Industry, trade and services

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Publishing, printing and reproduction of recorded media in Europe

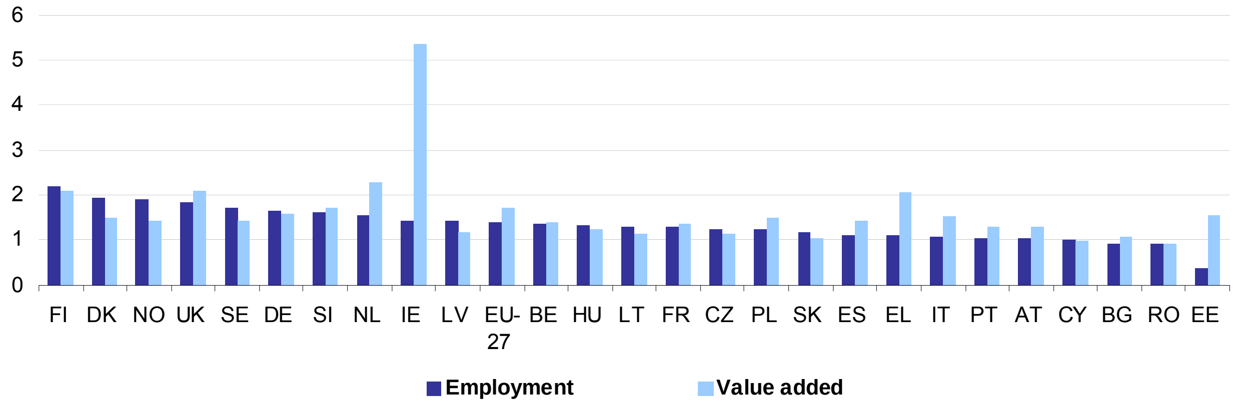
Publishing, printing and the reproduction of recorded media (NACE Rev. 1.1 Division 22) generated EUR 97 billion of value added in the EU-27 in 2006, representing 1.7 % of the non-financial business economy total. However, in employment terms this sector's contribution was smaller as 219 900 enterprises employed some 1.8 million people, equal to 1.4 % of the non-financial business economy's workforce.

Several activities are involved in this sector with quite different processes. A distinction can be made between printing which produces goods, publishing which provides services, and newer activities such as the reproduction of CDs/DVDs. This sector has been revolutionised by changes in information technologies more than many other industrial processes, creating a number of electronic alternatives to traditional printing and at the same time enabling smaller and more flexible print-runs.

Looking at the contribution of this sector within the non-financial business economy (see Figure 1) in 2006 the most specialised Member State in value added terms was Ireland (5.4 % of value added in the Irish non-financial business economy) due to its specialisation in the reproduction of recorded media subsector. The publishing, printing and reproduction of recorded media sector was also quite important in the Netherlands (2.3 %), Finland, Greece and the United Kingdom (2.1 %) where it accounted for a relatively high share of non-financial business economy value added – well above the EU-27 average (1.7 %).

In terms of employment, in 2006, Finland recorded the highest share for this sector in the non-financial business economy (2.2 %) followed by Denmark, while Norway (2.0 %) also recorded a relatively high share.

Figure 1: Share of publishing, printing and reproduction of recorded media in the non financial business economy, EU Member States and Norway, 2006 (%) (1)



(1) BE, DK, EE, CY, NL, AT, PT, RO and SE, 2007; LU and MT, not available.
Source: Eurostat (ebd_all)

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Structural profile of publishing, printing and reproduction of recorded media

Table 1 provides more detailed information on the EU-27 publishing, printing and reproduction of recorded media sector, which generated EUR 260 billion of turnover in 2006 of which EUR 97 billion was value added. With EUR 49 billion of value added, publishing (NACE Rev. 1.1 Group 22.1) was the largest subsector in 2006, accounting for half (50.5 %) of the total of this sector followed by printing and service activities related to printing (NACE Group 22.2) with a 42.9 % share. The smallest subsector, reproduction of recorded media (NACE Group 22.3) contributed around 5.9 %.

In employment terms, the situation was quite different. Printing and service activities related to printing had the largest workforce, 52.8 % of the sectoral total, ten percentage points more than its value added share. Publishing also had a high share of this sector's workforce (44.0 %); consequently, the reproduction of recorded media workforce accounted for around 2.0 % of the sectoral total in 2006, less than half the share this subsector recorded in terms of value added.

Average personnel costs per employee in the EU-27 publishing, printing and reproduction of recorded media sector were EUR 36 200 in 2006, around EUR 8 000 per employee higher than the non-financial business economy average. The relatively high level of average personnel costs for this sector was observed in most of the Member States with data available.

Apparent labour productivity, measured as the average value added generated by each person employed, stood at EUR 53 100 for the whole of the publishing, printing and reproduction of recorded media sector in the EU-27 in 2006. An analysis by subsector shows that this measure was considerably higher for the reproduction of recorded media (EUR 156 400) than for the other two subsectors, where it ranged from EUR 43 300 for printing and service activities related to printing to EUR 60 000 for publishing.

In contrast, the investment rate (investment relative to value added) showed a quite different pattern, with printing and service activities related to printing recording the highest rate (15.7 %), while the more service oriented publishing activity recorded a much lower rate (5.5 %). Investment rates were generally below the EU average in most of the largest and the EU-15 Member States, rising close to or more than 50 % in Latvia, Bulgaria and Romania.

Among the Member States for which data are available in Table 2, the United Kingdom and Germany were the largest Member States in the publishing, printing and reproduction of recorded media sector in 2006, both accounting for around one fifth of the EU-27 value added (EUR 22.6 billion in the United Kingdom and EUR 18.9 billion in Germany). In employment terms, Germany's share was slightly larger, while that of the United Kingdom was significantly smaller.

Table 1: Structural profile of publishing, printing and reproduction of recorded media, EU-27, 2006

	Number of enterprises	Number of persons empl. (2)	Turnover (2)	Value added (2)	Apparent labour product.	Gross operating rate (3)	Invest. rate (2)
	(1 000)		(EUR million)		(EUR 1 000/ pers. emp.)	(%)	
Publishing, printing, reproduction of recorded media (1)	**219.9**	**1 820**	**260 000**	**97 000**	**53.1**	**13.0**	**10.0**
Publishing	81.0	800	130 000	49 000	60.0	13.1	5.5
Printing and service activities related to printing	132.8	961	105 942	41 647	43.3	13.4	15.7
Reproduction of recorded media	6.2	36	18 713	5 685	156.4	23.9	8.5

(1) Including estimates.
(2) Publishing, estimates.
(3) Publishing, printing and the reproduction of recorded media, and publishing, 2005.
Source: Eurostat (sbs_na_2a_dade)

Table 2: Publishing, printing and reproduction of recorded media, EU Member States and Norway, 2006 (1)

	Persons employed	Turnover	Value added	Gross tangible invest. (2)	Average personnel costs (3)	Apparent labour prod. (3)	Wage adj.labour prod. ratio(3)	Gross operat. rate (3)	Invest. rate (2, 3)
	(1 000)	(EUR million)			(EUR 1 000) (/ employee)	(EUR 1 000) (/ person empl.)		(%)	
EU-27 (4)	**1 820**	**260 000**	**97 000**	**9 700**	**36.2**	**53.1**	**146.7**	**13.0**	**10.0**
BE	35	7 134	2 300	665	50.4	65.7	130.3	12.1	28.9
BG	17	421	120	55	3.1	6.2	136.5	14.9	55.3
CZ	44	2 602	762	165	12.9	17.2	133.2	12.2	17.4
DK	36	4 892	1 844	202	42.6	51.8	121.6	7.5	11.0
DE	364	50 434	18 931	1 802	37.6	52.1	138.4	11.5	8.0
EE	7	346	132	19	13.3	19.7	148.4	12.9	14.3
IE	15	15 846	4 808	333	53.3	311.4	584.5	25.2	7.7
EL	28	3 334	1 432	273	27.1	50.7	187.1	26.4	10.7
ES	156	19 146	7 587	712	33.1	48.6	147.1	15.3	9.7
FR	189	34 445	10 985	980	49.0	58.2	118.6	5.6	7.7
IT	165	29 548	9 653	1 034	40.9	58.4	142.8	14.9	9.9
CY	2	186	83	22	22.8	35.4	155.1	16.7	28.5
LV	10	340	123	45	6.6	12.9	193.5	17.6	48.8
LT	12	369	115	48	6.2	9.5	153.0	12.5	26.3
LU	:	:	:	:	:	:	:	:	:
HU	34	2 016	548	80	11.1	16.0	143.8	10.4	13.5
MT	:	:	:	:	:	:	:	:	:
NL	80	13 556	320	303	51.1	62.4	122.2	10.2	6.4
AT	26	4 931	244	249	48.6	73.8	151.7	14.7	12.7
PL	97	5 300	1 957	334	12.3	20.1	163.9	19.5	17.1
PT	35	2 593	214	194	20.2	27.8	137.5	11.3	21.7
RO	39	1 442	262	147	6.8	10.8	160.1	14.5	62.7
SI	10	790	271	68	21.1	27.8	131.6	10.4	20.2
SK	11	667	187	72	9.6	16.7	174.7	12.1	31.7
FI	28	4 419	1 729	148	43.3	62.0	143.4	12.4	8.5
SE	50	7 672	2 550	224	48.0	51.3	106.9	6.0	9.1
UK	329	47 882	22 648	1 889	42.7	68.7	160.9	19.5	7.7
NO	25	5 034	2 084	178	61.6	81.9	132.9	11.2	8.5

(1) BE, DK, EE, CY, NL, AT, PT, RO and SE, 2007.
(2) CY and SE: 2006.
(3) BG: 2005.
(4) Estimates.

Source: Eurostat (ebd_all)

High contribution of small and medium-sized enterprises

Large enterprises (with 250 and more persons employed) contributed two fifths of the value added generated in the EU-27 publishing, printing and reproduction of recorded media sector in 2006 and occupied over one quarter of the workforce, and as such their share in this sector was below their average share for the whole of the non-financial business economy; a similar situation was observed for micro enterprises (with less than 10 persons employed). In contrast, small enterprises (with between 10 and 49 persons employed), and particularly medium-sized enterprises (with between 50 and 249 persons employed) made a relatively high contribution to sectoral value added and the sectoral workforce.

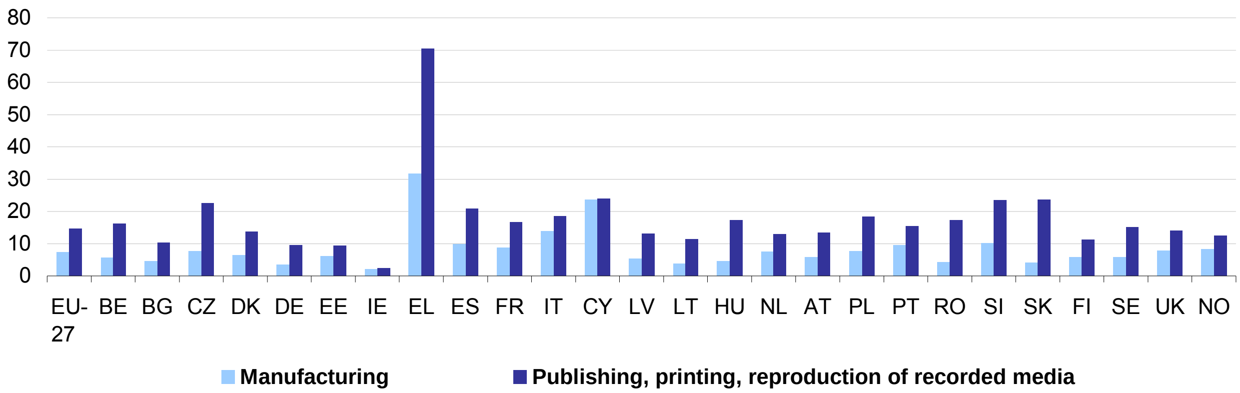
Table 3: Share of value added and persons employed by enterprise size class, EU-27, 2006 (%)

	Value added		Persons employed	
	Non-financial business econ. (1)	Publish., printing, repr.rec. media	Non-financial business econ. (1)	Publish., printing, repr.rec. media
1 to 9 employed	20.2	14.4	29.5	23.6
10 to 49 employed	18.8	20.9	20.8	24.7
50-249 employed	17.8	24.2	16.8	24.2
250 or + employed	43.1	40.6	33.0	27.5

(1) 1-9 persons employed and 50-249 persons employed, 2005.
Source: Eurostat (tin00053, tin00052)

The data presented in Table 3 is shown in relation to the non-financial business economy. Figure 2 presents a similar comparison, but compared with the manufacturing sector (NACE Section D). Given the service-related nature of many publishing and printing activities, it is perhaps not surprising to find that micro enterprises contributed a much higher proportion of sectoral value added than the manufacturing average. The relative importance of micro enterprises was particularly pronounced in Slovakia, Romania, Hungary and Lithuania, where the contribution of micro enterprises to the value added of the publishing, printing and reproduction of recorded media sector was at least three times as high as the manufacturing average in 2007. The share of micro enterprises rose to 70.4 % of sectoral value added in the Greek publishing, printing and reproduction of recorded media sector.

Figure 2: Share of micro enterprises in sectoral value added, EU Member States and Norway, 2007 (%) (1)



(1) EU-27 and RO, 2006; EU-27 includes rounded estimates; PL, provisional; LU and MT, not available.

Source: Eurostat (sbs_sc_2d_dade02)

Regional employment shows concentration in very large urban areas

Table 4 provides information on the ten regions within the EU-27 with the highest number of persons employed in the publishing, printing and reproduction of recorded media sector in 2006. This list is dominated by regions with large urban areas: among the largest regions are several with the capital city of medium-sized or large Member States, as well as other large urban zones, such as Milan in Lombardia, Munich in Oberbayern, Barcelona in Cataluña and Bradford and Leeds in West Yorkshire.

Looking at specialisation through the share of the printing, publishing and recorded media sector's employment in the non financial business economy, Table 5 shows that four of the ten most specialised regions (within the EU-27 and Norway) in 2006 were in the United Kingdom, including the capital city region. The remaining six most specialised regions were all capital city regions in Nordic countries, the Netherlands, the Czech Republic and Slovakia. The concentration of printing, publishing and recorded media employment around capital cities and other major urban areas is probably related in part to the concentration of newspaper printers and publishers in these regions.

Table 4: Persons employed in printing, publishing and reproduction of recorded media, 2006 (persons)

FR10 - Île de France	72 430
UKI1 - Inner London	63 291
ITC4 - Lombardia	50 755
ES30 - Comunidad de Madrid	49 310
ES51 - Cataluña	40 247
PL12 - Mazowieckie	30 673
NL32 - Noord-Holland	22 346
UKE4 - West Yorkshire	20 960
DE21 - Oberbayern	20 446
GR30 - Attiki	20 444

Source: Eurostat (sbs_r_nuts03)

Table 5: Share of printing, publishing and reproduction of recorded media in non-financial business economy employment, 2006 (%)

UKI1 - Inner London	4.2
UKE4 - West Yorkshire	3.3
NO01 - Oslo og Akershus	3.1
UKE2 - North Yorkshire	2.8
CZ01 - Praha	2.7
FI18 - Etelä-Suomi	2.6
SE11 - Stockholm	2.5
NL32 - Noord-Holland	2.4
SK01 - Bratislavský kraj	2.3
UKH3 - Essex	2.3

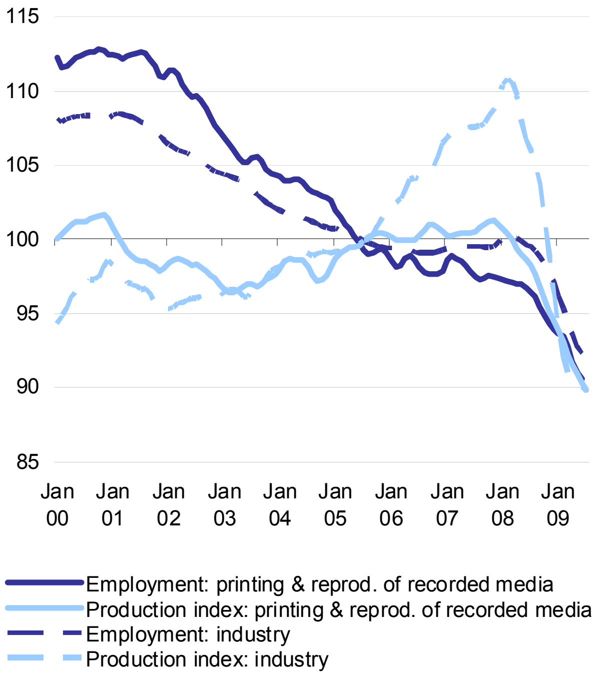
Source: Eurostat (sbs_r_nuts03)

Development of short-term indices

Between March 2003 and December 2007 the EU-27 production index for printing and reproduction of recorded media (NACE Rev. 2 Division 18) registered a period of growth, interrupted by short periods of contraction. From the end of 2007 to the middle of 2009 the production index for printing and reproduction of recorded media declined by just over 11 % in total; while this contraction was large, it was less than the 18 % average recorded for industry (NACE Rev. 2 Sections B to D) over the same period. Note that the production index is a volume index, and shows the development at constant prices.

Industrial employment has been on a downward trend in the EU-27 for many years, although the rate of decline slowed in 2006 and 2007 for printing and the reproduction of recorded media, and for industry as a whole. Since the end of 2007/beginning of 2008 the fall in employment accelerated again, with industry as well as printing and the reproduction of recorded media recording falls of around 7 % to 8 % by the middle of 2009.

Figure 3: Printing and reproduction of recorded media, production and employment indices, trend form, EU-27 (2005=100) (1)

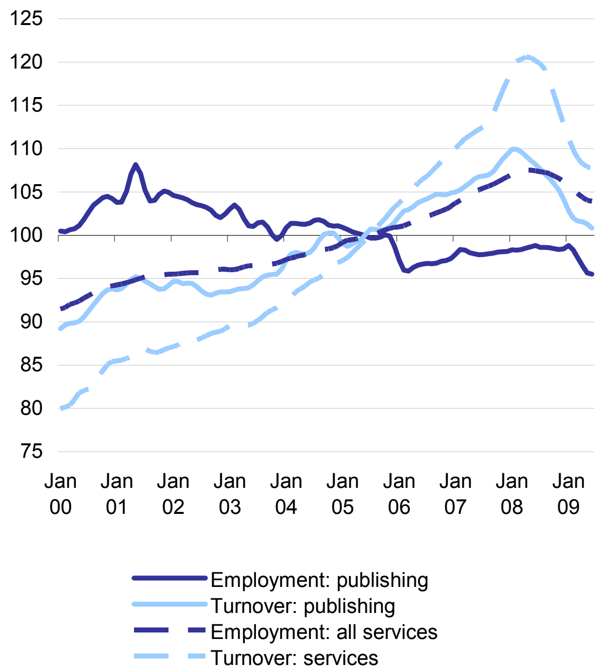


(1) Estimates.
Source: Eurostat (sts_inpr_m, sts_inlb_m)

The turnover index (in current prices) for the EU-27 publishing activities (NACE Rev. 2 Division 58) showed relatively steady growth peaking in February 2008; by June 2009 the index had fallen 8.3 % from this peak, slightly lower than the 10.3 % average fall for services over the same period.

In contrast to the average for services, the employment index for publishing activities fell quite regularly from a high in May 2001 to a low in March 2006, after which is recorded modest growth until January 2009. In the five months from January to June 2009 the employment index for publishing activities fell by 3.3 %. The employment index for services as a whole only lost 1.6 % between January and June 2009, but services as a whole had started to record a fall in employment in June 2008, and the overall decline for services between May 2008 and June 2009 was also 3.3 %.

Figure 4: Turnover and employment indices for publishing activities, EU-27 (2005=100) (1)



(1) Estimates.
Source: Eurostat (sts_selb_m, sts_setu_m, sts_trtu_m, sts_trlb_m)

Employment characteristics

Labour force statistics show that the characteristics of the workforce in the EU-27 publishing, printing and reproduction of recorded media sector (NACE Rev. 1.1 Division 22) did not diverge greatly from those for the non-financial business economy as a whole, although the activity displays employment characteristics that are often more closely related to those of service sectors than to the characteristics of traditional mining, industrial or construction activities.

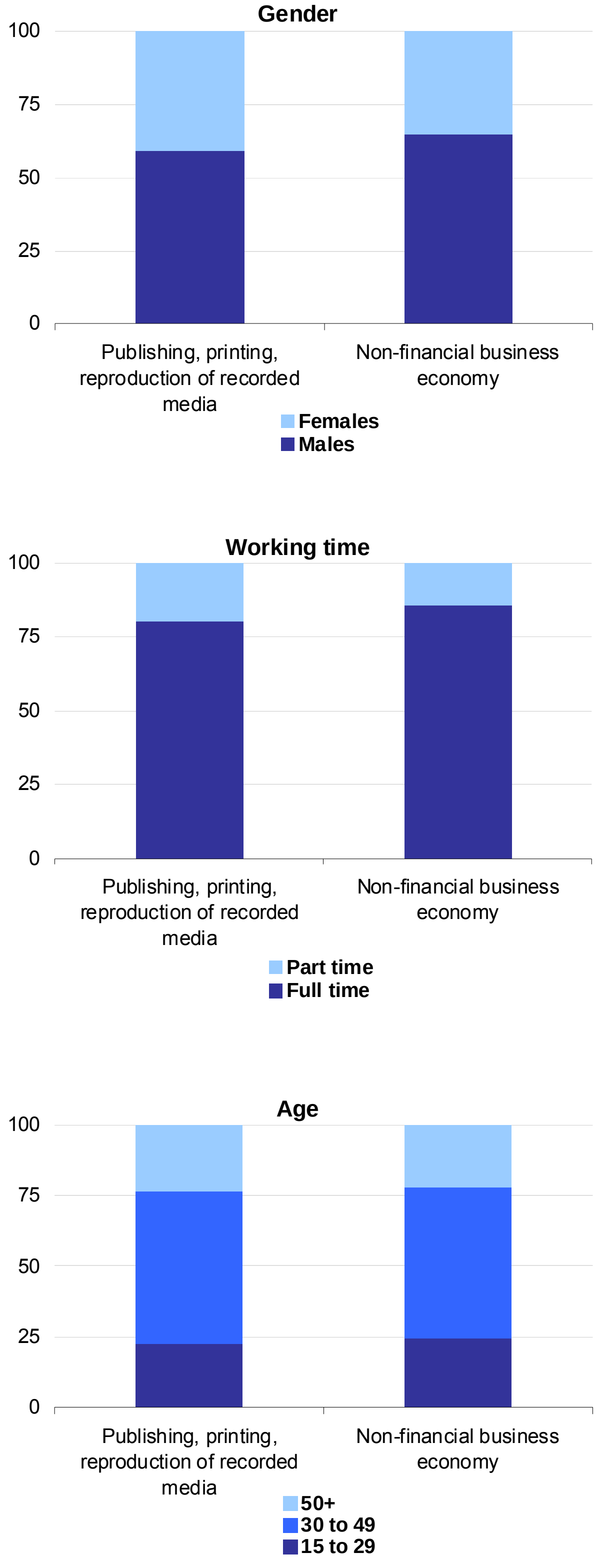
About three fifths (59.0 %) of the sectoral workforce were men in 2007, a proportion that was below that for the non-financial business economy as a whole (64.9 %).

This sector shows a slightly lower proportion of people working full-time; in fact, the proportion of part-time employment in the sector was 19.8 % in 2007, compared with 14.3 % for the non-financial business economy.

A breakdown by age of the workforce for the EU-27 publishing, printing and reproduction of recorded media sector shows that younger workers (aged 15 to 29) accounted for a lower proportion of the workforce than in the non-financial business economy as a whole, with slightly higher proportions for the two other age groups shown in Figure 5. Medium age workers (aged 30-49) represented the largest share of the workforce in this sector (54.0 %), very close to the business economy average.

SBS data can provide information on the share of the number of employees in the total number of persons employed. At an aggregate level for the whole of the EU-27, employees accounted for slightly more than nine out of ten (91.1 %) persons within the publishing, printing and reproduction of recorded media sector's workforce in 2006; the remainder being working proprietors and unpaid family workers. This ratio was lower than the EU-27 average for total manufacturing (93.9 %) and this pattern of a higher propensity for working proprietors and unpaid family workers was repeated in most of the Member States (the only exceptions being France, Cyprus and Lithuania). The lowest shares of employees in the workforce were recorded in Greece (71.7 % in 2007) and the Czech Republic (74.6 %, also 2007). The Greek figure was 4.5 percentage points lower than the national manufacturing average (76.2 %), while the difference in the Czech Republic was the biggest among the Member States (15.8 percentage points).

Figure 5: Employment characteristics, EU-27, 2007



Source: Eurostat (Labour Force Survey)

METHODOLOGICAL NOTES

Structural business statistics

SBS data have been collected within the legal framework provided by Council Regulation No 58/97 of 20 December 1996 concerning structural business statistics, which aims to provide data which is comparable between the Member States on the structure, activity, competitiveness and performance of businesses. Note that SBS data for the EU-27 may include rounded estimates. The classification of activities is based on NACE Rev. 1.1. The non-financial business economy is defined as Sections C to I and K.

The **number of enterprises** is a count of enterprises active during at least a part of the reference period.

The **number of persons employed** is all persons who work in the observation unit (inclusive of working proprietors and unpaid family workers), as well as persons who work outside the unit who belong to it and are paid by it. Part-time, seasonal and home workers on the payroll are included, as well as apprentices.

Turnover comprises the totals invoiced by the observation unit during the reference period, and this corresponds to market sales of goods or services supplied to third parties.

Value added (at factor cost) can be calculated from turnover, plus capitalised production, plus other operating income, plus or minus the changes in stocks, minus the purchases of goods and services, minus other taxes on products which are linked to turnover but not deductible, minus the duties and taxes linked to production.

Gross tangible investment includes new and existing capital goods bought or produced for own use having a useful life of more than one year, and includes also land.

Apparent labour productivity is calculated as value added divided by the number of persons employed.

Average personnel costs are calculated as personnel costs divided by the number of (paid) employees.

The **wage adjusted labour productivity ratio** is calculated by dividing the apparent labour productivity by average personnel costs, and is expressed as a percentage.

The **gross operating rate** is the gross operating surplus divided by turnover, expressed as a percentage. The gross operating surplus is calculated as value added less personnel costs.

The **investment rate** is gross tangible investment divided by value added expressed as a percentage.

Short-term business statistics (STS)

The basic form of an index is its gross (also known as unadjusted) form but in this publication the trend form is used for production, turnover and employment indices, whereby seasonal factors have been removed, and the volatility of the series reduced to show the underlying trend. Note that the information for STS is based on NACE Rev. 2.

The **production index** is a business cycle indicator showing the output and activity of industries. The index provides a measure of the volume trend in value added at factor cost over a given reference period.

The **turnover index** reflects the totals invoiced by the observation unit during the reference period. This corresponds to market sales of goods or services supplied to third parties.

The **employment index** shows the evolution of the number of persons employed.

Classifications

European statistics are undergoing a transition from one generation of the activity classification (NACE) to another, from Rev. 1.1 to Rev. 2. In this publication SBS and LFS data use the NACE Rev. 1.1 classification, while STS uses NACE Rev. 2.

	NACE Rev. 1.1	NACE Rev. 2
Publishing	22.1	58
Printing and service activities related to printing	22.2	18.1
Reproduction of recorded media	22.3	18.2

Abbreviations and symbols

EU-27	European Union of 27 Member States
BE	Belgium
BG	Bulgaria
CZ	Czech Republic
DK	Denmark
DE	Germany
EE	Estonia
IE	Ireland
EL	Greece
ES	Spain
FR	France
IT	Italy
CY	Cyprus
LV	Latvia
LT	Lithuania
LU	Luxembourg
HU	Hungary
MT	Malta
NL	Netherlands
AT	Austria
PL	Poland
PT	Portugal
RO	Romania
SI	Slovenia
SK	Slovakia
FI	Finland
SE	Sweden
UK	United Kingdom
NO	Norway
:	(in tables) not available

Further information

Eurostat website: http://ec.europa.eu/eurostat

Data on structural business statistics:
http://epp.eurostat.ec.europa.eu/portal/page/portal/european_business/data/main_tables
http://epp.eurostat.ec.europa.eu/portal/page/portal/european_business/data/database

More information about structural business statistics:
http://epp.eurostat.ec.europa.eu/portal/page/portal/european_business/introduction

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