

Manufacture of glass, ceramics and cement in Europe

Statistics in focus

INDUSTRY, TRADE AND SERVICES

21/2006

Author
Walter SURA

Contents

Czech Republic and Slovakia most specialised Member States 1

Manufacture of cement and concrete largest sub-sector..... 2

'Ready-mixed concrete' number-one product sold 4

Steepest growth in glass production between 1995 and 2005 4

SMEs more important than in manufacturing..... 5

Energy costs account for six percent of the operating costs .. 5

Imports grew twice as fast as exports between 1999 and 2005 6

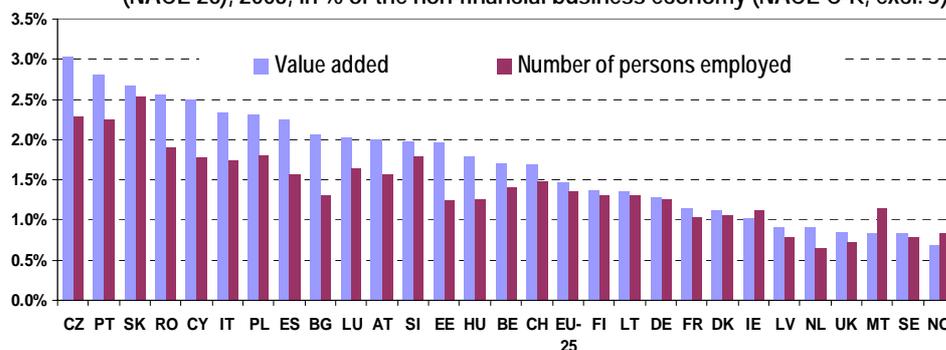


Manuscript completed on: 31.08.2006
Data extracted in: 15.05.2006
ISSN 1561-4840
Catalogue number: KS-NP-06-021-EN-N
© European Communities, 2006

Czech Republic and Slovakia most specialised Member States

The manufacture of glass, ceramics, cement and working of stone (which corresponds to 'other non metallic mineral products', NACE 26) was the main activity of some 103 thousand enterprises that produced a turnover of almost EUR 200 billion in 2003 in the EU-25. The sector generated a value added of EUR 69.1 billion, which represents a 1.5 % share of the non-financial business economy as a whole (NACE C-K, excl. J) and a 4.5 % share of manufacturing industry (NACE Section D). It employed 1.5 million persons, corresponding to 1.4 % of the total employed in the non-financial business economy and 4.6 % of manufacturing industry.

Graph 1: Value added and employment in 'other non-metallic mineral products' (NACE 26), 2003, in % of the non-financial business economy (NACE C-K, excl. J)



Note: EU-25 is estimated data. – MT, SE: 2002 data. – CH: 2001 data. – EL: data not available. Source: Eurostat (SBS)

When looking at the importance of 'other non-metallic mineral products' (NACE 26) in the non-financial business economy, in terms of value added, the Czech Republic was clearly the most specialised Member State, with the sector representing a share of 3 % in its economy (Graph 1). In terms of employment, however, the sector weighed heaviest in Slovakia (with 2.5 %).

However, there were several regions where this sector accounts for a larger share of the non-financial business economy workforce. Regional data at NUTS 2 level show that the most specialised region in this activity was Centro in Portugal, where 6.2 % of the persons employed worked in this activity (data not shown). This region was followed by Swietokrzyskie in Poland (5.7 %) and Oberfranken in Germany (5.1 %).

The sector's importance in Member States' economies was greater in terms of value added than for employment in the vast majority of Member States and in Bulgaria and Romania. This was especially the case in Estonia where the value-added share was 1.6 times that for employment. Only in two Member States, Ireland and Malta (2002 data), did the weight of employment exceed that of value added.

The manufacture of other non-metallic mineral products corresponds to NACE Rev. 1.1 Division 26. In this publication, the sector of activity is broken down into four sub-sectors: 'glass and glass products' (NACE 26.1); 'ceramic and clay products' (NACE Groups 26.2 to 26.4); 'cement and concrete' (26.5 and 26.6); and the 'working of stone and miscellaneous non-metallic mineral products' (26.7 and 26.8) (see Methodological Notes on page 7 for further details).

Manufacture of cement and concrete largest sub-sector

Table 1: Importance of 'other non-metallic mineral products' in the EU-25 and Member States by sub-sector, 2003

	Total EU value added		Total EU employment		Member State where this sector is most important**
	(in EUR million)	%	(in 1000s)	%	
Other non-metallic mineral products (NACE 26)	69 083*	100%	1 536*	100%	Czech Republic
Glass and glass products (26.1)	15 917	23%	373	24%	Czech Republic
Ceramic and clay products (26.2-26.4)	14 424	21%	373*	24%	Portugal
Cement and concrete (26.5 and 26.6)	28 807	42%	496	32%	Cyprus
Working of stone and miscellaneous non-metallic mineral products (26.7 and 26.8)	9 936	14%	294*	19%	Slovenia

* estimated data;

** most important (specialised): based on share in the non-financial business economy.

Source: Eurostat (SBS)

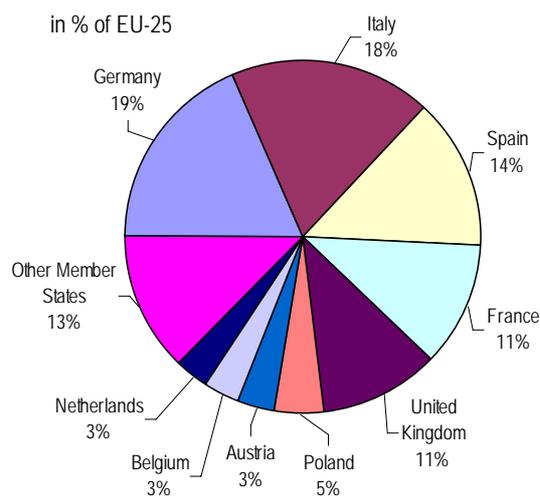
Turning to the breakdown of the manufacture of other non-metallic mineral products (Table 1) 'cement and concrete' accounted for the largest shares of value added and employment in the EU-25 in 2003, at respectively 42 % and 32 %. This sub-sector was followed, in decreasing order, by 'glass and glass products', 'ceramic and clay products', and the 'working of stone and miscellaneous non-metallic mineral products'.

Nine Member States contributed 3 % or more to EU-25 value added in the sector (Graph 2). Of these main contributors, the two largest were Germany (19 %) and Italy (18 %). Spain, France and the United Kingdom followed with shares above 10 %. Together, these five countries accounted for a little over 73 %, 2 percentage points less than the manufacturing average. Interestingly, the contribution of Germany was significantly smaller than the manufacturing average (by 8 percentage points).

Looking at the situation in the Member States (Graph 3), 'cement and concrete' was the largest sub-sector in 15 of the 16 Member States with data available, including eight of the main contributors to

EU-25 value added. The Member State in which this sub-sector was most important was Cyprus.

Graph 2: Main contributing Member States* to EU-25 value added in 'other non-metallic mineral products', 2003



* Member States with a share of 3 % or above of EU-25 value added.

Source: Eurostat (SBS)

Table 2: Main indicators of 'other non-metallic mineral products' (NACE 26), 2003

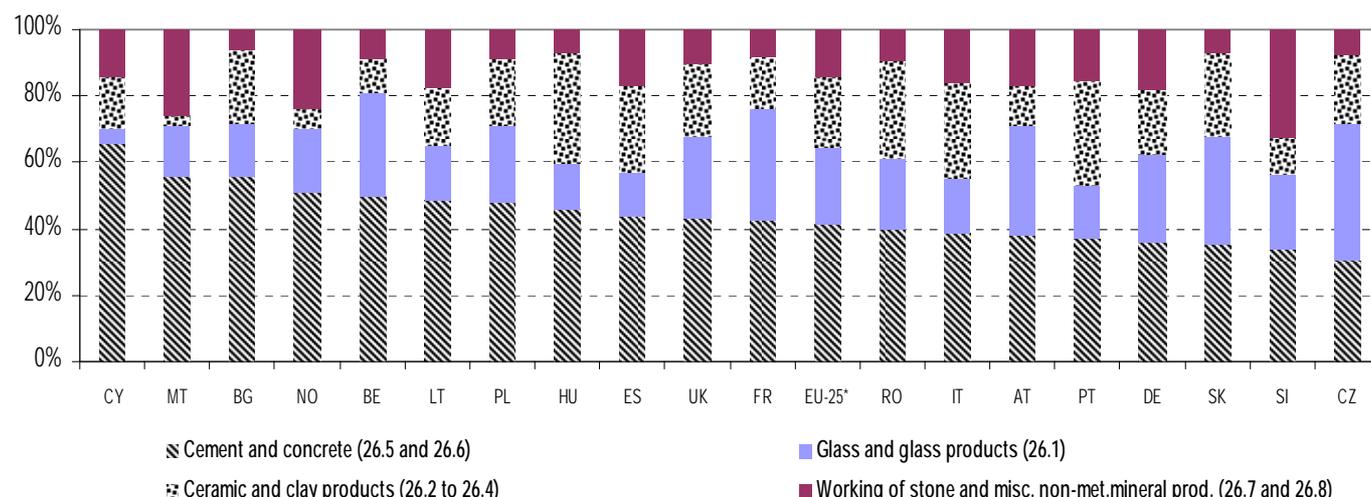
	EU-25	BE	CZ	DK	DE	EE	ES	FR	IE	IT	CY	LV	LT	LU
Value added at factor cost - in million EUR	69 083*	2 273	1 465	1 070	12 962	86	9 611	7 896	780	12 541	129	45	79	230
Persons employed - in thousands	1 536.3*	33.4	82.3	17.3	255.6	4.7	193.8	145.5	10.7	251.7	3.3	4.3	10.1	3.3
Number of enterprises	102 677*	1 479	7 403	677	9 892	154	11 924	9 202	307	26 872	354	311	563	41
Turnover - in million EUR	199 316	7 357	4 050	2 633	37 387	259	27 907	25 353	1 940	38 780	361	127	239	681
Average personnel costs - in thousand EUR	29.7*	45.2	8.7	43.8	40.3	8.3	27.7	38.5	36.8	30.9	20.7	3.8	4.7	43.2
Apparent labour productivity (value-added per person employed) - in thousand EUR	45.0*	68.0	17.8	61.7	50.7	18.4	49.6	54.3	73.2	49.8	39.4	10.6	7.8	70.4
Wage-adjusted labour productivity - in %	151.7*	150.4	204.5	140.9	125.9	222.2	179.1	140.8	199.0	161.1	190.3	277.6	164.4	163.0
Gross operating rate - in %	13.3*	11.3	20.3	12.4	8.0	18.4	15.9	9.4	20.3	15.4	17.5	23.2	13.5	13.2

* Estimated data. ** 2002 data. *** 2001 data.

EL: data not available

Source: Eurostat (SBS)

Graph 3: Value added breakdown by sub-sector of 'other non-metallic mineral products', 2003*



* 2001 data: CY, AT, PL, RO, NO – 2002 data: CZ, MT, SK, SI – Not available/confidential: EE, EL, DK, IE, LU, NL, LV, FI, SE

Source: Eurostat (SBS)

The largest sub-sector in the Czech Republic was 'glass and glass products', the sub-sector in which it was the most specialised Member State.

In Slovenia, the share of 'working of stone and miscellaneous products' was only fractionally below that of cement and concrete (approximately 33 % each) and Slovenia was also the most specialised Member State in this activity.

Finally, the largest share of 'ceramic and clay products' in any of the 16 Member States' economies (for which data are available) could be found in Hungary (33 %).

In the EU-25, apparent labour productivity (value added per person employed) was EUR 45 000 in other non-metallic mineral products in 2003 (Table 2), almost 3 % below the manufacturing average. Among the sub-sectors, it was highest in 'cement and

concrete' (EUR 58 000) and lowest in the 'working of stone and miscellaneous non-metallic mineral products' (EUR 33 800).

In the same year, personnel costs averaged approximately EUR 29 700 per employee in the EU, about 8 % less than the manufacturing average. As a result, wage-adjusted labour productivity – which shows the relationship between value added per person employed and average personnel costs – was 151.7 %, which was 8.6 percentage points more than the manufacturing average.

The gross operating rate – which is one indicator of profitability – was 18.3 % in 2003, almost double the manufacturing average. Although this extra profitability was combined with a higher investment rate (see page 5), the share in value added of research and development expenditure was lower than the manufacturing average in most of the 12 Member States with data available (data not shown).

Table 2: Main indicators of 'other non-metallic mineral products' (NACE 26), 2003 (continued)

	HU	MT**	NL	AT	PL	PT	SI	SK	FI	SE**	UK	BG	RO	NO	CH***
Value added at factor cost - in million EUR	597	24	2 109	2 379	2 088	1 703	249	296	969	1 084	7 525	140	441	661	1 410
Persons employed - in thousands	32.0	1.4	29.6	36.2	132.4	64.8	10.2	22.8	16.0	20.4	127.1	22.8	74.8	10.3	19.2
Number of enterprises	2 685	215	2 020	1 438	12 443	4 722	480	267	926	1 608	5 211	888	2 047	397	1 399
Turnover - in million EUR	1 796	69	5 991	5 571	6 258	4 718	681	1 000	2 553	3 203	18 234	525	1 288	1 956	3 192
Average personnel costs - in thousand EUR	8.8	10.2	45.1	44.3	7.9	14.8	14.4	6.6	37.1	38.8	32.75	2.8	2.8	46.5	:
Apparent labour productivity (value-added per person employed) - in thousand EUR	18.6	17.5	71.3	65.7	15.8	26.3	24.4	13.0	60.6	53.2	59.2	6.2	5.9	64.1	73.6
Wage-adjusted labour productivity - in %	212.1	172.6	158.2	148.1	221.5	177.2	169.6	196.5	163.3	137.1	180.7	222.8	213.5	137.9	:
Gross operating rate - in %	18.3	16.8	13.6	14.7	33.1	16.4	15.5	14.5	15.1	10.4	19.1	15.1	18.4	9.4	12.2

** 2002 data. *** 2001 data.

Source: Eurostat (SBS)

‘Ready-mixed concrete’ number-one product sold

Products manufactured in ‘other non-metallic mineral products’ are supplied to the construction sector and other downstream activities (e.g. refractory bricks for steel-making, or glass for windows, automotive glazing and containers). Some products are also destined for households in the form of consumer durables (e.g. ceramic table- and glassware).

The three largest products manufactured in the EU-25 and sold in 2004 were in the largest sub-sector ‘cement and concrete’ (Table 3): ‘ready-mixed concrete’ (with a sales value of EUR 19 billion), ‘grey Portland cement’ (EUR 12.1 bn) and ‘prefabricated structural components for building’ (EUR 11.4 bn).

Table 3: Main ‘other non-metallic mineral products’ (by CPA group) manufactured in the EU-25 and sold in 2004

Rank		Prodcom code	EUR bn
Glass and glass products (26.1)			
1	Multiple-walled insulating units of glass	26121330	c
2	Bottles of coloured glass of a nominal capacity < 2.5 litres	26131134	3.0
3	Bottles of colourless glass of a nominal capacity < 2.5 litres	26131128	2.0
4	Toughened safety glass for use in motor vehicles	26121215	1.5
5	Glass containers for beverages and foodstuffs of a nominal capacity < 2.5 litres (excluding bottles; flasks covered with leather or composition leather; domestic glassware; vacuum flasks and vessels)	26131140	1.3
Ceramic and clay products (26.2 to 26.4)			
1	Non-refractory clay building bricks (excluding of siliceous fossil meals or earths)	26401110	c
2	Glazed stoneware flags and paving; hearth or wall tiles; with a face of <= 90 cm²	26301073	3.6
3	Non-refractory clay roofing tiles	26401250	2.3*
4	Glazed ceramic flags and paving	26301079	2.0
5	Ceramic sinks... and other sanitary fixtures	26221030	1.7
Cement and concrete (26.5 and 26.6)			
1	Ready-mixed concrete	26631000	19.0
2	Grey Portland cement (including blended cement)	26511230	12.1*
3	Prefabricated structural components for building	26611200	11.4
4	Tiles; flagstones and similar articles of cement; concrete or artificial stone (excluding building blocks and bricks)	26611150	5.7
5	Factory made mortars	26641000	4.5*
Working of stone and miscellaneous non-metallic mineral products (26.7 and 26.8)			
1	Worked monumental or building stone and articles thereof; of granite excl. tiles; cubes and similar articles	26701260	3.0
2	Worked monumental/building stone and articles thereof; in marble; travertine and alabaster excl. tiles	26701100	2.9
3	Bituminous mixtures based on natural and artificial aggregate and bitumen or natural asphalt as a binder	26821300	2.6
4	Slag wool; rock wool and similar mineral wools and mixtures thereof; in bulk; sheets or rolls	26821610	1.7
5	Roofing or water-proofing felts based on bitumen (in rolls)	26821253	1.5

* estimated data.

NB: ‘c’ denotes confidential data.

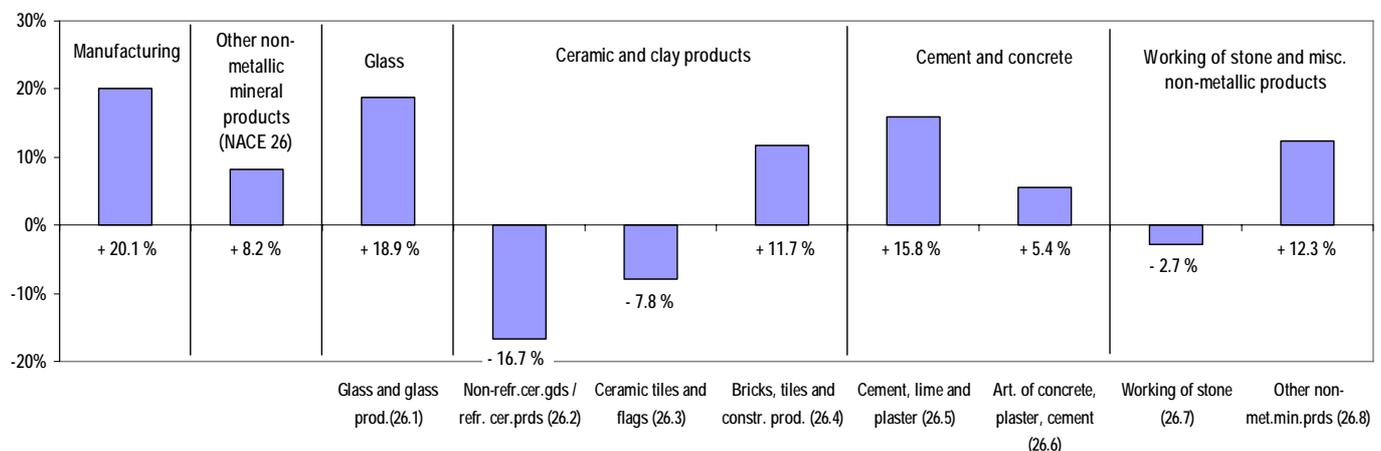
Source: Eurostat (PRODCOM)

Steepest growth in glass production between 1995 and 2005

Production of other non-metallic mineral products grew by a little over 8 % in the EU-25 between 1995 and 2005, about 12 percentage points less than the manufacturing average (Graph 4). This growth was the net result of increases notably in the two largest sub-sectors, ‘cement and concrete’ (NACE 26.5 and

26.6) and ‘glass and glass products’ (26.1), and decreases in two of the three NACE groups making up the third largest sub-sector, ‘ceramic and clay products’ (26.2 to 26.4). The growth of glass and glass products came closest to the manufacturing average, with an 18.9 % increase.

Graph 4: Development of production in ‘other non-metallic mineral products’, by NACE group, 1995-2005, in %



Source: Eurostat (STS)

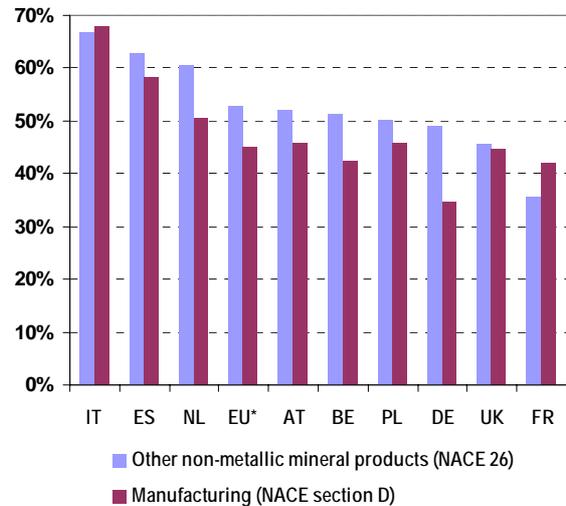
SMEs more important than in manufacturing

In 2003, small and medium-sized enterprises (SMEs employing between 1-249 persons) were more important in the 'other non-metallic mineral products' sector, compared with the manufacturing average (Graph 5). SMEs accounted for approximately 53 % of EU-25 value added and for around 63 % of employment, compared with respectively 45 % and 58 % in manufacturing. Although average labour productivity in other non-metallic mineral products was slightly lower than the manufacturing average, the productivity of SMEs was actually higher than for SMEs in manufacturing, by around 7 %.¹

The importance of SMEs generally differed between sub-sectors and/or NACE groups, based on data available for certain countries. Large enterprises were often far more important in 'glass and glass products' and 'cement, lime and plaster' (NACE group 26.5). However, SMEs generally dominated 'articles of concrete, plaster and cement' (26.6), and the sub-sector 'working of stone and misc. non-metallic products'. SME importance was less clear-cut in the 'ceramic and clay products' sub-sector.

¹ Employment data and derived labour productivity for SMEs based on an average of 19 Member States (accounting for 95 % of EU-25 value added in the sector).

Graph 5: Importance of SMEs based on value added in 'other non-metallic mineral products', 2003 (%)



Note: Main contributing Member States with a share of 3 % or above to EU-25 value added or above (see Graph 2).
* EU average excluding EL, EE, LV, LU, and MT and accounting for almost 100% of EU-25 value added.

Source: Eurostat (SBS)

Energy costs account for six percent of the operating costs

Graph 6: Division of total operating costs in 'other non-metallic mineral products', 2003, in %



* EU average excluding EL, LU, PL and SI (accounting for approx. 95% of EU-25 value added). MT and SE: 2002 data.

Source: Eurostat (SBS)

Graph 6 shows a breakdown of the total operating costs that enterprises producing other non-metallic mineral products face: energy, other goods and services (e.g. raw materials and consumables, rents and purchase of services) and personnel costs. Of these, energy accounted for approximately 6 % in the EU-25 in 2003, three times as much as the manufacturing average, making this sector relatively energy-intensive.

While the share of other goods and services (70 %) was 8 percentage points lower than in manufacturing, personnel costs (24 %) were 4 percentage points higher.

Looking at country level, energy costs were above the EU average mainly in Southern and Eastern Member

States. Slovakia and Latvia had the largest percentage of this cost type at 18%.

The investment rate – the share in value added of gross investment in tangible goods (e.g. plant and machinery) – was 20 % in 2003, more than the manufacturing average of 14 %¹ (data not shown). Italy's sector invested the highest absolute amount, at EUR 4.4 billion, representing 35 % of its sector's value added (against a manufacturing average of 17 %). This was more than double the amount invested in Germany, where investments represented only 12 % of the sector's value added. The highest rate was however recorded in Luxembourg (67 % against 19 % in manufacturing).

¹ Based on an average for 20 Member States accounting for 91 % of EU-25 value added in the sector.

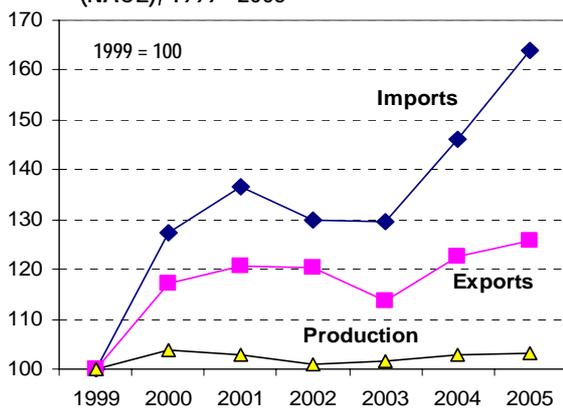
Imports grew twice as fast as exports between 1999 and 2005

In 2005, the EU-25 exported EUR 16.4 billion worth of other non-metallic mineral products, yielding a trade surplus of EUR 7.1 bn. This represented 1.5 % of total EU-25 exports of industrial goods. Italy was the largest EU-25 exporter (24 % share of EU-25 exports), while Germany was the largest importer of goods from outside the EU-25 (20 %).

Based on data available for 2003, EU-25 exports of these products was equal to 7.4 % of the EUR 200 billion turnover generated by the other non-metallic mineral products sector (NACE 26). Compared with other industrial sectors, exports were not as important in turnover. This reflects the fact that many of these products – cement, container glass, bricks/tiles, refractory ceramics and unworked flat glass – are not normally traded over long distances, and destined more for home/EU markets.

Nevertheless, exports and especially imports grew between 1999 and 2005, by 26 % and 64 % respectively (Graph 7). Following the post-2001 global economic decline, imports rose between 2003 and 2005 almost as fast as they did between 1999 and 2001, by 36 index points, indicating a strengthening home market. Recovery in exports was slower compared with the 1999-2001 growth, at 12 points. While caution should be exercised when comparing trade and production statistics (see footnote), this increase in exports was probably the most important factor behind the 1.6 % production growth between these same two years, most of which took place between 2003 and 2004.

Graph 7: Evolution of exports and imports of 'other non-metallic mineral products' (CPA), compared with production in 'other non-metallic mineral products' (NACE), 1999 - 2005*

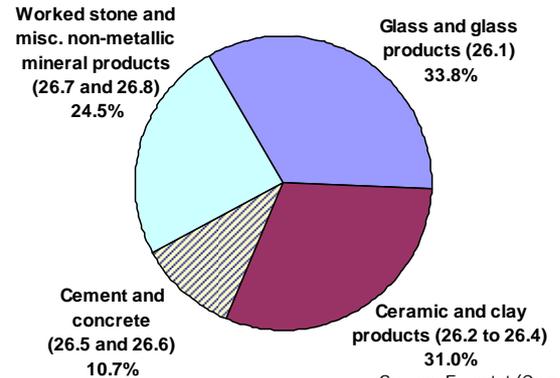


Source: Eurostat (Comext and STS)

* When comparing external trade data, the production index and structural business statistics (SBS), readers should note that these data originate from independent statistical sources, which are not entirely comparable. External trade data are based on products, the production index on kind-of-activity units, and business statistics on enterprises whose main activity is to produce these products. These enterprises could be involved in other types of production, while some 'other non-metallic mineral products' could be produced also by enterprises with another main activity.

Looking at the composition of EU-25 exports, according to the four main sub-sectors (compiled from NACE/CPA groups), the largest were glass and glass products (33.8 %), 'ceramic and clay products' (31 %), and 'working of stone and miscellaneous non-metallic mineral products' (24.5 %) (Graph 8). Contrary to the importance in terms of production, 'cement and concrete', generated the smallest export share (10.7 %).

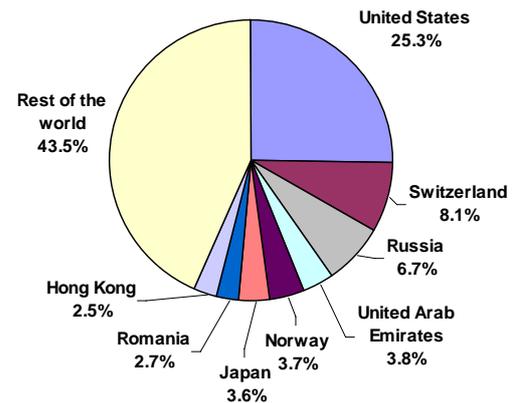
Graph 8: Breakdown of EU-25 exports of 'other non-metallic mineral products', by sub-sector (NACE/CPA product groups), 2005



Source: Eurostat (Comext)

All four sub-sectors generated a trade surplus in the EU-25 in 2005 (data not shown), of which 'ceramic and clay products' was the one generating the largest, at EUR 3.2 billion. This was mainly attributable to trade of 'ceramic tiles and flags' (NACE/CPA group 26.3), which netted a surplus of EUR 2.4 bn. The only group to register a deficit was 'cement, lime and plaster' (NACE/CPA group 26.5): EUR 0.3 bn.

Graph 9: Main destinations of EU-25 exports of 'other non-metallic mineral products', 2005



Source: Eurostat (Comext)

The geographical distribution of these exports was quite wide, with the United States being the top destination, accounting for 25.3 % (Graph 9). Finally, with regard to imports to the EU-25 (not shown), most striking is the fact that the proportion of imports coming from top partner China (a 31 % share in 2005) has doubled since 1999. In second place, the US (13 %) was not far ahead of Turkey (11 %).

➤ 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 of May 2006.

Structural Business Statistics (SBS) is the main data source for this publication. Three main SBS data sets have been used: annual enterprise statistics, annual enterprise statistics broken down by size classes and annual regional statistics. These and other SBS data sets are available under theme 'Industry, trade and services' on the Eurostat website <http://ec.europa.eu/eurostat/> (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.

PRODCOM provides detailed information on the production of about 5000 manufactured products (according to the Statistical Classification of Products by Activity: CPA). Data presented here relate to the value of production sold during the reference period.

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

Short-Term Statistics (STS) was used to complement SBS data with information on time series development based on the Industrial production index, which shows the evolution of value added at factor cost at constant prices.

COUNTRIES

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

EU-25

EU-25 aggregates include estimates for missing components where necessary. In the absence of EU-25 aggregates, averages of available countries are presented where appropriate.

EXCHANGE RATES

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

SYMBOLS

": not available or confidential.

SECTORS

Statistics are presented by sectors of activity according to the NACE Rev. 1.1 system of classification. The 'manufacture of other non-metallic mineral products' corresponds to NACE Division 26, and is broken down into eight Groups, which, for the purposes of this publication have been combined to make up four sub-sectors: '**Glass and glass products**': Manufacture of glass and glass products (26.1); '**Ceramic and clay products**': Manufacture of non-refractory ceramic goods other than for construction purposes; manufacture of refractory ceramic products (26.2); Manufacture of ceramic tiles and flags (26.3); Manufacture of bricks, tiles and construction products (26.4); '**Cement and concrete**': Manufacture of cement, lime and plaster (26.5); Manufacture

of articles of concrete, plaster and cement (26.6); and the '**Working of stone and miscellaneous non-metallic mineral products**': Cutting, shaping and finishing of ornamental and building stone (26.7); Manufacture of other non-metallic mineral products (26.8).

Comparisons are made with the whole non-financial business economy and/or total Manufacturing (NACE Section D). **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 Cyprus excludes Section K, and Ireland excludes 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 geographically identified place.

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.

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.

Investment rate (%)

An indicator of investment, related to value added generated, calculated by dividing the gross investment in tangible goods by value added at factor cost.

Further information:

Data: [Website EUROSTAT/Home page/Industry, trade and services/Data](#)

Industry, trade and services

Industry, trade and services - horizontal view

Short-term Business Statistics - Monthly and Quarterly (Industry, Construction, Retail Trade and Other Services)

Structural Business Statistics (Industry, Construction, Trade and Services)

Journalists can contact the media support service:

Bech Building Office A4/125
L - 2920 Luxembourg

Tel. (352) 4301 33408
Fax (352) 4301 35349

E-mail: eurostat-mediasupport@ec.europa.eu

European Statistical Data Support:

Eurostat set up with the members of the 'European statistical system' a network of support centres, which will exist in nearly all Member States as well as in some EFTA countries.

Their mission is to provide help and guidance to Internet users of European statistical data.

Contact details for this support network can be found on our Internet site: <http://epp.eurostat.ec.europa.eu/>

A list of worldwide sales outlets is available at the:

Office for Official Publications of the European Communities.

2, rue Mercier
L - 2985 Luxembourg

URL: <http://publications.europa.eu/>
E-mail: info-info-opoce@ec.europa.eu
