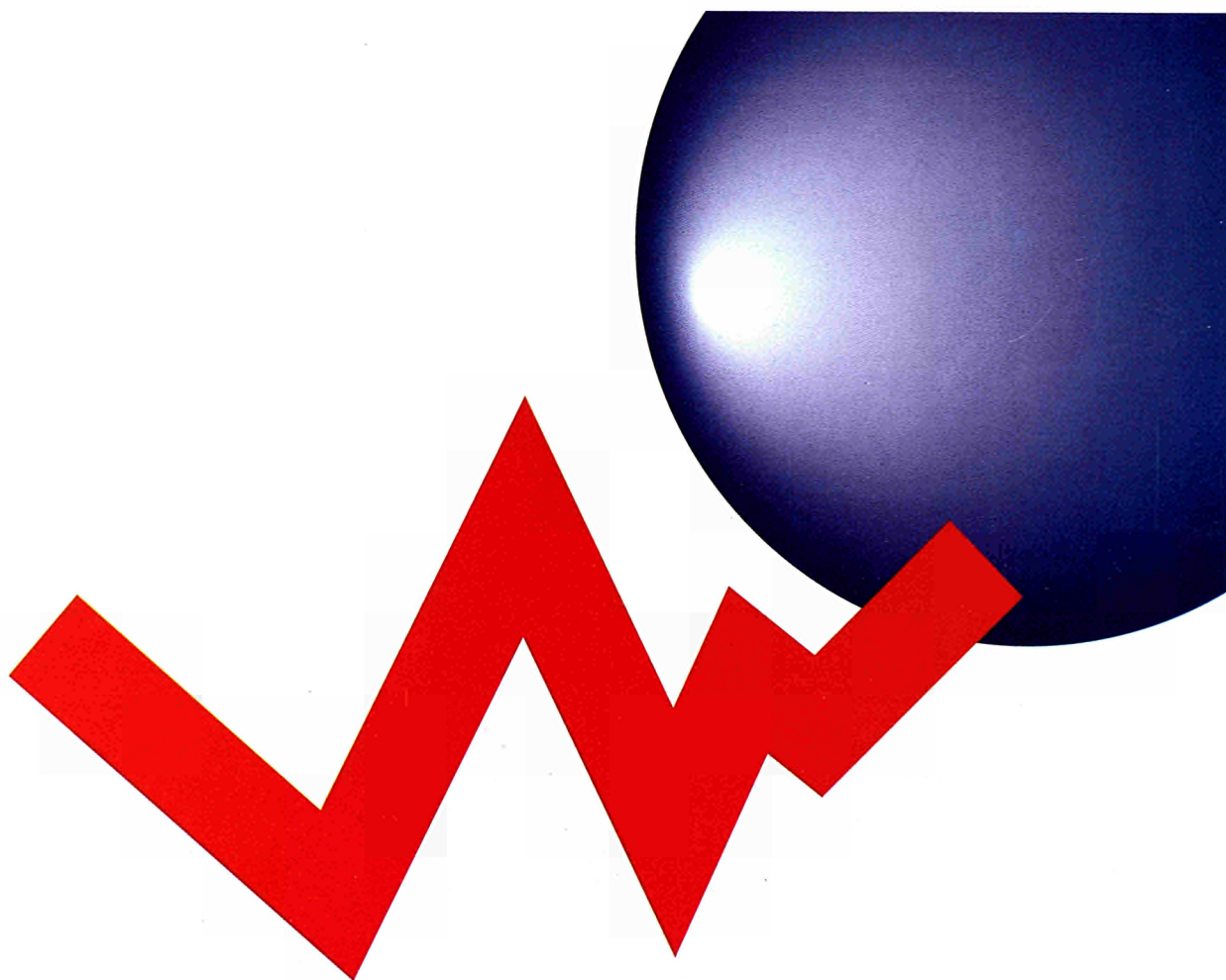


# Panorama of EU industry

Short-term supplement  
Latest information on EU industry

bi-monthly

1/1996





OFICINA ESTADÍSTICA DE LAS COMUNIDADES EUROPEAS  
DE EUROPÆISKE FÆLLESSKABERS STATISTISKE KONTOR  
STATISTISCHES AMT DER EUROPÄISCHEN GEMEINSCHAFTEN  
ΣΤΑΤΙΣΤΙΚΗ ΥΠΗΡΕΣΙΑ ΤΩΝ ΕΥΡΩΠΑΪΚΩΝ ΚΟΙΝΟΤΗΤΩΝ  
STATISTICAL OFFICE OF THE EUROPEAN COMMUNITIES  
OFFICE STATISTIQUE DES COMMUNAUTÉS EUROPÉENNES  
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# Panorama of EU industry

Short-term supplement  
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Theme **4**  
Energy and industry  
Series **B**  
Short-term statistics

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The year on year growth rate in EUR15 manufacturing industrial production fell steadily in the year to September 1995. Starting from 6.6 per cent in the fourth quarter of 1994, the growth rate successively recorded 5.6 per cent, 4.1 per cent, and 2.8 per cent in the first, second and third quarters of 1995. Capacity utilisation rates started to turn down in the third quarter of 1995, after two years of recovery. Unemployment rates showed mixed trends across Member States

In this issue, there are special articles on

- ★ the chemicals industry
- ★ the rubber and plastics industries
- ★ a comparison of high, medium and low capital intensity industries.

The chemicals industry is one of the EU's major exporters, with exports of 67 billion ECU and a trade surplus of 25 billion ECU in 1994. The industry produces a diverse range of products, including basic chemicals and petrochemicals (38 per cent of output in 1994), pharmaceuticals (25 per cent of output), paint, inks, industrial and agricultural chemicals (19 per cent of output), and soaps, detergents and perfumes (12 per cent of output).

Output is estimated to have grown by over 6% in 1994 in value terms, partly reflecting higher prices for basic chemicals. Exports also grew rapidly in 1994. Pharmaceuticals, and soaps, detergents, and perfume were the fastest growing sectors in the five years to 1994.

Plastics now account for about three quarters of the value of production of the rubber and plastics industry. Demand for plastics comes from packaging, building materials, electrical goods, automotive components and furniture markets, and remained quite resilient during the recession. The two major uses of rubber are in tyre production and industrial rubber products. Higher car sales in 1994 led to a modest recovery in rubber industry production though it was still below its 1992 level in value terms.

The final article looks at the relative performance of high, medium and low capital intensity industries. The medium capital intensity industries had the fastest output growth during the period under consideration. However the high capital intensity industries had a higher average growth rate in investment and in labour productivity than the other two classes.

Photis Nanopoulos, Director

BUSINESS AND ENERGY STATISTICS, R & D, AND STATISTICAL METHODS

**I**N THIS  
ISSUE:

<b>Contents</b>	<b>5</b>
<b>Macro-economy</b>	<b>7</b>
<b>Total industry</b>	<b>11</b>
<b>Chemicals</b>	<b>29</b>
<b>Rubber and Plastics</b>	<b>45</b>
<b>Capital investment by EU industry</b>	<b>65</b>





1. Macro-economy	7
Industrial production	8
Consumer prices	8
Trade balance	8
2. Total industry	11
Index of production	12
Producer price index	16
Capacity utilisation	20
Trade indicators	24
3. Chemical industry	29
3.1 Structural indicators	
Value added and turnover	33
Employment and labour cost	34
External trade	35
3.2 Short term indicators	
Index of production	36
Producer price index	36
Capacity utilisation	40
Trade indicators	41
4. Rubber and plastics industry	45
4.1 Structural indicators	
Value added and turnover	49
Employment and labour cost	50
External trade	51
4.2 Short term indicators	
Index of production	52
Producer price index	52
Capacity utilisation	56
Trade indicators	57
Methodological notes	62
5. Capital investment by EU industry	65

**Issue 1: 1996**

**Chemicals**

**Rubber and plastics**

**Capital investment by EU industry: A comparison of three capital intensity classes**

The supplement appears six times during the course of the year.

The Panorama of EU Industry provides users of enterprise statistics each year with a complete and detailed publication on the state of and main trends in industry and services.

The Panorama Short-term Supplement has a simple objective: to furnish readers of the annual Panorama 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.

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In coming issues:

Metal articles  
Mechanical engineering  
Comparative analysis of growth and investments  
Eurostat Competitiveness database:  
Methodology

EUROPEAN  
STATISTICAL  
OFFICE  
CONTENTS





**IN BRIEF....**

- ★ COMMISSION REVISES ITS GDP ESTIMATE FOR 1995 TO 2.75% (AGAINST 3% PREVIOUSLY)
- ★ CONSUMER PRICE INFLATION UNCHANGED IN SEPTEMBER 1995
- ★ STAGNATION IN EU INDUSTRIAL PRODUCTION
- ★ CAPACITY UTILISATION RATES FALL SOMEWHAT TO THE END OF 1995
- ★ NO MARKED UPTURN IN PRODUCTION DATA FOR THE USA OR JAPAN

In November the Commission published its Autumn economic forecasts. The report concluded that the European economy had lost some of its vigorous growth since the end of 1994. This was explained by a number of factors, including monetary instability, the lagged effects of the long-term interest rate rises in 1994 and a turnaround in confidence in the private sector. The main areas where growth had been expected to pick-up somewhat faster were investment (particularly in the construction sector) and private consumption. As a result, the Commission revised its GDP estimate for 1995 to 2.75% growth (rather than the 3% rate that had been predicted before).

Capacity utilisation fell for the first time in two years in July 1995 (third quarter data recording a rate of 83.4% for total industry) - suggesting that the recovery had slowed down during the summer months. This trend continued through the autumn months, with latest data reporting European capacity utilisation at 83.2% in October 1995. The economic sentiment indicator also reported another decline, which was reflected in weak domestic demand (with the level of orders falling). Consumer confidence measures showed a similar trend. After remaining static in August, the indicator fell throughout the period September to November. The December survey demonstrated that the declining trends observed in almost all the business survey indicators were for the moment continuing - due to slack growth in the autumn months.

Industrial production in Europe (EUR 15) stagnated, down by 1.1% for the three month period September to November 1995 (compared to the previous three months). In November, the monthly growth rate for industrial production was however up 0.6% (compared to the month before).

MACRO-  
ECONOMY

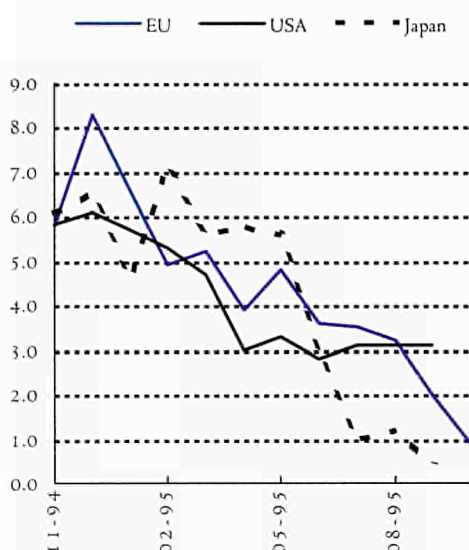
**I**N THIS  
SECTION:

<b>Commentary</b>	<b>7</b>
<b>Industrial production</b>	<b>8</b>
<b>Consumer prices</b>	<b>8</b>
<b>Trade balance</b>	<b>8</b>

**FIGURE 1.1**

INTERNATIONAL  
COMPARISON OF  
ANNUAL GROWTH  
RATES FOR  
INDUSTRIAL  
PRODUCTION  
(%)

SOURCE:  eurostat



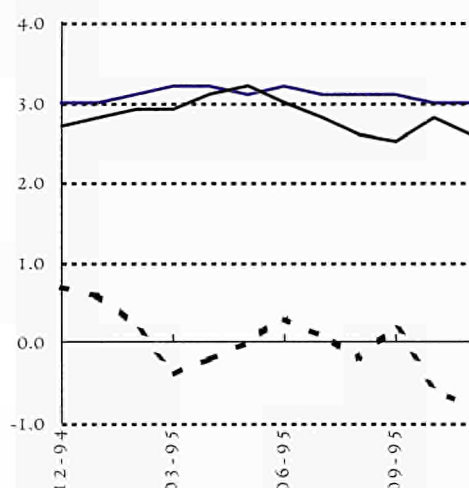
The only goods sector to record growth in the last three months in the EU was the investment goods industry (up by 0.6% - for the three month period, August to October 1995), whilst the intermediate goods sector showed a decline in its data (falling by 0.9% for the same period).

There appeared to be little development in terms of inflation trends. Consumer price inflation remained at a constant level in September 1995, rising by 3.1% on an annual basis - this was the third successive month that the CPI had displayed the same rate of growth. There was however a prominent increase in Greek inflation (due to the end of the summer sales), although the annual growth rate remained well below the corresponding figure from a year earlier (8.1% compared to 10.8%, December 1995 and 1994). All three of the new Member States reported a decreasing trend in their CPIs compared to a year before. Indeed, Finland reported the lowest CPI of the fifteen Member States (0.3% in November 1995). Austrian consumer price inflation continued its steady downward trend, with data for November showing the annual increase in the CPI standing at 1.9%. The CPI in the four major EU economies displayed mixed trends. German consumer prices were up by only 1.8% in December 1995, whilst in France the CPI was growing by 2.1%, in the United Kingdom 3.1% and Italy 5.8% (all for December, except the United Kingdom for November).

**FIGURE 1.2**

INTERNATIONAL  
COMPARISON OF  
ANNUAL GROWTH  
RATES FOR  
CONSUMER PRICES  
(%)

SOURCE:  eurostat

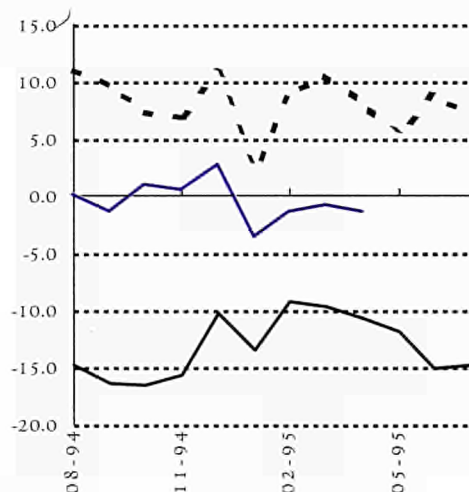


Producer price inflation in Belgium rose by 1.8% in October 1995 (annual growth), although it was down by 0.4% on the September figure. In the Netherlands a similar trend was observed, with producer prices rising by 1.6% in November 1995 (compared to a year before). Italian producer prices were up by 7.2% during the year to November 1995. Other growth rates (annual) were: Germany 1.3% (November 1995), the United Kingdom 3.2% (December 1995) and Spain 5.1% (November 1995). In France, producer prices for total industry rose by 1.4% during the year

**FIGURE 1.3**

INTERNATIONAL  
COMPARISON OF  
MONTHLY TRADE  
BALANCE  
(BILLION ECU)

SOURCE:  eurostat



to November 1995. Finnish annual producer price inflation was running at 0.7% in December. In Sweden, producer price inflation grew at a rapid pace, up by 6.4% on an annual basis for November 1995 (there was however a reduction of 0.2% between October and November). The rapid growth in Swedish producer prices was attributed to a fast expansion of prices in the instrument engineering and specialised chemicals sectors.

Latest macro-economic data released by the Member States reported that Belgian GDP fell by 1.1% in the second quarter of 1995, compared to the first quarter of 1995. United Kingdom GDP grew by 2.1% in the third quarter of 1995 (compared to a year before).

The trade surplus in France was equal to 0.91 billion ECU in October. The Dutch trade surplus also remained positive, equal to 1.27 billion ECU in September 1995. Sweden also exhibited a trade surplus in November 1995, equal to some 1.05 billion ECU. The United Kingdom trade deficit stood at 1.98 billion ECU in October 1995.

Unemployment rates showed mixed trends amongst the Member States. For example, in Germany the rate was up to 9.9% in December 1995. The number of unemployed in France went over the three million mark in December. In Belgium an extra four thousand were added to the unemployment total in September 1995, and the rate continued to grow to 10.3% by November. In Greece, the unemployment rate rose to 7.7% in November. On the other hand, Dutch and Swedish data showed encouraging signs. In the Netherlands, there was a fall in the number of jobless, with the rate standing at 6.5% in October 1995. In Sweden the unemployment rate declined from 8.0% in August 1995 to 7.2% by November. United Kingdom unemployment stood at 8.0% of the labour force in November 1995 (slightly down on the month before). Nevertheless, data on manufacturing employment in the United Kingdom showed a loss of four thou-

	EUR15	USA	JAPAN
11-94	5.8	5.8	6.1
12-94	8.3	6.1	6.5
01-95	6.6	5.7	4.6
02-95	4.9	5.3	7.1
03-95	5.2	4.7	5.6
04-95	3.9	3.0	5.8
05-95	4.8	3.3	5.6
06-95	3.6	2.8	2.9
07-95	3.5	3.1	1.0
08-95	3.2	3.1	1.2
09-95	2.0	3.1	0.4
10-95	0.9	N/A	N/A

TABLE I.1

INTERNATIONAL  
COMPARISON OF  
ANNUAL GROWTH  
RATES FOR  
INDUSTRIAL  
PRODUCTION  
(%)

SOURCE:  eurostat

	EUR15	USA	JAPAN
12-94	3.0	2.7	0.7
01-95	3.0	2.8	0.6
02-95	3.1	2.9	0.2
03-95	3.2	2.9	-0.4
04-95	3.2	3.1	-0.2
05-95	3.1	3.2	0.0
06-95	3.2	3.0	0.3
07-95	3.1	2.8	0.1
08-95	3.1	2.6	-0.2
09-95	3.1	2.5	0.2
10-95	3.0	2.8	-0.6
11-95	3.0	2.6	-0.8

TABLE I.2

INTERNATIONAL  
COMPARISON OF  
ANNUAL GROWTH  
RATES FOR  
CONSUMER PRICES  
(%)

SOURCE:  eurostat

	EUR15	USA	JAPAN
08-94	0.1	-14.9	11.0
09-94	-1.3	-16.4	9.7
10-94	1.1	-16.6	7.4
11-94	0.6	-15.8	6.9
12-94	2.8	-10.3	10.7
01-95	-3.5	-13.5	2.3
02-95	-1.3	-9.3	9.0
03-95	-0.8	-9.7	10.5
04-95	-1.3	-10.7	8.1
05-95	N/A	-11.9	5.3
06-95	N/A	-15.1	8.8
07-95	N/A	-14.8	7.0

TABLE I.3

INTERNATIONAL  
COMPARISON OF  
MONTHLY TRADE  
BALANCE  
(BILLION ECU)

SOURCE:  eurostat

sand jobs for October. The lack of progress against unemployment may have been due in part to the slowdown seen in production growth and the resulting stagnation observed in the capacity utilisation rate.

In the United States industrial production rose in November 1995 (compared to data for October) by 0.2%. The CPI increased by 0.3% from October to November 1995, while the annual rate stood at 2.6%. There was little change in US trade performance, the visible trade deficit was equal to 11.6 billion ECU in September 1995 (compared to 12.3 billion ECU in August 1995). The unemployment rate stood at 5.6% in November 1995, marking a slight reduction over the previous year.

In Japan the CPI showed no change between October and November 1995. The annual rate remained negative, down by 0.6%. Industrial production grew by 1.4% (year-on-year growth) in November 1995. Unemployment remained at a very low rate, 3.4% in November 1995.

**IN BRIEF....**

- ★ IN NOVEMBER 1995 EUR 15 RECORDED 0.9% GROWTH IN INDUSTRIAL PRODUCTION
- ★ SWEDEN RECORDED THE HIGHEST GROWTH IN INDUSTRIAL PRODUCTION IN NOVEMBER 1995
- ★ THE VOLUME OF PRODUCTION OF CONSUMER DURABLES INCREASED BY 4.5% BETWEEN OCTOBER 1994 AND OCTOBER 1995
- ★ IN THE FINAL QUARTER OF 1995 CAPACITY UTILISATION STOOD AT 82.6%
- ★ BETWEEN NOVEMBER 1994 AND NOVEMBER 1995 PRODUCER PRICES INCREASED BY 3.1%

Between November 1994 and November 1995 EUR15 industrial production rose by 0.9% in real terms. In October, the same rise had resulted from a fairly substantial increase in the production of capital goods (4.5%) and consumer durables (1.8%), tempered however by a relatively moderate increase of 0.5% for non-durable goods and by a fall of 0.4% for intermediate goods over the same period. Among Member States, Sweden recorded the highest growth in industrial production with a rate of 5.1% between November 1994 and November 1995. For the other Member States, the volume of industrial production grew by 4.3%, 3.6% and 3.5% respectively in the Netherlands, Italy and Finland between November 1994 and November 1995.

Capacity utilisation for the period October to December 1995 was 82.6% for European industry overall. The rates of capacity utilisation, measured for total industry, were highest in France, Germany and the Netherlands where they exceeded 84.0%. The highest levels of capacity utilisation were recorded for intermediate goods, at 83.3% in the fourth quarter of 1995 and 85.3% in the third quarter of 1995. Intermediate goods also recorded the sharpest rise in producer prices: 4.2% between October 1994 and October 1995. Producer prices for total industry increased by 3.5% over the same period and by 3.1% between November 1994 and November 1995. The sharpest price rises were in Greece and in Italy. The extent of this increase was mainly due to the rise seen for the intermediate goods sector.

Demand in the EU seems no longer to be driven as extensively by international markets. Thus, the volume of EU industrial goods' exports fell 7.6% between August 1994 and August 1995 while the volume of extra-EU imports decreased 1.3% over the same period. Moreover, in certain Member States (Belgium/Luxembourg, Italy, Ireland and Greece) the volume of capital goods exports in August 1995 continued to be up on the previous year. Over this period, the Netherlands and Germany recorded the greatest decline in capital goods imports whereas Ireland, Greece and Portugal recorded the highest increases.

TOTAL  
INDUSTRY

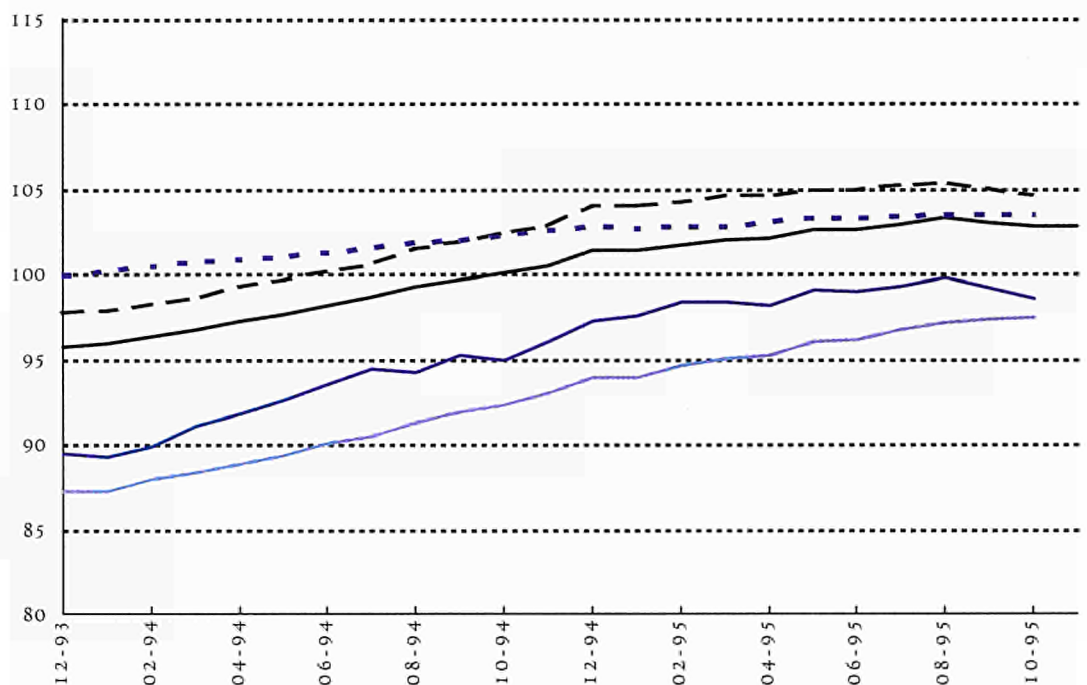
**I**N THIS  
SECTION:

Index of production	12
Producer prices	16
Capacity utilisation	20
Trade indicators	24

**FIGURE 2.1**

EVOLUTION OF  
EUR15  
PRODUCTION  
INDEX BY  
GOODS SECTOR  
(1990=100)

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



SOURCE: eurostat

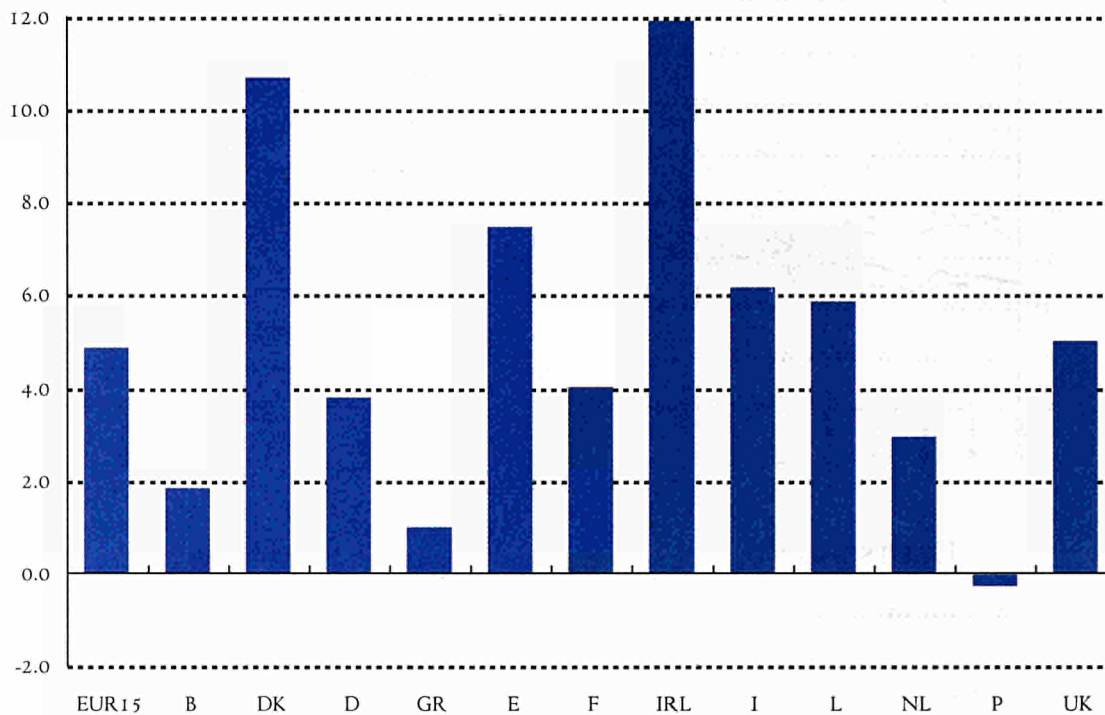
**TABLE 2.1**

QUARTERLY  
PRODUCTION  
INDEXES  
(1990=100)

	Latest quarter available	Total industry	Intermediate goods	Capital goods	Consumer durables	Consumer non-durables
EUR15	08-95 ⇔ 10-95	102.7	104.6	97.4	98.6	103.5
Growth rate, t/t-4 (%)		4.0	2.2	5.6	3.9	1.2
B	02-95 ⇔ 04-95	96.2	95.8	97.4	96.5	96.9
Growth rate, t/t-4 (%)		1.5	2.5	3.3	-1.2	-1.4
DK	09-95 ⇔ 11-95	115.3	111.1	120.2	111.0	117.0
Growth rate, t/t-4 (%)		4.6	-0.1	11.2	2.2	3.4
D	09-95 ⇔ 11-95	94.1	96.9	88.8	89.8	97.0
Growth rate, t/t-4 (%)		1.1	-1.6	1.1	-1.8	-0.9
GR	08-95 ⇔ 10-95	99.1	95.8	102.9	92.2	104.4
Growth rate, t/t-4 (%)		2.0	2.5	8.0	4.0	3.2
E	09-95 ⇔ 11-95	103.2	103.3	100.3	106.0	97.8
Growth rate, t/t-4 (%)		5.3	3.0	15.6	8.3	-1.9
F	08-95 ⇔ 10-95	103.2	105.7	91.9	99.6	104.4
Growth rate, t/t-4 (%)		3.2	2.0	3.9	4.8	2.5
IRL	07-95 ⇔ 09-95	158.0	164.8	187.0	N/A	132.0
Growth rate, t/t-4 (%)		18.8	18.3	39.1	N/A	7.5
I	08-95 ⇔ 10-95	107.4	107.8	105.7	112.2	109.8
Growth rate, t/t-4 (%)		6.0	4.2	13.3	11.1	1.7
L	04-95 ⇔ 06-95	103.4	103.6	92.8	78.5	110.2
Growth rate, t/t-4 (%)		2.7	1.9	9.2	15.0	8.6
NL	09-95 ⇔ 11-95	104.6	106.7	102.5	98.0	103.5
Growth rate, t/t-4 (%)		2.2	2.8	3.3	-1.1	1.2
P	06-95 ⇔ 08-95	99.0	99.9	86.6	91.7	89.4
Growth rate, t/t-4 (%)		3.1	3.1	3.6	2.0	-1.7
UK	09-95 ⇔ 11-95	105.5	110.4	96.8	100.8	103.4
Growth rate, t/t-4 (%)		2.0	2.2	0.8	2.0	1.6

SOURCE: eurostat

FIGURE 2.2



ANNUAL GROWTH  
RATE OF  
TOTAL INDUSTRY  
PRODUCTION  
INDEX BY MEMBER  
STATE (1)  
(%)

(1) Growth rates are based on the latest annual data available for each country. Please see the table below for the year concerned.

SOURCE: eurostat

TABLE 2.2

ANNUAL  
PRODUCTION  
INDEXES (1)  
(1990=100)

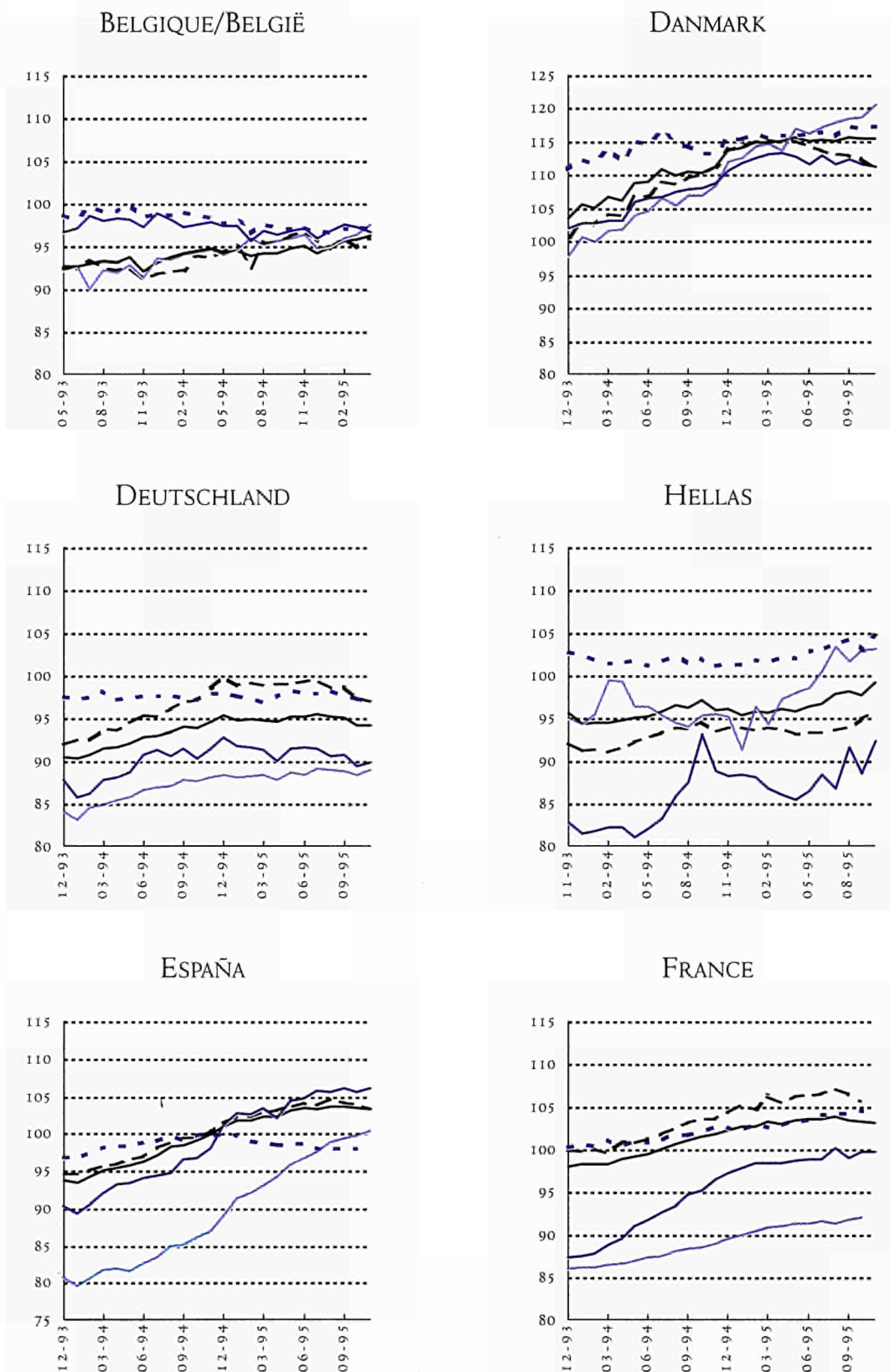
	Latest year available	Total industry	Intermediate goods	Capital goods	Consumer durables	Consumer non-durables
EUR15	1994	99.7	102.0	91.9	95.1	102.1
Growth rate, t/t-1 (%)		4.9	6.0	4.2	7.1	2.5
B	1994	94.7	95.5	95.3	96.4	97.1
Growth rate, t/t-1 (%)		1.8	3.4	3.1	-1.3	-1.9
DK	1994	111.1	110.3	107.8	107.9	114.7
Growth rate, t/t-1 (%)		10.7	14.0	11.9	10.4	7.0
D	1994	93.9	97.3	87.3	90.6	97.6
Growth rate, t/t-1 (%)		3.8	6.4	2.3	4.6	0.0
GR	1994	95.7	93.5	95.0	86.8	101.2
Growth rate, t/t-1 (%)		1.0	2.4	-7.6	5.1	0.7
E	1994	98.7	99.2	85.3	96.8	99.5
Growth rate, t/t-1 (%)		7.5	7.4	7.6	10.9	5.3
F	1994	99.2	102.5	87.0	94.5	101.9
Growth rate, t/t-1 (%)		4.0	4.1	1.7	5.3	1.4
IRL	1994	133.3	144.1	138.1	N/A	122.6
Growth rate, t/t-1 (%)		11.9	14.5	17.1	N/A	6.2
I	1994	101.7	103.1	92.4	100.6	107.5
Growth rate, t/t-1 (%)		6.2	6.3	5.0	12.9	5.0
L	1994	100.8	103.5	87.5	74.6	103.2
Growth rate, t/t-1 (%)		5.8	7.6	4.0	-2.3	2.5
NL	1994	102.5	104.3	99.0	99.4	102.2
Growth rate, t/t-1 (%)		2.9	3.2	4.0	-0.9	2.4
P	1994	94.9	96.5	84.3	89.1	88.2
Growth rate, t/t-1 (%)		-0.3	3.4	0.1	-3.4	-5.2
UK	1994	103.3	107.7	95.7	97.6	101.6
Growth rate, t/t-1 (%)		5.0	5.8	4.2	7.7	3.1

(1) Annual growth rates are based on the latest annual data. Only when data to October is available will an annual estimate for the year be made.

SOURCE: eurostat

FIGURE 2.3

EVOLUTION OF  
PRODUCTION  
INDEX BY  
GOODS SECTOR  
(1990=100)



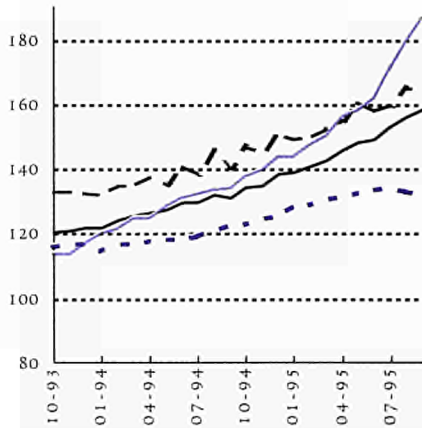
SOURCE: eurostat



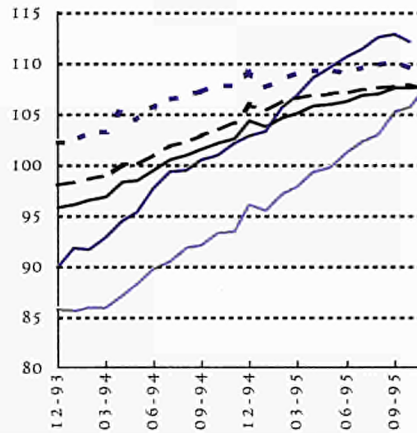
FIGURE 2.3

EVOLUTION OF  
PRODUCTION  
INDEX BY  
GOODS SECTOR  
(1990=100)

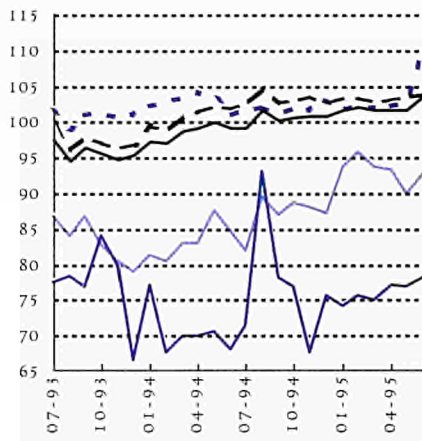
IRELAND



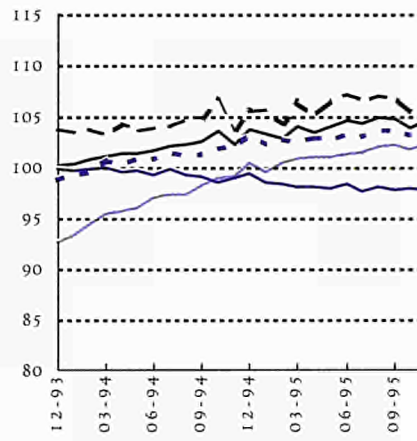
ITALIA



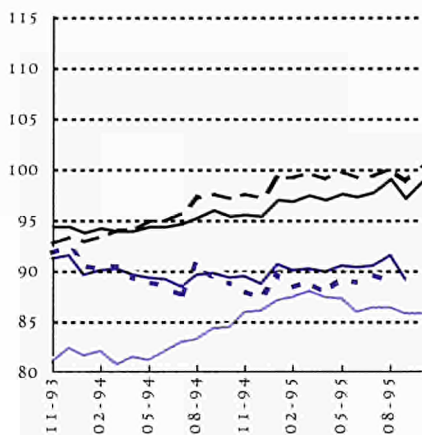
LUXEMBOURG



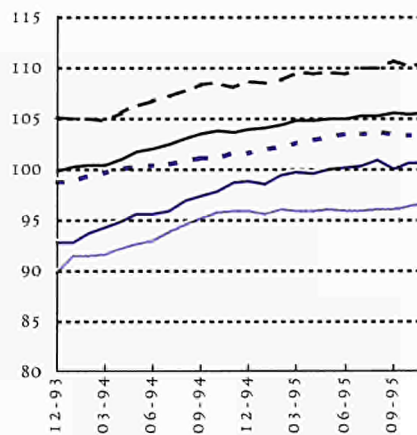
NEDERLAND



PORTUGAL



UNITED KINGDOM



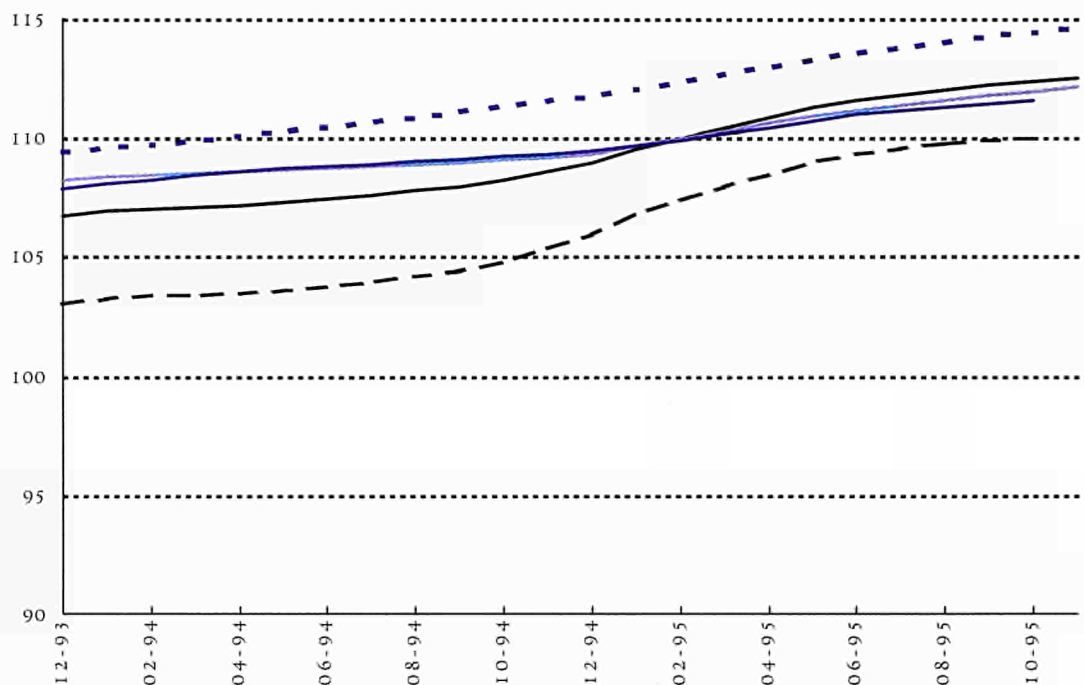
- Total industry
- - Intermediate goods
- Capital goods
- Consumer durables
- - Consumer non-durables

SOURCE:  eurostat

**FIGURE 2.4**

EVOLUTION OF  
EUR 15 PRODUCER  
PRICE INDEX BY  
GOODS SECTOR  
(1990=100)

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



SOURCE: eurostat

**TABLE 2.3**

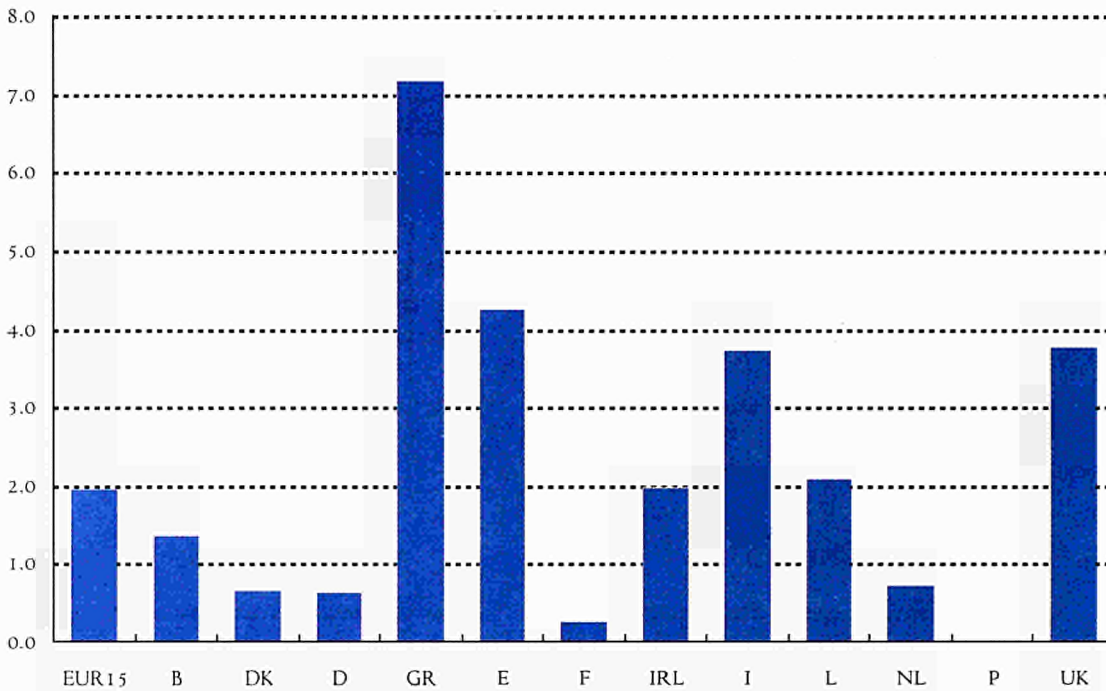
QUARTERLY  
PRODUCER  
PRICE INDEXES  
(1990=100)

	Latest quarter available	Total industry	Intermediate goods	Capital goods	Consumer durables	Consumer non-durables
<b>EUR 15</b>	08-95 ⇔ 10-95	112.3	109.9	111.9	111.5	114.5
Growth rate, t/t-4 (%)		3.8	4.9	2.6	2.1	2.8
<b>B</b>	08-95 ⇔ 10-95	101.8	97.4	108.4	N/A	105.6
Growth rate, t/t-4 (%)		2.0	2.7	1.4	N/A	1.6
<b>DK</b>	09-95 ⇔ 11-95	103.7	102.0	109.2	109.5	102.8
Growth rate, t/t-4 (%)		3.7	4.2	4.1	2.1	3.1
<b>D</b>	09-95 ⇔ 11-95	106.5	104.0	110.2	109.8	108.0
Growth rate, t/t-4 (%)		1.6	1.8	1.6	1.0	1.2
<b>GR</b>	08-95 ⇔ 10-95	171.4	168.3	172.7	160.1	176.3
Growth rate, t/t-4 (%)		9.1	10.6	8.1	6.1	7.6
<b>E</b>	09-95 ⇔ 11-95	117.0	114.4	114.0	119.4	121.7
Growth rate, t/t-4 (%)		6.0	7.4	4.0	4.7	4.9
<b>F</b>	04-95 ⇔ 06-95	102.7	102.4	101.5	97.3	100.9
Growth rate, t/t-4 (%)		2.1	4.8	0.4	-0.4	0.0
<b>IRL</b>	12-94 ⇔ 02-95	108.8	96.3	N/A	N/A	109.1
Growth rate, t/t-4 (%)		2.4	-0.7	N/A	N/A	1.6
<b>I</b>	08-95 ⇔ 10-95	122.6	125.6	116.8	116.3	122.3
Growth rate, t/t-4 (%)		8.1	11.3	5.4	4.3	6.5
<b>L</b>	07-95 ⇔ 09-95	110.8	91.9	107.6	102.9	112.2
Growth rate, t/t-4 (%)		3.4	5.1	2.1	1.7	1.1
<b>NL</b>	09-95 ⇔ 11-95	103.7	102.3	106.1	105.0	104.8
Growth rate, t/t-4 (%)		2.4	2.6	2.0	1.0	1.4
<b>P</b>	⇔	N/A	N/A	N/A	N/A	N/A
Growth rate, t/t-4 (%)		N/A	N/A	N/A	N/A	N/A
<b>UK</b>	10-95 ⇔ 12-95	119.4	110.0	116.8	114.2	125.5
Growth rate, t/t-4 (%)		3.3	1.9	3.1	1.3	4.2

SOURCE: eurostat

FIGURE 2.5

ANNUAL GROWTH  
RATE OF  
TOTAL INDUSTRY  
PRODUCER PRICE  
INDEX BY MEMBER  
STATE (1)  
(%)



(1) Growth rates are based on the latest annual data available for each country. Please see the table below for the year concerned.

SOURCE: eurostat

TABLE 2.4

ANNUAL  
PRODUCER  
PRICE INDEXES (1)  
(1990=100)

	Latest year available	Total industry	Intermediate goods	Capital goods	Consumer durables	Consumer non-durables
EUR15	1994	108.2	104.8	109.0	109.2	111.2
Growth rate, t/t-1 (%)		1.9	1.9	1.0	1.7	2.3
B	1994	99.5	94.5	107.1	N/A	103.4
Growth rate, t/t-1 (%)		1.4	1.1	0.9	N/A	2.0
DK	1994	99.7	97.5	105.1	107.0	99.1
Growth rate, t/t-1 (%)		0.7	-0.4	0.1	1.6	2.0
D	1994	104.7	102.0	108.4	108.8	106.5
Growth rate, t/t-1 (%)		0.6	0.8	0.4	0.6	0.5
GR	1994	156.6	151.7	159.5	150.6	163.0
Growth rate, t/t-1 (%)		7.2	5.5	7.0	6.3	9.4
E	1994	109.8	105.7	109.3	113.6	115.5
Growth rate, t/t-1 (%)		4.3	4.8	1.8	3.9	4.8
F	1994	100.9	98.5	101.0	97.5	101.2
Growth rate, t/t-1 (%)		0.3	0.9	-0.5	-0.1	0.4
IRL	1994	107.6	95.1	N/A	N/A	108.5
Growth rate, t/t-1 (%)		2.0	-3.7	N/A	N/A	2.0
I	1994	113.3	112.6	110.7	111.4	114.6
Growth rate, t/t-1 (%)		3.7	4.3	2.1	2.8	3.6
L	1994	107.2	87.6	105.8	101.2	110.6
Growth rate, t/t-1 (%)		2.1	0.0	0.2	0.0	1.1
NL	1994	101.0	99.3	103.9	103.9	103.2
Growth rate, t/t-1 (%)		0.7	0.7	0.0	0.2	0.9
P		N/A	N/A	N/A	N/A	N/A
Growth rate, t/t-1 (%)		N/A	N/A	N/A	N/A	N/A
UK	1995	118.7	109.6	116.3	113.7	124.7
Growth rate, t/t-1 (%)		3.8	3.0	3.0	1.1	4.1

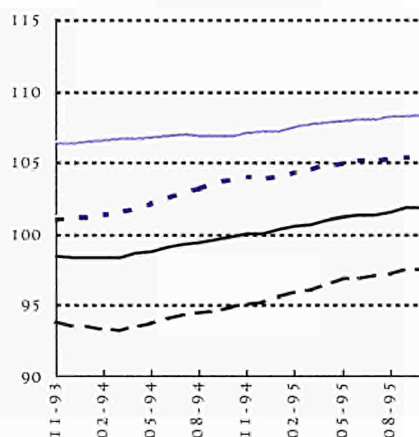
(1) Annual growth rates are based on the latest annual data. Only when data to October is available will an annual estimate for the year be made.

SOURCE: eurostat

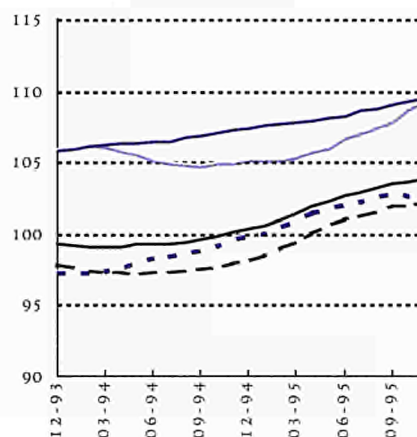
**FIGURE 2.6**

EVOLUTION OF  
PRODUCER PRICE  
INDEX BY  
GOODS SECTOR  
(1990=100)

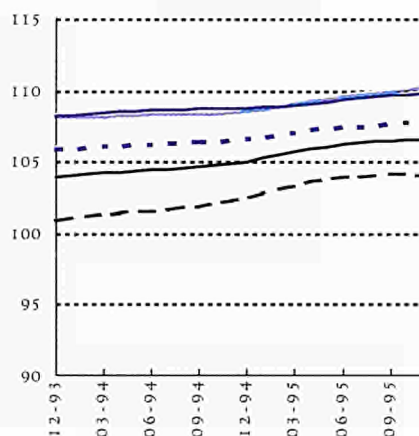
BELGIQUE/BELGIË



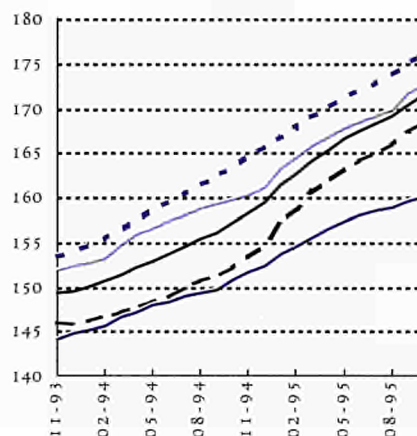
DANMARK



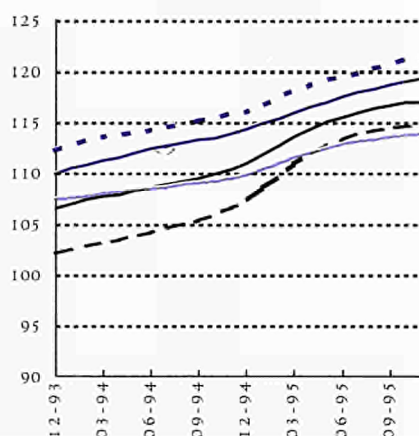
DEUTSCHLAND



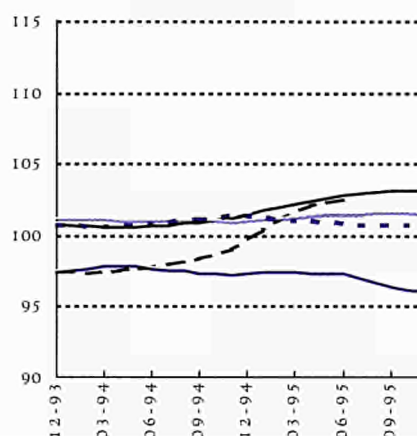
HELLAS



ESPAÑA



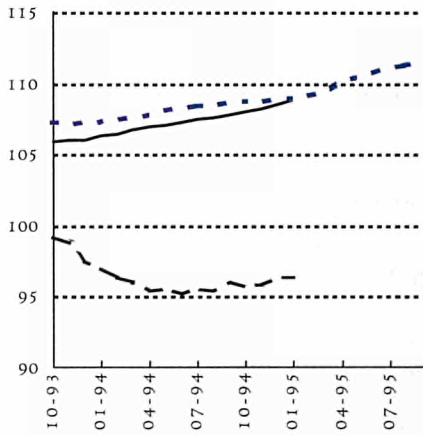
FRANCE



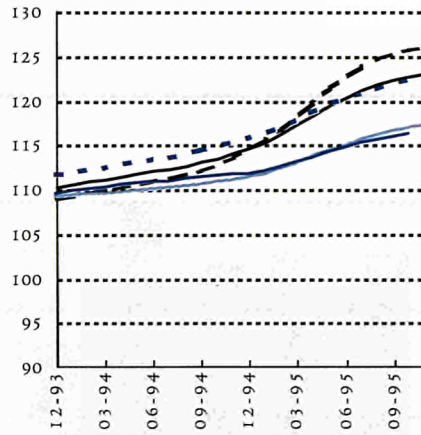
- Total industry
- - Intermediate goods
- Capital goods
- Consumer durables
- - Consumer non-durables

SOURCE:  eurostat

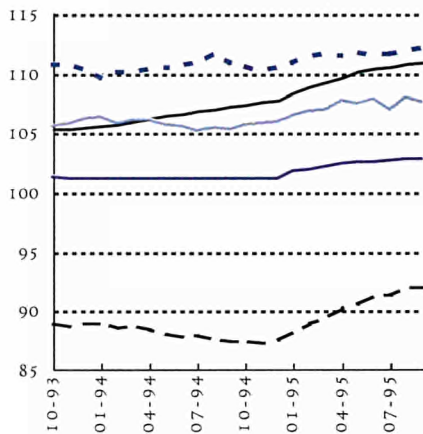
IRELAND



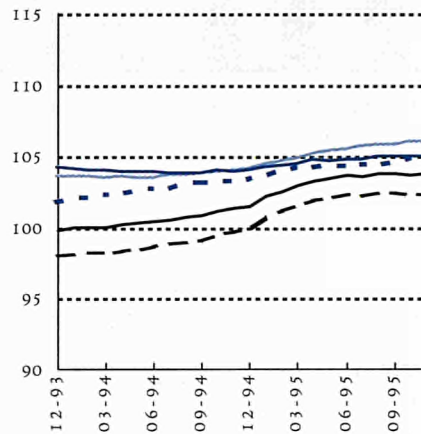
ITALIA



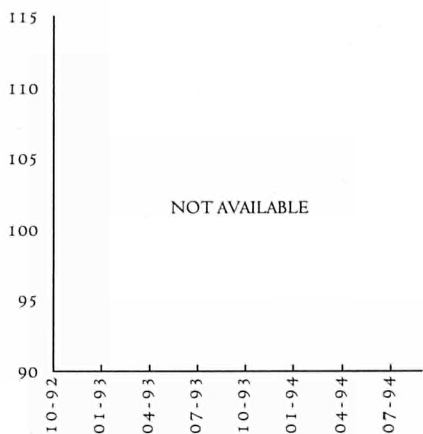
LUXEMBOURG



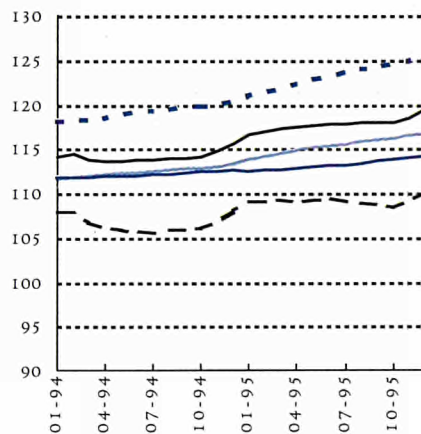
NEDERLAND



PORTUGAL



UNITED KINGDOM



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

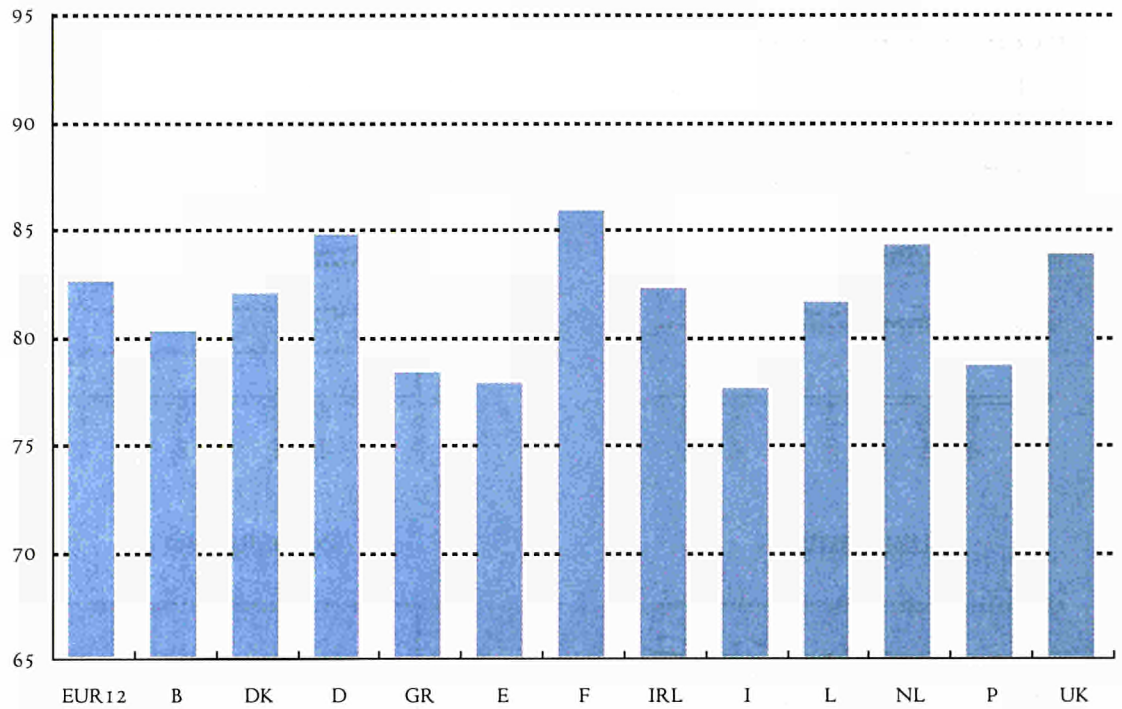
FIGURE 2.6

EVOLUTION OF  
PRODUCER PRICE  
INDEX BY  
GOODS SECTOR  
(1990=100)

SOURCE:  eurostat

**FIGURE 2.7**

TOTAL INDUSTRY:  
CAPACITY  
UTILISATION  
RATES BY  
MEMBER STATE,  
FOURTH QUARTER  
1995  
(%)



SOURCE: DG II -  
BUSINESS SURVEY

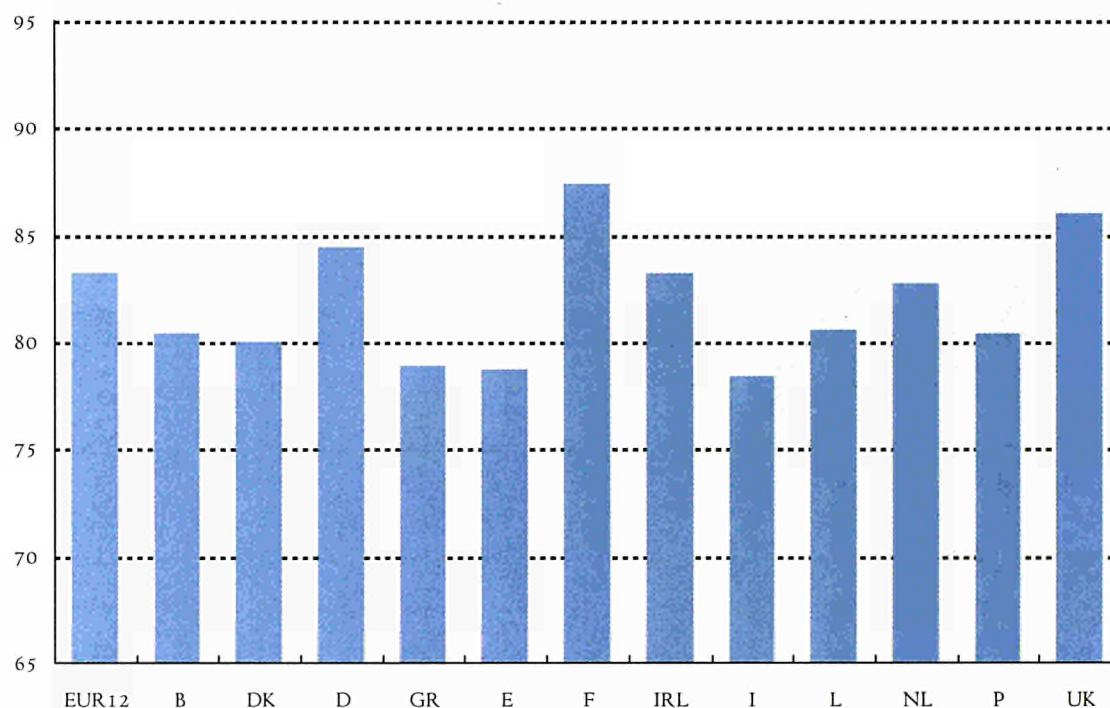
**TABLE 2.5**

TOTAL INDUSTRY:  
CAPACITY  
UTILISATION  
RATES BY  
MEMBER STATE  
(%)

	Annual growth rate: latest quarter, t/t-4	First quarter 1995	Second quarter 1995	Third quarter 1995	Fourth quarter 1995
EUR12	0.9	82.8	83.9	83.7	82.5
B	1.1	79.7	81.3	81.2	80.2
DK	-2.4	83.0	82.0	83.0	82.0
D	1.3	84.1	85.1	86.1	84.7
GR	2.0	75.7	75.2	76.5	78.3
E	2.9	78.3	78.6	77.9	77.8
F	1.4	85.6	85.7	85.5	85.8
IRL	10.2	77.2	80.9	79.2	82.2
I	2.4	77.6	78.2	78.6	77.6
L	-0.2	82.5	83.2	83.4	81.6
NL	-0.5	83.0	84.4	85.1	84.2
P	1.9	78.1	78.3	78.5	78.6
UK	-2.1	86.8	90.2	86.8	83.8

SOURCE: DG II -  
BUSINESS SURVEY

**FIGURE 2.8**



INTERMEDIATE  
GOODS: CAPACITY  
UTILISATION  
RATES BY  
MEMBER STATE,  
FOURTH QUARTER  
1995  
(%)

SOURCE: DG II -  
BUSINESS SURVEY

	Annual growth rate: latest quarter, t/t-4	First quarter 1995	Second quarter 1995	Third quarter 1995	Fourth quarter 1995
EUR12	0.0	84.8	85.9	85.3	83.2
B	-1.8	81.5	85.3	84.0	80.4
DK	-4.8	82.0	81.0	81.0	80.0
D	-0.8	85.4	86.6	87.3	84.4
GR	1.4	77.2	78.2	78.4	78.9
E	6.5	80.1	81.6	79.4	78.7
F	-1.0	87.4	87.8	88.4	87.4
IRL	17.3	80.3	83.8	74.1	83.2
I	2.9	79.2	79.6	79.3	78.4
L	-0.4	81.2	82.0	82.7	80.6
NL	-2.2	84.0	85.4	85.4	82.7
P	-0.2	82.3	82.2	81.7	80.4
UK	-1.9	91.0	93.1	89.8	86.0

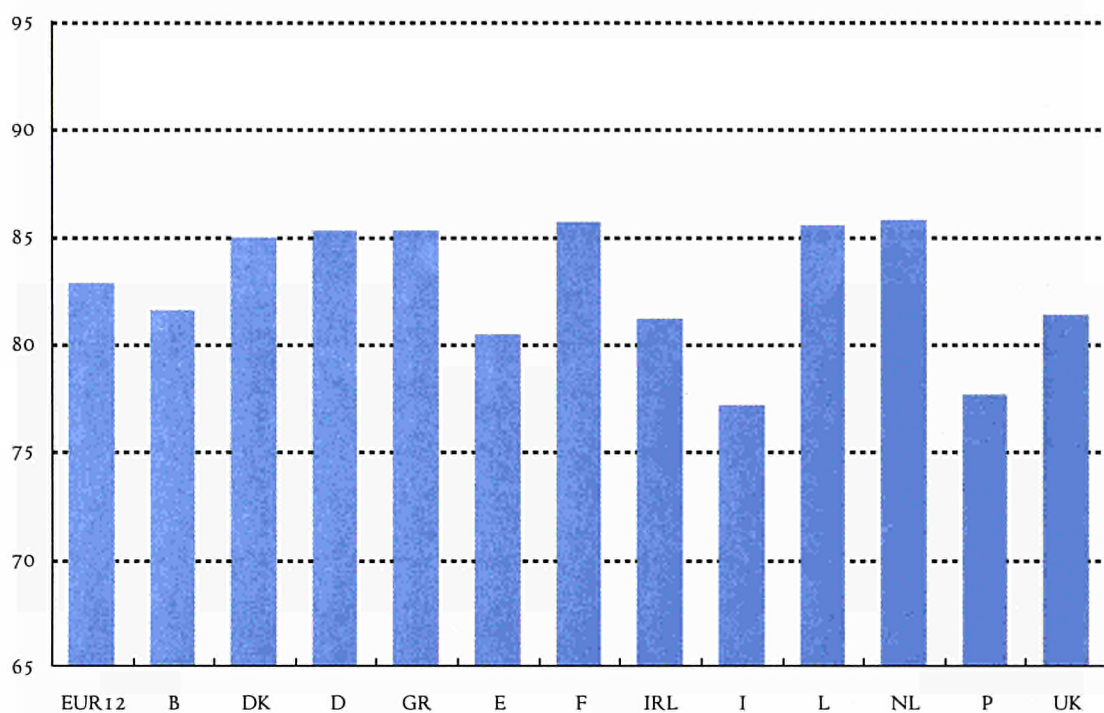
**TABLE 2.6**

INTERMEDIATE  
GOODS: CAPACITY  
UTILISATION  
RATES BY  
MEMBER STATE  
(%)

SOURCE: DG II -  
BUSINESS SURVEY

**FIGURE 2.9**

CAPITAL GOODS:  
CAPACITY  
UTILISATION  
RATES BY  
MEMBER STATE,  
FOURTH QUARTER  
1995  
(%)



SOURCE: DG II -  
BUSINESS SURVEY

**TABLE 2.7**

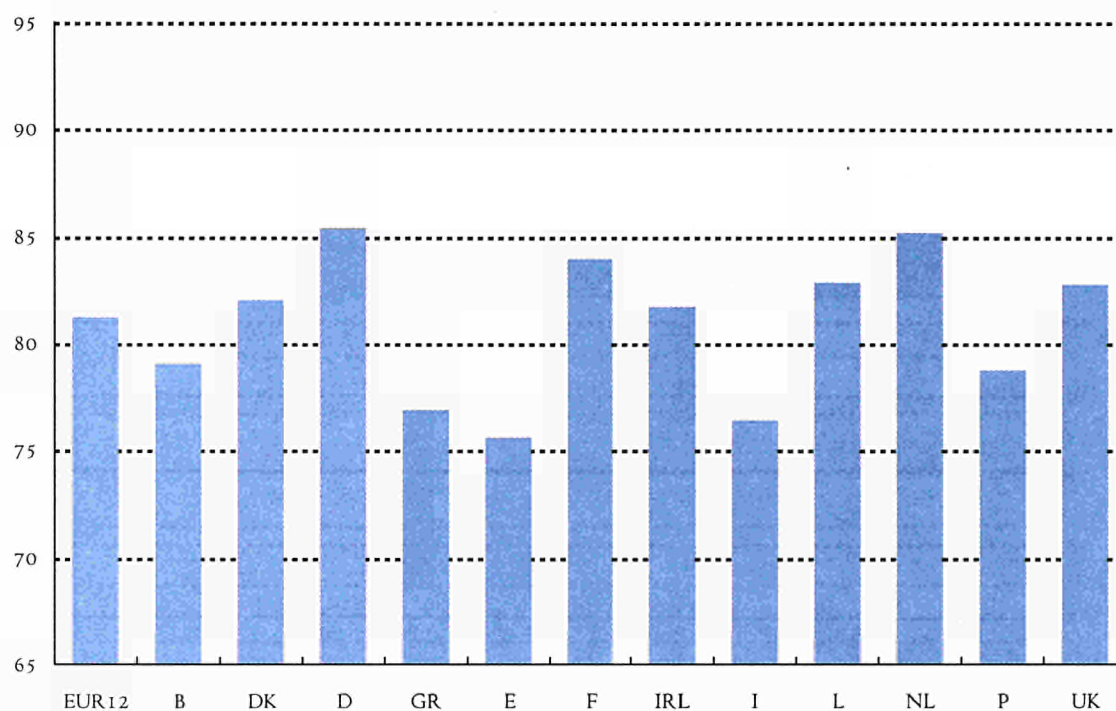
CAPITAL GOODS:  
CAPACITY  
UTILISATION  
RATES BY  
MEMBER STATE  
(%)

	Annual growth rate: latest quarter, t/t-4	First quarter 1995	Second quarter 1995	Third quarter 1995	Fourth quarter 1995
EUR12	4.7	81.1	82.4	83.0	82.9
B	2.6	79.2	80.0	81.8	81.6
DK	1.2	85.0	85.0	85.0	85.0
D	5.8	81.2	82.6	85.5	85.3
GR	25.8	75.2	79.0	80.4	85.3
E	6.5	76.3	77.9	76.2	80.5
F	5.2	87.6	85.4	82.2	85.7
IRL	-0.9	76.8	85.4	83.3	81.2
I	4.6	76.1	77.7	79.5	77.2
L	4.8	82.8	84.7	84.1	85.5
NL	4.4	82.0	82.1	84.2	85.8
P	1.8	74.3	74.0	75.1	77.7
UK	2.1	81.4	85.6	84.3	81.4

SOURCE: DG II -  
BUSINESS SURVEY



**FIGURE 2.10**



CONSUMER  
GOODS: CAPACITY  
UTILISATION  
RATES BY  
MEMBER STATE,  
FOURTH QUARTER  
1995  
(%)

SOURCE: DG II -  
BUSINESS SURVEY

	Annual growth rate: latest quarter, t/t-4	First quarter 1995	Second quarter 1995	Third quarter 1995	Fourth quarter 1995
EUR12	-1.6	81.9	82.5	81.9	81.2
B	5.1	78.1	78.0	77.6	79.0
DK	1.2	83.0	82.0	83.0	82.0
D	0.7	85.9	86.4	84.9	85.4
GR	-1.8	73.5	70.9	73.3	76.9
E	-1.2	77.4	75.8	77.0	75.6
F	-0.8	82.7	83.3	83.8	83.9
IRL	8.9	79.8	75.4	82.7	81.7
I	0.3	76.3	76.5	77.2	76.4
L	-3.2	87.1	86.8	85.7	82.8
NL	-1.3	84.0	84.7	85.4	85.1
P	-0.1	80.7	79.1	79.2	78.7
UK	-7.9	86.4	89.8	85.2	82.7

**TABLE 2.8**

CONSUMER  
GOODS: CAPACITY  
UTILISATION  
RATES BY  
MEMBER STATE  
(%)

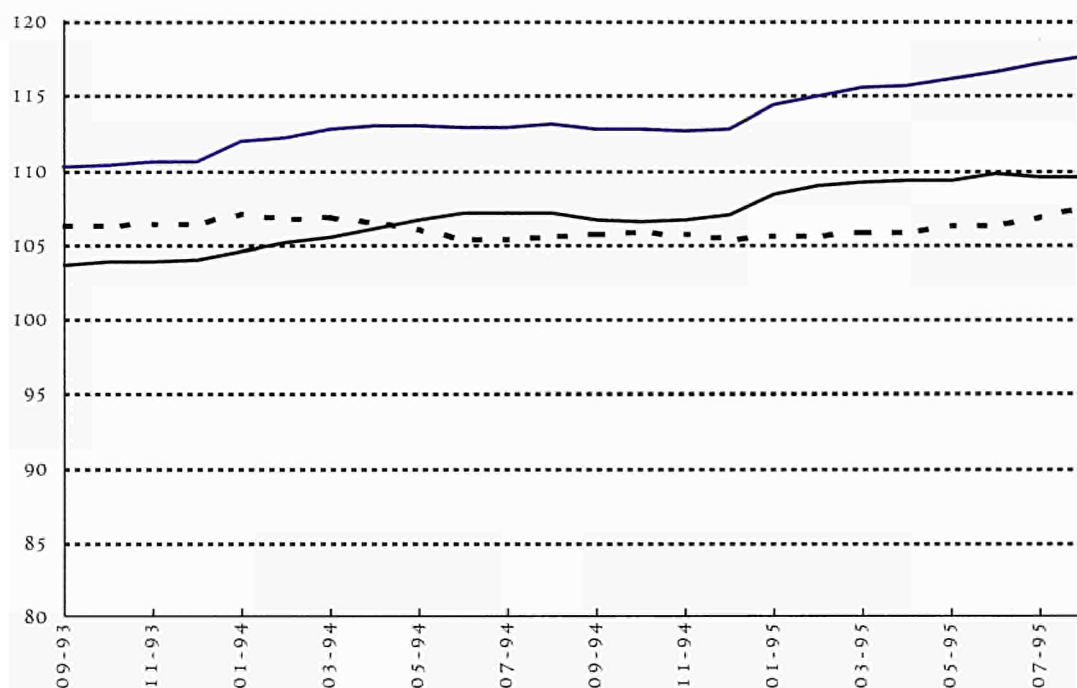
SOURCE: DG II -  
BUSINESS SURVEY

**FIGURE 2.11**

EVOLUTION OF  
EXTRA-EU  
TRADE INDEXES  
(1990=100)

— Export value  
— Import value  
- - - Terms of trade

SOURCE: 



**TABLE 2.9**

QUARTERLY  
EXTRA-EU  
TRADE INDEXES  
(1990=100)

	Latest quarter available	Exports		Imports		Terms of trade index
		Value	Volume	Value	Volume	
<b>EUR12</b>	06-95 ⇔ 08-95	109.5	110.2	117.6	111.7	107.4
Growth rate, t/t-4 (%)		2.2	1.6	4.0	-3.6	1.8
<b>B/L</b>	06-95 ⇔ 08-95	115.4	109.1	116.9	125.7	101.3
Growth rate, t/t-4 (%)		5.1	5.8	8.9	-3.5	3.6
<b>DK</b>	06-95 ⇔ 08-95	107.2	111.6	112.0	112.8	104.5
Growth rate, t/t-4 (%)		6.1	-1.6	5.3	-4.8	-0.6
<b>D</b>	06-95 ⇔ 08-95	114.6	115.8	124.2	108.2	108.4
Growth rate, t/t-4 (%)		3.4	0.0	5.0	-1.7	1.5
<b>GR</b>	06-95 ⇔ 08-95	101.2	117.7	107.1	115.9	105.9
Growth rate, t/t-4 (%)		1.3	1.9	7.2	-14.8	5.7
<b>E</b>	06-95 ⇔ 08-95	103.3	98.3	103.7	134.5	100.4
Growth rate, t/t-4 (%)		0.5	2.2	4.4	-3.4	3.9
<b>F</b>	06-95 ⇔ 08-95	106.7	99.4	119.9	91.8	112.3
Growth rate, t/t-4 (%)		1.0	1.9	3.4	-12.3	2.4
<b>IRL</b>	06-95 ⇔ 08-95	108.9	163.4	114.2	182.7	104.8
Growth rate, t/t-4 (%)		-5.2	21.8	5.9	10.5	11.6
<b>I</b>	06-95 ⇔ 08-95	102.7	100.5	107.0	132.3	104.2
Growth rate, t/t-4 (%)		4.0	7.6	0.3	9.9	-3.6
<b>NL</b>	06-95 ⇔ 08-95	103.0	122.2	115.8	128.5	112.5
Growth rate, t/t-4 (%)		0.6	-1.7	7.6	-11.8	7.1
<b>P</b>	06-95 ⇔ 08-95	95.1	114.8	109.6	103.8	115.2
Growth rate, t/t-4 (%)		0.7	1.4	5.2	2.9	4.5
<b>UK</b>	06-95 ⇔ 08-95	114.1	111.8	117.1	102.5	102.6
Growth rate, t/t-4 (%)		0.7	-0.6	1.8	-9.5	1.1

SOURCE: 

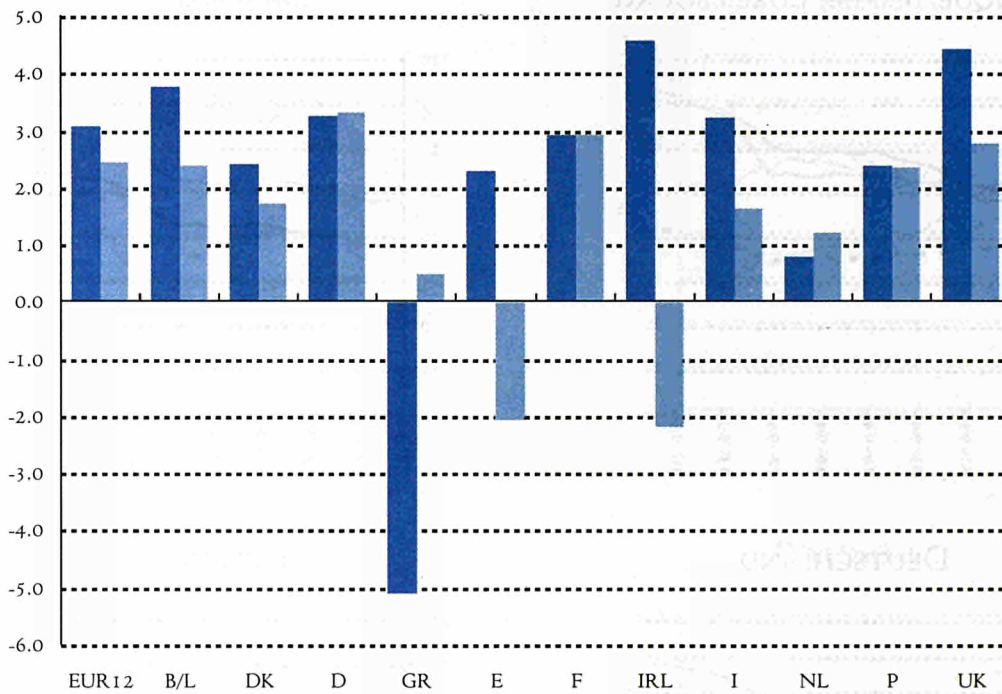
FIGURE 2.12

ANNUAL GROWTH  
RATE OF EXTRA-  
EU TRADE  
INDEXES BY  
MEMBER STATE  
(%) (1)

■ Export value  
■ Import value

(1) Growth rates are based on the latest annual data available for each country. Please see the table below for the year concerned.

SOURCE:  eurostat



	Latest year available	Exports		Imports		Terms of trade index
		Value	Volume	Value	Volume	
EUR12	1994	107.0	112.8	113.2	119.4	105.7
Growth rate, t/t-1 (%)		3.1	7.8	2.4	8.3	-0.7
B/L	1994	110.1	107.1	107.3	140.8	97.4
Growth rate, t/t-1 (%)		3.8	14.3	2.4	16.7	-1.3
DK	1994	101.6	119.4	106.8	120.5	105.1
Growth rate, t/t-1 (%)		2.4	16.8	1.7	12.3	-0.7
D	1994	110.8	118.6	118.4	110.8	106.8
Growth rate, t/t-1 (%)		3.3	5.8	3.3	8.4	0.0
GR	1994	100.3	117.4	100.1	158.3	99.8
Growth rate, t/t-1 (%)		-5.1	-10.7	0.5	12.7	5.9
E	1994	102.2	98.3	99.7	147.6	97.5
Growth rate, t/t-1 (%)		2.3	7.3	-2.1	12.4	-4.3
F	1994	105.3	101.8	116.4	111.4	110.5
Growth rate, t/t-1 (%)		2.9	3.9	2.9	6.2	0.0
IRL	1994	112.2	148.7	107.8	171.3	96.0
Growth rate, t/t-1 (%)		4.6	16.9	-2.2	14.6	-6.5
I	1994	98.9	102.9	106.7	126.4	107.8
Growth rate, t/t-1 (%)		3.2	6.4	1.6	9.0	-1.6
NL	1994	102.0	129.1	108.0	145.8	105.8
Growth rate, t/t-1 (%)		0.8	28.7	1.2	7.8	0.4
P	1994	94.3	110.1	104.7	102.7	111.0
Growth rate, t/t-1 (%)		2.4	1.5	2.3	5.5	0.0
UK	1994	113.3	115.4	114.8	115.2	101.3
Growth rate, t/t-1 (%)		4.4	3.1	2.8	4.1	-1.6

TABLE 2.10

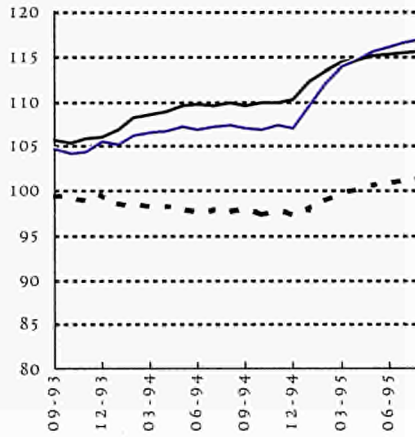
ANNUAL  
EXTRA-EU  
TRADE INDEXES  
(1990=100)

SOURCE:  eurostat

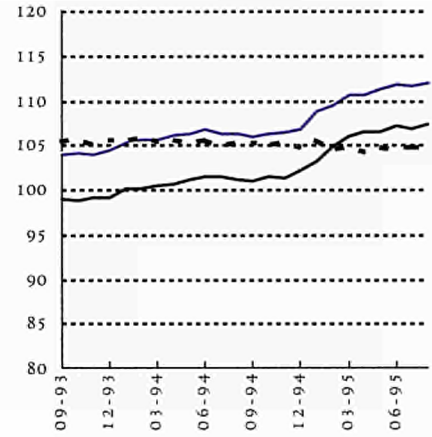
FIGURE 2.13

EVOLUTION OF  
EXTRA-EU  
TRADE INDEXES  
(1990=100)

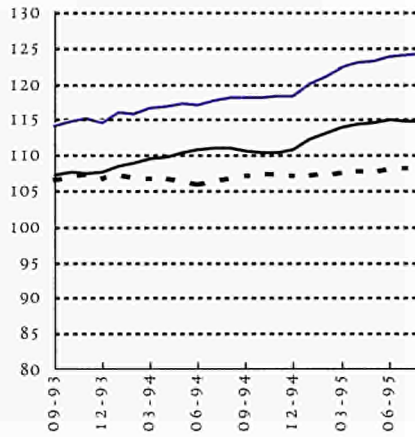
BELGIQUE/BELGIË, LUXEMBOURG



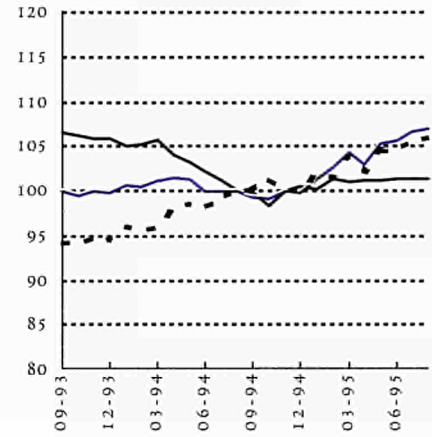
DANMARK



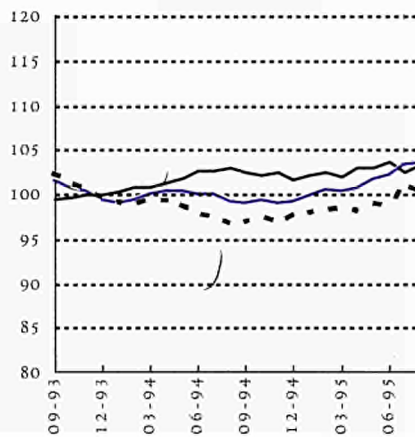
DEUTSCHLAND



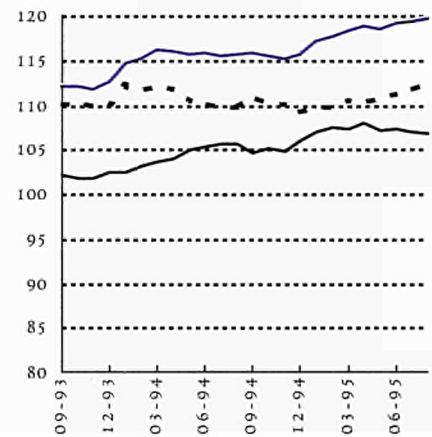
HELLAS



ESPAÑA



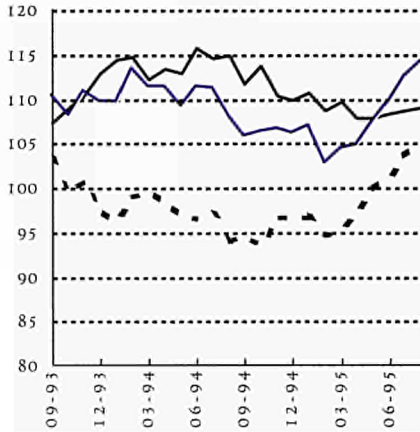
FRANCE



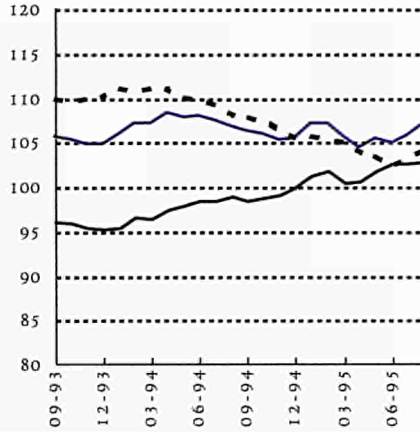
— Export value  
— Import value  
- - Terms of trade

SOURCE: eurostat

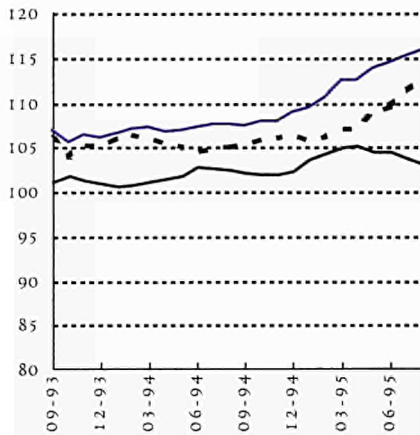
IRELAND



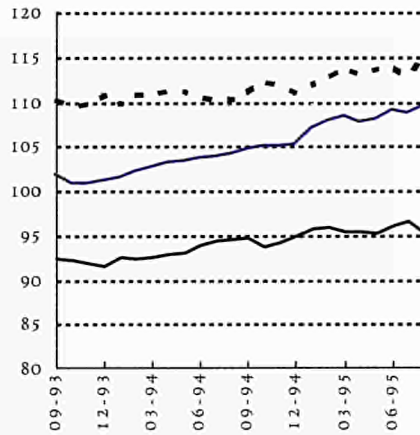
ITALIA



NEDERLAND



PORTUGAL



UNITED KINGDOM

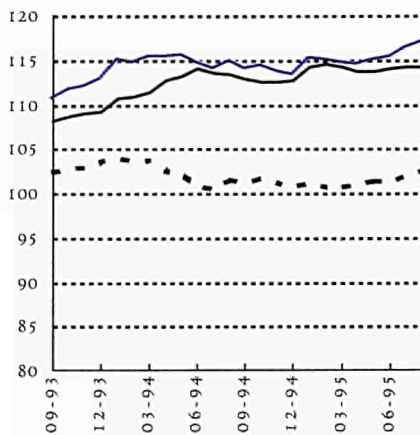


FIGURE 2.13

EVOLUTION OF  
EXTRA-EU  
TRADE INDEXES  
(1990=100)

— Export value  
— Import value  
- - - Terms of trade

SOURCE:  eurostat



## IN BRIEF....

- ★ EUROPE IS THE WORLD'S LEADING PRODUCER OF CHEMICALS, BUT THE ASIAN MARKET IS IN FULL EXPANSION
- ★ IN NOVEMBER 1995, GERMAN PRODUCTION FELL BY 8.7% IN VOLUME AND IN ANNUAL TERMS. MEANWHILE, THE PRODUCTION OF EUROPE 15 GROWS BY 0.9%
- ★ THE SITUATION AS REGARDS EMPLOYMENT VARIES WIDELY FROM ONE COUNTRY TO THE NEXT, DEPENDING ON THE STAGE REACHED IN RESTRUCTURING AND ON TRENDS IN PRODUCTION

Although the chemicals sector - in which the European Union is the world's leading producer, ahead of the United States and Japan - covers a broad mix of activities and products, the industries it encompasses are, broadly speaking, involved in the chemical transformation of materials to endow them with new physical and chemical properties. Among its main products are petrochemicals, paints, fertilizers, pharmaceuticals, cleaning products and toiletries and chemical fibres. The latter can be divided up into man-made fibres (85% of the Community's production) on the one hand and cellulose fibres (15% of European production) on the other.

Production soared in 1994, rising from ECU 292 billion to ECU 315 billion, an increase of 8% in current prices compared with average annual growth of a mere 0.75% for the period 1989-93. In terms of constant prices, production grew at a steady 6%. At the same time, the man-made fibres sector - which is subject to tough price competition as a result of cheap Asian labour - grew by more than 9%. In 1995 and for the chemical industry, production grows by 3.2% in constant prices. Having enjoyed a prosperous second half of the 1980s, the chemical industry saw its profits fall in the 1990s as a result of over capacity, and companies were compelled to adopt new strategies and enter into mergers and alliances in order to counter this phenomenon. Percentage capacity utilisation in April 1995 amounted to 87.4% in Germany and 94.8% in the United Kingdom. In this regard, the concentration which had already occurred was more downstream than upstream, i.e. it applied to refined chemicals and therefore led to specialisation and gains in value added. Europe, it is true, tends to import basic chemicals and exports refined chemicals. To this must be added the depreciation of the dollar, which gave a boost to exports and strengthened the competitiveness of North American companies, particularly as regards basic chemicals, a field in which differentiation is weak and competition tough.

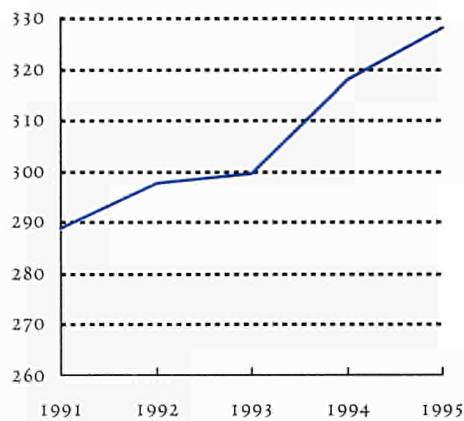
## CHEMICALS

IN THIS  
SECTION:

Commentary	29
Structural indicators	33
Short-term indicators	36

**FIGURE 3.1.1**

EVOLUTION OF EU  
PRODUCTION IN  
CONSTANT PRICES  
(BILLION ECU)

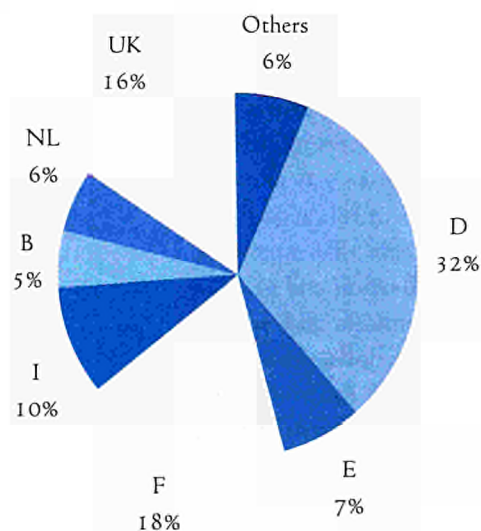


SOURCE: DEBA GEIE

The steadily declining growth in Europe's chemicals production recorded in 1994 was confirmed in 1995, with an annual fall of 1.2% in August and a fall of 11% in Germany. France and Italy, on the other hand, recorded an average annual growth of 4%, while Spanish production grew at 5%. For chemical industry, production in volume in november 1995 compared to november 1994 decreased by more than 4% for France, 0.6% for Italy and 3.1% for Spain. The trend for Europe as a whole is partly due to the weight of Germany, which dominates the continent's chemical industry.

**FIGURE 3.1.2**

SHARE OF  
VALUE-ADDED AT  
FACTOR COST BY  
MEMBER STATE,  
1995  
(%)



SOURCE: DEBA GEIE

Indeed, while six of the world's ten largest chemical firms are European, it is the German firms Hoechst, Bayer and BASF which occupy the first three places, followed by Rhône-Poulenc for France and Imperial Chemical Industries and SmithKline Beecham for the United Kingdom. Thus, in 1994-95, Germany accounted for 29% of chemicals production, France for 20%, the United Kingdom for 15% and Italy for 13%. The trend among the main European producers in the chemical fibres sub-sector was somewhat different, with Germany no longer so far in front but France still ahead of the United Kingdom.

Apparent consumption climbed back to ECU 290 billion in 1994 after a fall of 5% in 1993. It would therefore seem that this fall was little more than a blip, whereas trends in the man-made fibres sector were directly linked to economic activity. The economic recovery was also reflected in renewed consumption of petrochemicals, textile fibres and toiletries. However, the chemical industry directly consumed 65 % of its production in the form of intermediate consumption.

Although Community imports (70% of which were intra-Community) had fallen by 6.3% in 1993, they rose substantially in 1994 from ECU 120 billion to ECU 137 billion (an increase of 15%), while imports of chemical fibres rose by 19%. Exports of man-made fibres grew by 14% while exports of chemical products stayed ahead of imports, reaching ECU 65 billion in 1994 (an increase of 12%). As a result, the extra-Community trade balance remained in surplus at ECU 25 billion, while the cover ratio remained stable at around 160%. At the same time, the trade balance for man-made fibres worsened, with a 1994 deficit of ECU 299 million and a cover ratio of 82% (an annual fall of ten points). As far as the Member States of the European Union are concerned, Germany is the leading extra-Community exporter with 36% of total



exports in 1994, followed by France (15.4%), the United Kingdom (14.7%) and Italy (8%), the latter -like Spain - recording a marked trade deficit. Finally, the annual growth in imports for the third quarter of 1995 was 8% in Germany, 4% in France and 16% in Italy, while exports rose respectively by 8%, 6% and 10%.

Employment levels continued to fall in 1994, with job losses amounting to 4.25%. With a view to boosting productivity and improving the capital/labour ratio, the chemical industry shed almost 66 000 of its workers (4%), while annual job losses in the man-made fibres sector amounted to 4 500 (9.5%).

Employment levels fell more slowly in Germany due to the increased demand generated by unification, while British, French and Italian businesses opted to relocate their production sites to Community countries with lower taxes and factor costs and embarked on restructuring exercises aimed at boosting the productivity and output of their already highly qualified workforces. In France employment levels improved slightly in 1995 with a 0.7% growth while employment declined by 3.2% in the EU, 7.2% in Italy, 3.5% in the Netherlands and 4.2% in the United Kingdom.

R&D activities are far from negligible in the chemical industry, accounting for as much as 10% of turnover in sectors such as pharmaceuticals, agro-chemicals or biotechnologies.

Competition from Asia is making itself increasingly felt as a result of the economic dynamism of this region, with the new generation of NICs providing much of the impetus. In addition, the expiry of patent protection has opened the way to mass production and led to a growing alignment of prices and to overcapacity. The only way to expand margins is to specialize and settle into market niches. This is precisely the challenge now facing the European chemical industry, which must there-

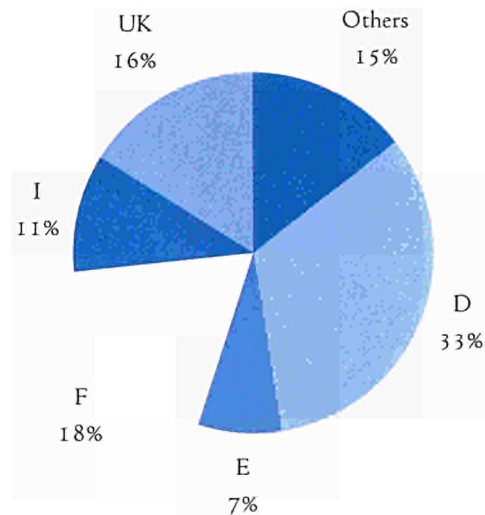


FIGURE 3.1.3

SHARE OF  
NUMBER OF  
EMPLOYEES BY  
MEMBER STATE,  
1995  
(%)

SOURCE: DEBA GEIE

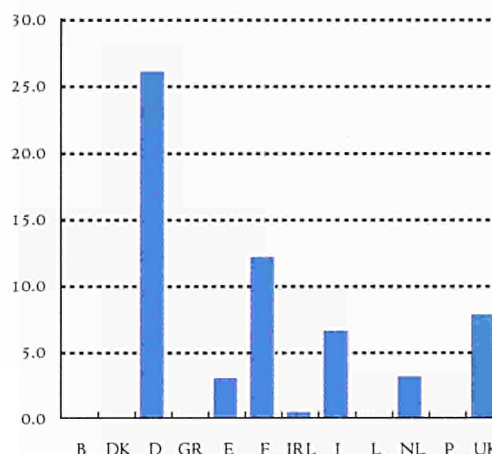


FIGURE 3.1.4

LABOUR COSTS BY  
MEMBER STATE,  
1994  
(BILLION ECU)

SOURCE: DEBA GEIE

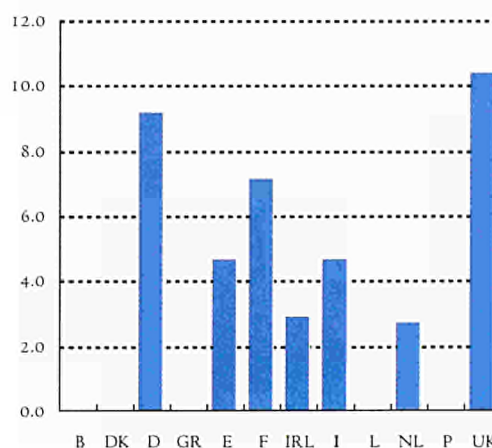


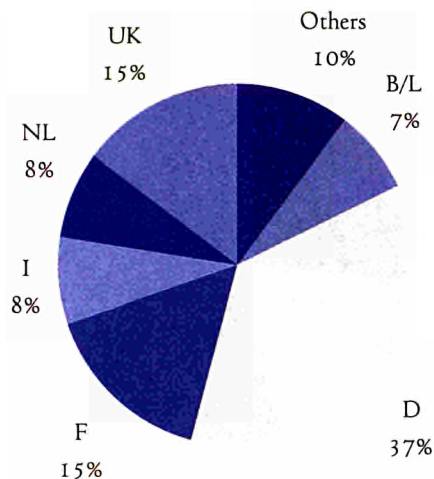
FIGURE 3.1.5

GROSS  
OPERATING  
SURPLUS BY  
MEMBER STATE,  
1994  
(BILLION ECU)

SOURCE: DEBA GEIE

**FIGURE 3.1.6**

SHARE OF  
EXTRA-EU  
EXPORTS BY  
MEMBER STATE,  
1994  
(%)

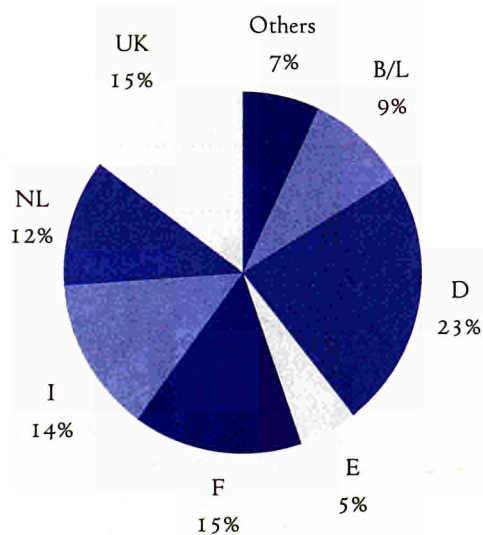


SOURCE:  eurostat

fore invest in the new technologies and man-made materials. 1995 has already seen numerous European companies entering into alliances with Asian firms in order to develop the production of specialist polyethylenes or paints, for example. The setting up of joint ventures and the establishment of sites in Asia in order to benefit from the growth in consumption are also likely to play a key role in this regard.

**FIGURE 3.1.7**

SHARE OF  
EXTRA-EU  
IMPORTS BY  
MEMBER STATE,  
1994  
(%)



SOURCE:  eurostat

TABLE 3.1.1

	1991	t/t-1 (%)	1992	t/t-1 (%)	1993	t/t-1 (%)	1994	t/t-1 (%)	1995	t/t-1 (%)
EUR 12	99,802	0.8	102,106	2.3	101,904	-0.2	110,393	8.3	120,897	9.5
B	4,204	0.5	4,753	13.1	4,675	-1.7	5,344	14.3	6,253	17.0
share (%)	4.2		4.7		4.6		4.8		5.2	
DK	1,501	8.5	1,709	13.9	1,815	6.2	2,118	16.7	2,387	12.7
share (%)	1.5		1.7		1.8		1.9		2.0	
D	33,081	2.5	33,382	0.9	33,244	-0.4	35,308	6.2	38,817	9.9
share (%)	33.1		32.7		32.6		32.0		32.1	
GR	398	-3.0	398	0.0	447	12.3	475	6.4	575	20.9
share (%)	0.4		0.4		0.4		0.4		0.5	
E	7,515	5.5	7,406	-1.4	6,803	-8.1	7,840	15.2	8,994	14.7
share (%)	7.5		7.3		6.7		7.1		7.4	
F	16,718	-3.2	17,186	2.8	17,898	4.1	19,363	8.2	21,596	11.5
share (%)	16.8		16.8		17.6		17.5		17.9	
IRL	1,992	11.9	2,489	25.0	2,834	13.9	3,449	21.7	3,902	13.1
share (%)	2.0		2.4		2.8		3.1		3.2	
I	12,366	1.4	12,376	0.1	11,139	-10.0	11,356	1.9	11,975	5.4
share (%)	12.4		12.1		10.9		10.3		9.9	
L	48	29.1	77	59.0	79	3.4	85	7.3	86	1.1
share (%)	0.0		0.1		0.1		0.1		0.1	
NL	5,210	-10.8	4,976	-4.5	5,376	8.0	5,976	11.2	6,786	13.5
share (%)	5.2		4.9		5.3		5.4		5.6	
P	759	-1.2	876	15.4	768	-12.4	754	-1.7	774	2.6
share (%)	0.8		0.9		0.8		0.7		0.6	
UK	16,010	1.5	16,480	2.9	16,828	2.1	18,325	8.9	18,754	2.3
share (%)	16.0		16.1		16.5		16.6		15.5	

VALUE-ADDED AT  
FACTOR COST BY  
MEMBER STATE  
(MILLION ECU)

SOURCE: DEBA GEIE

TABLE 3.1.2

	1991	t/t-1 (%)	1992	t/t-1 (%)	1993	t/t-1 (%)	1994	t/t-1 (%)	1995	t/t-1 (%)
EUR 12	323,379	1.7	327,367	1.2	324,158	-1.0	350,019	8.0	385,416	10.1
B	14,586	-0.8	16,523	13.3	16,278	-1.5	18,512	13.7	21,634	16.9
share (%)	4.5		5.0		5.0		5.3		5.6	
DK	3,196	5.7	3,474	8.7	3,642	4.8	4,141	13.7	4,607	11.3
share (%)	1.0		1.1		1.1		1.2		1.2	
D	96,976	1.4	97,157	0.2	97,844	0.7	103,704	6.0	114,077	10.0
share (%)	30.0		29.7		30.2		29.6		29.6	
GR	1,884	2.5	1,893	0.5	2,075	9.6	2,233	7.6	2,694	20.6
share (%)	0.6		0.6		0.6		0.6		0.7	
E (1)	21,554	3.6	20,826	-3.4	19,130	-8.1	21,943	14.7	25,340	15.5
share (%)	6.7		6.4		5.9		6.3		6.6	
F	61,375	-0.2	63,228	3.0	65,456	3.5	70,922	8.4	79,515	12.1
share (%)	19.0		19.3		20.2		20.3		20.6	
IRL	4,052	19.1	4,965	22.5	5,573	12.2	6,818	22.3	7,707	13.0
share (%)	1.3		1.5		1.7		1.9		2.0	
I	48,456	5.2	48,222	-0.5	43,510	-9.8	44,765	2.9	48,499	8.3
share (%)	15.0		14.7		13.4		12.8		12.6	
L	258	31.0	410	58.9	425	3.5	465	9.5	474	2.0
share (%)	0.1		0.1		0.1		0.1		0.1	
NL	20,588	-3.8	20,462	-0.6	20,106	-1.7	22,094	9.9	24,919	12.8
share (%)	6.4		6.3		6.2		6.3		6.5	
P	2,716	-3.0	3,085	13.6	2,673	-13.4	2,566	-4.0	2,628	2.4
share (%)	0.8		0.9		0.8		0.7		0.7	
UK	47,739	2.0	47,122	-1.3	47,448	0.7	51,857	9.3	53,322	2.8
share (%)	14.8		14.4		14.6		14.8		13.8	

TURNOVER IN  
CURRENT PRICES  
BY MEMBER STATE  
(MILLION ECU)

SOURCE: DEBA GEIE

**TABLE 3.I.3**

	1991	t/t-1 (%)	1992	t/t-1 (%)	1993	t/t-1 (%)	1994	t/t-1 (%)	1995	t/t-1 (%)	
<b>NUMBER OF EMPLOYEES BY MEMBER STATE (THOUSANDS)</b>	<b>EUR12</b>	<b>1,743</b>	<b>-1.2</b>	<b>1,708</b>	<b>-2.0</b>	<b>1,642</b>	<b>-3.9</b>	<b>1,583</b>	<b>-3.5</b>	<b>1,532</b>	<b>-3.2</b>
	B	64	-0.3	63	-1.2	61	-3.6	60	-1.9	60	1.0
	share (%)	3.7		3.7		3.7		3.8		3.9	
	DK	19	-1.9	21	8.8	21	1.6	N/A	N/A	N/A	N/A
	share (%)	1.1		1.2		1.3		N/A		N/A	
	D	601	-0.6	590	-1.8	561	-5.0	535	-4.5	504	-5.8
	share (%)	34.5		34.5		34.2		33.8		32.9	
	GR	20	-2.7	19	-7.1	18	-0.9	18	-0.5	18	0.6
	share (%)	1.1		1.1		1.1		1.2		1.2	
	E	124	-0.5	119	-4.1	113	-5.2	112	-1.0	111	-0.5
	share (%)	7.1		7.0		6.9		7.1		7.3	
	F	289	-1.6	285	-1.3	276	-3.1	279	1.1	281	0.7
	share (%)	16.5		16.7		16.8		17.6		18.3	
	IRL	14	6.8	15	6.9	15	3.1	16	7.2	17	3.9
	share (%)	0.8		0.9		0.9		1.0		1.1	
	I	215	0.3	206	-4.0	197	-4.4	179	-9.2	166	-7.2
	share (%)	12.3		12.1		12.0		11.3		10.8	
	L	1	24.0	1	44.1	1	1.4	1	-3.5	1	-0.1
	share (%)	0.0		0.1		0.1		0.1		0.1	
	NL	89	-0.9	86	-3.0	82	-4.6	79	-3.5	N/A	N/A
	share (%)	5.1		5.0		5.0		5.0		N/A	
	P	28	-13.8	29	5.4	27	-8.0	26	-4.9	N/A	N/A
	share (%)	1.6		1.7		1.6		1.6		N/A	
	UK	281	-2.8	275	-2.4	270	-1.8	258	-4.1	248	-4.2
	share (%)	16.1		16.1		16.4		16.3		16.2	

SOURCE: DEBA GEIE

**TABLE 3.I.4**

	1990	t/t-1 (%)	1991	t/t-1 (%)	1992	t/t-1 (%)	1993	t/t-1 (%)	1994	t/t-1 (%)	
<b>LABOUR COSTS BY MEMBER STATE (MILLION ECU)</b>	<b>EUR12</b>	<b>59,917</b>	<b>6.4</b>	<b>63,233</b>	<b>5.5</b>	<b>65,442</b>	<b>3.5</b>	<b>64,835</b>	<b>-0.9</b>	<b>64,268</b>	<b>-0.9</b>
	B	2,505	5.5	2,622	4.6	2,671	1.9	2,697	1.0	N/A	N/A
	share (%)	4.2		4.1		4.1		4.2		N/A	
	DK	630	6.1	659	4.6	714	8.3	776	8.7	N/A	N/A
	share (%)	1.1		1.0		1.1		1.2		N/A	
	D	23,703	5.7	24,780	4.5	25,867	4.4	26,590	2.8	26,094	-1.9
	share (%)	39.6		39.2		39.5		41.0		40.6	
	GR	315	9.7	331	5.0	332	0.2	355	7.0	N/A	N/A
	share (%)	0.5		0.5		0.5		0.5		N/A	
	E	3,283	12.6	3,589	9.3	3,676	2.4	3,264	-11.2	3,163	-3.1
	share (%)	5.5		5.7		5.6		5.0		4.9	
	F	10,577	7.8	10,848	2.6	11,437	5.4	11,693	2.2	12,198	4.3
	share (%)	17.7		17.2		17.5		18.0		19.0	
	IRL	364	8.6	407	12.0	456	11.9	471	3.3	524	11.2
	share (%)	0.6		0.6		0.7		0.7		0.8	
	I	7,722	7.4	8,383	8.6	8,497	1.4	7,308	-14.0	6,644	-9.1
	share (%)	12.9		13.3		13.0		11.3		10.3	
	L	12	17.3	16	28.7	24	52.2	27	11.3	27	0.0
	share (%)	0.0		0.0		0.0		0.0		0.0	
	NL	3,047	5.7	3,103	1.8	3,236	4.3	3,272	1.1	3,226	-1.4
	share (%)	5.1		4.9		4.9		5.0		5.0	
	P	394	26.4	420	6.4	522	24.5	475	-9.1	N/A	N/A
	share (%)	0.7		0.7		0.8		0.7		N/A	
	UK	7,366	2.4	8,075	9.6	8,010	-0.8	7,908	-1.3	7,907	0.0
	share (%)	12.3		12.8		12.2		12.2		12.3	

SOURCE: DEBA GEIE

TABLE 3.I.5

	1990	t/t-1 (%)	1991	t/t-1 (%)	1992	t/t-1 (%)	1993	t/t-1 (%)	1994	t/t-1 (%)
EUR 12	45,031	-2.8	47,797	6.1	50,077	4.8	59,544	18.9	66,757	12.1
B/L	2,864	-3.2	3,105	8.4	3,395	9.3	4,093	20.6	4,976	21.6
share (%)	6.4		6.5		6.8		6.9		7.5	
DK	841	-2.7	852	1.3	988	15.9	1,544	56.3	1,802	16.7
share (%)	1.9		1.8		2.0		2.6		2.7	
D	16,549	-2.2	17,783	7.5	18,092	1.7	21,514	18.9	24,259	12.8
share (%)	36.8		37.2		36.1		36.1		36.3	
GR	126	-14.4	135	7.3	140	3.9	202	44.7	194	-4.4
share (%)	0.3		0.3		0.3		0.3		0.3	
E	1,860	3.1	2,002	7.6	2,026	1.2	2,223	9.7	2,419	8.8
share (%)	4.1		4.2		4.0		3.7		3.6	
F	6,931	-1.1	7,194	3.8	7,746	7.7	9,159	18.2	10,294	12.4
share (%)	15.4		15.1		15.5		15.4		15.4	
IRL	1,024	1.3	1,284	25.4	1,544	20.2	2,030	31.5	2,205	8.6
share (%)	2.3		2.7		3.1		3.4		3.3	
I	4,005	-10.5	4,061	1.4	4,322	6.4	4,999	15.7	5,444	8.9
share (%)	8.9		8.5		8.6		8.4		8.2	
NL	3,826	-3.3	3,881	1.5	3,949	1.7	4,472	13.2	5,174	15.7
share (%)	8.5		8.1		7.9		7.5		7.8	
P	214	23.5	176	-17.6	176	0.1	195	10.7	200	2.7
share (%)	0.5		0.4		0.4		0.3		0.3	
UK	6,792	-2.9	7,325	7.8	7,702	5.1	9,113	18.3	9,792	7.4
share (%)	15.1		15.3		15.4		15.3		14.7	

EXTRA-EU  
EXPORTS BY  
MEMBER STATE  
(MILLION ECU)

SOURCE:  eurostat

TABLE 3.I.6

	1990	t/t-1 (%)	1991	t/t-1 (%)	1992	t/t-1 (%)	1993	t/t-1 (%)	1994	t/t-1 (%)
EUR 12	33,895	3.8	35,573	5.0	36,855	3.6	36,035	-2.2	41,301	14.6
B/L	3,085	3.9	3,225	4.5	3,566	10.6	3,038	-14.8	3,728	22.7
share (%)	9.1		9.1		9.7		8.4		9.0	
DK	849	-2.5	823	-3.1	861	4.7	999	16.0	1,058	6.0
share (%)	2.5		2.3		2.3		2.8		2.6	
D	8,082	4.2	9,077	12.3	9,134	0.6	8,953	-2.0	9,777	9.2
share (%)	23.8		25.5		24.8		24.8		23.7	
GR	388	5.7	464	19.5	470	1.3	554	17.9	565	1.9
share (%)	1.1		1.3		1.3		1.5		1.4	
E	2,130	7.8	2,328	9.3	2,409	3.5	1,839	-23.7	2,217	20.5
share (%)	6.3		6.5		6.5		5.1		5.4	
F	4,909	3.4	4,862	-0.9	5,067	4.2	5,343	5.4	6,095	14.1
share (%)	14.5		13.7		13.7		14.8		14.8	
IRL	449	3.5	555	23.7	556	0.2	752	35.3	858	14.1
share (%)	1.3		1.6		1.5		2.1		2.1	
I	4,950	-0.2	5,014	1.3	5,118	2.1	5,157	0.8	5,633	9.2
share (%)	14.6		14.1		13.9		14.3		13.6	
NL	3,764	2.0	3,789	0.7	4,159	9.8	3,578	-14.0	4,822	34.7
share (%)	11.1		10.7		11.3		9.9		11.7	
P	376	10.9	404	7.5	417	3.2	415	-0.4	418	0.7
share (%)	1.1		1.1		1.1		1.2		1.0	
UK	4,915	8.0	5,033	2.4	5,098	1.3	5,407	6.1	6,131	13.4
share (%)	14.5		14.1		13.8		15.0		14.8	

EXTRA-EU  
IMPORTS BY  
MEMBER STATE  
(MILLION ECU)

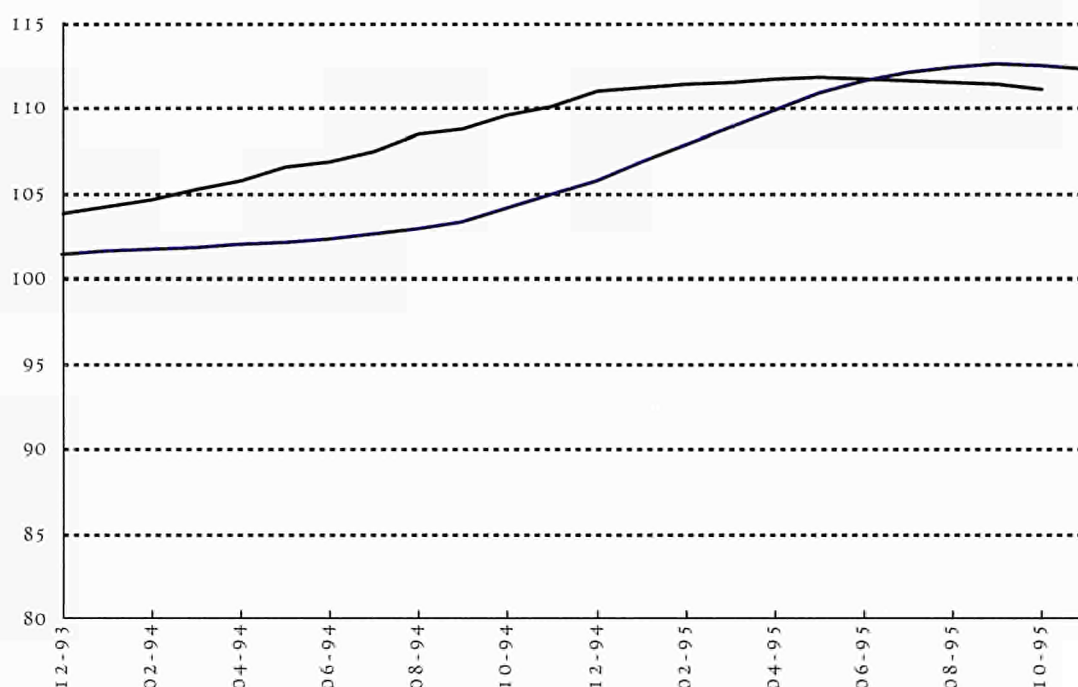
SOURCE:  eurostat

**FIGURE 3.2.1**

EVOLUTION OF  
EUR 15  
PRODUCTION AND  
PRODUCER PRICE  
QUARTERLY  
INDEXES  
(1990=100)

— Index of production  
— Producer price index

SOURCE:  eurostat



**TABLE 3.2.1**

QUARTERLY  
AND ANNUAL  
PRODUCTION  
INDEXES (1)  
(1990=100)

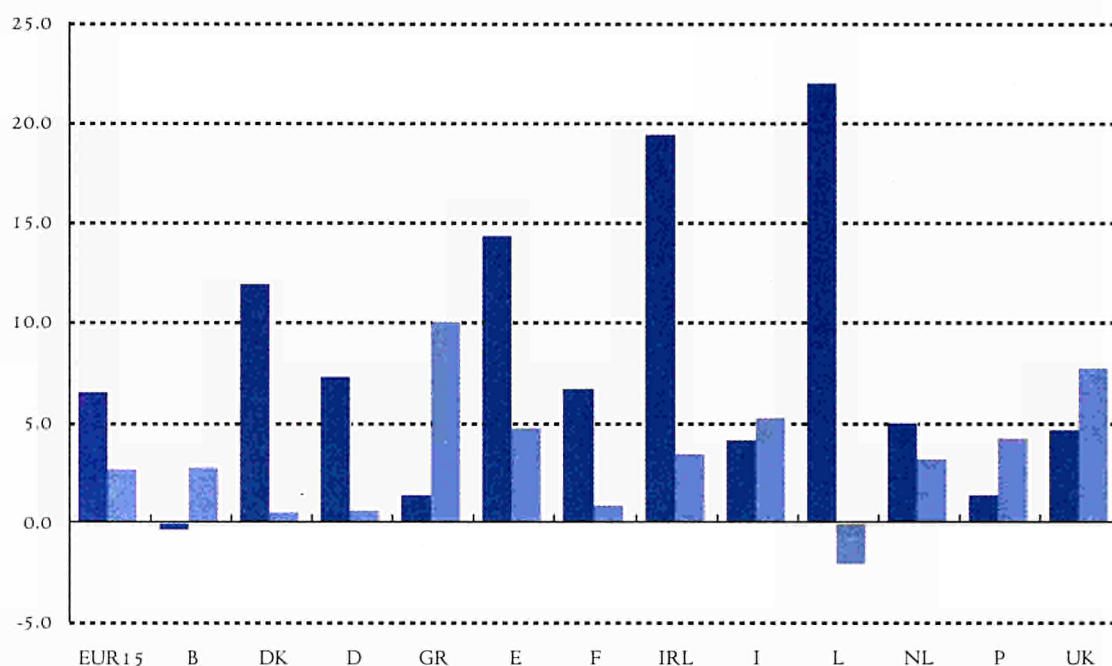
(1) Annual growth rates are based on the latest annual data. Only when data to October is available will an annual estimate for the year be made.

SOURCE:  eurostat

	Latest quarter available	Index	Quarterly t/t-4 (%)	Index	Annual t/t-1 (%)
EUR 15	08-95 ⇔ 10-95	111.1	1.4	109.1	6.5
B	02-95 ⇔ 04-95	110.6	1.8	107.4	-0.4
DK	09-95 ⇔ 11-95	135.9	10.2	122.3	11.9
D	09-95 ⇔ 11-95	99.1	-5.5	103.4	7.3
GR	08-95 ⇔ 10-95	109.6	13.5	96.7	1.4
E	09-95 ⇔ 11-95	114.4	1.0	112.2	14.3
F	09-95 ⇔ 11-95	117.3	-0.2	117.2	6.7
IRL	07-95 ⇔ 09-95	224.9	24.0	186.9	19.4
I	08-95 ⇔ 10-95	104.2	2.8	100.7	4.1
L	04-95 ⇔ 06-95	156.8	11.8	156.0	22.0
NL	08-95 ⇔ 10-95	101.0	1.4	98.6	5.0
P	06-95 ⇔ 08-95	73.3	-0.7	74.6	1.4
UK	09-95 ⇔ 11-95	115.9	2.7	112.6	4.6

FIGURE 3.2.2

ANNUAL GROWTH  
RATE OF EU  
PRODUCTION  
AND PRODUCER  
PRICE  
INDEXES  
(%) (1)



■ Production  
■ Producer prices

(1) Growth rates are based on the latest annual data available for each country. Please see the table below for the year concerned.

SOURCE: eurostat

	Latest quarter available	Quarterly		Annual	
		Index	t/t-4 (%)	Index	t/t-1 (%)
EUR15	09-95 ⇔ 11-95	112.2	7.0	103.9	2.7
B	01-95 ⇔ 03-95	104.6	6.3	100.5	2.8
DK	09-95 ⇔ 11-95	106.8	1.7	104.9	0.5
D	09-95 ⇔ 11-95	100.5	4.1	96.0	0.6
GR	08-95 ⇔ 10-95	192.0	16.6	164.6	10.0
E	09-95 ⇔ 11-95	118.7	10.7	105.7	4.8
F	09-95 ⇔ 11-95	101.0	3.5	97.1	0.8
IRL	07-95 ⇔ 09-95	107.0	6.6	101.6	3.4
I	09-95 ⇔ 11-95	126.0	12.4	110.4	5.3
L	07-95 ⇔ 09-95	107.4	7.6	98.1	-2.1
NL	09-95 ⇔ 11-95	101.1	2.1	97.4	3.2
P	08-95 ⇔ 10-95	117.5	7.4	109.0	4.2
UK	10-95 ⇔ 12-95	117.9	5.9	118.0	7.8

TABLE 3.2.2

QUARTERLY  
AND ANNUAL  
PRODUCER PRICE  
INDEXES  
(1990=100)  
(1)

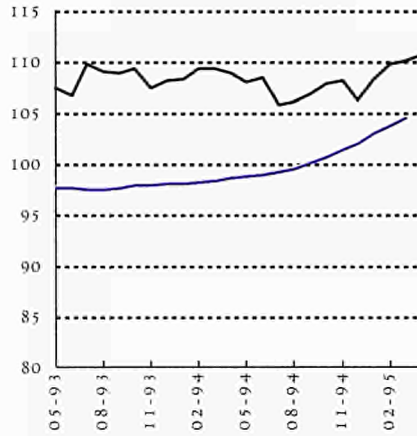
(1) Annual growth rates are based on the latest annual data. Only when data to October is available will an annual estimate for the year be made.

SOURCE: eurostat

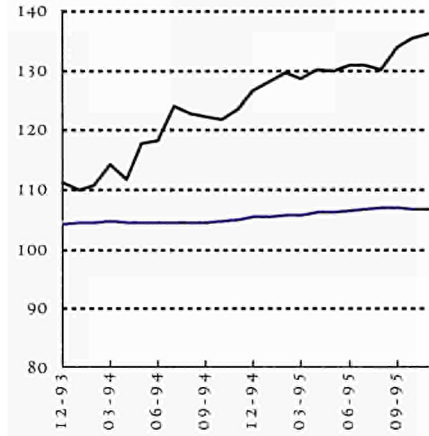
**FIGURE 3.2.3**

EVOLUTION OF  
PRODUCTION AND  
PRODUCER PRICE  
INDEXES  
(1990=100)

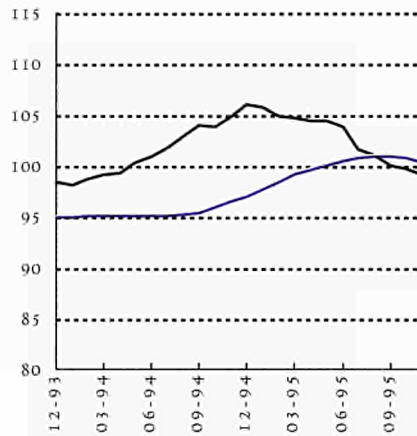
BELGIQUE/BELGIË



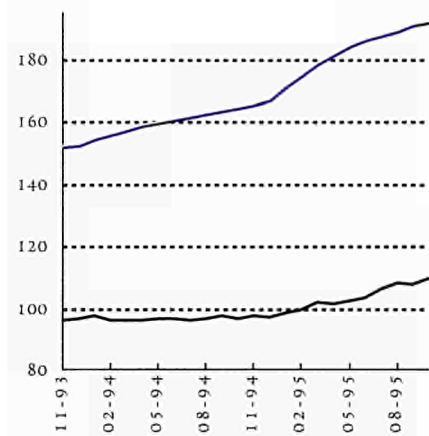
DANMARK



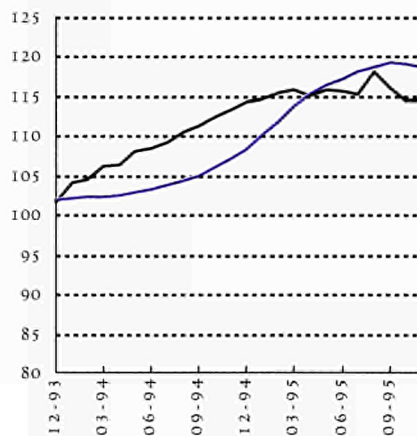
DEUTSCHLAND



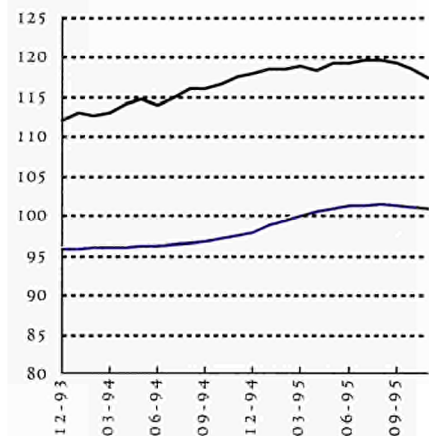
HELLAS



ESPAÑA



FRANCE



— Index of production  
— Producer price index

SOURCE: eurostat



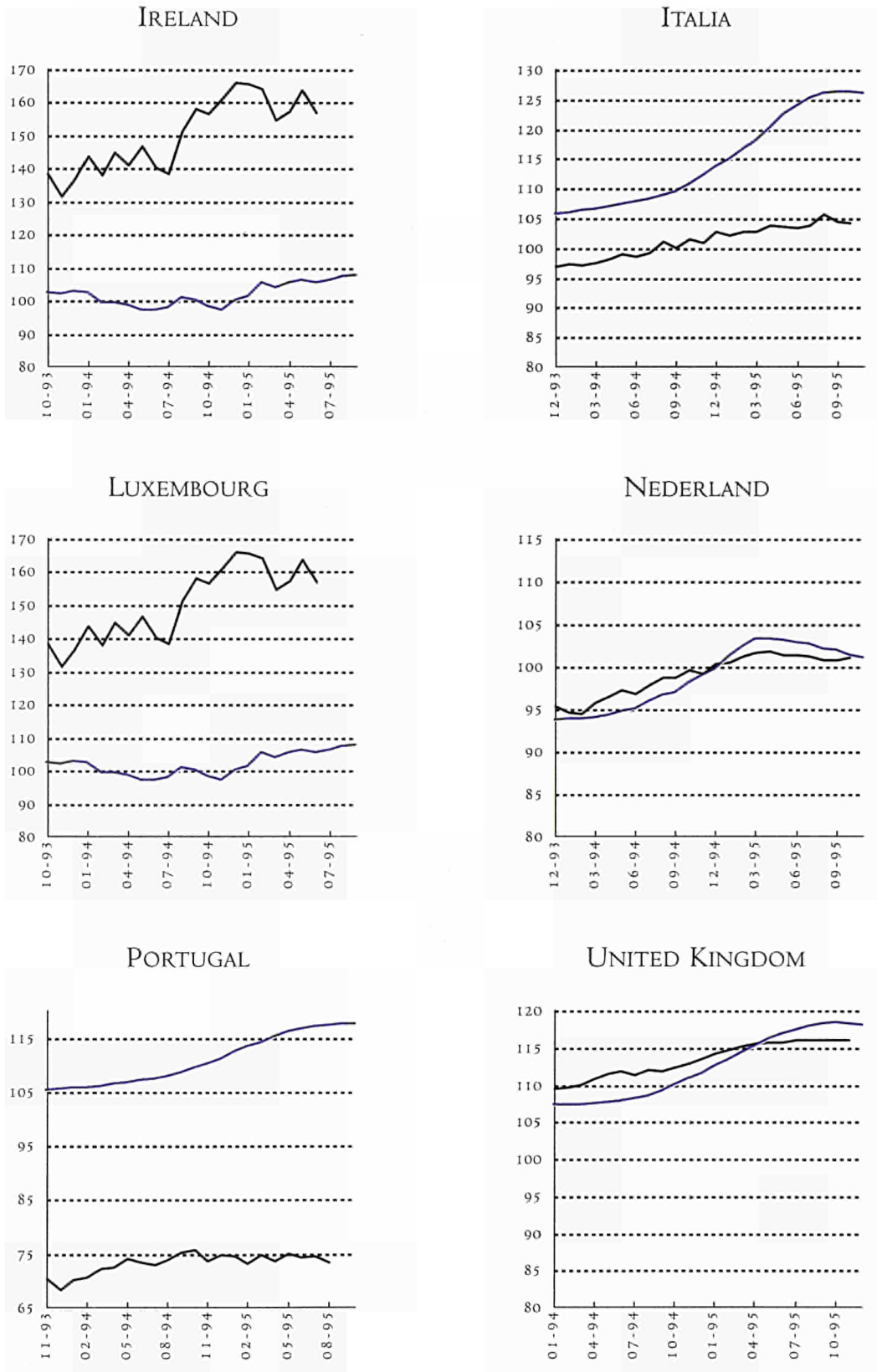


FIGURE 3.2.3

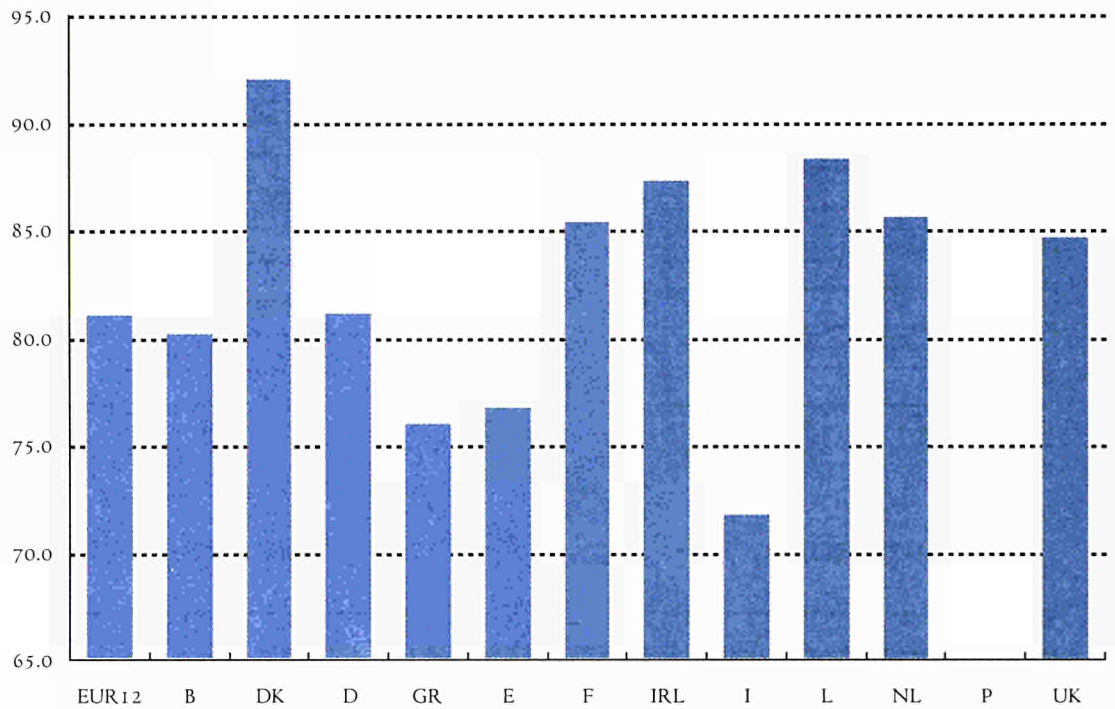
EVOLUTION OF  
PRODUCTION AND  
PRODUCER PRICE  
INDEXES  
(1990=100)

— Index of production  
— Producer price index

SOURCE:  eurostat

**FIGURE 3.2.4**

CAPACITY  
UTILISATION  
RATES BY  
MEMBER STATE,  
FOURTH QUARTER  
1995  
(%)



SOURCE: DG II -  
BUSINESS SURVEY

**TABLE 3.2.3**

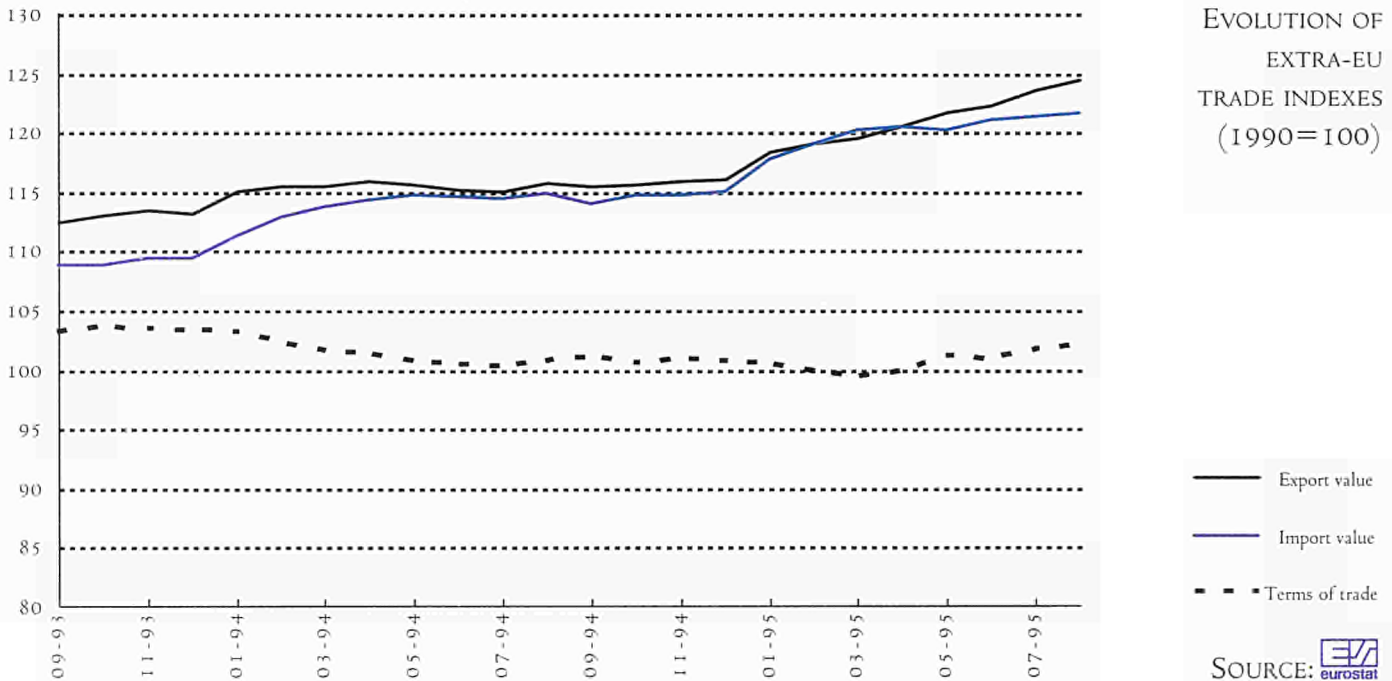
CAPACITY  
UTILISATION  
RATES BY  
MEMBER STATE  
(%)

	Annual growth rate: latest quarter, t/t-4	First quarter 1995	Second quarter 1995	Third quarter 1995	Fourth quarter 1995
EUR12	N/A	N/A	N/A	85.0	81.0
B	N/A	80.9	86.2	81.9	80.1
DK	N/A	90.0	85.0	91.0	92.0
D	N/A	83.8	87.4	87.3	81.1
GR	N/A	79.1	78.9	78.6	76.0
E	N/A	79.7	80.4	80.6	76.7
F	N/A	84.0	84.9	86.1	85.3
IRL	N/A	N/A	87.9	70.5	87.2
I	N/A	N/A	N/A	72.9	71.7
L	N/A	88.8	89.2	88.0	88.3
NL	N/A	86.0	88.0	87.8	85.6
P	N/A	N/A	N/A	N/A	N/A
UK	N/A	95.2	94.8	94.8	84.6

SOURCE: DG II -  
BUSINESS SURVEY

FIGURE 3.2.5

EVOLUTION OF  
EXTRA-EU  
TRADE INDEXES  
(1990=100)



SOURCE: eurostat

TABLE 3.2.4

QUARTERLY  
EXTRA-EU  
TRADE INDEXES  
(1990=100)

	Latest quarter available	Exports		Imports		Terms of trade index
		Value	Volume	Value	Volume	
EUR12	06-95 ⇔ 08-95	121.7	105.6	124.4	103.8	102.2
Growth rate, t/t-4 (%)		6.0	7.1	7.5	-7.3	1.4
B/L	06-95 ⇔ 08-95	112.6	126.6	116.3	131.8	103.1
Growth rate, t/t-4 (%)		7.6	14.9	13.7	-18.4	5.5
DK	06-95 ⇔ 08-95	121.1	101.7	126.0	83.1	104.1
Growth rate, t/t-4 (%)		13.5	-6.1	9.9	-17.1	-3.1
D	06-95 ⇔ 08-95	126.6	104.6	122.8	103.3	96.9
Growth rate, t/t-4 (%)		7.6	4.4	6.5	1.9	-1.0
GR	06-95 ⇔ 08-95	144.0	101.5	103.2	103.7	71.8
Growth rate, t/t-4 (%)		10.7	2.4	7.7	-13.1	-2.8
E	06-95 ⇔ 08-95	117.8	98.6	109.8	109.6	93.2
Growth rate, t/t-4 (%)		5.9	15.2	6.6	-12.4	0.7
F	06-95 ⇔ 08-95	121.1	110.2	125.9	102.4	104.0
Growth rate, t/t-4 (%)		2.4	10.7	5.6	-8.6	3.2
IRL	06-95 ⇔ 08-95	150.5	139.9	115.7	181.2	77.0
Growth rate, t/t-4 (%)		3.3	8.9	-6.5	-6.8	-9.5
I	06-95 ⇔ 08-95	126.4	92.1	126.3	117.9	100.0
Growth rate, t/t-4 (%)		11.1	6.3	4.0	11.6	-6.6
NL	06-95 ⇔ 08-95	114.4	109.4	122.0	104.6	106.6
Growth rate, t/t-4 (%)		4.6	4.0	18.6	-24.6	13.3
P	06-95 ⇔ 08-95	106.7	102.1	136.8	68.3	128.2
Growth rate, t/t-4 (%)		14.0	-12.6	23.2	-18.4	6.8
UK	06-95 ⇔ 08-95	119.5	102.8	134.1	87.0	112.2
Growth rate, t/t-4 (%)		0.9	7.3	6.5	-14.1	5.6

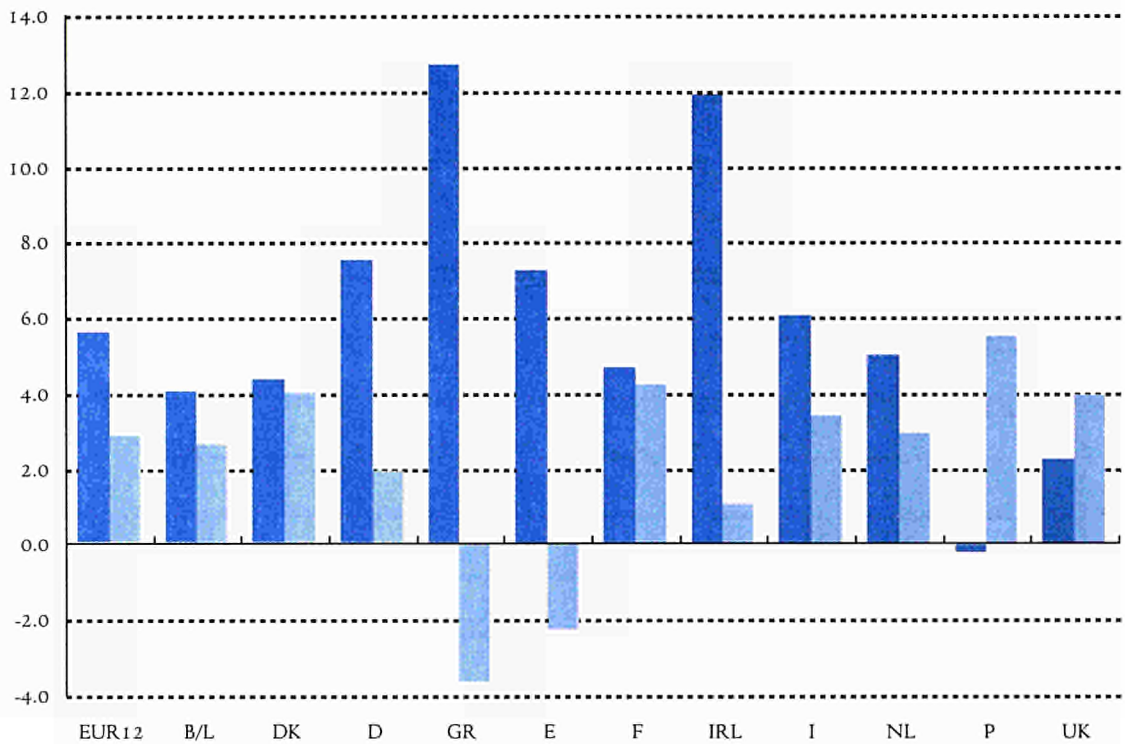
SOURCE: eurostat

**FIGURE 3.2.6**

ANNUAL GROWTH  
RATE OF  
EXTRA-EU TRADE  
INDEXES  
(%) (1)

■ Export value  
■ Import value

(1) Growth rates are based on the latest annual data available for each country. Please see the table below for the year concerned.



SOURCE: eurostat

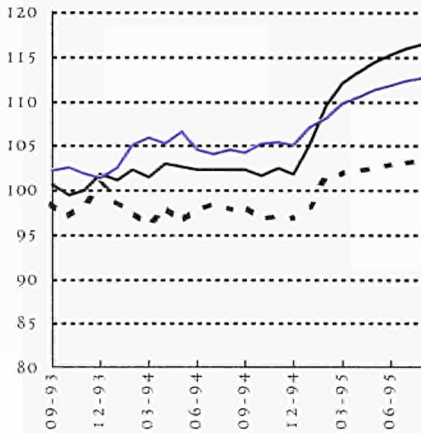
**TABLE 3.2.5**

ANNUAL  
EXTRA-EU  
TRADE INDEXES  
(1990=100)

	Latest year available	Exports Value	Exports Volume	Imports Value	Imports Volume	Terms of trade index
EUR12	1994	115.4	105.3	116.1	112.8	100.6
Growth rate, t/t-1 (%)		5.6	11.3	2.8	9.7	-2.5
B/L	1994	105.7	115.1	102.2	164.7	96.6
Growth rate, t/t-1 (%)		4.0	19.5	2.6	22.2	-1.4
DK	1994	107.6	111.7	117.6	94.0	109.2
Growth rate, t/t-1 (%)		4.4	1.4	4.0	12.0	-0.5
D	1994	118.9	102.6	115.3	101.6	96.9
Growth rate, t/t-1 (%)		7.5	6.8	1.9	10.7	-5.2
GR	1994	136.8	108.6	98.2	132.1	71.7
Growth rate, t/t-1 (%)		12.7	-9.3	-3.6	1.5	-14.5
E	1994	114.0	93.8	103.2	130.4	90.5
Growth rate, t/t-1 (%)		7.2	14.3	-2.3	10.0	-8.9
F	1994	118.0	109.1	118.9	116.8	100.7
Growth rate, t/t-1 (%)		4.7	13.1	4.2	8.7	-0.5
IRL	1994	146.8	131.3	123.8	190.5	84.3
Growth rate, t/t-1 (%)		11.9	3.6	1.1	15.6	-9.6
I	1994	114.0	101.3	122.2	111.9	107.1
Growth rate, t/t-1 (%)		6.0	4.9	3.4	5.8	-2.5
NL	1994	109.0	110.6	104.2	135.0	95.6
Growth rate, t/t-1 (%)		5.0	28.6	3.0	15.5	-1.9
P	1994	97.3	118.0	107.0	81.9	109.9
Growth rate, t/t-1 (%)		-0.2	4.5	5.5	-1.9	5.7
UK	1994	117.3	101.3	126.1	99.6	107.5
Growth rate, t/t-1 (%)		2.3	12.2	4.0	1.3	1.7

SOURCE: eurostat

BELGIQUE/BELGIË, LUXEMBOURG



DANMARK

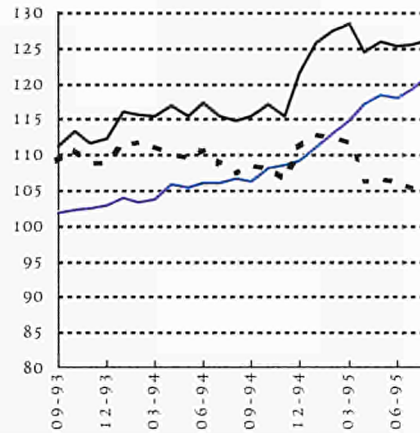
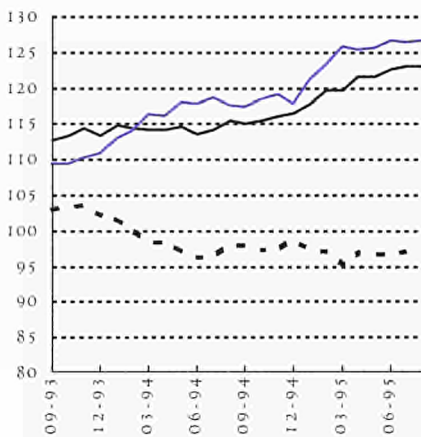


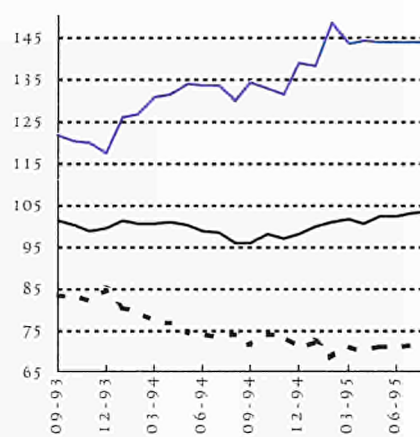
FIGURE 3.2.7

EVOLUTION OF  
EXTRA-EU  
TRADE INDEXES  
(1990=100)

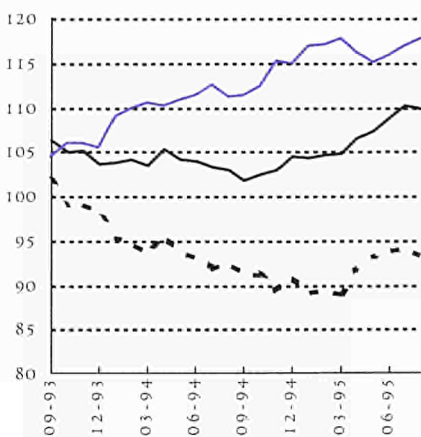
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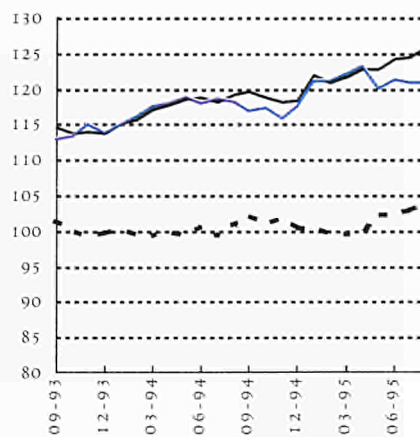
HELLAS



ESPAÑA



FRANCE

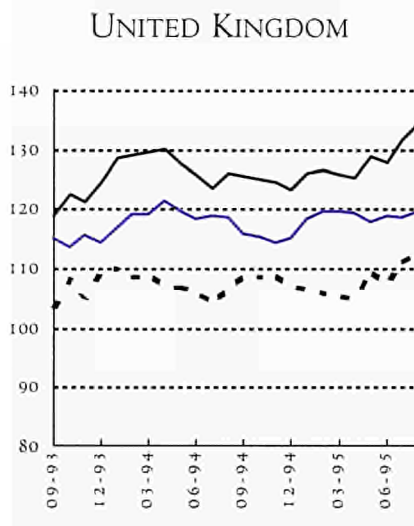
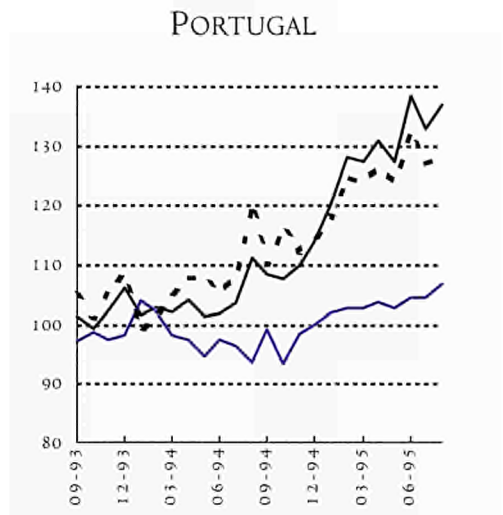
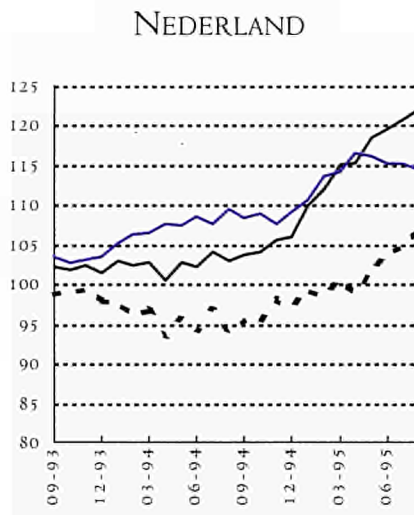
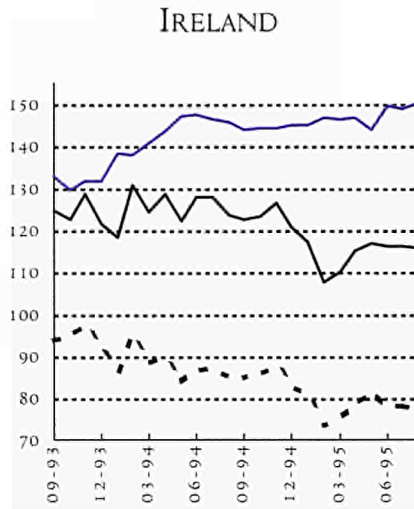


— Export value  
— Import value  
- - - Terms of trade

SOURCE:  eurostat

**FIGURE 3.2.7**

EVOLUTION OF  
EXTRA-EU  
TRADE INDEXES  
(1990=100)



— Export value  
— Import value  
- - Terms of trade

SOURCE:  eurostat

## IN BRIEF....

- ★ EUROPEAN GROWTH HAS BEGUN TO FALL MODERATELY SINCE THE SPRING AND THE DECREASE IN PRODUCTION IN VOLUME AMOUNTS TO 0.8% IN NOVEMBER 1995 IN RELATION TO NOVEMBER 1994
- ★ AT THE END OF MARCH 1995, ANNUAL GROWTH IN FRENCH TYRE PRODUCTION STOOD AT 7%, WITH CAPACITY UTILISATION HIGH AT AROUND 87%. IN NOVEMBER 1995, IT INCREASES BY 0.7% IN ANNUAL TERMS
- ★ EARLY 1995 SAW A RISE IN THE NUMBER OF JOBS IN EUROPE, PARTICULARLY IN THE UNITED KINGDOM, WHERE EMPLOYMENT WAS UP 10% ON THE PREVIOUS YEAR
- ★ IN ITALY, EXPORTS GREW AT AN ANNUAL RATE OF 16% IN THE THIRD QUARTER OF 1995
- ★ AN ACTIVE POLICY FOR THE RECYCLING OF PLASTICS HAS BEEN INTRODUCED IN EUROPE

It is useful to divide up this sector into two domains of production right from the start, i.e. the rubber industry on the one hand and plastics manufacturing on the other. We will consider first the rubber industry, which consists in processing hydrocarbon-based polymers and comprises two sub-sectors: the manufacture of tyres and tyre tubes and the production of rubber goods.

The main natural rubber producer is South-East Asia, which is also Europe's main supplier. Natural rubber is used chiefly in the manufacture of bus and lorry tyres, while the synthetic rubber produced by the chemical industry is used to manufacture rubber goods. Following an unexpected rise in the price of rubber in 1994, customers have begun to look around for new suppliers, particularly since the prices charged by Indonesia and Malaysia are more than 10% higher than in Vietnam and Gabon. The motor industry, which accounts for just over two-thirds of the demand for rubber goods, is the main outlet for this sub-sector.

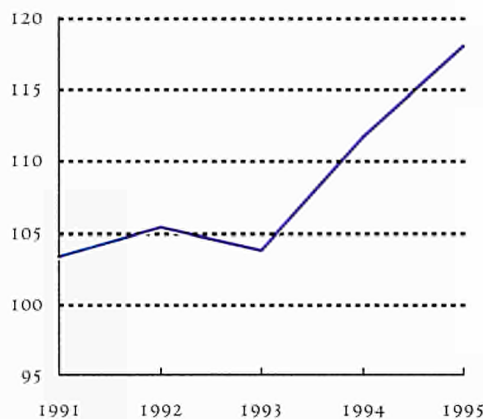
The tyre sector can be divided up into the new-vehicles market on the one hand and the spare-parts market on the other. The former generates intense competition among tyre producers due to the small number of customers, i.e. vehicle manufacturers. This tends to result in a downward pull on prices, narrower margins and restructuring and automation policies aimed at reducing production costs and homogenizing series. In addition, there is a direct link between demand for rubber and the demand for new motor vehicles. The market for spare parts, on the other hand, is far less competitive because its customers - e.g. private car owners, car-hire firms, hauliers - are more numerous and diverse. Tyre producers can therefore maintain their margins despite the fact that consumers are more demanding in terms of the quality and specifications of the range on offer.

RUBBER AND  
PLASTICSIN THIS  
SECTION:

Commentary	45
Structural indicators	49
Short-term indicators	52

**FIGURE 4.1.1**

EVOLUTION OF EU  
PRODUCTION IN  
CONSTANT PRICES  
(BILLION ECU)



SOURCE: DEBA GEIE

This is reflected not only in product differentiation and longer service life (particularly with the invention of the radial ply casing) but also in a change of strategy involving a recombination of the production factors, the gradual lowering of manpower costs and recourse to automation. In addition, the dynamism of R&D departments has led to the emergence of new plastics which can be used as a substitute for rubber, even if sales of plastic tyres have not lived up to expectations. Furthermore, although rubber products may lose out to their substitutes, they still serve as excellent replacements for metals in certain items of vehicle equipment, while composite materials based on

rubber and glass, metal or plastic have been developed in order to provide higher-quality car components and to satisfy customers.

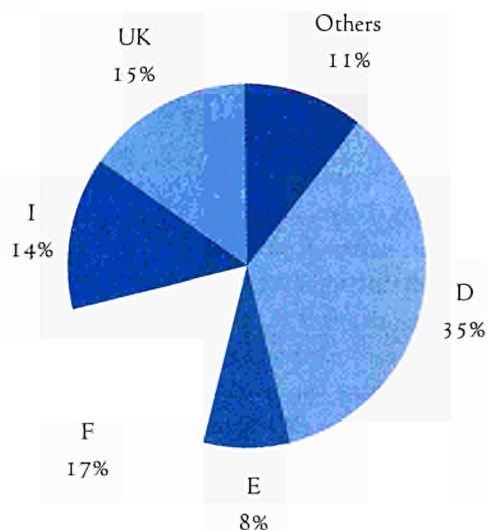
The tyre sector is characterized by a high degree of concentration. The world's three leading companies - Michelin (France), Bridgestone (Japan) and Goodyear (United States) - account for over 50% of sales, a phenomenon which is lent further impetus by acquisitions and alliances. In 1994, European, American and Japanese production amounted, respectively, to 200, 237 and 140 million units. In March 1995, annual growth in production was 7% in France and 3% in the United Kingdom. Since production was unable to keep pace with demand, the trade balance - while remaining in surplus - has narrowed substantially over the past five years. It is worth noting that extra-Community exports respond to cyclical factors and are dependent on overall economic activity, while extra-Community imports show a steady upward trend.

The rubber goods sector, which is dominated by small and medium-sized enterprises, is more highly specialized and tends more towards differentiation. Customers frequently have their own regular suppliers in order to obtain the product most closely tailored to their requirements, and this obviously serves to strengthen customer-supplier links.

The plastics manufacturing sector, which is well placed for discovering new materials and new outlets, was hit very hard by the recession. This was reflected in substantial losses for European businesses, particularly since the decline in consumption triggered a fall in prices. However, future developments in this sector also depend on the introduction of European standards and on the recycling policy to be adopted. Producers' willingness to take genuine ecological measures and the greater share of plastics in the overall composition of motor vehicles should provide a boost for consumption, even if investment is directed more towards recycling the materials used and reducing packaging.

**FIGURE 4.1.2**

SHARE OF  
VALUE-ADDED AT  
FACTOR COST BY  
MEMBER STATE,  
1995  
(%)



SOURCE: DEBA GEIE



Employment over the industry as a whole fell by less than 1% in 1994 compared with almost 5% in 1993. In France, the average annual growth in employment was +1% between October 1994 and June 1995, while Spain recorded steady annual growth of 4%. The picture in the UK was considerably brighter, with employment growing in annual terms by as much as 10% at the beginning of 1995. Moreover, in April 1995 capacity utilisation stood at 87% in France and 84% in the United Kingdom and Germany, while labour costs remained steady. Finally, the EU employment rises by 1.7% in 1995.

Germany is the leading European producer with 33% of production, followed by France (18%), Italy (16%) and the United Kingdom (15%). Production and consumption rose by 8% in 1994. In relation to October 1994, production in volume fell by 0.8% for the EU, 5.2% in Germany, 1.1% in Italy, remained steady in both Spain and France and increased by nearly 2% in the United Kingdom. Eventually, in 1995 and in constant prices, the rubbers and plastics EU production grew by 7.7% in 1994 and 5.6% in 1995 that is to say +2.8% in Germany, 6.4 in France and 11.6 in Italy.

The surplus on the trade balance continued its slow but steady erosion, although the balance improved in May 1995, since exports grew faster than imports. In the third quarter of 1995, German exports grew at an annual rate of 8% as against 9% for imports, while in the United Kingdom and Italy the corresponding figures were 6% and -3% and 16% and 5% respectively.

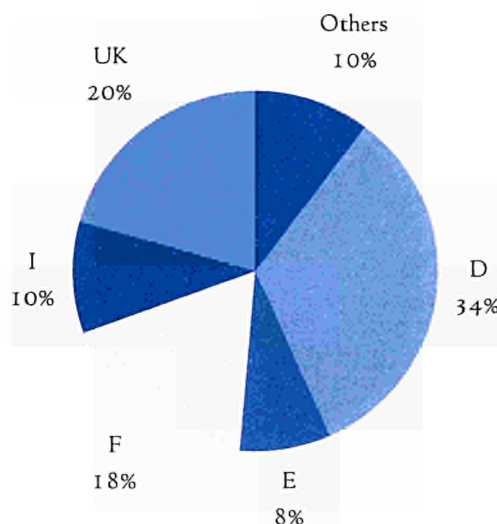


FIGURE 4.1.3

SHARE OF  
NUMBER OF  
EMPLOYEES BY  
MEMBER STATE,  
1995  
(%)

SOURCE: DEBA GEIE

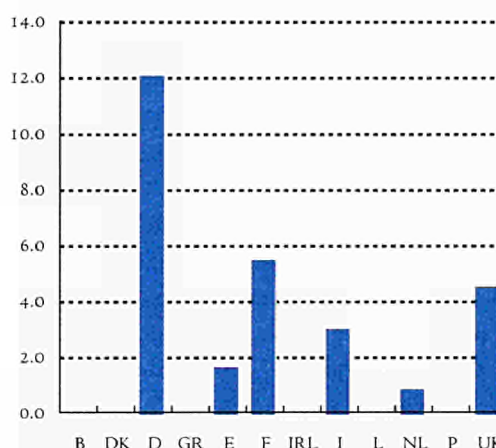


FIGURE 4.1.4

LABOUR COSTS BY  
MEMBER STATE,  
1994  
(BILLION ECU)

SOURCE: DEBA GEIE

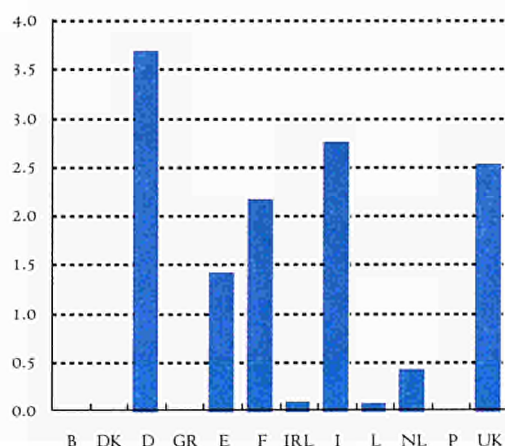


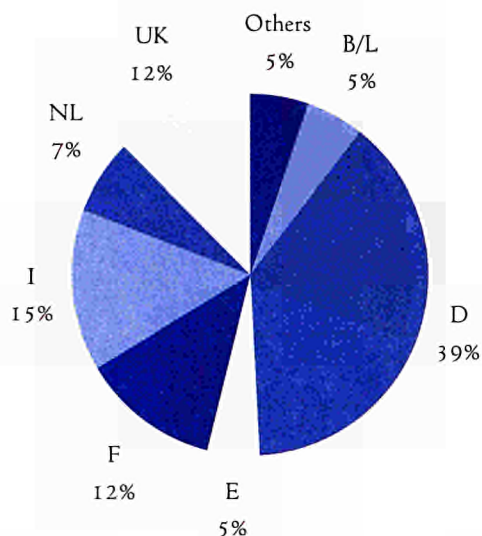
FIGURE 4.1.5

GROSS  
OPERATING  
SURPLUS BY  
MEMBER STATE,  
1994  
(BILLION ECU)

SOURCE: DEBA GEIE

**FIGURE 4.1.6**

SHARE OF  
EXTRA-EU  
EXPORTS BY  
MEMBER STATE,  
1994  
(%)

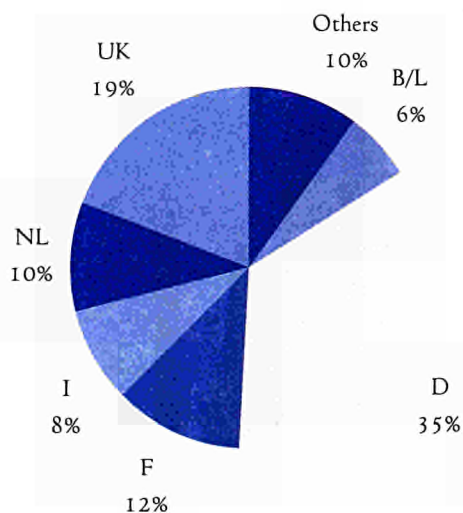


SOURCE:  eurostat

Over the sector as a whole, European production in 1994 stood at ECU 113 billion compared with ECU 95 billion for the United States and ECU 111 billion for Japan. The United States is the leading tyre producer, but takes second place to Japan in the production of plastics. While Asia used to be the main outlet for European and US production and would absorb any surplus capacities, the roles are currently being reversed. Japan and the Asian NICs have become net exporters while Asia has dislodged the United States as Europe's main trading partner.

**FIGURE 4.1.7**

SHARE OF  
EXTRA-EU  
IMPORTS BY  
MEMBER STATE,  
1994  
(%)



SOURCE:  eurostat

TABLE 4.1.1

	1991	t/t-1 (%)	1992	t/t-1 (%)	1993	t/t-1 (%)	1994	t/t-1 (%)	1995	t/t-1 (%)
<b>EUR 12</b>	41,622	6.6	42,954	3.2	41,559	-3.2	44,540	7.2	49,161	10.4
<b>B</b>	1,205	9.0	1,333	10.6	1,207	-9.5	1,343	11.3	1,551	15.5
share (%)	2.9		3.1		2.9		3.0		3.2	
<b>DK</b>	665	3.6	747	12.4	737	-1.3	833	12.9	933	12.0
share (%)	1.6		1.7		1.8		1.9		1.9	
<b>D</b>	15,039	8.5	15,394	2.4	15,393	0.0	15,891	3.2	17,415	9.6
share (%)	36.1		35.8		37.0		35.7		35.4	
<b>GR</b>	144	-1.6	162	11.8	166	2.6	182	9.7	168	-7.5
share (%)	0.3		0.4		0.4		0.4		0.3	
<b>E</b>	3,429	10.4	3,516	2.5	3,006	-14.5	3,179	5.8	3,727	17.2
share (%)	8.2		8.2		7.2		7.1		7.6	
<b>F</b>	6,990	8.0	7,313	4.6	7,281	-0.4	7,765	6.7	8,544	10.0
share (%)	16.8		17.0		17.5		17.4		17.4	
<b>IRL</b>	270	8.0	294	8.9	279	-5.0	311	11.5	336	8.1
share (%)	0.6		0.7		0.7		0.7		0.7	
<b>I</b>	5,684	6.1	5,627	-1.0	5,185	-7.9	5,876	13.3	6,814	16.0
share (%)	13.7		13.1		12.5		13.2		13.9	
<b>L</b>	236	-2.0	263	11.6	260	-1.0	298	14.6	327	9.6
share (%)	0.6		0.6		0.6		0.7		0.7	
<b>NL</b>	1,314	5.4	1,361	3.6	1,341	-1.5	1,407	4.9	1,575	11.9
share (%)	3.2		3.2		3.2		3.2		3.2	
<b>P</b>	231	5.1	269	16.4	246	-8.5	260	5.6	303	16.6
share (%)	0.6		0.6		0.6		0.6		0.6	
<b>UK</b>	6,416	0.3	6,676	4.1	6,459	-3.3	7,197	11.4	7,468	3.8
share (%)	15.4		15.5		15.5		16.2		15.2	

VALUE-ADDED AT  
FACTOR COST BY  
MEMBER STATE  
(MILLION ECU)

SOURCE: DEBA GEIE

TABLE 4.1.2

	1991	t/t-1 (%)	1992	t/t-1 (%)	1993	t/t-1 (%)	1994	t/t-1 (%)	1995	t/t-1 (%)
<b>EUR 12</b>	114,434	4.7	117,271	2.5	113,272	-3.4	121,597	7.3	134,674	10.8
<b>B</b>	3,676	3.4	4,066	10.6	3,691	-9.2	4,088	10.8	4,721	15.5
share (%)	3.2		3.5		3.3		3.4		3.5	
<b>DK</b>	1,603	3.0	1,704	6.3	1,665	-2.3	1,867	12.2	2,091	12.0
share (%)	1.4		1.5		1.5		1.5		1.6	
<b>D</b>	40,122	9.0	41,175	2.6	40,572	-1.5	41,827	3.1	45,814	9.5
share (%)	35.1		35.1		35.8		34.4		34.0	
<b>GR</b>	612	-1.1	623	1.8	613	-1.5	639	4.2	594	-7.1
share (%)	0.5		0.5		0.5		0.5		0.4	
<b>E (1)</b>	8,276	4.6	8,326	0.6	7,029	-15.6	7,332	4.3	8,612	17.5
share (%)	7.2		7.1		6.2		6.0		6.4	
<b>F</b>	19,451	3.6	20,233	4.0	19,974	-1.3	21,337	6.8	23,738	11.3
share (%)	17.0		17.3		17.6		17.5		17.6	
<b>IRL</b>	772	14.8	847	9.7	813	-4.0	913	12.3	995	9.0
share (%)	0.7		0.7		0.7		0.8		0.7	
<b>I</b>	17,742	2.2	17,673	-0.4	16,357	-7.4	18,601	13.7	21,595	16.1
share (%)	15.5		15.1		14.4		15.3		16.0	
<b>L</b>	727	-1.1	812	11.7	804	-1.0	921	14.5	1,009	9.6
share (%)	0.6		0.7		0.7		0.8		0.7	
<b>NL</b>	4,073	4.0	4,138	1.6	N/A	N/A	N/A	N/A	N/A	N/A
share (%)	3.6		3.5		N/A		N/A		N/A	
<b>P</b>	768	-1.8	818	6.5	748	-8.6	780	4.3	904	16.0
share (%)	0.7		0.7		0.7		0.6		0.7	
<b>UK</b>	16,612	0.2	16,858	1.5	16,903	0.3	18,917	11.9	19,667	4.0
share (%)	14.5		14.4		14.9		15.6		14.6	

TURNOVER IN  
CURRENT PRICES  
BY MEMBER STATE  
(MILLION ECU)

SOURCE: DEBA GEIE

**TABLE 4.1.3**

NUMBER OF  
EMPLOYEES BY  
MEMBER STATE  
(THOUSANDS)

	1991	t/t-1 (%)	1992	t/t-1 (%)	1993	t/t-1 (%)	1994	t/t-1 (%)	1995	t/t-1 (%)
<b>EUR 12</b>	1,139	-0.1	1,113	-2.3	1,059	-4.8	1,054	-0.5	1,072	1.7
<b>B</b>	26	-0.6	26	0.1	24	-7.7	23	-1.9	24	1.9
share (%)	2.3		2.3		2.2		2.2		2.2	
<b>DK</b>	16	0.0	16	3.2	16	-2.3	N/A	N/A	N/A	N/A
share (%)	1.4		1.5		1.5		N/A		N/A	
<b>D</b>	395	2.9	384	-2.9	360	-6.3	348	-3.2	355	1.9
share (%)	34.7		34.5		34.0		33.0		33.1	
<b>GR</b>	8	-7.9	8	-2.8	8	-2.0	9	12.3	8	-7.9
share (%)	0.7		0.7		0.8		0.9		0.8	
<b>E</b>	100	0.4	92	-7.6	82	-11.5	82	0.1	84	3.2
share (%)	8.8		8.3		7.7		7.8		7.9	
<b>F</b>	194	0.8	192	-0.8	187	-3.0	188	1.0	191	1.5
share (%)	17.0		17.3		17.6		17.9		17.9	
<b>IRL</b>	9	4.0	8	-1.5	8	-1.6	9	3.6	9	5.8
share (%)	0.8		0.8		0.8		0.8		0.8	
<b>I</b>	136	-1.2	130	-4.5	124	-4.5	116	-6.0	112	-3.6
share (%)	11.9		11.7		11.7		11.0		10.5	
<b>L</b>	5	-1.2	5	-2.9	5	-3.8	5	-1.9	5	1.9
share (%)	0.5		0.5		0.5		0.5		0.5	
<b>NL</b>	32	2.8	33	1.7	32	-2.0	31	-2.9	N/A	N/A
share (%)	2.8		2.9		3.0		2.9		N/A	
<b>P</b>	18	-6.5	19	5.2	16	-12.6	16	-3.0	N/A	N/A
share (%)	1.5		1.7		1.5		1.5		N/A	
<b>UK</b>	201	-5.2	199	-0.8	198	-0.6	211	6.4	220	4.0
share (%)	17.6		17.9		18.7		20.0		20.5	

SOURCE: DEBA GEIE

**TABLE 4.1.4**

LABOUR COSTS BY  
MEMBER STATE  
(MILLION ECU)

	1991	t/t-1 (%)	1992	t/t-1 (%)	1993	t/t-1 (%)	1994	t/t-1 (%)	1995	t/t-1 (%)
<b>EUR 12</b>	28,863	5.8	30,042	4.1	29,576	-1.6	30,129	1.9	N/A	N/A
<b>B</b>	751	4.5	774	3.1	745	-3.7	N/A	N/A	N/A	N/A
share (%)	2.6		2.6		2.5		N/A		N/A	
<b>DK</b>	437	3.2	474	8.5	483	1.9	N/A	N/A	N/A	N/A
share (%)	1.5		1.6		1.6		N/A		N/A	
<b>D</b>	11,053	7.1	11,743	6.2	12,185	3.8	12,178	-0.1	N/A	N/A
share (%)	38.3		39.1		41.2		40.4		N/A	
<b>GR</b>	109	-2.7	111	1.2	118	6.3	N/A	N/A	N/A	N/A
share (%)	0.4		0.4		0.4		N/A		N/A	
<b>E</b>	2,089	5.5	2,139	2.4	1,784	-16.6	1,740	-2.4	N/A	N/A
share (%)	7.2		7.1		6.0		5.8		N/A	
<b>F</b>	5,012	4.8	5,266	5.1	5,318	1.0	5,572	4.8	N/A	N/A
share (%)	17.4		17.5		18.0		18.5		N/A	
<b>IRL</b>	172	7.3	185	7.1	179	-3.4	192	7.6	N/A	N/A
share (%)	0.6		0.6		0.6		0.6		N/A	
<b>I</b>	3,866	5.9	3,840	-0.7	3,283	-14.5	3,087	-6.0	N/A	N/A
share (%)	13.4		12.8		11.1		10.2		N/A	
<b>L</b>	183	6.4	192	5.1	195	1.5	197	0.8	209	6.1
share (%)	0.6		0.6		0.7		0.7		N/A	
<b>NL</b>	839	6.8	901	7.4	946	5.1	958	1.2	N/A	N/A
share (%)	2.9		3.0		3.2		3.2		N/A	
<b>P</b>	144	7.2	179	24.6	154	-13.8	N/A	N/A	N/A	N/A
share (%)	0.5		0.6		0.5		N/A		N/A	
<b>UK</b>	4,208	4.0	4,239	0.7	4,186	-1.2	4,637	10.8	4,725	1.9
share (%)	14.6		14.1		14.2		15.4		N/A	

SOURCE: DEBA GEIE

TABLE 4.1.5

EXTRA-EU  
EXPORTS BY  
MEMBER STATE  
(MILLION ECU)

	1990	t/t-1 (%)	1991	t/t-1 (%)	1992	t/t-1 (%)	1993	t/t-1 (%)	1994	t/t-1 (%)
EUR 12	10,498	-0.7	10,738	2.3	11,256	4.8	12,312	9.4	13,827	12.3
B/L	550	-0.3	534	-2.9	556	4.2	627	12.7	728	16.2
share (%)	5.2		5.0		4.9		5.1		5.3	
DK	477	1.0	453	-5.1	455	0.5	443	-2.5	487	9.9
share (%)	4.5		4.2		4.0		3.6		3.5	
D	3,922	1.1	4,140	5.6	4,360	5.3	4,702	7.8	5,349	13.8
share (%)	37.4		38.6		38.7		38.2		38.7	
GR	34	6.5	38	11.7	54	40.2	76	42.3	89	16.9
share (%)	0.3		0.4		0.5		0.6		0.6	
E	554	-6.4	550	-0.7	524	-4.8	542	3.5	626	15.4
share (%)	5.3		5.1		4.7		4.4		4.5	
F	1,447	-3.9	1,449	0.1	1,479	2.1	1,597	8.0	1,703	6.7
share (%)	13.8		13.5		13.1		13.0		12.3	
IRL	69	-13.6	71	3.8	73	2.1	91	25.5	101	10.9
share (%)	0.7		0.7		0.6		0.7		0.7	
I	1,465	-3.7	1,481	1.1	1,578	6.6	1,783	13.0	2,055	15.2
share (%)	13.9		13.8		14.0		14.5		14.9	
NL	576	6.5	591	2.5	705	19.3	845	19.9	966	14.3
share (%)	5.5		5.5		6.3		6.9		7.0	
P	51	6.9	47	-8.0	55	16.8	47	-14.4	49	3.8
share (%)	0.5		0.4		0.5		0.4		0.4	
UK	1,353	0.0	1,383	2.2	1,419	2.5	1,558	9.8	1,673	7.4
share (%)	12.9		12.9		12.6		12.7		12.1	

SOURCE:  eurostat

TABLE 4.1.6

EXTRA-EU  
IMPORTS BY  
MEMBER STATE  
(MILLION ECU)

	1990	t/t-1 (%)	1991	t/t-1 (%)	1992	t/t-1 (%)	1993	t/t-1 (%)	1994	t/t-1 (%)
EUR 12	7,346	5.4	8,258	12.4	8,939	8.2	9,260	3.6	10,678	15.3
B/L	481	4.7	536	11.5	583	8.7	536	-8.0	641	19.6
share (%)	6.5		6.5		6.5		5.8		6.0	
DK	292	0.9	303	3.7	300	-0.8	310	3.4	356	14.8
share (%)	4.0		3.7		3.4		3.4		3.3	
D	2,401	9.6	2,893	20.5	3,163	9.3	3,313	4.7	3,698	11.6
share (%)	32.7		35.0		35.4		35.8		34.6	
GR	86	-1.6	100	16.2	104	3.8	115	10.9	118	2.8
share (%)	1.2		1.2		1.2		1.2		1.1	
E	210	15.1	256	21.9	315	23.1	266	-15.3	314	17.8
share (%)	2.9		3.1		3.5		2.9		2.9	
F	901	5.4	987	9.6	1,035	4.9	1,113	7.5	1,244	11.7
share (%)	12.3		12.0		11.6		12.0		11.6	
IRL	90	-1.2	103	13.9	129	25.4	148	14.6	178	20.9
share (%)	1.2		1.2		1.4		1.6		1.7	
I	673	0.3	733	9.0	818	11.6	783	-4.3	902	15.2
share (%)	9.2		8.9		9.2		8.5		8.5	
NL	665	13.4	777	16.9	854	9.9	858	0.4	1,087	26.8
share (%)	9.1		9.4		9.6		9.3		10.2	
P	49	15.6	58	17.8	65	13.0	79	20.8	98	25.2
share (%)	0.7		0.7		0.7		0.8		0.9	
UK	1,501	-1.2	1,514	0.9	1,573	4.0	1,738	10.5	2,040	17.4
share (%)	20.4		18.3		17.6		18.8		19.1	

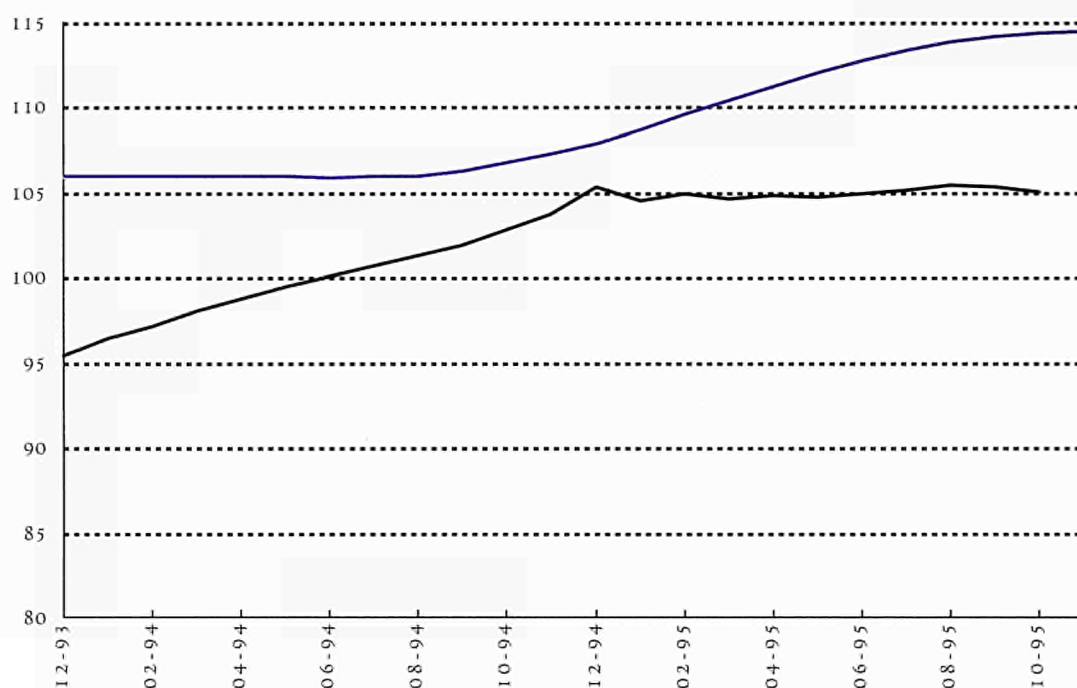
SOURCE:  eurostat

**FIGURE 4.2.1**

EVOLUTION OF  
EUR15  
PRODUCTION AND  
PRODUCER PRICE  
INDEXES  
(1990=100)

— Index of production  
— Producer price index

SOURCE: 



**TABLE 4.2.1**

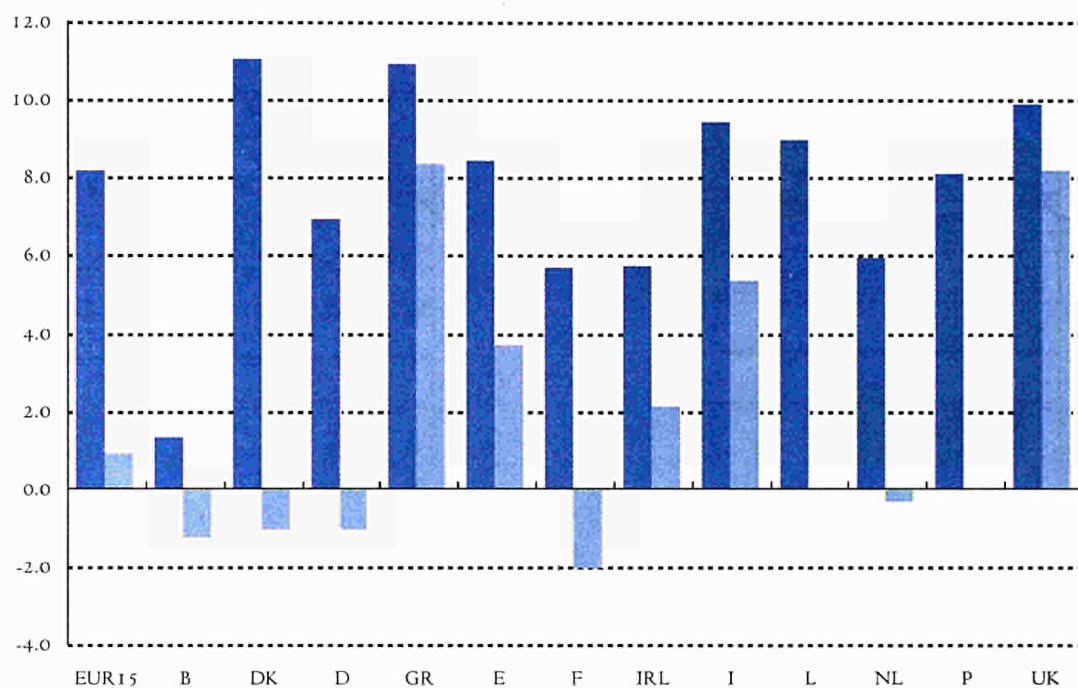
QUARTERLY  
AND ANNUAL  
PRODUCTION  
INDEXES  
(1990=100)  
(1)

(1) Annual growth rates are based on the latest annual data. Only when data to October is available will an annual estimate for the year be made.

SOURCE: 

	Latest quarter available	Index	Quarterly t/t-4 (%)	Index	Annual t/t-1 (%)
EUR15	08-95 ⇔ 10-95	105.0	2.2	102.7	8.2
B	02-95 ⇔ 04-95	103.5	0.8	102.1	1.3
DK	09-95 ⇔ 11-95	108.5	-3.6	111.5	11.1
D	09-95 ⇔ 11-95	92.9	-4.8	96.9	6.9
GR	08-95 ⇔ 10-95	85.2	-10.4	97.8	10.9
E	09-95 ⇔ 11-95	112.3	5.9	103.2	8.4
F	09-95 ⇔ 11-95	105.0	2.8	102.4	5.7
IRL	10-92 ⇔ 12-92	104.1	4.5	104.4	5.7
I	08-95 ⇔ 10-95	111.7	3.8	107.7	9.4
L	04-95 ⇔ 06-95	94.1	7.5	90.6	9.0
NL	08-95 ⇔ 10-95	104.0	1.5	102.6	5.9
P	06-95 ⇔ 08-95	103.6	6.7	96.8	8.1
UK	09-95 ⇔ 11-95	114.2	2.8	109.8	9.9

FIGURE 4.2.2



ANNUAL GROWTH  
RATE OF EU  
PRODUCTION  
AND PRODUCER  
PRICE  
INDEXES  
(%) (1)

■ Production  
■ Producer prices

(1) Growth rates are based on the latest annual data available for each country. Please see the table below for the year concerned.

SOURCE: eurostat

	Latest quarter available	Quarterly		Annual	
		Index	t/t-4 (%)	Index	t/t-1 (%)
EUR15	09-95 ⇔ 11-95	114.4	6.7	106.7	0.9
B	08-95 ⇔ 10-95	101.1	2.9	98.3	-1.3
DK	09-95 ⇔ 11-95	103.5	6.2	96.4	-1.1
D	09-95 ⇔ 11-95	106.1	3.3	102.5	-1.0
GR	08-95 ⇔ 10-95	169.9	9.5	154.8	8.3
E	09-95 ⇔ 11-95	118.8	6.9	110.7	3.7
F	09-95 ⇔ 11-95	101.3	3.3	97.6	-2.0
IRL	12-94 ⇔ 02-95	110.6	8.8	103.8	2.1
I	09-95 ⇔ 11-95	134.9	15.2	115.7	5.3
L	⇔	N/A	N/A	N/A	N/A
NL	09-95 ⇔ 11-95	108.4	5.8	101.8	-0.3
P	⇔	N/A	N/A	N/A	N/A
UK	10-95 ⇔ 12-95	120.6	7.9	119.7	8.2

TABLE 4.2.2

QUARTERLY  
AND ANNUAL  
PRODUCER PRICE  
INDEXES  
(1990=100)  
(1)

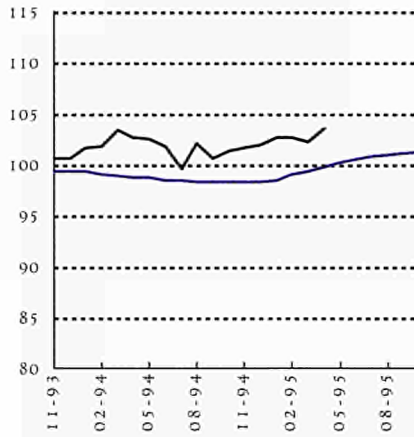
(1) Annual growth rates are based on the latest annual data. Only when data to October is available will an annual estimate for the year be made.

SOURCE: eurostat

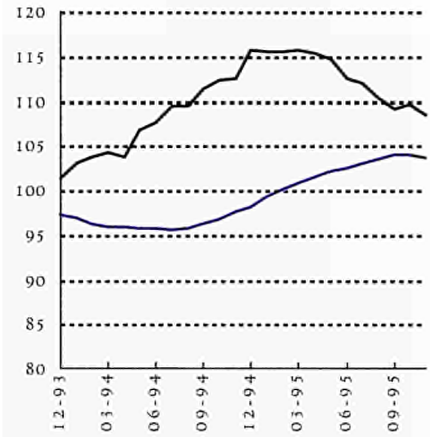
**FIGURE 4.2.3**

EVOLUTION OF  
PRODUCTION AND  
PRODUCER PRICE  
INDEXES  
(1990=100)

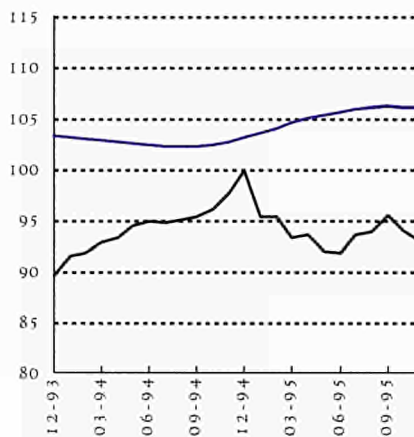
**BELGIQUE/BELGIË**



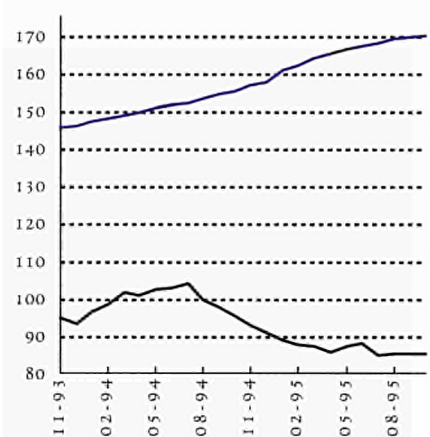
**DANMARK**



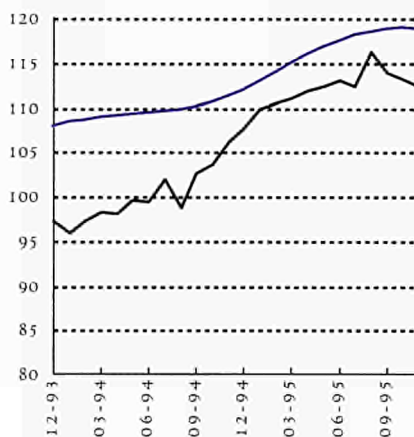
**DEUTSCHLAND**



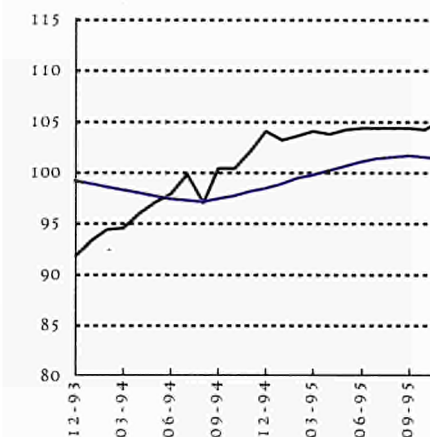
**HELLAS**



**ESPAÑA**



**FRANCE**



— Index of production

— Producer price index

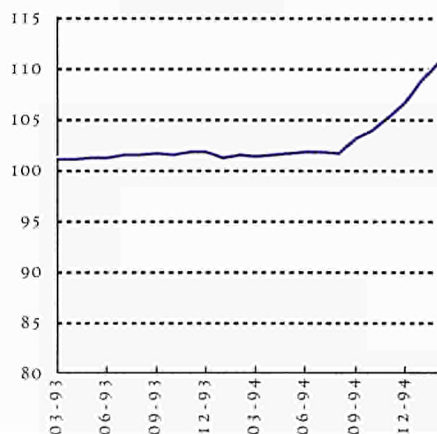
SOURCE: eurostat



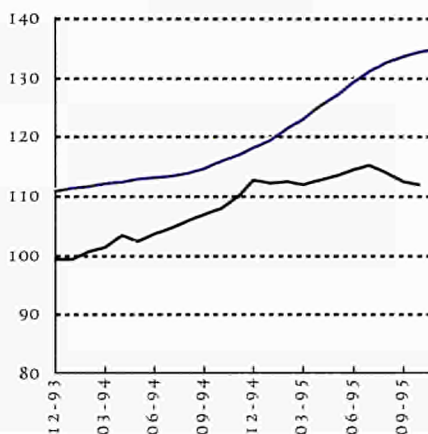
FIGURE 4.2.3

EVOLUTION OF  
PRODUCTION AND  
PRODUCER PRICE  
INDEXES  
(1990=100)

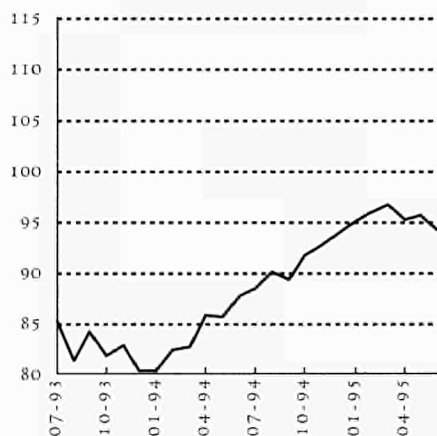
IRELAND



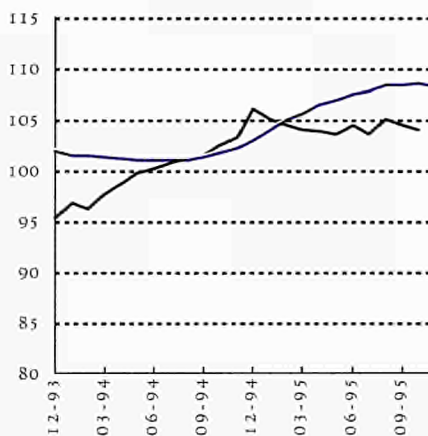
ITALIA



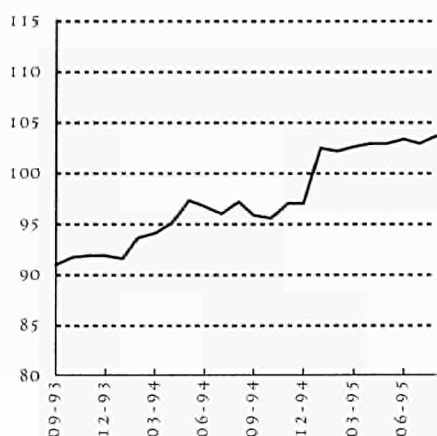
LUXEMBOURG



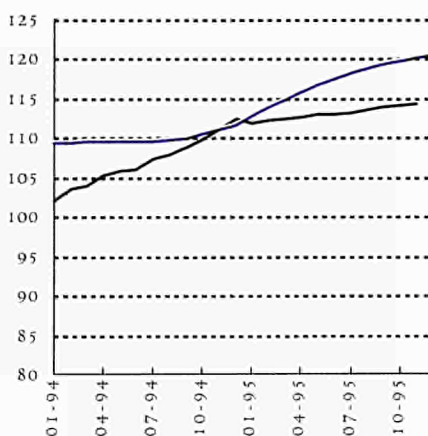
NEDERLAND



PORTUGAL



UNITED KINGDOM

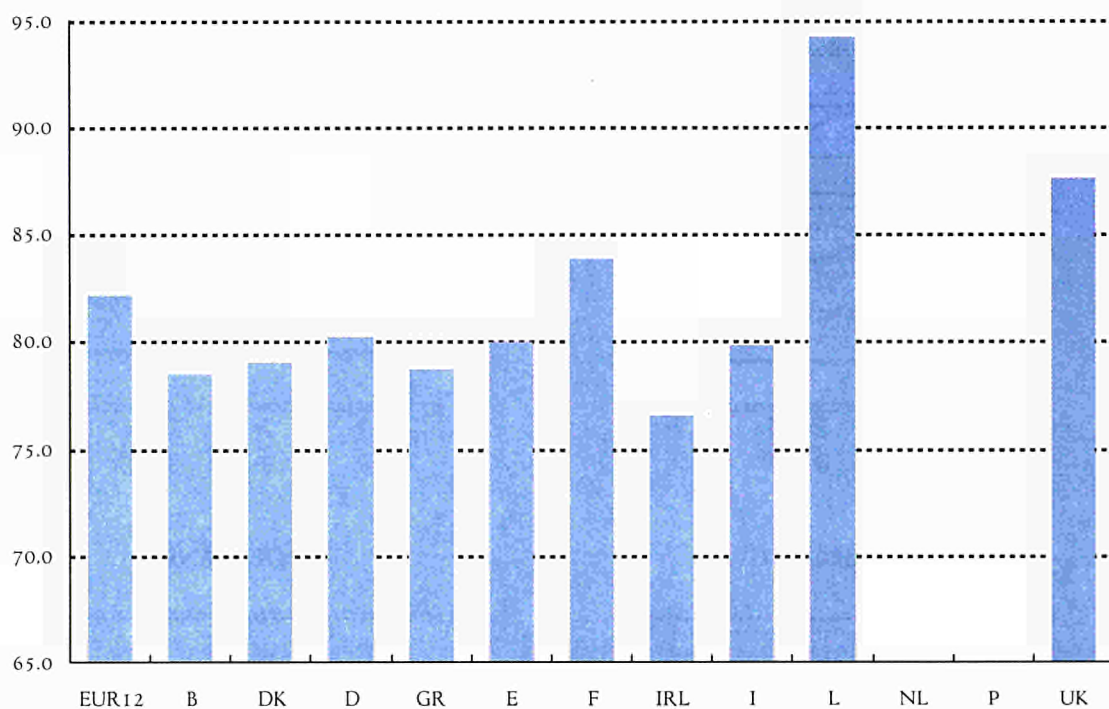


— Index of production  
— Producer price index

SOURCE:  eurostat

**FIGURE 4.2.4**

CAPACITY  
UTILISATION  
RATES BY  
MEMBER STATE,  
FOURTH QUARTER  
1995  
(%)



SOURCE: DG II -  
BUSINESS SURVEY

**TABLE 4.2.3**

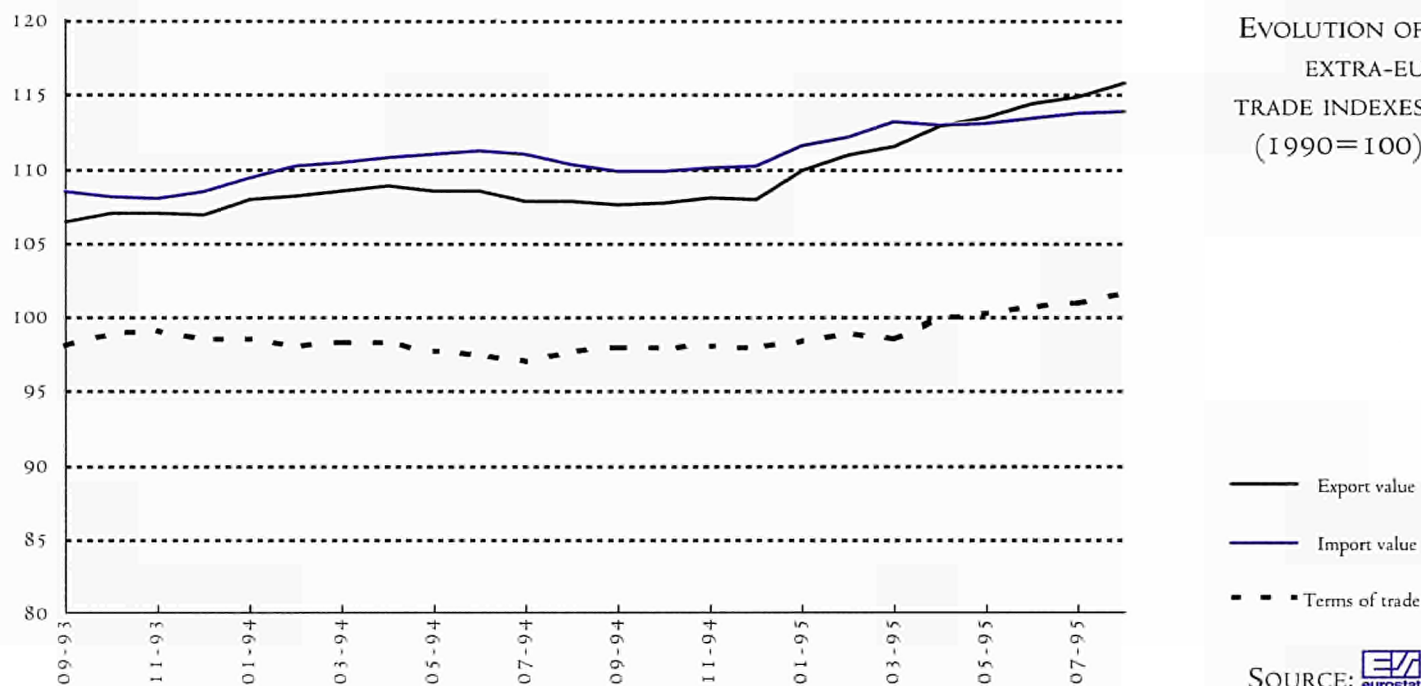
CAPACITY  
UTILISATION  
RATES BY  
MEMBER STATE  
(%)

	Annual growth rate: latest quarter, t/t-4	First quarter 1995	Second quarter 1995	Third quarter 1995	Fourth quarter 1995
EUR12	N/A	N/A	N/A	84.5	82.1
B	N/A	N/A	82.9	82.0	78.4
DK	N/A	83.0	80.0	79.0	79.0
D	N/A	82.9	83.5	82.4	80.2
GR	N/A	83.5	79.4	78.9	78.7
E	N/A	78.6	81.3	75.0	80.0
F	N/A	84.7	86.9	86.8	83.8
IRL	N/A	N/A	74.5	65.7	76.5
I	N/A	N/A	N/A	82.6	79.8
L	N/A	92.0	92.9	92.3	94.2
NL	N/A	N/A	N/A	N/A	N/A
P	N/A	N/A	N/A	N/A	N/A
UK	N/A	92.3	84.3	92.7	87.6

SOURCE: DG II -  
BUSINESS SURVEY

FIGURE 4.2.5

EVOLUTION OF  
EXTRA-EU  
TRADE INDEXES  
(1990=100)



SOURCE: eurostat

	Latest quarter available	Exports		Imports		Terms of trade index
		Value	Volume	Value	Volume	
EUR 12	06-95 ⇔ 08-95	113.9	133.5	115.8	112.5	101.6
Growth rate, t/t-4 (%)		3.3	3.5	7.4	-5.3	4.0
B/L	06-95 ⇔ 08-95	114.6	125.8	111.6	104.7	97.3
Growth rate, t/t-4 (%)		4.7	11.4	10.3	-17.2	5.2
DK	06-95 ⇔ 08-95	110.5	119.2	112.9	89.9	102.2
Growth rate, t/t-4 (%)		9.1	7.5	12.6	-9.0	3.2
D	06-95 ⇔ 08-95	120.7	132.4	120.4	124.7	99.7
Growth rate, t/t-4 (%)		7.8	-3.2	8.1	2.5	0.2
GR	06-95 ⇔ 08-95	117.8	120.3	96.5	227.4	81.9
Growth rate, t/t-4 (%)		6.2	-6.1	8.7	-6.9	2.3
E	06-95 ⇔ 08-95	106.7	175.6	106.1	110.2	99.5
Growth rate, t/t-4 (%)		0.0	28.4	6.8	2.3	6.8
F	06-95 ⇔ 08-95	112.8	127.5	115.9	93.8	102.7
Growth rate, t/t-4 (%)		2.6	8.6	4.4	-12.7	1.8
IRL	06-95 ⇔ 08-95	97.5	202.6	101.0	132.8	103.7
Growth rate, t/t-4 (%)		-0.4	-2.5	-9.1	12.8	-8.6
I	06-95 ⇔ 08-95	104.3	138.2	114.3	131.6	109.6
Growth rate, t/t-4 (%)		2.8	17.2	11.0	7.0	7.9
NL	06-95 ⇔ 08-95	111.1	142.0	123.5	122.1	111.2
Growth rate, t/t-4 (%)		-1.1	-4.8	10.7	-28.4	12.0
P	06-95 ⇔ 08-95	103.4	211.4	113.3	96.3	109.5
Growth rate, t/t-4 (%)		1.1	30.8	9.6	32.5	8.3
UK	06-95 ⇔ 08-95	111.3	129.2	106.4	92.2	95.6
Growth rate, t/t-4 (%)		-2.1	6.0	1.6	-14.3	3.8

TABLE 4.2.4

QUARTERLY  
EXTRA-EU  
TRADE INDEXES  
(1990=100)

SOURCE: eurostat

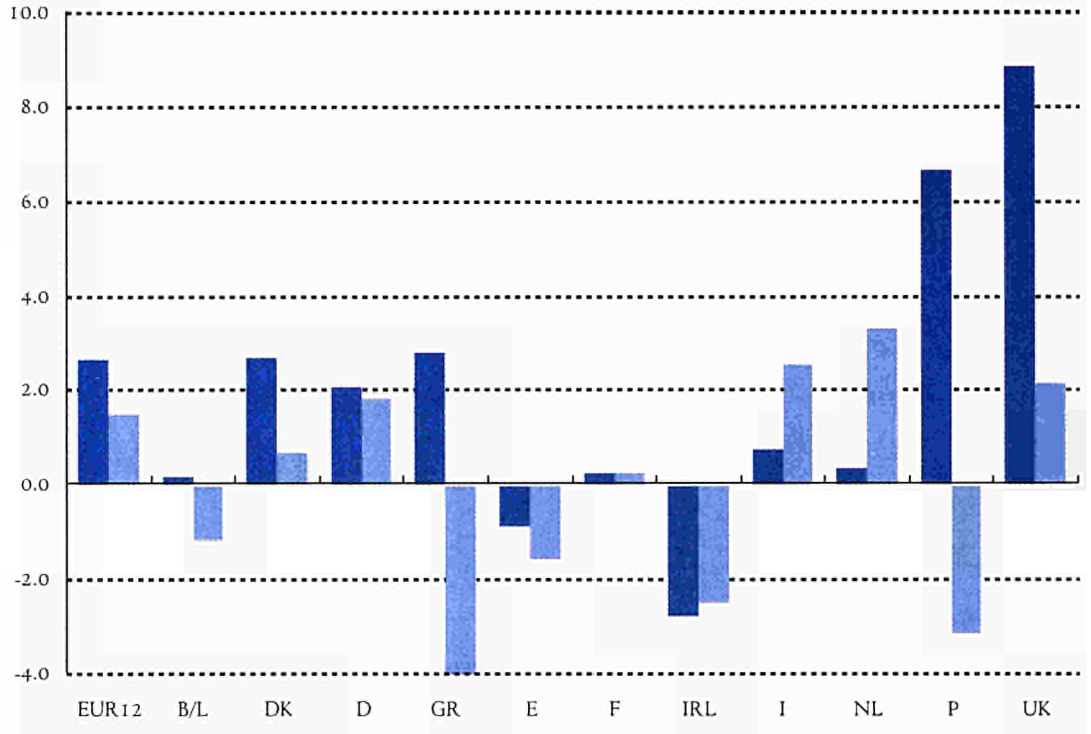
**FIGURE 4.2.6**

ANNUAL GROWTH  
RATE OF  
EXTRA-EU TRADE  
INDEXES  
(%) (1)

■ Export value  
■ Import value

(1) Growth rates are based on the latest annual data available for each country. Please see the table below for the year concerned.

SOURCE:  eurostat



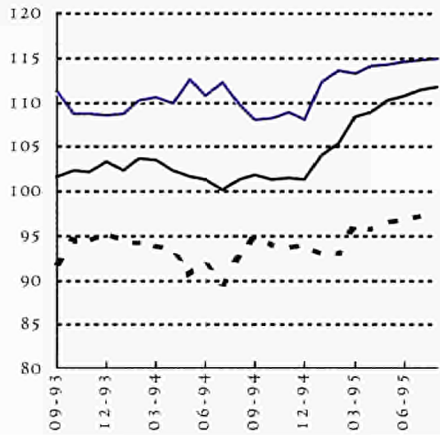
**TABLE 4.2.5**

ANNUAL  
EXTRA-EU  
TRADE INDEXES  
(1990=100)

	Latest year available	Exports		Imports		Terms of trade index
		Value	Volume	Value	Volume	
EUR12	1994	110.8	130.9	108.3	122.8	97.7
Growth rate, t/t-1 (%)		2.7	12.4	1.5	10.9	-1.1
B/L	1994	109.2	119.7	101.3	130.1	92.7
Growth rate, t/t-1 (%)		0.2	19.2	-1.2	18.6	-1.4
DK	1994	105.8	112.7	101.3	101.1	95.7
Growth rate, t/t-1 (%)		2.7	11.1	0.7	9.4	-1.9
D	1994	112.9	135.5	112.0	121.3	99.2
Growth rate, t/t-1 (%)		2.1	9.3	1.8	12.1	-0.2
GR	1994	112.7	126.9	91.6	265.0	81.2
Growth rate, t/t-1 (%)		2.8	1.8	-4.0	24.8	-6.7
E	1994	105.2	143.7	100.4	114.5	95.4
Growth rate, t/t-1 (%)		-0.8	20.3	-1.6	16.6	-0.7
F	1994	110.5	122.8	110.4	114.1	99.9
Growth rate, t/t-1 (%)		0.3	11.1	0.3	8.9	0.0
IRL	1994	95.5	217.7	110.4	134.7	115.6
Growth rate, t/t-1 (%)		-2.7	25.3	-2.5	10.5	0.3
I	1994	102.1	131.5	104.3	132.0	102.1
Growth rate, t/t-1 (%)		0.8	14.0	2.6	11.2	1.8
NL	1994	111.1	148.0	111.8	183.0	100.6
Growth rate, t/t-1 (%)		0.4	27.9	3.3	11.4	3.0
P	1994	103.6	200.5	107.9	83.1	104.1
Growth rate, t/t-1 (%)		6.7	22.5	-3.1	9.8	-9.2
UK	1994	114.0	120.8	104.8	110.9	91.9
Growth rate, t/t-1 (%)		8.9	7.5	2.1	4.8	-6.1

SOURCE:  eurostat

BELGIQUE/BELGIË, LUXEMBOURG



DANMARK

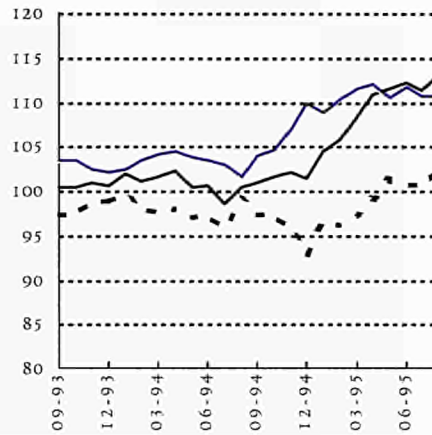
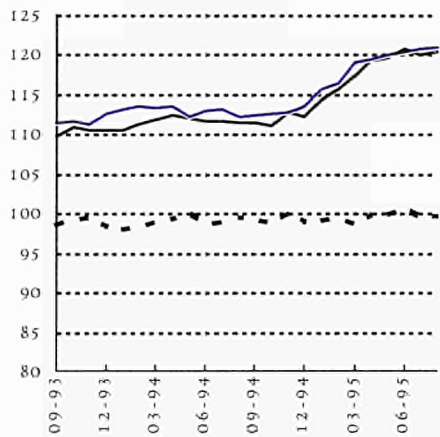


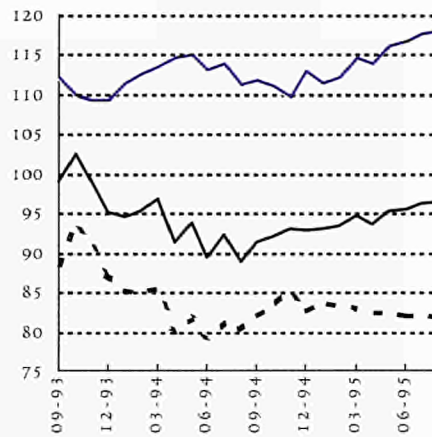
FIGURE 4.2.7

EVOLUTION OF  
EXTRA-EU  
TRADE INDEXES  
(1990=100)

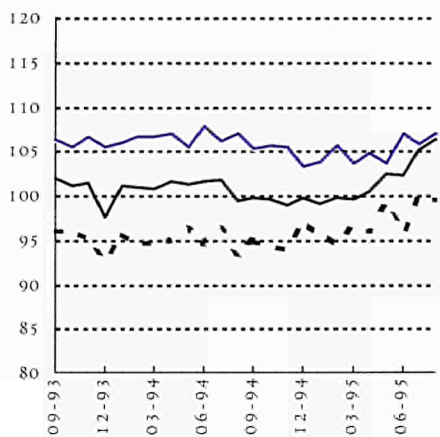
DEUTSCHLAND



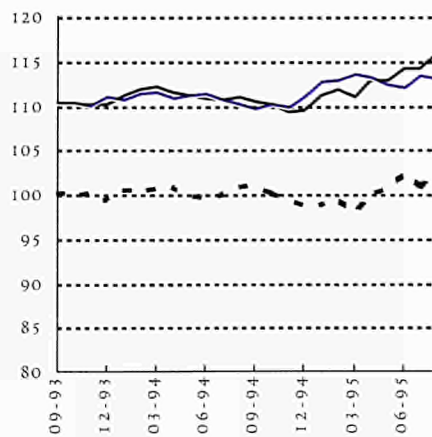
HELLAS



ESPAÑA



FRANCE

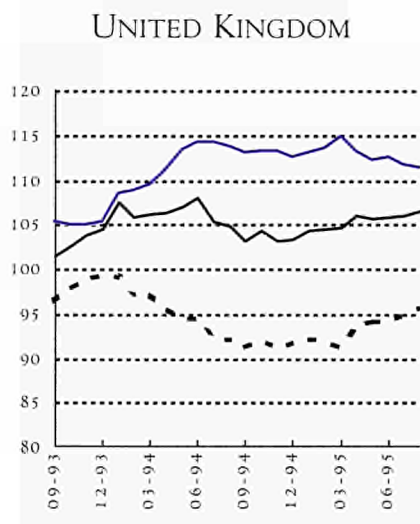
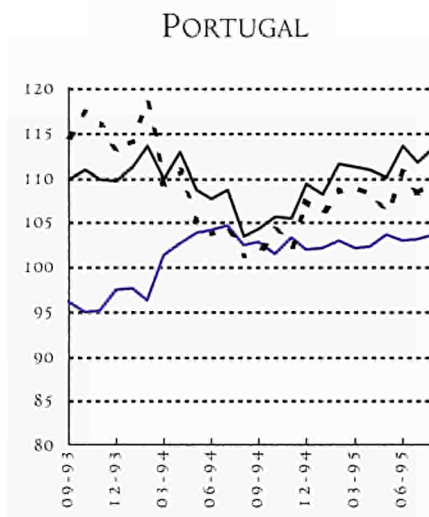
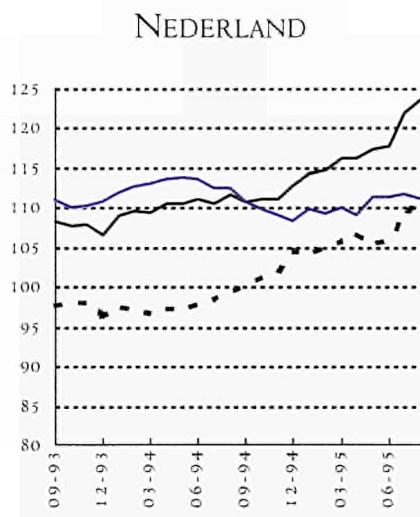
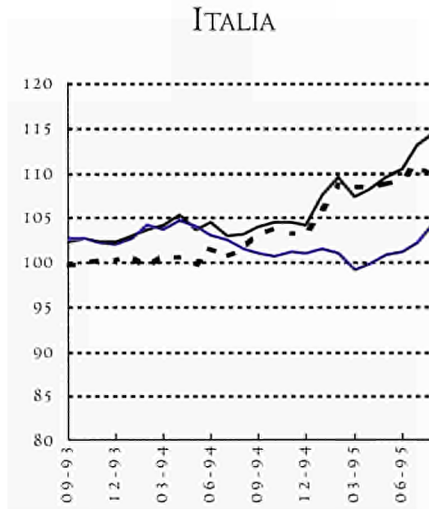
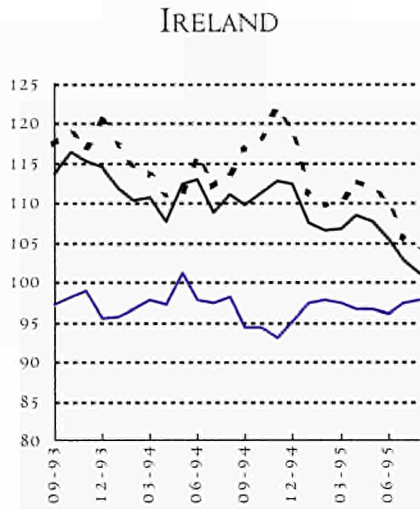


— Export value  
— Import value  
- - - Terms of trade

SOURCE:  eurostat

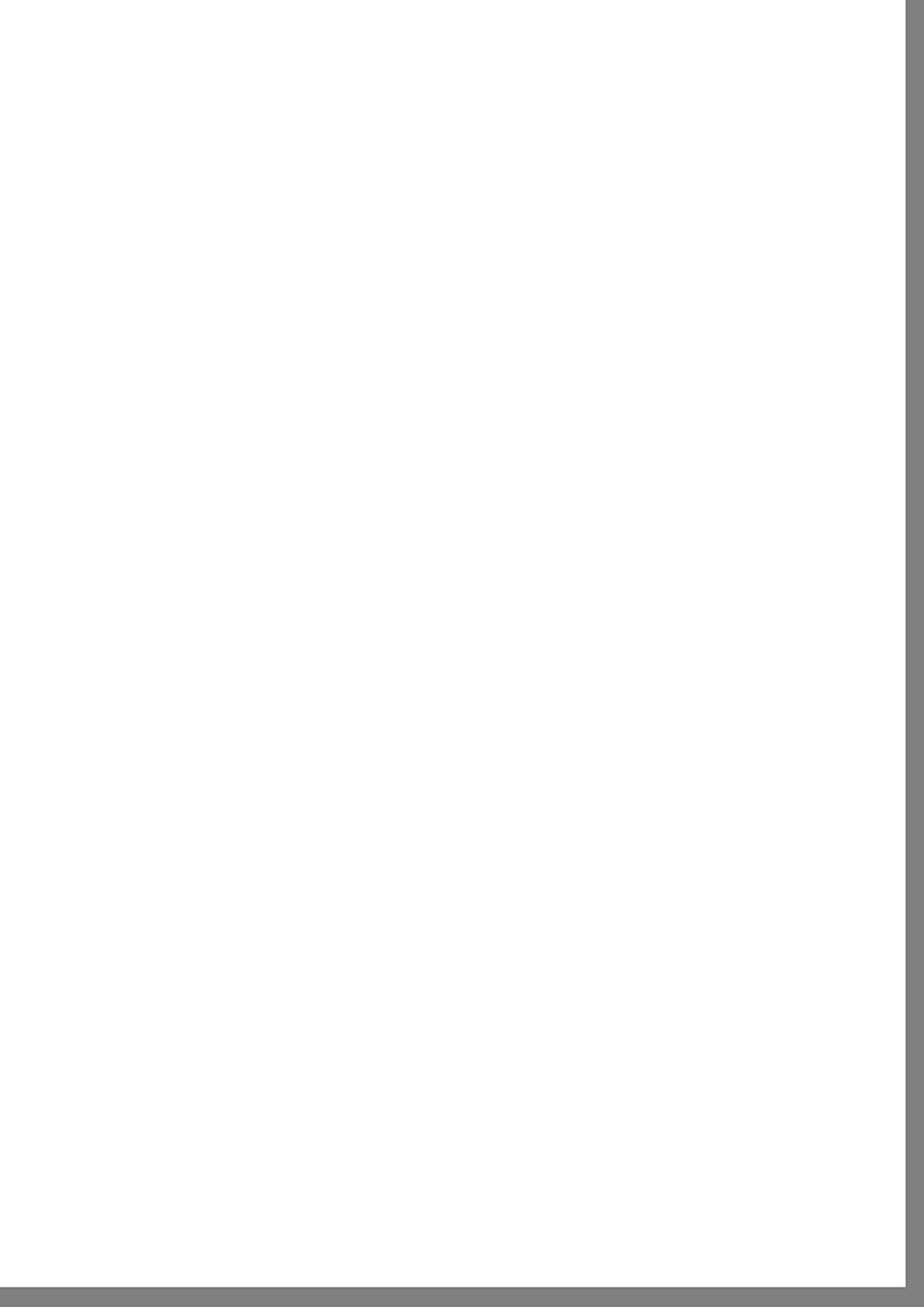
**FIGURE 4.2.7**

EVOLUTION OF  
EXTRA-EU  
TRADE INDEXES  
(1990=100)



— Export value  
— Import value  
- - - Terms of trade

SOURCE: eurostat



**INDUSTRY CLASSIFICATION SYSTEM:**

The industry groupings used in this publication are based on the NACE classification system. This classifies economic activity in terms of the nature of goods and services produced or by the nature of the production process employed. It is arranged on the decimal system and is subdivided into divisions (1-digit codes), classes (2-digit codes), groups (3-digit codes), sub-groups (4-digit codes) and items (5-digit codes). More information is contained in the "General Industrial Classification of Economic Activities within the European Community" published by Eurostat (1985 reprint of the 1970 edition). This publication is available from the usual outlets for EU publications. A major revision to the NACE classification has been incorporated in a Council Regulation (OJ L293 24th October 1990) and is being used for short-term indicators already, whereas structural indicators are still based on NACE 1970.

The broad groups used in Section 1 of this publication have the following definitions in terms of NACE Revision 1:

**Total industry**  
C, D, E

**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, 41.0

**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

**STATISTICAL SOURCES:**

Most of the data in this publication is harmonized data supplied to Eurostat by the EUR12 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 estimates for the latest years' structural data, which are supplied by the DEBA European Economic Interest Group: DEBA GEIE, EBBC F , 2-6, Rue de Trèves, L-2633 Senningerberg-Luxembourg; tél: (352) 3410 4000.
- 3) The indices of industrial production 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 EUR 15 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 unless otherwise stated.

**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 (in principle, at factor cost). The indices are adjusted in two stages; firstly to take account of the varying number of working days in the month (except for Spain and Japan) and secondly by seasonal adjustment. The other short term indices in this publication are not adjusted for working days.

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 markets of the various countries. The EU indices refer to overall weighted price changes. No seasonal adjustment is carried out on them.



For the indices of imports and exports, external trade data of industrial products were grouped according to the industrial NACE branch to which they belong. The value indices are all in ECU terms. The indices refer only to extra-EU trade. The indices are not seasonally adjusted.

The capacity utilisation series come from quarterly European Union business surveys, and are not seasonally adjusted.

The changes which are given in the tables show the growth rate for the moving average of the latest three months compared to the same three months of the previous year (t/t-4). These series are derived from data which has not been seasonally adjusted. Estimates are shown in bold. For annual data, estimates are made if data exists to October of the year concerned. In this case the estimates of the indexes are rounded to the nearest integer, as are the corresponding growth rates.

#### **Structural data:**

Data in the structural tables are in current ECU unless otherwise stated. They are based on the NACE 70 classification.

Data for value added at factor cost, turnover, labour costs, gross operating surplus and employment come from annual enquiries conducted by Member States involving all enterprises with 20 or more employees. The exceptions to this are Spain and Portugal (upto 1990) where the coverage is for local units of all sizes.

The employment data relates to persons employed excluding home workers. The definitions are standardized and so the figures are comparable across industries and countries.

Estimates are not supplied to Eurostat by Member States for the smaller firms not covered by the enquiries, and the figures under-report the actual values.

Gaps in Eurostat's data have been filled by estimates supplied by DEBA. Thus EU totals often contain estimates for missing countries. Estimates are shown in bold.

#### **SIGNS AND ABBREVIATIONS:**

EU: European Union of 12  
 EUR 12: European Union of 12  
 EUR 15: European Union of 15  
 B/L: Belgo-Luxembourg Economic Union  
 ECU: European currency unit  
 Mio: Million  
 Billion: Thousand million  
 N/A: Not available  
 %: Percent  
 1990 = 100: Reference year



IN BRIEF....

- ★ EUROPEAN INDUSTRY EXPERIENCED SUBSTANTIAL CAPITAL DEEPENING BETWEEN 1985 AND 1990
- ★ THE CAPITAL DEEPENING WAS CAUSED BY A SURGE IN REAL NET INVESTMENT AND A DROP IN EMPLOYMENT ACROSS INDUSTRIES
- ★ MEDIUM CAPITAL INTENSITY INDUSTRIES ACHIEVED HIGHEST GROWTH RATES IN REAL PRODUCTION, EMPLOYMENT AND VALUE ADDED
- ★ HIGH CAPITAL INTENSITY INDUSTRIES PERFORMED BEST ON REAL NET INVESTMENT AND LABOUR PRODUCTIVITY
- ★ RELATIVELY CAPITAL INTENSIVE INDUSTRIES HAVE BECOME MORE IMPORTANT IN THE GENERATION OF INCOME

This article on the determinants and effects of capital intensity is a preview of chapter VIII of the publication "Capital formation activity in the European Union", produced by units B2 and D2 of Eurostat in co-operation with INSEE, the national statistical institute of France. The analysis of capital intensity and its influences on net investment and other variables in this study exemplifies the use of harmonised industrial statistics aggregated to a European Union wide level. Its aim was to extend and complement the other studies in the publication that address the subject within the European economy, at higher levels of aggregation. The large number of industries for which data was available in a harmonised form and for a long enough period, obliged the use of aggregates. An aggregation into three groups according to capital intensity was chosen in order to distinguish its effects in issues that have received much attention, such as the generation of employment and the competitiveness of European industry (through the analysis of labour productivity, labour costs and capital formation). Analysis proceeded in three steps. The first step comprised the conceptualisation of capital intensity and the classification of individual industries into three groups. A lack of estimates for capital stock, either in aggregated form or broken down into plant, machinery and vehicles and structures and buildings necessitated the use of proxies for capital intensity. These proxies, introduced in the article as factor intensity indicators, permitted the formation of a taxonomy of industries. An investigation into the development of production and net investment (both in constant prices) for the aggregated series during the 1980's made up the second step. The third and final step, consisted of investigations into the development of employment, gross value added and labour productivity (and gross operating surplus, not reported on in this article), using those of net investment and production as benchmarks. Also, individual industries were singled out for further examination of these variables. The next sections of this article present some of the more salient facts and conclusions from the full text of the publication.

CAPITAL  
INVESTMENT

IN THIS SECTION:

Developments in net investment and production 66

Employment trends and labour costs 68

Gross value added and trends in labour productivity 71



The net investment in constant prices series were calculated by deflating net investment using the gross fixed capital formation price index. No distinction could be made between investment in land, buildings or equipment. Aggregate series for the three classes are presented in Table 5.1.1. The data shows, for all three classes, a substantial increase in the growth of real net investment after 1984. The low and high capital intensity classes experienced average annual growth rates between 1981 and 1985 of 1.8 and 2.4 per cent respectively. These increased to 7.2 and 8.1 percentage points during the period 1985-90. The growth rate of real net investment for the medium capital intensity class did not rise by as much as for the other classes but was already relatively high in the first period. Over the whole period, the average annual growth rate was highest for the high capital intensity class, closely followed by the medium capital intensity class. The net investment data show just one year of negative growth for the low and medium capital intensity classes, 1982, while the high capital intensity groups net investment declined in both 1982 and 1983. After these two years the growth rates remained remarkably stable.

The range of growth rates for this class as a total (12.4 percentage points) is much smaller than for the medium class (17.2 percentage points). The range of growth rates for the medium class is again smaller than that of the low intensity class (20.0 percentage points). This indicates that for these aggregates, the cycles in net investment are less fierce as capital intensity increases.

Table 5.1.2 reports the aggregate series of production in constant prices for the three capital intensity classes. Similar to what was found for net investment, the growth rates of production in constant prices show an acceleration after 1984, although less pronounced. Also, the conclusion that the variation in growth rates declines as capital intensity increases seems to hold true for production as well. The variation in the growth rates of production was smaller than for net investment and the differences between the three classes are therefore less clear. Year-to-year growth rates lay within a range of 9.8 percentage points for the low capital intensity class, 6.8 percentage points for the medium capital intensity class and 7.1 percentage points for the high capital intensity class. These

TABLE 5.1.1

NET INVESTMENT  
IN CONSTANT  
1990 PRICES  
(MIO ECU)

SOURCE: eurostat

	1982	1983	1984	1985	1986	1987	1988	1989	1990
Low capital intensity	20,942	21,511	21,639	24,244	26,089	27,531	29,661	33,408	34,301
Growth rate, t/t-1 (%)	-7.3	2.7	0.6	12.0	7.6	5.5	7.7	12.6	2.7
Medium capital intensity	22,839	23,197	24,718	28,072	29,168	31,337	35,390	37,151	38,126
Growth rate, t/t-1 (%)	-3.6	1.6	6.6	13.6	3.9	7.4	12.9	5.0	2.6
High capital intensity	32,386	31,638	33,181	36,449	38,476	41,925	44,602	49,012	53,578
Growth rate, t/t-1 (%)	-2.5	-2.3	4.9	9.8	5.6	9.0	6.4	9.9	9.3

TABLE 5.1.2

PRODUCTION IN  
CONSTANT 1990  
PRICES  
(MIO ECU)

SOURCE: eurostat

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Low capital intensity	663,129	660,089	669,365	684,503	688,361	697,946	737,770	792,168	823,133	818,661	798,702	756,044
Growth rate, t/t-1 (%)	-2.4	-0.5	1.4	2.3	0.6	1.4	5.7	7.4	3.9	-0.5	-2.4	-5.3
Medium capital intensity	559,494	580,014	613,652	637,967	649,762	681,214	730,890	776,356	810,142	831,825	837,445	829,641
Growth rate, t/t-1 (%)	0.5	3.7	5.8	4.0	1.8	4.8	7.3	6.2	4.4	2.7	0.7	-0.9
High capital intensity	649,539	676,257	707,398	719,117	718,515	751,047	792,449	835,675	838,925	833,169	837,281	804,238
Growth rate, t/t-1 (%)	-1.5	4.1	4.6	1.7	-0.1	4.5	5.5	5.5	0.4	-0.7	0.5	-3.9

ranges are only half as large as the ranges found for net investment. Traditional explanations for net investment having more volatile business cycles than production are: (i) the gestation period of investment which causes clustering of investment expenditures around certain years, (ii) the volatility of profits as a source of financing, (iii) the possibility of smoothing changes in production by using stocks as a buffer. Another remark on production growth rates in the eighties worth making is that although the high capital intensity class achieved the highest average for net investment it came second in the ranking for production. Its average over 1981-90 was 1.6 percentage points below the average of the medium capital intensity class.

Three year moving averages show that the peak in growth rates of production took place in 1989 for the low capital intensity class and in 1988 for the medium and high capital intensity classes. Peaks are less clearly discernible in the investment series. Comparable three year moving averages show two peaks for the low and high classes but only one peak for the medium class. Maximum growth rates of production over the period between consecutive moving averages roughly coincide with those for net investment at the end of the eighties.

In order to indicate the extent of capital intensity differences between the three classes, Figure 5.1.4 presents the investment-production ratios for the time period under analysis. As should have been expected, the investment-production ratio increases with capital intensity. The figure also shows the increase in the growth of net investment over and above the growth of production, leading to a considerable increase in the ratios after 1984 for all three capital intensity classes. This increase was largest for the high capital intensity class, with a rise in the ratio of 1.35 percentage points between 1984 and 1990, followed by the low and the medium capital intensity classes with 0.84 and 0.45 percentage points respectively.

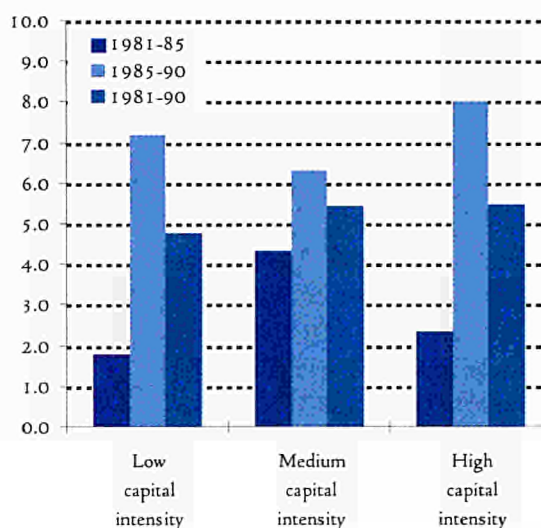


FIGURE 5.1.1

AVERAGE ANNUAL  
NET  
INVESTMENT  
GROWTH RATES  
IN CONSTANT  
1990 PRICES  
(%)

SOURCE: eurostat

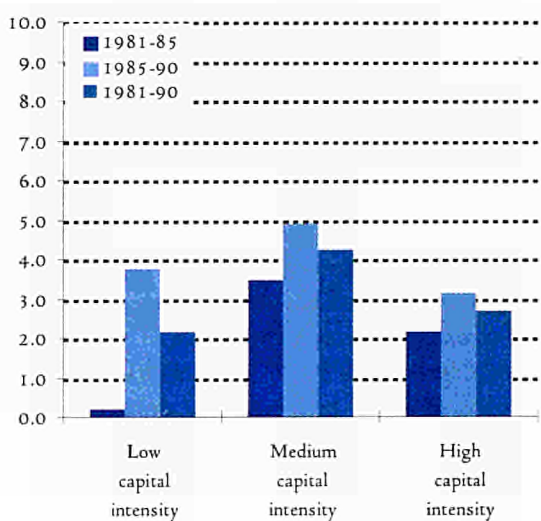


FIGURE 5.1.2

AVERAGE ANNUAL  
PRODUCTION  
GROWTH RATES  
IN CONSTANT  
1990 PRICES  
(%)

SOURCE: eurostat

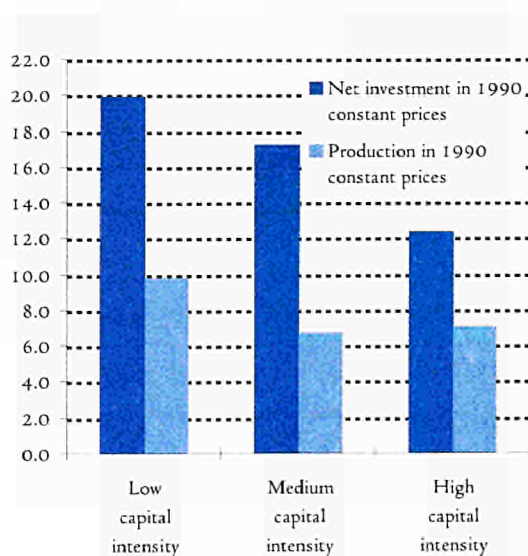


FIGURE 5.1.3

RANGE OF  
YEAR-TO-YEAR  
GROWTH RATES,  
1981-1990  
(%)

SOURCE: eurostat



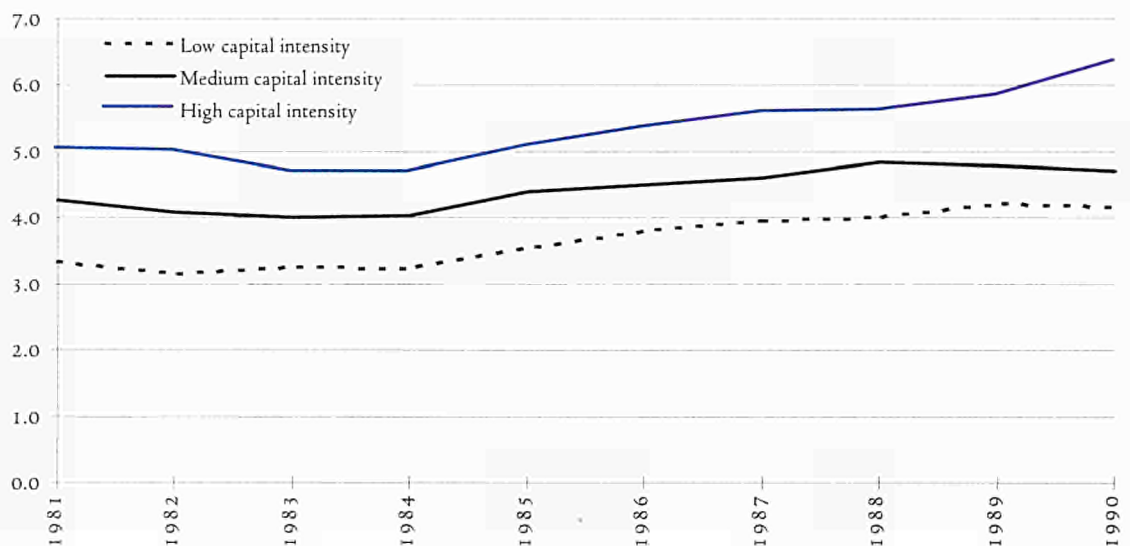
Many European industries underwent substantial restructuring of their labour force during the period under analysis. The exact causes were not examined since many of the relevant subjects were beyond the scope of this article. There are however a number of interesting questions pertaining to the nature of the restructuring for the different capital intensity classes. The first to be answered here relates to the straightforward comparison of average growth rates. Employment data in Tables 5.2.1 to 5.2.3 shows that in the first half of the decade, employment decreased most in the low and high capital intensity classes. In the second half, employment growth turned positive in the low and medium capital intensity classes, while growth remained negative in the high capital intensity class. Extending the period to 1993, substantial losses of jobs in all three classes reappeared after a period of relatively stable employment, from 1988 to 1991. Loss of employment over the whole period is largest in the high capital intensity class, amounting to 21.1 per cent, followed by the low capital intensity class with 19.8 per cent. The medium capital intensity class took first place in production growth (see figure 5.1.2) and also had the most positive, or rather least negative, developments in employment which decreased by “only” 13.0 per cent.

Together with the strong growth in net investment during the second half of the eighties, declining employment led to substantial capital deepening. Figure 5.2.4 shows the investment per employee in the low capital intensity class increased from nearly two thousand ECU in 1981 to well over three thousand ECU in 1990, an increase of 68 per cent. Investment per employee in the medium capital intensity class achieved about the same growth rate. Net investment grew faster and employment dropped further in the high capital intensity class. This resulted in its ratio achieving a level of over ten thousand ECU, 84 per cent above the level in 1981.

By far the most interesting question is whether changes in labour costs played a part in capital deepening and whether this role differed by capital intensity class. From the possible measures of labour costs we selected two for our analysis. Ideally, one would like to have a measure of relative factor costs of labour with respect to the costs of capital. For lack of such a measure we choose total labour costs per employee and unit labour costs (defined as total labour costs divided by production in constant prices) which are more like price indices.

FIGURE 5.1.4

REAL NET  
INVESTMENT-REAL  
PRODUCTION  
RATIO BY CAPITAL  
INTENSITY CLASS  
(%)



SOURCE: eurostat

The aggregate class data is also presented in tables 5.2.1 to 5.2.3. One fact worth mentioning is that with increasing capital intensity, unit labour costs decrease while labour costs per employee increase. The first relationship was to be expected from our definition of capital intensity. Whether the last relationship is proof for the complementarity of physical and human capital is hard to say. The data is at the least not inconsistent with this hypothesis.

In order to measure the sensitivity of employment to our measures of labour costs we decided to use arc elasticities. With the available data there are two ways to estimate the six elasticities of employment (for the two measures of

labour costs and each of the capital intensity classes). These methods are rather crude and we want to stress that they do not take into account other factors relevant for the decline in employment. One way is simply to take the growth rates of employment and one of the labour cost measures between two years for the aggregate series. The unit labour cost elasticities of employment so calculated using growth rates between 1981 and 1990 were (in order of increasing capital intensity) -0.35, -0.24 and -0.61. This result is somewhat surprising since one would expect the sensitivity to labour costs to decrease with augmenting capital intensity. In 1990, labour costs took up 74.5 per cent of value added in the low capital

TABLE 5.2.1

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Employment (thousands)	10,996	10,703	10,424	10,214	10,091	10,024	10,048	10,248	10,442	10,280	9,857	9,283
Growth rate, t/t-1 (%)	-5.0	-2.7	-2.6	-2.0	-1.2	-0.7	0.2	2.0	1.9	-1.6	-4.1	-5.8
Unit labour cost index	83.8	86.2	88.5	90.4	93.7	95.6	95.4	96.3	100.0	106.3	110.2	111.4
Growth rate, t/t-1 (%)	7.1	2.8	2.6	2.2	3.6	2.0	-0.3	1.0	3.8	6.3	3.7	1.1
Labour costs per employee	64.1	67.4	72.1	76.9	81.1	84.5	88.8	94.5	100.0	107.4	113.3	115.1
Growth rate, t/t-1 (%)	10.0	5.2	6.9	6.7	5.5	4.2	5.2	6.3	5.9	7.4	5.5	1.6

LOW CAPITAL  
INTENSITY  
INDUSTRIES  
(1990=100)

SOURCE:  eurostat

TABLE 5.2.2

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Employment (thousands)	7,174	7,007	6,978	6,922	6,851	6,908	6,957	7,075	7,134	7,094	6,838	6,485
Growth rate, t/t-1 (%)	-3.7	-2.3	-0.4	-0.8	-1.0	0.8	0.7	1.7	0.8	-0.6	-3.6	-5.2
Unit labour cost index	90.4	90.9	91.6	93.9	95.4	96.9	96.2	98.0	100.0	104.7	105.7	103.5
Growth rate, t/t-1 (%)	6.1	0.6	0.8	2.5	1.7	1.5	-0.7	1.9	2.0	4.7	1.0	-2.1
Labour costs per employee	62.1	66.3	70.9	76.2	79.7	84.1	89.0	94.7	100.0	108.1	114.0	116.5
Growth rate, t/t-1 (%)	10.8	6.8	7.1	7.4	4.6	5.6	5.8	6.4	5.6	8.1	5.4	2.3

MEDIUM CAPITAL  
INTENSITY  
INDUSTRIES  
(1990=100)

SOURCE:  eurostat

TABLE 5.2.3

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Employment (thousands)	5,679	5,514	5,417	5,281	5,194	5,165	5,105	5,136	5,191	5,120	4,965	4,677
Growth rate, t/t-1 (%)	-4.3	-2.9	-1.8	-2.5	-1.7	-0.6	-1.1	0.6	1.1	-1.4	-3.0	-5.8
Unit labour cost index	88.1	88.1	88.7	91.2	94.0	94.4	93.2	94.2	100.0	106.0	108.4	108.4
Growth rate, t/t-1 (%)	6.2	0.1	0.7	2.7	3.1	0.5	-1.3	1.1	6.2	6.0	2.2	0.0
Labour costs per employee	62.3	66.9	71.7	76.8	80.4	85.0	89.5	94.8	100.0	106.7	113.1	115.3
Growth rate, t/t-1 (%)	9.2	7.3	7.2	7.1	4.7	5.6	5.3	5.9	5.5	6.7	5.9	2.0

HIGH CAPITAL  
INTENSITY  
INDUSTRIES  
(1990=100)

SOURCE:  eurostat

intensive industries against 66.5 per cent in the medium capital intensive and 63.2 per cent in the high capital intensive industries. Since low capital intensity sectors use more labour per unit produced, a rise in labour costs would have to be offset by more lay-offs in order to keep the share of labour costs in value added constant than in medium capital intensive industries. And the lay-offs would have to be greater in the latter again than in high capital intensive industries. The employment elasticities with regard to labour costs per employee, in the same order, of -0.14, -0.05 and -0.17 shows the same pattern as found for the employment elasticities with regard to unit labour costs.

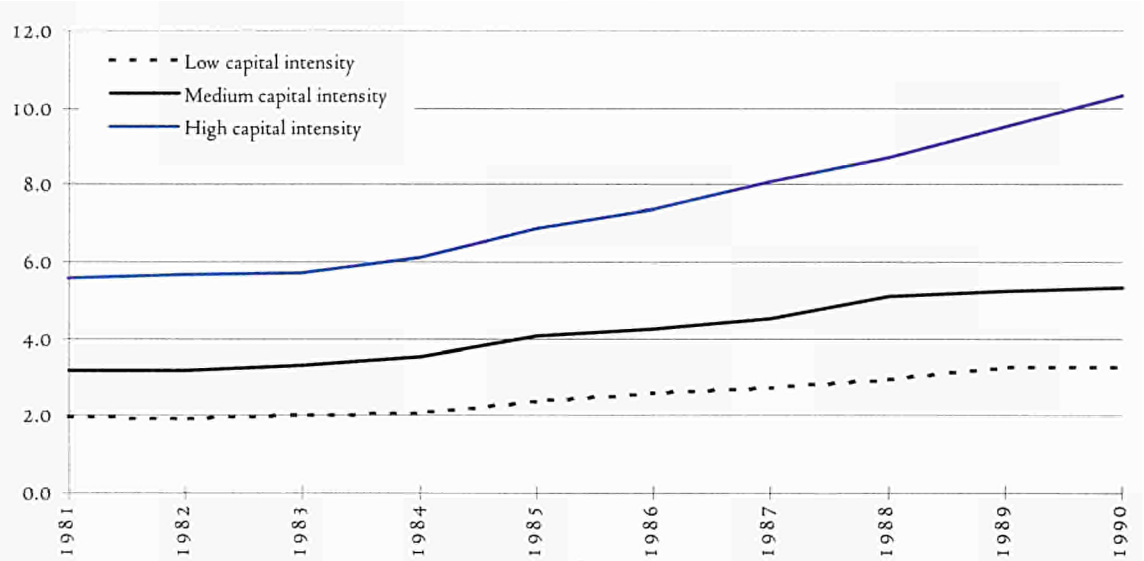
A major drawback of this method to calculate the elasticities is that it provides no measure of statistical significance, neither for the estimates themselves, nor for the differences between them. We therefore choose regression analysis as a second method of estimation. In a regression of the growth rates of employment on one of the labour cost measures for the individual industries, without using an intercept, the regression coefficient can be interpreted as an estimate of the elasticity. For both labour cost measures, the regression estimates indicated no significant difference in labour cost elasticities of employment between either of the classes.

The estimate of the 95 per cent confidence interval for the unit labour cost elasticity was  $[-0.77, -0.15]$  around a point estimate of -0.46. Coefficients on the interaction terms of low and medium capital intensity industry dummies and the growth rates in labour costs, included to test for differences in elasticities between classes, had t-values below 0.3. The adjusted R-squared for the whole model was 26 per cent with a  $F(3,92)$  value equal to 12.2. Similar results were achieved in the regression of the growth in employment on growth in labour costs per employee. The point estimate of the elasticity was -0.18 with an absolute t-value of 3.8. The interaction terms included to test for inter-class differences were again not significant by any reasonable standard. The adjusted R-squared was even higher at 32 per cent with a  $F(3,92)$  of 16.2.

We concluded earlier that the order of classes according to the growth in employment roughly matched the order according to growth in production. Together with the fact that we could not find differences in the reaction to changes in labour costs, it seems that output was the most important of the two in determining employment.

**FIGURE 5.2.4**

REAL NET  
INVESTMENT PER  
EMPLOYEE  
(1000 ECU)



SOURCE: eurostat



Table 5.3.1 presents capital intensity class aggregates for gross value added at factor costs in prices of 1990. The series on gross value added provide a good guide to the relative size of the industries. While the low capital intensity class contains 44 of the 95 industries (46.3 per cent) and employed 45.9 per cent of the industrial work force, it contributed only 37.6 per cent to gross value added in 1990. The medium and high capital intensity classes contain 30 (31.6 per cent) and 21 (22.1 per cent) industries respectively and employed 31.3 and 22.8 per cent of the work force. They contributed 33.5 per cent and 28.9 per cent to gross value added.

In previous sections we found that the medium capital intensity class had the highest average growth rate in real production and employment. With regard to growth in gross value added we find again that it takes first place. The shares in value added shifted during the eighties from the low capital intensity class to the other two classes. From 1981 to 1990, the low capital

intensity class lost 4.5 percentage points of its share in real gross value added and during the first half of the decade, it even lost 3.7 per cent in absolute terms. The share of the medium capital intensity class gained 3.3 percentage points and high capital intensity class 1.2 percentage points. This indicates that not only did most industries in all three classes experience capital deepening, but that the more capital intensive industries gained importance in the generation of income.

This development is of course linked to the evolution of employment. Generation of income in the low capital intensity class depends more closely on the amount of labour employed than in the other two classes. When sectors in the low capital intensity class cut employment in the years to 1985 and real production remained close to its 1981 level, total gross value added fell as a direct result. In the other two capital intensity classes employment fell too but gross value added continued to grow, along with production. These develop-



TABLE 5.3.1

VALUE ADDED AT  
FACTOR COST  
IN CONSTANT  
1990 PRICES,  
(MIO ECU)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Low capital intensity	275,523	273,532	270,899	274,916	277,141	285,120	297,079	308,518	318,772	319,472	311,414	291,934
Growth rate, t/t-1 (%)	-3.5	-0.7	-1.0	1.5	0.8	2.9	4.2	3.9	3.3	0.2	-2.5	-6.3
Medium capital intensity	207,501	212,597	218,732	225,531	235,467	250,331	264,957	273,523	283,895	289,915	287,927	286,225
Growth rate, t/t-1 (%)	1.3	2.5	2.9	3.1	4.4	6.3	5.8	3.2	3.8	2.1	-0.7	-0.6
High capital intensity	185,757	194,073	197,567	201,026	216,063	232,027	246,147	250,645	244,383	241,335	242,516	231,229
Growth rate, t/t-1 (%)	-1.0	4.5	1.8	1.8	7.5	7.4	6.1	1.8	-2.5	-1.2	0.5	-4.7

SOURCE: eurostat

TABLE 5.3.2

LABOUR  
PRODUCTIVITY  
(1000 ECU PER  
EMPLOYEE)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Low capital intensity	25.1	25.6	26.0	26.9	27.5	28.4	29.6	30.1	30.5	31.1	31.6	31.4
Index (1990=100)	82.1	83.7	85.1	88.2	90.0	93.2	96.8	98.6	100.0	101.8	103.5	103.0
Medium capital intensity	28.9	30.3	31.3	32.6	34.4	36.2	38.1	38.7	39.8	40.9	42.1	44.1
Index (1990=100)	72.7	76.2	78.8	81.9	86.4	91.1	95.7	97.1	100.0	102.7	105.8	110.9
High capital intensity	32.7	35.2	36.5	38.1	41.6	44.9	48.2	48.8	47.1	47.1	48.8	49.4
Index (1990=100)	69.5	74.8	77.5	80.9	88.4	95.4	102.4	103.7	100.0	100.1	103.7	105.0

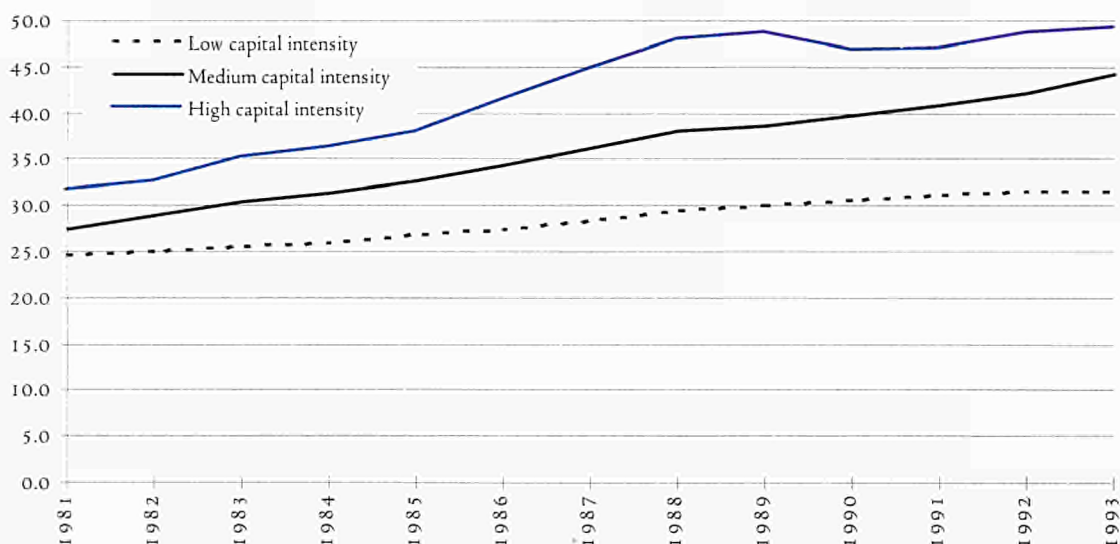
SOURCE: eurostat

ments in real gross value added in combination with those in employment are reflected in those of labour productivity. The series of labour productivity, defined as gross value added in constant prices per employee are reported in table 5.3.2. They are also depicted in figure 5.3.1. Both the medium and high capital intensity classes achieved growth rates of labour productivity in excess of 4 per cent a year between 1981 and 1990. Labour productivity growth accelerated in the latter to 8.2 per cent a year between 1985 and 1988 as the sectors in the high capital intensity class kept employment relatively stable in spite of continued growth in production. The low capital intensity class achieved less impressive labour productivity growth due to falling gross value added in the early eighties and rising employment during the late eighties. Four year moving averages show that labour productivity growth, after reaching maximum levels in 1987, slowed down in all three classes. This decline in growth rates was more pronounced in the low and high capital intensity classes. In both classes, production and gross value added fell while employment followed but with a lag, which led to labour stockpiling.

One more interesting fact worth mentioning are the differences in the levels of labour productivity between the capital intensity classes. In 1981, differences were relatively small. Labour productivity in the low capital intensity class, at 24.7 thousand ECU per employee, was only 2.8 thousand ECU lower than in the medium capital intensity class. The difference between the medium and high capital intensity class was also less pronounced than later in the period, at 4.1 thousand ECU. As labour productivity growth remained positive in the medium capital intensity class and higher than in the low capital intensity class, the difference in labour productivity peaked in 1993 at 12.7 thousand ECU. Labour productivity growth turned slightly negative during the 1989-1991 period in the high capital intensity class, after the growth spurt in 1985-1988, during which the medium capital intensity class gained and the difference in labour productivity dropped from a maximum in 1989 of 10.1 thousand ECU to just 5.3 thousand ECU in 1993. On the whole, labour productivity grew by 23.8 per cent to 1990 in the low capital intensity class and by 44.7 per cent and 48.8 per cent in the medium and high capital intensity classes respectively.

**FIGURE 5.3.1**

LABOUR  
PRODUCTIVITY  
(1000 ECU PER  
EMPLOYEE)



SOURCE: eurostat

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