Business services

The freedom to provide services and the freedom of establishment are central principles to the internal market for services and are set out in the EC Treaty. They guarantee to EU enterprises the freedom to establish themselves in other Member States, and the freedom to provide services on the territory of another EU Member State. Box 22.1 presents developments regarding the directive of services, whose goal is to create a real internal market in services.

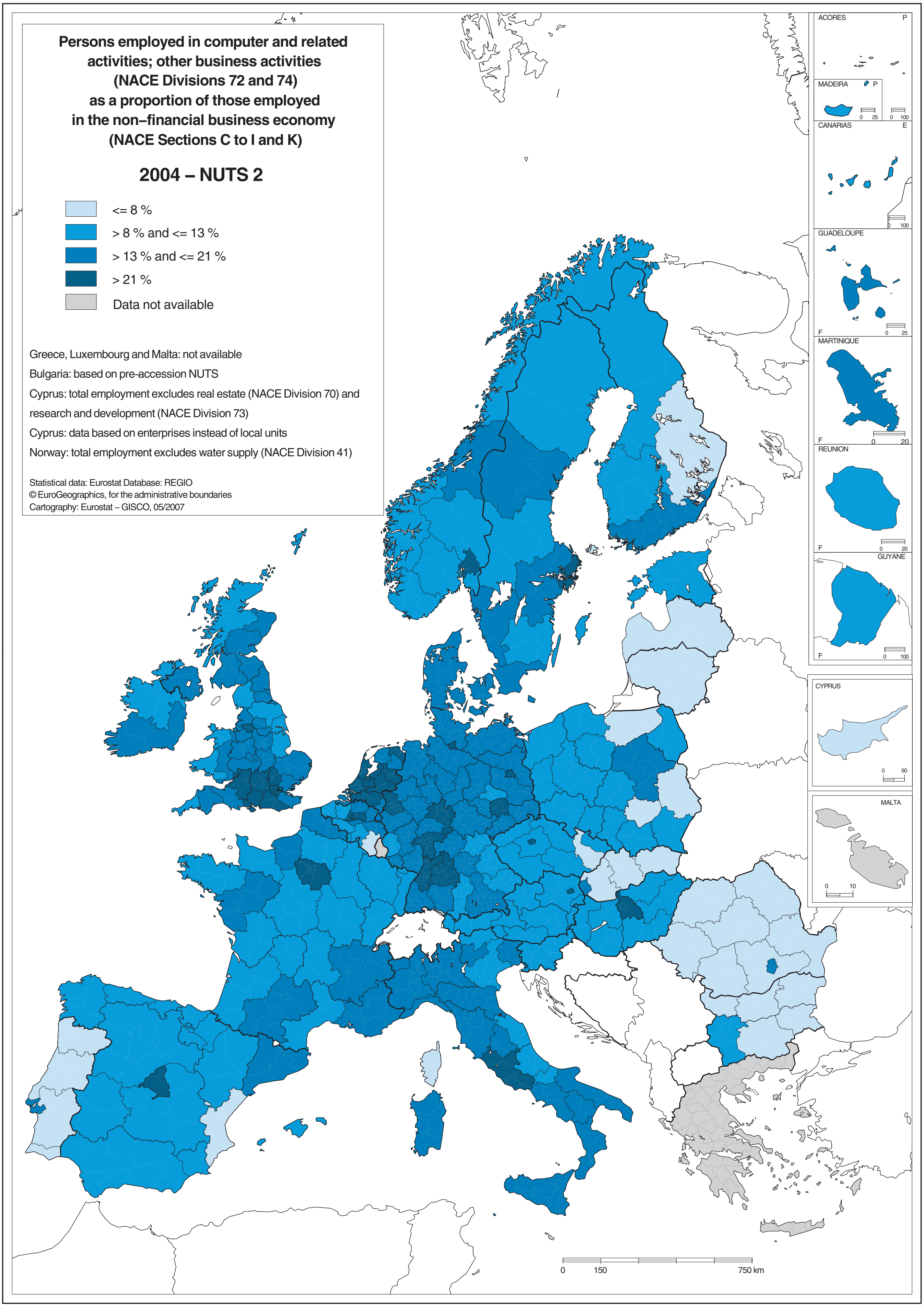
Business services are mainly supplied to other enterprises, while the public sector and households can also make use of these services, especially legal, architectural and engineering, and technical testing activities. Many of these services could be provided in-house by enterprises themselves or purchased (outsourced) from service providers, which enables the client enterprise to focus on its core activities. Given the considerable political interest and the flexibility and dynamics of the business services sector, in 2000 Eurostat launched a development project to collect data on these key areas of the economy, in particular as regards type of service supplied and type and residence of clients. From this source it can be seen that in 2004 some 86 % of turnover generated by business services enterprises in the EU [1] came from services supplied to enterprises, 10 % from services to the public sector and 4 % from services to households. The manufacturing sector's increased degree of outsourcing has made it into an important client of the business services sector. Indeed, enterprises active in the manufacturing sector (NACE Section D) represented 19 % of the total turnover of the business services sector. The ratio of payments for business services to total operating expenditure (here defined as personnel costs plus purchases of goods and services) for manufacturing enterprises reached 10 % in Denmark and ranged between 2 % and 6 % in most available countries, while outsourcing by manufacturing enterprises was not very widespread in 2004 in Latvia and Romania.

(1) Average based on data for Denmark, Germany, Greece, Spain, Latvia, Lithuania, Malta, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, the United Kingdom and Norway.

In this chapter, the term 'business services' is used to refer to the aggregate of two NACE divisions: computer services (NACE Division 72, as covered by Subchapter 22.1) and other business activities (NACE Division 74, the components of which are covered in Subchapters 22.2 to 22.6). As for the previous edition of this publication, renting and leasing, research and development activities, and real estate services (NACE Divisions 70, 71 and 73) are covered in Chapter 23, such that Chapters 22 and 23 cover the whole of NACE Section K.

NACE

72: Computer and related activities;
72.1: hardware consultancy;
72.2: software consultancy and supply;
72.3: data processing;
72.4: database activities;
72.5: maintenance and repair of office, accounting and computing machinery;
72.6: other computer related activities;
74: other business activities;
74.1: legal, accounting, book-keeping and auditing activities; tax consultancy; market research and public opinion polling; business and management consultancy; holdings;
74.2: architectural and engineering activities and related technical consultancy;
74.3: technical testing and analysis;
74.4: advertising;
74.5: labour recruitment and provision of personnel;
74.6: investigation and security activities;
74.7: industrial cleaning;
74.8: miscellaneous business activities n.e.c.


Persons employed in computer and related activities; other business activities (NACE Divisions 72 and 74) as a proportion of those employed in the non–financial business economy (NACE Sections C to I and K)
2004 – NUTS 2
<= 8 %
> 8 % and <= 13 %
> 13 % and <= 21 %
> 21 %
Data not available
Greece, Luxembourg and Malta: not available
Bulgaria: based on pre-accession NUTS
Cyprus: total employment excludes real estate (NACE Division 70) and research and development (NACE Division 73)
Cyprus: data based on enterprises instead of local units
Norway: total employment excludes water supply (NACE Division 41)
Statistical data: Eurostat Database: REGIO
© EuroGeographics, for the administrative boundaries
Cartography: Eurostat – GISCO, 05/2007
ACORES
MADEIRA
CANARIAS
GUADELOUPE
MARTINIQUE
REUNION
GUYANE
CYPRUS
MALTA
0 150 750 km

Box 22.1: internal market in services

The main objective of the directive [2] of the European Parliament and of the Council of 12 December 2006 on services in the internal market is to make progress towards a genuine internal market in services. The directive will have to be implemented by Member States within three years of its publication, therefore by 28 December 2009 at the latest.

In terms of activity coverage, the directive applies to a wide variety of services, whether provided to enterprises or to households. Without being exhaustive, the following can be mentioned as examples of services covered by the directive: industrial services such as the installation and maintenance of equipment; construction; distributive trades; hotels and restaurants; services of travel agencies; business services, such as computer services, most regulated professional activities, advertising, labour recruitment; real estate and renting services; as well as leisure and entertainment services (such as services provided by sports centres and amusement parks), information services (such as news agency activities and publishing), services in the area of training and education; and household support services (such as private nannies or gardening services).

However, the scope of the directive excludes: non-economic services of general interest (services which are not performed for an economic agent), financial services, electronic communication services and networks, services in the field of transport, services of temporary work agencies, healthcare, audiovisual and broadcasting services, gambling activities, activities which are connected with the exercise of official authority (such as notaries), social services relating to social housing, childcare and support of families and persons permanently or temporarily in need, and private security services.

(2) Directive 2006/123/EC of the European Parliament and of the Council of 12 December 2006 on Services in the Internal Market, Official Journal L376 of 27.12.2006, p. 36.

Table 22.1

Business services (NACE Divisions 72 and 74)
Structural profile, EU-27, 2004

	No. of enterprises		Turnover		Value added		Employment	
	(thousands)	(% of total)	(EUR million)	(% of total)	(EUR million)	(% of total)	(thousands)	(% of total)
Business services	3 900.6	100.0	1 450 148	100.0	739 621	100.0	19 433.3	100.0
Computer services	500.6	12.8	313 023	21.6	154 257	20.9	2 570.1	13.2
Other business activities	3 400.1	87.2	1 137 124	78.4	585 364	79.1	16 863.1	86.8
Legal, accounting & management services	1 409.0	36.1	404 343	27.9	221 644	30.0	4 390.6	22.6
Architectural & engineering activities; technical testing & analysis	833.0	21.4	220 633	15.2	108 250	14.6	2 442.1	12.6
Advertising	193.6	5.0	131 569	9.1	33 852	4.6	844.5	4.3
Labour recruitment & provision of personnel	65.4	1.7	97 196	6.7	74 526	10.1	2 911.8	15.0
Other business services	899.0	23.0	283 384	19.5	147 092	19.9	6 274.2	32.3

Source: Eurostat (SBS)

STRUCTURAL PROFILE

The EU-27's business services (NACE Divisions 72 and 74) sector comprised 3.9 million enterprises, about 7 % more than in the previous year, compared with an increase in the number of enterprises for the whole of the non-financial business economy of around 2 %. These enterprises together generated EUR 739.6 billion of value added and employed 19.4 million persons in 2004. As such, the business services sector accounted for 15.5 % of the persons employed in the non-financial business economy (NACE Sections C to I and K), while accounting for a slightly lower proportion of value added (14.5 %).

Among the two NACE divisions that make up the business services sector, computer services (NACE Division 72, see Subchapter 22.1) accounted for about one fifth (20.9 %) of sectoral value added in 2004, while the remainder was generated by the other business activities (NACE Division 74, as presented in Subchapters 22.2 to 22.6). Of these activities, the largest was legal, accounting and management services (NACE Group 74.1) which alone provided 30.0 % of all business services value added – see Subchapter 22.2, followed by the miscellaneous activities of other business services (NACE Groups 74.6 to 74.8), presented in Subchapter 22.6, that together contributed 19.9 % of business services value added. Architectural and engineering activities and technical testing (NACE Groups 74.2 and 74.3 – see Subchapter 22.3) contributed 14.6 % of business services value added. The two remaining subsectors are advertising (NACE Group 74.4 – see Subchapter 22.4) and labour recruitment and provision of personnel (NACE Group 74.5 - see Subchapter 22.5) which had shares of 4.6 % and 10.1 % of value added respectively. However, in employment terms, the importance of other business services (NACE Groups 74.6 to 74.8) and labour recruitment and provision of personnel (NACE Group 74.5) was much greater – see Table 22.1.

The United Kingdom was by far the largest contributor to the EU-27's business services sector in 2004: with EUR 203.5 billion of value added and 3.8 million persons employed, it generated 27.5 % of the EU-27's sectoral value added and employed 19.5 % of its workforce; indeed, for each of the business services covered in Subchapters 22.1 to 22.6, the United Kingdom contributed the greatest share of EU-27 value added.

Germany had the second largest business services sector, generating the equivalent of about two thirds of the British value added, while the level of employment (3.4 million) was closer to that recorded in the United Kingdom. France, Italy and Spain were the only other Member States that recorded more than EUR 50 billion of value added in 2004 in this sector. Unsurprisingly, in terms of the contribution to national non-financial business economy value added, the United Kingdom was the most specialised Member State, with business services contributing 21.1 % of non-financial business economy value added, compared with the EU-27's average of 14.5 % – see Table 22.3. Luxembourg, where business services contributed 16.8 % (2003) of the non-financial business economy value added, was also relatively highly specialised in these activities, closely followed by the Netherlands (16.3 %) and France (16.1 %). Note that none of the remaining Member States for which data are available recorded a contribution of business services to the non-financial business economy value added above the EU-27 average.

Table 22.2

Business services (NACE Divisions 72 and 74)
Share of non-financial business economy, EU-27, 2004 (%) (1)

	No. of enterprises	Turnover	Value added	Employment
Business services	20.6	7.6	14.5	15.5
Computer services	2.6	1.6	3.0	2.1
Other business activities	18.0	6.0	11.5	13.5
Legal, accounting & management services	7.5	2.1	4.3	3.5
Architectural & engineering activities; technical testing & analysis	4.4	1.2	2.1	2.0
Advertising	1.0	0.7	0.7	0.7
Labour recruitment & provision of personnel	0.3	0.5	1.5	2.3
Other business services	4.8	1.5	2.9	5.0

(1) Rounded estimate based on non-confidential data.
Source: Eurostat (SBS)

Table 22.3

Business services (NACE Divisions 72 and 74)
Structural profile: ranking of top five Member States, 2004

			Share of non-financial business economy			
Rank	Value added (EUR million) (1)	Employment (thousands) (1)	No. of enterprises (2)	Turnover (2)	Value added (2)	Employment (2)
1	United Kingdom (203 519)	United Kingdom (3 783.3)	Sweden (31.4 %)	United Kingdom (11.0 %)	United Kingdom (21.1 %)	Netherlands (23.9 %)
2	Germany (137 526)	Germany (3 428.2)	United Kingdom (30.4 %)	France (8.7 %)	Luxembourg (16.8 %)	Luxembourg (23.1 %)
3	France (115 933)	France (2 457.4)	Hungary (28.5 %)	Netherlands (8.4 %)	Netherlands (16.3 %)	United Kingdom (21.0 %)
4	Italy (74 657)	Italy (2 223.3)	Netherlands (25.6 %)	Sweden (8.2 %)	France (16.1 %)	France (17.2 %)
5	Spain (50 646)	Spain (1 921.5)	Luxembourg (25.6 %)	Slovenia (7.4 %)	Sweden (14.4 %)	Belgium (17.1 %)

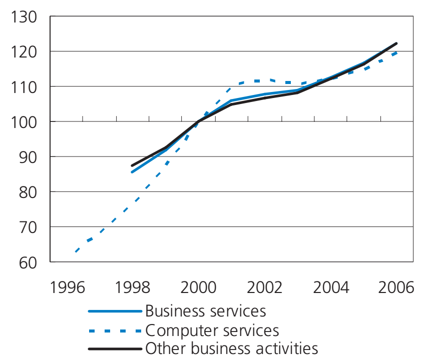
(1) Greece and Malta, not available; Luxembourg, 2003.
(2) Ireland, Greece, Cyprus and Malta, not available; Luxembourg, 2003.
Source: Eurostat (SBS)

The regional specialisation in business services is shown in the map on page 372 which is based on the non-financial business economy employment share of this sector. The region with the highest specialisation in business services in 2004 was Inner London where two fifths (40.5 %) of non-financial business economy employment was within this sector. As well as parts of the United Kingdom, several other countries had many regions specialised in these services, notably in the Netherlands and Germany. In a number of countries one region was particularly specialised in these services, typically around the capital city: for example in Praha (Czech Republic), Madrid (Spain), Île de France (France), Lazio (Italy), Budapest (Hungary), Wien (Austria), Lisboa (Portugal) and Stockholm (Sweden).

Figures 22.1 and 22.2 show the development of business services and some of its parts based on annual short-term statistics. The index of employment is available for the business services sector and the two NACE divisions that make up the sector. Developments show that the business services sector offered new employment opportunities, as the EU-27's index of employment for these activities grew, on average, by 2.9 % per annum between 2001 and 2006. Employment growth was particularly strong for other business activities where the index of the number of persons employed rose by an average of 3.2 % per annum over the same period, with the highest gain in employment being recorded in 2006 (5.0 %). Employment grew on average by 1.6 % per annum between 2001 and 2006 for computer services: with a high increase in the workforce recorded in 2001 (10.4 %), while more modest growth occurred in the following years (including a slight contraction of 0.8 % in 2003).

Figure 22.1

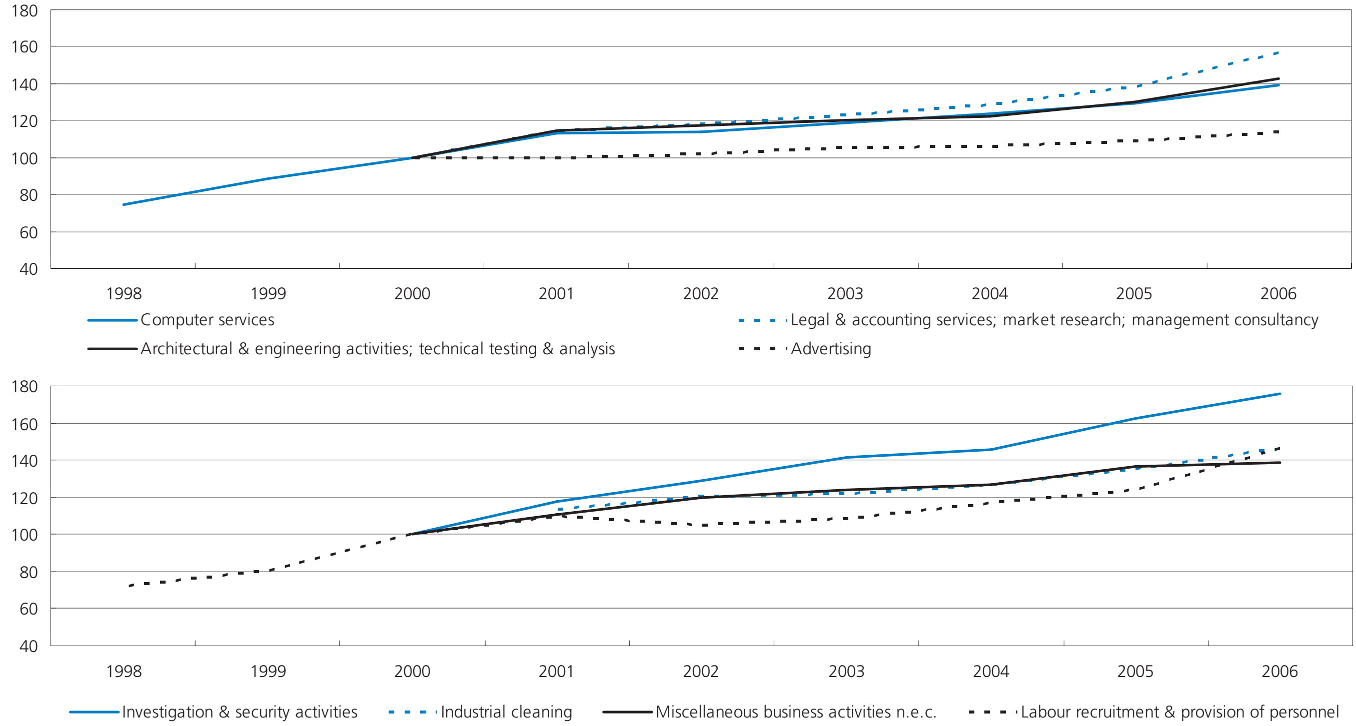
Business services
(NACE Divisions 72 and 74)
Index of employment, EU-27 (2000=100)



Source: Eurostat (STS)

Figure 22.2

Business services (NACE Divisions 72 and 74)
Index of turnover, EU-27 (2000=100)



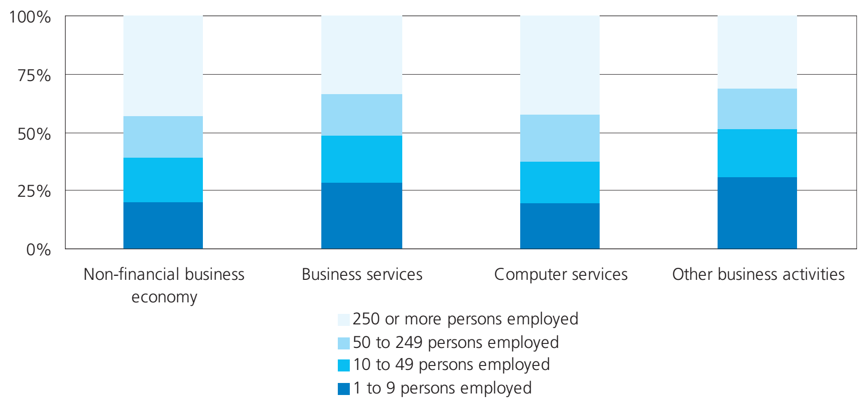
Source: Eurostat (STS)

A more detailed breakdown is available for an analysis of the turnover index for business services – see Figure 22.2. Although time-series are often short they generally show widespread turnover growth throughout the business services sector. Even advertising (NACE Group 74.4), where the turnover index fell slightly in 2001, and labour recruitment and provision of personnel (NACE Group 74.5), where the index contracted by 4.4 % in 2002, recorded consecutive year on year growth in the following years up to 2006. Over the period 2001 to 2006, investigation and security activities (NACE Group 74.6) recorded the fastest developments for the turnover index, with average growth of 8.4 % per annum. The next highest expansion occurred for legal and accounting services; market research and management consultancy, with average growth for the turnover index of 6.5 % per annum. For the remaining activities, the annual average growth rate for the index of turnover between 2001 and 2006 ranged between 2.6 % per annum for advertising (NACE Group 74.4) and 5.9 % per annum for labour recruitment and the provision of personnel (NACE Group 74.5).

In 2004, a size class breakdown of EU-27's business services value added showed that large enterprises (with more than 250 persons employed) generated about one third (33.6 %) of the total, a somewhat lower share than the non-financial business economy average (43.0 %) – see Figure 22.3. The contribution of medium-sized enterprises (with between 50 and 249 persons employed) and small enterprises (with between 10 to 49 persons employed) to sectoral value added was in both cases rather similar to that for the non-financial business economy as a whole. However, micro enterprises (with less than 10 persons employed) brought some 28.4 % of value added to the sector, 8.2 percentage points above the non-financial business economy average: nevertheless, micro enterprises in computer services generated just 19.4 % of this subsector's value added, whereas in other business activities, the share of micro enterprises was 30.8 %.

Figure 22.3

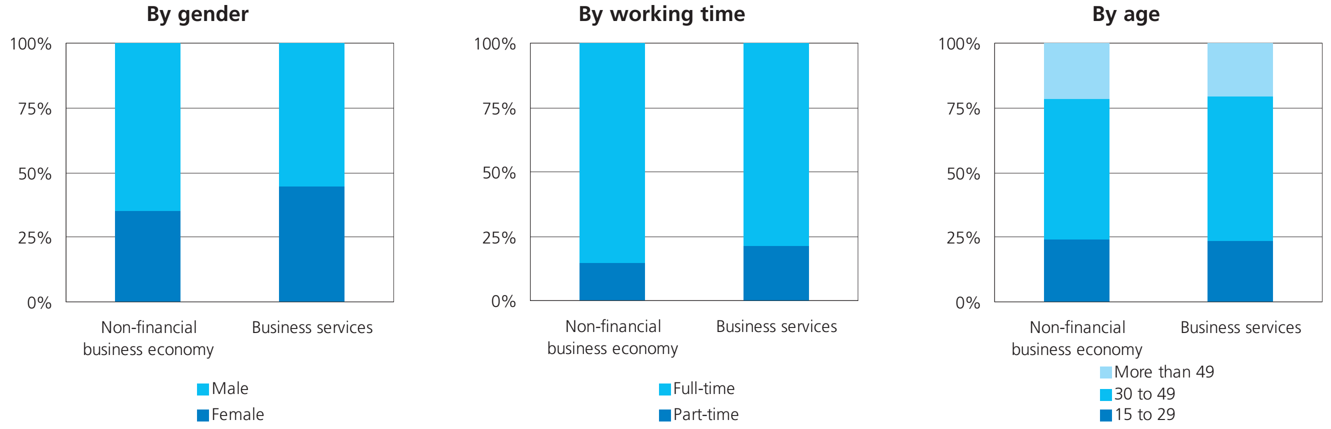
Business services (NACE Divisions 72 and 74)
Share of value added by enterprise size class, EU-27, 2004



Source: Eurostat (SBS)

Figure 22.4

Business services (NACE Divisions 72 and 74)
Labour force characteristics, EU-27, 2006



Source: Eurostat (LFS)

EMPLOYMENT CHARACTERISTICS

According to Labour Force Survey data (see Figures 22.4 and 22.5), male employment represented 55.4 % of the total number of persons employed in the EU-27's business services sector in 2006; a share that was 9.6 percentage points lower than that for the non-financial business economy (NACE Sections C to I and K) as a whole. However, among the two NACE divisions that compose the business services sector, male employment was considerably higher (77.6 %) for computer services (NACE Division 72), but much lower (50.9 %) for the other business activities (NACE Division 74).

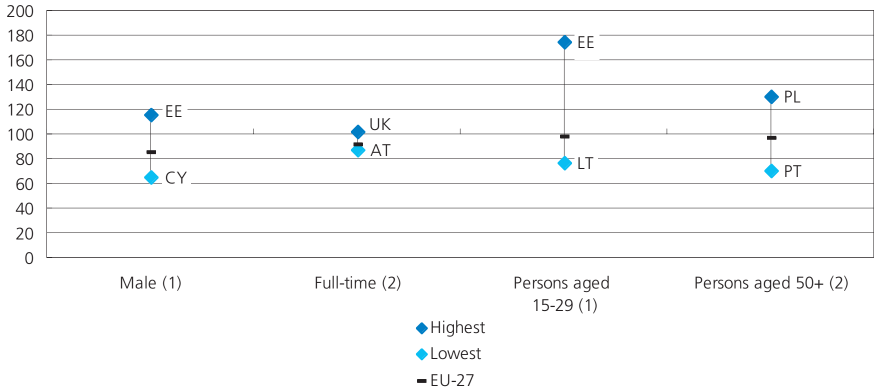
More than three quarters (78.7 %) of those employed in the EU-27's business services sector worked on a full-time basis, a working status that was less represented in this sector than in the non-financial business economy as a whole (85.6 %). There were significant differences between the two NACE divisions that make up the business services sector, as computer services recorded a full-time employment rate of 90.4 %, compared with a 76.4 % rate for other business activities. The full-time employment rate for computer services was similar to the rates recorded for several industrial NACE divisions.

The age structure of the EU-27's business services workforce was quite similar to that of the non-financial business economy as a whole in 2006, although the proportions of young persons (aged less than 30) and older persons (aged 50 or more) were both somewhat lower in business services, balanced by a slightly higher proportion of those aged between 30 and 49. In the computer services' workforce this age class was significantly more represented, 62.4 % compared with 54.2 % on average in the non-financial business economy, while the proportion of older persons (11.9 %) was almost half that for the whole of the non-financial business economy (21.6 %).

According to structural business statistics, the share of paid employees in the number of persons employed in the EU-27's business services sector in 2004 was 84.0 %, slightly lower than for non-financial business economy as a whole (86.2 %), and there was no great difference in this share between two NACE divisions that make up the sector.

Figure 22.5

Business services (NACE Divisions 72 and 74)
Labour force characteristics relative to national averages, 2006 (non-financial business economy=100)



(1) Luxembourg, not available.
(2) Ireland and Luxembourg, not available.
Source: Eurostat (LFS)

Table 22.4

Business services (NACE Divisions 72 and 74)
Total expenditure, EU-27, 2004

	Value (EUR million)				Share (% of total expenditure)		
	Total expenditure	Purchases of goods and services	Personnel costs	Investment in tangible goods	Purchases of goods and services	Personnel costs	Investment in tangible goods
Business services	1 247 915	705 189	490 049	52 678	56.5	39.3	4.2
Computer services	276 603	157 819	107 553	11 231	57.1	38.9	4.1
Other business activities	971 312	547 370	382 495	41 447	56.4	39.4	4.3
Legal, accounting & management services	336 609	184 472	131 713	20 424	54.8	39.1	6.1
Architectural & engineering activities; technical testing & analysis	191 527	116 720	67 733	7 074	60.9	35.4	3.7
Advertising (1)	115 726	93 962	19 544	2 220	81.2	16.9	1.9
Labour recruitment & provision of personnel	80 635	17 769	62 098	769	22.0	77.0	1.0
Other business services (1)	246 854	134 447	101 408	11 000	54.5	41.1	4.5

(1) Rounded estimates based on non-confidential data.
Source: Eurostat (SBS)

Table 22.5

Business services (NACE Divisions 72 and 74)
Productivity and profitability, EU-27, 2004

	Apparent labour productivity (EUR thousand)	Average personnel costs (EUR thousand)	Wage adjusted labour productivity (%)	Gross operating rate (%)
Business services	38.1	30.0	126.8	17.2
Computer services	60.0	48.6	123.5	14.9
Other business activities	34.7	27.1	128.1	17.8
Legal, accounting & management services	50.5	40.2	125.6	22.2
Architectural & engineering activities; technical testing & analysis	44.3	38.3	115.8	18.4
Advertising	40.1	28.4	141.1	10.9
Labour recruitment & provision of personnel	25.6	21.7	117.7	12.8
Other business services	23.4	18.3	127.8	16.1

Source: Eurostat (SBS)

COSTS, PRODUCTIVITY AND PROFITABILITY

A breakdown of total expenditure for the EU-27's business services sector shows that more than half (56.5 %) was dedicated to the purchases of goods and services in 2004, compared with more than three quarters (78.7 %) for the non-financial business economy as a whole (NACE Sections C to I and K). Personnel costs represented almost two fifths (39.3 %) of total expenditure for this sector, more than twice the equivalent share for the non-financial business economy. The two NACE divisions that make up the business services sector displayed a similar breakdown to that of the sector as a whole.

In 2004, apparent labour productivity and average personnel costs for the EU-27's business services sector (respectively EUR 38 100 per person employed and EUR 30 000 per employee) were almost the same as the non-financial business economy averages. Among the two NACE divisions that make up the sector, apparent labour productivity reached EUR 60 000 per person employed for computer services, where average personnel costs were EUR 48 600 per employee, while both indicators for other business activities were slightly below the sectoral and the non-financial business economy averages.

The combination of such levels of apparent labour productivity and average personnel costs led to a wage adjusted labour productivity ratio of 126.8 % for the business services sector in 2004 for the EU-27, therefore 21.2 percentage points below the non-financial business economy average. The ratio of gross operating surplus to turnover (the gross operating rate) was 17.2 % in 2004, significantly higher than the non-financial business economy average of 11.0 %.

EXPORTS OF BUSINESS SERVICES

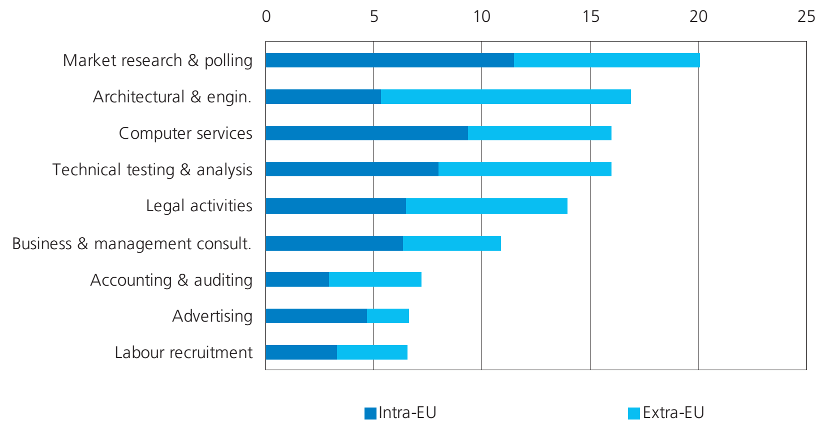
In 2005, as part of a development project, a number of Member States [(3)] carried out a survey (reference year 2004) with the aim of gathering more detailed information on exports of business services. An analysis based on the location of clients gives information on the proportion of turnover for business services coming from clients residing in the same country as the supplier, or from exports (clients in another Member State or a non-Community country) – see Figure 22.6. The results show that the market for business services was mainly local, as customers residing in the same country as their service provider contributed at least four fifths of business services' turnover in 2004. Such results can be explained, in part, by the requirement of geographical proximity for some services, as well as cultural (language and consumption characteristics, for instance), economic (such as taxes) and legal factors. Labour recruitment (NACE Group 74.5), advertising (NACE Group 74.4) and accounting and auditing (NACE Class 74.12) were among the business services most locally sold (more than 90 % of total turnover), while 20.1 % of turnover for market research and polling (NACE Class 74.13) activities came from exports; this figure was broken down as 11.5 % from intra-EU customers and 8.6 % from extra-EU customers. Other activities that derived a relatively high share of their turnover from exports of business services included architectural and engineering activities (17 %), technical testing and analysis (16 %) and computer services (16 %). Among the Member States, the share of exports reached 30.7 % in Denmark, while four other relatively small Member States also showed high shares of business services turnover coming from exports: namely, Latvia, Slovakia, Malta and Lithuania, all with an export contribution to turnover that ranged from 15.6 % to 23.0 %. The United Kingdom was the only other participant to report that exports of business services were in excess of 15 % of sectoral turnover.

The qualitative part of the survey aimed to investigate reasons for business services enterprises' exports. The most frequently reported reason for exporting business services was that the products were cutting edge or in a specialised niche, as this was reported by 47 % of the enterprises exporting business services, while 22 % reported that they did so because they belonged to a multi-national group, and 18 % because their domestic market was too small; note that for this part of the survey, multiple answers were allowed.

(3) Denmark, Germany, Greece, Spain, Latvia, Lithuania, Romania, Slovenia, Slovakia, Finland, Sweden, the United Kingdom and Norway.

Figure 22.6

Exports of business services (NACE Divisions 72 and 74) by location of client, average, 2004 (% share of total turnover) (1)



(1) Weighted average based on data for Denmark, Germany, Greece, Spain, Latvia, Lithuania, Romania, Slovenia, Slovakia, Finland, Sweden, the United Kingdom and Norway.
Source: Eurostat (SBS)

22.1: COMPUTER SERVICES

Computer services (NACE Division 72) covers software and computing services, which include consultancy activities for hardware or software, data processing activities, database activities and the maintenance and repair of office and information technology machinery. Note that although this subchapter includes the repair of computers it does not cover their actual manufacture (NACE Class 30.02), nor their wholesaling, retailing, or renting (NACE Classes 51.84, 52.48 and 71.33).

This sector is at the forefront of the information society along with telecommunications – see Subchapter 21.2. Enterprises delivering software and computer services support clients in a broad range of areas, in almost all economic activities. It is quite common for enterprises to out-source their requirements for hardware and software to specialist providers. The ability of such services to be traded across borders has been assisted by improved telecommunications, notably growing access to broadband Internet. The world's top software and IT services enterprise (groups) in 2005 are shown in Table 22.6.

Issues faced by this sector include notably the development of open source technology, anti-trust rulings concerning the bundling of applications and operating systems, the protection of intellectual property rights and patentability of software, and the security of software – particularly in relation to the use of the Internet.

Table 22.6

World's top software and IT services enterprise (groups), 2006 (1)

	Software and IT services revenue (EUR million)	Corporate revenue (EUR million)	Number of employees (units)
IBM	50 263	72 582	366 345
Microsoft	29 106	31 688	61 000
EDS	15 735	15 735	117 000
Hewlett-Packard	13 842	69 047	150 000
Accenture	13 615	13 615	123 000
Computer Sciences	11 197	11 197	79 000
Oracle	9 397	9 397	49 872
SAP	7 960	8 028	32 205
Hitachi	7 186	64 428	35 600
Capgemini (2)	7 077	7 077	59 324

(1) Revenue converted at USD 1.2556 = EUR 1.
(2) Number of employees, 2005.
Source: Software Magazine's Annual Software 500, King Content Co., Newton, Mass., 2006

Free and open-source software has become an alternative source of software to traditional software providers that dominate the market overall. The European Commission has encouraged interoperability of software, and the enforcement of this has been one of the main points behind its long-running dispute with Microsoft stemming from the 2004 anti-trust ruling concerning the Windows® operating system: daily fines of EUR 1.5 million were imposed by the European Commission in July 2006, backdated to December 2005. Microsoft and the European Commission are discussing compliance with the anti-trust ruling in the context of the Vista version of Windows.

The protection of intellectual property rights is a double issue for this sector, as software suppliers provide solutions to manage digital rights for other content providers, as well as being concerned about protecting their own rights – see Chapter 21 for information on intellectual property rights in general.

One of the broader issues facing the information society is the security of communication networks and IT, and computer services have a leading role to play in this area. In May 2006 the European Commission adopted a communication [(4)] on a strategy for a secure information society – dialogue, partnership and empowerment. The proposed strategy emphasises the virtue of technological diversity, as well as the importance of openness and interoperability. In tackling security challenges, a three-pronged approach has been developed embracing specific network and information security measures, the regulatory framework for electronic communications (which includes privacy and data protection issues), and the fight against cyber-crime.

[(4)] COM(2006) 251.

Table 22.7

Computer services (NACE Division 72)
Structural profile: ranking of top five Member States, 2004

Rank	Share of EU-27 value added (%) (1)	Share of EU-27 employment (%) (1)	Value added specialisation ratio (EU-27=100) (2)	Employment specialisation ratio (EU-27=100) (2)
1	United Kingdom (30.5)	United Kingdom (22.3)	United Kingdom (161.0)	Sweden (184.7)
2	Germany (18.4)	Germany (14.4)	Sweden (154.1)	United Kingdom (155.0)
3	France (14.7)	Italy (13.9)	France (104.1)	Finland (147.8)
4	Italy (9.9)	France (13.4)	Denmark (103.5)	Netherlands (132.7)
5	Spain (5.2)	Spain (7.2)	Netherlands (95.5)	Denmark (126.5)

(1) Greece and Malta, not available; Luxembourg, 2003.
(2) Ireland, Greece, Cyprus and Malta, not available; Luxembourg, 2003.
Source: Eurostat (SBS)

STRUCTURAL PROFILE

The EU-27's computer services (NACE Division 72) sector generated EUR 154.3 billion of value added and employed 2.6 million persons in 2004, therefore contributing 20.9 % of business services (NACE Divisions 72 and 74) value added and 13.2 % of its workforce. There were slightly more than half a million enterprises reported within the computer services sector in the EU-27 in 2004.

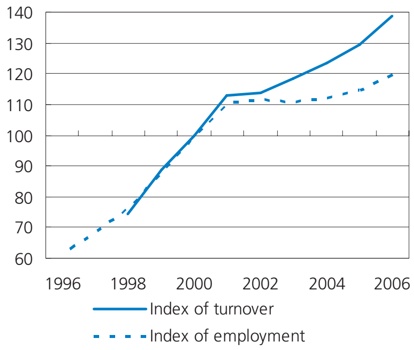
The United Kingdom had by far the largest computer services sector within the EU-27, providing about three tenths of EU-27's value added and somewhat more than one fifth of the employment total – see Table 22.7. The next largest national sector was found in Germany, with a significantly lower proportion of both the EU-27's value added and employment than in the United Kingdom. Unsurprisingly, the United Kingdom was the most specialised Member State [5] within computer services in so far as the contribution of this activity to national non-financial business economy value added is concerned, it was 4.9 %, compared with an EU-27 average of 3.0 %. The second highest contribution among the Member States was recorded in Sweden (4.7 %). In terms of employment specialisation, this ranking was reversed with Sweden being the most specialised, followed by the United Kingdom.

Annualised short-term statistics show that computer services (NACE Division 72) were a very dynamic activity within the EU-27 up until 2001, as witnessed by the 14.8 % annual average growth rate for the turnover index during the period 1998 to 2001 and the 12.4 % annual average growth rate for the employment index between 1996 and 2001. In 2002 however, EU-27 turnover and employment indices developed much more sedately (0.6 % and 1.2 % growth respectively). In the following year, employment even contracted by 0.8 %, before recovering gradually and accelerating to 4.5 % growth by 2006. From 2003 to 2006, year on year growth rates for the index of turnover were posted between 4.1 % (2004) and 7.2 % (2006) – see Figure 22.7.

(5) Luxembourg, 2003; Ireland, Greece, Cyprus and Malta, not available.

Figure 22.7

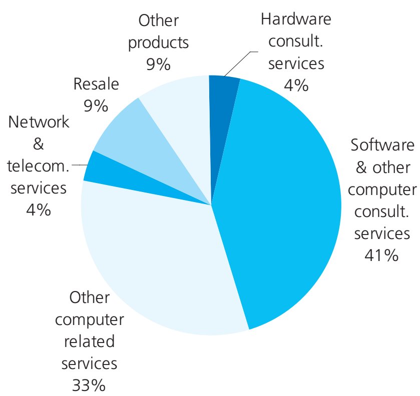
Computer services (NACE Division 72) Evolution of main indicators, EU-27 (2000=100)



Source: Eurostat (STS)

Figure 22.8

Computer services (NACE Division 72) Breakdown of turnover in computing services by product, average, 2004 (%) (1)



(1) Weighted average based on data for Denmark, Germany, Greece, Spain, Lithuania, Malta, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden and the United Kingdom.
Source: Eurostat (SBS)

A PRODUCT ANALYSIS

An analysis of the breakdown of turnover in computer services is available for a subset of Member States [6], based on the data from a development project compiled on a voluntary basis. The results show that software and other computer consultancy services generated the largest share (41 %) of the sector's turnover – see Figure 22.8 – followed by other computer related activities (33 %) that includes: computer facilities management and data processing services; database services; systems maintenance services; and computer hardware servicing, repair and maintenance of computing machinery and equipment.

COSTS, PRODUCTIVITY AND PROFITABILITY

In 2004 purchases of goods and services accounted for almost three fifths (57.1 %) of total expenditure in the EU-27's computer services sector, while personnel costs accounted for 38.9 %.

Apparent labour productivity in the EU-27's computer services sector was EUR 60 000 per person employed in 2004 and average personnel costs were EUR 48 600 per employee, the highest levels for both of these indicators among the business services subsectors presented in Subchapters 22.1 to 22.6. The wage adjusted labour productivity ratio, derived from these two indicators, was 123.5 % for computer and related activities sector, while the gross operating rate (calculated as the gross operating surplus divided by turnover) was 14.9 %, both of these measures were slightly below the business services average (126.8 % and 17.2 % respectively).

(6) Denmark, Germany, Greece, Spain, Lithuania, Malta, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden and the United Kingdom.

22.2: LEGAL, ACCOUNTING AND MANAGEMENT SERVICES

This subchapter extends across a variety of professional activities that include legal services, accounting, book-keeping, auditing, tax consultancy, market research, public opinion polling, business and management consultancy services, as well as management activities relating to holding companies; these are all classified within NACE Group 74.1.

Enterprises in this sector are generally small, and a common legal form is that of partnerships. Another characteristic of these activities is that households are more likely to use these services than most of the other activities within the business services sector, for instance when they need an accountant, a lawyer, a notary or a tax adviser. Note that activities connected with the exercise of official authority (including part of the work of notaries) are excluded from the scope of the Directive on services in the internal market.

Legal services cover the activities of advocates, barristers, solicitors, notaries, registered lawyers and legal consultants. According to figures from CCBE [7], there were about 1.1 million lawyer members of the Bar in the EU in 2006.

[7] CCBE (the Council of Bars and Law Societies of Europe), more information at: http://www.ccbe.org; approximate figures for the EU-27; excluding Malta.

STRUCTURAL PROFILE

The 1.4 million enterprises active in the EU-27's legal, accounting and management services sector (NACE Group 74.1) generated EUR 221.6 billion of value added in 2004, accounting for 30.0 % of the business services total (NACE Divisions 72 and 74). With some 4.4 million persons employed in this sector, it contributed more than one fifth (22.6 %) of the business services workforce. Legal, accounting and management services had therefore the largest value added among the business services activities covered in Subchapters 22.1 to 22.6 and was the second largest employer across these activities in 2004.

The United Kingdom generated more than one quarter (26.8 %) of the EU-27's value added in this sector in 2004, the largest contribution among the Member States, followed by Germany that contributed another fifth (20.2 %). Those two Member States were also the largest employers in the sector – see Table 22.8. However, this activity was also particularly important in the Benelux countries and in Italy, which together with the United Kingdom were the five most specialised Member States in this activity in terms of this sector's contribution to non-financial business economy value added as a whole. Indeed, the legal, accounting and management services sector accounted for 7.2 % (2003) of non-financial business economy value added in Luxembourg, 6.2 % of the total in the United Kingdom, 5.5 % in the Netherlands, and 4.5 % in both Italy and Belgium, compared with an average 4.3 % for the EU-27.

A PRODUCT ANALYSIS

Tables 22.9 to 22.12 provide, for a limited set of countries, a product analysis for four of the five NACE classes covered by the legal, accounting and management services sector. In all of the countries shown in Table 22.9 concerning the legal activities subsector, legal advisory and representation services accounted for the highest proportion of turnover, except in Latvia, Lithuania, Malta and Romania. Among legal advisory and representation services the most popular was services in relation to business/commercial law. For enterprises in accounting, book-keeping, auditing and tax consultancy activities (Table 22.10), there was roughly a three-way split in terms of the most important products contributing to turnover among auditing services, tax consultancy services (including tax returns) and accounting and book-keeping services (excluding tax returns). In the market research and public opinion polling subsector, market research services were clearly the most important products, of which quantitative ad-hoc surveys generally accounted for the largest share of turnover among the Member States with available data – see Table 22.11 – followed by quantitative continuous/regular surveys. The turnover derived by those enterprises operating within business and management consultancy activities was spread across a wide range of products, as shown in Table 22.12.

Table 22.8

Legal, accounting, book-keeping and auditing activities; tax consultancy; market research and public opinion polling; business and management consultancy; holdings (NACE Group 74.1)
Structural profile: ranking of top five Member States, 2004

Rank	Share of EU-27 value added (%) (1)	Share of EU-27 employment (%) (1)	Value added specialisation ratio (EU-27=100) (2)	Employment specialisation ratio (EU-27=100) (2)
1	United Kingdom (26.8)	United Kingdom (20.9)	Luxembourg (163.5)	Netherlands (167.7)
2	Germany (20.2)	Germany (17.8)	United Kingdom (141.9)	United Kingdom (145.3)
3	France (13.9)	Italy (12.3)	Netherlands (126.1)	Luxembourg (137.5)
4	Italy (11.6)	France (10.9)	Italy (104.2)	Belgium (123.3)
5	Spain (6.0)	Spain (8.8)	Belgium (102.8)	Germany (107.4)

(1) Greece and Malta, not available; Luxembourg, 2003.
(2) Ireland, Greece, Cyprus and Malta, not available; Luxembourg, 2003.
Source: Eurostat (SBS)

Table 22.9

Legal activities (NACE Class 74.11)
Breakdown of turnover by product, 2004 (%) (1)

	Average	DK	DE	EL	ES	LV	LT	MT	PL	RO	SI	SK	FI	SE	UK
Legal advisory and representation services	66	87	61	59	42	26	7	33	52	5	74	87	35	73	76
In criminal law	3	4	6	5	5	c	0	2	3	0	8	1	3	7	1
In business/commercial law	39	57	18	29	15	23	4	11	25	5	38	83	23	53	56
In labour law	7	2	12	12	6	c	3	1	4	0	8	2	2	1	5
In civil law	17	23	25	14	16	1	1	19	20	0	20	3	7	12	13
Other legal advisory and information services	7	2	9	10	11	9	80	13	19	14	13	11	0	3	4
Patent and copyright consultancy services	5	1	11	0	3	20	11	2	4	0	6	1	57	16	2
Notarial services	11	0	16	9	39	43	0	15	16	0	4	1	0	0	1
Other products	11	10	3	22	5	3	3	37	9	80	3	0	7	8	16

(1) c: confidential.
Source: Eurostat (SBS)

Table 22.10

Accounting, book-keeping and auditing activities; tax consultancy (NACE Class 74.12)
Breakdown of turnover by product, 2004 (%) (1)

	Average	DK	DE	EL	ES	LV	LT	MT	PT	RO	SI	SK	FI	SE	UK
Accounting, book-keeping & auditing; tax consultancy	79	87	93	93	92	92	85	c	64	90	83	71	92	87	60
Auditing services	23	38	18	20	12	c	39	20	2	34	17	23	18	44	32
Tax consultancy services, including tax returns	20	12	22	43	23	14	17	20	5	15	9	33	9	8	20
Accounting and book-keeping services, except tax returns	22	33	36	9	21	28	24	8	50	40	44	4	45	26	4
Payroll services	6	1	9	9	14	c	1	30	0	0	6	8	9	1	1
Other accounting, book-keeping & auditing services	8	3	8	12	23	4	4	c	6	0	7	3	10	7	2
Business and management consultancy services	14	12	5	5	4	5	10	18	16	9	7	14	4	8	27
Other products	7	2	2	2	4	4	5	c	20	1	10	14	4	5	13

(1) c: confidential.
Source: Eurostat (SBS)

Table 22.11

Market research and public opinion polling activities (NACE Class 74.13)
Breakdown of turnover by product, 2004 (%) (1)

	Average	DK	DE	EL	ES	LV	LT	MT	PL	PT	RO	SI	SK	FI	SE	UK
Market research services	87	79	94	84	89	83	79	38	68	47	78	43	36	89	89	90
Qualitative surveys	11	15	19	27	9	7	5	27	14	10	16	5	5	3	12	7
Quantitative ad-hoc surveys	29	29	36	25	19	6	13	c	20	38	9	12	17	17	32	30
Quantitative continuous/regular surveys	21	22	24	11	17	12	6	c	14	0	28	12	9	65	20	22
Market research other than surveys	11	13	10	15	22	51	52	0	3	0	2	11	0	2	3	10
Other market research services	15	0	5	6	23	7	1	0	17	0	23	4	6	1	22	20
Public opinion polling services	4	3	4	11	7	6	13	c	10	17	1	4	1	2	2	2
Other products	9	18	2	5	4	11	8	c	22	35	20	52	63	10	9	8

(1) c: confidential.
Source: Eurostat (SBS)

COSTS, PRODUCTIVITY AND PROFITABILITY

The pattern of expenditure in the EU-27's legal, accounting and management services sector was very similar to that displayed for the whole of the business services sector, namely a little more than half (54.8 %) of total expenditure was dedicated to purchases of goods and services, less than two fifths (39.1 %) to personnel costs, and the remaining share to investment in tangible goods.

The EU-27's legal, accounting and management services sector registered apparent labour productivity of EUR 50 500 per person employed in 2004, the second highest level of productivity recorded among all the activities that make up the business services activities covered in Subchapters 22.1 to 22.6. Average personnel costs were EUR 40 200 per employee in the EU-27, and the combination of these two indicators led to a wage adjusted labour productivity ratio of 125.6 % in the EU-27, a fairly typical ratio for business services. Among the Member States [8] only the Belgian and Portuguese legal, accounting and management services sectors had a wage adjusted labour productivity ratio below 100 % in 2004, meaning that in these two Member States apparent labour productivity was lower than average personnel costs.

The gross operating rate of the EU-27's legal, accounting and management services sector was 22.2 % in 2004, the highest rate among the business services sectors, and 5.0 percentage points above the business services average (17.2 %). In several Member States, the gross operating rate stood above 25 % for this sector, reaching a high of 43.6 % in Italy.

[8] Luxembourg, 2003; Greece and Malta, not available.

Table 22.12

Business and management consultancy activities (NACE Class 74.14)
Breakdown of turnover by product, 2004 (%) (1)

	Average	DK	DE	EL	ES	LV	LT	MT	PT	RO	SI	SK	FI	SE	UK
Business and management consultancy services	59	78	93	91	92	88	84	78	56	41	53	80	53	66	35
Business organisation consultancy services	11	5	19	12	14	7	55	19	13	9	11	14	7	17	5
Strategic consult. services, including mergers & acquisitions	6	12	12	7	13	c	4	1	4	1	2	1	14	5	2
Financial management consulting services	4	5	7	8	11	4	4	3	2	4	4	0	2	2	2
Human resources management consulting services	7	9	13	4	4	4	1	1	2	0	3	1	14	3	4
Marketing management consulting services	3	4	7	14	4	c	3	15	:	5	8	6	3	2	1
Production management consulting services	3	6	8	2	2	1	0	1	:	1	4	3	1	1	0
Public relations services	4	5	7	7	5	18	5	0	:	1	1	0	1	2	2
Project management services other than for construction	3	5	6	4	0	15	3	1	:	1	3	23	1	2	1
Other business and management consultancy services	19	27	12	34	38	12	9	36	35	19	17	31	12	32	17
Accounting, book-keeping & auditing; tax consultancy	11	3	0	5	3	3	4	:	18	45	6	6	1	2	18
Other products	31	19	7	3	5	9	12	c	27	13	41	15	46	32	47

(1) c: confidential.
Source: Eurostat (SBS)

22.3: ARCHITECTURAL AND ENGINEERING ACTIVITIES; TECHNICAL TESTING AND ANALYSIS

Architectural and engineering activities covered by NACE Group 74.2 include architectural consulting activities (such as building design and drafting, supervision of construction, town and city planning, and landscape architecture) and various engineering and technical activities related to construction, as well as geological and prospecting activities, weather forecasting activities and geodetic surveying. Technical testing and analysis activities (NACE Group 74.3) include environmental measuring, testing of food hygiene, buildings and equipment, as well as the periodic testing of vehicles for roadworthiness.

Table 22.13 shows the ten largest architectural enterprises (groups) in the EU, based on information compiled by the Swedish Federation of Consulting Engineers and Architects (STD). As can be seen, the United Kingdom dominated the market in 2006, as the four largest groups and several other top ten groups were British. However, even the largest groups were relatively small, with only the three largest having 600 or more employees.

Table 22.13

Top ten architectural groups, EU-25, 2006

		Number of employees (units)	Turnover (EUR million)
AEDAS Architects Group	UK	1 329	99.2
Foster & Partners Ltd	UK	625	65.1
RMJM	UK	600	:
Broadway Malyan Ltd	UK	500	:
White Architects AB	SE	322	29.2
PRP Architects Ltd	UK	320	30.1
SWECO FFNS	SE	310	36.7
Nightingale Associates	UK	310	28.0
Chapman Taylor LLP	UK	300	38.0
gmp-Architekten von Gerkan, Marg und Partner	DE	300	38.0
INBO Architects/consultants	NL	272	26.0
Barton Willmore Group	UK	270	30.1

Source: Swedish Federation of Consulting Engineers and Architects (STD), Sector Review, November 2006

Table 22.14

Architectural and engineering activities and related technical consultancy; technical testing and analysis (NACE Groups 74.2 and 74.3)
Structural profile: ranking of top five Member States, 2004

Rank	Share of EU-27 value added (%) (1)	Share of EU-27 employment (%) (1)	Value added specialisation ratio (EU-27=100) (2)	Employment specialisation ratio (EU-27=100) (2)
1	United Kingdom (23.7)	Germany (17.1)	United Kingdom (125.2)	Sweden (136.5)
2	Germany (19.3)	United Kingdom (15.8)	Sweden (119.6)	Finland (129.5)
3	France (14.3)	Italy (14.1)	Netherlands (114.1)	Netherlands (120.2)
4	Italy (10.5)	France (10.9)	Slovenia (113.9)	Italy (119.8)
5	Spain (8.4)	Spain (10.1)	Denmark (113.2)	Luxembourg (119.6)

(1) Greece and Malta, not available; Luxembourg, 2003.
(2) Ireland, Greece, Cyprus and Malta, not available; Luxembourg, 2003.
Source: Eurostat (SBS)

STRUCTURAL PROFILE

Some EUR 108.3 billion of added value was generated in 2004 by the EU-27's architectural, engineering and technical activities sector (NACE Groups 74.2 and 74.3), corresponding to 14.6 % of the total value added for business services (NACE Divisions 72 and 74). There were 2.4 million persons employed across the 833 000 enterprises that were reported in this sector, equivalent to 12.6 % of the EU-27's business services' workforce. Among the six business services sectors covered in Subchapters 22.1 to 22.6, the architectural, engineering and technical activities sector was the fourth largest in terms of value added and the fifth largest in terms of employment.

Unsurprisingly, the United Kingdom contributed the greatest share (23.7 %) of EU-27 value added in architectural, engineering and technical activities, the second largest contribution being recorded by Germany (19.3 %). However, Germany had a larger workforce in this sector than the United Kingdom – see Table 22.14. In value added terms, the United Kingdom and Sweden were the most specialised Member States in these activities in 2004, as this sector contributed 2.7 % and 2.5 % respectively to national non-financial business economy value added.

A PRODUCT ANALYSIS

Tables 22.15 and 22.16 provide, for a limited set of countries, a product analysis of the two NACE groups covered by this subchapter. In almost all of the countries shown in Table 22.15 concerning architectural and engineering activities and related technical consultancy, engineering design services generated the highest share of turnover. However, in Malta, construction services generated almost half of all sales made by those enterprises within architectural and engineering activities and related technical consultancy. Table 22.16 shows a similar breakdown for the technical testing and analysis subsector where most countries reported that the largest proportion of their turnover from technical testing and analysis services came from the miscellaneous category of other technical testing inspection and analysis services. However, technical automobile inspection services contributed the largest proportion of technical testing and analysis services turnover in Finland (67 %), Lithuania (27 %) and Slovenia (16 %). Only in Slovakia did composition and purity testing and analysis services generate the largest proportion of technical testing and analysis services turnover (35 %).

Table 22.15

Architectural and engineering activities and related technical consultancy (NACE Group 74.2)
Breakdown of turnover by product, 2004 (%) (1)

	Average	DK	DE	EL	ES	LV	LT	MT	PT	RO	SI	SK	FI	SE	UK
Architectural services	14	12	21	26	26	23	18	14	24	25	6	7	18	7	5
Advisory and pre-design architectural services	2	4	2	4	4	4	1	1	9	5	2	2	2	2	1
Architect. design services for buildings & other structures	10	8	18	20	18	18	15	11	12	16	3	1	15	4	2
Other architectural services	2	1	2	2	4	0	2	2	2	4	0	4	1	1	2
Engineering design services incl. for turnkey projects	c	45	58	43	30	c	30	8	33	32	27	50	63	44	c
Urban planning services	2	4	1	2	2	1	2	0	3	1	2	1	2	0	3
Project management services	8	10	7	3	16	9	30	7	9	5	10	1	1	4	7
Other architectural and engineering services	c	16	8	18	21	c	14	10	0	21	12	5	4	27	c
Construction	7	0	0	6	1	4	3	47	5	4	13	24	2	13	13
Technical testing and analysis services	1	0	1	0	1	c	2	c	0	0	1	1	0	0	2
Other products	c	13	4	1	3	c	1	c	27	12	29	11	11	4	c

(1) c: confidential.
Source: Eurostat (SBS)

Table 22.16

Technical testing and analysis (NACE Group 74.3)
Breakdown of turnover by product, 2004 (%) (1)

	Average	DK	DE	EL	ES	LV	LT	MT	PL	RO	SI	SK	FI	SE	UK
Technical testing and analysis services	77	90	93	94	92	c	90	c	71	75	58	87	89	97	42
Composition and purity testing and analysis services	15	14	20	23	12	16	26	c	12	5	9	35	3	13	12
Testing & analysis services of physical properties	8	4	11	24	11	c	13	0	4	2	6	7	2	6	4
Testing & analysis, integr. mechan. & electr. systems services	6	19	8	3	5	28	11	c	6	4	16	1	5	14	c
Technical automobile inspection services	13	0	16	2	17	18	27	c	10	5	16	12	67	27	c
Other technical testing inspection and analysis services	32	52	37	42	47	25	13	87	40	58	10	32	12	37	13
Engineering design services incl. for turnkey projects	1	4	1	3	1	c	0	7	1	0	c	0	0	3	c
Other architectural and engineering services	2	2	1	0	4	c	3	:	6	0	5	2	1	0	c
Other products	c	4	5	3	3	c	7	c	22	25	c	11	11	1	c

(1) c: confidential.
Source: Eurostat (SBS)

COSTS, PRODUCTIVITY AND PROFITABILITY

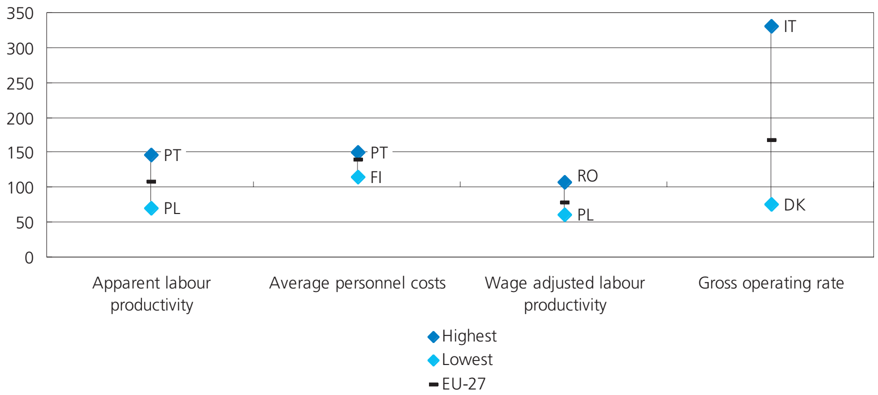
The share of purchases of goods and services in total expenditure was 60.9 %, while 35.4 % of the total was accounted for by personnel costs and the remaining 3.7 % by investment in tangible goods.

In 2004, apparent labour productivity was relatively high in the EU-27's architectural, engineering and technical activities sector (EUR 44 300 of value added per person employed) compared with a business services average (EUR 38 100). However, average personnel costs were also relatively high in this sector at EUR 38 300 per employee compared with a EUR 30 000 average for business services. As a result, the wage adjusted labour productivity ratio for the EU-27s architectural, engineering and technical activities sector was 115.8 %, which was the lowest among the business services sectors presented in Subchapters 22.1 to 22.6. Only in Romania was the wage adjusted labour productivity ratio for architectural, engineering and technical activities sector above the national average for the non-financial business economy – see Figure 22.9.

Contrasting with the relatively low wage adjusted labour productivity ratios, the gross operating rate of the EU-27's architectural, engineering and technical activities sector was high, reaching 18.4 % in 2004, which was the second highest rate among the business services sectors presented in Subchapters 22.1 to 22.6. This indicator was notably high in Italy (37.8 %), particularly when compared with the national non-financial business economy average (11.4 %). At the other end of the spectrum, in Slovakia, France and Denmark, sectoral profitability (as measured by the gross operating rate) was lower than for the national non-financial business economy as a whole.

Figure 22.9

Architectural and engineering activities and related technical consultancy; technical testing and analysis (NACE Groups 74.2 and 74.3)
Productivity and profitability characteristics relative to national averages, 2004 (non-financial business economy=100) (1)



(1) Ireland, Greece, Cyprus and Malta, not available; Luxembourg, 2003.
Source: Eurostat (SBS)

22.4: ADVERTISING AND DIRECT MARKETING

Advertising and direct marketing enterprises engage in services aimed at promoting ideas, goods and services, be it to the general public, specific target groups or other enterprises. These activities are covered by NACE Group 74.4 which includes the creation and placing of outdoor advertising, the sale of advertisement time and space, and the distribution or delivery of advertising material, as well as direct marketing, sponsorship and sales promotion services. Note that advertising enterprises buying and reselling sales time or space tend to have relatively high level of turnover (and therefore a relatively low gross operating rate), while purchases of goods and services tend to be high relative to personnel costs, reflecting the distributive nature of this part of their activity.

Advertising and direct marketing are among the activities for which expenditures tend to rapidly decrease when the economic climate is not favourable. Nonetheless, when an upturn is foreseen, expenditure on these services tends to increase faster than the economy in general. This sector was affected by the slowdown observed in the EU (and global) economy in 2001 and 2002, and in particular by the collapse in 2001 of the dot.com boom, however short-term statistics indicate that there has been growth since.

Recent changes in terms of legislation affecting the advertising activities occurred in May 2007, when both the European Parliament and Council agreed on the main aims of the European Commission's original proposal for the new directive on audiovisual media services without frontiers. It will offer a comprehensive legal framework that covers all audiovisual media services, including TV advertising; the directive should enter into force by the end of 2007.

STRUCTURAL PROFILE

The 193 600 enterprises that took part in advertising activities (NACE Group 74.4) generated EUR 33.9 billion of value added in the EU-27 in 2004, contributing 4.6 % of the business services (NACE Divisions 72 and 74) wealth creation. The advertising sector employed 844 500 persons, 4.3 % of the business services workforce.

With EUR 7.5 billion, the United Kingdom was the largest contributor to the EU-27's value added in advertising activities in 2004, equivalent to 22.1 % of the total – see Table 22.17. France (19.0 %) and Germany (18.1 %) were the next largest contributors. However, the contribution of this sector to non-financial business economy value added in the United Kingdom (0.8 %) was not much above the EU-27 average of 0.7 %. Using this measure, the Czech Republic, France and Sweden (each 0.9 %) were more specialised [9].

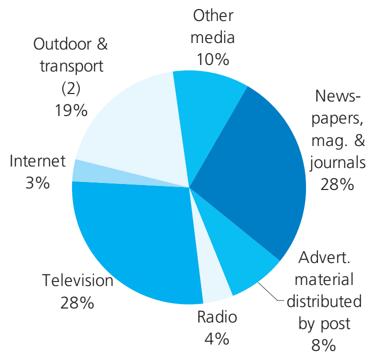
A number of Member States provided turnover data for 2004 in the advertising sector broken down by media – see Figure 22.10. This sector's turnover was dominated by advertising in newspapers, magazines and journals and advertising on television which both represented more than one quarter (28 %) of total turnover, while outdoor and transport-based media accounted for almost one fifth (19 %) of total advertising turnover. At the other end of the spectrum, the Internet accounted for 3 % of total sales from advertising activities in 2004, the smallest share of all the media covered, with a share just below that of radio (4 %). Another type of analysis, providing a breakdown of the advertising sector's turnover by product, shows that sales were dominated by the sale or leasing of advertising space/time which represented almost half of all turnover – it should be noted that this product is similar to a retail or wholesale product, in that a large proportion of the turnover represents the reselling (normally with a margin) of space/time purchased from a media organisation, rather than income for the provision of a service produced directly by advertising enterprises themselves.

(9) Luxembourg, 2003; Ireland, Greece, Cyprus and Malta, not available.

The series for annual short-term statistics for the EU-27's advertising activities starts in 2000 and shows a downturn in the developments of turnover in 2001 (-0.1 % compared with the previous year) that may be associated with a general slowdown in economic activity. In the following years to 2006, the turnover index for advertising activities grew by at least 1.8 % each year except in 2004 when the index remained virtually unchanged (0.7 %); nevertheless, growth rates for advertising activities were systematically lower or similar to those for business services between 2001 and 2006.

Figure 22.10

Advertising activities (NACE Group 74.4) Breakdown of turnover by type of media, 2004 (1)



(1) Average based on data for Germany, Spain, Latvia, Lithuania, Romania, Slovenia, Slovakia, Finland, Sweden and United Kingdom.
(2) Airplanes, buses, taxis, posters etc.
Source: Eurostat (SBS)

Table 22.17

Advertising (NACE Group 74.4)
Structural profile: ranking of top five Member States, 2004

Rank	Share of EU-27 value added (%) (1)	Share of EU-27 employment (%) (1)	Value added specialisation ratio (EU-27=100) (2)	Employment specialisation ratio (EU-27=100) (2)
1	United Kingdom (22.1)	Germany (25.1)	Czech Republic (140.7)	Denmark (188.0)
2	France (19.0)	France (12.6)	Sweden (136.1)	Netherlands (160.1)
3	Germany (18.1)	Spain (11.9)	France (134.9)	Germany (151.4)
4	Spain (9.2)	United Kingdom (11.3)	United Kingdom (116.6)	Sweden (150.5)
5	Italy (7.5)	Italy (6.0)	Netherlands (112.5)	Austria (121.6)

(1) Greece and Malta, not available; Luxembourg, 2003.
(2) Ireland, Greece, Cyprus and Malta, not available; Luxembourg, 2003.
Source: Eurostat (SBS)

COSTS, PRODUCTIVITY AND PROFITABILITY

A large proportion of total expenditure within advertising activities was accounted for by purchases of goods and services (81.2 %), the highest share among the business services covered in Subchapters 22.1 to 22.6, while personnel costs accounted for less than one fifth of the total (16.9 %) and investment in tangible goods for less than 2 %.

In 2004, apparent labour productivity in the EU-27's advertising activities was EUR 40 100 per person employed and average personnel costs were EUR 28 400 per employee. As a result, the wage adjusted labour productivity ratio for EU-27 advertising activities in 2004 was 141.1 %, the highest ratio among the business services presented in this chapter; nevertheless, still below the non-financial business economy average (148.0 %). Among the Member States with available data, only in Germany, Hungary, Italy, Portugal, the United Kingdom, Lithuania and France was the wage adjusted labour productivity ratio for advertising activities above the national non-financial business economy average.

The gross operating rate of advertising activities was relatively low, at just 10.9 % for the EU-27 in 2004; the lowest rate among business services sectors. In Romania and Luxembourg (2003), personnel costs exceeded value added, leading to a negative gross operating surplus and therefore a negative gross operating rate.

22.5: LABOUR RECRUITMENT AND TEMPORARY WORK SERVICES

Activities covered in this subchapter include personnel search, selection referral, head-hunting and job placement services, be they supplied to an individual looking for work or to an enterprise trying to hire (NACE Group 74.5). The data presented also cover labour-contracting activities (for example, temporary work agencies); however, they do not comprise farm labouring or the performing arts.

Labour recruitment and temporary work services have grown mainly as a consequence of the outsourcing trend, using the flexibility and expertise provided by enterprises in this sector (for example, knowledge of the employment market and selection procedures) instead of trying to employ personnel directly. Activities of temporary work agencies are excluded from the scope of the Directive on services in the internal market, but not other parts of this sector, notably labour recruitment/placement services.

On 27 June 2007, the European Commission proposed in a Communication the establishment of eight common principles of flexicurity (10), a policy approach that gains growing importance as an instrument that combines labour market flexibility with employment security and the need to respect workers rights and working conditions. This policy is a response to the challenges posed by globalisation, with the aim of making EU labour markets more flexible while providing employment security at the same time. In this framework, enterprises acting in labour recruitment and temporary work services are directly concerned.

(10) For more information, see: http://ec.europa.eu/employment_social/news/2007/jun/flexicurity_en.pdf.

STRUCTURAL PROFILE

The EU-27's labour recruitment and provision of personnel sector (NACE Group 74.5) generated EUR 74.5 billion of value added in the EU-27 in 2004 and therefore contributed 10.1 % of the wealth that was created in the business services sector. With 2.9 million persons employed across 65 400 enterprises, the sector of labour recruitment and provision of personnel represented a much larger share of the EU-27's business services workforce (15 %) than its corresponding share of value added, reflecting the nature of much of this sector – namely, to employ people to undertake work for clients in other sectors.

Among the Member States, more than one third of the EU-27's value added came from the United Kingdom (34.8 %), the largest market for labour recruitment and provision of personnel, as well as the largest employer – see Table 22.18. France and Germany were respectively the second and third largest

Table 22.18

Labour recruitment and provision of personnel (NACE Group 74.5)
Structural profile: ranking of top five Member States, 2004

Rank	Share of EU-27 value added (%) (1)	Share of EU-27 employment (%) (1)	Value added specialisation ratio (EU-27=100) (2)	Employment specialisation ratio (EU-27=100) (2)
1	United Kingdom (34.8)	United Kingdom (25.2)	France (186.0)	Luxembourg (379.4)
2	France (26.2)	France (20.9)	United Kingdom (183.9)	Netherlands (292.4)
3	Germany (10.9)	Germany (12.4)	Belgium (159.8)	Belgium (192.6)
4	Netherlands (6.6)	Netherlands (10.8)	Netherlands (144.2)	France (182.5)
5	Italy (4.9)	Spain (8.0)	Luxembourg (104.4)	United Kingdom (175.1)

(1) Greece and Malta, not available; Luxembourg, 2003.
(2) Ireland, Greece, Cyprus and Malta, not available; Luxembourg, 2003.
Source: Eurostat (SBS)

Table 22.19

Labour recruitment services (NACE Group 74.5)
Breakdown of turnover of by product, 2004 (%) (1)

	Average	DK	DE	EL	ES	LV	LT	PL	RO	SI	SK	FI	SE	UK
Placement services of personnel	10	12	3	38	7	76	60	30	46	7	22	3	6	12
Executive search services	2	6	2	12	3	8	17	19	28	0	15	0	3	2
Office support personnel and other workers	8	6	1	26	5	67	42	11	17	7	7	3	3	11
Supply services of personnel	85	86	94	51	92	18	30	48	31	91	76	91	93	82
Commercial/trade	9	1	4	8	8	6	2	4	3	8	8	7	2	11
Industrial/manufacturing	24	21	37	1	36	7	19	7	6	40	49	17	18	19
Horeca	2	3	1	c	7	0	0	1	1	7	0	20	1	2
Medical	4	29	3	0	1	0	0	2	0	1	0	0	3	5
Education	1	0	0	2	0	0	0	2	0	1	2	0	0	2
Transport/warehousing/logistics	12	4	19	c	7	c	0	20	7	4	2	1	13	10
Computer and telecommunication	7	0	2	3	3	c	0	2	1	6	2	5	16	9
Other office support personnel	12	23	5	19	20	0	9	2	6	14	4	11	26	13
Others	14	4	22	18	10	c	0	8	7	11	9	32	14	12
Other additional products	5	2	3	11	1	6	10	22	24	2	3	6	1	6

(1) c: confidential.
Source: Eurostat (SBS)

contributors, both in terms of value added or employment, while none of the remaining Member States contributed more than 10 % to EU-27 value added. Given the share of EU-27 value added provided by France and the United Kingdom, it is not surprising that these two Member States [11] were the most specialised in labour recruitment and provision of personnel in terms of this sector's contribution to non-financial business economy (NACE Sections C to I and K) value added. They were joined by Belgium, the Netherlands and Luxembourg, which were the only other Member States to report some degree of specialisation in these activities.

According to annual short-term business statistics, the index of turnover for the EU-27's labour recruitment and provision of personnel sector grew at a rapid pace from 1996 to 2001, on average by 18.6 % per annum, before contracting by 4.4 % in 2002. The turnover index subsequently recovered and an upward trend was observed through to 2006, with sales growth of 18.1 % in the latest year for which data are available.

(11) Luxembourg, 2003; Ireland, Greece, Cyprus and Malta, not available.

Table 22.20

Number of hours supplied by labour recruitment services, breakdown by type of personnel, 2004 (% of total)

	DK	DE	GR	ES	LV	LT	PL	RO	SI	SK	FI	SE	UK
Commercial, trade	0.7	4.1	15.4	9.4	33.8	3.3	1.1	41.8	6.6	10.1	8.4	2.5	8.5
Industrial, manufacturing	28.3	44.2	:	39.1	37.8	75.9	91.2	12.8	17.0	51.9	21.4	14.0	22.6
Horeca	4.4	1.2	0.0	7.6	0.0	0.0	0.2	7.4	22.2	2.6	22.7	1.5	6.0
Medical	23.8	2.1	1.3	0.6	0.0	0.0	0.6	0.0	2.2	0.0	:	2.3	4.7
Education	0.0	0.0	5.1	0.1	0.0	0.0	0.0	2.7	0.3	0.5	:	0.2	2.8
Transport, warehousing, logistics	6.3	18.1	:	6.1	:	0.0	3.7	10.4	12.5	2.6	0.7	7.9	7.4
Computer and telecommunication	1.0	1.9	2.9	2.7	:	0.0	0.3	7.3	11.6	6.7	2.3	11.3	11.1
Other office support personnel	27.6	4.3	43.8	20.9	1.9	1.4	0.5	12.8	14.0	5.6	11.7	10.5	36.3
Others	7.9	24.2	31.0	13.3	:	19.4	2.4	4.7	13.5	20.0	32.6	49.7	0.6

Source: Eurostat (SBS)

A PRODUCT ANALYSIS

Table 22.19 presents a breakdown of turnover by product for the labour recruitment and temporary work services sector for a limited set of Member States. In 2004, supply services of personnel generated the largest share of turnover in most of the Member States for which data are available, as compared with placement services. Only in Latvia and Lithuania, did the placement services of personnel (executive search services and office support personnel and other workers) generate more than half of the total sales. However, placement services of personnel were also the most important labour recruitment and temporary work services in terms of turnover in Romania, where they accounted for 46 % of total sales.

NUMBER OF HOURS WORKED SUPPLIED BY LABOUR RECRUITMENT SERVICES

Table 22.20 provides an analysis of the number of hours worked by type of personnel. The country coverage is limited to those countries with complete or nearly complete data sets for 2004. Hours worked supplied to the industrial activities represented the largest proportion of the total number of hours supplied in a majority of Member States for which data are available, with shares that reached 75.9 % in Lithuania and 91.2 % in Poland. In Denmark, while the largest proportion of hours worked supplied by labour recruitment services was also for the industrial sector (28.3 %), other office support personnel was also important (27.6 % of the total hours supplied), as well as medical personnel (23.8 %).

COSTS, PRODUCTIVITY AND PROFITABILITY

About three quarters (77.0 %) of total expenditure in the EU-27's labour recruitment and provision of personnel sector was dedicated to personnel costs, a little above one fifth to purchases of goods and services (22.0 %), and the remaining 1 % in the form of investment in tangible goods.

Apparent labour productivity, average personnel costs and the wage adjusted labour productivity were all lower in the EU-27's labour recruitment and provision of personnel sector than respective averages for business services (NACE Divisions 72 and 74) in 2004. Indeed, apparent labour productivity was EUR 25 600 per person employed for labour recruitment and provision of personnel (EUR 38 100 for the business services), average personnel costs were EUR 21 700 per employee (EUR 30 000 for business services) and the wage adjusted labour productivity ratio was 117.7 % (126.8 % for business services). However, note that the first two ratios are to some extent influenced by the high incidence of part-time and temporary work in the labour recruitment and provision of personnel sector, as both of these measures are based on simple head counts of persons employed or employees, while the wage adjusted labour productivity ratio is less affected by these characteristics of the workforce.

22.6: OTHER BUSINESS SERVICES

The business services covered here include security services, such as the transport of valuables and security guard/watchman activities (NACE Group 74.6), industrial cleaning, including interior and exterior cleaning of buildings of all types as well as cleaning of public means of transport (NACE Group 74.7), and miscellaneous business activities (NACE Group 74.8) which includes professional business services such as photographic, secretarial and translation activities, and operational business services such as packaging services.

Table 22.21

Other business services (NACE Groups 74.6, 74.7 and 74.8)
Structural profile, EU-27, 2004

	No. of enterprises (thousands)	Turnover (EUR million)	Value added (EUR million)	Employment (thousands)
Other business services	899.0	283 384	147 092	6 274.2
Investigation & security activities	53.2	32 697	22 753	1 153.0
Industrial cleaning	161.5	61 292	43 216	2 883.6
Miscellaneous business activities n.e.c.	684.3	189 395	81 122	2 237.6

Source: Eurostat (SBS)

Security services are excluded from the scope of the latest Directive on services in the internal market, but not other parts of this sector such as industrial cleaning and miscellaneous business activities.

STRUCTURAL PROFILE

The other business services sector (NACE Groups 74.6 to 74.8) created EUR 147.1 billion of value added in the EU-27's in 2004, which represented 19.9 % of the business services total; this wealth was generated by almost 900 000 enterprises. This sector's contribution to business services employment was 6.3 million persons or a 32.3 % share. Among the three subsectors covered (at the NACE group level) by the other business services sector, miscellaneous business activities (NACE Group 74.8) was the largest in value added terms (EUR 81.1 billion), accounting for a 55.2 % share of the sectoral total. However, industrial cleaning (NACE Group 74.7) had the largest workforce of the three subsectors covered, employing 2.9 million persons – see Table 22.21.

More than one quarter of the EU-27's value added in the other business services sector came from the United Kingdom (25.8 %), which was also most specialised in terms of this sector's share of non-financial business economy value added – see Table 22.22.

Annual short-term business statistics shows positive developments for the index of turnover from 2000 to 2006 for each of the three subsectors (in terms of NACE groups) that make up the other business services sector. The most rapid pace of sales growth was recorded for investigation and security activities, where turnover rose by an average of 9.9 % per annum, followed by industrial cleaning (8.0 % per annum) and miscellaneous business activities (6.7 % per annum). For comparison, the index of turnover for business services as a whole grew on average by 7.6 % per annum.

Table 22.22

Other business services (NACE Groups 74.6, 74.7 and 74.8)
Structural profile: ranking of top five Member States, 2004

Rank	Share of EU-27 value added (%) (1)	Share of EU-27 employment (%) (1)	Value added specialisation ratio (EU-27=100) (2)	Employment specialisation ratio (EU-27=100) (2)
1	United Kingdom (25.8)	Germany (20.5)	United Kingdom (136.4)	Germany (123.9)
2	Germany (19.8)	United Kingdom (17.2)	Luxembourg (111.2)	Spain (119.6)
3	France (14.3)	Spain (12.3)	Spain (103.1)	United Kingdom (119.3)
4	Italy (11.1)	Italy (11.7)	France (101.7)	Hungary (107.8)
5	Spain (9.3)	France (10.4)	Italy (99.5)	Luxembourg (105.0)

(1) Greece and Malta, not available; Luxembourg, 2003.
(2) Ireland, Greece, Cyprus and Malta, not available; Luxembourg, 2003.
Source: Eurostat (SBS)

COSTS, PRODUCTIVITY AND PROFITABILITY

A breakdown of expenditure within the EU-27's other business services sector was very similar to that for the business services as a whole. The largest item of expenditure was purchases of goods and services, which accounted for more than half (54.5 %) of total expenditure in this sector. The share of purchases of goods and services in total expenditure varied considerably between the three subsectors, from a high of 66.1 % for miscellaneous business activities n.e.c., to 31.7 % and 31.6 % for investigation and security activities and for industrial cleaning.

Apparent labour productivity and average personnel costs were relatively low for the EU-27's other business services sector (NACE Groups 74.6 to 74.8). In 2004, apparent labour productivity was EUR 23 400 per person employed and average personnel costs were EUR 18 300 per employee, in both cases these values were lower than for any of the other business services sectors presented in Subchapters 22.1 to 22.5; note these ratios are given for headcounts and that the relatively low figure may reflect, to some degree, a high propensity to employ on a part-time basis within these activities. Among the three subsectors, the lowest values were recorded for industrial cleaning, while the highest values were recorded for miscellaneous business activities (although both ratios nevertheless remained below business services' averages). The combination of these two indicators resulted in a wage adjusted labour productivity ratio of 127.8 % for the EU-27's other business services sector in 2004, very similar to that for the whole of business services (126.8 %). The other business services sector recorded a gross operating rate of 16.1 %, slightly below the business services average (17.2 %). Among the three subsectors, these two indicators were lowest for investigation and security activities (NACE Group 74.6), and (once again) highest for miscellaneous business activities.

Table 22.23

Computer services (NACE Division 72)
Main indicators, 2004

	EU-27	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR	IT	CY	LV	LT
No. of enterprises (thousands)	500.6	10.9	2.6	23.4	7.0	45.2	0.8	4.3	:	26.4	49.1	86.8	0.2	0.9	0.9
Turnover (EUR million)	313 023	7 570	204	2 601	6 615	56 841	173	6 742	:	17 266	46 766	35 704	111	151	209
Production (EUR million)	277 688	7 423	183	2 129	5 651	46 882	146	3 749	:	13 760	43 184	34 505	102	131	161
Value added (EUR million)	154 257	3 283	77	1 029	3 197	28 375	71	2 713	:	7 982	22 605	15 246	68	71	68
Gross operating surplus (EUR million)	46 704	867	33	403	787	9 021	21	1 524	:	1 883	2 861	5 550	20	24	30
Purchases of goods & services (EUR million)	157 819	4 290	132	1 596	3 522	29 711	102	4 031	:	9 451	24 486	20 469	43	81	141
Personnel costs (EUR million)	107 553	2 416	44	627	2 410	19 354	51	1 189	:	6 100	19 744	9 696	48	47	38
Investment in tangible goods (EUR million)	11 231	388	14	174	261	2 518	8	91	:	536	1 133	1 296	3	11	11
Employment (thousands)	2 570	49	12	51	43	370	4	29	:	185	345	358	2	6	6
Apparent labour prod. (EUR thousand)	60.0	66.6	6.3	20.3	74.0	76.6	16.5	93.8	:	43.1	65.4	42.6	39.2	12.8	12.0
Average personnel costs (EUR thousand)	48.6	62.8	4.6	17.5	60.6	57.7	12.8	45.8	:	37.1	57.7	38.6	28.2	9.1	7.2
Wage adjusted labour productivity (%)	123.5	106.1	136.0	116.1	122.3	132.7	129.3	205.0	:	116.1	113.4	110.2	139.2	141.0	166.7
Gross operating rate (%)	14.9	11.4	15.9	15.5	11.9	15.9	11.9	22.6	:	10.9	6.1	15.5	18.0	15.7	14.5
Investment / employment (EUR thousand)	4.4	7.9	1.2	3.4	6.0	6.8	1.9	3.2	:	2.9	3.3	3.6	1.9	2.0	2.0

	LU (1)	HU	MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK	NO
No. of enterprises (thousands)	1.0	22.2	:	18.5	12.9	27.5	3.2	9.3	2.1	1.2	4.4	28.9	103.2	9.4
Turnover (EUR million)	762	2 639	:	13 669	5 895	3 692	2 161	849	647	529	4 474	14 928	80 366	5 460
Production (EUR million)	581	1 401	:	13 339	4 531	2 842	1 844	626	471	464	4 323	13 095	75 206	5 026
Value added (EUR million)	283	707	:	6 761	2 628	1 322	763	312	240	233	1 742	6 898	47 006	2 770
Gross operating surplus (EUR million)	19	258	:	1 521	736	712	180	149	71	91	-130	1 390	18 593	648
Purchases of goods & services (EUR million)	496	1 881	:	4 626	3 383	2 245	1 457	550	400	292	2 809	8 282	32 867	2 725
Personnel costs (EUR million)	264	449	:	5 240	1 892	610	583	163	169	142	1 872	5 509	28 413	2 122
Investment in tangible goods (EUR million)	6	108	:	330	196	102	87	71	13	25	106	404	2 960	199
Employment (thousands)	5	51	:	126	47	78	21	35	8	11	37	98	573	35
Apparent labour prod. (EUR thousand)	60.1	13.9	:	53.8	56.0	16.9	36.0	9.0	31.6	21.7	47.2	70.4	82.0	79.0
Average personnel costs (EUR thousand)	60.7	12.0	:	46.7	52.8	13.2	28.7	4.9	26.2	13.6	52.0	63.2	55.9	66.0
Wage adjusted labour productivity (%)	99.0	116.2	:	115.1	106.1	128.9	125.2	182.2	120.7	159.4	90.8	111.4	146.7	119.7
Gross operating rate (%)	2.4	9.8	:	11.1	12.5	19.3	8.3	17.6	11.0	17.1	-2.9	9.3	23.1	11.9
Investment / employment (EUR thousand)	1.4	2.1	:	2.6	4.2	1.3	4.1	2.0	1.8	2.3	2.9	4.1	5.2	5.7

(1) 2003.
Source: Eurostat (SBS)

Table 22.24

Other business activities (NACE Division 74)
Main indicators, 2004

	EU-27	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR	IT	CY	LV	LT
No. of enterprises (thousands)	3 400.1	79.6	18.5	191.0	33.2	323.7	5.0	17.8	:	364.0	386.7	693.2	2.6	7.1	5.0
Turnover (EUR million)	1 137 124	41 359	1 174	10 821	18 546	183 683	765	14 011	:	78 977	204 750	120 750	651	657	807
Production (EUR million)	1 069 220	41 046	1 113	10 597	17 502	163 790	734	9 917	:	61 004	197 845	129 022	645	618	796
Value added (EUR million)	585 364	15 541	325	4 392	9 728	109 151	359	6 838	:	42 664	93 328	59 412	431	259	347
Gross operating surplus (EUR million)	202 869	4 553	133	2 251	2 727	40 236	125	3 223	:	14 956	12 008	33 309	190	121	145
Purchases of goods & services (EUR million)	547 370	25 608	913	6 663	9 282	81 865	418	7 162	:	38 005	116 851	65 791	209	413	480
Personnel costs (EUR million)	382 495	10 988	192	2 141	7 001	68 914	234	3 615	:	27 708	81 321	26 103	241	138	202
Investment in tangible goods (EUR million)	41 447	1 993	125	448	675	6 577	53	669	:	2 923	8 305	4 517	27	58	75
Employment (thousands)	16 863	358	110	359	223	3 058	33	127	:	1 736	2 112	1 865	12	36	41
Apparent labour prod. (EUR thousand)	34.7	43.4	3.0	12.2	43.6	35.7	10.8	53.7	:	24.6	44.2	31.9	36.8	7.2	8.5
Average personnel costs (EUR thousand)	27.1	39.4	2.1	9.8	34.4	25.5	7.3	32.6	:	19.6	39.2	23.8	25.9	4.4	5.3
Wage adjusted labour productivity (%)	128.1	110.1	139.9	124.5	126.7	140.2	147.2	164.5	:	125.6	112.8	134.0	141.9	164.9	160.4
Gross operating rate (%)	17.8	11.0	11.3	20.8	14.7	21.9	16.3	23.0	:	18.9	5.9	27.6	29.1	18.4	18.0
Investment / employment (EUR thousand)	2.5	5.6	1.1	1.2	3.0	2.2	1.6	5.3	:	1.7	3.9	2.4	2.3	1.6	1.8

	LU (1)	HU	MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK	NO
No. of enterprises (thousands)	4.6	138.4	:	105.9	49.1	217.6	40.3	42.0	15.1	5.6	29.9	129.3	362.2	42.5
Turnover (EUR million)	2 742	10 511	:	69 316	21 920	14 035	12 145	3 191	3 430	1 661	10 405	28 580	265 069	15 476
Production (EUR million)	2 388	5 660	:	68 544	17 124	13 014	11 745	2 834	2 465	1 541	9 681	28 675	259 972	15 402
Value added (EUR million)	1 623	2 709	:	31 380	11 030	5 539	4 750	1 036	996	641	5 429	14 451	156 513	8 176
Gross operating surplus (EUR million)	412	992	:	7 178	3 435	3 165	756	511	330	241	1 406	2 961	64 831	2 300
Purchases of goods & services (EUR million)	1 093	7 528	:	19 018	11 761	8 769	7 590	2 193	2 379	1 014	5 173	14 704	106 794	7 515
Personnel costs (EUR million)	1 211	1 716	:	24 202	7 595	2 375	3 994	525	666	401	4 023	11 490	91 682	5 876
Investment in tangible goods (EUR million)	46	407	:	1 704	846	512	1 386	399	90	187	327	991	7 373	518
Employment (thousands)	41	315	:	977	269	663	290	226	48	58	128	317	3 210	154
Apparent labour prod. (EUR thousand)	39.3	8.6	:	32.1	40.9	8.4	16.4	4.6	20.7	11.0	42.5	45.6	48.8	52.9
Average personnel costs (EUR thousand)	31.2	7.9	:	27.2	33.6	5.6	14.6	2.4	16.8	7.1	34.2	42.6	31.6	42.8
Wage adjusted labour productivity (%)	125.8	109.0	:	118.1	122.0	148.9	112.4	192.2	123.0	155.3	124.0	107.1	154.3	123.8
Gross operating rate (%)	15.0	9.4	:	10.4	15.7	22.5	6.2	16.0	9.6	14.5	13.5	10.4	24.5	14.9
Investment / employment (EUR thousand)	1.1	1.3	:	1.7	3.1	0.8	4.8	1.8	1.9	3.2	2.6	3.1	2.3	3.4

(1)2003.
Source: Eurostat (SBS)