-3.21	3	2.02	16.41	109	69.97	0.54	66	41.93	3.29	44	28.03	-3.18
NO	282	12.47	-1.48	103	4.53	0.24	1 685	74.41	0.15	1 009	44.55	1.68	676	29.87	-1.96
CH	603	15.27	-1.77	280	7.09	-2.12	2 782	70.42	2.06	1 537	38.91	3.14	1 245	31.51	0.79
BG	671	23.34	-0.08	134	4.66	-5.95	1 630	56.69	1.87	634	22.06	1.44	996	34.63	2.16
RO	1 964	20.96	-1.09	499	5.32	-2.81	3 108	33.18	-0.55	1 219	13.02	1.07	1 889	20.17	-1.55

(1) Exceptions to the reference year 2003 — NL and IS: 2002.

(2) EU-25 excludes Poland. Eurostat estimate.

## Employment increased in all knowledge-intensive service sectors between 2000 and 2003

As previously underlined services at EU-25 level employed more than 120 million people in 2003, of which one half were in KIS. Among these, more than 6.1 million were employed in knowledge-intensive high tech services and 5.8 million in knowledge-intensive financial services. The largest KIS employer in 2003 was other knowledge-intensive services with 33.2 million employed people followed by knowledge-intensive market services, with 13.9 million workers.

This latter sector has also seen the most rapid growth since 2000, with an annual average rate of 3.3% — see Table 2. In high tech KIS, the same rate was 1.8%, whereas knowledge-intensive financial services grew by an average 0.4% per annum. This nevertheless means that employment in all sub-sectors of KIS increased during the period 2000-2003.

LKIS accounted for the other half of total employment in services at EU-25 level and, within this sector, less knowledge-intensive market services employed more than 40 million people in 2003 or more than 20% of total employment.

Once again, European averages hide discrepancies at the Member State level. For example, high tech KIS, while increasing at the EU-25 level (1.8%), decreased in Denmark, Estonia, the Netherlands, Lithuania and Slovakia, with annual reduction rates of more than 3%. This fall was as much as 10.5% for Lithuania. Higher sector growth was observed in countries such as Cyprus, Luxembourg, Austria, Portugal and Iceland, where the annual average growth was between 4% and 11%.

Concerning knowledge-intensive market services, only two countries saw employment decrease between 2000 and 2003: Latvia and Iceland with respective annual average reductions of 2.5% and 3.4%. Otherwise, employment increased in this sub-sector in all countries. The annual average growth rate was 12.8% in Estonia and 10.9% in Luxembourg.

Other knowledge-intensive services also grew overall between 2000 and 2003. In fact, employment in this sector only fell in two countries, Lithuania and Slovakia (-5.1% and -0.4%, respectively).

*Table 2: Employment in services broken down by sub-sector  
in 1000s — 2003, AAGR — 2000-2003 <sup>(1,2)</sup>*

Country	Knowledge-intensive services						Less knowledge-intensive services					
	High technology KIS		Financial KIS		Market KIS		Other KIS		Market LKIS		Other LKIS	
	1000s	AAGR 2000-2003	1000s	AAGR 2000-2003	1000s	AAGR 2000-2003	1000s	AAGR 2000-2003	1000s	AAGR 2000-2003	1000s	AAGR 2000-2003
<b>EU-25</b>	<b>6 141</b>	<b>1.82</b>	<b>5 771</b>	<b>0.35</b>	<b>13 890</b>	<b>3.30</b>	<b>33 206</b>	<b>2.30</b>	<b>40 698</b>	<b>0.98</b>	<b>20 397</b>	<b>1.28</b>
<b>EU-15</b>	<b>5 717</b>	<b>1.97</b>	<b>5 480</b>	<b>0.39</b>	<b>13 117</b>	<b>3.18</b>	<b>30 793</b>	<b>2.44</b>	<b>37 213</b>	<b>0.98</b>	<b>18 984</b>	<b>1.27</b>
BE	160	2.46	147	-2.37	326	1.83	937	1.33	899	-1.00	505	-1.88
CZ	150	1.70	98	0.95	231	1.85	672	0.20	1 050	0.37	414	1.30
DK	122	-3.83	76	-6.14	218	2.52	753	1.82	580	2.34	236	0.03
DE	1 191	2.73	1 361	0.78	2 732	2.90	6 568	2.52	7 579	-0.37	4 352	-1.05
EE	14	-5.76	9	1.31	50	12.79	114	6.86	138	0.60	44	-0.90
EL	70	3.19	102	-1.90	241	3.61	496	0.68	1 130	0.99	440	1.91
ES	391	3.69	407	-0.50	1 253	6.19	2 266	5.20	4 387	2.20	1 890	4.03
FR	979	3.10	698	-0.78	2 039	3.49	4 825	1.81	4 914	0.94	3 511	2.23
IE	70	1.21	73	2.14	131	2.44	321	5.69	430	2.44	141	4.78
IT	646	1.86	682	0.64	1 514	5.49	3 209	2.14	5 150	1.85	2 810	1.01
CY	7	11.82	16	1.81	23	5.72	43	11.33	99	4.58	48	6.30
LV	23	1.63	13	2.17	46	-2.52	159	0.52	245	2.28	103	0.83
LT	24	-10.46	14	-4.51	56	9.30	262	-5.14	326	2.03	113	-1.63
LU	6	4.75	20	3.10	17	10.88	30	1.38	37	-2.77	38	2.66
HU	123	1.65	72	-5.32	226	8.24	675	2.44	920	0.66	386	1.92
MT	4	:	5	:	9	:	24	:	40	:	17	:
NL	304	-3.15	273	0.21	822	1.80	1 769	2.20	1 733	-0.46	736	2.47
AT	122	5.95	129	-2.42	259	4.50	607	2.27	970	0.15	341	-1.18
PL	:	:	:	:	:	:	:	:	:	:	:	:
PT	72	7.23	88	-0.83	232	5.13	614	2.20	1 159	2.07	582	1.19
SI	24	2.00	22	0.05	45	5.10	126	1.74	198	0.62	70	-0.59
SK	55	-3.79	43	5.10	88	8.40	338	-0.39	467	1.38	219	2.39
FI	112	2.65	50	-0.21	215	2.34	576	2.01	472	0.52	201	1.40
SE	211	-0.13	91	4.27	451	4.70	1 302	2.75	838	2.06	360	3.61
UK	1 260	1.25	1 282	1.88	2 667	1.07	6 520	2.56	6 935	1.43	2 842	2.77
IS	8	4.30	6	-1.41	12	-3.35	40	6.17	31	-2.78	12	-4.16
NO	87	0.62	47	-2.28	213	2.51	662	1.86	487	-1.94	189	-2.01
CH	160	3.47	221	5.71	348	5.03	809	1.66	860	1.32	385	-0.34
BG	77	2.39	28	-4.56	104	8.35	425	0.26	712	0.74	284	6.10
RO	136	-2.73	85	-3.28	136	8.44	863	1.17	1 282	-2.63	607	0.90

(1) Exceptions to the reference year 2003 — NL and IS: 2002.

(2) EU-25 excludes Poland, Eurostat estimate.

Within the EU-25, employment increased in both of the less knowledge-intensive sectors (less knowledge-intensive market services and other LKIS), but at a rate that is lower than the average for services.

For example, in less knowledge-intensive market services, Member States were more likely to have experienced an employment decline between 2000 and 2003 than for some KIS sectors. This was the case in Belgium, Germany, Luxembourg, the Netherlands, Iceland and Norway (except knowledge-intensive financial services in Belgium). The number of people employed in less knowledge-intensive market services increased at a rate higher than 4% only in Cyprus, but this was still lower than its annual average growth rate for the entire services sector (6%).

Figure 2 shows the share of services in total employment and the breakdown by sub-sector. Countries are ranked by employment in services as a percentage of total employment. The country where the proportion of services is the highest is Luxembourg, at 78% of total employment. It is followed by the United Kingdom, Sweden, Norway and Denmark.

Below the European average (62.5%), but still above the 60% level, are Greece and Hungary in 2003, with 62.4% and 61.8%, respectively. In fact, services accounted for less than 60% of total employment in only eight countries. With the exception of Portugal, these were exclusively New Member States and Candidate countries — between 33.2% (Romania) and 58.6% (Latvia).

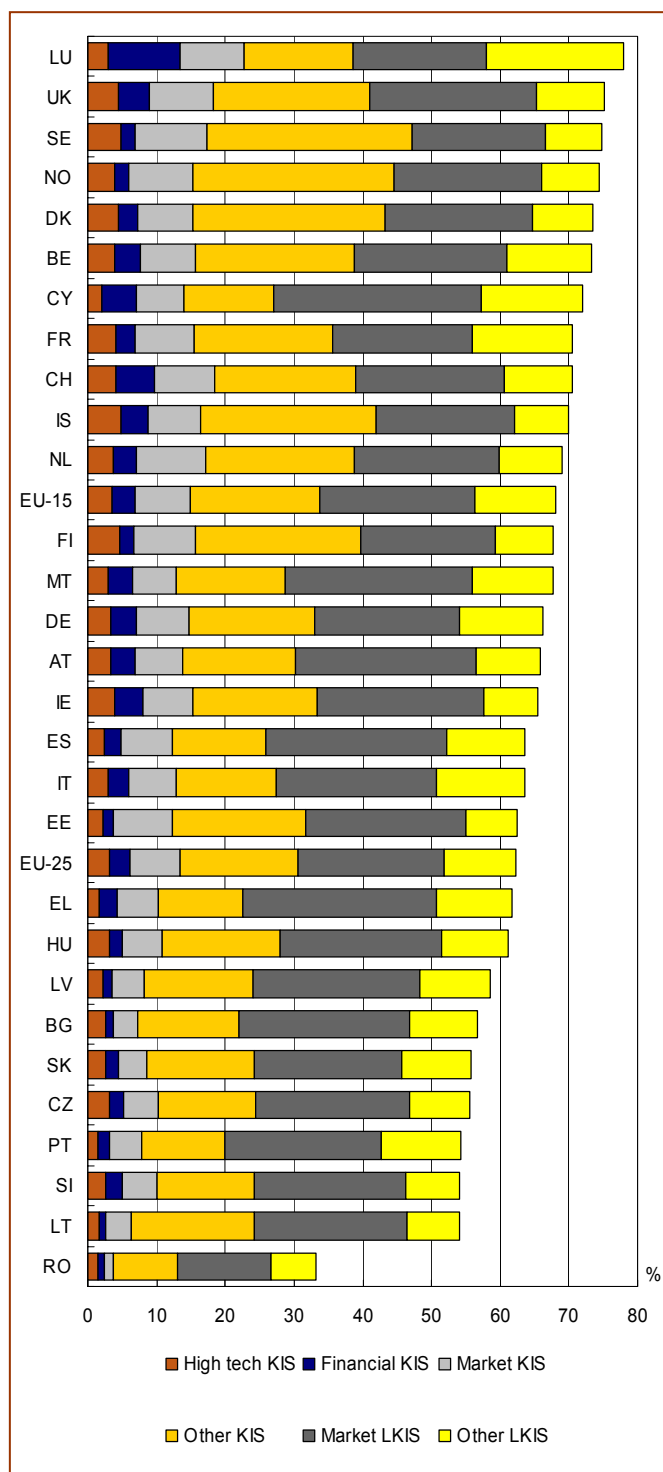
In Finland, Iceland, France, Denmark, Sweden and the UK, high tech KIS accounted for more than 4% of total employment. With the exception of Denmark, this proportion increased between 2000 and 2003 in all these countries — see Table 2.

Luxembourg is highly specialised in knowledge-intensive financial services with more than 10% of employment in this sub-sector and an annual average growth of 3.1% between 2000 and 2003.

The Netherlands, Sweden, the United Kingdom and Luxembourg, had a relatively high proportion of knowledge-intensive market services and, in addition, a positive annual average growth rate between 2000 and 2003. This was again even greater than 10% for Luxembourg.

In Cyprus, Austria, Spain and Greece, less knowledge-intensive market services accounted for more than 25% of total employment. The number of people employed in this sector increased in all of these countries, with a particularly high rate in Cyprus and Spain.

Figure 2: Employment in services by sector as a % of total employment, Member States and Candidate Countries — 2003 <sup>(1,2,3)</sup>



(1) Exceptions to the reference year 2003 — NL and IS: 2002.  
(2) Hungary: Knowledge-intensive financial services data are unreliable.  
(3) EU-25 excludes Poland, Eurostat estimate.

## The United Kingdom has the most knowledge-intensive service oriented regions in Europe, but also the greatest regional disparities

Table 3 shows the 30 regions, at the NUTS 2 level, with the highest proportion of workers in KIS. Of the top 30 regions, 14 are regions from the United Kingdom, five from Germany, four from France and three from Sweden. Three of the first four regions are from the United Kingdom, namely Inner London, Outer London and Surrey, East and West Sussex. The second region is Stockholm, the first French region is Île de France and the first German region is Hamburg.

In 2003, the proportion of employment in KIS for the top 30 regions was between 57% and 36.3%. Furthermore, employment increased in this sector between 2000 and 2003 for all of the top 30 regions.

Concerning high tech KIS, only three regions saw an employment decrease between 2000 and 2003, but with rates of decline between 0.6% and 1.5%. Mostly, however, employment grew rapidly in this sector, and in 11 regions, with annual average growth rates higher than 7%.

Between 2000 and 2003, knowledge-intensive financial services decreased in half of the top 30 regions. In knowledge-intensive market services, meanwhile, employment fell in four of the top 30 regions between 2000 and 2003, but for two of them, the annual average rate of decline was just below zero. On the other hand, growth in this sector was above 6.5% in four regions, three of which are in the top 10 (Stockholm; Surrey, East and West Sussex; Västsverige).

Figure 3 shows the regional distribution of employment in KIS as a percentage of total employment, by plotting the national averages and the regional extremes at the NUTS 2 level. In 2003, 20 countries had at least one region above the European average (30.6%). But in some countries, all regions performed well compared to the EU average, whereas in others all regions compared less favourably. For example, in Belgium, the Netherlands, Finland and Sweden, the least knowledge-intensive service oriented regions are still nevertheless above the EU-25 average. This is also true in Norway and Switzerland — see Figure 3.

Table 3: Top 30 regions in Europe in knowledge-intensive services and sub-sectors ranked according to proportion of knowledge-intensive services in total employment in 1000s and as a % of total employment — 2003 and AAGR — 2000-2003

Region	Country	Knowledge-intensive services			Knowledge-intensive high technology services			Knowledge-intensive financial services			Knowledge-intensive market services			Other knowledge-intensive services		
		1000s	% of employment	AAGR 2000-2003	1000s	% of employment	AAGR 2000-2003	1000s	% of employment	AAGR 2000-2003	1000s	% of employment	AAGR 2000-2003	1000s	% of employment	AAGR 2000-2003
Inner London	UK	783	56.99	3.95	72	5.23	4.35	124	9.03	8.30	241	17.51	4.08	347	25.22	2.47
Stockholm	SE	534	55.40	5.19	78	8.07	7.07	41	4.28	0.94	152	15.79	8.99	263	27.26	3.53
Outer London	UK	1 063	48.24	0.98	135	6.15	4.00	141	6.40	-2.05	298	13.54	1.35	488	22.15	0.96
Surrey, East & West Sussex	UK	632	47.52	2.03	75	5.63	3.08	76	5.70	-3.16	178	13.34	6.53	304	22.83	1.01
Île de France	FR	2 229	45.99	1.67	357	7.36	6.13	259	5.35	-0.93	706	14.57	2.87	907	18.72	0.10
Hamburg	DE	359	45.77	2.90	34	4.38	9.04	40	5.05	-0.58	112	14.35	4.30	172	22.00	1.90
Berlin	DE	647	45.77	1.91	67	4.72	2.31	47	3.34	1.90	179	12.69	3.61	354	25.02	1.05
Berks., Buckinghamsh. & Oxfordshire	UK	535	44.87	2.56	99	8.35	2.78	47	3.92	4.27	148	12.45	1.79	240	20.15	2.65
Östra Mellansverige	SE	321	44.54	2.96	32	4.46	0.68	11	1.58	7.21	64	8.88	4.15	214	29.61	2.78
Västsverige	SE	390	44.37	4.52	36	4.11	4.93	13	1.45	0.01	82	9.33	7.07	259	29.48	3.97
Bedfords. & Hertfords.	UK	369	44.05	1.82	58	6.95	-0.59	37	4.44	-0.31	98	11.68	2.69	176	20.98	2.70
Wien	AT	308	43.66	0.64	44	6.28	9.25	31	4.41	-6.42	90	12.73	2.12	143	20.23	-0.39
Danmark	DK	1 169	43.21	1.43	122	4.50	1.82	76	2.82	-1.15	218	8.06	2.41	753	27.83	1.38
Eastern Scotland	UK	401	43.16	2.13	32	3.43	-1.54	68	7.37	7.14	76	8.17	2.85	225	24.19	1.18
Gloucesters., Wills. & North Somerset	UK	486	42.87	3.96	65	5.75	7.52	54	4.80	-1.50	112	9.89	3.46	254	22.44	4.75
Etelä-Suomi	FI	531	42.03	:	73	5.78	:	34	2.70	:	133	10.55	:	290	23.01	:
Essex	UK	335	41.99	1.50	28	3.55	5.13	70	8.73	-2.72	87	10.93	4.08	150	18.78	1.72
Greater Manchester	UK	496	41.45	3.06	49	4.13	6.79	44	3.68	-3.43	122	10.23	5.67	280	23.41	2.66
Darmstadt	DE	700	40.41	4.83	88	5.11	7.00	140	8.06	5.72	199	11.49	4.29	273	15.75	4.14
South Western Scotland	UK	400	40.28	0.86	40	4.06	8.72	45	4.53	1.01	74	7.43	-0.29	241	24.27	0.15
West Yorkshire	UK	400	40.21	2.54	41	4.09	9.91	53	5.29	3.55	74	7.44	-2.12	232	23.39	2.97
Languedoc-Roussillon	FR	300	38.99	3.82	38	4.88	10.82	13	1.74	-6.61	60	7.84	1.86	189	24.53	4.36
Hampshire & Isle of Wight	UK	357	38.89	1.25	55	5.99	7.33	33	3.60	-0.09	85	9.29	-0.04	184	20.00	0.61
West Midlands	UK	434	38.85	1.66	55	4.93	14.32	41	3.69	-0.74	84	7.54	-1.42	254	22.69	1.25
East Anglia	UK	436	38.67	3.28	50	4.47	3.49	43	3.77	-0.24	100	8.90	2.70	243	21.52	4.20
Oberbayern	DE	770	37.86	3.30	102	5.00	7.27	116	5.72	4.04	202	9.91	3.81	350	17.23	1.81
Provence-Alpes-Côte d'Azur	FR	577	37.76	0.32	57	3.75	-0.66	35	2.31	-4.38	167	10.94	5.37	317	20.77	-1.13
Köln	DE	676	37.34	2.99	77	4.24	6.04	86	4.76	0.76	144	7.96	3.83	369	20.38	2.65
Nord - Pas-de-Calais	FR	547	36.31	5.65	30	2.00	0.05	40	2.68	8.68	120	7.98	5.68	356	23.65	5.88
Comunidad de Madrid	ES	852	36.27	6.29	125	5.32	8.36	114	4.86	5.63	286	12.18	9.62	327	13.90	3.38

NB: NUTS 2 regions are only taken into account if there are at least 300 thousand people working in KIS.

On the contrary, in the two Candidate countries — Bulgaria and Romania, as well as in Portugal, the regions most oriented towards knowledge-intensive services still fell below the European average.

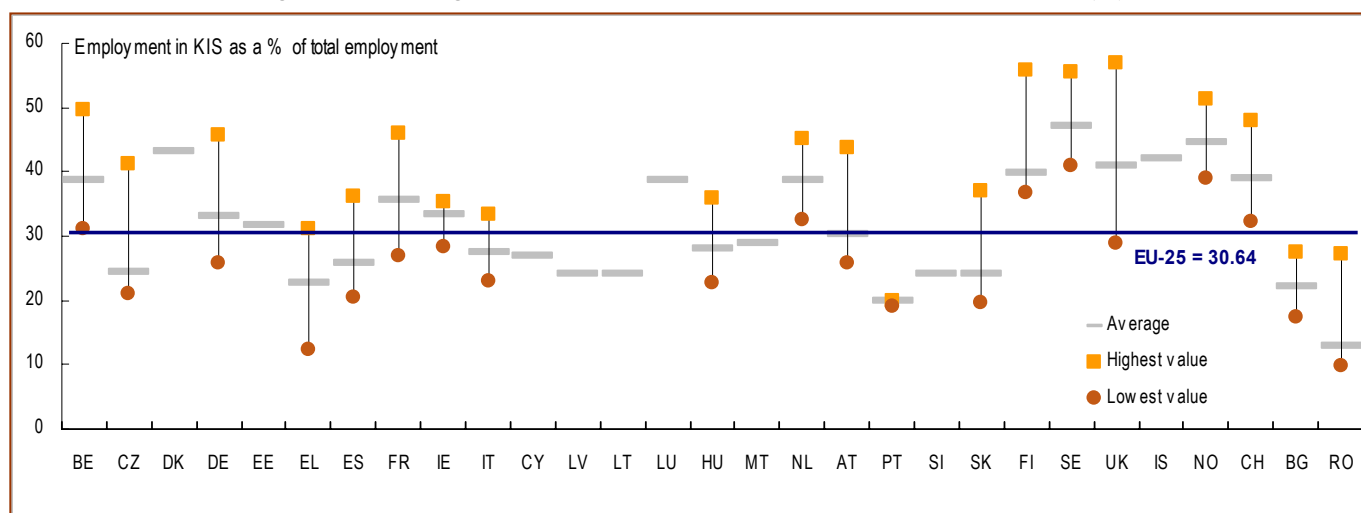
The national average of people employed in KIS was also lower than the EU-25 average in the Czech Republic, Greece, Spain, Italy, Cyprus, Latvia, Lithuania, Hungary, Malta, Slovenia and Slovakia.

In Åland (FI), Stockholm (SE) and Inner London (UK), knowledge-intensive services accounted for more than 50% of

total employment. In Région de Bruxelles-Capitale (BE), Hamburg (DE), Île de France (FR) and Utrecht (NL) as well as Zürich (CH), KIS represented between 45 and 50% of total employment.

The United Kingdom has the greatest regional disparities. In the highest region — Inner London, KIS accounted for 57% of total employment compared with 28.8% in the lowest — Northern Ireland. On the contrary, Portugal was the country with the lowest regional disparities, but employment in KIS represented only 19.9% of total employment.

Figure 3: Employment in knowledge-intensive services in % — 2003  
Highest value, average and lowest value — EU-25 Member States and other countries <sup>(1, 2)</sup>



Country	Region with highest value	%	Country average in %	Region with lowest value	%
BE	Région de Bruxelles-Capitale	49.76	38.71	Prov. West-Vlaanderen	31.19
CZ	Praha	41.34	24.47	Střední Morava	20.92
DK	-	-	43.21	-	-
DE	Hamburg	45.77	32.99	Dessau	25.66
EE	-	-	31.61	-	-
EL	Attiki	31.05	22.65	Sterea Ellada	12.26
ES	Comunidad de Madrid	36.27	25.90	La Rioja	20.54
FR	Île de France	45.99	35.52	Auvergne	27.00
IE	Southern and Eastern	35.21	33.43	Border, Midland and Western	28.21
IT	Lazio	33.43	27.43	Marche	23.12
CY	-	-	26.97	-	-
LV	-	-	23.97	-	-
LT	-	-	24.22	-	-
LU	-	-	38.59	-	-
HU	Közép-Magyarország	35.93	27.95	Közép-Dunántúl	22.66
MT	-	-	28.77	-	-
NL	Utrecht	45.20	38.75	Limburg (NL)	32.65
AT	Niederösterreich	43.66	30.26	Steiermark	25.72
PT	Continente	19.91	19.88	Região Autónoma dos Açores	19.15
SI	-	-	24.19	-	-
SK	Bratislavský kraj	36.92	24.16	Západné Slovensko	19.69
FI	Åland	55.70	39.72	Länsi-Suomi	36.76
SE	Stockholm	55.40	47.23	Småland med öarna	41.05
UK	Inner London	56.99	40.96	Northern Ireland	28.78
IS	-	-	41.93	-	-
NO	Oslo og Akershus	51.32	44.55	Hedmark og Oppland	39.05
CH	Zürich	47.93	38.91	Ostschweiz	32.29
BG	Yugozapaden	27.56	22.06	Yuzhen tsentralen	17.46
RO	Bucuresti	27.31	13.02	Sud	9.92

Note that, in contrast with Table 3, regions are included whatever the number of people employed in knowledge-intensive services (so long as data are reliable) and, to that end, leading regions may differ slightly.

(1) Exceptions to the reference year 2003 — NL and IS: 2002.

(2) The highest regional value in Portugal is for a NUTS 1 level region.



## ➤ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

### Sources

Employment data presented here originate from Eurostat. The database on *Statistics on high-tech industries and knowledge-intensive services* includes data on employment in high technology and medium-high technology manufacturing sectors, knowledge-intensive service sectors, high technology service sectors, other sub-sectors and reference sectors. The indicators are extracted and built up using data from the European Union Labour Force Survey — EU LFS.

The database covers a time series from 1994 onwards, but differences exist and certain years are missing. Existence of data further depends on their quality. Data are currently available at the national and regional levels for the 25 Member States of the European Union, the Candidate countries, Iceland, Norway and Switzerland. EU-25 regional data follow the NUTS 2003 nomenclature and are available at NUTS levels 1 and 2.

### Classification of high tech and knowledge intensive sectors

#### High tech and medium-high tech manufacturing sectors

The classification of high and medium-high technology manufacturing sectors is based on the Eurostat/OECD's classification — itself based on the ratio of R&D expenditure to GDP or R&D intensity. Since the EU LFS only allows reporting of NACE at the 2 digit level, some slight adaptations are necessary.

#### Knowledge-intensive and less knowledge-intensive services

Service sectors are defined according to their knowledge-intensity.

The two main groups are:

- Knowledge-intensive services — KIS — and
- Less Knowledge-intensive services — LKIS.

Each of these can be further broken into sub-groups.

### NACE

The data presented are based on the statistical classification of economic activities in the European Community, NACE Rev.1.1.

### NUTS

Regional data are presented according to the Nomenclature of Territorial Units for Statistics, NUTS 2003. Data in this publication are presented at the NUTS 2 level, subject to being statistically significant.

### Quality of the data

The guidelines on the sample size reliability of the data established by the EU LFS are applied to the database on high tech industries and knowledge-based services and therefore regions for which quality levels do not permit publication appear as not available and are flagged as unreliable. Regions for which quality levels define the data as unreliable but allow for publication are included in the rankings and flagged as unreliable.

Sector Code	Description	NACE Rev 1.1 codes
<b>MA_TOTAL</b>	<b>Manufacturing</b>	<b>15 to 37</b>
MA_H_MH_TOT	High and medium high technology manufacturing	24, 29 to 35
MA_HIGH_TEC	High technology manufacturing	30, 32 and 33
MA_MHIGH_TEC	Medium high technology manufacturing	24, 29, 31, 34 and 35
MA_LOW_TEC	Low-technology	15 to 22 and 36 to 37
MA_MLOW_TEC	Medium low technology	23 and 25 to 28
<b>SE_TOTAL</b>	<b>Services</b>	<b>50 to 99</b>
SE_KIS_TOT	Total knowledge-intensive services	61, 62, 64 to 67, 70 to 74, 80, 85 and 92
SE_KIS_HT	Knowledge-intensive high-technology services	64, 72, 73
SE_KIS_MS	Knowledge-intensive market services	61, 62, 70, 71, 74
SE_KIS_FS	Knowledge-intensive financial services	65, 66, 67
SE_KIS_OT	Other knowledge-intensive services	80, 85, 92
SE_LKIS_TOT	Total less-knowledge-intensive services	50, 51, 52, 55, 60, 63, 75, 90, 91, 93, 95 and 99
SE_LKIS_MS	Less-knowledge-intensive market services	50, 51, 52, 55, 60, 63
SE_LKIS_OT	Other less-knowledge-intensive services	75, 90, 91, 93, 95, 99

Due to a lack of employment data at the 2-digit level of NACE, employment by sector indicators for PL can not be calculated and therefore are not presented in this publication. The EU aggregate excludes Poland in such cases.

### Statistical abbreviations and symbols

- u unreliable
- : not available

# Further information:

## ➤ Reference publications

Title Statistics on Science and Technology in Europe, 2003 edition  
Catalogue No KS-57-03-104-EN-C Price EUR 35

## ➤ Databases

NewCronos, Theme 9, Domain: high\_tec

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