Industry, trade and services

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Statistics in focus
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The Manufacture of Basic Chemicals

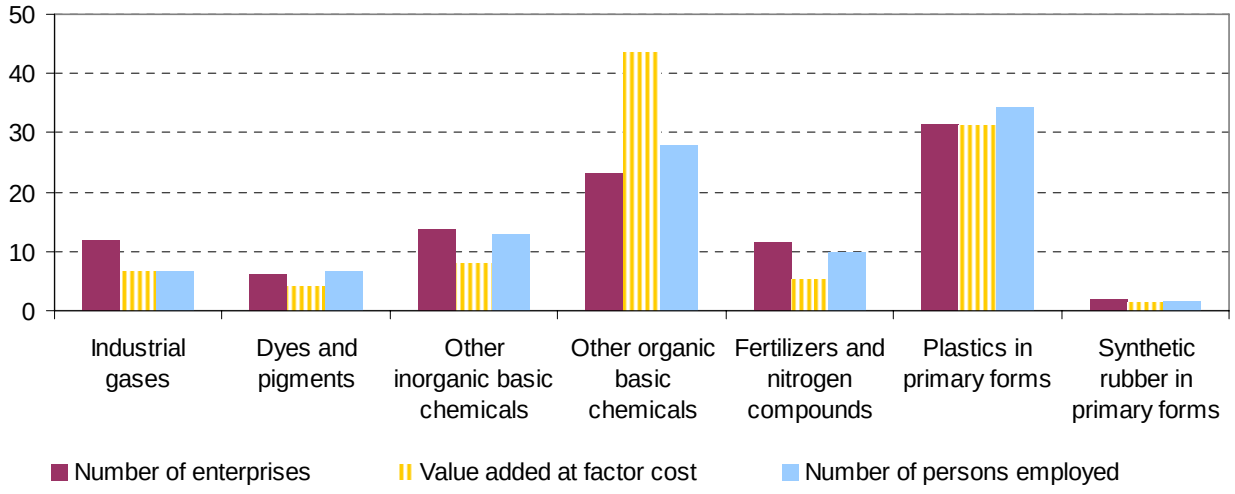
Manufacturing Basic chemicals (NACE DG24.1) was the main activity of 8 530 enterprises in the EU-27 in 2005 employing 573 900 persons and producing a value added of EUR 64.2 Bn. This activity produces a large number of compounds that are used as inputs into a multiplicity of modern-day manufacturing processes. Accounting for 0.4% of the number of enterprises yet 1.7% of the persons employed and 3.9% of value added in Manufacturing (NACE D), the Basic chemicals sector is dominated by large enterprises, it is capital-intensive and generates high added value.

Main indicators

Basic chemicals are organised into seven subsectors according to their physical properties, production processes and uses. The subsectors' shares in the number of enterprises, value added and number of persons employed of the EU-27's Basic chemicals industry are shown in Figure 1. The two largest subsectors in 2005 were those producing 'Other organic basic chemicals' (chemical compounds whose molecules contain carbon; hereafter: 'Other organic chemicals') and 'Plastics in primary forms' ('Plastics'). Together they accounted for 53.7% of the total number of enterprises, 62.2% of the persons employed and 75.0% of the value added in the manufacture of Basic chemicals.

The apparent labour productivity (value added per person employed) of Basic chemicals was EUR 111 800 in 2005, more than double the apparent labour productivity of Manufacturing (EUR 47 000). Ranging from EUR 58 800 in the production of 'Fertilizers and nitrogen compounds' ('Fertilizers') to EUR 174 000 in the production of 'Other organic chemicals', apparent labour productivity stood above the Manufacturing average in all seven subsectors of Basic chemicals.

Fig. 1 EU-27 total number of enterprises, value added and number of persons employed
share of the Basic chemicals industry (NACE DG24.1) by subsector, 2005 (%)



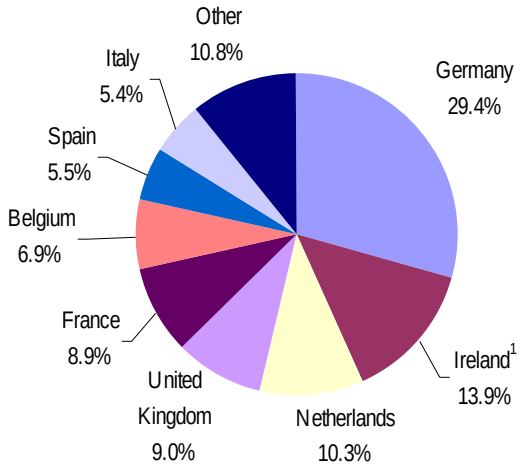
Source: Eurostat, SBS

The wage adjusted labour productivity (value added per unit personnel cost) of the manufacture of Basic chemicals in the EU-27 was 191% in 2005 compared with 139% in Manufacturing. The indicator was highest in the subsectors 'Other organic chemicals' (245%) and 'Industrial gases' (214%). These figures are impressive, given that average personnel costs in Basic chemicals (EUR 58 600) were among the highest of all manufacturing activities. In Basic chemicals as a whole, they were 73% greater and, in the subsectors 'Other organic chemicals' and 'Plastics' around double the size of the average personnel costs in Manufacturing.

The gross operating rate (gross operating surplus on turnover) of EU-27 Basic chemicals was 10.7% in 2005, compared to 8.3% in Manufacturing. The indicator reached 18.2% and 14.0% respectively in 'Industrial gases' and 'Other organic chemicals'. The gross operating rate was highest in Ireland[1] (36.6%), Denmark (26.5%) and Lithuania (17.3%).

Table 1 shows the main indicators of the Basic chemicals industry in the EU-27 and the Member States in 2005. More than 1 000 Basic chemicals enterprises were located in the United Kingdom (1119), in Italy (1096), and in Spain (1012). Close to 70% of the persons employed in the EU-27 Basic chemicals industry worked in Germany (29%), France (12%), the United Kingdom (10%), Italy (8%), Spain (6%) and Poland (5%). Figure 2 shows the Member States that contributed most to total EU-27 Basic chemicals value added.

Fig. 2 Main contributing Member States to EU-27 Basic Chemicals (DG24.1) value added, 2005



Source: Eurostat, SBS

Tab. 1 Main indicators of the manufacture of Basic chemicals (NACE DG24.1), EU-27 and Norway, 2005

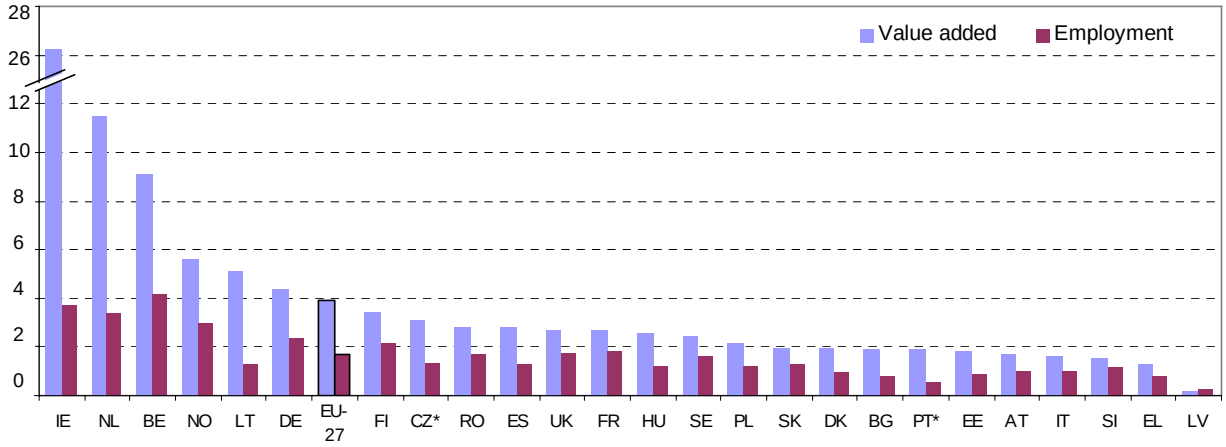
	Number of enterprises	Turnover	Value added at factor cost	Number of persons employed	Average personnel costs	Apparent labour productivity	Wage adjusted labour productivity	Gross operating rate
		Million EUR	Million EUR		1 000 EUR	1 000 EUR	%	%
EU-27	8 530	287 562	64 162	573 900	58.6	111.8	191	10.7
BE	238	19 722	4 399	25 772	80.1	170.7	213	11.9
BG	154	367	61	5 214	5.5	11.6	212	9.0
CZ*	447	2 778	661	18 826	11.1	35.1	317	16.4
DK	66	966	504	3 949	62.9	127.6	203	26.5
DE	771	74 227	18 841	167 708	88.3	112.3	127	9.3
EE	29	138	29	1 185	8.2	24.3	295	13.9
IE	55	22 826	8 949	8 094	73.4	1 105.6	1 506	36.6
EL	75	846	182	3 038	38.6	59.9	155	8.3
ES	1 012	17 109	3 516	33 614	45.6	104.6	230	11.7
FR	854	35 191	5 709	68 124	59.6	83.8	141	4.7
IT	1 096	25 146	3 446	46 119	47.3	74.7	158	5.3
LV	32	12	3	475	3.1	6.6	214	14.2
LT	29	517	129	3 425	11.7	37.8	324	17.3
HU	220	2 373	431	9 636	16.9	44.7	264	11.3
NL	240	36 719	6 633	26 139	71.6	253.8	354	13.0
AT	92	2 940	698	6 456	58.5	108.1	185	11.0
PL	554	4 388	1 057	29 462	11.7	35.9	307	16.4
PT*	180	1 806	357	4 781	33.1	74.6	226	11.1
RO	324	1 522	257	27 010	5.4	9.5	178	7.4
SI	44	351	89	2 627	21.1	34.0	161	9.8
SK	40	588	115	5 191	9.8	22.2	227	11.0
FI	117	4 258	1 042	8 724	55.3	119.5	216	13.8
SE	210	5 014	1 213	12 839	62.4	94.5	151	10.0
UK	1 119	27 520	5 747	56 143	56.9	102.4	180	9.4
NO	71	4 443	1 107	7 558	76.2	146.5	192	12.0

* 2004
not available: CY and MT; confidential: LU

Source: Eurostat, SBS

[1]: The high proportion of Irish manufacturing value added that is accounted for by the manufacture of Basic chemicals may reflect foreign ownership of enterprises, outsourcing of activities, and the accounting practices of some multinational enterprises.

Fig. 3 Manufacture of Basic chemicals (NACE D G 24.1) value added and employment, 2005
% of manufacturing (NACE D)



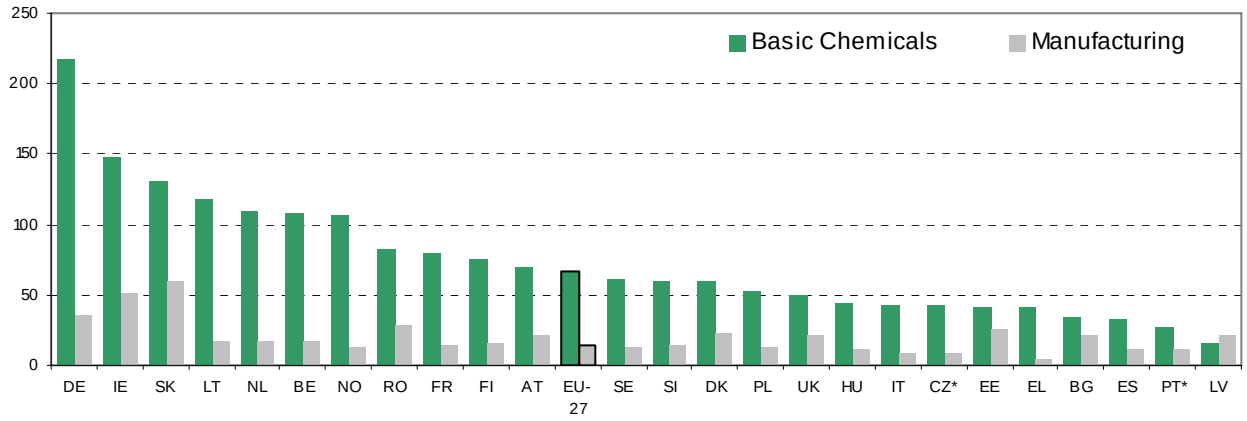
* 2004; EU27 - excluding: CY, LU and MT

Source: Eurostat, SBS

The importance of individual countries' Basic chemicals sectors is measured in terms of the sector's value added and employment relative to those of Manufacturing (Figure 3). Ireland was the most specialised in terms of value added (26.2%) and Belgium the most specialised in terms of employment (4.2%), while Latvia was the least specialised according to both measures. In all countries except Latvia, the share of the Basic chemicals sector's value added in Manufacturing was higher than that of employment, reflecting the industry's high apparent labour productivity. Displaying the highest shares of Basic chemicals value added in Manufacturing total in 2005, Ireland, the Netherlands, Belgium and Norway were also the countries recording the highest apparent labour productivity.

Focus on size-class

Fig. 4 Number of persons employed per enterprise in Basic chemicals (DG24.1) and Manufacturing (D), 2005



* 2004; EU-27 - excluding: CY, LU and MT

Source: Eurostat, SBS

In each country except Latvia, Basic chemicals enterprises employed at least 1.5 times as many persons as did enterprises in Manufacturing on average. Large enterprises dominated Basic chemicals in the EU-27 in 2005 as 67 persons were employed per enterprise, well above the average of 15 persons employed per enterprise in Manufacturing (Figure 4). The seven countries in which enterprises employed on average more than 100 persons in 2005 were all major producers of Basic chemicals in terms of turnover and value added (except Slovakia and Lithuania).

The distribution of persons employed in Basic chemicals according to enterprise size-class is available for 19 Member States (Table 2). It differed from the size-class distribution of Manufacturing enterprises in that medium and large enterprises were predominant. In the 19 Member States, 89.4% of persons were employed by enterprises with more than 50 persons employed, compared with 65.4% in Manufacturing. Enterprises with more than 250 persons employed 69.8% of persons in Basic chemicals on average, compared with 40.6% in Manufacturing.

Among the 19 Member States for which data are available and Norway, the eight countries in which above 91% of persons were employed in the '50+' category include the three main contributors to EU-27 value added and the main actors in the EU-27's foreign trade in Basic chemicals (see below): Germany (96.4%), Norway (94.7%), Belgium (94.3%), Ireland (92.7%), Finland (91.9%), France (91.8%), Romania (91.8%) and the Netherlands (91.7%). Similarly, the five Member States with the highest proportions of persons employed in the '250+' category were either major contributors to EU-27 Basic chemicals value added and foreign trade or central European states with a strong manufacturing tradition: Germany, the Czech Republic, Romania, Slovakia and Belgium.

Economies of scale are evident in the Basic chemicals industry and the predominance of large enterprises points at a large optimum size in terms of persons employed for Basic chemical processing installations. Of course, average size also depends on the manufacturing processes carried out – some of which can be astonishingly complex – and it is thus related to the individual countries' specialisation by subsector of Basic chemicals. This topic is analysed in more detail in the following section.

Tab. 2 Persons employed by enterprise size-class EU-27 Manufacturing and Basic chemicals*, 2005 total and share by enterprise size-class (%)

	Total	1 to 9 %	10 to 49 %	50 to %	250 + %
Manufacturing					
EU-27	**34 643 900**	**14.0**	**20.5**	**24.8**	**40.6**
Basic Chemicals					
EU*	**560 330**	**2.7**	**7.9**	**19.6**	**69.8**
BE	**25 772**	1.2	4.6	20.4	73.9
BG	**5 214**	6.8	13.5	11.8	67.9
CZ**	**18 827**	4.0	5.6	7.4	83.0
DK	**3 949**	1.9	:c	:c	:c
DE	**167 708**	0.9	2.7	11.0	85.4
EE	**1 185**	:c	:c	38.1	:c
IE	**8 094**	0.3	6.9	30.9	61.8
EL	**3 039**	:c	:c	32.8	:c
ES	**33 615**	4.9	23.3	29.4	42.4
FR	**68 124**	1.7	6.5	22.0	69.8
IT	**46 119**	4.6	15.1	29.8	50.5
LV	**475**	12.4	71.4	16.2	0.0
LT	**3 425**	1.5	6.2	:c	:c
HU	**9 636**	4.4	10.3	13.9	71.4
NL	**26 139**	1.7	6.6	26.7	65.0
AT	**6 456**	3.0	8.5	23.6	64.9
PL	**29 462**	4.0	6.6	16.4	73.0
PT**	**4 781**	13.7	26.5	27.3	32.6
RO	**27 010**	2.0	6.2	10.0	81.8
SI	**2 627**	:c	:c	45.0	:c
SK	**5 191**	1.6	7.5	11.5	79.3
FI	**8 725**	1.3	6.8	32.9	59.0
SE	**12 839**	9.1	4.9	26.1	59.9
UK	**56 143**	4.0	12.7	30.5	52.8
NO	**7 558**	0.4	4.9	35.6	59.0

* EU-27 excl. DK, EE, EL, CY, LT, LU, MT & SI; ** 2004; " :c "confidential

Source: Eurostat, SBS

Focus on subsectors

Tab. 3 Value added of the manufacture of Basic chemicals (NACE DG24.1), EU-27 and Norway, 2005 value and share by subsector (EUR Million and %)

	Manufacture of basic chemicals	Industrial gases	Dyes and pigments	Other inorganic basic chemicals	Other organic basic chemicals	Fertilizers and nitrogen compounds	Plastics in primary forms	Synthetic rubber in primary forms
	EUR Million	%	%	%	%	%	%	%
EU-27	**64 162**	**6.6**	**4.2**	**7.9**	**43.6**	**5.2**	**31.3**	**1.3**
BE	**4 399**	4.8	3.1	10.6	55.8	2.0	20.8	3.0
BG	**61**	7.1	0.2	55.3	3.1	:c	0.7	:c
DK	**504**	13.5	:c	:c	:c	0.5	3.9	0.0
DE	**18 841**	:c	5.0	7.0	29.8	4.6	50.3	:c
IE	**8 949**	:c	:c	:c	98.2	0.4	0.8	0.0
EL	**182**	:c	6.5	3.3	2.5	30.3	37.3	:c
ES	**3 516**	14.8	4.6	12.6	21.4	7.4	38.4	0.7
FR	**5 709**	11.1	3.7	9.9	49.9	5.5	16.9	3.0
IT	**3 446**	15.0	5.6	14.5	7.1	6.4	50.8	0.6
LT	**129**	:c	0.2	:c	6.0	88.6	4.8	0.0
HU**	**431**	20.6	2.3	6.4	10.0	5.3	55.4	0.1
NL	**6 633**	:c	2.0	6.3	52.2	5.5	31.4	:c
AT***	**698**	15.5	2.5	11.0	15.5	15.8	36.0	:c
PL	**1 057**	13.8	1.5	8.9	23.3	28.0	24.5	0.0
PT*	**357**	24.3	3.0	7.4	18.9	12.8	33.5	0.0
RO***	**257**	12.4	2.0	44.4	7.7	23.5	9.1	:c
SI***	**89**	22.4	51.5	13.5	1.3	0.1	11.1	0.1
SK	**115**	:c	:c	2.2	14.0	:c	:c	0.0
FI	**1 042**	9.6	10.9	25.0	14.0	7.9	24.9	7.8
SE***	**1 213**	:c	1.2	20.4	25.5	:c	35.4	1.2
UK***	**5 747**	:c	9.8	10.4	36.9	4.2	23.5	2.2
NO	**1 107**	9.8	1.5	36.6	35.2	7.4	9.4	0.0

EU-27 excluding. CZ, EE, CY, LV, LU & MT; " :c " confidential; *PT: 2004; **HU: 2003; ***Some weights estimated using previous years' distributions. *Source*: Eurostat, SBS

The value added in EU-27 Basic chemicals is detailed by subsector (Table 3). The industry's two main subsectors in terms of employment 'Plastics' and 'Other organic chemicals' were also the main contributors to EU-27 value added in Basic chemicals. Making up 43.6% and 31.3% respectively of the total, they together produced three quarters of the value added in Basic chemicals in 2005. The enterprises in these two subsectors were larger on average.

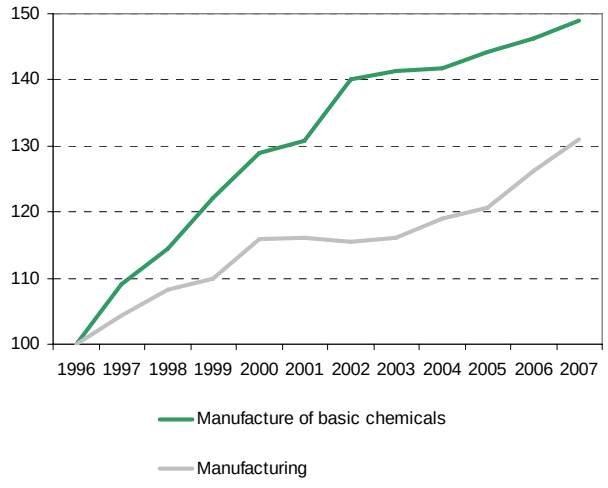
In Ireland, 'Other organic chemicals' made up close to the entirety of value added in Basic chemicals (98.2%), the sign of a thriving downstream pharmaceuticals industry, and in Belgium (55.8%), the Netherlands (52.2%) and France (49.9%), the subsector's share in Basic chemicals value added stood close to or above one half. The Member States displaying specialisation in the 'Plastics' subsector were Hungary (55.4%), Italy (50.8%) and Germany (50.3%).

In third position, the value added in 'Other inorganic basic chemicals' (chemical compounds of mineral origin, whose molecules do not contain carbon) made up 7.9% of EU-27 Basic chemicals total. The subsector's share in total value added was high in Bulgaria (55.3%), Romania (44.4%), Norway (36.6%) and Finland (25.0%). 'Industrial gases', whose enterprises generally tended to be smaller in terms of the number of persons employed, contributed more than one fifth to total national Basic chemicals value added in Portugal (24.3%), Slovenia (22.4%) and Hungary (20.6%).

Enterprises active in producing 'Fertilizers', 'Other inorganic basic chemicals' and 'Synthetic rubber in primary forms' were also smaller in terms of the number of persons employed than on average in the industry. Significant shares of Basic chemicals value added were generated by 'Fertilizers' in Lithuania (88.6%), Greece (30.3%) and Poland (28.0%). The contribution of 'Dyes and pigments' to sector total was 51.5% in Slovakia, while the Member States displaying specialisation in 'Synthetic rubber in primary forms' were Finland (7.8%), France (3.0%) and Belgium (3.0%).

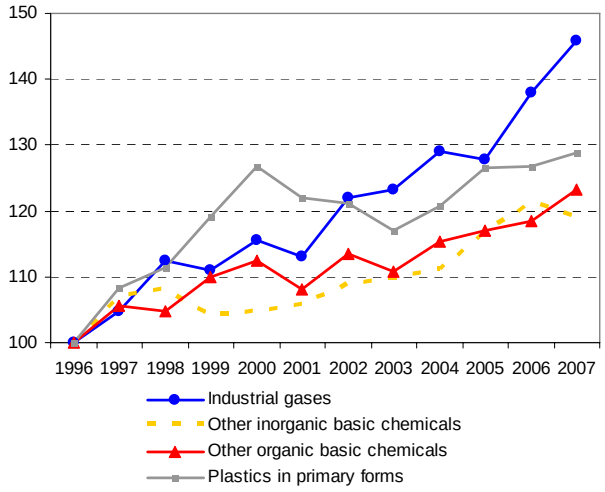
Recent trends

Fig. 5 EU-27 manufacturing and Basic chemicals production index 1995 = 100



Source: Eurostat, STS

Fig. 6 EU-27 Basic chemicals: main sub-sectors production index 1995 = 100



Source: Eurostat, STS

Between 1996 and 2007, the manufacture of Basic chemicals outperformed the EU-27 Manufacturing sector as can be seen from the progression of the production indices at constant prices in Figure 5. Over the eleven-year period, the production of the former grew by 49.0% while Manufacturing rose by 31.0%.

Between 2000 and 2003 the production of Basic chemicals continued its progression at rates similar to those of the second half of the 1990s, while Manufacturing production stagnated. Growth in Basic chemicals production did slow down between 2002 and 2004, and this is assumed to be related to weaker export demand (see Figure 7 below). Production rose again after 2004 yet, perhaps due to the strong increase in the price of crude oil, at rates below those witnessed before 2002.

It is interesting to note from STS data that, in the EU-25, between 2000 and 2005, the number of persons employed in the manufacture of Basic chemicals fell at an average annual rate of 1.8%, compared with a 1.1% equivalent reduction in Manufacturing.

Figure 6 depicts the production indices of the four subsectors that contributed close to 90% of Basic chemicals value added in 2006. In these subsectors, growth in production over the 11-year period ranged between 19.2% in 'Other inorganic basic chemicals' and 45.9% in 'Industrial gases'. The swings in the production index of 'Plastics' were more pronounced, peaking in 2000 before receding until 2003, while the other subsectors' production indices displayed less volatility.

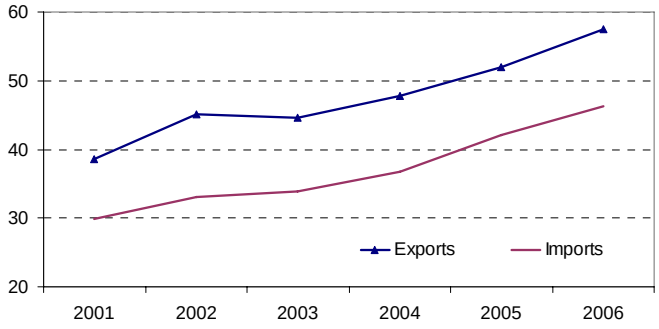
Focus on foreign trade

The manufacture of Basic chemicals is strongly export-oriented. In 2006, EU-27 exports of Basic chemicals amounted to EUR 188.9 Bn, while imports totalled EUR 192.7 Bn. Revealing the EU-27's strong competitivity in world markets for Basic chemicals, extra-EU-27 trade in Basic chemicals generated a surplus that rose from EUR 8.7 Bn in 2001 to EUR 11.2 Bn in 2006. The activities contributing most to this surplus in 2006 were 'Other organic chemicals' and 'Plastics', generating surpluses of EUR 7.5 Bn and EUR 6.2 Bn respectively, and largely outweighing deficits of EUR 1.3 Bn and EUR 1.0 Bn in 'Fertilizers' and 'Other inorganic basic chemicals'. The ratio of EU-27 Basic chemicals surplus to total trade (exports + imports) fell by 2.0 percentage points from 12.8% in 2001 to 10.8% in 2006.

Between 2001 and 2006, extra-EU-27 Basic chemical exports grew annually by 8.3% on average and imports by 9.1% (Figure 7). Over the period, extra-EU-27 export growth was driven by exports of 'Plastics' and 'Other organic chemicals', the former rising at an annual average 14.5% while the latter grew by yearly 6.7%. Exports of 'Synthetic rubber in primary forms' grew by 20% annually while, due to down-sizing in the EU-27 textile and corollary industries, exports of 'Dyes and pigments' grew at a relatively low annual 1.4%. Higher imports of 'Other organic chemicals' and 'Plastics', growing at annual rates of 10.9% and 10.5% respectively, were the main contributors to the increase in EU-27 Basic chemical imports between 2001 and 2006. The prices of a large range of Organic chemicals (also known as petrochemicals) and those of 'Plastics' have been driven by the cost of one of the main manufacturing inputs, naphta, an important product of crude oil distillation.

Table 4 details intra- and extra-EU-27 export and import data by subsector, by main actor and by main partner. The USA was the EU-27's main trading partner, purchasing EUR 19.8 Bn worth of EU-27 Basic chemicals exports in 2006, 85% of which were 'Other organic chemicals'. Imports from the USA amounted to EUR 10.7 Bn and consisted to 58% of 'Other organic chemicals' and to 25% of 'Plastics'. With an advanced pharmaceutical industry, Switzerland was the second main destination of EU-27 exports while Singapore, the world's third main petroleum refining center, was the second main source of EU-27 Basic chemical imports. While Japan has remained a major trading partner, EU-27 Basic chemicals exports to Turkey, China and Russia have risen rapidly in recent years, as have imports from China and Russia.

Fig. 7 Basic chemical exports and imports extra-EU-27
2001 to 2006, EUR billion



Source: Comext

In 2006, Belgium was the Member State displaying the largest exports of Basic chemicals (20.5% of EU-27 total) ahead of Germany (18.1%). Belgium led with EU-27 export market shares ranging between 20% and 24% in all subsectors except 'Dyes and pigments' (Germany: 28%) and 'Other inorganic basic chemicals' (Germany: 31%). Together with France, Germany and Belgium were also the EU-27's main importers of Basic chemicals.

The equivalent of around 60% of Basic chemicals turnover was exported extra-EU-27 in 2005. As the costs of transporting bulky and hazardous materials impede the long-distance trade in Basic chemicals, lower ratios of both exports and imports to turnover are seen in 'Industrial gases', 'Fertilizers' and 'Other inorganic basic chemicals'. Generally, lower proportions of exports and imports were made extra- than intra-EU-27.

Tab. 4 EU-27 Basic chemical exports and imports detailed by NACE class, 2006

	Exports					**Imports**				
	EUR Million	of which % :		Main exporter	Main partner extra-EU-27	EUR Million	of which % :		Main importer	Main partner extra-EU-27
		Intra-EU-27	Extra-EU-27				Intra-EU-27	Extra-EU-27		
Basic chemicals	188 934	70%	30%	BE	US	192 705	76%	24%	DE	US
Industrial gases	513	81%	19%	BE	US	573	73%	27%	FR	US
Dyes & pigments	8 209	65%	35%	DE	US	9 008	69%	31%	DE	US
Other inorganic basic chemicals	9 299	70%	30%	DE	US	11 952	69%	31%	DE	US
Other organic basic chemicals	95 893	65%	35%	BE	US	95 132	73%	27%	BE	US
Fertilizers & nitrogen compounds	5 602	74%	26%	NL	US	7 783	64%	36%	FR	RU
Plastics in primary forms	65 791	76%	24%	BE	TR	63 759	85%	15%	DE	US
Synthetic rubber in primary forms	3 626	68%	32%	BE	CN	4 498	70%	30%	DE	US

Source: Eurostat, SBS & Comext

➢ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

DATA SOURCES

The source of all figures presented is Eurostat (unless specifically stated otherwise). Most data sources are continually updated and revised where necessary. This publication reflects the state of data availability in Eurostat's reference database as in March 2008.

Structural Business Statistics (SBS) is the main data source for this publication. Two main SBS data sets have been used: annual enterprise statistics and annual enterprise statistics broken down by size classes. These and other SBS data sets are available under theme 'Industry, trade and services' on the Eurostat website http://epp.eurostat.ec.europa.eu/ (select 'Data' / 'Industry, trade and services' / 'Horizontal view' / 'Structural Business Statistics'). Selected publications, data and background information are available in the section dedicated to European Business, located directly under the theme 'Industry, trade and services' on the Eurostat website (URL: http://ec.europa.eu/eurostat/europeanbusiness).

Short-Term Statistics (STS) was used to provide information on time series development based on the Industrial production index. It shows the evolution of value added at factor cost at constant prices.

Comext Eurostat's database on external trade supplied data on the value of exports and imports of products, by type of product (CPA/NACE), by reporting Member State and by destination.

The Basic chemicals industries analysed include the following:

24.1 Manufacture of basic chemicals

24.11 Industrial gases, incl. liquefied or compressed industrial or medical gases

24.12 Dyes and pigments, including dyes and pigments from any source in basic form or as concentrate

24.13 Other inorganic basic chemicals, including chemical elements except metals, industrial elemental gases and radioactive elements produced by the nuclear fuels industry; inorganic acids except nitric acid; alkalis, lyes and other inorganic bases except ammonia

24.14 Other organic basic chemicals, including acyclic and cyclic hydrocarbons, saturated and unsaturated; acyclic and cyclic alcohols; mono- and polycarboxylic acids; other oxygen-function compounds; nitrogen-function organic compounds; other organic compounds incl. wood distillation compounds; manufacture of charcoal; production of pitch and pitch coke; synthetic aromatic products; distillation of coal tar

24.15 Fertilizers and nitrogen compounds, including: fertilizers; associated nitrogen products (eg. nitric and sulphonitric acids, ammonia, ammonium chloride, nitrites and nitrates of potassium, phosphates of triammonium and ammonium carbonates)

24.16 Plastics in primary forms, including polymers, polyamides, phenolic & epoxide resins & polyurethanes, alkyd and polyester resins and polyethers, silicones, ion-exchangers based on polymers, cellulose

24.17 Synthetic rubber in primary forms, including synthetic rubber, factice, mixtures of synthetic rubber and natural rubber or rubber-like gums (eg. balata).

COUNTRIES

This publication covers 25 of the Member States (EU-27): Belgium (BE), Bulgaria (BG), the Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain (ES), France (FR), Italy (IT), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), the Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE) and the United Kingdom (UK). Also included is Norway (NO).

EU-27

EU-27 aggregates include estimates for missing components where necessary. EU-27 aggregates from the SBS data set were supplemented by rounded estimates based on non-confidential data where necessary and appropriate. Some differences may exist between aggregates and sub-components due to rounding. In some cases when no EU totals are available, averages of available countries are presented.

EXCHANGE RATES

All data are presented in ECU/EUR terms, with national currencies converted using average exchange rates prevailing for the year in question.

SECTORS

Statistics are presented by sectors of activity according to the NACE Rev. 1.1 system of classification. Comparisons are made with the whole non-financial business economy. Non-financial business economy includes the Sections C (Mining and quarrying), D (Manufacturing), E (Electricity, gas and water supply), F (Construction), G (Wholesale and retail trade), H (Hotels and restaurants), I (Transport, storage and communication) and K (Real estate, renting and business activities). Note that these calculations for Cyprus exclude NACE K73, and for Ireland exclude Section E.

OBSERVATION UNIT

The observation unit is the enterprise. An enterprise carries out one or more activities at one or more locations. Enterprises are classified into sectors (by NACE) according to their main activity. The enterprise should not be confused with the local unit, which is an enterprise or part thereof situated in one location.

STRUCTURAL BUSINESS STATISTICS VARIABLES

Variables are defined according to Commission Regulation No 2700/98 and include:

Number of enterprises

The number of enterprises active during at least part of the reference period.

Number of persons employed

The total number of persons who work in the observation unit, as well as persons who work outside the unit who belong to it and are paid by it. It includes working proprietors, unpaid family workers, part-time workers, seasonal workers etc.

Value added at factor cost

The gross income from operating activities after adjusting for operating subsidies and indirect taxes (including value added tax).

Turnover

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.

Apparent labour productivity

This is a simple indicator of productivity calculated as value added divided by persons employed.

Average personnel costs

Personnel costs are the total remuneration, in cash or in kind, payable by an employer to an employee for work carried out. This is divided by the number of employees (paid workers), which includes part-time workers, seasonal workers etc, but excludes persons on long-term leave.

Wage adjusted labour productivity

Value added divided by personnel costs, after the latter has been divided by the share of employees (paid workers) in the number of total persons employed. It can also be calculated by dividing apparent labour productivity by average personnel costs.

The gross operating rate

This is an indicator of profitability where the gross operating surplus is related to the turnover generated. The gross operating surplus is the surplus generated by operating activities after the labour factor input has been recompensed. It can be calculated from the value added at factor cost less the personnel costs.

Further information

Data: Eurostat Website: http://ec.europa.eu/eurostat

Select your theme on the left side of the homepage and then 'Data' from the menu.

Data: Eurostat Website/Industry trade and services/Structural business statistics

Industry, trade and services

- Industry, trade and services - horizontal view
  - Structural Business Statistics (Industry, Construction, Trade and Services)
    - Annual enterprise statistics
      - Annual detailed enterprise statistics on manufacturing subsections DF-DN and total manufacturing (NACE D) (part of Annex 2)

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