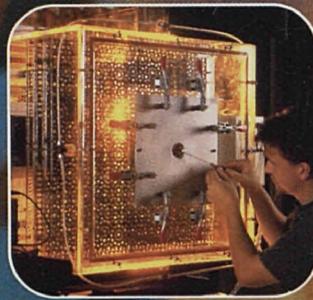
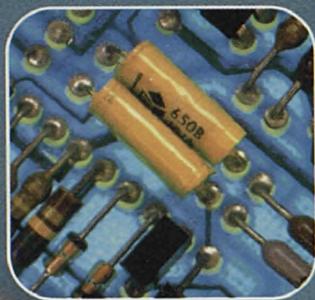


Monthly **Panorama**
of European Industry



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Monthly **Panorama**

of European Industry

ISSUE 10/97 ■ OCTOBER 1997

Theme
Energy and industry
Series
Short-term statistics

4

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Sent to press in October 1997

A great deal of additional information on the European Union is available on the Internet. It can be accessed through the Europa server (<http://europa.eu.int>)

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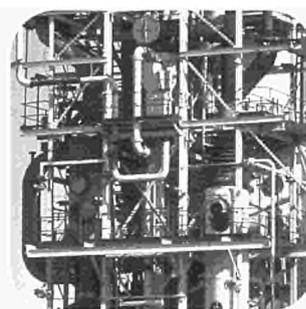
Europe's industry is going through a period of generally rising output, which is more pronounced for intermediate products, capital goods and consumer durables. This points to a situation more favourable than the corresponding period of 1996, and price inflation in the industrial sector in Europe remains low, at slightly over one per cent.

This issue of the Monthly Panorama, in addition to the usual economic commentary and recent economic indicators, contains two special articles on the steel industry. The first looks at the industry as a whole and analyses recent changes and trends. EU steel production reached a 15-year peak in 1995, since when it has fluctuated but fallen below that peak. Steel consumption was hit by the crisis in the construction industry and declined in 1996. However, 1996 was marked by steady growth in investment in the steel industry, a steep rise in the EU's external trade balance and continued downward pressure on steel prices.

The **second** special article on steel considers more specifically steel tube rolling. This branch of the steel industry has been seriously hit by the crisis in the building and construction sector with, Europe-wide, a fairly severe slump in steel tube consumption, which **in turn led to** a decline in production in 1996. Producer prices have been falling steadily since the third quarter of 1995, though the branch's productivity is rising.

The next regular edition of the MPEI will look in detail at the manufacture of electrical and electronic equipment, including a special article on information technology.

François de Geuser,
Luxembourg



Latest outlook - the most recent short-term indicators for European industry in tabular and graphic format, page 13



In depth - recent trends in the steel industry, page 43



Special focus - the steel tube industry - recent developments, page 53



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The Monthly Panorama of European Industry has the objective of furnishing readers with an instrument which will allow them to follow the evolution of industrial short-term trends and also show the structure and activity of industry at the sectorial level. The publication appears eleven times during the course of the year. When the occasion warrants topical articles may well be treated in the form of a special edition, five of which are planned for 1997.

This publication is a joint project of Eurostat and Directorate General III (Industry policy).

The opinions expressed in this publication are those of the individual authors alone and do not necessarily reflect the position of the European Commission.

Next issue:
Electrical engineering
Information technology

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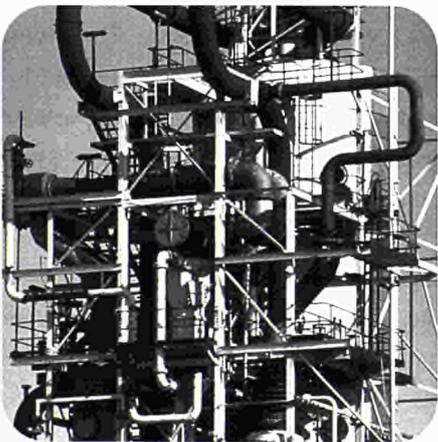
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**Economic commentary**

current economic situation in
the EU, Japan and United States

**Data in this section**

index of production,
consumer price index, trade balance



In this section

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Community-wide, the growth in industrial output which began in January continued in early summer

In July 1997, the growth in the output of manufacturing industry, adjusted for working days and in comparison with the corresponding month of 1996, was up by 5.2%, against 3.6% in June. This was the seventh consecutive month of growth since the 0.3% decline of December 1996. The growth since January 1997 has varied sharply from one month to another, ranging from a low of 1.3% in March to a high of 5.6% in April. But over the first seven months of the year, the trend has been an improvement on that of 1996. For example, in July 1996, growth was only 1.0%.

Industrial output is improving generally in the main industrial powers

Industrial growth for July 1997 in EUR15, measured in comparison with the corresponding month of the previous year, was above the results of the USA and Japan, which returned growth of 4.3% and 4.4% respectively for July 1996. The United States' growth rate for industrial output has exceeded 2.5% every month since April 1996, reaching 5.2% in April 1997, but has since fallen back to the levels of autumn 1996. In Japan, the end of 1996 saw a slowdown in the growth of industrial output - from 5.3% in October 1996 to 3.2% in December - but the situation has improved, and in each of the first seven months of 1997 it has exceeded 4.4%. July, nevertheless, showed a fall of 2.6 percentage points on May's figure.

Generally, industrial output is following an upward trend in 1997

Amongst the Member States growth is very strong at present in Germany, with an 8.7% rise in July 1997 compared to July 1996, (6.4% in June, whilst only 0.9% in May). This can be seen as a dramatic upturn in economic activity.

The situation is also improving in the United Kingdom after the spring, when uneven variations were recorded. After falling 1.6% in May, industrial output rose by 2.3% in June and 2.6% in July (compared to the same month of the previous year).

Negative growth rates predominated in Italy in 1996, but 1997 has seen a return to positive results with annual gains of 3.9% in April and 3.3% in July.

Further information:

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INDUSTRIAL PRODUCTION AND CONSUMER PRICES

Industrial output looking

up in EUR15

Trends in industrial output by goods sector

Manufacture of intermediate goods has developed appreciably since the beginning of the year. It is possible that the robust state of industry as a whole can be largely ascribed to the intermediate goods sector. Growth in output of intermediate goods was 5.8% in July, and 4.7% in June, each compared with the corresponding month of 1996. The general trend in industrial output is in step with this, though at a lower level.

Positive signs for intermediate goods, capital goods and consumer durables too

The general growth of industrial output can, in recent months, also be ascribed to the improvement in the capital goods sector, which grew by 7.2% in July 1997, 1.9 percentage points higher than in June. However, the capital goods sector is nevertheless subject to much wider variations than those seen for intermediate goods.

The consumer durables sector also reported appreciable growth during July 1997, up 4.9%. Output thus seems to be on the rise again after declining by 0.7% in May 1997 (against May 1996). During the spring there were also promising figures (+4.0% in March and +6.1% in April).

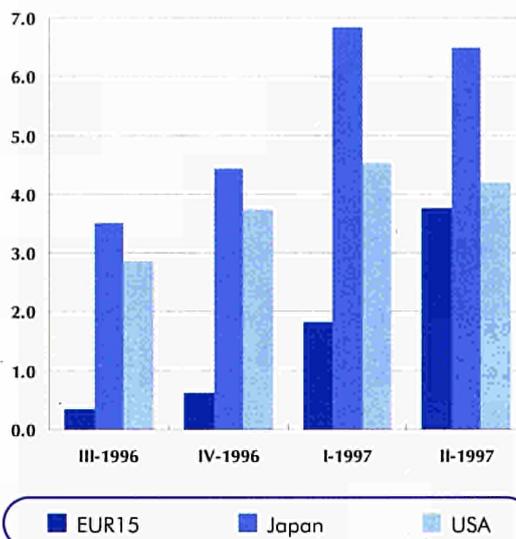


Figure 1.1

Year on year growth rates (t/t-4) for industrial production (%)

Source: eurostat

Less dynamic activity for the non-durable consumer goods sector

Finally, the non-durable consumer goods sector differs from the other goods sectors - displaying significantly less dynamic levels of economic activity, which have always been below the average of total industry during recent months. Growth of output for consumer non-durables was equal to 0.0% in June 1997 and 1.1% in July 1997. Nevertheless, the slightly gloomy impression given by these results should be balanced by the fact that the last negative results for the sector were back in December 1996.

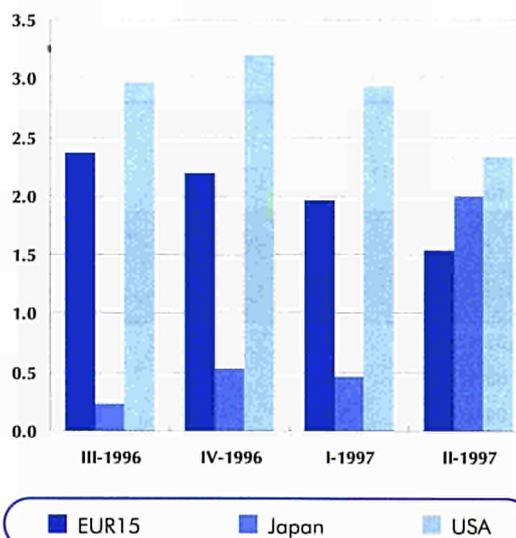


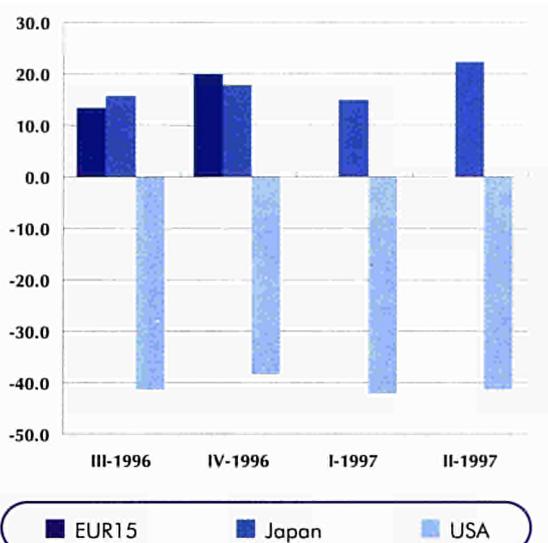
Figure 1.2

Year on year growth rates (t/t-4) for consumer prices (%)

Source: eurostat

Figure 1.3

Quarterly
trade balance
(billion ECU)



Source: eurostat

Growth of industrial output in the USA and Japan has been driven by capital goods

The United States and Japan also returned lower rates of growth in the non-durable consumer goods sector over the first seven months of the year. The sector with the most impressive growth rate has been capital goods, with growth of 7.5% and 7.0% in July 1997 for the United States and Japan respectively. From January to March 1997, Japan turned in double-digit growth over the corresponding months of 1996 - and in the USA output grew by between 7.0% and 8.4% during the first quarter of 1997.

Three month on three month growth of industrial output

The three month on three month growth rate of EUR15 industrial output indicates growth increasing at a faster pace from June 1996 onwards. There has been a slight but steady acceleration in growth, from 0.1% in the summer of 1996 to 0.8% on average during the winter of 1996/97 and more recently 1.5% between May and July 1997. The Community trend is following Germany's (although at a lower level), and seems since the spring of 1997 to have been following the same course as that displayed in France.

Table 1.1

Year on year
growth rates (t/t-12)
for industrial
production
(%)

	EUR15	Japan	USA
08-96	-0.3	1.5	2.8
09-96	0.2	4.7	2.6
10-96	1.3	5.3	3.2
11-96	0.8	4.9	3.9
12-96	-0.3	3.2	4.1
01-97	1.5	7.6	4.9
02-97	2.7	5.8	4.1
03-97	1.3	7.2	4.6
04-97	5.6	4.8	5.2
05-97	2.1	7.8	4.1
06-97	3.7	7.0	3.4
07-97	5.2	4.4	4.3

Source: eurostat

Japan's three month on three month growth rates have exceeded 1.0% since July 1996, and are consistently in the range of 1.5% to 2.0%. In the United States, on the other hand, growth seems to be slowing down slightly, from 1.3% in the first quarter 1997 to only 0.8% in July 1997, thus falling below the European rate.

CONSUMER PRICES & TRADE BALANCE

Since June 1997, EUR15 producer price inflation has exceeded 1.0% - the first time for more than a year...

Industrial producer prices are rising, and point to an increase in inflation. The rate has risen from 0.4% in December 1996 to 1.1% at the beginning of the summer of 1997. Price trends are relatively heterogeneous between Member States: 1.4% in Germany (July 1997), 1.7% in Italy and 2.7% in the Netherlands and Belgium - but below 1.0% in the United Kingdom (0.6% in July; and -0.1% in April). France, meanwhile, recorded deflationary figures, -0.2%. We have to go back to December 1995 to find price inflation exceeding one per cent in the French economy.

The United States is entering a period of deflation and Japan one of inflation

Meanwhile, industrial producer prices in the USA and Japan are moving in opposite directions. While the USA had inflation in excess of 2.0% throughout 1996, Japan was undergoing a period of deflation which was to continue until March 1997. Since then, the situation has reversed and US industrial prices fell by 0.9% in the year to July, whilst prices in Japan rose at the rate of 1.9% from April 1997 onwards.

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EUR15 Japan USA

Table 1.2

	EUR15	Japan	USA
09-96	2.3	-0.1	3.0
10-96	2.3	0.6	3.0
11-96	2.2	0.5	3.3
12-96	2.1	0.5	3.3
01-97	2.2	0.5	3.0
02-97	2.0	0.5	3.0
03-97	1.7	0.4	2.8
04-97	1.5	1.9	2.5
05-97	1.5	1.9	2.2
06-97	1.6	2.2	2.3
07-97	1.7	1.9	2.2
08-97	1.8	:	:

Year on year
growth rates (t/t-12)
for consumer
prices
(%)

Source:  eurostat

EUR15 Japan USA

Table 1.3

	EUR15	Japan	USA
08-96	4.5	3.9	-13.1
09-96	1.2	7.0	-14.2
10-96	7.7	4.6	-12.2
11-96	6.4	6.0	-11.9
12-96	5.8	7.3	-14.2
01-97	-2.3	1.6	-14.9
02-97	3.1	6.1	-14.4
03-97	:	7.3	-12.9
04-97	:	7.1	-13.6
05-97	:	6.8	-14.2
06-97	:	8.4	-13.4
07-97	:	8.2	-15.5

Monthly
trade balance
(billion ECU)

Source:  eurostat

The Panorama CD-ROM Professional Version

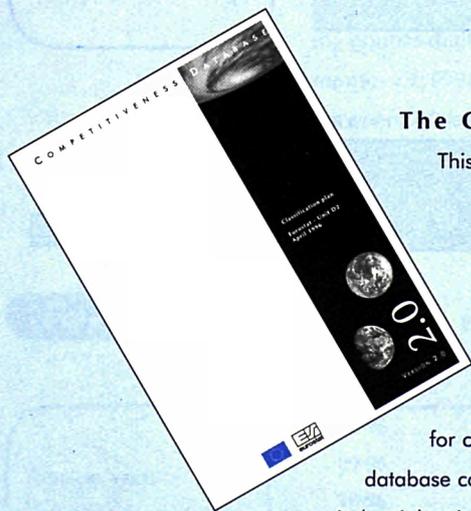
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- ★ country breakdowns of EU totals;
- ★ data from the SME (small and medium sized enterprises) database;
- ★ and data from National Accounts.

All this information is contained on one single, easy-to-use CD-Rom. As well as containing a pictorial representation of the publication, with powerful search facilities to enable the user to access related industries, the CD-Rom has the added facility of being able to link directly with spreadsheets and word processors. This CD-Rom is a useful tool for consultants, policy advisors, researchers and anyone generally interested in EU industry.

The Competitiveness Database

This is a new product, bringing together a wide range of indicators linked to industrial competitiveness for the EU Member States and OECD countries. This database will be vital for anyone interested in studying industrial competitiveness, for comparing industrial opportunities. The database covers some 30 countries in depth, 200 industrial activities and nearly 100 indicators, for the period 1980-1995. The database comes on CD-ROM and includes Eurostat standard CUB.X software for viewing and extracting the data.



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Business cycle at a glance



Short-term indicators

production index, producer price index,
employment index, capacity utilisation,
the construction sector



data extracted on: 09/10/97

For full methodological notes and an explanation of the signs and abbreviations used in this publication, please refer to page 65

Table 2.1

Business cycle at a glance - situation for the production index of the main industrial groupings, trend cycle

	Latest 3 months available	Total industry	Intermediate goods	Capital goods	Consumer durables	Consumer non-durables
EUR15	05-97 ⇔ 07-97	↗	↗	↗	↗	→
B	05-97 ⇔ 07-97	→	↗	→	↘	→
DK	04-97 ⇔ 06-97	↗	↗	→	→	↗
D	06-97 ⇔ 08-97	↗	↗	↗	→	→
EL	05-97 ⇔ 07-97	→	↗	↗↗	↗↗	→
E	05-97 ⇔ 07-97	↗	↗	↗↗	↗	→
F	04-97 ⇔ 06-97	↗	↗	↗	↗	↗
IRL	04-97 ⇔ 06-97	↗↗	↗↗	↗	:	↗
I	05-97 ⇔ 07-97	↗	↗	→	↗	→
L	04-97 ⇔ 06-97	↗	↗	→	↘↘	↘
NL	04-97 ⇔ 06-97	↗	↗	→	↗	↗
A	⇔	:	:	:	:	:
P	04-97 ⇔ 06-97	↗	↗	↘↘	↘	→
FIN	05-97 ⇔ 07-97	↗↗	↗↗	↗↗	↗↗	→
S	05-97 ⇔ 07-97	↗	↗	↗↗	↗	→
UK	05-97 ⇔ 07-97	↗	→	↗	↗↗	→
Japan	05-97 ⇔ 07-97	↗	↗	↗	→	→
USA	05-97 ⇔ 07-97	↗	→	↗	↗	→

Growth rates:

↗↗ >2.5%

↗ 0.5% → 2.5%

→ -0.5% → 0.5%

↘ -2.5% → -0.5%

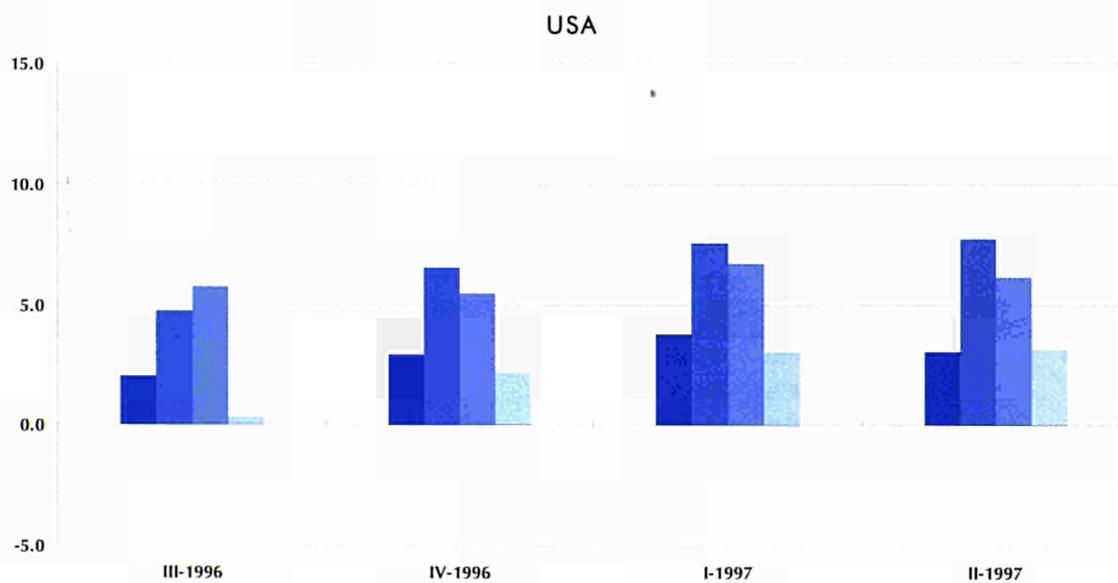
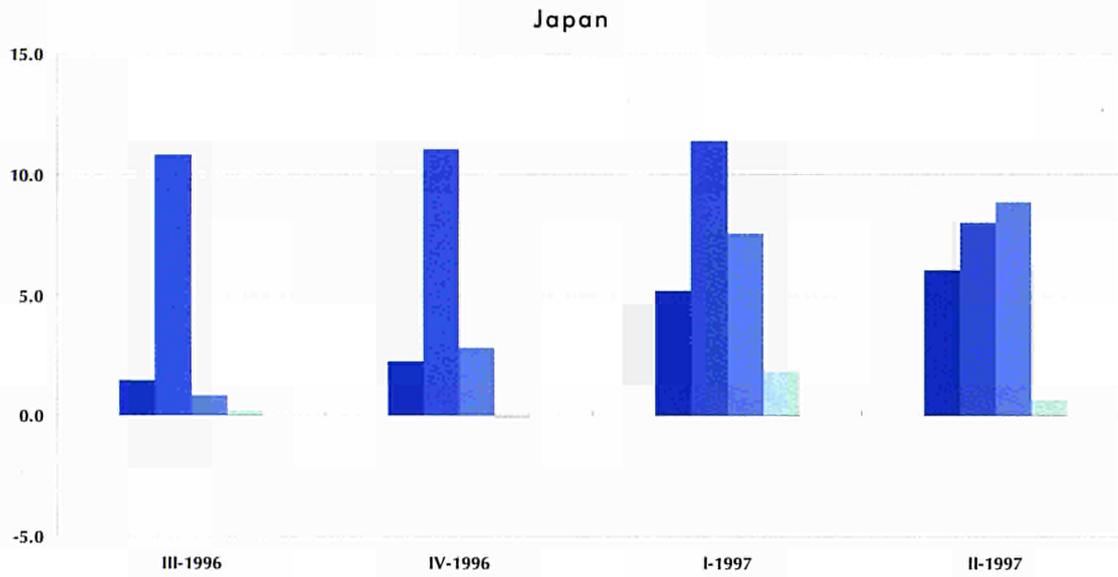
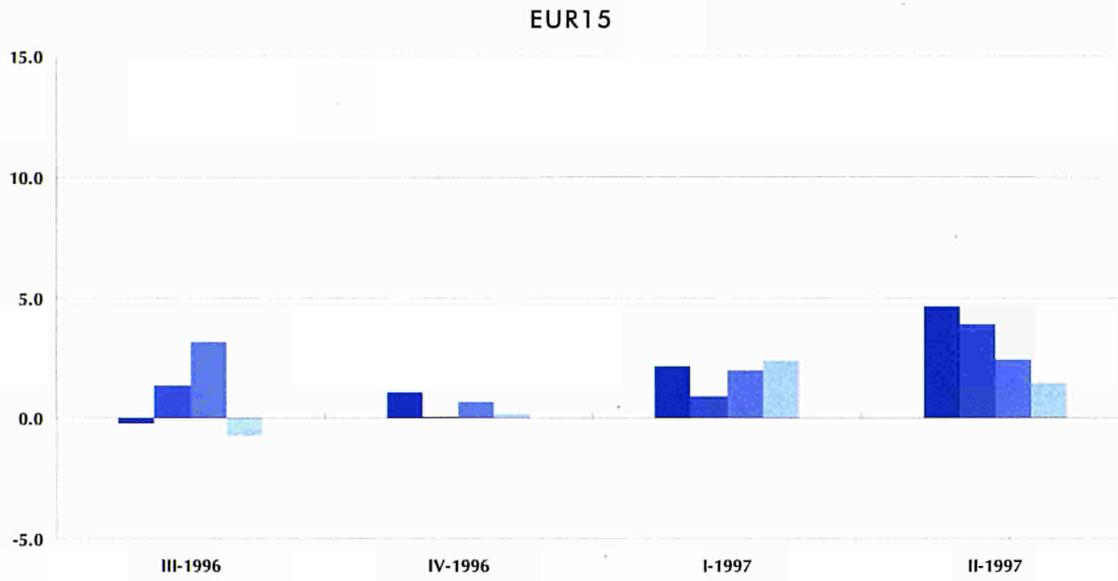
↘↘ <-2.5%

Source:  eurostat

PRODUCTION INDEX - W.D.ADJ.

Figure 2.1

TRIAD comparison of production growth for the main industrial groupings, based on changes from the corresponding quarter of the previous year, w.d.adj. (%)



- Intermediate goods
- Capital goods
- Consumer durables
- Consumer non-durables

Source: eurostat

PRODUCTION INDEX - W.D.ADJ.

Table 2.2

Indices of
production for total
industry, w.d.adj.
(1990 = 100)

	1994	1995	1996	02-97	03-97	04-97	05-97	06-97	07-97
EUR15	99.4	103.3	103.4	106.9	111.9	109.3	105.7	111.4	104.5
B	94.7	100.9	102.4	106.4	111.6	105.6	109.0	107.7	92.9
DK	111.2	115.8	117.1	118.1	126.0	120.3	117.5	132.9	:
D	93.9	95.9	96.0	94.1	102.2	100.6	94.3	102.9	101.6
EL	95.7	97.4	98.4	95.9	97.9	97.2	99.0	105.6	106.6
E	98.7	103.2	102.1	108.7	113.4	115.6	109.3	116.6	114.3
F	97.7	99.6	99.7	107.5	106.7	107.6	99.5	107.1	:
IRL	133.3	158.5	171.1	178.4	210.8	193.6	192.4	204.7	:
I	101.7	107.9	104.9	114.2	116.0	112.6	114.1	116.1	113.0
L	100.5	101.0	100.6	110.8	107.0	111.3	109.4	110.3	:
NL	103.2	106.7	110.2	115.8	117.3	116.0	110.2	112.3	:
A	105.9	112.3	:	:	:	:	:	:	:
P	94.9	99.4	100.8	105.0	104.4	104.7	101.6	108.0	:
FIN	106.5	114.1	118.3	121.8	130.8	130.2	131.6	134.8	99.1
S	103.8	113.5	116.3	120.4	129.8	126.1	127.0	135.2	88.3
UK	103.8	106.2	107.1	108.1	115.1	107.2	104.5	107.6	103.7
Japan	93.1	96.3	98.6	105.4	112.5	102.3	98.6	107.0	106.2
USA	109.8	113.4	116.5	119.9	119.9	119.8	119.3	123.0	119.8

Source:  eurostat

Table 2.3

TRIAD comparison of
indices of production
for the main
industrial groupings,
w.d.adj.
(1990 = 100)

	1994	1995	1996	02-97	03-97	04-97	05-97	06-97	07-97
Total industry									
EUR15	99.4	103.3	103.4	106.9	111.9	109.3	105.7	111.4	104.5
Japan	93.1	96.3	98.6	105.4	112.5	102.3	98.6	107.0	106.2
USA	109.8	113.4	116.5	119.9	119.9	119.8	119.3	123.0	119.8
Intermediate goods									
EUR15	101.7	104.9	104.2	109.6	113.4	112.1	107.7	111.6	105.8
Japan	95.5	99.3	99.7	105.2	108.8	104.4	101.0	106.9	106.2
USA	104.1	105.4	107.3	106.3	107.1	107.2	107.6	112.6	112.9
Capital goods									
EUR15	92.1	99.3	101.2	101.0	109.0	106.4	102.6	114.2	102.8
Japan	85.6	89.5	97.6	105.0	126.1	98.8	95.6	105.6	104.7
USA	103.7	108.6	113.7	119.6	119.9	120.7	121.1	124.8	120.0
Consumer durables									
EUR15	95.4	96.7	97.1	100.3	111.3	104.8	98.2	106.9	95.8
Japan	82.3	81.3	79.6	88.5	94.5	83.6	79.8	90.8	86.5
USA	114.5	120.9	127.0	133.0	134.0	134.7	134.5	137.9	130.2
Consumer non-durables									
EUR15	102.5	104.5	103.7	104.7	108.5	104.9	104.4	107.7	104.0
Japan	98.8	98.7	98.3	98.8	102.0	102.6	95.5	103.6	100.7
USA	107.2	108.5	108.6	107.8	108.1	109.7	109.5	113.9	112.0

Source:  eurostat

PRODUCTION INDEX - SEASONALLY ADJUSTED

Table 2.4

	1994	1995	1996	02-97	03-97	04-97	05-97	06-97	07-97
EUR15	99.4	103.3	103.4	105.4	105.2	107.5	105.8	107.6	108.7
B	94.7	100.9	102.4	101.6	102.7	100.9	102.2	100.5	127.8
DK	111.2	115.8	117.1	121.2	118.2	120.2	120.5	119.9	:
D	93.9	95.9	96.0	99.5	97.7	101.0	98.1	101.9	103.3
EL	95.7	97.4	98.4	99.9	100.3	99.9	100.5	100.2	100.8
E	98.7	103.2	102.1	105.1	106.5	110.2	106.6	108.5	109.1
F	97.7	99.6	99.7	100.9	100.7	103.9	102.5	102.4	:
IRL	133.3	158.5	171.1	180.9	194.6	190.0	187.6	194.5	:
I	101.7	107.9	104.9	105.9	107.4	107.3	107.4	108.0	108.7
L	100.5	101.0	100.6	105.5	101.5	104.1	103.0	103.6	:
NL	103.2	106.7	110.2	109.9	111.0	113.0	112.3	113.1	:
A	105.9	112.3	:	:	:	:	:	:	:
P	94.9	99.4	100.8	101.8	101.9	102.0	101.0	103.5	:
FIN	106.5	114.1	118.3	122.8	126.2	125.6	125.4	128.2	132.3
S	103.8	113.5	116.3	120.5	124.5	120.4	122.6	123.0	125.6
UK	103.8	106.2	107.1	108.5	108.3	109.2	108.2	110.1	110.8
Japan	93.1	96.3	98.6	102.7	102.1	101.8	106.0	103.0	103.7
USA	109.8	113.4	116.5	119.8	120.2	120.7	120.7	121.0	121.2

Indices of production for total industry, seasonally adjusted (1990 = 100)

Source:  eurostat

Table 2.5

	1994	1995	1996	02-97	03-97	04-97	05-97	06-97	07-97
Total industry									
EUR15	99.4	103.3	103.4	105.4	105.2	107.5	105.8	107.6	108.7
Japan	93.1	96.3	98.6	102.7	102.1	101.8	106.0	103.0	103.7
USA	109.8	113.4	116.5	119.8	120.2	120.7	120.7	121.0	121.2
Intermediate goods									
EUR15	101.7	104.9	104.2	106.0	106.1	109.1	107.4	109.0	110.7
Japan	95.5	99.3	99.7	103.4	103.8	102.9	105.9	103.0	104.1
USA	104.1	105.4	107.3	109.9	110.0	109.9	110.0	109.8	109.7
Capital goods									
EUR15	92.1	99.3	101.2	103.0	102.1	105.6	102.3	106.4	108.1
Japan	85.6	89.5	97.6	103.5	101.6	100.5	107.2	104.8	105.6
USA	103.7	108.6	113.7	119.4	120.2	121.0	121.5	122.5	122.5
Consumer durables									
EUR15	95.4	96.7	97.1	97.8	100.9	101.4	97.0	100.7	103.9
Japan	82.3	81.3	79.6	81.2	82.9	82.8	88.5	82.4	84.3
USA	114.5	120.9	127.0	132.1	133.0	133.6	134.0	134.7	135.1
Consumer non-durables									
EUR15	102.5	104.5	103.7	105.4	105.0	105.4	104.9	105.1	105.2
Japan	98.8	98.7	98.3	98.1	97.5	98.5	101.0	96.8	97.3
USA	107.2	108.5	108.6	110.9	111.0	111.0	110.8	110.8	110.6

TRIAD comparison of indices of production for the main industrial groupings, seasonally adjusted (1990 = 100)

Source:  eurostat

Figure 2.2

EUR15 production index by main industrial grouping, trend cycle (1990 = 100)

Total industry —
Intermediate goods - - - -
Capital goods —
Consumer durables —
Consumer non-durables - - - -

Source:  eurostat

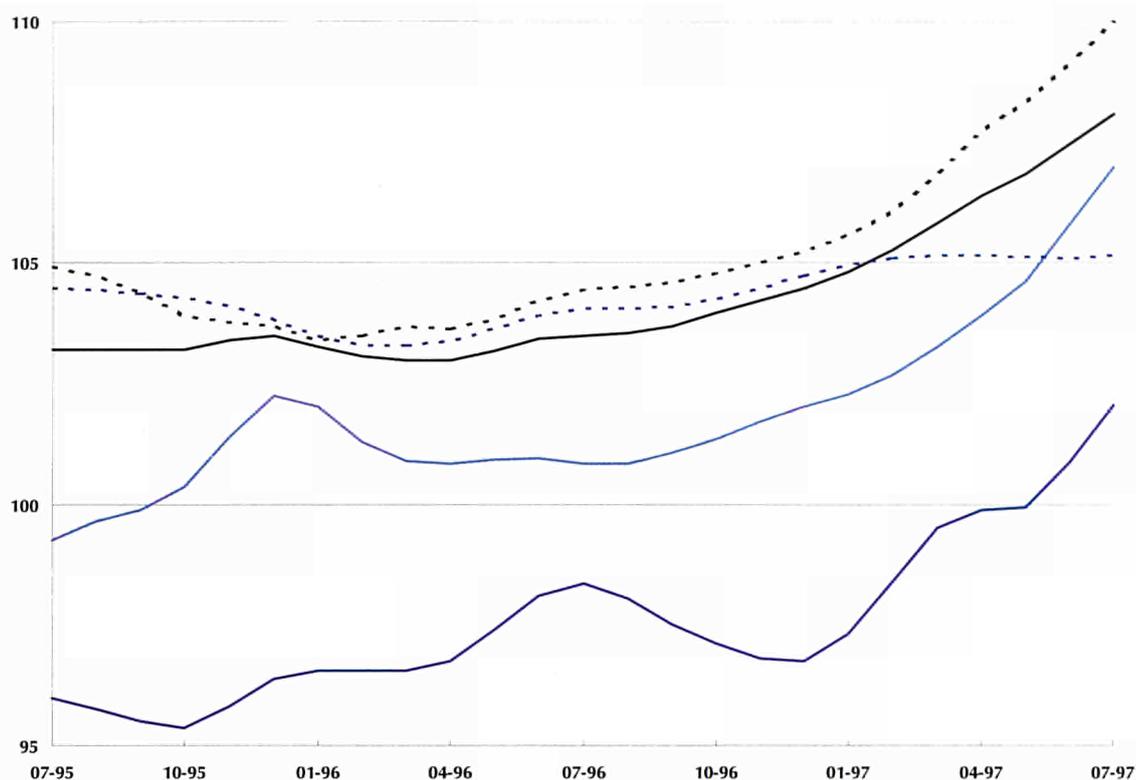


Table 2.6

Three month on three month growth rates for the production index of the main industrial groupings, trend cycle (%)

Source:  eurostat

	Latest 3 months available	Total industry	Intermediate goods	Capital goods	Consumer durables	Consumer non-durables
EUR15	05-97 ⇒ 07-97	1.5	2.1	2.5	1.7	0.0
B	05-97 ⇒ 07-97	0.5	1.3	0.4	-0.9	0.0
DK	04-97 ⇒ 06-97	0.7	1.3	0.5	0.2	0.7
D	06-97 ⇒ 08-97	1.5	2.2	2.1	-0.3	-0.2
EL	05-97 ⇒ 07-97	0.5	0.8	5.5	3.8	-0.2
E	05-97 ⇒ 07-97	1.7	2.1	3.0	1.4	0.0
F	04-97 ⇒ 06-97	1.2	0.9	2.4	1.3	0.6
IRL	04-97 ⇒ 06-97	3.0	4.1	1.5	:	1.0
I	05-97 ⇒ 07-97	1.4	2.5	-0.5	1.3	0.4
L	04-97 ⇒ 06-97	0.6	1.4	0.3	-7.2	-0.7
NL	04-97 ⇒ 06-97	1.1	1.3	0.4	1.1	0.7
A	⇒	:	:	:	:	:
P	04-97 ⇒ 06-97	0.8	0.5	-4.7	-1.4	-0.3
FIN	05-97 ⇒ 07-97	3.2	3.3	6.5	14.4	0.4
S	05-97 ⇒ 07-97	2.1	1.5	5.5	1.8	0.5
UK	05-97 ⇒ 07-97	0.8	0.4	2.0	3.2	-0.4
Japan	05-97 ⇒ 07-97	1.1	0.6	1.5	0.2	-0.5
USA	05-97 ⇒ 07-97	0.8	0.1	1.9	1.4	0.1

PRODUCTION INDEX - W.D.ADJ.

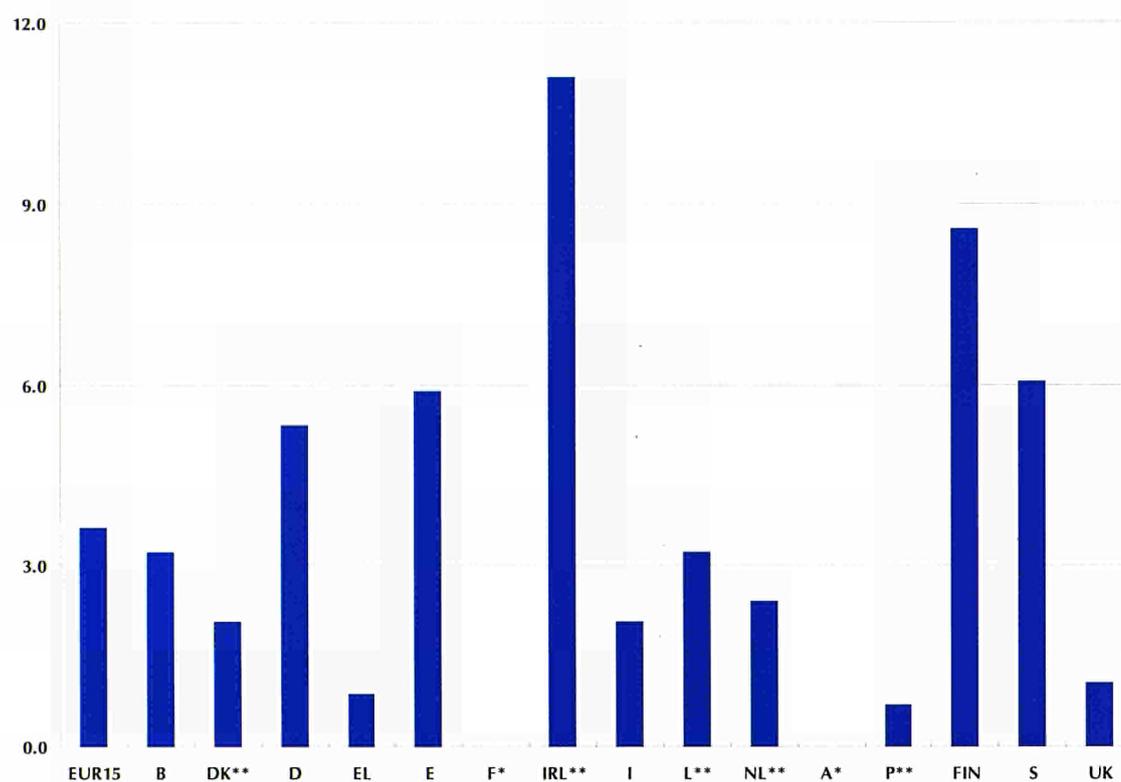


Figure 2.3

Annual growth rates for the production index of total industry, based on changes from the corresponding three months of the previous year, w.d.adj., May-97 to July-97 (%)

Source:  eurostat

	Latest 3 months available		Total industry	Intermediate goods	Capital goods	Consumer durables	Consumer non-durables
EUR15	05-97	⇒ 07-97	3.6	4.5	4.4	2.0	0.8
B	05-97	⇒ 07-97	3.2	4.8	8.4	-7.6	0.1
DK	04-97	⇒ 06-97	2.8	6.0	0.8	0.5	1.5
D	06-97	⇒ 08-97	6.4	8.8	8.9	1.0	-0.6
EL	05-97	⇒ 07-97	0.9	1.1	15.3	12.6	-1.0
E	05-97	⇒ 07-97	5.9	6.3	11.4	5.1	2.9
F	04-97	⇒ 06-97	3.6	3.2	4.9	2.3	2.7
IRL	04-97	⇒ 06-97	12.3	15.4	17.7	:	2.6
I	05-97	⇒ 07-97	2.1	3.8	-3.7	-1.0	2.5
L	04-97	⇒ 06-97	4.2	6.7	6.2	-21.6	-0.9
NL	04-97	⇒ 06-97	2.6	3.6	-0.9	4.7	2.8
A	⇒		:	:	:	:	:
P	04-97	⇒ 06-97	2.0	2.5	-1.4	-1.5	1.6
FIN	05-97	⇒ 07-97	8.6	12.4	11.0	21.1	0.7
S	05-97	⇒ 07-97	6.1	5.3	10.4	11.9	-2.2
UK	05-97	⇒ 07-97	1.1	1.3	3.6	5.0	-1.2
Japan	05-97	⇒ 07-97	6.4	5.6	8.4	6.9	0.0
USA	05-97	⇒ 07-97	3.9	2.5	7.4	5.9	2.4

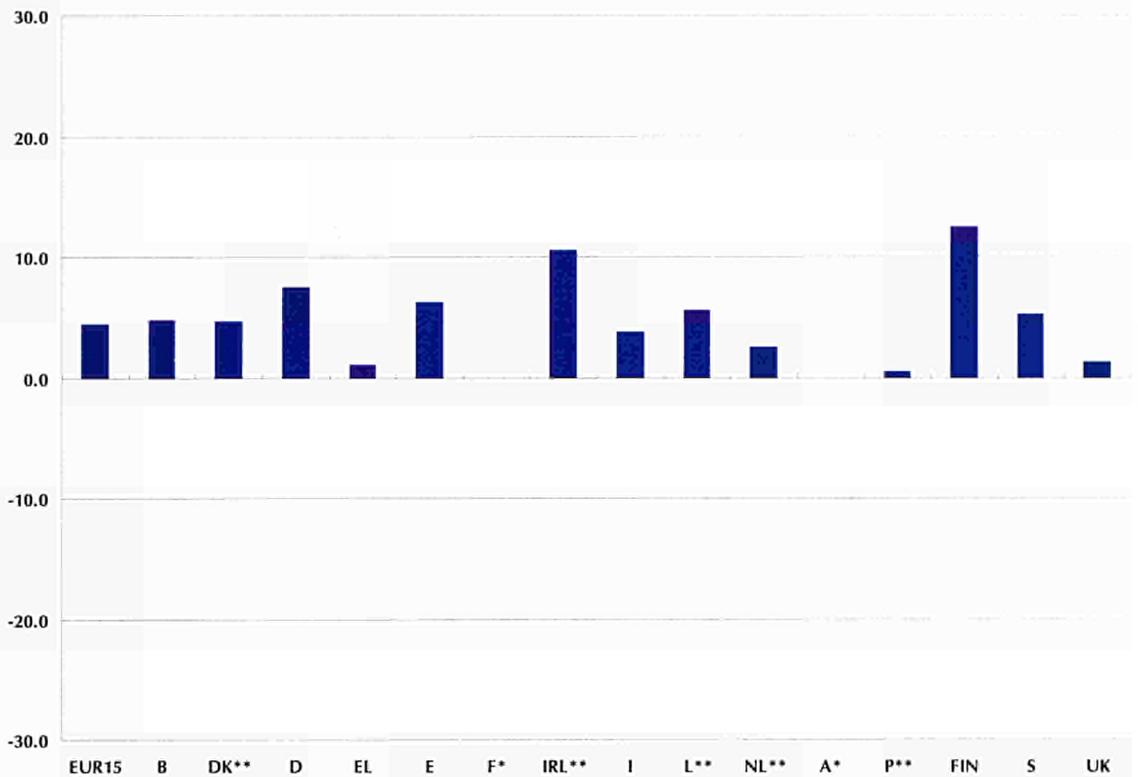
Table 2.7

Annual growth rates for the production index of the main industrial groupings, based on changes from the corresponding three months of the previous year, w.d.adj. (%)

Source:  eurostat

Figure 2.4

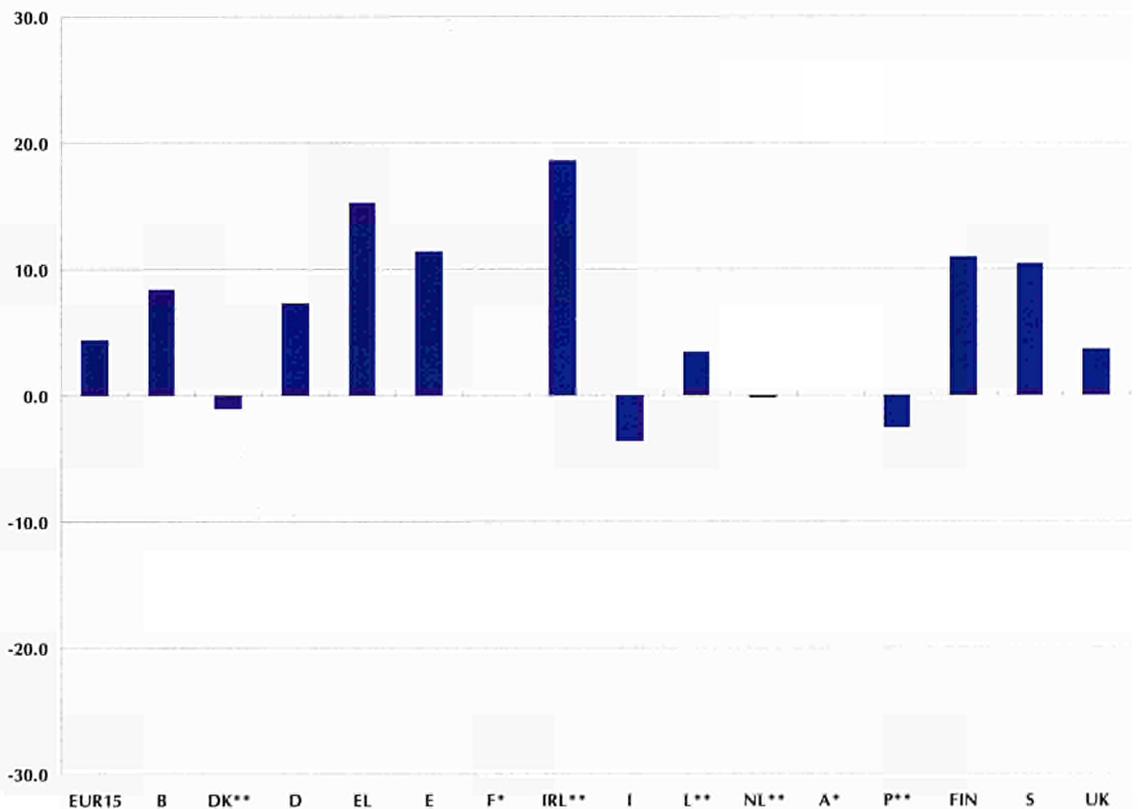
Annual growth rates for the production index of intermediate goods, based on changes from the corresponding three months of the previous year, w.d.adj., May-97 to July-97 (%)



Source: eurostat

Figure 2.5

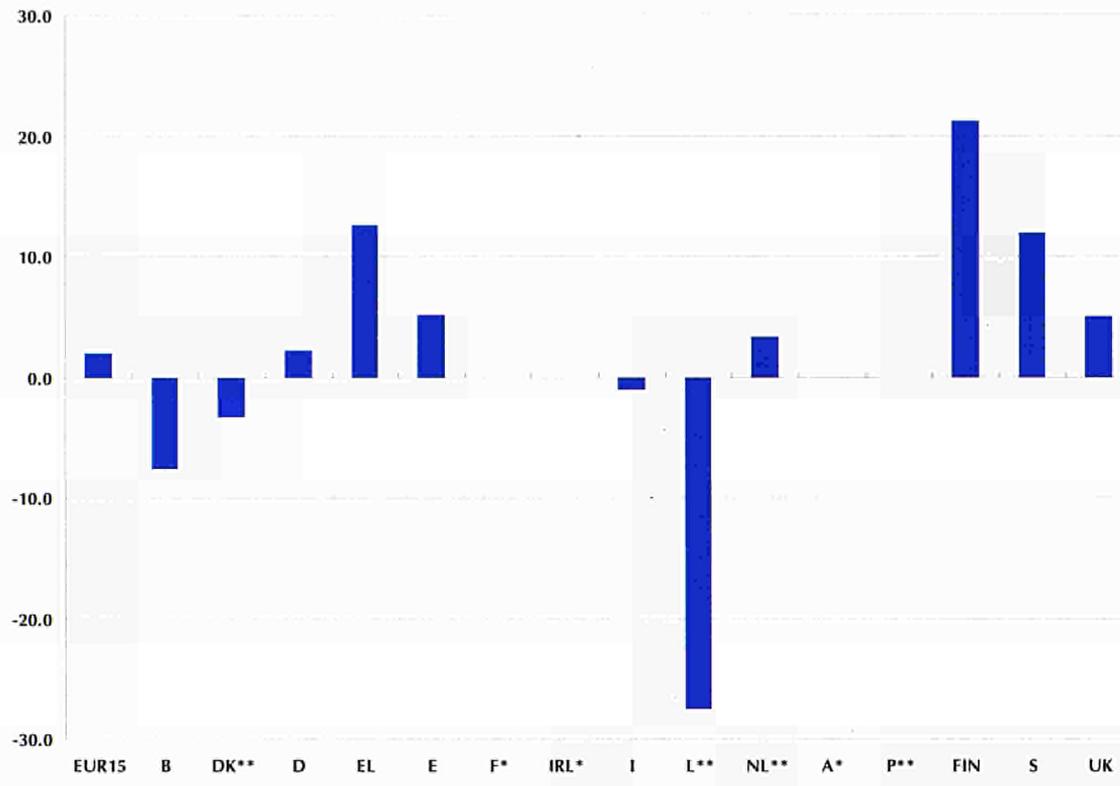
Annual growth rates for the production index of capital goods, based on changes from the corresponding three months of the previous year, w.d.adj., May-97 to July-97 (%)



Source: eurostat

PRODUCTION INDEX - W.D.ADJ.

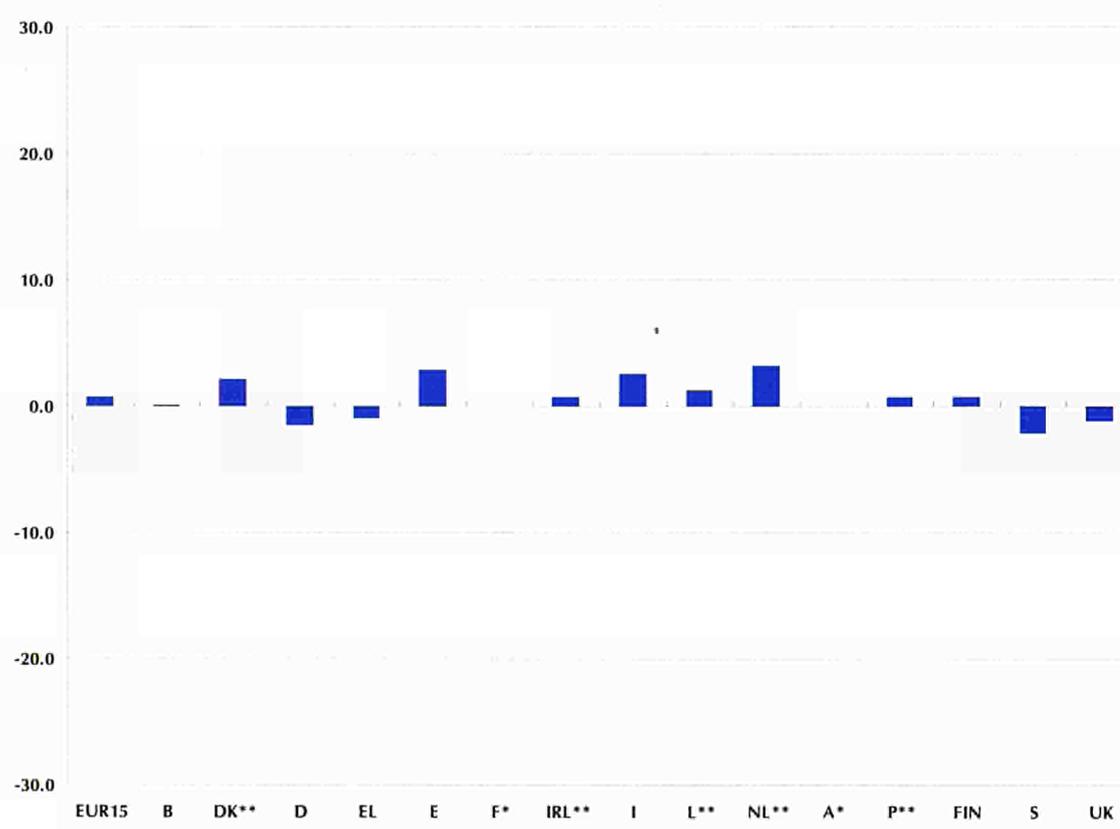
Figure 2.6



Annual growth rates for the production index of consumer durables, based on changes from the corresponding three months of the previous year, w.d.adj., May-97 to July-97 (%)

Source: eurostat

Figure 2.7

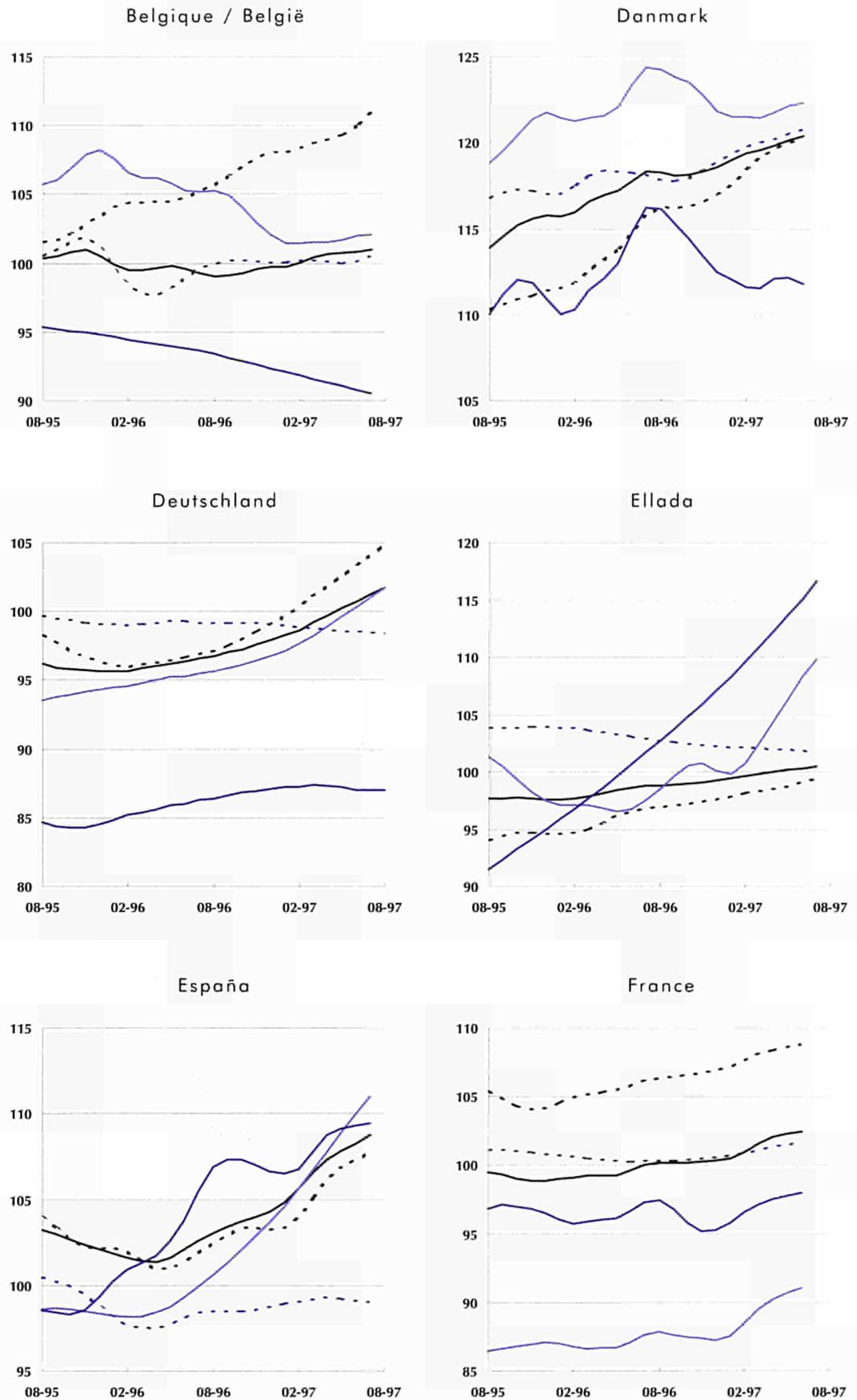


Annual growth rates for the production index of consumer non-durables, based on changes from the corresponding three months of the previous year, w.d.adj., May-97 to July-97 (%)

Source: eurostat

Figure 2.8

Production index by main industrial grouping, trend cycle (1990 = 100)



- Total industry ———
- Intermediate goods - - - - -
- Capital goods ———
- Consumer durables ———
- Consumer non-durables - - - - -

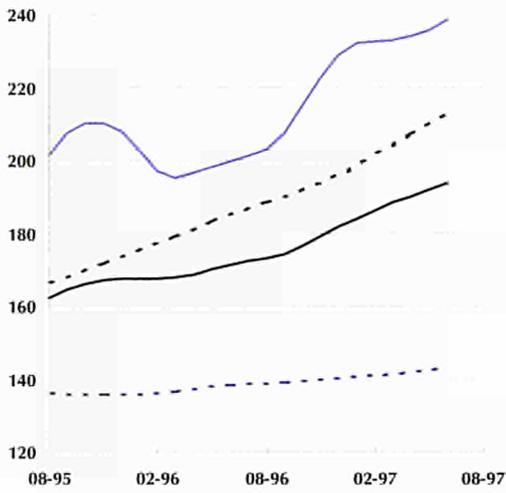
Source: eurostat

PRODUCTION INDEX - TREND CYCLE

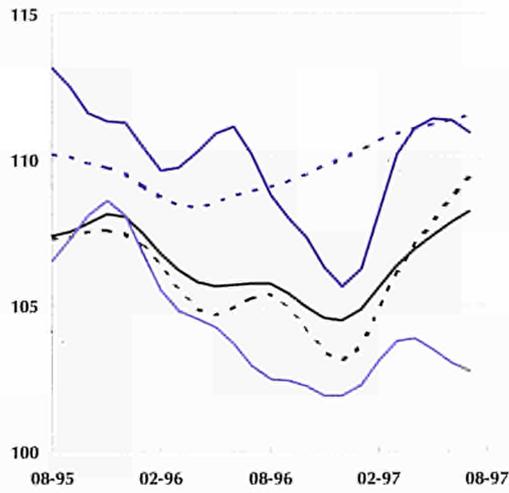
Figure 2.8

Production index by main industrial grouping, trend cycle (1990 = 100)

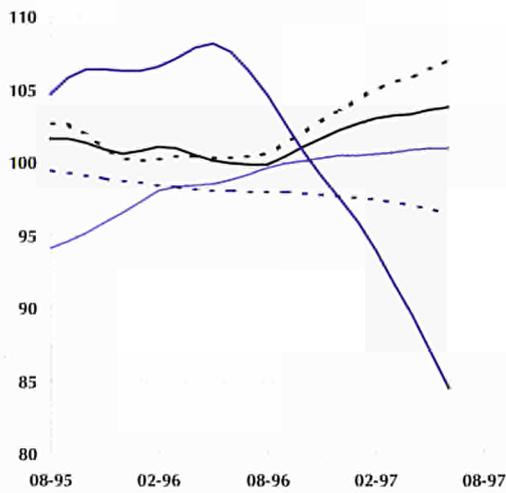
Ireland



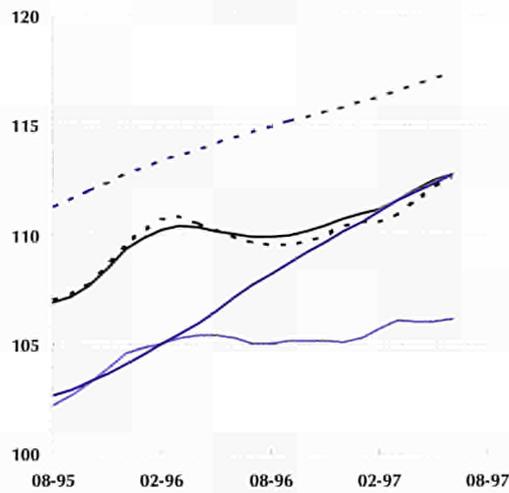
Italia



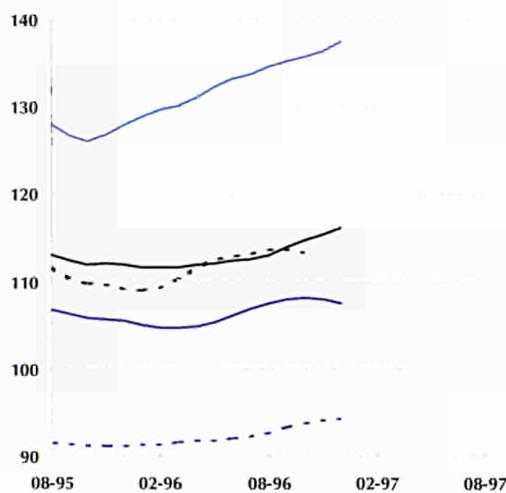
Luxembourg



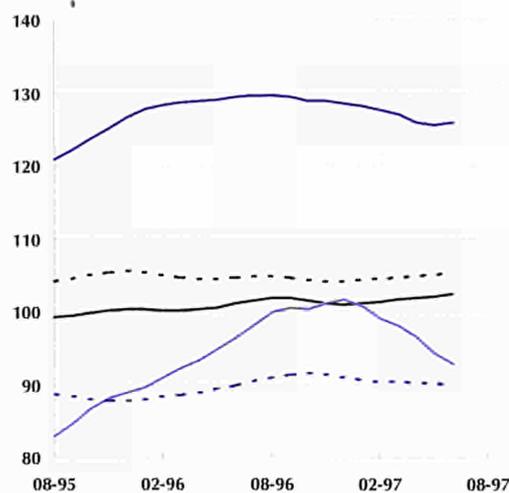
Nederland



Österreich



Portugal

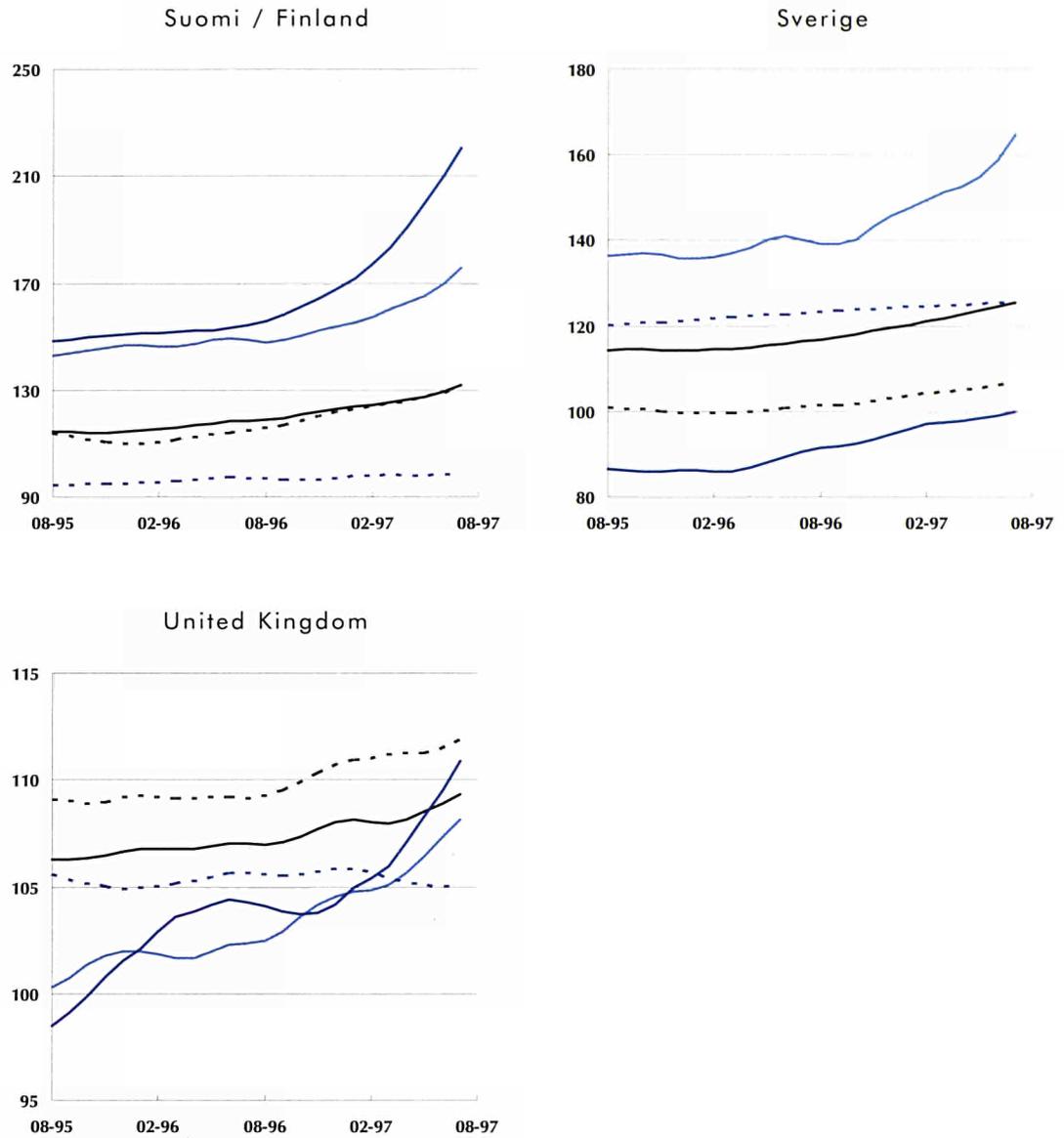


- Total industry
- - - Intermediate goods
- Capital goods
- Consumer durables
- Consumer non-durables

Source: Eurostat

Figure 2.8

Production index by main industrial grouping, trend cycle (1990 = 100)



- Total industry ———
- Intermediate goods - - - - -
- Capital goods ———
- Consumer durables ———
- Consumer non-durables - - - - -

Further information - the production index:

The index of production measures changes in volume (at constant prices) of gross value added created by a given activity, the activity indices being aggregated (like the aggregation at Community level) by means of a system of weighting according to gross value added at factor cost.

The indices of production are adjusted in two stages. Firstly, account is taken of the variation in the number of working days in the month. The national Statistical Offices provide Eurostat with these series (except Denmark, France, Spain and the United Kingdom). Secondly, for EUR15 and most of the Member States a correction is made using seasonal adjustment with TRAMO / SEATS, a method developed by Professor Maravall and V.Gomez. For France, Finland, Sweden and the United Kingdom, the indices are adjusted by the national statistical offices themselves. For the production index of Germany, the trend and seasonally adjusted figures are calculated by the German NSO. All data from Ireland is converted to NACE Rev.1 from the old classification NACE 1970 and is therefore less reliable. Full methodological notes may be found on page 65.

Source: eurostat

DOMESTIC PRODUCER PRICE INDEX - NATIONAL CURRENCY

EUR15

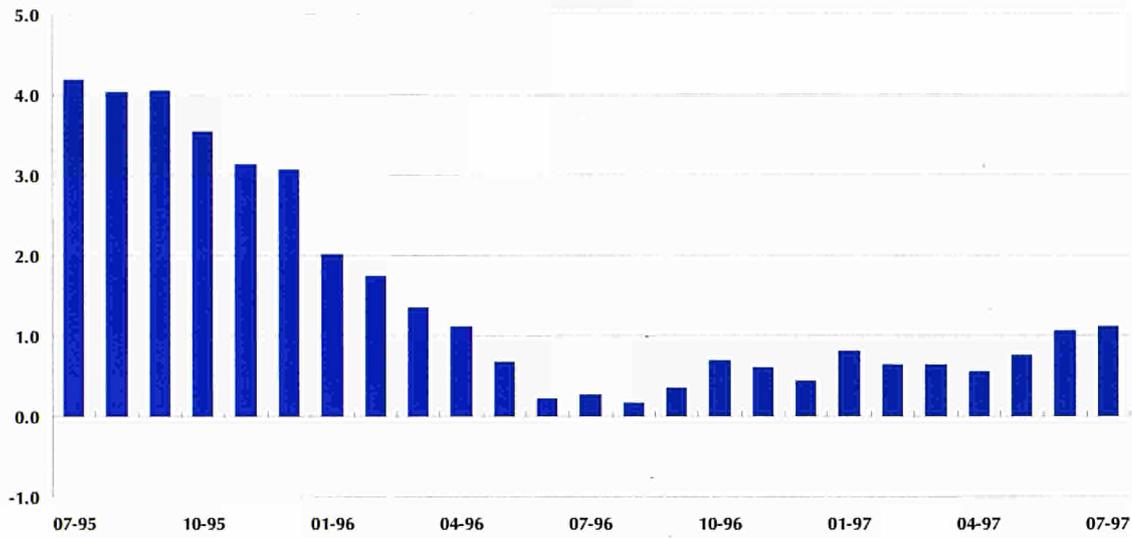
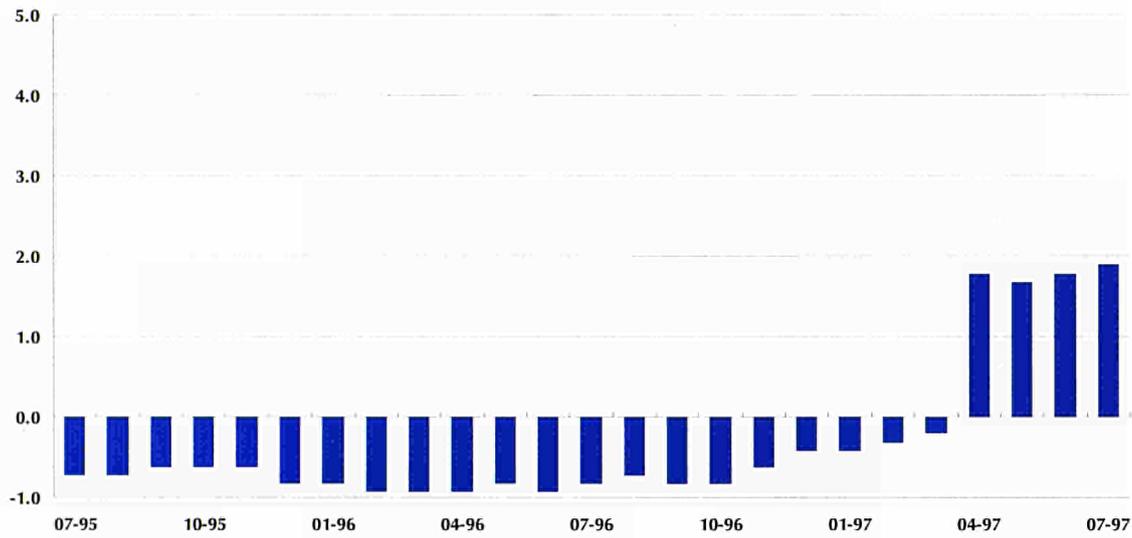


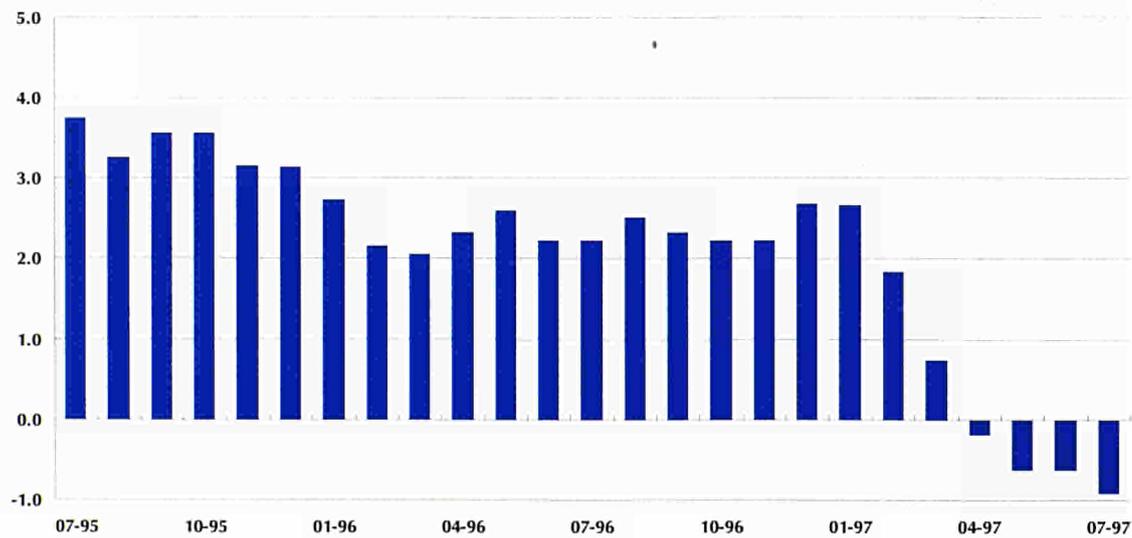
Figure 2.9

TRIAD comparison of annual growth rates of producer prices for total industry, in national currency (%)

Japan



USA



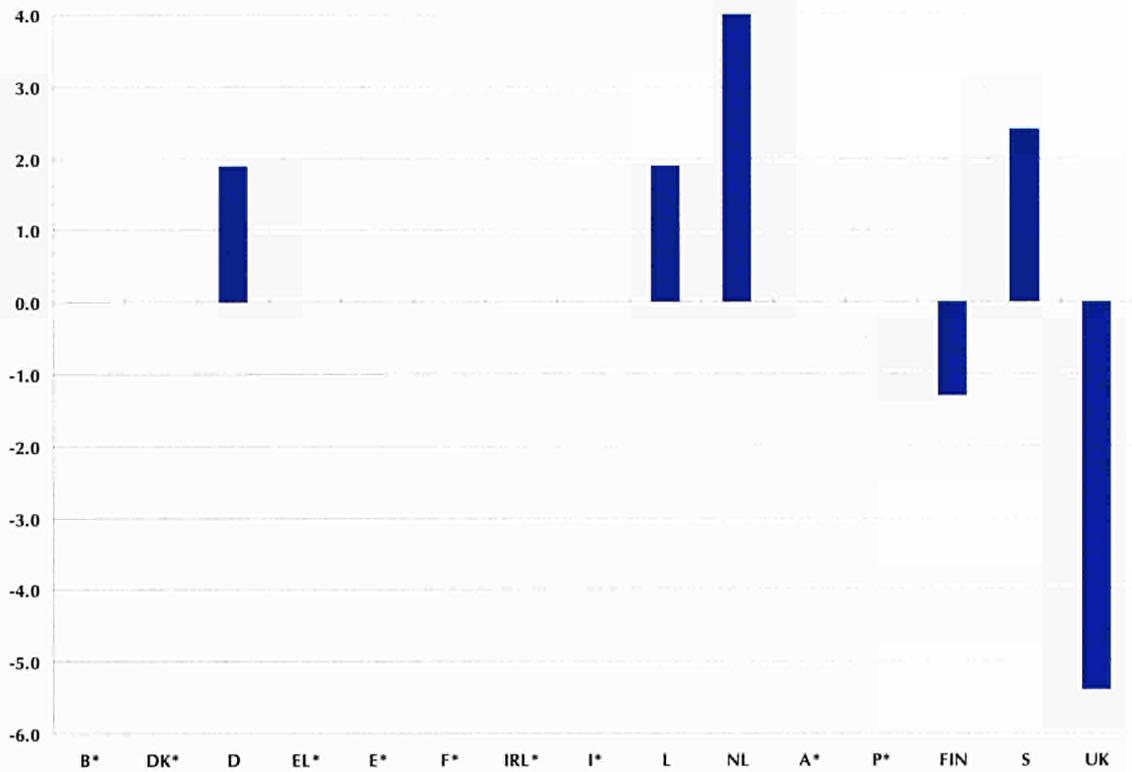
Source: eurostat



EXPORT PRICE INDEX AND DOMESTIC PRODUCER PRICE INDEX

Figure 2.10

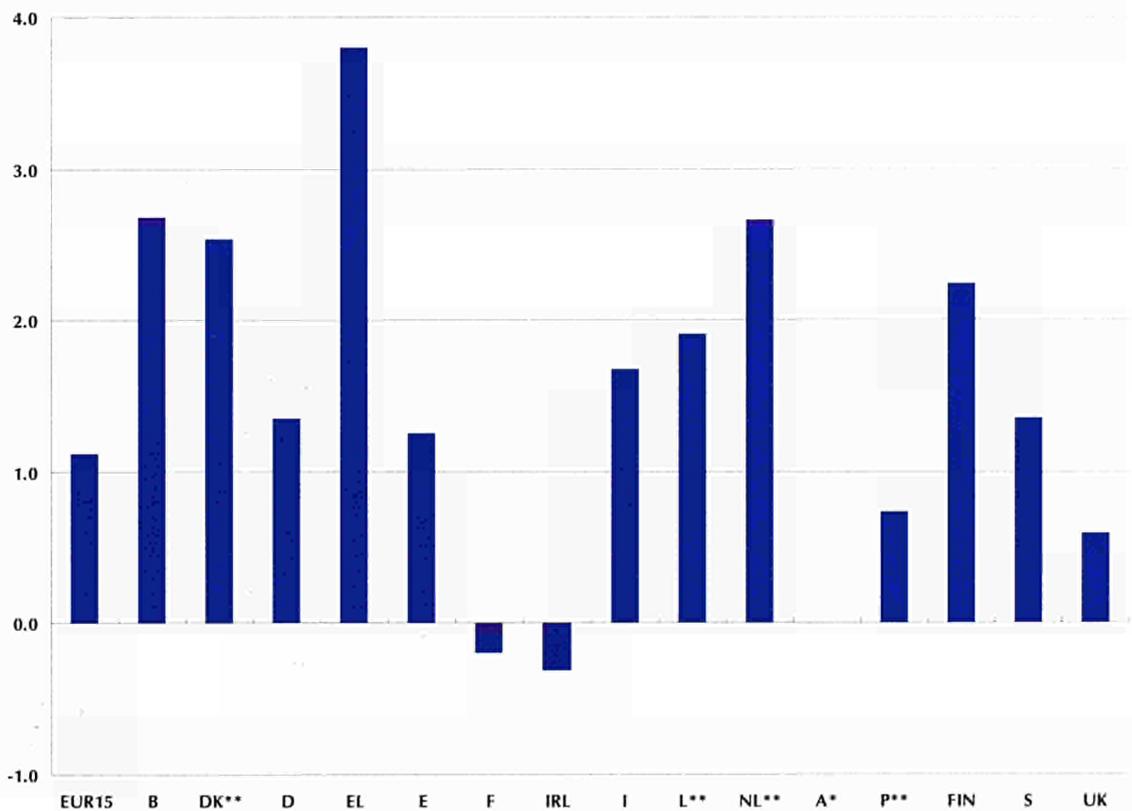
Annual growth rates of export prices for manufacturing industry, in national currency, July-97 (1990 = 100)



Source: eurostat

Figure 2.11

Annual growth rates of the producer price index of total industry, in national currency, July-97 (%)



Source: eurostat

DOMESTIC PRODUCER PRICE INDEX

Table 2.8

	1994	1995	1996	02-97	03-97	04-97	05-97	06-97	07-97
EUR15	108.2	112.4	113.3	114.1	114.0	114.0	114.1	114.1	114.2
B	99.5	101.7	102.4	103.0	102.8	103.2	104.0	103.7	104.4
DK	99.7	103.4	105.1	105.4	105.6	107.6	108.8	108.0	:
D	104.7	106.5	106.0	106.6	106.6	106.9	107.1	107.2	107.3
EL	156.6	171.4	184.1	188.9	187.6	188.6	189.1	189.5	189.9
E	109.8	116.8	118.7	119.3	119.4	119.6	119.7	119.6	119.9
F	100.9	103.1	103.5	103.8	103.6	103.4	103.3	103.2	103.2
IRL	107.6	111.6	113.6	113.6	113.4	113.7	113.7	113.8	113.7
I	113.3	122.2	124.5	125.4	125.7	125.7	125.9	126.0	126.0
L	107.2	110.8	110.4	111.0	111.0	111.9	112.5	112.4	:
NL	101.0	104.0	105.8	107.7	107.7	108.5	109.0	108.6	:
A	:	:	:	:	:	:	:	:	:
P	112.3	116.6	120.2	122.0	121.3	120.9	121.9	121.4	:
FIN	105.8	107.7	107.6	108.1	108.3	108.4	108.7	109.1	109.3
S	108.6	117.3	118.0	118.0	118.4	118.6	119.7	119.8	119.8
UK	114.2	118.5	119.4	120.8	119.8	119.1	119.0	118.8	118.8
Japan	96.8	96.1	95.4	95.3	95.4	97.2	97.1	97.0	97.0
USA	103.6	107.3	109.8	110.5	109.5	109.4	109.5	109.4	109.1

Indices of
producer prices for
total industry,
in national currency
(1990 = 100)

Source:  eurostat

Table 2.9

	1994	1995	1996	02-97	03-97	04-97	05-97	06-97	07-97
EUR15	102.4	104.2	106.5	108.7	108.4	108.6	108.8	108.9	109.5
B	106.4	112.0	110.5	108.5	108.3	108.3	109.2	108.6	108.4
DK	103.8	110.9	112.2	111.2	111.5	113.3	114.7	113.5	:
D	111.6	116.6	113.9	112.0	112.1	112.0	112.3	112.1	111.3
EL	109.6	114.0	121.5	124.5	123.2	122.7	122.1	122.8	123.3
E	89.4	92.8	95.6	93.3	93.4	93.6	93.7	93.3	92.9
F	106.0	109.2	110.3	108.9	108.9	108.4	108.2	107.7	106.9
IRL	104.2	105.0	110.0	118.7	118.4	118.2	114.9	115.8	118.3
I	90.1	87.3	96.8	98.9	98.2	98.7	99.1	99.5	99.5
L	114.7	121.9	119.2	116.9	117.0	117.5	118.1	117.7	:
NL	108.1	114.5	114.3	113.5	113.4	113.9	114.5	113.7	:
A	:	:	:	:	:	:	:	:	:
P	103.3	107.7	111.2	112.7	112.1	111.4	111.9	110.9	:
FIN	83.1	91.6	89.6	90.4	90.2	89.6	89.4	90.0	90.5
S	89.2	94.7	104.3	102.8	101.1	101.4	102.1	102.3	104.4
UK	105.1	102.1	104.9	120.2	119.4	121.0	120.8	122.6	128.3
Japan	146.5	144.2	126.9	122.1	124.2	124.1	130.8	137.1	140.0
USA	110.9	104.2	109.9	120.5	121.0	121.4	121.1	122.3	125.5

Indices of
producer prices for
total industry,
in ECU terms
(1990 = 100)

Source:  eurostat

Figure 2.12

EUR15 producer price index by main industrial grouping, in national currency (1990 = 100)

Total industry —
Intermediate goods - - -
Capital goods —
Consumer durables —
Consumer non-durables - - -

Source: 

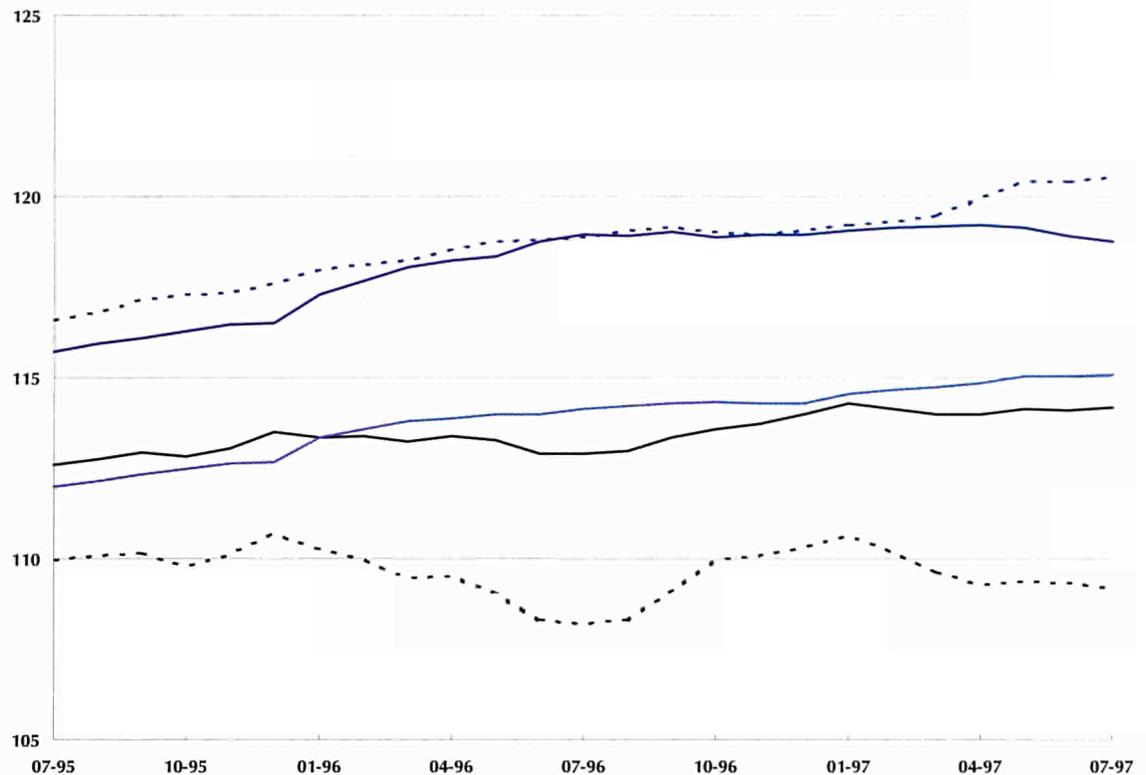


Table 2.10

TRIAD comparison of indices of producer prices for the main industrial groupings, in national currency (1990 = 100)

1994 1995 1996 02-97 03-97 04-97 05-97 06-97 07-97

	1994	1995	1996	02-97	03-97	04-97	05-97	06-97	07-97
Total industry									
EUR15	108.2	112.4	113.3	114.1	114.0	114.0	114.1	114.1	114.2
Japan	96.8	96.1	95.4	95.3	95.4	97.2	97.1	97.0	97.0
USA	103.6	107.3	109.8	110.5	109.5	109.4	109.5	109.4	109.1
Intermediate goods									
EUR15	104.9	109.8	109.4	110.2	109.6	109.3	109.4	109.3	109.2
Japan	:	:	:	:	:	:	:	:	:
USA	:	:	:	:	:	:	:	:	:
Capital goods									
EUR15	109.0	111.8	114.0	114.7	114.7	114.9	115.0	115.0	115.1
Japan	:	:	:	:	:	:	:	:	:
USA	:	:	:	:	:	:	:	:	:
Consumer durables									
EUR15	112.7	115.6	118.5	119.1	119.2	119.2	119.1	118.9	118.8
Japan	:	:	:	:	:	:	:	:	:
USA	:	:	:	:	:	:	:	:	:
Consumer non-durables									
EUR15	112.9	116.4	118.7	119.3	119.5	119.9	120.4	120.4	120.5
Japan	:	:	:	:	:	:	:	:	:
USA	:	:	:	:	:	:	:	:	:

Source: 

DOMESTIC PRODUCER PRICE INDEX

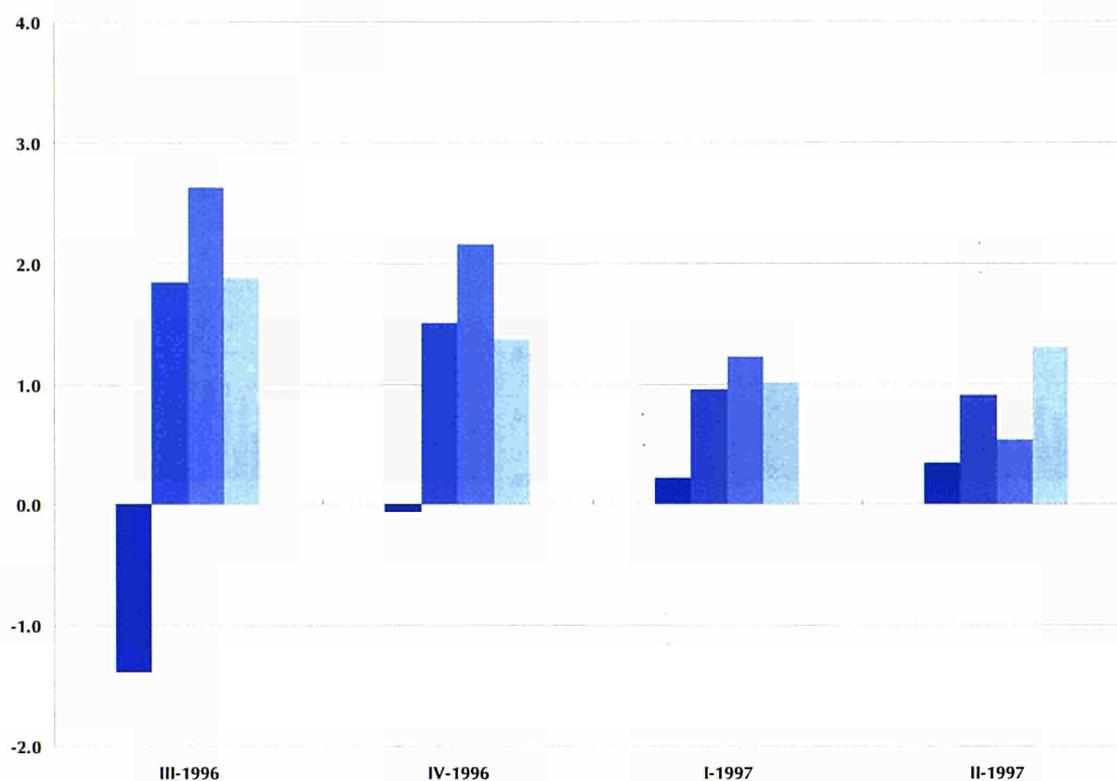


Figure 2.13

EUR15 annual growth rates of producer prices for the main industrial groupings (%)

- Intermediate goods
- Capital goods
- Consumer durables
- Consumer non-durables

Source: eurostat

	Latest month available	Total industry	Intermediate goods	Capital goods	Consumer durables	Consumer non-durables
--	------------------------	----------------	--------------------	---------------	-------------------	-----------------------

	Latest month available	Total industry	Intermediate goods	Capital goods	Consumer durables	Consumer non-durables
EUR15	07-97	1.1	0.9	0.8	-0.1	1.4
B	07-97	2.7	3.1	-0.1	:	3.0
DK	06-97	2.9	1.2	4.6	0.9	4.5
D	07-97	1.4	1.8	0.7	0.5	1.3
EL	07-97	3.8	4.2	7.0	6.2	2.6
E	07-97	1.3	1.9	1.1	0.5	1.1
F	08-97	0.2	0.5	-1.0	-1.2	1.5
IRL	08-97	0.3	:	:	:	0.3
I	07-97	1.7	2.5	1.0	-2.0	1.3
L	06-97	2.0	0.5	1.5	0.1	2.7
NL	06-97	2.8	3.0	1.1	0.8	2.5
A		:	:	:	:	:
P	06-97	0.6	0.3	:	:	1.1
FIN	08-97	2.9	4.0	0.3	2.1	1.5
S	08-97	1.6	1.2	1.4	1.0	1.9
UK	08-97	0.6	-1.9	1.1	0.2	1.4
Japan	07-97	1.9	:	:	:	:
USA	07-97	-0.9	:	:	:	:

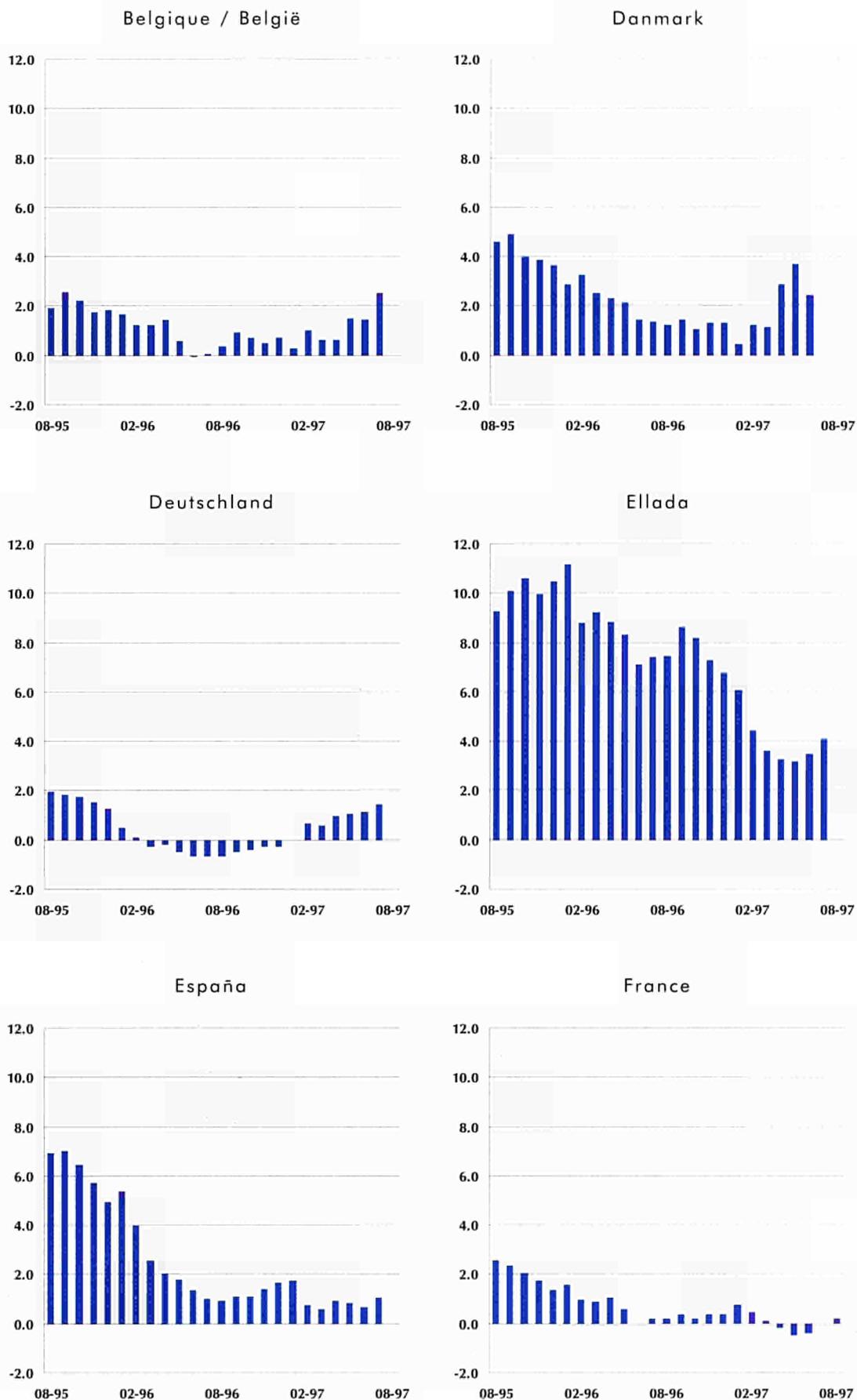
Table 2.11

Annual growth rates of the producer price index of the main industrial groupings, in national currency (%)

Source: eurostat

Figure 2.14

Annual growth rates of producer prices for total industry, in national currency (%)



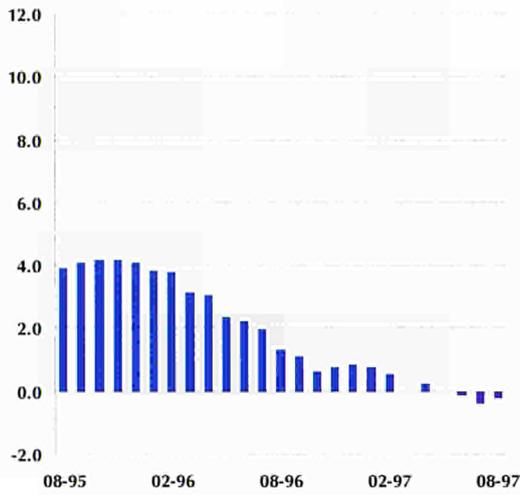
Source:  eurostat

DOMESTIC PRODUCER PRICE INDEX

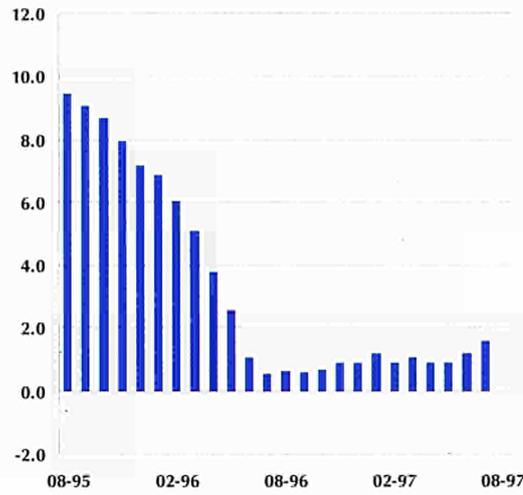
Figure 2.14

Annual growth rates of producer prices for total industry, in national currency (%)

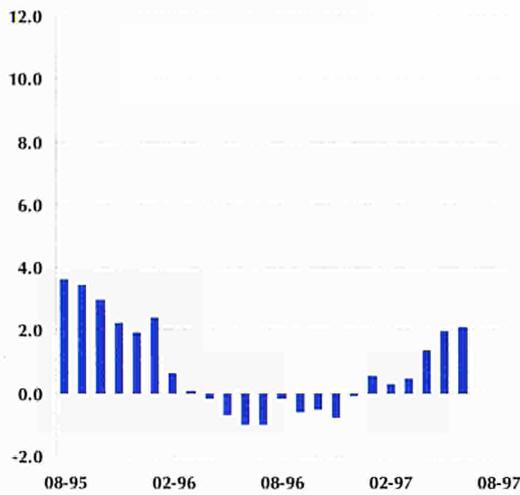
Ireland



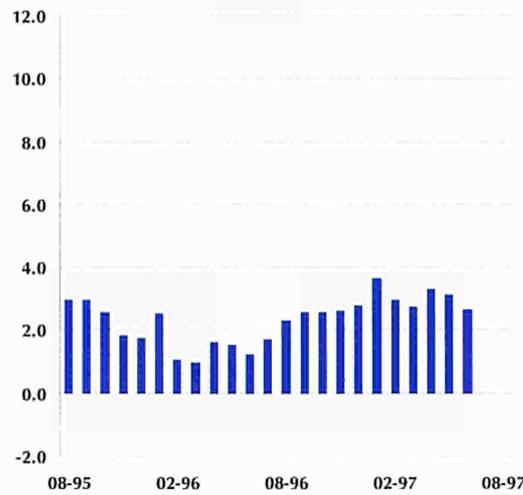
Italia



Luxembourg



Nederland



Österreich

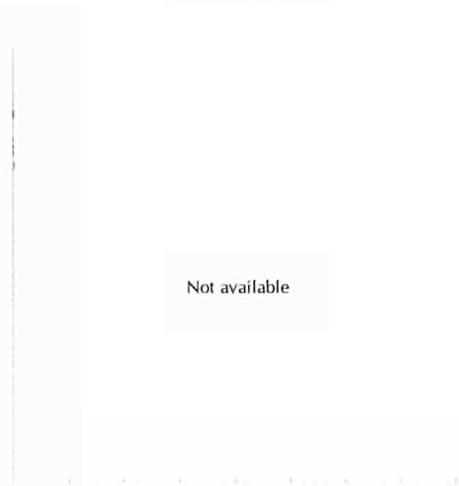
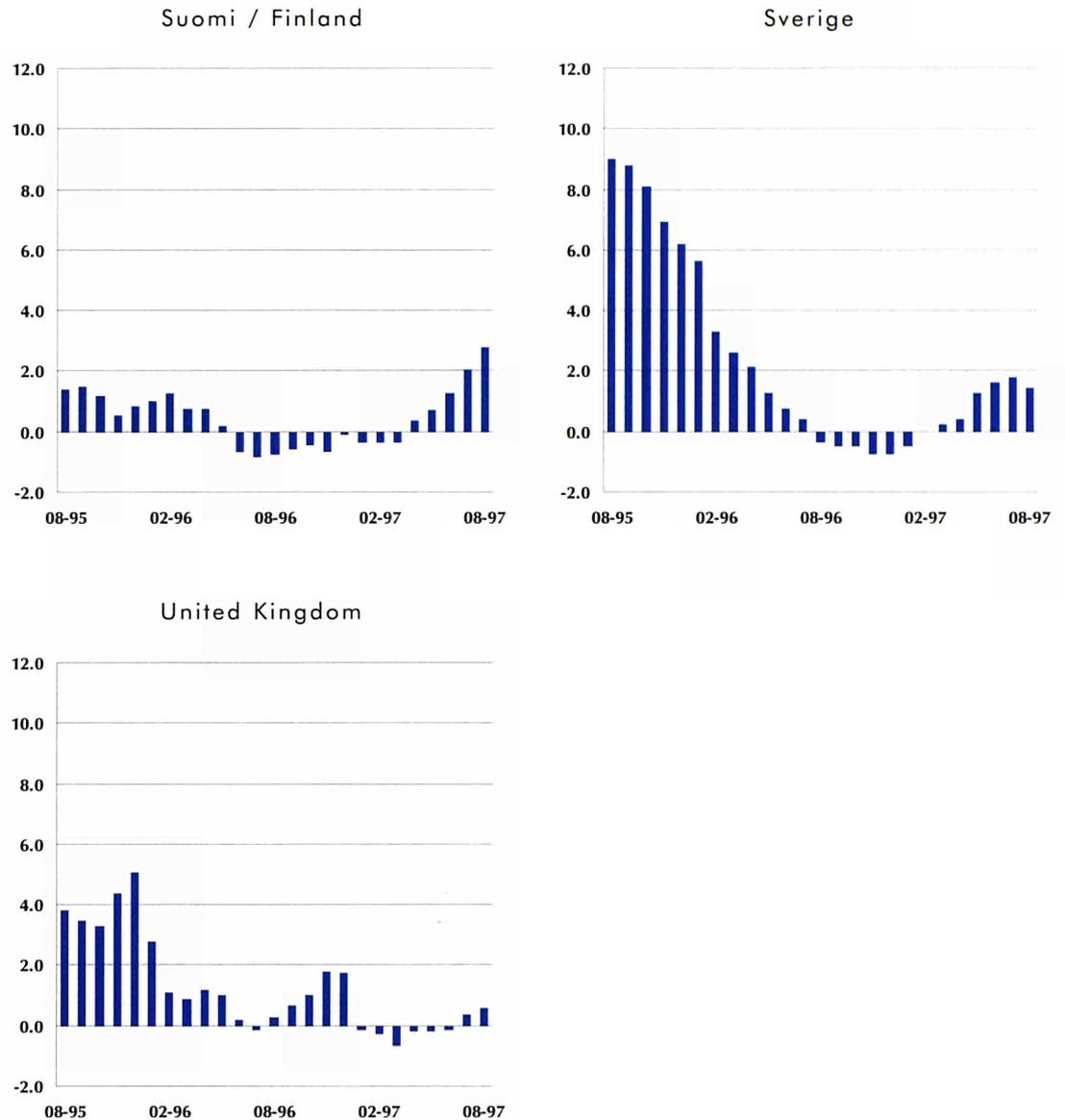


Figure 2.14

Annual growth rates of producer prices for total industry, in national currency (%)



Further information - price indices:

The index of producer prices shows (in the national currency of the Member State in question) changes in the ex-works selling prices of all products sold on the domestic market. Since we deal with producer prices, imports are not included in these price indices. The Community indices (EUR13, since there are no producer price indices for Portugal and Austria) refer to overall weighted price changes. Producer price indices are not seasonally adjusted.

The system used for the collection of export price indices is a duplicate of the model for domestic producer price indices.

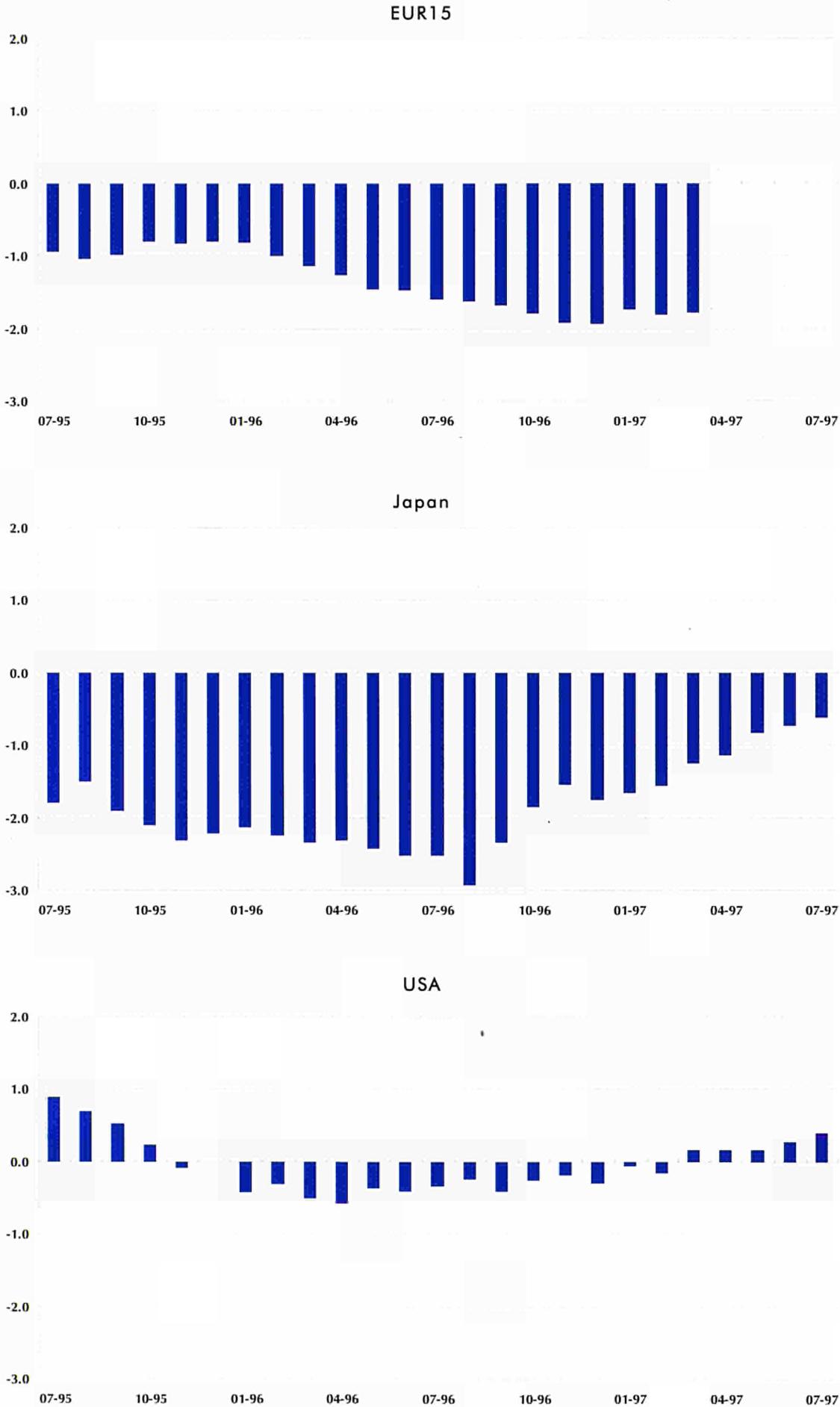
All data from Ireland is converted to NACE Rev.1 from the old classification NACE 1970 and is therefore less reliable.

Full methodological notes may be found on page 65.

EMPLOYMENT INDEX - GROSS DATA

Figure 2.15

TRIAD comparison of annual growth rates of employment for total industry, gross data (%)



Source: eurostat

Figure 2.16

EUR15 employment index by main industrial grouping, trend cycle (1990 = 100)

Total industry —
Intermediate goods - - - -
Capital goods —
Consumer durables —
Consumer non-durables - - - -

Source: 

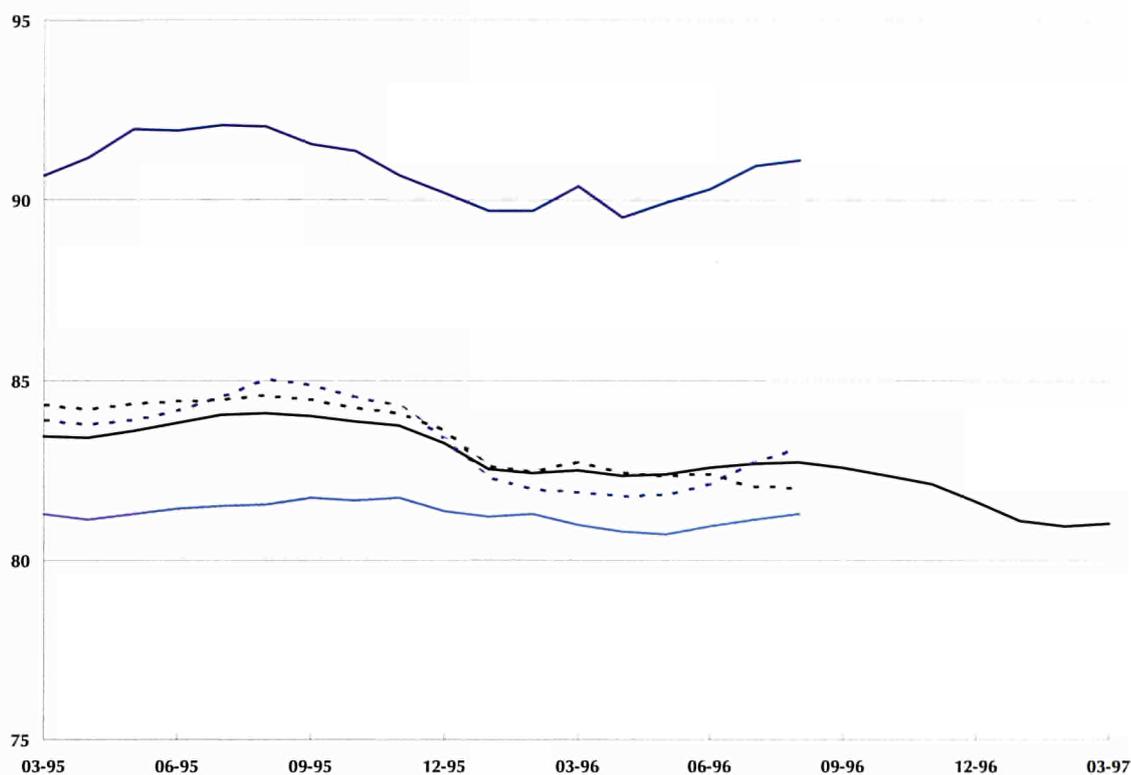


Table 2.12

Three month on three month growth rates for the employment index of the main industrial groupings, trend cycle (%)

	Latest 3 months available	Total industry	Intermediate goods	Capital goods	Consumer durables	Consumer non-durables
EUR15	01-97 ⇔ 03-97	-0.4	:	:	:	:
B	12-96 ⇔ 02-97	-0.1	-0.2	0.3	:	:
DK	⇔	:	:	:	:	:
D	04-97 ⇔ 06-97	-0.9	-0.9	-1.0	-1.4	-1.2
EL	10-96 ⇔ 12-96	-0.5	-0.4	-1.5	-2.2	-1.2
E	04-97 ⇔ 06-97	1.0	0.7	1.1	1.0	0.8
F	04-97 ⇔ 06-97	-0.2	-0.2	-0.1	-0.7	-0.1
IRL	01-97 ⇔ 03-97	2.0	1.3	3.7	:	:
I	06-96 ⇔ 08-96	-0.5	-1.1	-0.4	0.4	-0.9
L	04-97 ⇔ 06-97	0.1	0.0	0.6	-3.4	0.5
NL	07-96 ⇔ 09-96	-1.7	:	:	:	:
A	08-96 ⇔ 10-96	-1.0	-1.2	-0.3	-0.3	-0.6
P	04-97 ⇔ 06-97	-0.8	-0.4	-0.3	-0.4	-1.0
FIN	04-96 ⇔ 06-96	0.2	:	:	:	:
S	04-97 ⇔ 06-97	0.6	:	:	:	:
UK	05-97 ⇔ 07-97	0.3	0.1	0.7	0.2	-0.3
Japan	05-97 ⇔ 07-97	-0.1	:	:	:	:
USA	05-97 ⇔ 07-97	0.1	:	:	:	:

Source: 

EMPLOYMENT INDEX - GROSS DATA

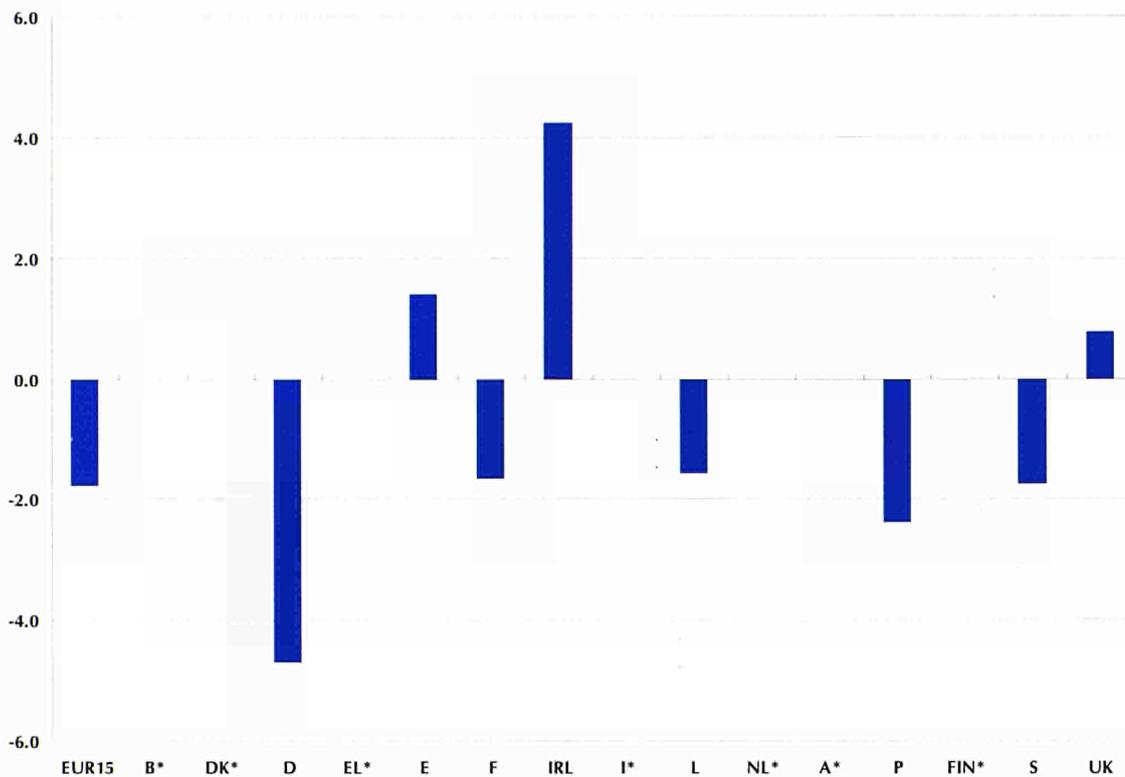


Figure 2.17

Annual growth rates for the employment index of total industry, based on changes from the corresponding three months of the previous year, gross data, Jan-97 to Mar-97 (%)

Source: eurostat

	Latest 3 months available		Total industry	Intermediate goods	Capital goods	Consumer durables	Consumer non-durables
EUR15	01-97	⇒ 03-97	-1.8	:	:	:	:
B	12-96	⇒ 02-97	-1.0	-1.1	0.6	:	:
DK		⇒	:	:	:	:	:
D	04-97	⇒ 06-97	-4.2	-5.3	-4.2	-6.1	-4.3
EL	10-96	⇒ 12-96	-3.6	-1.2	-6.7	0.5	-6.3
E	04-97	⇒ 06-97	2.7	-0.9	6.7	6.9	1.6
F	04-97	⇒ 06-97	-1.3	-1.6	-0.5	-2.6	-1.4
IRL	01-97	⇒ 03-97	4.3	5.1	5.0	:	:
I	06-96	⇒ 08-96	-1.9	-4.3	-2.0	1.3	-3.7
L	04-97	⇒ 06-97	-1.2	-2.6	1.5	-5.3	0.5
NL	07-96	⇒ 09-96	-0.4	:	:	:	:
A	08-96	⇒ 10-96	-4.8	-5.3	-3.2	-7.1	-4.5
P	04-97	⇒ 06-97	-2.6	-1.5	-1.7	-1.4	-3.9
FIN	04-96	⇒ 06-96	1.1	:	:	:	:
S	04-97	⇒ 06-97	-0.8	:	:	:	:
UK	05-97	⇒ 07-97	0.9	0.3	1.5	1.3	0.8
Japan	05-97	⇒ 07-97	-0.7	:	:	:	:
USA	05-97	⇒ 07-97	0.3	:	:	:	:

Table 2.13

Annual growth rates for the employment index of the main industrial groupings, based on changes from the corresponding three months of the previous year, gross data (%)

Source: eurostat

Figure 2.18

EUR15 production and employment trends in construction, trend cycle (1990 = 100)

Total industry: production index —
 Construction: production index —
 Construction: employment index - - - -

Source:  eurostat

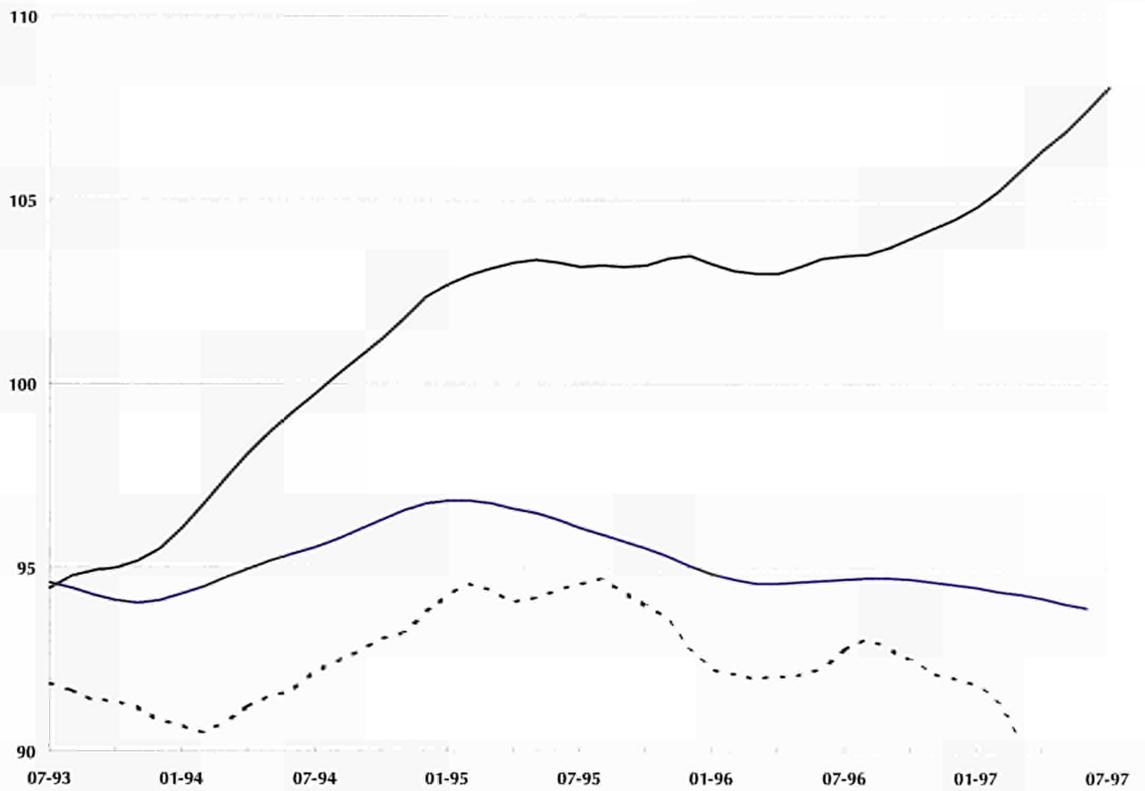
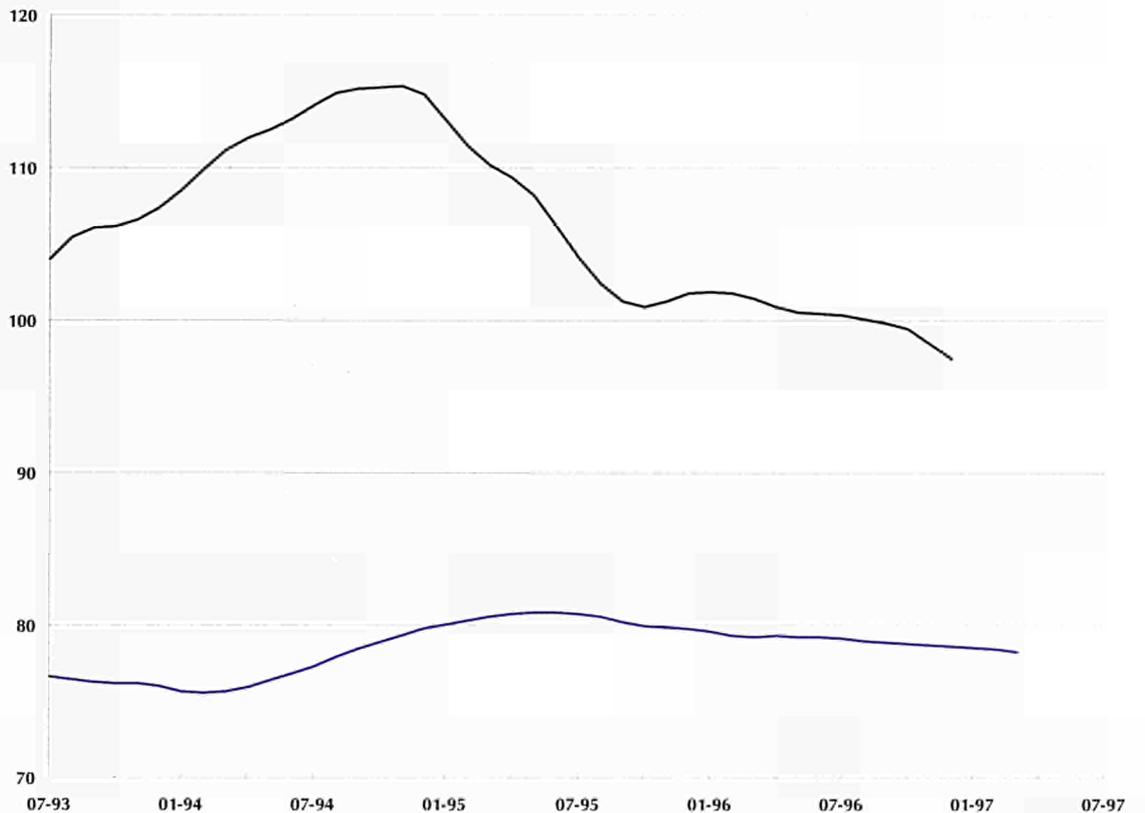


Figure 2.19

EUR15 building permits, trend cycle (1990 = 100)

Residential —
 Non-residential —

Source:  eurostat



PRODUCTION INDEX

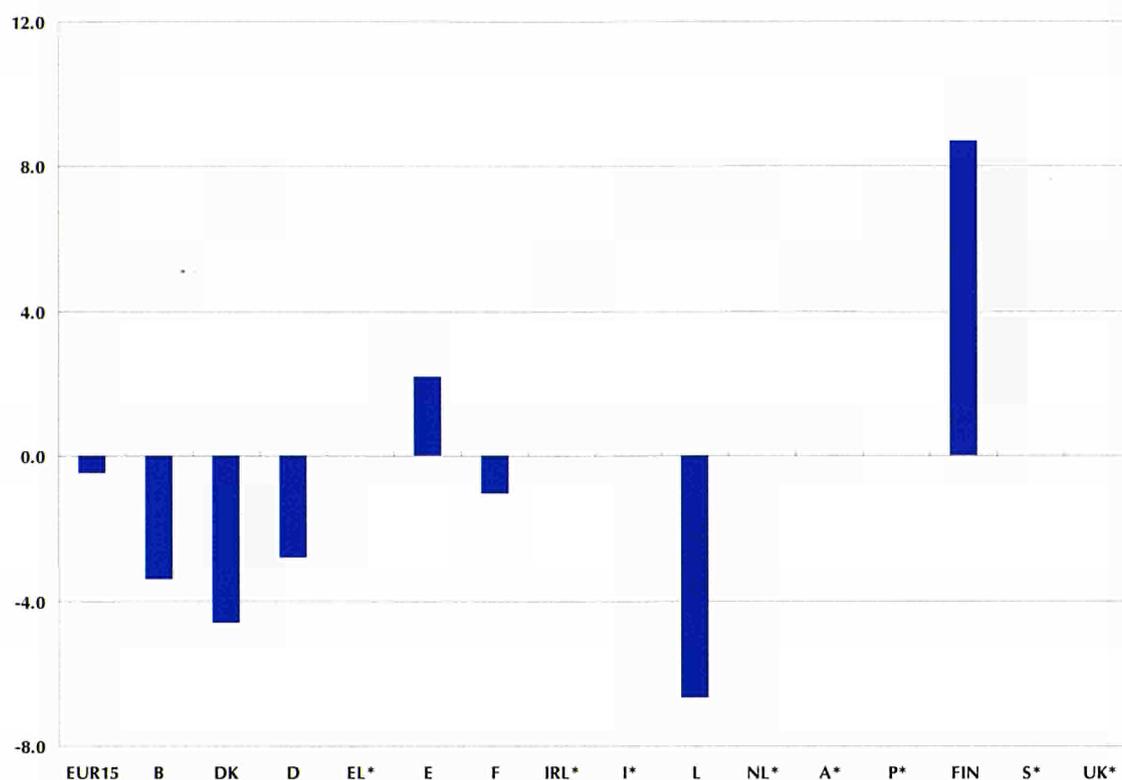


Figure 2.20

Annual growth rates for the production index of construction activity, based on changes from the corresponding three months of the previous year, w.d.adj., Apr-97 to June-97 (%)

Source:  eurostat

	Latest 3 months available		Building t / t-1 t / t-4		Latest 3 months available		Civil engineering t / t-1 t / t-4	
EUR15	01-97	⇒ 03-97	-0.5	4.7	04-97	⇒ 06-97	-1.2	-1.5
B	09-94	⇒ 11-94	4.1	14.0	09-94	⇒ 11-94	6.2	24.4
DK	04-97	⇒ 06-97	-5.2	-3.3	04-97	⇒ 06-97	-4.8	-6.8
D	06-97	⇒ 08-97	-1.5	-2.4	06-97	⇒ 08-97	-1.2	-4.6
EL		⇒	:	:		⇒	:	:
E	04-97	⇒ 06-97	0.7	3.6	04-97	⇒ 06-97	3.7	0.0
F	04-97	⇒ 06-97	-0.5	-2.0	04-97	⇒ 06-97	-0.6	-0.6
IRL		⇒	:	:		⇒	:	:
I	01-97	⇒ 03-97	-3.3	-3.8	07-96	⇒ 09-96	-1.5	:
L	04-97	⇒ 06-97	-3.3	-10.2	04-97	⇒ 06-97	0.5	-3.1
NL	01-97	⇒ 03-97	8.2	25.4		⇒	:	:
A		⇒	:	:		⇒	:	:
P		⇒	:	:		⇒	:	:
FIN	04-97	⇒ 06-97	0.9	14.2	04-97	⇒ 06-97	0.4	-2.9
S		⇒	:	:		⇒	:	:
UK		⇒	:	:		⇒	:	:

Table 2.14

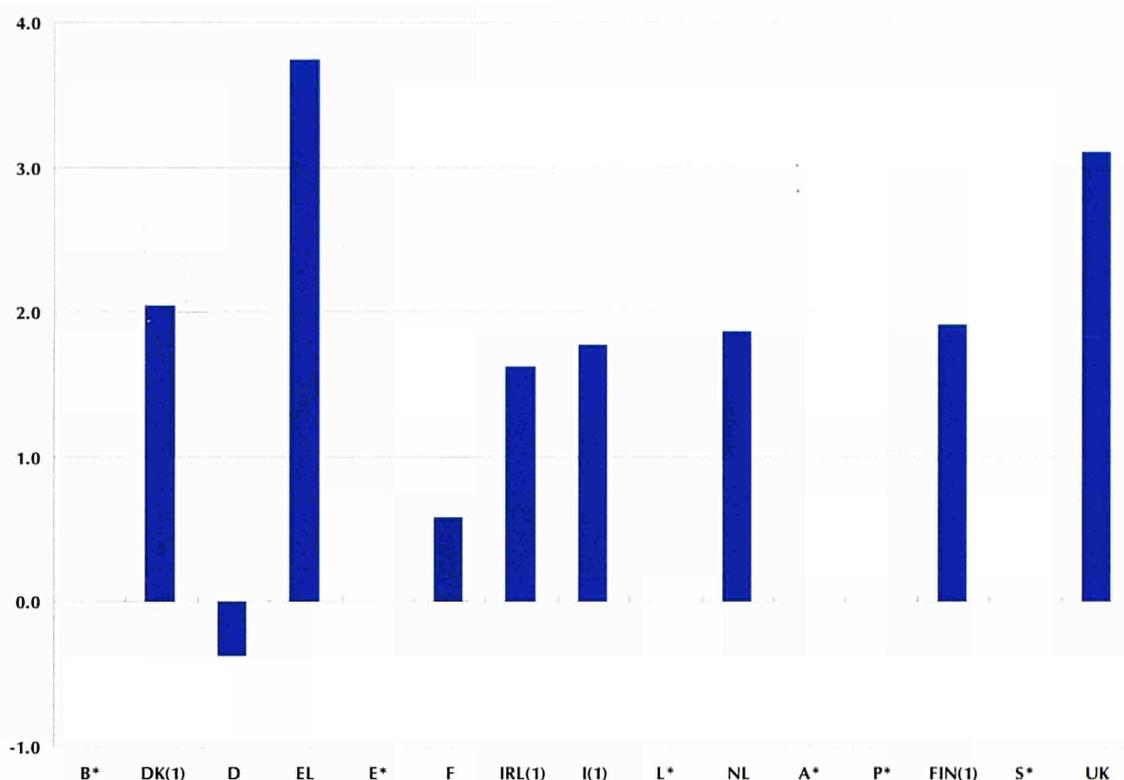
Latest growth rates for the production index of building and civil engineering (%)

Source:  eurostat

PRICE INDICES FOR NEW RESIDENTIAL BUILDINGS

Figure 2.21

Annual growth rates of output prices for new residential buildings, based on changes from the corresponding quarter of the previous year, Jan-97 to Mar-97 (%)



1) input prices

Source: eurostat

Table 2.15

Output price indices for new residential buildings, quarterly data (1990 = 100)

	IV-1995	I-1996	II-1996	III-1996	IV-1996	I-1997	II-1997	III-1997
EUR15	:	:	:	:	:	:	:	:
B	:	:	:	:	:	:	:	:
DK (1)	116.8	117.6	118.5	119.3	120.2	121.0	121.8	122.7
D	124.5	124.2	124.2	124.1	123.8	123.6	123.5	:
EL	165.9	170.3	171.7	172.8	174.7	179.0	180.0	:
E	:	:	:	:	:	:	:	:
F	106.7	109.3	108.4	108.5	110.2	110.3	:	:
IRL (1)	117.5	117.4	117.5	117.9	118.8	120.1	:	:
I (1)	123.9	123.9	124.2	126.3	127.0	127.3	127.5	:
L	117.7	118.0	118.0	:	:	:	:	:
NL	119.0	121.0	121.0	121.0	122.0	124.0	125.0	:
A	120.5	121.2	121.8	122.1	:	:	:	:
P	:	:	:	:	:	:	:	:
FIN (1)	102.0	100.8	101.5	102.2	102.7	103.8	104.9	:
S	87.6	91.5	94.0	110.6	99.5	:	:	:
UK	102.4	102.5	102.9	104.0	105.0	107.0	108.0	:

1) input prices

Source: eurostat

BUILDING PERMITS - USEFUL FLOOR AREA

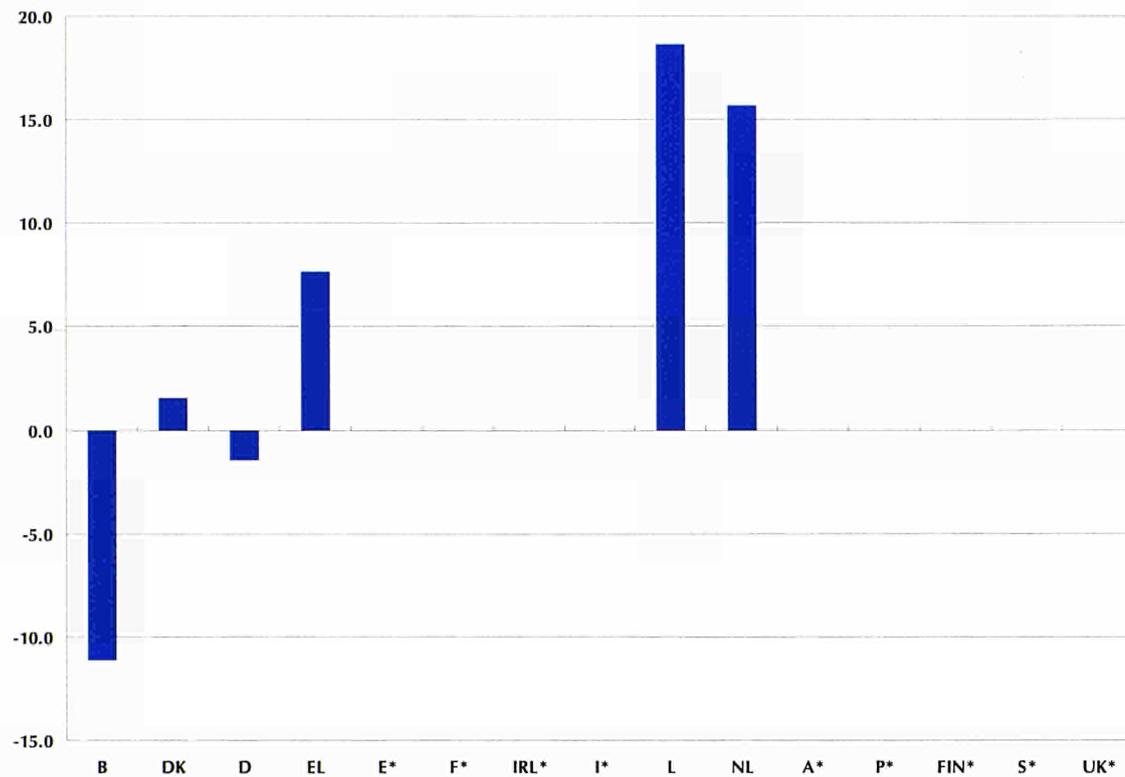


Figure 2.22

Annual growth rates of building permits (useful floor area), based on changes from the corresponding three months of the previous year, Mar-97 to May-97 (%)

Source: eurostat

Country	Latest 3 months available		Residential '000m ² 1990=100		Latest 3 months available		Non-residential '000m ² 1990=100	
	Start	End	Value	Index	Start	End	Value	Index
EUR15	⇨		:	:	01-97	⇨ 03-97	:	70.9
B	03-97	⇨ 05-97	2,100	82.7	03-97	⇨ 05-97	1,370	54.0
DK	04-97	⇨ 06-97	696	169.0	04-97	⇨ 06-97	1,360	107.7
D	04-97	⇨ 06-97	13,656	149.1	04-97	⇨ 06-97	10,425	109.2
EL	10-95	⇨ 12-95	2,288	62.9	10-95	⇨ 12-95	1,028	76.6
E	02-97	⇨ 04-97	10,872	107.3	02-97	⇨ 04-97	2,333	76.3
F		⇨	:	:	01-97	⇨ 03-97	7,083	54.1
IRL	01-97	⇨ 03-97	1,166	154.1	01-97	⇨ 03-97	722	100.9
I	10-96	⇨ 12-96	2,164	45.2	10-96	⇨ 12-96	3,887	53.9
L	04-97	⇨ 06-97	:	85.8	04-97	⇨ 06-97	:	100.2
NL	04-97	⇨ 06-97	4,278	130.0	04-97	⇨ 06-97	5,490	110.6
A		⇨	:	:		⇨	:	:
P		⇨	:	:		⇨	:	:
FIN	02-97	⇨ 04-97	:	60.9	02-97	⇨ 04-97	:	50.1
S		⇨	:	:		⇨	:	:
UK		⇨	:	:		⇨	:	:

Table 2.16

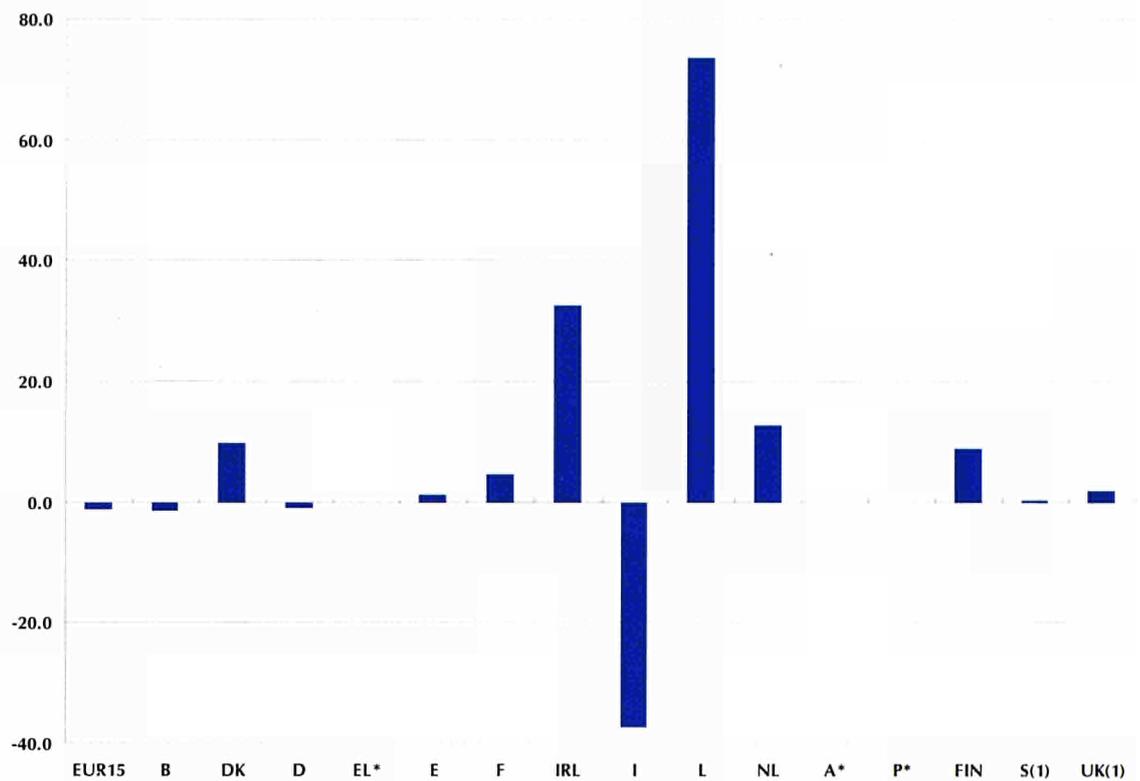
Building permits (useful floor area) for residential and non-residential buildings (thousand square metres and indices)

Source: eurostat

BUILDING PERMITS - NUMBER OF DWELLINGS

Figure 2.23

Annual growth rates of building permits (no. of dwellings), based on changes from the corresponding three months of the previous year, Oct-96 to Dec-96 (%)



1) buildings starts

Source: eurostat

Table 2.17

Number of dwellings authorised (units)

	Latest year available	no. of dwellings	Latest month available	no. of dwellings	no. of dwellings per 1000 inhabitants	Index, 1990 = 100
EUR15		:	12-96	:	:	99.2
B	1996	48,707	05-97	3,335	0.33	76.6
DK	1996	15,809	06-97	1,910	0.37	119.9
D	1996	576,376	06-97	46,177	0.57	139.7
EL	1995	70,865	12-95	6,326	0.61	63.1
E	1996	265,956	04-97	25,268	0.64	129.9
F	1996	304,186	07-97	26,700	0.46	83.4
IRL	1996	34,864	03-97	3,221	0.90	175.1
I	1996	138,439	12-96	5,818	0.10	33.2
L	1996	2,797	02-97	204	0.50	64.5
NL	1996	102,119	06-97	9,777	0.63	130.7
A		:		:	:	:
P	1996	84,609	05-97	7,193	0.73	:
FIN	1996	24,211	04-97	3,582	0.70	74.5
S (1)	1996	12,790	07-97	325	0.04	5.6
UK (1)	1996	173,300	07-97	17,100	0.29	125.0

1) buildings starts

Source: eurostat

CAPACITY UTILISATION RATES

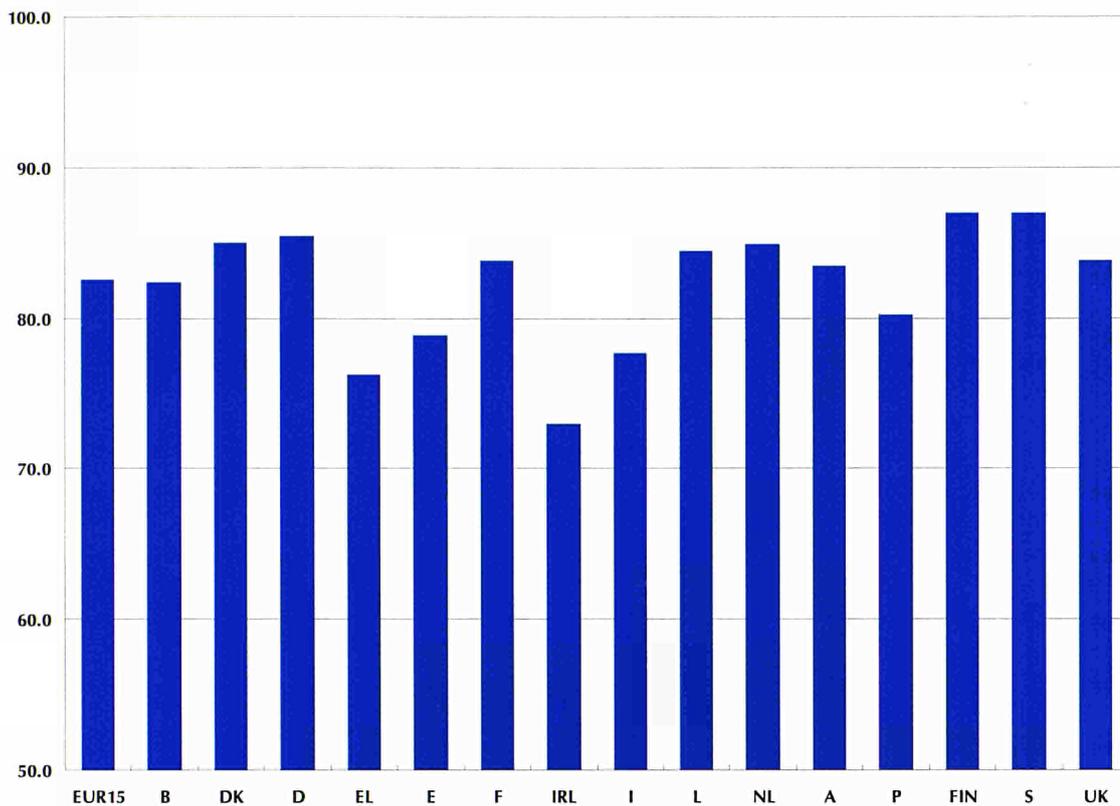


Figure 2.24

Capacity utilisation rates for total industry, July-97 (%)

Source: DG II, Business Survey

Growth rate: latest month, t / t-12 (%)

10/96

01/97

04/97

07/97

Table 2.18

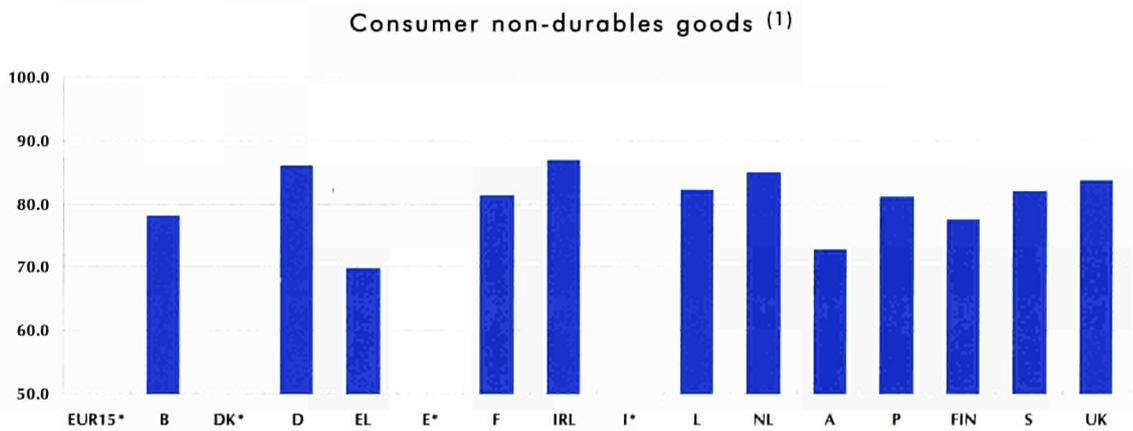
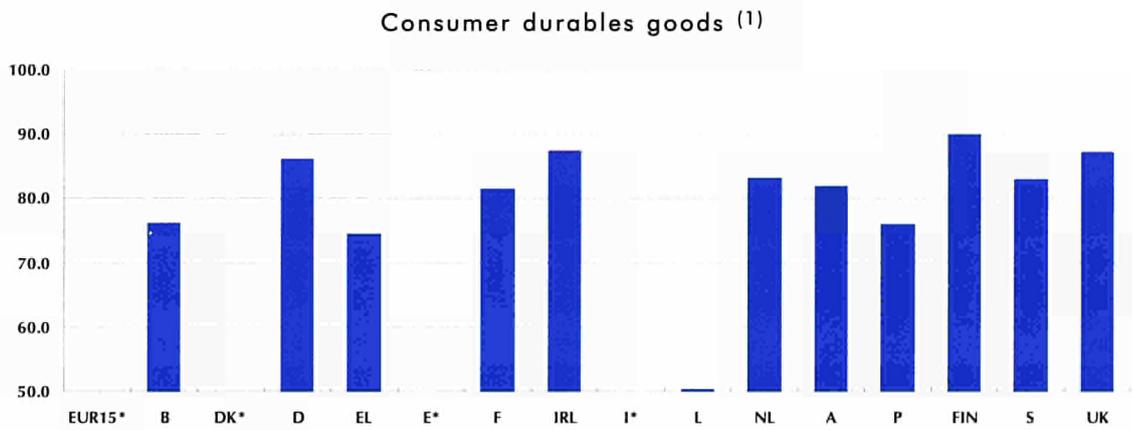
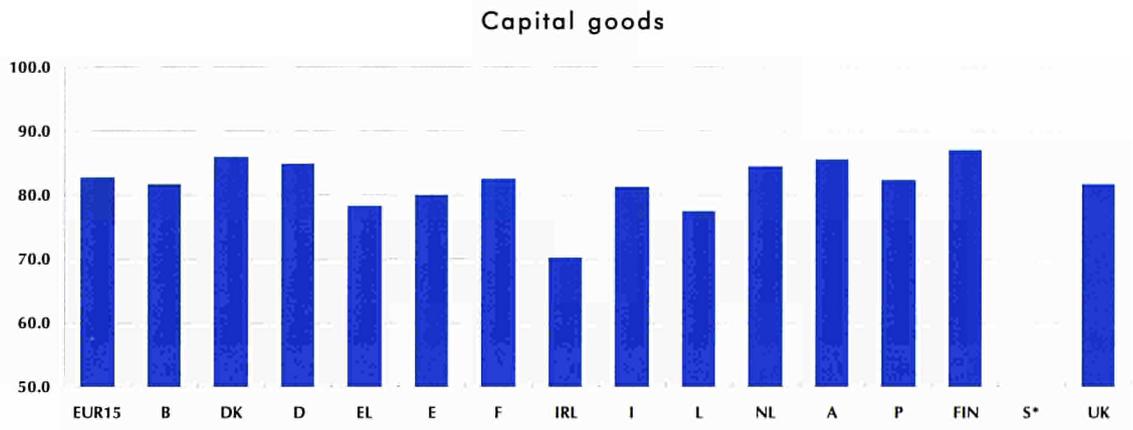
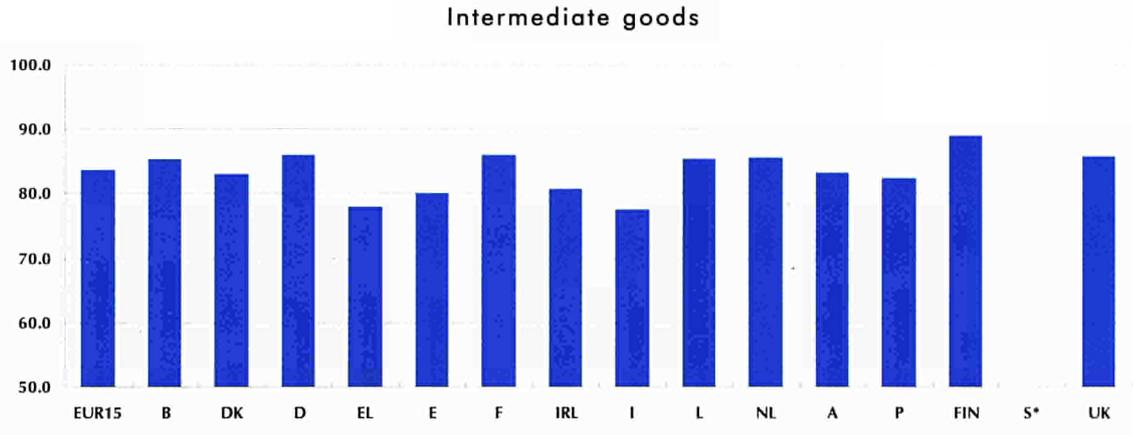
	Growth rate: latest month, t / t-12 (%)	10/96	01/97	04/97	07/97
EUR15	1.9	81.2	80.8	81.7	82.6
B	3.4	80.3	80.3	80.3	82.4
DK	3.7	82.0	82.0	82.0	85.0
D	3.5	82.8	82.4	84.6	85.5
EL	1.6	77.2	75.2	72.1	76.3
E	2.3	77.6	77.1	77.3	78.9
F	0.5	83.0	83.4	82.8	83.8
IRL	-4.3	75.8	76.9	80.5	73.0
I	2.5	75.6	75.1	76.2	77.7
L	7.0	77.6	79.0	82.7	84.5
NL	0.8	84.4	83.8	83.8	84.9
A	3.6	81.4	79.8	80.7	83.5
P	2.6	76.6	81.4	80.3	80.2
FIN	4.8	85.0	85.7	86.9	87.0
S	2.4	85.0	87.0	84.0	87.0
UK	1.7	83.0	82.8	83.5	83.8

Capacity utilisation rates for total industry (%)

Source: DG II, Business Survey

Figure 2.25

Capacity utilisation rates for the main industrial groupings, July-97 (%)



1) Apr-97

Source: DG II, Business Survey

3 Recent trends in the steel industry



Description of the industry

Recent developments

Steel market

Extra-EU trade

Intra-EU trade and production

Producer prices and turnover

Investments

Productivity and employment

Capacity utilisation

Environment



In this section

Description of the industry 44

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Extra-EU trade 46

Intra-EU trade and production 49

Producer prices and turnover 50

Investment 50

Productivity and employment 50

Capacity utilisation 51

Environment 51



Description of the industry

The steel industry as described in this article is the industry as defined in the European Coal and Steel Community (ECSC) Treaty, and by NACE Rev.1 heading 27.10.

According to this definition, the production of iron and of ferro-alloys is also included. More than 99% of the iron produced is used within the industry. The steel products sold outside the industry are intermediate products, of which 35% are used for the primary processing of steel, the production of steel tubes, pressing, stamping, wire drawing and cold forming and cold rolling etc.

Including the products of the primary processing industries, 20.2% of steel is used in the building industry, and 29.7% in building and civil engineering. The second most important branch is the production of metal goods, excluding metal packaging, with 17.5%. The automotive industry accounts for 15.8% and mechanical engineering for 12.2%. Metal packaging accounts for 3.8%, all figures measured in volume terms. In terms of turnover, the building industry is less important, whereas the importance of the automotive industry, metal packaging and the machinery industry is higher.

Recent developments

In the EU, steel production in 1995 reached it's highest level for 15 years, based on a comparison of EUR12 data. After a peak in the second quarter, production in the fourth quarter declined sharply. During 1996, production has stagnated at the depressed level of end 1995. Only towards the end of the year could some improvement be seen. In recent months, the situation has considerably improved. Production in April and May 1997 surpassed the high level of the second quarter of 1995. This production level looks maintainable in the short run from the latest available information, since new orders were running at a level some 15% higher than in the corresponding quarter of 1996.

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STEEL MARKET

The trend in steel prices reflected these fluctuations in the market. Export quotations (US\$ per ton, fob. Antwerp) experienced a low in early 1994 - from when they started to increase, but since declined from November 1995. The low reached in July 1996 was only 10% above the previous low. Measured in ECU, the low was even below that of 1994. Even after an acceleration in March 1997, the actual level is still 17% lower than in 1995. Because of the appreciation of the US\$, the level in ECU is nearly equal to the high in 1995.

Steel market

Steel consumption decreased slightly in 1996. Whereas total industrial production in the EU grew by only 0.3%, production of capital goods increased by 2%, which has a positive impact on real steel consumption. However, the negative development in the building industry led on balance to an overall negative growth in steel consumption. With a decrease of 6.4% for building and 9.8% for civil engineering in the fourth quarter, steel consumption in Germany was hit more seriously than in other countries. As a result, for the EU apparent consumption decreased by 3.1%.

000 tonnes %

Mechanical engineering	12,556	12.2
Electrical engineering	5,049	4.9
Shipbuilding	1,409	1.4
Vehicles & other transport	16,261	15.8
Structural steelwork	9,715	9.5
Building and civil engineering	20,723	20.2
Metal goods	17,922	17.5
Cans and metal boxes	3,906	3.8
Boilers, drums and vessels	4,650	4.5
Other cons. industries	10,497	10.2
Total	102,688	100.0

Table 3.1

Steel consumption by consuming branches

Source:  eurostat

During the year however the effects of the inventory cycle became very evident. Because of a fear of shortages, in the early months of 1995 large inventories had been built up. As the fear disappeared, steel traders and steel users restrained new orders. This caused a reduction of steel deliveries in the fourth quarter of 1995. The total deliveries on the market from home industry and from imports decreased by more than 8.5%.

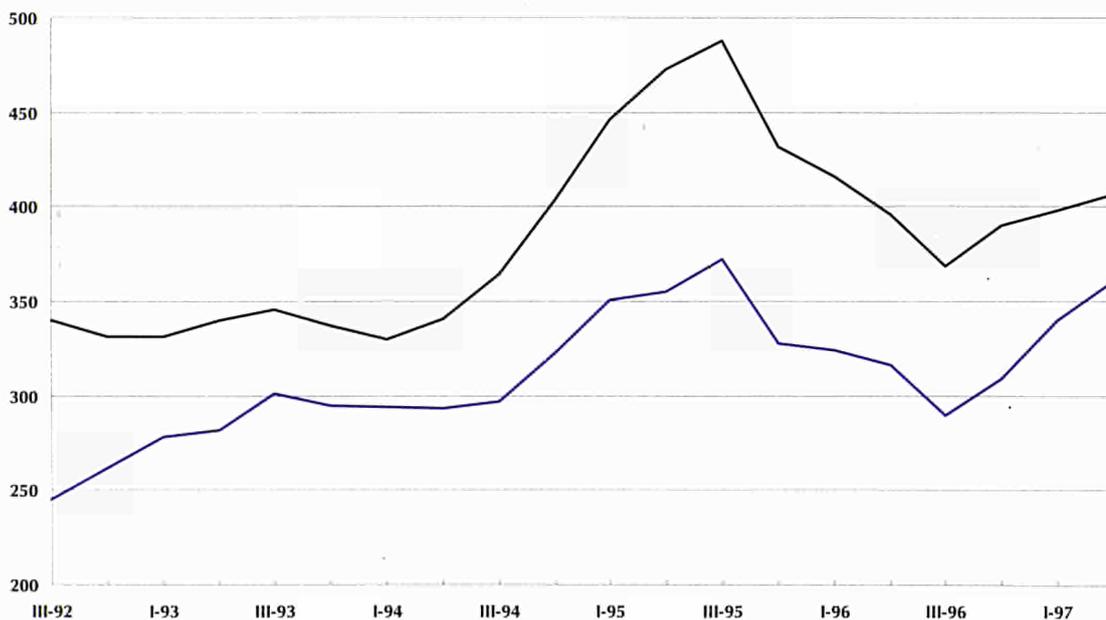


Figure 3.1

FOB Antwerp export quotations

— ECU
— \$

Source:  eurostat

Table 3.2

Market size¹
(1992=100)

1) based on limited information for the first quarter of 1997, an increase of 3.2% compared to the same period of 1996 may be expected

Source:  eurostat

	1995	1996	1997
1st quarter	119.5	106.0	109.5
2nd quarter	118.2	102.6	:
3rd quarter	101.1	92.7	:
4th quarter	100.1	99.0	:

Development of steel consumption across countries has been rather divergent. Whereas the BLEU and France had shown a decline in apparent consumption in 1995, followed by a slight increase in 1996, Italy and the UK still had a healthy growth in 1995, but as a consequence did show a considerable fall in consumption in 1996, by 12.5% and 3.9% respectively. For the last quarter of 1996 compared to the last quarter of 1995, the growth in Germany and France even reached +1% and +6.6%, although the level was still below the average of 1995.

Extra-EU trade

After the dramatic increase of imports into the EU between 1993 and 1995, imports in 1996 decreased by 27.5%. At the same time, exports increased by 24.8%, and the trade surplus therefore increased from 5.5 million tonnes in 1995 to 15 million tonnes. This was comparable to the 12 million tonnes recorded by EUR12 in 1994, but still less than the 20 million tonnes (EUR12) in 1993. Because of the sharp decline in export prices, the trade surplus in ECU only grew from 5.9 Mrd ECU to 7.3 Mrd ECU.

For all countries the trade position towards third countries has improved. The trade surplus of Germany increased from 1.4 million tonnes to 4.1 million. For Italy the trade deficit of 0.2 million tonnes turned into a surplus of 0.3 million tonnes.

The decrease in imports and the increase of exports has mainly been the result of favourable developments in the world steel market. According to the International Iron and Steel Institute, steel consumption in all regions outside Europe increased in 1996, by 11.3% in Rep. of China and 6.8% in the USA to 0.7% in Japan. Compared to the decrease in production of 8.7 million tonnes in the EU, total

Table 3.3

Apparent crude steel consumption
(thousand tonnes)Source:  eurostat

	IV-1995	I-1996	II-1996	III-1996	IV-1996	1995	1995 share (%)	1996	1996 share (%)	IV-1996 growth (t/t-4, %)	1996 growth (t/t-1, %)
EUR15	33,583	36,000	34,562	31,090	32,745	138,753	100.0	134,397	100.0	-2.5	-3.1
B/L	560	2,066	1,243	1,136	936	3,784	2.7	5,381	4.0	67.1	42.2
DK	391	342	380	368	377	1,635	1.2	1,467	1.1	-3.6	-10.3
D	8,678	9,172	9,204	9,278	8,764	36,611	26.4	36,418	27.1	1.0	-0.5
EL	579	461	696	586	498	2,153	1.6	2,241	1.7	-14.0	4.1
E	3,353	3,408	3,210	2,782	3,482	13,867	10.0	12,882	9.6	3.8	-7.1
F	3,817	4,177	4,229	3,505	4,069	15,436	11.1	15,980	11.9	6.6	3.5
IRL	144	132	154	148	164	542	0.4	598	0.4	13.9	10.3
I	7,446	7,939	7,167	5,806	6,320	31,111	22.4	27,232	20.3	-15.1	-12.5
NL	1,199	1,444	1,272	1,108	1,160	4,977	3.6	4,984	3.7	-3.3	0.1
A	879	915	1,041	1,009	1,021	3,506	2.5	3,986	3.0	16.2	13.7
P	743	487	554	511	642	2,383	1.7	2,194	1.6	-13.6	-7.9
FIN	666	579	421	498	549	2,530	1.8	2,047	1.5	-17.6	-19.1
S	1,270	937	1,038	805	1,024	4,420	3.2	3,804	2.8	-19.4	-13.9
UK	3,858	3,941	3,953	3,550	3,739	15,798	11.4	15,183	11.3	-3.1	-3.9

EXTRA-EU TRADE

world production outside the EU increased by 4.7 million tonnes. The highest production growth has been realised in the Rep. of China with 5 million tonnes (up 5.2%) and Korea (up by 5.8%). In the USA, in spite of the increase of deliveries by the steel industry, production was slightly down, by 0.5%. In Japan, production fell by 2.8%.

Exports to the USA, more than 26% of EU exports in 1996, have started to accelerate from the second quarter of 1996. Due to the strength of the US\$, exports in 1996 increased by about 52%, but still remained far below the level of 1994. In spite of strong production growth recorded in the Rep. of China, exports to China were able to recover part of the losses which occurred in 1995. However, with 2% of total exports in 1996, exports to China will be only 13% of the record level reached in 1993. Exports to the other Western European countries have been stagnant, whereas exports to Eastern Europe have further decreased.

Imports from all third countries have decreased in 1996, most notably as regards the imports of semis from Eastern Europe. Imports from Russia were

down by 45%. However imports from the Czech Rep. and Poland were down only 14% and 34%. Germany which accounts for 30% of steel consumption and production, accounts for 27% of imports from third countries, but for 85% of imports from the Czech Rep. and for 71% of imports from Poland. So the import pressure on the largest steel market of the EU has partly remained.

The pressure on the market has been stronger due to some cases of dumping. To avoid damage to the market, the EU had to put quotas on imports from Russia, Ukraine and Kazakhstan and a special control on imports from other countries. The EU has recently agreed with Russia on a new steel arrangement that foresees a full liberalisation of trade towards the year 2001. In between there will be a step-like increase in the EU-import quota together with a development towards normal competition practices. These types of conditions have also been agreed for the Ukraine. The temporary measures of double control on imports from other Eastern European countries like the Czech Republic, Slovakia, Romania, Bulgaria and possibly the FYR of Macedonia will be continued in 1997.

	IMPORTS					EXPORTS				
	1996 000 tonnes	95/96 (%)	Latest quarter available	000 tonnes	t/t-1 (%)	1996 000 tonnes	95/96 (%)	Latest quarter available	000 tonnes	t/t-1 (%)
EUR15	11,253	-27.5	IV-96	2,533	-33.6	26,182	24.8	IV-96	6,739	14.2
B/L	577	-34.9	I-97	139	-32.5	2,813	27.6	I-97	510	-14.4
DK	147	-33.5	I-97	34	-5.6	113	-0.9	I-97	27	8.0
D	3,061	-32.9	I-97	730	14.2	7,194	20.9	I-97	1,580	10.3
EL	613	-26.7	IV-96	198	-18.9	315	60.7	IV-96	71	102.9
E	1,047	-20.0	I-97	160	-71.5	2,067	41.6	I-97	450	-5.7
F	310	-29.4	I-97	70	-31.4	2,852	20.3	I-97	550	-4.2
IRL	43	43.3	I-97	9	0.0	21	320.0	I-97	3	0.0
I	3,072	-27.2	I-97	958	-3.8	3,358	26.7	I-97	582	-27.4
NL	277	-33.6	IV-96	56	-41.1	1,906	21.6	IV-96	522	-0.8
A	295	-4.2	IV-96	81	-9.0	273	-52.1	IV-96	91	-15.7
P	140	-24.3	I-97	45	-10.0	157	153.2	I-97	15	15.4
FIN	543	-13.7	I-97	116	-10.1	1,469	64.7	I-97	391	-5.8
S	190	-17.0	I-97	45	-6.3	779	28.3	I-97	200	7.0
UK	938	-24.8	I-97	266	-1.1	2,865	22.9	I-97	537	-25.4

Table 3.4

Trade with third
countries in volume

Source:  eurostat

Table 3.5

Trade with third countries in value

	IMPORTS					EXPORTS				
	1996 mio ECU	95/96 (%)	Latest quarter available	mio ECU	t/t-1 (%)	1996 mio ECU	95/96 (%)	Latest quarter available	mio ECU	t/t-1 (%)
EUR15	3,813	-24.7	IV-96	786	-42.0	11,153	2.0	IV-96	2,840	-5.4
B/L	237	-22.3	I-97	53	-40.0	1,085	-0.1	I-97	204	-15.7
DK	56	-31.7	I-97	12	-13.1	57	3.4	I-97	14	8.8
D	1,033	-34.0	I-97	156	-40.1	3,249	-3.0	I-97	463	-34.8
EL	148	-26.2	IV-96	45	-28.5	110	41.1	IV-96	27	86.0
E	298	-25.7	I-97	28	-81.7	865	22.2	I-97	134	-33.7
F	151	-11.7	I-97	24	-49.8	1,305	5.7	I-97	181	-43.9
IRL	18	74.4	I-97	3	-18.6	9	252.5	I-97	1	-47.7
I	962	-23.7	I-97	264	-24.6	1,316	5.1	I-97	257	-19.9
NL	146	-23.9	IV-96	29	-43.8	632	1.2	IV-96	170	-16.2
A	108	-7.0	IV-96	26	-18.8	218	-35.0	IV-96	63	-7.4
P	50	-19.3	I-97	14	-19.7	45	140.9	I-97	5	-4.6
FIN	128	-19.4	I-97	30	-7.0	404	-26.0	I-97	91	-22.5
S	103	-9.3	I-97	15	-45.1	646	10.3	I-97	103	-39.4
UK	375	-11.4	I-97	112	6.9	1,211	14.1	I-97	271	-2.8

Source:  eurostat

The impact of the changes in international trade in 1996 on the steel industry of the individual member countries is rather different. The volume of imports in the BLEU decreased by 35%, and in Austria by only 5%, whereas in Ireland there was an increase of 43%. Imports in value terms have decreased less. The unit value of imports has increased by 4%. This increase was mainly the result of a change in the composition of imports. The average unit value, weighted with the 1994 product mix of imports decreased by 4%.

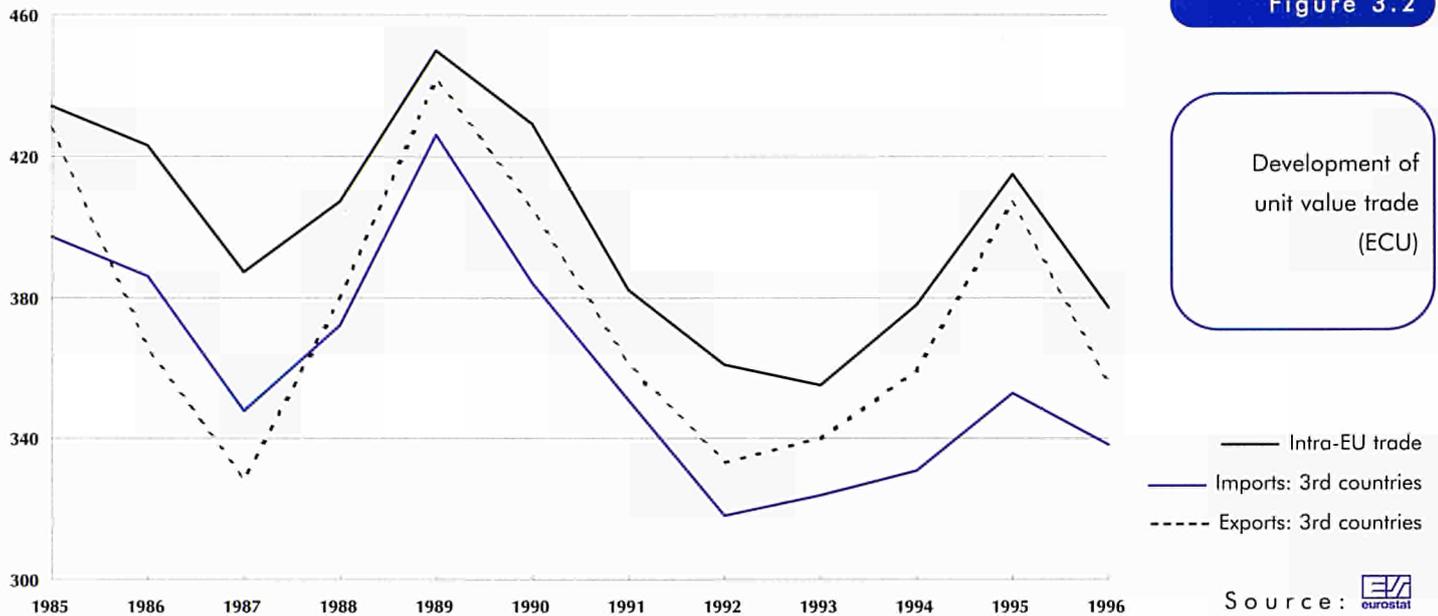
For exports the same pattern can be seen. The increase in exports has notably been for semis and hot rolled wide strip, all products at the lower end of the price range. This shift in the export mix has contributed most to the sharp decrease in the unit value of exports to third countries (-18.2%). When

compared to the increase of 25% in exports in volume terms, the value of exports increased by only 2%. The actual behaviour of prices has been less extreme. The weighted index of unit values only showed a decline of 13%.

Although Germany's exports grew less than those of the EU, the share of Germany in EU exports (27.5%) remained the highest. Its share in exports was even higher than its share in production (27%). Italy was the second largest exporter with a 12.8% share. However, Italy in 1995 was still a net importer from third countries (1.6 million tonnes), although by 1996 it achieved net exports of 0.7 million tonnes. Compared to their shares in EU production, the BLEU countries, the Netherlands and Finland have relatively high shares in EU exports, equal to 10.7%, 7.3% and 5.6% respectively.

INTRA-EU TRADE AND PRODUCTION

Figure 3.2



Development of
unit value trade
(ECU)

— Intra-EU trade
— Imports: 3rd countries
- - - Exports: 3rd countries

Source:  eurostat

Intra-EU trade and production

Intra-EU trade in 1996 decreased by 6% (export based), 2% less than the total deliveries on the EU market. There has also been a decrease in prices in this market. The unit value decreased by 9%. There was no difference between the directly measured and weighted unit value, which is compatible with a stable structure of trade.

During 1996, the UK steel industry suffered from a 20% increase in the value of sterling against the DM. As a result the unit value of UK exports into the EU has decreased 6% more than the EU average in sterling terms; in the fourth quarter of 1996, the UK unit value was 14% lower.

The structure of Intra-EU trade has remained remarkably constant, as regards both product mix and the share of the Member States. The UK saw its share in Intra-EU exports increase from 9.4% in 1995 to 9.9% in 1996. In Austria, BLEU and France small gains were recorded. Only the figures for Germany showed a decrease from 20.1% to 18.6%, although it still reported net exports.

As a result of the decline in market size, production in the EU in 1996 decreased by 5.6% after an increase of 2.7% in 1995. Only in the UK and Ireland was there growth in production in both years. In both countries there was even an acceleration of the growth, in the UK from 1.7% to 2.3%. Luxembourg and Sweden had a decrease in both years. In the first quarter of 1997 growth in the EU turned positive, +2.6% as compared to the corresponding quarter of 1996. The strongest growth was for France (11.4%), the Netherlands (11.2%) and Germany (8.4%). For Italy and Belgium the first signs of a recovery were not seen until the second quarter.

In spite of the diverging growth rates, the structure of production has not changed as much. The share of the UK has risen from 11.3% in 1995 to 12.3% in 1996. In Italy it has decreased from 17.8% to 16.6%. Germany has maintained its share of 27% of the EU production.

PRODUCER PRICES AND TURNOVER, INVESTMENT, PRODUCTIVITY AND EMPLOYMENT

Producer prices and turnover

Although the increase in the volume of exports and the decrease in imports have certainly given some relief to the EU steel industry, from the results shown for the unit trade values, it is clear that the downward pressure on steel prices has continued throughout nearly the whole of 1996. As a result, producer prices in ECU were down 3.1% after an increase of 5.8% in 1995. The level is now 8.4% below the last high reached in 1989. Measured in national currencies, the decrease in 1996 was 5%, 1.4% below the high of 1989. The largest reduction was in the strongly export dependent Belgian steel industry, 12.5%, followed by 7.8% for Sweden and 7.5% for Germany. For the EU the low was reached in Jan/Feb 1997, and for some countries, notably Finland and Sweden, in Nov/Dec 1996. According to some provisional estimates, producer prices in March/April 1997 were up 1% compared to the two first months of the year.

As a result of the decline in steel prices and steel production, the total turnover of the EU steel industry in 1996 was down by 12.1%, varying between -16.7% for Spain and -2.5% for the UK.

In line with this negative development of turnover, a great number of steel companies have reported losses in 1996.

Investment

The steel industry has found it constantly necessary to improve productivity. Therefore, in spite of negative developments in the steel market, investment by the EU steel industry in 1996 increased by 23.6%. Because of shrinking production, investment per tonne has increased by even more, from 20.6 ECU/tonne to 27.0 ECU/tonne or 5.8% of turnover. Investment per tonne across Member States varies widely, from 4.1 ECU/tonne in Portugal to 73.5 ECU/tonne in Finland. It should be

noted that investment is generally higher in countries with a high share of special and alloyed steel making, such as Austria and Sweden with 60.8 and 38.1 ECU/tonne. However, as a share of turnover, the countries are grouped more closely together, with 8.4% the highest for Spain and Finland, followed by Denmark with 6.8%.

Germany accounts for 27.8% of EU investment, just equalling its share in production. Investment by the Italian steel industry is considerably lower than its share in production, 8.9% of investment and 16.6% of production.

Productivity and employment

Productivity in the steel industry as measured by tonnes of steel produced per head declined in 1996 from 485 kg/head to 481 kg/head. The fall in productivity is the direct result from the fall in production. Based on the employment of the last quarter of 1996 and the production of the first quarter of 1997, productivity may have risen to 502 kg/head, nearly twice the level of 1986. For EUR12, production reached 517 kg/head. However, due to the three new Member States all having a high share of special steels in their product mix, they tend to show much lower figures for production per head. For the whole period there was an increase in productivity of more than 7% a year.

The figures on productivity show the number of people needed for a given production of steel has been continuously decreasing. Because of the continuous increase in the quality and performance of the steel products delivered, value added per person has increased even faster. Employment in the steel industry has steadily declined. Following a reduction in employment of 16,000 in 1995, there was a reduction of 15,500 in 1996, equivalent to 4.8%.

CAPACITY UTILISATION AND ENVIRONMENT

Table 3.6

	1995	1996	95/96 (%)	II-1996	II-1997	II-1997 t/t-4,(%)
EUR15	75.9	74.1	-1.8	75.9	83.3	7.4
B	80.3	75.9	-4.4	73.9	77.2	3.3
DK	76.8	86.7	9.9	83.1	92.0	8.9
D	82.0	77.1	-4.9	76.1	88.6	12.5
EL	24.7	22.3	-2.4	22.7	24.8	2.1
E	66.2	68.3	2.1	79.5	75.5	-4.0
F	78.9	75.1	-3.8	76.8	86.1	9.3
IRL	61.8	68.0	6.2	76.0	72.0	-4.0
I	65.8	64.9	-0.9	69.3	76.8	7.5
L	58.1	55.6	-2.5	56.9	59.6	2.7
NL	94.4	93.0	-1.4	94.6	95.1	0.5
A	89.4	79.5	-9.9	78.5	95.6	17.1
P	86.4	91.9	5.5	93.3	97.0	3.7
FIN	78.1	78.6	0.5	64.3	85.5	21.2
S	93.5	86.5	-7.0	91.3	94.8	3.5
UK	83.8	86.1	2.3	88.8	93.1	4.3

Crude steel:
capacity utilisation
(%)

Source:  eurostat

Capacity utilisation

Capacity utilisation for EUR15 in 1995 was only 76% compared with 80.8% for EUR12 in 1994. Because of a reduction in capacity in 1996, utilisation fell only 2%, from 76% to 74.1%, less than the fall in production. Capacity utilisation was lower than 70% in Greece, Spain, Italy and Luxembourg, all four countries have a high share of electric arc furnaces and therefore a more flexible production process.

The high level of investment in the steel industry does not lead to big increases in capacity as they are predominantly aimed at quality and at improving the production process.

However, with only a limited potential for production growth this leads to a lasting need for capacity reductions and restructuring. To avoid distortions of competition by state aid or subsidies the EU put in force at the beginning of 1997 a new code on state aid. It will run out in the year 2002 when the Treaty on the ECSC comes to an end. For the period concerned it still foresees the possibilities of social aid for restructuring.

Restructuring in many cases will be accompanied by mergers or co-operation in certain well defined

segments of the market. For 1997 the takeover by Hoogovens (NL) of the rolling mill section of Boëll (B), and in Germany the merger of the steel works of Thijssen and of Krupp-Hoesch (that is now near to a conclusion) are typical of this process. This merger will give the latter company a potential production of 18 million tonnes, one of the biggest steel producers in the EU, along with British Steel and Usinor.

Environment

The environmental impact of the steel industry and the production of steel has three main aspects. These are the steel production process, the manufacturing processes that use steel as an input and the environmental aspects of products made of steel, especially the aspect of recycling.

The steel industry has done a great deal to overcome environmental problems of steel production. The remaining issue is the more general problem of energy consumption, although the results achieved here are equally impressive.

One special problem is coke factories. Although coke consumption per tonne of pig iron over the last ten years has decreased from 549 kg/tonne in

1986 to 436 kg/tonne in 1995, the production of coke remains a part of the production process that is rather burdensome. The increased use of coal injection will further lower coke consumption in the iron making process.

The share of electric arc furnaces in steel making has increased from 29.4% in 1986 to 35.1% in 1995. This production route can do without the blast furnace and without the use of coke and therefore is considered to be more environmentally friendly, although the overall energy efficiency in the form of electricity is not as high as in the so called integrated steel making process.

The last blast furnace in Luxembourg has just been closed. However, the availability of scrap will allow only a limited further increase of the share of electric arc steel making, unless there is a fundamental breakthrough in the economics of the production of directly reduced iron.

In 1995 in the EU, 73 million tonnes of scrap have been recovered. In comparison to a production of 155.8 million tonnes this means only 47%. However compared to the apparent final consumption of steel, calculated after the subtraction of indirect steel exports by the way of cars and other products made of steel, the recovery rate is 57%. Although this figure is rather high as compared to other materials, one should bear in mind that a con-

siderable part of the steel consumed ends up in products like rails, pipe lines, steel structures that have a life span of several decades and therefore should not be included in this figure.

The increased efficiency in steel making and in steel processing by the way of continuous casting has also reduced the amount of crude steel and therefore of pig iron needed to produce one tonne of final steel product.

The high share of investment in the steel industry has been devoted in part to an improvement in the environment, but still more to an improvement in the quality of the steel. The share of stainless, heat resistant or other alloyed steels in the production has increased from 12.1% in 1992 to 15.1% in 1995. The entry of Sweden into the EU accounts for 1% of this increase. Alloyed steels however are only a part of the overall quality increase. The steel industry has been able to develop a number of steel qualities by improving the rolling process, special heat treatment, quenching and tempering. For weight sensitive applications like the car industry, the result has been a big increase in the use of lighter, stronger steels.

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Description of the industry

The steel tube industry, NACE Rev.1 27.22 comprises the manufacture of steel tubes and of steel tube fittings.

Within the manufacturing of steel tubes, it is useful to make a distinction between the production of steel tube fittings and three categories of tubes:

- ★ seamless steel tubes;
- ★ welded tubes with a circular diameter of over 406.4mm;
- ★ welded tubes with a circular diameter of less than 406.4mm, together with welded tubes of non-circular cross-section.

The three product categories of tubes differ considerably in manufacturing process as well as regards the applications they are used for. Differences in the capital investment requirements for the three categories lead to differences in cost structure and prices. Production of steel tube fittings and other accessories is more labour and capital intensive per tonne than the production of tubes. Although this part of the steel tube industry only accounts for 6% to 7% of intra-EU trade and of EU exports measured in tonnes, it accounts for 23% to 24% of the trade measured in value.

The most important consuming branches of steel tubes as reported in the statistics on steel consumption by user branch are the other (miscellaneous) industries, which includes the gas and oil industry. Further important consumers are mechanical engineering with 17.1%, building and civil engineering with 16.5% and the steel construction industry with 14.8%. For seamless tubes, mechanical engineering is even more important with 30.7%, whereas both the other branches are more important for welded tubes with 17.6% and 17.0% respectively.

Enquiries regarding the purchase of data should be directed to:

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RECENT DEVELOPMENTS

The production of steel tubes has fluctuated from year to year, but the trend in production has been negative since 1984. In the same period, the trend in consumption has been slightly upwards, although there was a steep downturn in 1993, followed by a recovery in 1994 and 1995 and again a downturn in 1996. This largely positive trend in consumption principally reflects the development of welded tubes. For seamless tubes the trend has been negative. The unfavourable development of production is also reflected in comparison to the steel industry; since 1984 the importance of the branch in steel consumption has declined from a share of 20% of steel consumption to a mere 12% in 1994.

Recent developments

Production of steel tubes in tonnes was down 3.3% in 1996, and fell by 6% for seamless tubes and 5.8% for welded tubes <= 406.4mm. For the large diameter pipes, production grew, by 10.8%.

In the first quarter of 1997, the production of seamless tubes was still below the corresponding level of 1996; for all welded tubes, first indications suggest an increase of between 5% and 10%, mainly because of demand from the oil industry.

Producer prices in the tube industry in ECU terms (the information on data in money terms, including prices, is only available for the EU as a whole for both iron and steel tubes; the value of production of iron tubes is about 6% that of steel tubes) have been falling since the third quarter of 1995. By the end of the first quarter of 1997, they had fallen by 6.5%. For 1996, the reduction was 1.5%. During this period, producer prices for total manufacturing increased by 3%.

In the first quarter of 1997, prices were 5.7% below the level of the corresponding quarter of 1996. The available figures for the second quarter show a further fall, although very marginal.

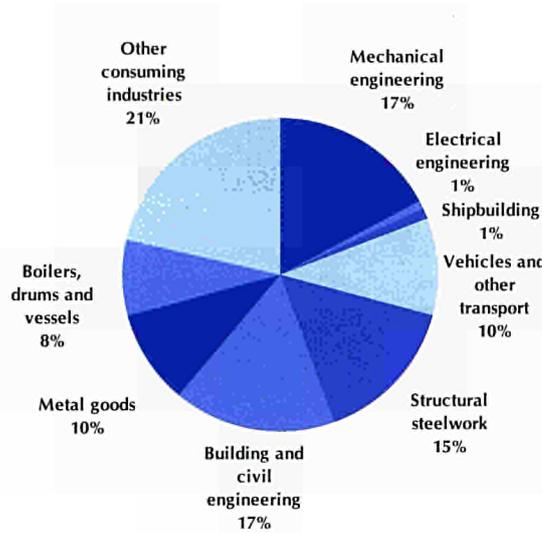


Figure 4.1

Total tubes: consumption by branch, 1994 (%)

Source: eurostat

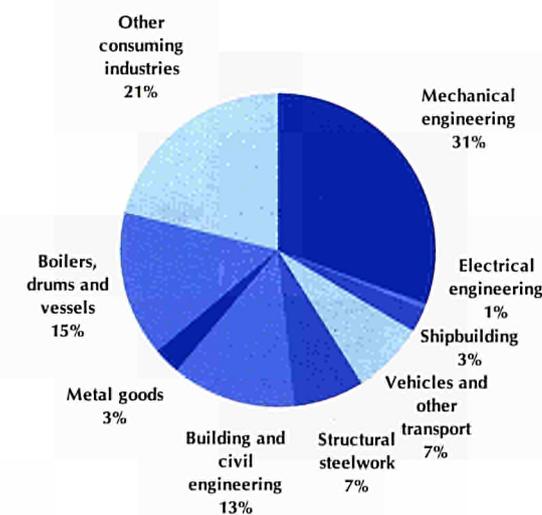


Figure 4.2

Seamless tubes: consumption by branch, 1994 (%)

Source: eurostat

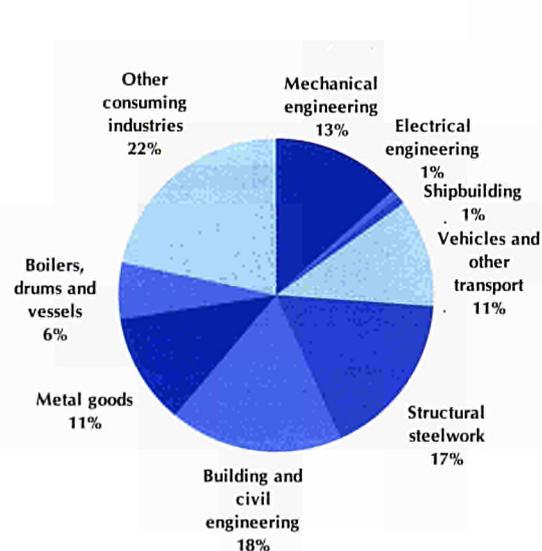


Figure 4.3

Welded tubes: consumption by branch, 1994 (%)

Source: eurostat

Table 4.1

Production of tubes,
1996
(thousand tons)

	All tubes	Seamless tubes	Welded <= 406.4 mm	Welded > 406.4 mm
B	1.0	0.0	1.5	0.8
DK	0.5	0.0	0.9	0.0
D	27.3	39.6	15.7	45.2
EL	1.5	0.0	2.4	0.6
E	7.5	7.4	9.3	2.1
F	11.6	17.3	8.9	11.4
IRL	0.0	0.0	0.1	0.0
I	26.7	21.7	30.4	22.9
L	0.8	0.0	1.4	0.0
NL	3.3	0.0	5.2	2.1
A	4.1	7.8	3.5	0.0
P	0.5	0.0	0.8	0.0
FIN	2.7	0.0	4.1	2.8
S	1.8	4.0	1.3	0.2
UK	10.7	2.2	14.5	11.9

Source:  eurostat

Table 4.2

Main indicators:
steel tubes¹
(million tons)

	1985	1988	1990	1991	1992	1993	1994	1995	1996
Production									
Total tubes	14.46	13.33	12.33	12.52	11.31	10.18	11.26	12.45	12.04
Seamless tubes	4.77	4.06	3.68	3.76	3.02	2.65	2.98	3.48	3.27
Welded tubes <= 406.4 mm	6.24	6.97	7.10	6.74	6.35	5.78	6.15	7.09	6.68
Welded tubes > 406.4 mm	3.45	2.30	1.55	2.02	1.94	1.75	2.14	1.88	2.09
Imports from third countries									
Total tubes	0.70	1.13	1.41	1.42	1.49	1.21	1.52	1.55	0.81
Seamless tubes	0.27	0.40	0.46	0.49	0.58	0.34	0.44	0.48	0.54
Welded tubes <= 406.4 mm	0.40	0.71	0.79	0.75	0.84	0.77	0.94	0.96	0.80
Welded tubes > 406.4 mm	0.02	0.03	0.16	0.18	0.07	0.09	0.14	0.11	0.19
Exports to third countries									
Total tubes	6.75	4.78	3.16	4.13	3.00	2.56	3.36	2.84	3.16
Seamless tubes	2.77	2.13	1.69	1.81	1.39	1.25	1.32	1.36	1.47
Welded tubes <= 406.4 mm	1.18	0.93	0.87	0.90	0.74	0.65	0.80	0.64	0.66
Welded tubes > 406.4 mm	2.80	1.73	0.61	1.43	0.87	0.66	1.25	0.84	1.03
Apparent consumption									
Total tubes	8.41	9.68	10.57	9.81	9.80	8.83	9.42	11.16	9.69
Seamless tubes	2.27	2.33	2.45	2.44	2.21	1.74	2.10	2.60	2.34
Welded tubes <= 406.4 mm	5.47	6.75	7.01	6.60	6.44	5.91	6.30	7.41	6.82
Welded tubes > 406.4 mm	0.67	0.60	1.10	0.77	1.14	1.18	1.03	1.15	1.25

1) 1985-1994, EUR12;
1995-1996, EUR15

Source:  eurostat

THE MARKET

The market

The negative development of the EU building industry in 1996 had a direct impact on the consumption of tubes. Consumption of all types of tubes in the EU in 1996 decreased by 6.9%. Consumption of seamless tubes fell by 10.4% due to the effect of the inventory cycle and in spite of only a marginal decline in the machinery industry. The development of consumption of welded tubes ≤ 406.4 mm runs parallel to the development of seamless tubes. For the EU there was a decrease of 7.9%.

In the UK, where building activity was more stable, there was growth in the consumption of small welded tubes of 5.7%. However, consumption of seamless tubes in the UK showed a decline. In Germany, where the building industry was affected by a decline of activity of 10%, consumption of both seamless tubes and small welded tubes was down more than 10%. The effects of growth in the car industry could only moderate the downturn.

The consumption of tubes > 406.4 mm is dependent on activity in the oil and gas industry to a large extent, but it is affected even more directly by the investment activity of that industry. Consumption of welded tubes of > 406.4 mm fluctuates widely from year to year as consumption is very much dependent on big projects like new pipelines for gas or

The development of
the consumption of welded
tubes ≤ 406.4 mm runs
parallel to the development
of seamless tubes...

	1985	1990	1991	1992	1993	1994	1995	1996
Seamless tubes	4.77	3.68	3.76	3.02	2.65	2.98	3.48	3.27
Welded tubes ≤ 406.4 mm	6.24	7.1	6.74	6.35	5.78	6.15	7.09	6.68
Welded tubes > 406.4 mm	3.45	1.55	2.02	1.94	1.75	2.14	1.88	2.09

Table 4.3

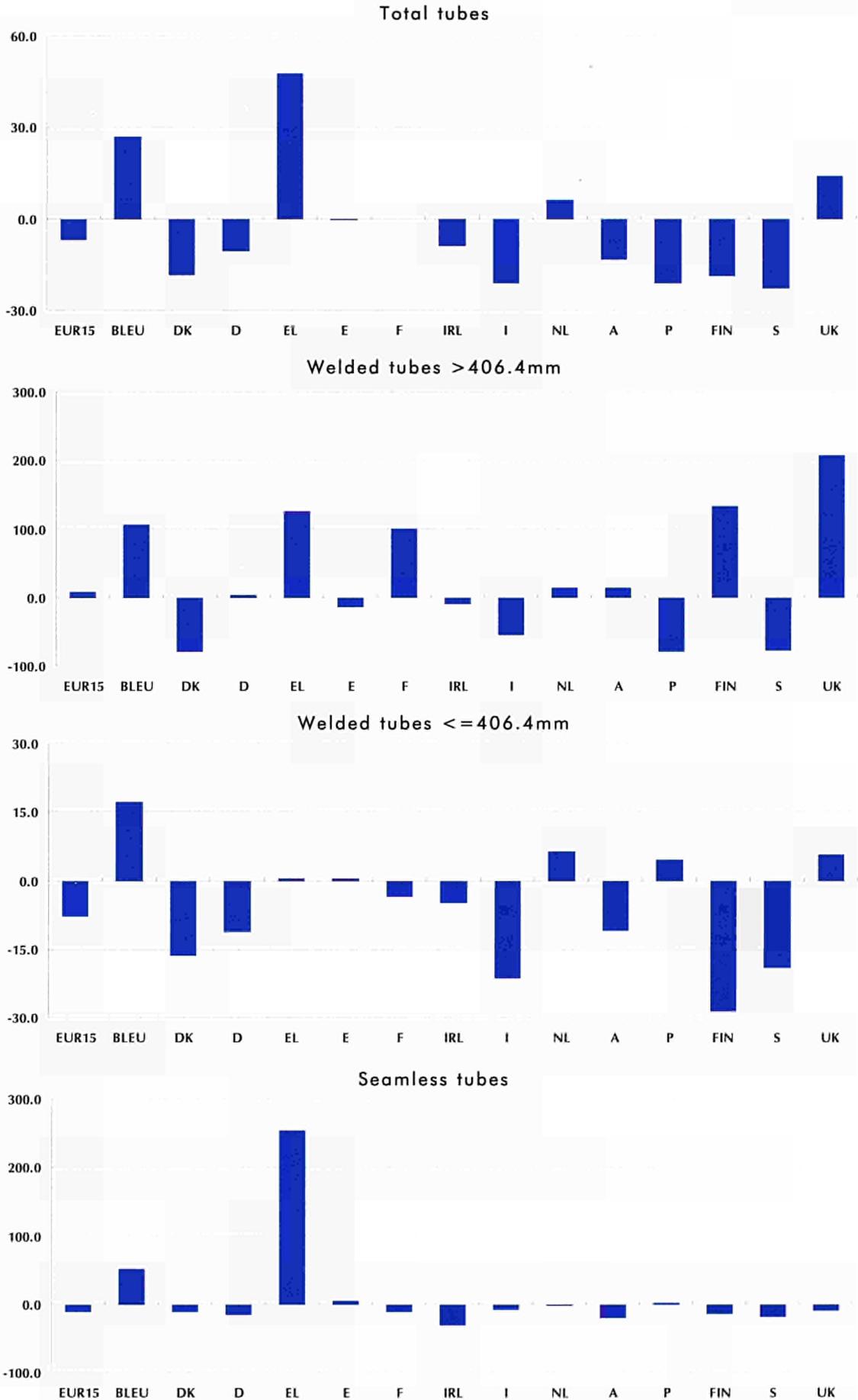
Production of
steel tubes¹
(million tons)

1) 1985-1994, EUR12;
1995-1996, EUR15

Source:  eurostat

Figure 4.4

Consumption of steel tubes - annual growth rate, 1995/95¹ (%)



1) Please note that the y-axis differs between graphs.

Source: eurostat

EU TRADE

oil. So the market growth in 1996 varied from +208% in the UK where the production of the mining industry had increased by 4.6% to -79% in Portugal. In France consumption increased by 100%, in spite of a decrease in mining activity of 14%. For the EU, consumption of welded tubes of >406.4mm in 1996 increased by 8%.

Extra-EU trade

World production of steel tubes increased slightly in 1996 by 1.8%. However, for seamless tubes there was a decline of 0.7%. For producers in the EU this meant that the import pressure on the EU market had lessened.

Total imports into the EU of steel tubes, including fittings, went down by 0.9%, from 1.71 million tonnes to 1.69 million tonnes. However, imports in value terms have increased by 1.9%, due to an increase in the unit value of the imports of all product categories. The decrease in imports has not been general. In 1996 only welded tubes <=406.4mm were affected, decreasing by 16%. For this product category, the increase in unit values was minimal, 0.9% versus 2.9% for the total of all products.

The lessening of the pressure from the world market has been more generally felt by exports. Here, gains in exports of all products were made. Total exports of steel tubes and accessories increased by 11.2% in volume terms and 15.6% in value terms. There was also scope for increases of unit values of 4.0%. Within exports, again welded tubes <=406.4mm did less well than the other product categories. For this product, exports increased by only 3.9%, whereas their unit value even decreased, by 1.7%.

As a consequence the traditional trade surplus of the tube industry that in 1995 had come down to nearly 400,000 tonnes, was able to recover to the level of 1994, though it was still only 30% of the EUR12 level reached in 1985. The surplus grew continuously during 1996. In the fourth quarter, the

surplus was about 50% higher than in the first quarter of 1996. For the smaller welded tubes, the trade position also improved. However, for this product, there was still a negative trade surplus in volume terms of 140,000 tonnes. The position of the EU as a quality producer is illustrated by the fact that in value terms, there was a trade surplus even for this product category in 1996 of 221 million ECU.

Germany had the highest share of imports from third countries, 33.4%, compared to 24.3% of consumption and 27.3% of production. This pattern was also true for the UK, where the share in imports, 15.4%, was higher than the share in production and consumption. For Italy, the share in imports, 18.6%, was about equal to the share in consumption, but considerably less than the share in production, 26.7%.

As regards exports, Germany's share, 28.2%, was higher than those for consumption and production, but the difference was less pronounced. The share of Italy in exports, 25.3%, nearly equals the German share, but is still less than the Italian share in the production.

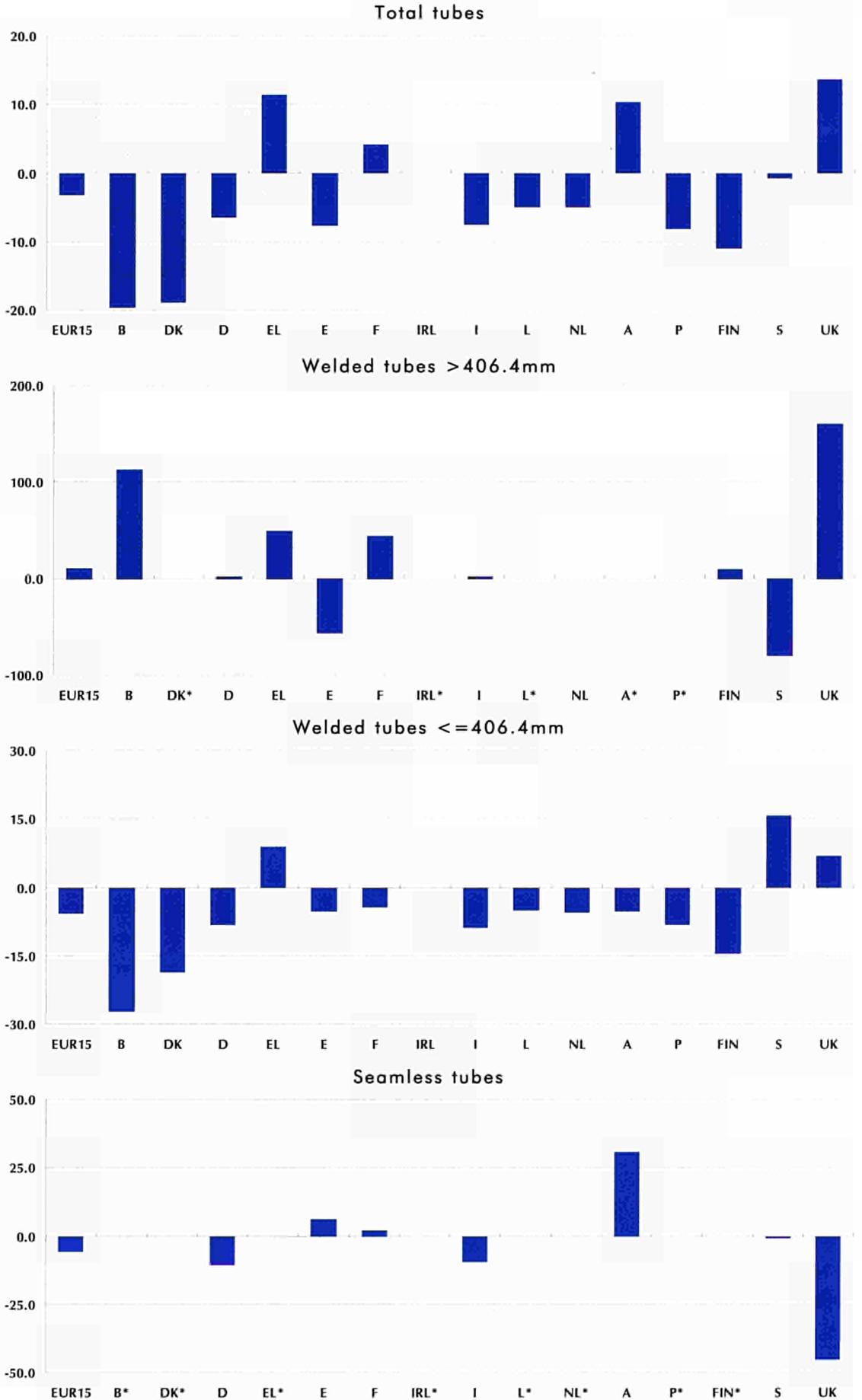
Intra-EU trade and production

As for most steel products, intra-EU trade is rather important. About 42% of total production is exported within the EU. Intra-EU exports in 1996 decreased 0.9%, compared to a decrease of 3.3% for production and 6.9% for consumption. Germany increased its intra-EU exports by 3.4%, and Italy by 6.5%. German industry profited due to the increase in the demand for large diameter pipes. Exports of small diameter pipes and seamless pipes decreased by 14% and 1.5% respectively.

Germany and Italy together account for over 50% of EU production, whilst with France and the United Kingdom they account for around 80%. Production concentration for seamless tubes is even more pronounced; production is confined to seven Member States. Germany by itself accounts for 40% of the EU total, followed by Italy with 22%. A

Figure 4.5

Production of steel tubes - annual growth rate, 1995/95¹ (%)



1) Please note that the y-axis differs between graphs.

Source: eurostat

INTRA-EU TRADE AND PRODUCTION, PRICES AND TURNOVER

comparable division is seen for welded tubes >406.4mm, where Germany has 45% of EU production and Italy 23%.

In 1996, only four Member States (Greece, France, Austria and the UK) had increases in production, but by the fourth quarter of 1996, only five Member States (Germany, Spain, Italy, Denmark, and Portugal) still had negative growth. For the EU, total production growth in the fourth quarter (as compared to the fourth quarter of 1995) was just positive, 0.1%. The growth of production in France and the UK can be fully attributed to the growth in production of welded tubes >406.4mm.

The growth of the different product categories was very different. For seamless tubes the market was not growing, due to a gradual loss of market share to smaller welded tubes. In addition, there was a gradual increase in imports from third countries that now take a 23% share of the market. On the other hand, EU industry is able to maintain its position on the world market as a supplier of higher quality product ranges in this category. Thus, EU producers still have a ratio of exports to production of 45%.

For welded tubes \leq 406.4mm, the competition from extra-EU imports is much more severe. Although the internal market is growing, imports are growing too. The import share now equals 11.8%, whilst exports make 10.5% of production. The EU has only maintained its position as a supplier of products in the higher quality ranges, such as tubes of special and high alloy steels. Therefore, the unit value of exports in 1996 was 77% higher than the unit value of imports, 1058 ECU/tonne versus 598 ECU/tonne.

The market and production of large diameter pipes is rather peculiar. In as far as the product is used for the transport of gas and oil it meets rather stringent quality requirements. For this product, imports into the EU are less important, meeting 15% of market needs. In 1996, 50% of total production was exported. Because of the conditions in this typical

market, the export share has fluctuated between 82% in 1987 and 37% in 1993. A single big contract can determine whether the export share is large or small.

Prices and turnover

Producer prices in the industry¹ have developed parallel to producer prices in the steel industry. Both series fell from a high in 1989 to a low in 1993, although steel prices did fall about 7.5% more over that period. From 1993 to 1995 there was a recovery, 10% for steel and 11.5% for tubes. The fall in prices in 1996 has been general in most of the EU countries. Only in Sweden and Greece were increases in producer prices in ECU terms recorded. For Sweden, the increase has been the result of changes in exchange rates; in national currency, there was a fall of prices in Sweden. For Germany, the effect of the exchange rate has been the opposite. Producer prices in DM were up 1%, as opposed to a fall in ECU prices of 1%.

The fall in the prices for welded tubes of less than 406.4mm in intra-EU and extra-EU trade has been more than average. As a consequence, the fall in producer prices for Italy and Germany (countries with the highest shares in the production of seamless tubes and of welded tubes of over 406.4mm) has been clearly less than for other countries, except Greece.

The fall in prices is only partly reflected in the figures on turnover. Whereas production and sales in volume were down by 3.3%, turnover was down only 1.2%. This resulted from a shift in production between products, with a decline in smaller welded tubes and an increase for large diameter pipes (that sell at a greater value per tonne). In Germany, where the production of seamless tubes has particularly decreased, turnover was down 7.2%, slightly more than production. Only the Netherlands and the UK had growth in turnover, sales in the latter country growing by 14.4%.

1) The data on prices, turnover, productivity and employment relate to NACE 27.20, and include the manufacture of iron tubes.

Productivity and employment

Productivity in the industry has increased continuously. Value-added in the tube industry in 1996 was 48,000 ECU per head as compared to 59,000 ECU per head in the steel industry and 44,000 ECU per head in the rubber and plastics industry. Since 1988, the annual increase in productivity has been about 6.5% per annum. In 1996, the increase was 6.8%, as compared to 3.3% in 1995. In the Netherlands and Sweden, productivity fell in 1996. This was due to structural changes that have occurred since 1994 in the Netherlands and as a result of a correction to the increase in productivity in Sweden to 11.1% in 1995.

The trend in employment in the tube industry reflects increases in productivity. Employment in 1996 decreased by 6% to 107,300 people (including those making iron tubes; employment in that activity may be as high as 12%), following a decrease in 1995 of 4.9%. About 57,000 people, or 53% of the labour force, are employed directly in tube making. This percentage compares with the 55% of production value that is accounted for by the production of tubes. The greatest fall in employment occurred in Germany, where the reduction was 9.5% and 10.6% in 1995 and 1996. Employment in Germany remains 41.4% of the EU total, noticeably higher than Germany's share in production in volume terms of 27.3%, but more comparable to the share in production measured in constant prices, 37.6%, reflecting the high rate of specialisation in Germany.

Capacity

Due to the downturn in production, the steel tube industry has suffered for years from the effects of over-capacity. The industry has been facing the dilemma of investing in technological and quality improvements, investing to improve environmental standards, and at the same time, having to reduce capacity.

A number of closures have been recorded in recent years, leading to more concentration in the industry. Sometimes this may result from mergers, as companies put together comparable production units, but in many cases the strategy of the companies will be to form joint ventures to improve the position of the companies involved in a special market segment, and so give each company the chance to remain active in a very broad product range.

All these actions have tended to raise the quality of the product, as can be seen from the export position in the higher quality range products. The EU steel tube industry is positioned at the leading edge against world competition.

Although this policy of supplying a range of high quality tubes is designed to maintain and improve the position of EU firms within the internal market and even more so on export markets. It is however not possible for the tube industry to change into a supplier of just special and quality products. From the type of investment and the kind of the installations, each supplier has to be in a position to supply tubes across the entire quality range. In this way, even the "quality supplier" has to keep a foot in the market of lower quality tubes in order to achieve the optimal utilisation rates of his installations.

ENVIRONMENT

Environment

The impact of the steel tube industry on the environment has several aspects, as there is the environmental burden of the production of raw materials used to make steel, the production process itself and the recovery of the product after its useful life span.

With respect to the first point, the continuous efforts of the steel industry to make the production process more clean also improves the environmental impact of the steel tube industry, although the measures themselves are outside the competence of the industry.

For the manufacturing process itself, most of the measures by the tube industry are aimed at saving energy and material and at the reuse of energy and heat, as well as lowering the emissions from the production process.

Companies are now in a position to prove their positive attitude towards the environment and at the same time to improve their image in the eyes of their customers by applying on a voluntary basis the recommended environmental quality standards, as has already been done by a great number of companies.

As regards recovery of the products, the position of steel tubes is very favourable. The basic material, steel, has a proven record of a 57% recycling rate. The nature of the product, which is often voluminous and easily traceable, should make the recovery rate for steel tubes much higher.

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The files on the diskette are broken down by industrial branches. Each file contains all countries and indicators for a particular industry. The files have the following format: country, indicator, branch, periodicity,

datatype, flag, data,

e.g. EF;PROD;B0020;M;S*;85.14164...

Step by step guide to using the data on the diskette:

1. Copy the file MPEI1.EXE (English number format) or MPEI2.EXE (continental European number format) from the diskette to a directory on your hard disk (usually C:\....).
2. If in WINDOWS, switch to the File Manager and double-click on the file. The files will self-extract themselves (into the directory from which the program is run).

You may need to perform WINDOW - REFRESH to see the files once the procedure has finished.

3. If in DOS move to the directory you placed the file in (for example, C:\DATA>) and then type the name of the file (MPEI1.EXE or MPEI2.EXE) and press <ENTER>, the files will self-extract and be placed in the same directory as the EXE file.

4. The files are simple, plain text files, with the .TXT extension. The files are semi-colon separated (;) and use speech marks as a delimiter.

5. It should be easy to import/open the data-files into any standard spreadsheet or database package.

6. There is a file for each branch available at the NACE 2-digit level, codes are given in the readme.txt file supplied on the diskette.

Branches:

B0020 Total Industry excluding Construction
 B0040 Intermediate Goods Industry
 B0050 Capital Goods Industry
 B0060 Durable Consumer Goods Industry
 B0070 Non-Durable Consumer Goods Industry
 B1000 Mining of Coal and Lignite; Extraction of Peat
 B1100 Extraction of Crude Petroleum and Natural Gas; Service Activities Incidental to Oil and Gas Extraction, excluding Surveying
 B1200 Mining of Uranium and Thorium Ores
 B1500 Food and Drink Industry
 B1600 Tobacco
 B1700 Manufacture of Textiles
 B1800 Clothing Industry
 B1900 Leather and Shoe Industry
 B2000 Manufacture of Wood and Products of Wood
 B2100 Paper Industry
 B2200 Publishing, Printing, Reproduction of Recorded Media
 B2300 Manufacture of Coke, Refined Petroleum

Products, Nuclear Fuel
 B2400 Chemical Industry
 B2500 Manufacture of Rubber and Plastic Products
 B2600 Manufacture of other Non-Metallic Mineral Products
 B2700 Manufacture of Basic Metals
 B2800 Manufacture of Fabricated Metal Products
 B2900 Mechanical Engineering
 B3000 Manufacture of Office Machinery, Computers
 B3100 Manufacture of Electrical Machinery
 B3200 Manufacture of Radio, TV and Communication Equipment
 B3300 Manufacture of Medical, Precision and Optical Instruments
 B3400 Manufacture of Motor Vehicles
 B3500 Manufacture of Other Transport Equipment
 B3600 Manufacture of Furniture; Manufacturing not elsewhere classified
 B4000 Electricity, Gas, Steam and Hot Water Supply
 B4500 Construction

6 Methodological notes

Industry classification system

NACE Rev.1,
definitions of main industrial groupings



Statistical sources

sources and methods used for short-term
indicators and structural data; notes on series
used and calculation methods

Signs and abbreviations

specific to use in this publication



CLASSIFICATION SYSTEM & STATISTICAL SOURCES

Industry classification system

The economic activities used in this publication are defined in the revised Classification of Economic Activities within the European Communities, NACE Rev.1. This classification was laid down in a Council Regulation in 1990 (OJ L293 24th October 1990). It should be noted that many series before 1990 and a large amount of annual data even between 1990 and now had to be converted from the old classification NACE 1970. This estimation process can reduce the reliability of the data. Main industrial groupings that are used in Section 2 of this publication have the following definitions in terms of NACE Rev.1.

Total industry

C + D + E,
i.e. mining, manufacturing and energy supply

Intermediate goods industries

13.1, 13.2, 14.1-14.5, 15.6, 15.7, 17.1-17.3,
20.1-20.5, 21.1, 21.2, 24.1-24.3, 24.6, 24.7, 25.1, 25.2,
26.1-26.8, 27.1-27.5, 28.4-28.7, 31.2-31.6, 32.1, 34.3,
37.1, 37.2

Capital goods industries

28.1-28.3, 29.1-29.6, 30.0, 31.1, 32.2, 33.1-33.3, 34.1,
34.2, 35.1-35.3

Durable consumer goods industries

29.7, 32.3, 33.4, 33.5, 35.4, 35.5, 36.1-36.3

Non durable consumer goods industries

15.1-15.5, 15.8-16.0, 17.4-17.7, 18.1-18.3, 19.1-19.3,
22.1-22.3, 24.4, 24.5, 36.4-36.6

If Member States dispose of more detailed data series at the 4 digit level of NACE Rev.1, a more elaborate definition at this level of disaggregation is used.

Statistical sources

Most of the data in this publication is harmonised data supplied to Eurostat by the EU Member States. The exceptions are:

- 1) The capacity utilisation series which come from the business surveys carried out on behalf of the Directorate General for Economic Affairs of the Commission (DG II).
- 2) The data for the USA and Japan, which are supplied by the OECD.

Data sources are indicated for each statistical table. Every effort has been made to include data for the EUR15 Member States. The indices from 1991 onwards are on a post-unification basis and include East-Germany. However, the structural data is still on a pre-unification basis.

Short term indicators

The index of production measures changes in the volume of the gross value added created by industry, the branch indices being aggregated by means of a system of weighting according to gross value added at factor cost. The indices are adjusted to take account of the varying number of working days in the month.

The index of producer prices shows (in national currencies) the changes in the ex-works selling prices of all products sold on the domestic markets of the various countries. The EU indices refer to overall weighted price changes. There are not yet indices for Austria. No seasonal adjustment is carried out on these indices.

The capacity utilisation series come from three monthly European Union business surveys.

For further details of the methodology employed, please refer to the Eurostat publication "Methodology of Industrial Short-term Indicators" CA-97-96-079-EN-C.

STATISTICAL SOURCES, SIGNS & ABBREVIATIONS

Seasonal adjustment

All series except prices and capacity utilisation are seasonally adjusted with TRAMO / SEATS, a method developed by Professor Maravall and V. Gomez. This adjustment also takes account of one-off fluctuations (so called outliers). For France, Finland, Sweden and the United Kingdom the indices are seasonally adjusted by the national statistical office. For the production index of Germany, the trend and seasonally adjusted figures are calculated by the German NSO. In addition, Eurostat calculates the trend cycle, i.e. seasonally adjusted series, where additionally the irregular fluctuations have been excluded (using the program TRAMO / SEATS).

Growth rates

The changes which are given in the tables show two different growth rates. The first being for the latest three months data compared to the previous three months data - here the trend cycle is used. The second growth rate is for the latest three months data compared to the same three months of the previous year - here a series only adjusted for the number of working days is used. Estimates are sometimes made to create a EUR15 total.

Graphs

The line graphs show the trend cycle. The bar graphs show the annual growth of the index, using a working day adjusted series. For Member States where just one month is missing (and not more), this missing value was estimated in order to bring the growth rate for all Member States up to the same date. This estimation is indicated by ** in the graph.

Signs and abbreviations

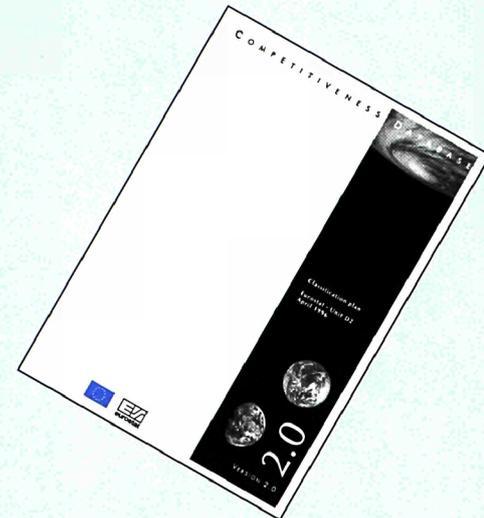
B / L	Belgo-Luxembourg Economic Union
ECU	European currency unit
TRIAD	EU, Japan and the USA
w.d.adj.	working day adjusted series
Billion	thousand million
*	not available (in graphs)
:	not available (in tables)
**	estimation (in graphs)
data in bold, estimation (in tables)	
1990 = 100, reference year	



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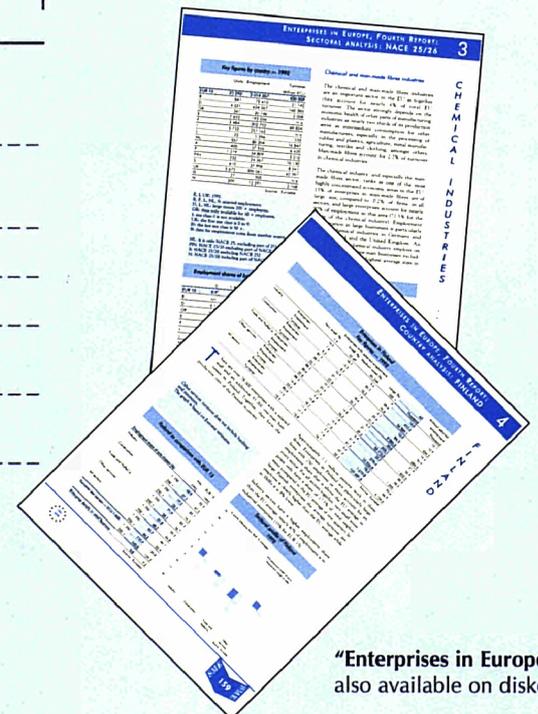
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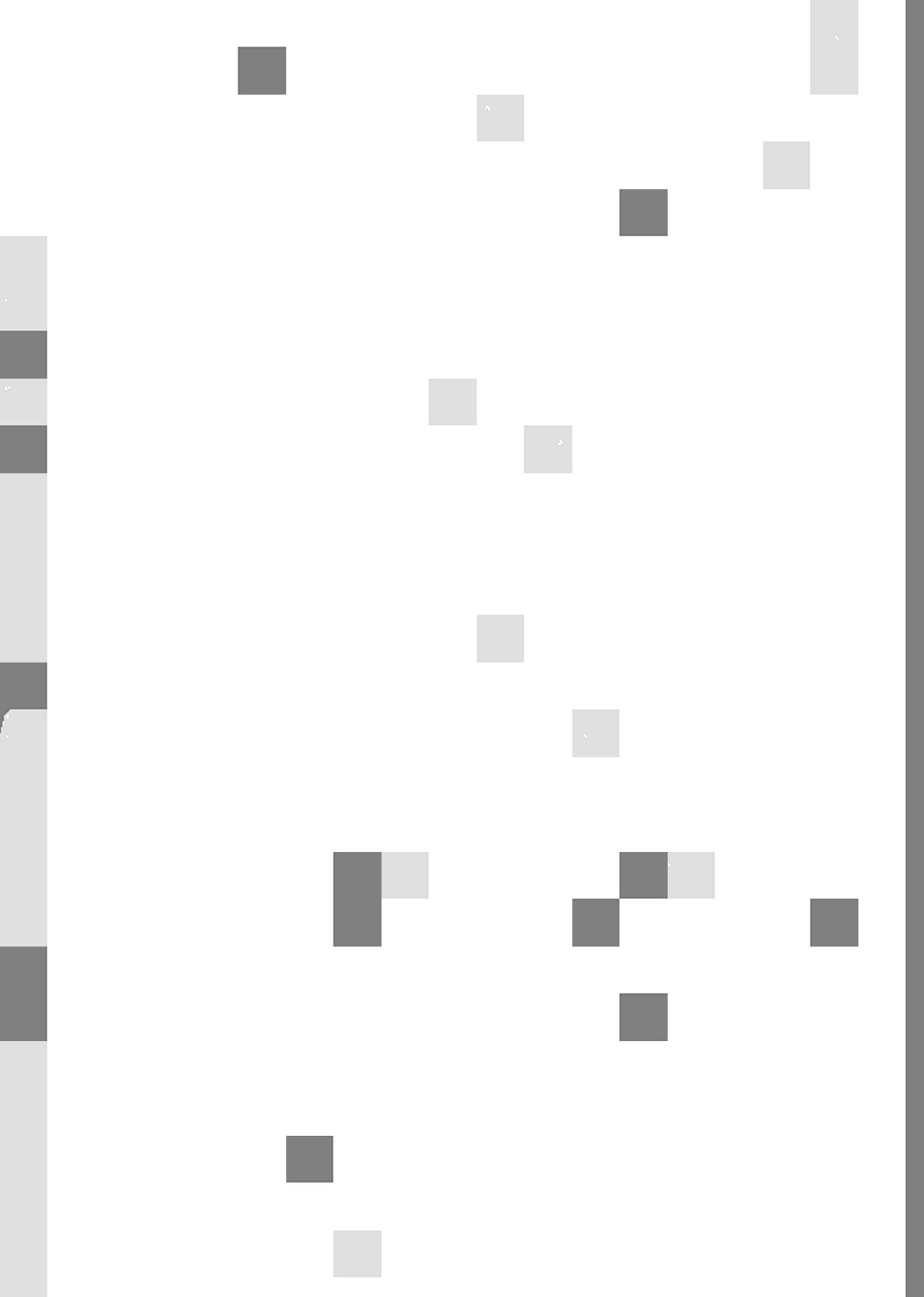
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