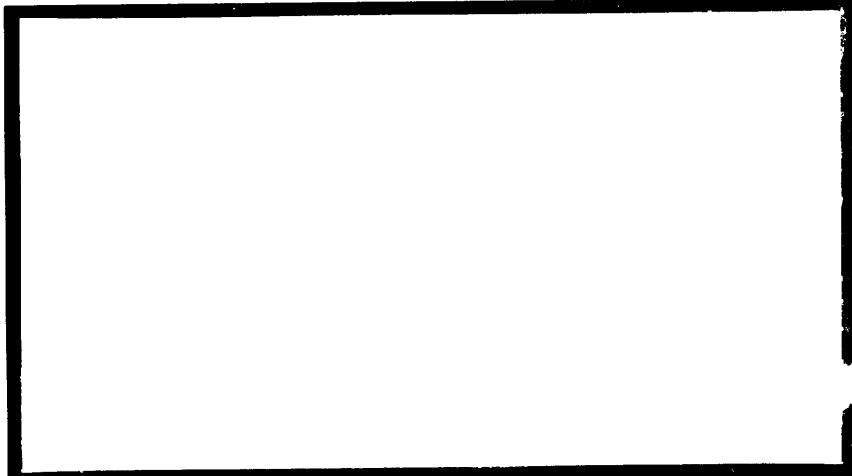


# PRICE AND COST COMPETITIVENESS

EUROPEAN COMMISSION  
DIRECTORATE-GENERAL FOR ECONOMIC AND FINANCIAL AFFAIRS



*The quarterly reports on "Price and Cost Competitiveness" provide a periodic assessment by the Commission services of the price and cost competitiveness of the European Union and its Member States.  
Comments and enquiries should be addressed to :*

European Commission  
Directorate-General for Economic and Financial Affairs  
200, rue de la Loi  
1049 Brussels, Belgium

## **PRICE AND COST COMPETITIVENESS**

DG II-C-1

First quarter 1999

### **Quarterly report on the price and cost competitiveness of the European Union and its Member States**

# PRICE AND COST COMPETITIVENESS

## QUARTERLY REPORT –FIRST QUARTER 1999

This series of quarterly reports provide a periodic assessment of the **price and cost competitiveness of the euro area and the individual Member States of the European Union**. *Part 1* offers an overview of international and intra-EU price and cost competitiveness positions. *Part 2* is a data section which provides data for the euro area, for each Member State, as well as for five other industrial countries (United States; Japan, Norway, Australia, and Canada).

The **nominal effective exchange rate (NEER)** of a country (or currency area) aims to track changes in the value of that country's currency relative to the currencies of its principal trading partners. It is calculated as a weighted average of the bilateral exchange rates with those currencies. However, changes in cost and price competitiveness depend not only on exchange rate movements but also on cost and price trends. The **real effective exchange rate (REER)** aims to assess a country (or currency area's) price or cost competitiveness relative to its principal competitors in international markets. It corresponds to the NEER deflated by selected relative price or cost deflators.

Countries in the euro area share a single currency and there is no longer any exchange rate between them. For these countries, the terms "nominal effective exchange rate" and "real effective exchange rate" have been replaced by the terms "**trade-weighted currency index**" and "**relative price and cost indicators**" but the underlying concepts and their calculation remains the same. The trade-weighted currency indices for individual countries using the euro may diverge because they have different trading patterns. In addition, the relative price and cost indicators may evolve differently due to diverging price and cost trends.

A comprehensive assessment of developments in cost and price competitiveness should ideally draw on various measures of the real effective exchange rate. Most international trade is in manufactured goods and some widely used measures focus on **unit labour costs in the manufacturing industry (ULCM)**. However, in-house labour costs account for only a limited share of total costs in the manufacturing industry. The sector purchases a growing amount of inputs from the rest of the economy, including financial services, marketing, accounting etc. In addition, an increasing amount of services are traded internationally. Therefore, some prefer to consider developments based on **unit labour costs in the whole economy (ULCE)**. Moreover, capital costs account for a sizeable fraction of total costs. Price measures such as the **GDP-deflator (PGDP)** include the return on capital. On the other hand, the measures based on ULCE and PGDP cover many sectors whose output is neither directly nor indirectly traded. The discussion in Part 1 focuses on real effective exchange rates as measured by unit labour costs in the whole economy, but Part 2 of the report also shows real exchange rates based on the deflator of private consumption, and the deflator of exports of goods and services (PX).

**1994 is taken as the base period** for the indicators of price and cost competitiveness. This does not imply that 1994 exchange rates should be treated as equilibrium rates.

The quarterly report is also available on the Internet. Our Web site, "<http://europa.eu.int/comm/off/rep/pccr/>", permits the downloading of standard statistics to your PC or Macintosh. Moreover, differently defined nominal and real exchange rates are available upon request. A technical annex provides further details.

# **PRICE AND COST COMPETITIVENESS**

**QUARTERLY REPORT – FIRST QUARTER 1999**

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**PART 1**

**DEVELOPMENTS IN  
THE COST COMPETITIVENESS OF  
THE EUROPEAN UNION,  
THE UNITED STATES AND JAPAN**

## **DEVELOPMENTS IN THE COST COMPETITIVENESS OF THE EUROPEAN UNION, THE UNITED STATES AND JAPAN**

### **MAIN FEATURES**

#### **The euro against other major international currencies:**

- Over the course of the first three months of 1999, the dollar appreciated by 8% against the euro. The value of the euro fell by more than 5% against the pound sterling and, after considerable fluctuations, by 3% against the Japanese yen. The Swiss franc was stable against the euro. In all, the nominal effective exchange of the euro depreciated by about 5% against the currencies of 13 industrialised countries.
- these movements were essentially the reversal of the appreciation of the EUR11 currencies in the second half of 1998. In nominal effective terms, the exchange rate of the euro area remained 3½% higher in March 1999 than one year earlier.

#### **Relative cost and price indicators: international developments**

- Together with subdued price and cost developments, the depreciation of the euro contributed to an improvement in the cost competitiveness of euro area producers by some 3½% in the first quarter of 1999 compared to the preceding quarter. In terms of relative unit labour costs, the cost competitiveness of the EUR11 is (almost) back to where it was in the first half of 1998, i.e. at its most favourable since 1985.
- In relative terms, unit labour costs in EUR11 compared to the USA are now 12% below their 1987-98 average. Relative to Japan, they are some 3½% below their 1987-98 average.

#### **Relative cost and price indicators: intra-EMU developments**

- Over the last year, Germany's cost competitiveness (unit labour costs in the whole economy) relative to EMU partners improved by about 1% (2% in manufacturing) while the Netherlands and Portugal saw a deterioration of 1 to 2%.
- Over the last two years, Germany and Ireland improved considerably their cost competitiveness relative to EMU partners, while the Netherlands, Belgium, Spain and Portugal saw a deterioration.
- In a longer time perspective, intra-EUR11 cost competitiveness is considerably better than its 1987-98 average in Finland (about 10%) and Ireland (10%), while it is considerably worse than this average in Belgium (about 5%) and Portugal (about 15%).

#### **Relative cost and price indicators: Member States outside euro area**

- Denmark has seen a substantial deterioration in its unit labour cost competitiveness against the EUR11 over the last two years (about 10%). In Greece, the 7% improvement in cost competitiveness at the time of entry to the ERM in 1998 has been followed by a deterioration of about 5%.
- In the UK, unit labour costs relative to EUR11 are now 20-25% higher than their 1987-98 average, mainly due to the strengthening of the pound sterling since 1996. In Sweden, cost competitiveness worsened (-2%) relative to the euro area in the first quarter of 1999 but it remains better than its 1987-98 average.

# PRICE AND COST COMPETITIVENESS

## QUARTERLY REPORT – FIRST QUARTER 1999

### I. INTERNATIONAL DEVELOPMENTS

#### 1. BILATERAL EXCHANGE RATES OF THE EURO

The euro was introduced on 1 January 1999 as the single currency of 11 EU Member States, namely Belgium, Germany, Spain, France, Ireland, Italy, Luxembourg, Netherlands, Austria, Portugal and Finland. These 11 Member States are referred to as the euro area (EUR11).

On 31 December 1998, at the fixing of the conversion rates between the national currencies and the euro, the euro/dollar exchange rate stood at 1.167 USD/EUR. Initially, the euro appreciated to 1.18 USD/EUR but over the subsequent three months the US dollar strengthened steadily to reach 1.07 USD/EUR by end-March. This implied an appreciation of 8% in the USD against the euro (Chart 1 and Table 1).

In terms of the national currency units, the euro/dollar exchange rate by end-March corresponded to 1.82 DEM/USD, implying a return of the USD to the level it had before the Russian financial crisis in August 1998 (see also Chart 2).

The strengthening of the USD in early 1999 was related to stronger-than-expected activity in the US economy which led to upward revisions of US interest rate expectations. In addition, the euro was affected by signs of an economic slowdown and falling inflation pressures in the euro area which led to expectations that the

Chart 1 The euro against major international currencies  
Index 1.1.1999 = 100 (daily data)

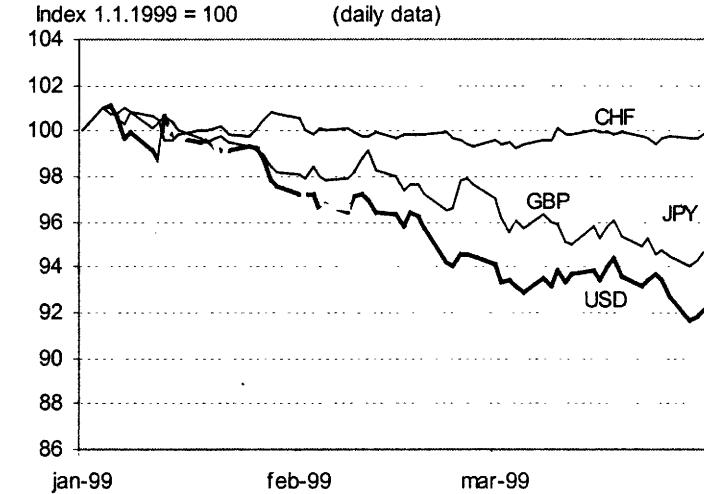
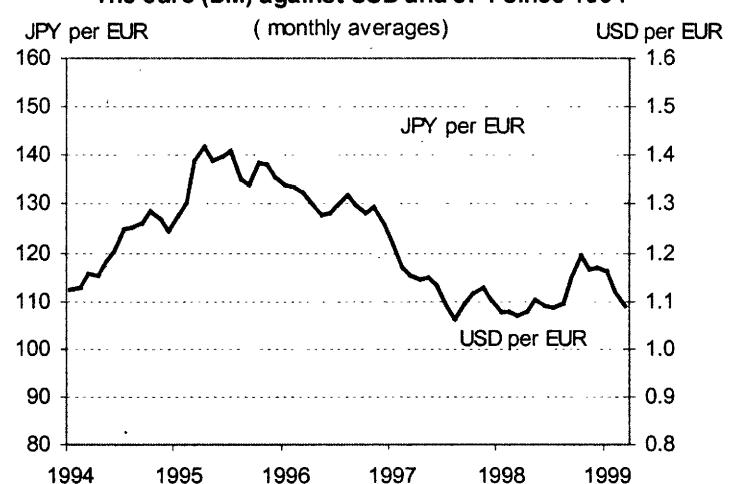


Chart 2 The euro (DM) against USD and JPY since 1994



Note: EUR rates before 1999 calculated on the basis of DEM rates.  
Source: European Commission

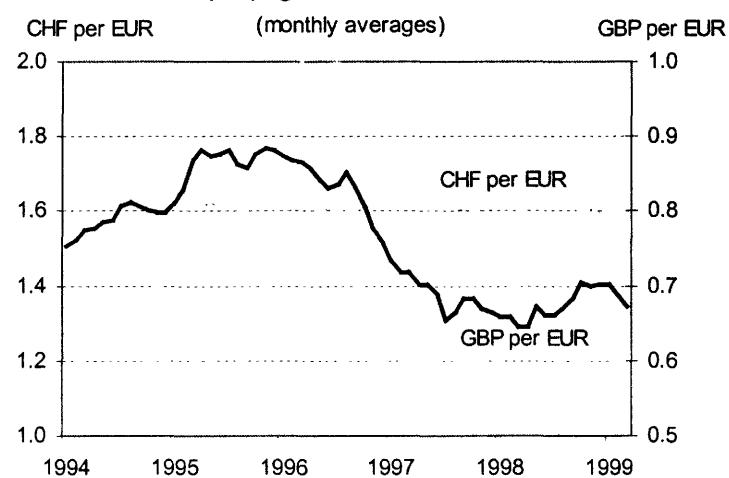
Eurosystem (i.e., the European Central Bank and the national central banks of the 11 countries in the euro area) would reduce interest rates.

The Japanese yen fluctuated considerably against the euro throughout January and February in a range centred around 131 JPY/EUR. During March, the JPY followed the dollar's appreciation against the euro, and the exchange rate reached 128 JPY/EUR by end-March, implying an appreciation of the yen by 3½% since the beginning of the year.

The pound sterling followed the US dollar's appreciation against the euro to a larger extent. By end-March, the pound had appreciated by more than 5% against the euro. This appreciation almost brought the pound back up to the level it had against the EUR11 currencies between mid-1997 and mid-1998 (Chart 3).

The Swiss franc was remarkably steady against the euro during the first quarter of 1999, hardly moving out of a range of ±1% around a rate of 1.60 CHF/EUR.

Chart 3 The euro (DEM) against GBP and CHF since 1994



Note: EUR rates before 1999 calculated on the basis of DEM rates.  
Source: European Commission

TABLE 1: EVOLUTION OF MAIN BILATERAL EXCHANGE RATES

	During the first quarter of 1999 (daily data)			Relative to the previous quarter (monthly averages)		
	31 Dec. 1998	31 March 1999	% change	Average Dec. 98	Average Mar. 99	% change
USD/EUR	1.167	1.074	-7.9%	1.171	1.088	-7.1%
JPY/EUR	132.4	127.8	-3.4%	137.2	130.2	-5.1%
GBP/EUR	0.704	0.666	-5.3%	0.701	0.671	-4.2%
CHF/EUR	1.600	1.598	-0.1%	1.593	1.595	0.1%

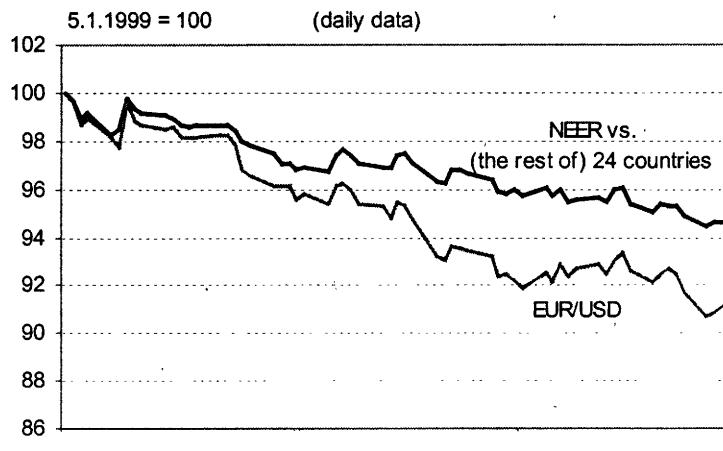
Source: European Commission

## 2. NOMINAL EFFECTIVE EXCHANGE RATES (IC24)

During the first three months of 1999, the nominal effective exchange rate of the euro depreciated by more than 5% against 13 industrialised countries (IC24 other than EUR11). This fall was noticeably smaller than the movement in the bilateral exchange rate against the USD (Chart 4). Despite the depreciation of the euro in the first quarter of 1999, the nominal effective exchange rate of EUR11 still exceeded the level in 1997 (Chart 5).

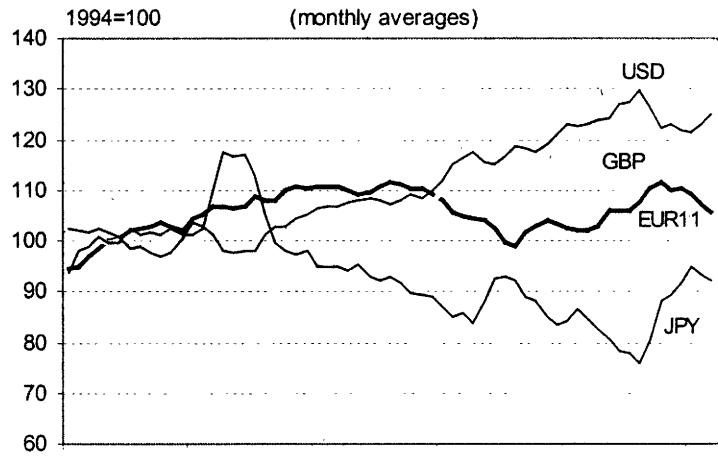
The nominal effective exchange rates of both the USD and GBP appreciated by around 4% during the first quarter, not least reflecting their rise against the euro. The nominal effective exchange rate of the JPY appreciated markedly (25%) between August 1998 and January 1999, but eased down somewhat in February and March.

Chart 4  
Nominal effective exchange rate of the euro in 1999



Source: European Commission

Chart 5  
Nominal effective exchange rates since 1994



Source: European Commission

TABLE 2: NOMINAL EFFECTIVE EXCHANGE RATES  
(vs.24 industrialised countries, index 1994 =100)

	During the first quarter of 1999 (daily data)			Relative to the previous quarter (monthly averages)		
	5 Jan. 1998	31 March 1999	% change	Average Dec. 98	Average Mar. 99	% change
EUR11	110.5	104.6	-5.4%	110.4	105.5	-4.4%
USD	119.9	121.5	4.3%	121.9	125.1	2.6%
JPY	96.3	92.8	-3.6%	91.6	92.0	0.4%
GBP	115.1	119.1	4.0%	117.2	119.4	1.9%

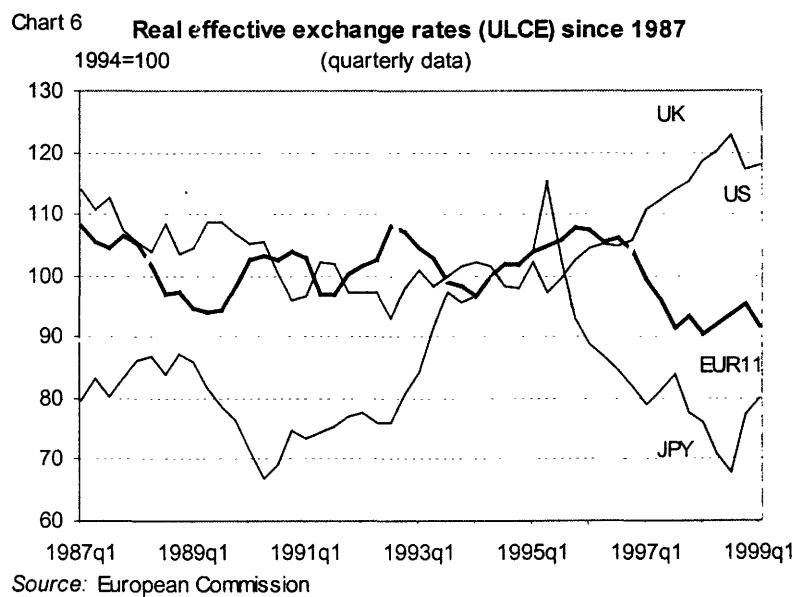
Source: European Commission

### 3. REAL EFFECTIVE EXCHANGE RATES<sup>1</sup> (IC24)

In the first quarter of 1999, the cost competitiveness of the euro area (measured by relative unit labour costs in the economy as a whole) improved by some 3½%. EUR11 cost competitiveness thus returned to the level attained in the first half of 1998 (Chart 6). This represents the most favourable level since 1985. Also based on relative price measures such as the GDP deflator – which cover capital costs as well as labour costs – EUR11 price and cost competitiveness is favourable at the current juncture (not shown).

As a mirror image of the euro area improvement, the cost competitiveness of the US, the UK and Japan deteriorated in the first quarter of 1999.

In a historical perspective, the real effective exchange rate continues to be very high for the USD and the GBP, although slightly down from the peak in 1998q3 (Chart 6). The real effective exchange rate of the JPY has appreciated by some 18% since its low point in 1998q3. Yet, it is still considerably below its average over the 1987-1998 period.



<sup>1</sup> Although the current section focuses on real effective exchange rates as measured by unit labour costs in the whole economy, a comprehensive assessment of developments in cost competitiveness should ideally draw on various measures of the real effective exchange rate. Most international trade is in manufactured goods and some widely used measures focus on unit labour costs in the manufacturing industry (ULCM). However, in-house labour costs account for only a limited share of total costs in the manufacturing industry. The sector purchases a growing amount of inputs from the rest of the economy, including financial services, marketing, accounting etc. In addition, an increasing amount of services are traded internationally. Therefore, some prefer to consider developments based on unit labour costs in the whole economy (ULCE). Moreover, capital costs account for a sizeable fraction of total costs, and one should also take into account measures which include these costs, notably price measures such as the GDP-deflator (PGDP). On the other hand, the measures based on ULCE and PGDP cover many sectors whose output is neither directly nor indirectly traded.

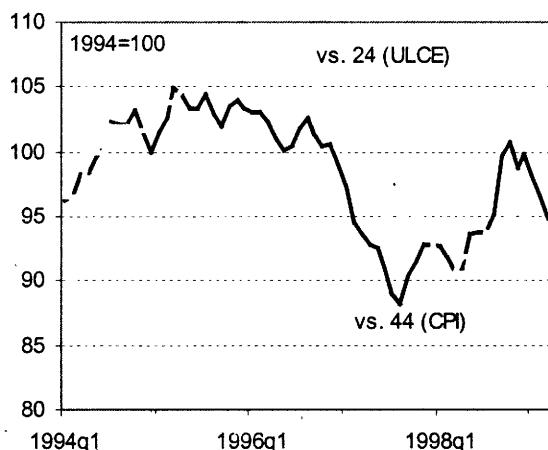
**Box: a broad measure of the real effective exchange rate of EUR11**

Standard measures of real and nominal effective exchange rates often include only the currencies of industrialised countries. This is also the case for the standard measures used in this series of Quarterly Reports which are based on a group of 24 industrialised countries (IC24 = EUR11 + 4 remaining EU countries + 9 non-EU countries). However, as emerging markets and transition economies play an ever larger role in international trade, it has become increasingly important to include them in measures of effective exchange rates.

The Directorate-General for Economic and Financial Affairs has started to calculate an alternative set of effective exchange rates based on a group of 44 countries (see table). Whereas the competitor countries in the IC24 group account for around 57% of EUR11 exports, the countries in the G44 group account for 81% of total extra-EUR11 exports. However, for reasons of data availability the broad measures are only available from 1994 onwards, and real effective exchange rates are available only as deflated by consumer price indices.

The chart below compares the evolution of the standard and the broad measures of the real effective exchange rate of EUR11 since 1994. Among other things, the broad measure shows a substantially larger appreciation of the EUR11 currencies between the onset of Asian financial crises in mid-1997 and late 1998, reflecting the fall in many emerging market currencies during that period.

**REER of EUR11: Narrow and broad measures**



Reference group of 44 countries (EUR11 + 33) (1994 data)		
Country (group)	Share in extra-EUR11 exports to the 33 countries	Double export weights
<i>IC 24 (standard)</i>	71.4 <sup>1</sup>	70.1
UK	22.1	18.5
Denmark	3.3	3.0
Sweden	4.5	3.9
Greece	2.3	2.0
USA	16.7	18.6
Japan	5.0	8.6
Switzerland	9.4	7.5
Canada	1.6	1.6
Norway	1.7	1.6
Turkey	1.7	1.8
Australia	1.4	1.5
New Zealand	0.2	0.3
Mexico	1.4	1.2
<i>CEEC (+Russia)</i>	9.4	10.4
Czech Republic	1.7	1.6
Hungary	1.7	1.4
Slovenia	0.9	0.7
Poland	2.3	2.0
Russia	2.8	4.7
<i>Asian countries</i>	12.9	13.1
China	2.6	3.3
Hong Kong	2.3	1.5
India	1.2	1.4
Indonesia	0.9	1.0
Korea	2.0	2.5
Malaysia	0.9	0.7
Philippines	0.4	0.3
Singapore	1.5	1.2
Thailand	1.1	1.2
<i>Latin America<sup>3</sup></i>	2.4	2.8
Argentina	1.0	1.1
Brazil	1.4	1.7
<i>Others</i>	3.9	3.6
South Africa	1.2	1.5
Israel	1.7	1.3
Egypt	0.9	0.7
Iceland	0.1	0.1
Total	100.0 <sup>2</sup>	100.0

<sup>1</sup> Equal to 57% of total extra-EUR11 exports

<sup>2</sup> Equal to 81% of total extra-EUR11 exports

<sup>3</sup> In addition to Mexico which is included in the standard IC24 group

#### 4. COST COMPETITIVENESS OF THE EURO AREA RELATIVE TO THE USA AND JAPAN

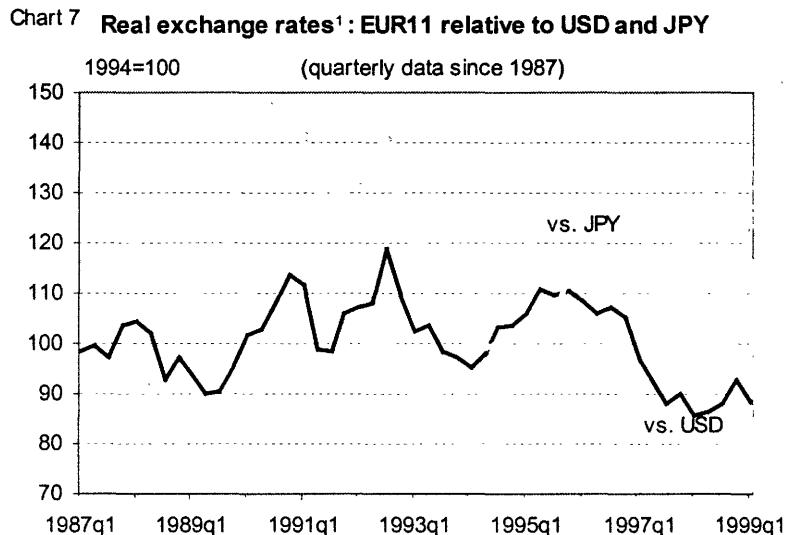
Between the last quarter of 1998 and the first quarter of 1999, the strengthening of the US dollar against the euro led to a gain in cost competitiveness for EUR11 producers against their US competitors of around 4½%.

The appreciation of the Japanese yen since the fourth quarter of 1998 led to a gain for EUR11 producers of around 6½% against Japanese competitors. In both cases, the result was aided by a slightly lower rate of increase in unit labour costs in the euro area than in the US or Japan, but the main driving force was changes in exchange rates.

In a somewhat longer historical perspective, the unit labour cost

competitiveness of euro area producers is currently very favourable relative to US producers (chart 7). Relative unit labour costs in EUR11 are some 12% below their 1987-98 average.

After the strengthening of the Japanese yen since Autumn 1998, unit labour costs in EUR11 relative to Japan are now below their 1987-98 average (by some 3½%).



<sup>1</sup> Deflated by unit labour costs in total economy

Source: European Commission

## **II. DEVELOPMENTS WITHIN THE EUROPEAN UNION**

### **5. COST COMPETITIVENESS MOVEMENTS AMONG EURO AREA MEMBER STATES**

Although euro area Member States now share a single currency, their relative price and cost competitiveness positions may still vary according to movements in costs and prices. Chart 8 and Table 4 show three measures of the real effective exchange rate of individual Member States against the EUR11 average. The different measures do not always give a uniform picture of the movement over time in the real effective exchange rate of a given country, and the indicators must be interpreted carefully.

Deviating price and cost trends among euro area Member States may potentially signal a build-up of competitive imbalances which, if sustained, could lead to regional problems of low economic growth and high unemployment in parts of the euro area. In some cases, however, deviations from the historical longer-run averages may be justified by changes in economic fundamentals related e.g. to catching-up processes in some countries, changes in non-price competitiveness factors, or changes in underlying savings and investment patterns. An in-depth assessment of movements in real exchange rates would require a comprehensive analysis of the economic situation and environment of each country seen in a longer time perspective.

***Recent developments:*** The real effective exchange rate of most euro participants relative to the EUR11 average has been broadly stable over the last year. This relative constancy reflects the convergence in price and cost inflation and the stability among their currencies in the run-up to EMU. Nevertheless, between the first quarter of 1998 and the first quarter of 1999, Germany improved its intra-EUR11 cost competitiveness by almost 1% (2% in manufacturing) while the Netherlands and Portugal saw a deterioration of 1-2%.

Seen over the last two years, the intra-EUR11 real effective exchange rate has depreciated in Germany (by about 2% economy-wide and 6% in manufacturing), and in Ireland (4% economy-wide and 10% in manufacturing). In Germany, this reflected the labour-shedding and cost-cutting efforts of German companies to regain at least part of the competitiveness lost over the previous years. In Ireland, rapid labour productivity growth helped restrain unit labour costs. In addition, the depreciation of the Irish punt within its ERM band outweighed the 3% revaluation of the central rate in March 1998.

Over the same two-year period, there was an upward movement in the real effective exchange rates of the Netherlands (by about 4% economy-wide and by 2½% in the manufacturing sector), Belgium (2% economy-wide and 5% in the manufacturing sector), Portugal (4% economy-wide but less than 1% in the manufacturing sector), and Spain (2% economy-wide and 7% in manufacturing). In the Netherlands, the loss in competitiveness should be seen against a background of many years of improvement and a high current account surplus despite the advanced state of the economic cycle and strong domestic demand. In Belgium and Spain, relative cost increases in the manufacturing sector may signal a potentially more worrying loss in intra-EUR11 cost competitiveness, although a more comprehensive analysis would be needed to allow any firm conclusions to be drawn.

***Relative to the 1987-98 period:*** In a longer time perspective, relative price and cost competitiveness compared to euro area partners is currently considerably worse than the 1987-98 average in Belgium-Luxembourg (about 5%) and Portugal (about 15%). It is significantly better than the 1987-98 average in Finland (about 10%) and Ireland (about 10% in the case of economy-wide ULC). In the remaining countries, the relative price and cost competitiveness indices are either close to their 1987-98 average (Germany, France, Italy, Austria) or they convey contrasting signals with some measures above and some below their 1987-98 average (Spain and the Netherlands).

The large deviation from the 1987-98 average in the case of Portugal may be related to that country being in a catching-up process. In accordance with the so-called Balassa-Samuelson effect, such countries tend to experience real exchange rate appreciation for broad price and cost measures covering both tradeable and non-tradeable sectors. However, it should be noticed that the real appreciation is considerable also in the manufacturing sector in Portugal (around 10% above the historical average). Ireland is unusual in that it has had a trend real exchange rate depreciation – especially as concerns unit labour costs in manufacturing – during the last decade of its catching-up process.

The large deviation from the 1987-98 average in the case of Finland may in part reflect the lagged adjustment to the economic shocks in the late 1980s/early 1990s when the collapse of trade with the former Soviet Union required a reorientation of trade patterns.

## 6. COST COMPETITIVENESS BETWEEN THE EURO AREA AND OTHER MEMBER STATES

Chart 8 also shows the relative price and cost competitiveness of the 4 EU Member States which do not participate in the euro against the EUR11 average.

Notwithstanding its stable exchange rate against the EUR11 currencies, Denmark has seen a very pronounced deterioration in its unit labour cost competitiveness over the last two years (by about 8% economy-wide and almost 12% in the manufacturing industry). This reflects both faster wage increases and lower productivity growth rates in Denmark, partly related to the fact that the economic cycle in this country is more advanced than in the euro area.

After several years of real exchange rate appreciation, the devaluation of the Greek drachma in connection with its entry into the Exchange Rate Mechanism in March 1998 resulted in real effective terms in a depreciation of around 7% (quarterly data). However, with a continuing differential in the pace of price and cost increases relative to EUR11 and with the Greek drachma now considerably above its central parity in the new ERM, the real effective exchange rate of the Greek drachma has since moved up again by about 5%.

The strengthening of the pound sterling since 1996 has led to a sharp deterioration of price and cost competitiveness in the UK relative to the EUR11. Relative unit labour costs are 18% higher than their 1987-98 average in the economy as a whole, and 25% in

manufacturing. After some improvement in the second half of 1998, the strengthening of the GBP against the euro in the first quarter of 1999 led to a renewed deterioration.

Also in Sweden, cost and price competitiveness worsened relative to the euro area in the first quarter of 1999, but it remains moderately better than its 1987-98 average, and similar to the level it had in the 1995-97 period.

TABLE 4: RELATIVE COST AND PRICE INDICATORS OF INDIVIDUAL COUNTRIES RELATIVE TO THE EURO AREA (EUR11)

	Over the last year (99 Q1 / 98 Q1)			Over the last two years (99 Q1 / 97 Q1)			Relative to 1987-98 average (99 Q1 / Average 87-98)		
<b>Euro area Member States</b>									
% Change	ULCE	ULCM	PGDP	ULCE	ULCM	PGDP	ULCE	ULCM	PGDP
BLEU	0.2	1.8	0.1	1.6	4.9	0.3	4.8	5.7	1.7
Germany	-0.7	-1.9	-0.7	-2.2	-5.8	-1.6	-0.6	0.9	0.5
Spain	0.2	1.6	0.5	1.8	6.8	0.6	-3.0	5.7	-4.0
France	-0.5	1.0	-0.8	1.2	2.9	-0.8	2.9	-0.6	-1.3
Ireland	0.9	-3.5	2.6	-3.6	-9.9	-0.2	-7.7	-19.3	1.1
Italy	-0.2	0.4	0.8	-2.2	2.1	2.5	-6.3	-2.0	-0.5
Netherlands	2.0	1.2	0.8	4.4	2.6	1.4	3.0	-3.0	0.1
Austria	0.0	0.1	0.1	0.5	0.4	0.0	0.8	0.1	1.6
Portugal	1.7	1.0	1.7	4.1	0.6	3.0	18.1	11.5	15.1
Finland	0.6	-1.0	-0.3	1.4	-2.8	-1.1	-11.1	-15.2	-9.1
<b>Non-euro area Member States</b>									
% Change	ULCE	ULCM	PGDP	ULCE	ULCM	PGDP	ULCE	ULCM	PGDP
Denmark	3.2	3.5	1.2	8.1	11.6	1.8	7.2	10.9	2.1
Greece	-1.4	-2.0	0.0	0.9	1.7	1.5	17.2	12.0	15.0
Sweden	-1.7	-1.5	-4.2	2.4	1.5	-3.6	-0.3	-7.9	-8.1
UK	-2.0	-2.3	-3.9	13.5	16.4	7.3	19.0	26.5	12.0
<b>Other countries</b>									
% Change	ULCE	ULCM	PGDP	ULCE	ULCM	PGDP	ULCE	ULCM	PGDP
USA	-3.1	-2.4	-4.3	9.6	10.3	4.7	13.2	9.2	6.4
Japan	2.5	5.0	3.6	6.5	12.2	6.6	2.3	11.7	-1.0

Source : European Commission

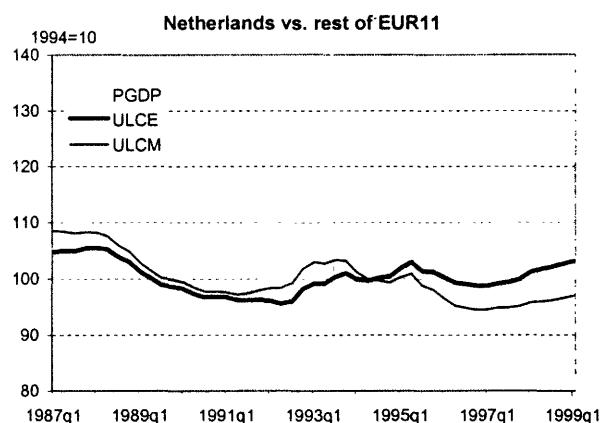
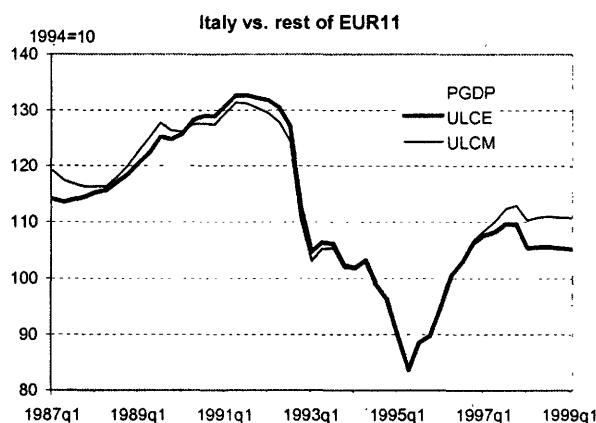
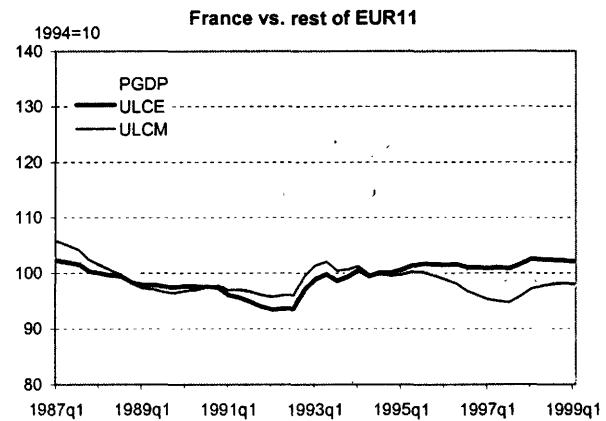
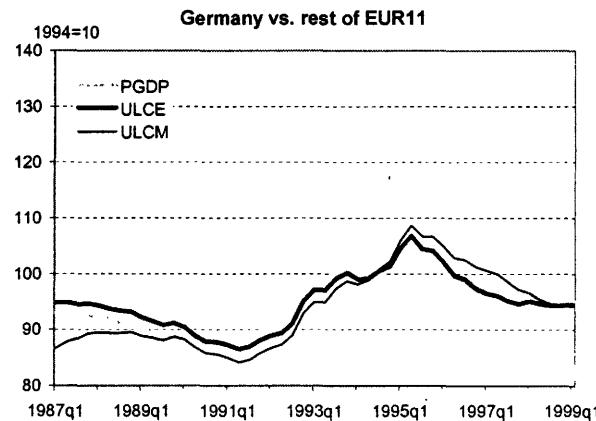
(1) ULCE = Based on unit labour costs in the economy as a whole.

(2) ULCM = Based on unit labour costs in manufacturing industry.

(3) PGDP = Based on GDP-deflator.

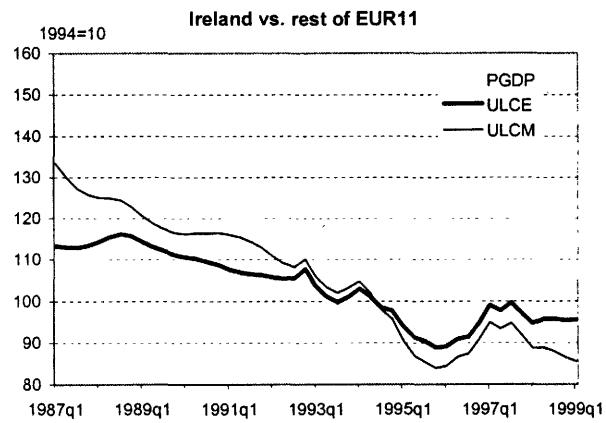
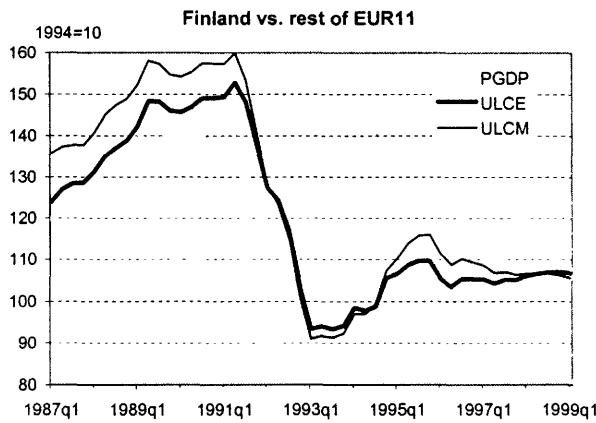
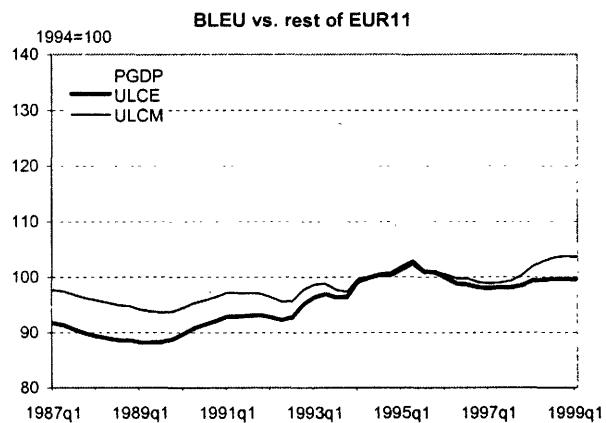
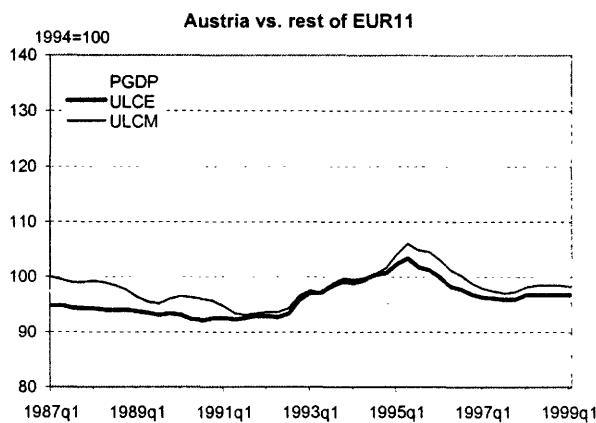
A minus means an improvement in cost competitiveness.

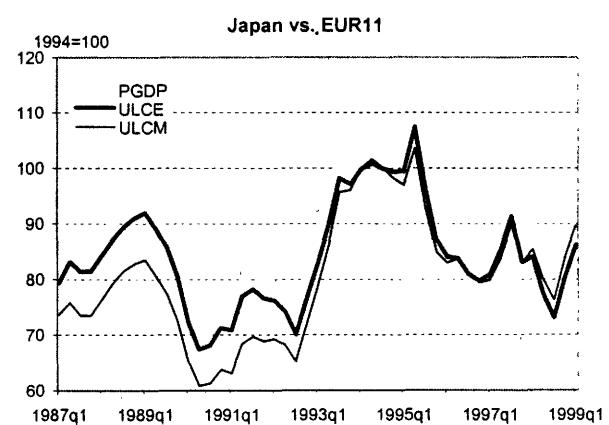
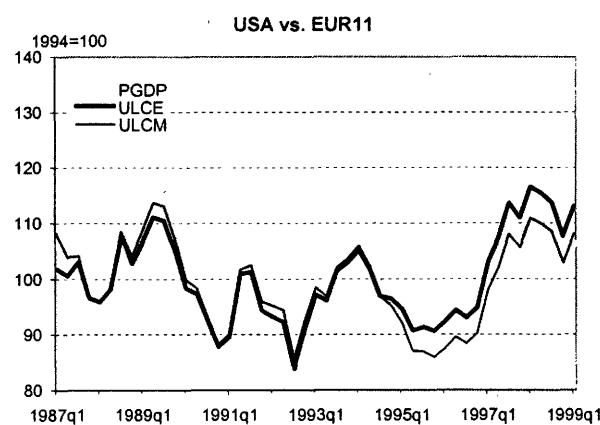
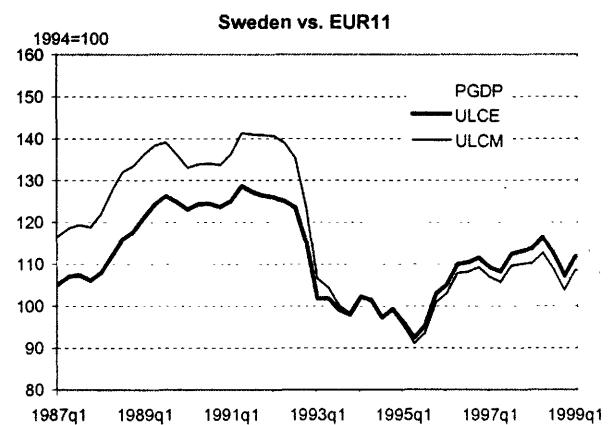
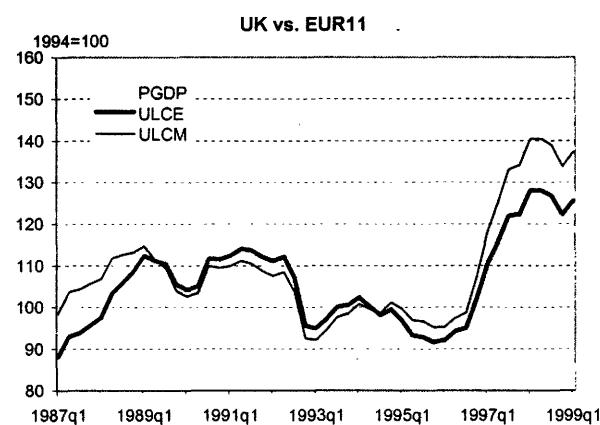
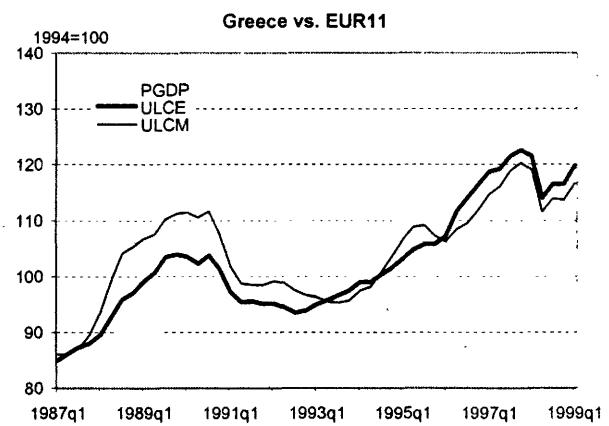
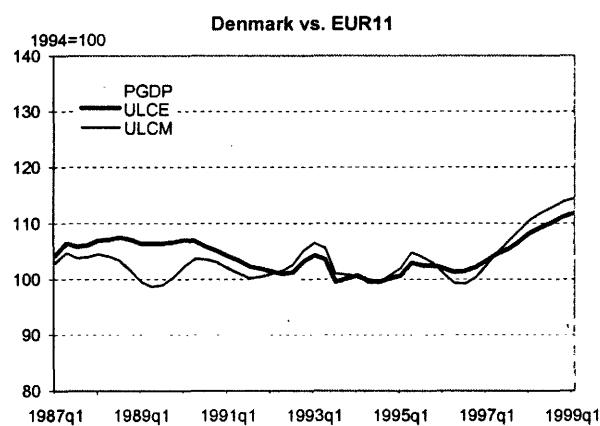
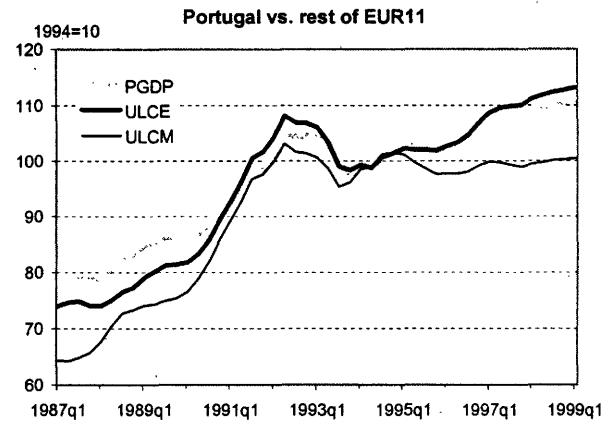
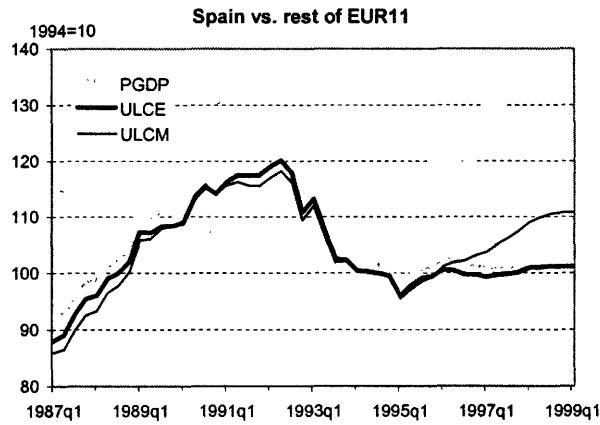
**Chart 8: price and cost indicators for individual countries relative to EUR11**

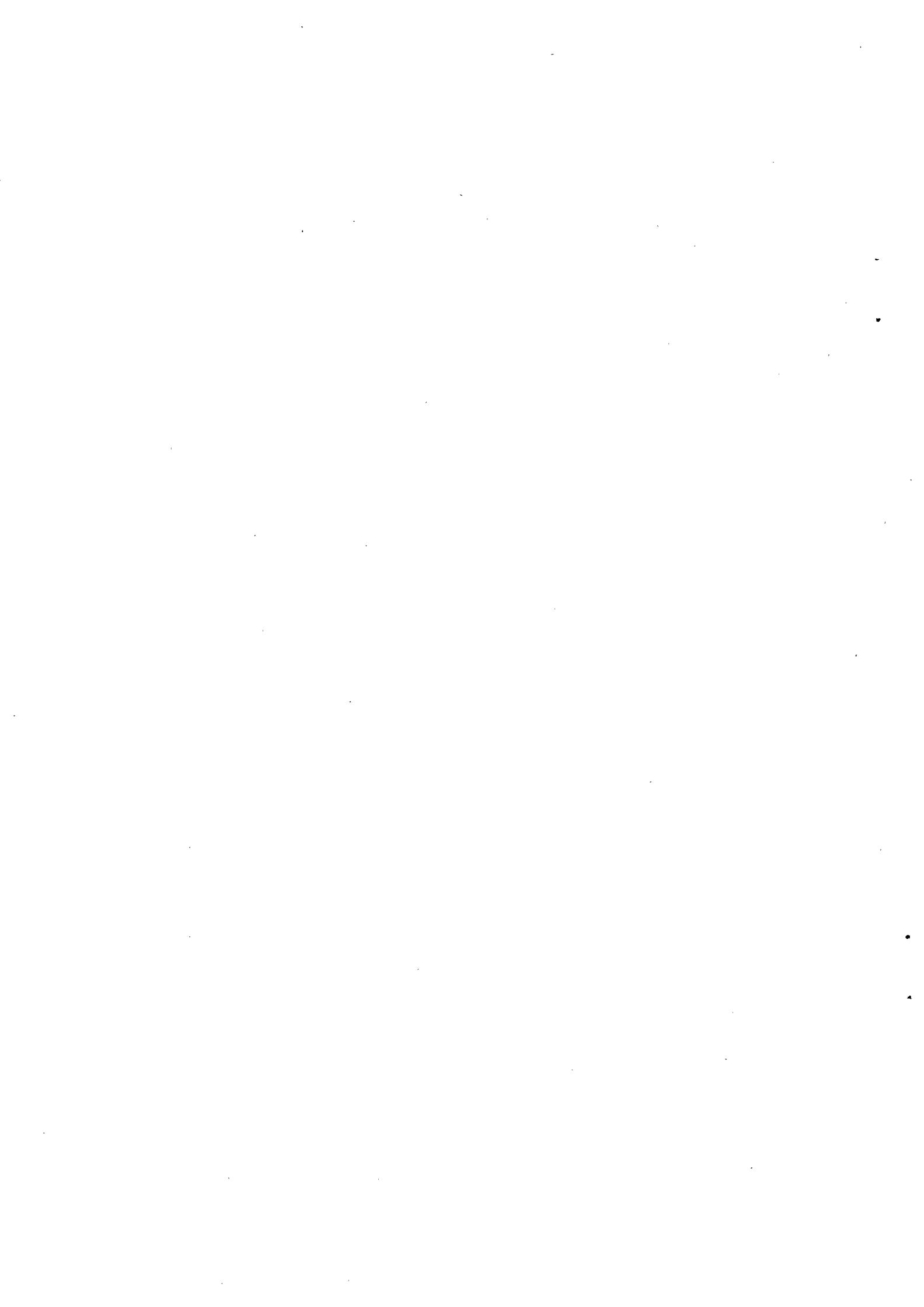


Source: European Commission

Source: European Commission







**PART 2**

**TABLES AND GRAPHS  
BY COUNTRY**

## **PART 2:**

### **TABLES AND GRAPHS BY COUNTRY**

The tables and graphs on **Pages 1 to 40** present nominal and real effective exchange rates of the currencies of the European Union Member States and five other industrial countries. Aggregate measures for the European Union as a whole (EUR15) and the group of countries participating in the Exchange Rate Mechanism (ERM) are presented as well. Each country (or country group) is compared with 23 industrial countries (the 15 EU countries, Norway, Australia, Canada, Japan, the United States, Mexico, New Zealand, Turkey and Switzerland), with the European Union and with the group of ERM participants.

The tables on **Pages 41 to 58** present bilateral exchange rates of the US dollar against the currencies of the 23 industrial countries; and nominal and real effective exchange rates of the EU currencies, the US dollar and Japanese yen (as well as aggregate measures for EUR15 and the ERM). Each cross-national table of real effective exchange rates is based on a single price or cost deflator. Price and cost indices in national currency are presented as well. These tables aim to facilitate a comparison of developments in the different industrial countries. The final table shows the latest double export weight matrices that were used to calculate effective exchange rates.<sup>1</sup>

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<sup>1</sup> The technical annex provides further details.

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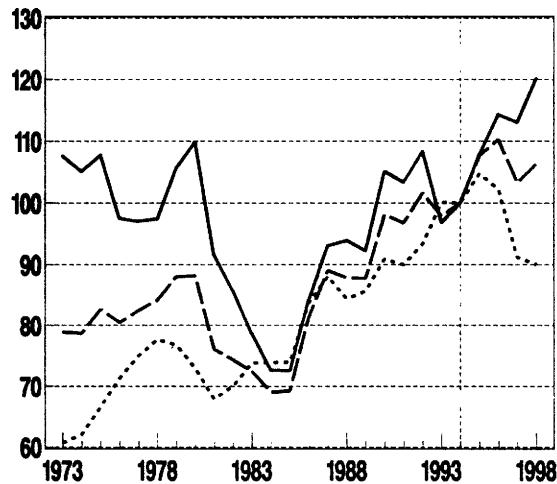
# EUR15 and EUR11

## Trade-weighted currency indices

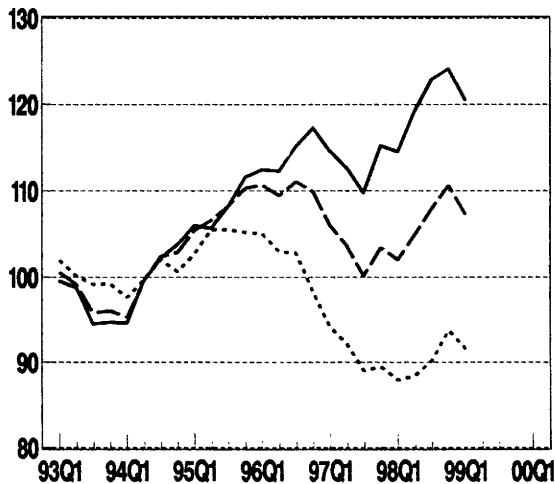
Annual data Index (1994=100)			Quarterly data index (1994=100)			Monthly data monthly % change					
	EUR15 vs. IC24	EUR11 vs. IC24	EUR11 vs. EUR15		EUR15 vs. IC24	EUR11 vs. IC24	EUR11 vs. EUR15		EUR15 vs. IC24	EUR11 vs. IC24	EUR11 vs. EUR15
86	84.2	81.3	83.7	96Q1	112.5	110.7	105.0	MAR98	1.0	-0.1	-1.5
87	93.1	89.1	88.1	96Q2	112.3	109.5	103.0	APR98	1.7	1.1	-0.1
88	93.9	87.9	84.4	96Q3	115.2	111.1	102.8	MAY98	2.2	2.8	2.9
89	92.3	87.8	85.7	96Q4	117.3	109.9	98.3	JUN98	0.9	0.1	-0.8
90	105.1	98.1	90.9	97Q1	114.6	106.0	94.2	JUL98	0.0	0.0	0.1
91	103.4	96.8	90.0	97Q2	112.7	103.6	92.2	AUG98	1.4	1.5	1.3
92	108.3	101.6	93.3	97Q3	109.8	100.1	89.0	SEP98	2.3	2.4	1.8
93	96.9	97.9	100.1	97Q4	115.2	103.4	89.5	OCT98	0.2	1.3	2.6
94	100.0	100.0	100.0	98Q1	114.6	102.0	87.9	NOV98	-1.9	-1.5	-0.7
95	107.9	107.6	104.7	98Q2	119.2	104.9	88.4	DEC98	0.4	0.4	0.4
96	114.3	110.3	102.3	98Q3	122.9	107.9	90.2	JAN99	-1.1	-1.0	-0.6
97	113.1	103.3	91.2	98Q4	124.1	110.6	93.7	FEB99	-1.6	-1.9	-1.8
98	120.1	106.3	90.0	99Q1	120.5	107.3	91.6	MAR99	-1.1	-1.5	-1.6

## Trade-weighted currency indices

Annual data (Index 1994=100)

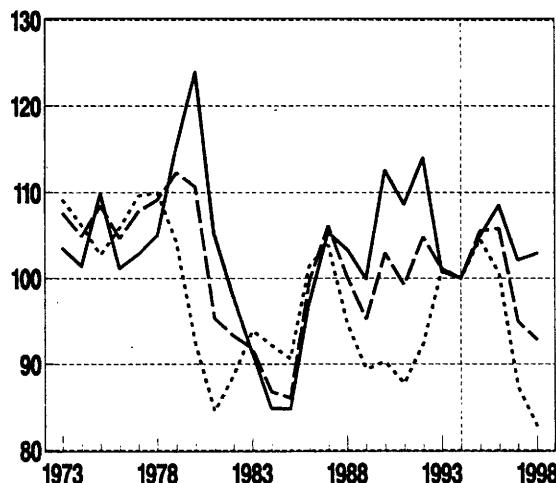


Quarterly data (Index 1994=100)

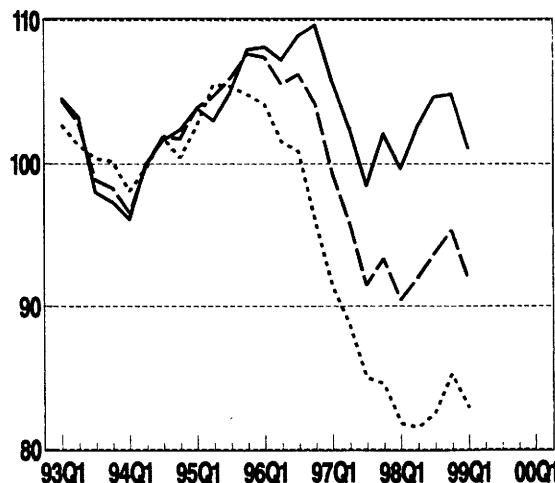


## Relative cost indicators (based on ULCE)

Annual data (Index 1994=100)



Quarterly data (Index 1994=100)



# EUR15 and EUR11

## Relative price and cost indicators of EUR15 vs. (the rest of) 24 industrial countries

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	95.7	93.0	91.9	97.2	96.6	96Q1	108.2	108.2	109.6	108.1	111.2
87	103.3	101.5	99.0	105.3	110.3	96Q2	107.4	107.4	108.2	107.2	109.7
88	102.0	100.5	97.5	103.4	108.3	96Q3	109.4	109.2	109.9	108.9	111.2
89	98.5	97.4	95.7	99.9	102.8	96Q4	110.5	110.3	111.0	109.7	112.0
90	110.4	110.2	107.4	112.5	116.4	97Q1	107.0	106.7	107.7	105.7	108.1
91	107.7	107.6	105.0	108.6	112.5	97Q2	104.2	103.9	105.2	102.5	104.9
92	111.9	112.4	109.2	114.0	116.1	97Q3	100.5	100.2	101.7	98.5	100.8
93	99.2	99.6	100.0	100.7	101.9	97Q4	104.4	104.2	105.8	102.1	104.0
94	100.0	100.0	100.0	100.0	100.0	98Q1	102.6	102.6	104.3	99.7	101.2
95	105.0	105.2	106.8	104.9	108.0	98Q2	105.6	105.7	107.6	102.5	103.6
96	108.9	108.8	109.7	108.5	111.0	98Q3	107.8	108.1	110.2	104.6	105.4
97	104.0	103.7	105.1	102.1	104.4	98Q4	108.0	108.4	110.8	104.8	105.5
98	106.0	106.2	108.2	102.9	103.9	99Q1	104.1	104.6	107.2	101.1	101.8

## Relative price and cost indicators of EUR11 vs. (the rest of) 24 industrial countries

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	96.8	94.3	94.8	99.6	94.4	96Q1	107.5	107.5	108.2	107.4	108.4
87	102.9	101.0	100.4	106.1	104.4	96Q2	105.9	105.8	106.5	105.5	106.3
88	98.6	96.8	97.8	100.2	99.6	96Q3	107.0	106.7	107.8	106.2	106.8
89	96.1	94.0	96.0	95.2	96.3	96Q4	105.3	104.9	106.7	104.1	104.3
90	104.0	102.5	104.0	102.9	105.0	97Q1	100.9	100.5	103.0	99.3	99.0
91	99.9	99.1	101.5	99.2	101.5	97Q2	98.0	97.5	100.8	95.9	95.2
92	104.1	103.9	105.5	104.8	106.2	97Q3	94.0	93.6	97.5	91.5	90.5
93	99.4	99.6	100.1	101.1	102.4	97Q4	96.4	96.1	100.8	93.3	91.9
94	100.0	100.0	100.0	100.0	100.0	98Q1	94.5	94.2	99.4	90.4	88.8
95	105.5	105.7	106.3	105.5	106.2	98Q2	96.5	96.4	102.1	92.0	90.1
96	106.4	106.2	107.3	105.8	106.4	98Q3	98.6	98.6	104.7	93.7	91.6
97	97.3	96.9	100.5	95.0	94.1	98Q4	100.5	100.5	106.9	95.3	93.2
98	97.5	97.4	103.3	92.8	90.9	99Q1	97.0	97.0	103.2	91.9	89.9

## Relative price and cost indicators of EUR11 vs. (the rest of) EUR15

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	98.4	96.4	99.2	101.4	91.9	96Q1	104.3	104.1	103.9	104.1	102.4
87	100.8	98.9	101.1	103.9	94.9	96Q2	102.1	101.8	102.3	101.5	100.1
88	94.0	91.9	97.6	94.7	88.4	96Q3	101.8	101.3	102.9	100.9	99.2
89	93.0	89.8	95.9	89.4	88.0	96Q4	97.2	96.6	99.2	96.0	93.7
90	94.6	91.9	98.0	90.3	90.0	97Q1	92.9	92.3	96.0	91.4	88.3
91	90.1	88.6	96.1	87.7	87.6	97Q2	90.7	90.1	95.0	88.8	84.9
92	93.4	92.4	99.0	92.3	92.4	97Q3	87.5	86.9	92.8	85.0	80.8
93	99.9	99.7	100.2	101.1	102.2	97Q4	87.8	87.2	94.3	84.6	80.1
94	100.0	100.0	100.0	100.0	100.0	98Q1	86.2	85.6	93.6	81.8	77.5
95	104.3	104.4	103.8	104.6	102.2	98Q2	86.5	86.1	94.8	81.5	77.3
96	101.3	100.9	102.1	100.6	98.8	98Q3	88.2	87.7	96.9	82.5	78.3
97	89.7	89.1	94.5	87.4	83.4	98Q4	91.5	90.9	100.4	85.3	80.9
98	88.1	87.6	96.4	82.8	78.5	99Q1	89.2	88.6	97.5	82.9	78.7

Abbreviations: IC24 = 24 Industrial Countries  
 EUR15 = 15 Member States of the European Union  
 EUR11 = Countries in the euro area  
 PCP = Deflator of private consumption  
 PGDP = Gross Domestic Product Deflator  
 PX = Price Deflator Exports of Goods and Services  
 ULCE = Nominal Unit Labour Cost in total Economy  
 ULCM = Nominal Unit Labour Cost in Manufacturing industry

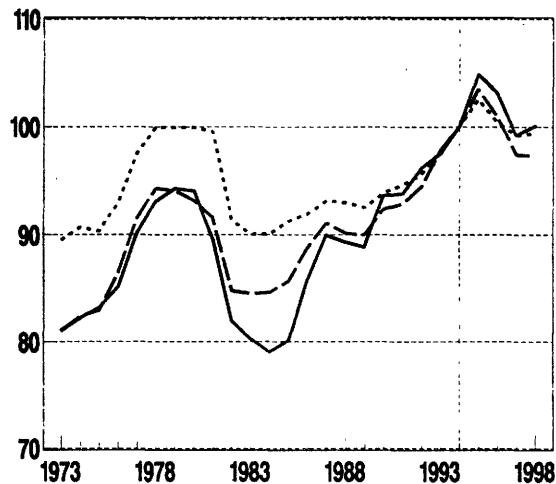
# BLEU – euro (before 1999: franc)

## Trade-weighted currency indices

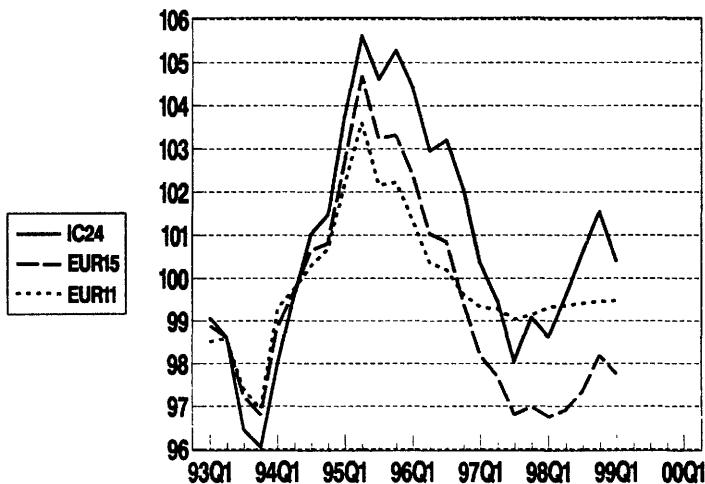
Annual data Index (1994=100)				Quarterly data Index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	85.8	88.8	91.9	96Q1	104.4	102.4	101.3	MAR98	-0.1	-0.3	0.0
87	90.0	91.1	93.2	96Q2	103.0	101.0	100.4	APR98	0.3	-0.0	-0.0
88	89.3	90.2	93.0	96Q3	103.2	100.8	100.2	MAY98	1.1	-0.7	0.0
89	88.9	90.0	92.5	96Q4	102.1	99.4	99.6	JUN98	-0.0	-0.2	-0.0
90	93.6	92.4	93.9	97Q1	100.4	98.2	99.3	JUL98	0.0	0.0	0.0
91	93.8	92.9	94.6	97Q2	99.5	97.7	99.3	AUG98	0.5	0.3	0.0
92	96.2	94.5	95.6	97Q3	98.0	96.8	99.0	SEP98	0.8	0.4	0.0
93	97.5	97.9	97.9	97Q4	99.1	97.0	99.1	OCT98	0.5	0.6	0.0
94	100.0	100.0	100.0	98Q1	98.6	96.7	99.3	NOV98	-0.5	-0.1	0.0
95	104.8	103.5	102.6	98Q2	99.6	96.9	99.3	DEC98	0.1	0.1	0.0
96	103.2	100.9	100.4	98Q3	100.6	97.4	99.4	JAN99	-0.3	-0.1	0.0
97	99.2	97.4	99.2	98Q4	101.5	98.2	99.5	FEB99	-0.7	-0.4	0.0
98	100.1	97.3	99.4	99Q1	100.4	97.8	99.5	MAR99	-0.6	-0.4	0.0

## Trade-weighted currency indices

Annual data (index 1994=100)

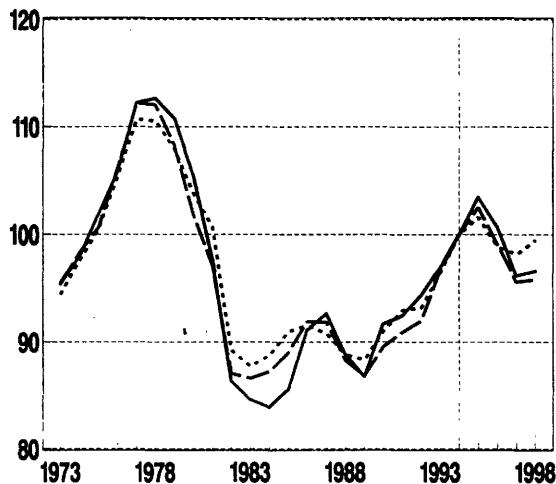


Quarterly data (index 1994=100)

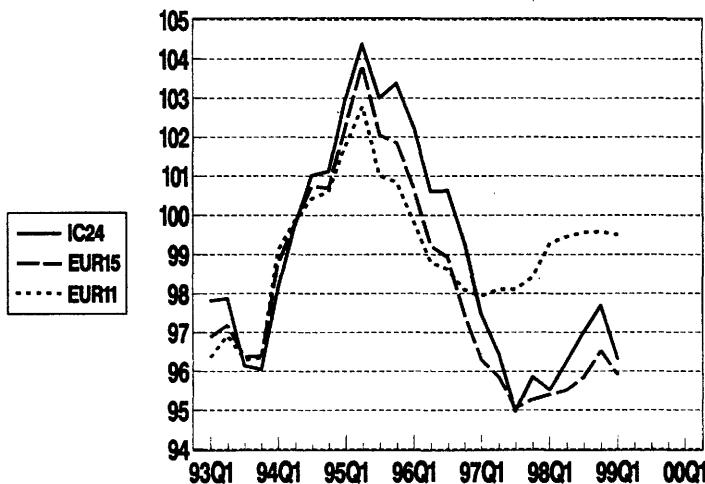


## Relative cost indicators (based on ULCE)

Annual data (index 1994=100)



Quarterly data (index 1994=100)



# BLEU – euro (before 1999: franc)

## Relative price and cost indicators vs. (the rest of) 24 industrial countries

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	94.1	91.2	94.1	91.1	94.8	96Q1	103.6	102.5	102.4	102.3	103.0
87	97.7	94.4	95.1	92.6	98.0	96Q2	102.1	101.0	101.7	100.6	101.7
88	94.9	92.2	95.2	88.8	94.7	96Q3	102.3	101.1	102.9	100.6	101.7
89	94.0	91.9	96.4	86.8	92.3	96Q4	101.1	99.8	102.8	99.3	100.2
90	97.8	95.4	99.1	91.7	96.8	97Q1	99.2	98.0	102.0	97.5	98.0
91	96.3	94.0	97.4	92.5	97.3	97Q2	98.2	97.0	101.9	96.5	96.8
92	97.0	96.1	98.5	94.4	98.0	97Q3	96.5	95.5	100.9	95.0	95.4
93	98.0	97.8	97.7	97.0	99.1	97Q4	97.4	96.5	102.1	95.9	96.8
94	100.0	100.0	100.0	100.0	100.0	98Q1	96.7	95.9	101.5	95.5	97.1
95	104.2	103.4	102.7	103.4	103.2	98Q2	97.4	96.7	102.3	98.3	98.4
96	102.3	101.1	102.4	100.7	101.6	98Q3	98.2	97.6	103.1	97.0	99.7
97	97.8	96.8	101.7	96.2	96.8	98Q4	98.9	98.4	104.0	97.7	100.6
98	97.8	97.2	102.7	96.6	98.9	99Q1	97.7	97.1	102.7	96.3	99.2

## Relative price and cost indicators vs. (the rest of) EUR15

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	95.2	92.8	96.0	91.9	95.8	96Q1	102.0	100.9	100.6	100.7	100.9
87	97.2	94.3	95.5	91.8	96.3	96Q2	100.7	99.5	100.2	99.2	99.8
88	94.6	92.1	95.9	88.3	93.3	96Q3	100.5	99.3	101.0	98.9	99.6
89	94.4	92.5	97.4	86.8	91.9	96Q4	99.1	97.9	100.7	97.5	97.9
90	96.0	93.6	97.9	89.6	94.0	97Q1	97.8	96.7	100.5	98.3	98.4
91	94.9	92.6	96.5	90.9	95.0	97Q2	97.3	96.2	100.9	95.9	95.7
92	94.9	94.0	96.9	92.0	95.2	97Q3	96.3	95.3	100.5	95.1	95.1
93	98.0	97.8	97.7	96.7	98.6	97Q4	96.4	95.5	100.9	95.3	95.9
94	100.0	100.0	100.0	100.0	100.0	98Q1	96.1	95.3	100.7	95.4	96.6
95	103.2	102.4	101.4	102.5	101.7	98Q2	96.2	95.5	100.7	95.5	97.5
96	100.6	99.4	100.6	99.1	99.6	98Q3	96.5	95.9	101.1	95.8	98.4
97	97.0	95.9	100.7	95.6	95.8	98Q4	97.3	96.6	101.9	98.5	99.3
98	96.5	95.8	101.1	95.8	98.0	99Q1	96.8	96.1	101.3	95.9	98.7

## Relative price and cost indicators vs. (the rest of) the countries in the euro area (EUR11)

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	95.5	93.3	96.2	91.5	97.3	96Q1	101.2	100.0	99.8	99.8	100.4
87	96.9	94.2	95.2	90.8	97.0	96Q2	100.3	99.1	99.7	98.8	99.8
88	95.6	93.4	96.1	88.8	95.2	96Q3	100.1	99.0	100.5	98.6	99.7
89	95.6	94.1	98.0	88.3	93.8	96Q4	99.6	98.4	100.8	98.1	99.1
90	96.8	94.9	98.1	91.0	95.5	97Q1	99.3	98.2	101.4	97.9	98.8
91	96.7	94.6	97.1	93.0	97.1	97Q2	99.2	98.2	102.0	98.1	98.9
92	96.1	95.2	97.0	93.2	96.3	97Q3	98.9	98.0	102.0	98.1	99.2
93	98.1	97.8	97.6	96.5	98.1	97Q4	99.0	98.1	102.1	98.4	100.2
94	100.0	100.0	100.0	100.0	100.0	98Q1	99.1	98.3	102.1	99.3	101.8
95	102.3	101.5	100.6	101.6	101.3	98Q2	99.0	98.4	101.9	99.5	102.8
96	100.3	99.1	100.2	98.8	99.7	98Q3	99.0	98.4	101.8	99.6	103.5
97	99.1	98.1	101.9	98.1	99.3	98Q4	99.1	98.4	101.8	99.6	103.7
98	99.0	98.4	101.9	99.5	103.0	99Q1	99.1	98.4	101.9	99.5	103.7

Abbreviations: IC24 = 24 Industrial Countries  
 EUR15 = 15 Member States of the European Union  
 EUR11 = Countries in the euro area  
 PCP = Deflator of private consumption  
 PGDP = Gross Domestic Product Deflator  
 PX = Price Deflator Exports of Goods and Services  
 ULCE = Nominal Unit Labour Cost in total Economy  
 ULCM = Nominal Unit Labour Cost in Manufacturing Industry

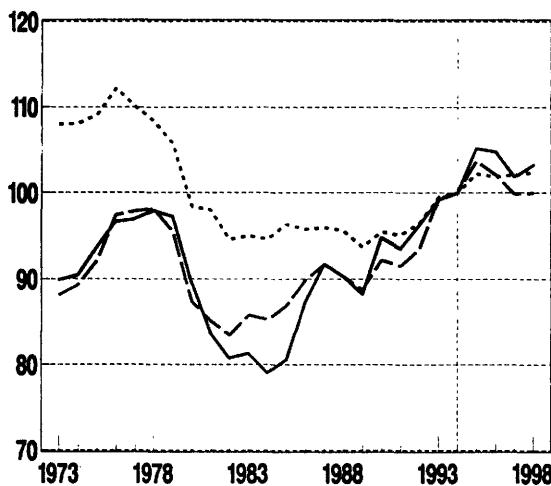
# Denmark – krone

## Trade-weighted currency indices

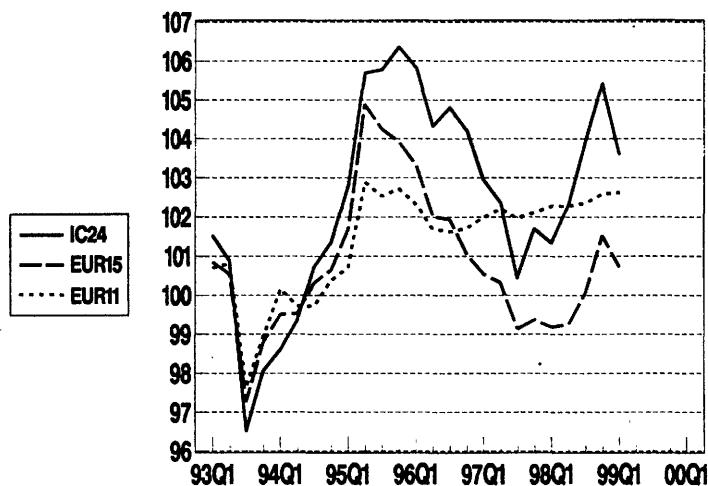
Annual data index (1994=100)			Quarterly data index (1994=100)			Monthly data monthly % change					
	vs. IC24	(the rest of) EUR15 EUR11		vs. IC24	(the rest of) EUR15 EUR11		vs. IC24	(the rest of) EUR15 EUR11			
86	87.3	89.9	95.8	96Q1	105.8	103.3	102.3	MAR98	-0.3	-0.5	-0.0
87	91.7	91.7	96.0	96Q2	104.3	102.0	101.7	APR98	0.3	-0.1	-0.0
88	90.3	90.3	95.6	96Q3	104.8	101.9	101.6	MAY98	1.3	-0.8	0.1
89	88.3	88.8	93.7	96Q4	104.2	101.1	101.7	JUN98	0.2	-0.0	0.0
90	94.8	92.2	95.5	97Q1	102.9	100.5	102.0	JUL98	0.0	0.0	-0.0
91	93.5	91.5	95.1	97Q2	102.4	100.3	102.2	AUG98	0.9	0.5	0.1
92	96.3	93.5	96.5	97Q3	100.5	99.1	102.0	SEP98	1.1	0.6	0.1
93	99.2	99.3	99.5	97Q4	101.7	99.4	102.1	OCT98	0.8	1.0	0.2
94	100.0	100.0	100.0	98Q1	101.3	99.2	102.3	NOV98	-0.8	-0.2	0.0
95	105.1	103.7	102.2	98Q2	102.3	99.3	102.3	DEC98	0.2	0.1	-0.1
96	104.8	102.1	101.8	98Q3	103.9	100.0	102.3	JAN99	-0.9	-0.4	-0.0
97	101.9	99.8	102.1	98Q4	105.4	101.5	102.6	FEB99	-0.8	-0.5	0.1
98	103.2	100.0	102.4	99Q1	103.6	100.7	102.6	MAR99	-0.6	-0.3	0.0

## Trade-weighted currency indices

Annual data (index 1994=100)

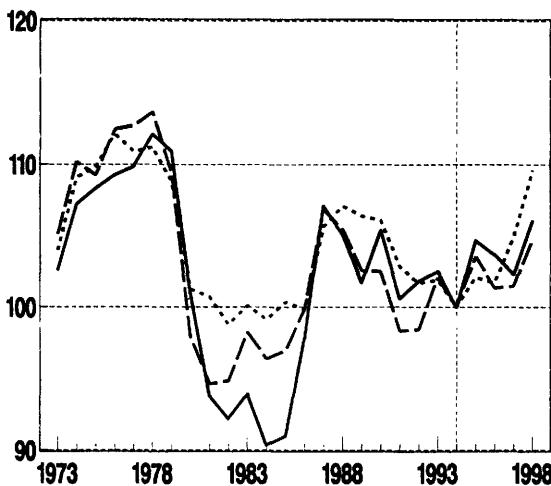


Quarterly data (index 1994=100)

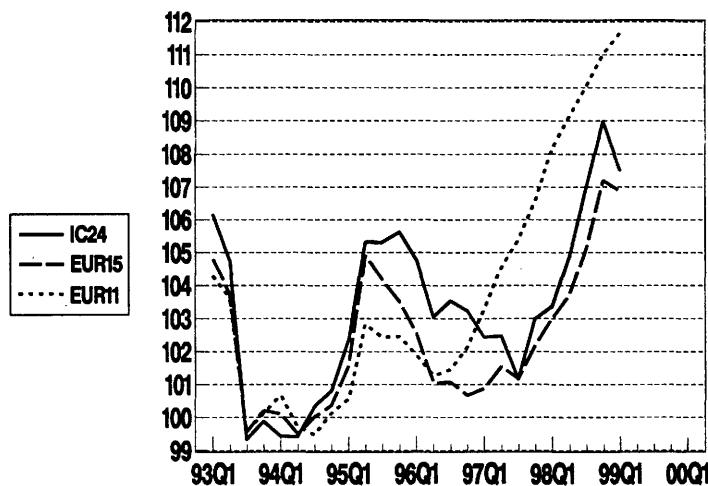


## Relative cost indicators (based on ULCE)

Annual data (index 1994=100)



Quarterly data (index 1994=100)



# Denmark – krone

## Relative price and cost indicators vs. (the rest of) 24 industrial countries

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	97.0	95.9	95.5	97.8	93.0	96Q1	103.3	104.3	101.8	104.8	104.2
87	102.8	101.5	97.5	107.1	104.0	96Q2	101.8	102.9	100.7	103.1	101.3
88	101.2	99.1	94.0	105.1	100.4	96Q3	102.3	103.4	101.7	103.5	101.3
89	99.0	97.0	93.1	101.7	95.1	96Q4	101.6	102.8	101.7	103.2	101.3
90	103.7	102.3	99.2	105.4	103.1	97Q1	100.3	101.5	101.1	102.4	101.3
91	99.4	98.5	97.6	100.6	99.2	97Q2	99.7	100.9	101.1	102.5	102.3
92	99.5	100.0	102.6	101.8	102.7	97Q3	97.8	99.0	99.5	101.2	101.1
93	99.8	100.3	101.3	102.5	104.8	97Q4	99.0	100.3	100.8	103.0	104.1
94	100.0	100.0	100.0	100.0	100.0	98Q1	98.7	100.0	100.3	103.4	104.7
95	103.3	103.9	101.8	104.6	106.3	98Q2	99.7	101.1	101.2	104.8	106.4
96	102.3	103.4	101.5	103.7	102.0	98Q3	101.4	102.8	102.7	107.0	108.6
97	99.2	100.4	100.6	102.3	102.4	98Q4	103.1	104.5	104.3	109.0	110.6
98	100.7	102.1	102.1	106.0	107.6	99Q1	101.6	102.9	102.6	107.5	109.1

## Relative price and cost indicators vs. (the rest of) EUR15

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	98.8	98.6	98.8	99.9	94.8	96Q1	101.1	102.2	99.5	102.6	101.4
87	102.3	101.7	98.5	106.8	101.9	96Q2	99.8	101.0	98.8	101.0	98.9
88	101.2	99.5	95.3	105.4	99.0	96Q3	99.8	101.1	99.5	101.1	98.5
89	99.8	98.1	95.0	102.5	94.6	96Q4	98.9	100.3	99.4	100.7	98.5
90	101.2	100.0	98.2	102.5	99.0	97Q1	98.5	99.8	99.6	100.9	99.4
91	97.5	96.7	96.9	98.3	95.8	97Q2	98.3	99.7	100.0	101.5	101.0
92	96.7	97.2	100.8	98.5	98.6	97Q3	97.2	98.6	99.1	101.2	101.4
93	99.8	100.3	101.5	102.1	103.8	97Q4	97.5	98.9	99.3	102.2	103.1
94	100.0	100.0	100.0	100.0	100.0	98Q1	97.5	98.8	99.0	103.0	104.2
95	102.1	102.6	100.2	103.5	104.5	98Q2	97.7	99.0	98.9	103.7	105.2
96	99.9	101.1	99.3	101.3	99.3	98Q3	98.8	100.0	99.6	105.1	106.7
97	97.9	99.2	99.5	101.5	101.2	98Q4	100.5	101.6	101.1	107.2	108.8
98	98.6	99.8	99.6	104.7	106.2	99Q1	100.0	101.0	100.3	106.9	108.4

## Relative price and cost indicators vs. (the rest of) the countries in the euro area (EUR11)

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	99.5	100.2	99.8	99.8	97.8	96Q1	100.4	101.5	99.0	101.9	101.0
87	102.0	102.2	98.8	105.6	103.8	96Q2	99.8	101.1	98.7	101.3	99.3
88	103.0	102.2	96.7	107.1	103.2	96Q3	99.8	101.2	99.2	101.5	99.2
89	102.2	101.7	97.0	106.4	99.3	96Q4	99.9	101.4	99.8	102.1	100.3
90	103.1	103.0	99.4	106.1	103.1	97Q1	100.3	101.8	100.6	103.3	102.5
91	101.1	100.9	98.8	102.8	100.8	97Q2	100.6	102.1	101.1	104.5	104.8
92	99.5	100.4	101.7	101.7	102.5	97Q3	100.5	102.0	100.9	105.4	106.7
93	100.0	100.5	101.4	101.9	103.5	97Q4	100.8	102.2	100.8	106.6	108.6
94	100.0	100.0	100.0	100.0	100.0	98Q1	101.1	102.5	100.6	108.2	110.6
95	100.8	101.4	99.4	102.1	103.4	98Q2	101.3	102.6	100.9	109.1	111.8
96	100.0	101.3	99.2	101.7	100.0	98Q3	101.6	102.9	100.2	110.0	112.8
97	100.5	102.0	100.9	104.9	105.6	98Q4	102.2	103.4	100.5	111.0	113.8
98	101.5	102.8	100.4	109.6	112.3	99Q1	102.5	103.7	100.8	111.7	114.4

Abbreviations: IC24 = 24 Industrial Countries  
 EUR15 = 15 Member States of the European Union  
 EUR11 = Countries in the euro area  
 PCP = Deflator of private consumption  
 PGDP = Gross Domestic Product Deflator  
 PX = Price Deflator Exports of Goods and Services  
 ULCE = Nominal Unit Labour Cost in total Economy  
 ULCM = Nominal Unit Labour Cost in Manufacturing industry

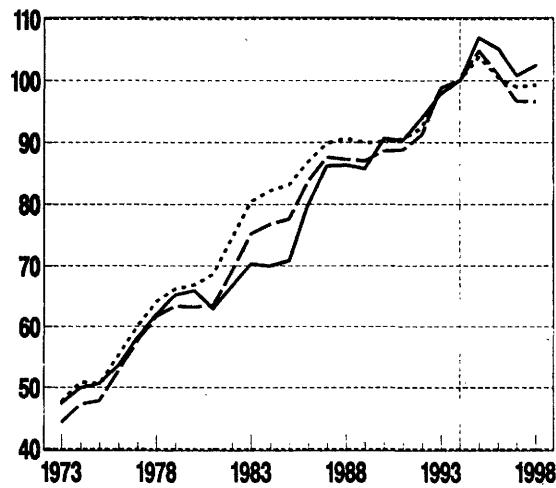
# Germany – euro (before 1999: mark)

## Trade-weighted currency indices

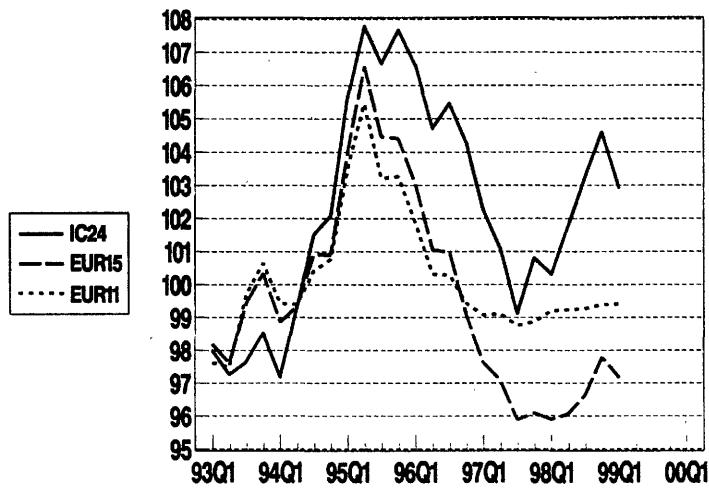
Annual data Index (1994=100)			Quarterly data Index (1994=100)			Monthly data monthly % change					
	vs. IC24	(the rest of) EUR15 EUR11		vs. IC24	(the rest of) EUR15 EUR11		vs. IC24	(the rest of) EUR15 EUR11			
86	79.9	83.7	86.9	96Q1	106.6	103.0	101.8	MAR98	-0.1	-0.5	-0.0
87	86.2	87.7	89.9	96Q2	104.7	101.0	100.3	APR98	0.6	0.0	0.0
88	86.4	87.3	90.6	96Q3	105.5	101.0	100.3	MAY98	1.4	0.8	-0.0
89	85.8	87.0	90.0	96Q4	104.3	99.0	99.4	JUN98	0.1	-0.2	-0.0
90	90.6	88.7	90.2	97Q1	102.2	97.6	99.1	JUL98	0.0	0.0	0.0
91	90.4	88.8	90.6	97Q2	101.1	97.1	99.1	AUG98	0.8	0.4	0.0
92	94.0	91.3	92.4	97Q3	99.1	95.9	98.8	SEP98	1.3	0.6	0.1
93	97.9	98.9	98.9	97Q4	100.8	96.1	98.9	OCT98	0.7	0.8	0.0
94	100.0	100.0	100.0	98Q1	100.3	95.9	99.2	NOV98	-0.8	-0.2	0.0
95	106.9	104.9	103.9	98Q2	101.8	96.1	99.2	DEC98	0.2	0.1	0.0
96	105.3	101.0	100.5	98Q3	103.3	96.6	99.3	JAN99	-0.5	-0.2	-0.0
97	100.8	96.7	99.0	98Q4	104.6	97.8	99.4	FEB99	-1.0	-0.5	-0.0
98	102.5	96.6	99.3	99Q1	102.9	97.2	99.4	MAR99	-0.8	-0.5	-0.0

## Trade-weighted currency indices

Annual data (index 1994=100)

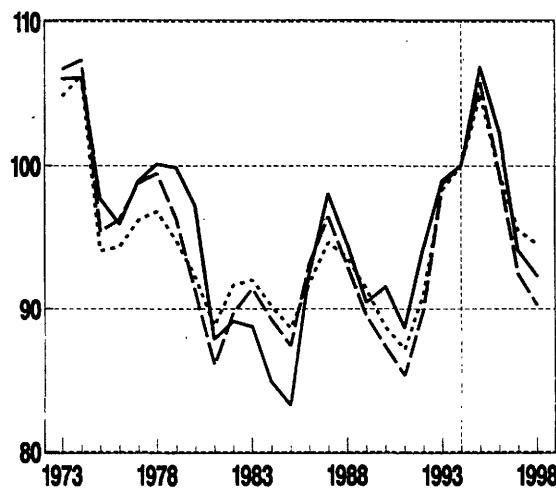


Quarterly data (index 1994=100)

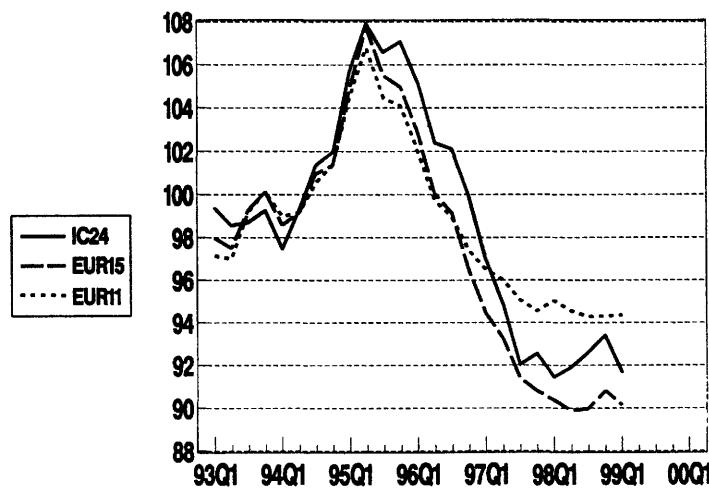


## Relative cost indicators (based on ULCE)

Annual data (index 1994=100)



Quarterly data (index 1994=100)



# Germany – euro (before 1999: mark)

## Relative price and cost indicators vs. (the rest of) 24 industrial countries

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	91.6	89.2	90.3	92.5	82.0	98Q1	103.8	104.1	103.8	105.2	108.0
87	95.5	94.1	95.5	98.0	91.8	96Q2	101.6	101.7	101.7	102.4	105.4
88	92.9	91.3	94.2	94.6	91.0	96Q3	102.1	101.9	102.2	102.1	105.3
89	90.2	88.2	91.0	90.5	88.7	96Q4	100.6	100.2	100.8	99.9	103.2
90	92.8	91.1	94.6	91.5	90.7	97Q1	98.4	97.6	98.7	97.0	100.2
91	91.0	89.6	94.1	88.7	87.8	97Q2	97.0	96.0	97.5	94.9	97.6
92	95.0	94.5	98.1	94.3	93.1	97Q3	94.7	93.6	95.6	92.0	94.2
93	98.9	98.8	100.0	99.0	98.0	97Q4	96.0	94.8	97.3	92.5	93.9
94	100.0	100.0	100.0	100.0	100.0	98Q1	95.1	93.9	96.9	91.5	91.8
95	105.1	105.5	105.5	106.8	108.8	98Q2	96.1	94.8	98.3	91.9	91.5
96	102.0	101.9	102.1	102.4	105.5	98Q3	97.0	95.8	99.6	92.6	91.7
97	96.5	95.5	97.3	94.1	96.5	98Q4	97.9	96.6	100.6	93.4	92.4
98	96.5	95.3	98.8	92.3	91.9	99Q1	96.0	94.8	98.6	91.7	90.9

## Relative price and cost indicators vs. (the rest of) EUR15

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	92.8	90.9	92.2	93.2	81.8	96Q1	101.3	101.6	100.9	102.8	104.9
87	94.3	93.4	95.5	96.4	88.2	96Q2	99.2	99.2	99.0	100.0	102.4
88	91.7	90.4	94.4	93.0	87.7	96Q3	99.0	98.8	99.0	99.1	101.8
89	89.8	87.8	91.3	89.5	86.6	96Q4	97.0	96.5	97.1	96.5	99.2
90	89.3	87.5	91.9	87.3	85.4	97Q1	95.6	94.8	95.8	94.4	97.1
91	88.0	86.5	92.0	85.3	83.3	97Q2	95.0	94.0	95.4	93.3	95.5
92	91.3	90.6	95.3	89.9	88.1	97Q3	93.8	92.6	94.4	91.4	93.0
93	99.2	98.9	100.1	98.7	97.3	97Q4	93.8	92.5	94.9	90.8	91.6
94	100.0	100.0	100.0	100.0	100.0	98Q1	93.5	92.1	95.1	90.4	90.2
95	103.8	104.2	103.1	105.8	106.8	98Q2	93.5	92.1	95.5	89.9	89.1
96	99.1	99.0	99.0	99.6	102.1	98Q3	93.9	92.4	96.0	90.0	88.8
97	94.6	93.5	95.1	92.5	94.3	98Q4	94.8	93.2	96.9	90.8	89.6
98	93.9	92.4	95.9	90.3	89.5	99Q1	94.0	92.4	95.9	90.2	89.1

## Relative price and cost indicators vs. (the rest of) the countries in the euro area (EUR11)

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	92.3	90.8	91.7	91.8	81.6	96Q1	100.3	100.6	99.9	102.0	104.8
87	93.3	92.8	94.7	94.7	88.0	96Q2	98.6	98.8	98.3	99.7	102.8
88	92.4	91.5	94.5	93.6	89.4	96Q3	98.5	98.4	98.2	99.0	102.4
89	90.6	89.2	91.4	91.4	88.5	96Q4	97.6	97.2	97.1	97.4	101.2
90	89.7	88.4	91.7	88.7	86.6	97Q1	97.3	96.8	96.5	98.5	100.5
91	89.5	88.3	92.3	87.1	84.8	97Q2	97.3	96.4	96.4	96.0	99.9
92	92.2	91.8	95.2	91.1	88.9	97Q3	96.9	95.8	95.9	95.1	98.4
93	99.2	99.0	100.1	98.3	96.4	97Q4	96.9	95.6	96.1	94.5	97.1
94	100.0	100.0	100.0	100.0	100.0	98Q1	97.1	95.7	96.5	95.0	96.5
95	102.9	103.3	102.3	105.0	107.0	98Q2	97.0	95.5	96.5	94.6	95.3
96	98.7	98.4	98.4	99.5	102.8	98Q3	96.8	95.3	96.5	94.3	94.6
97	97.1	96.1	96.2	95.5	99.0	98Q4	96.8	95.2	96.5	94.3	94.5
98	96.9	95.4	96.5	94.5	95.2	99Q1	96.7	95.0	96.2	94.4	94.7

Abbreviations: IC24 = 24 Industrial Countries  
 EUR15 = 15 Member States of the European Union  
 EUR11 = Countries in the euro area  
 PCP = Deflator of private consumption  
 PGDP = Gross Domestic Product Deflator  
 PX = Price Deflator Exports of Goods and Services  
 ULCE = Nominal Unit Labour Cost in total Economy  
 ULCM = Nominal Unit Labour Cost in Manufacturing industry

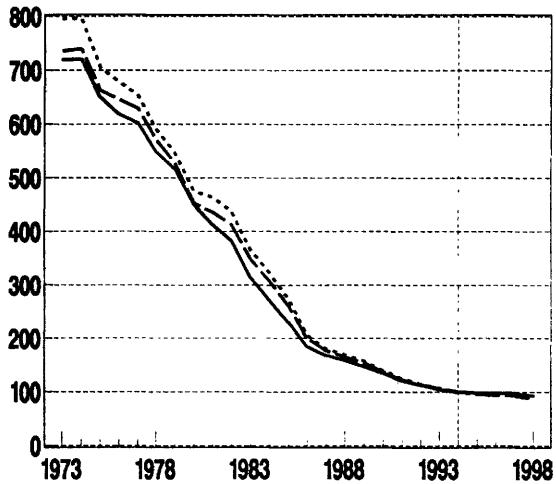
# Greece — drachma

## Trade-weighted currency indices

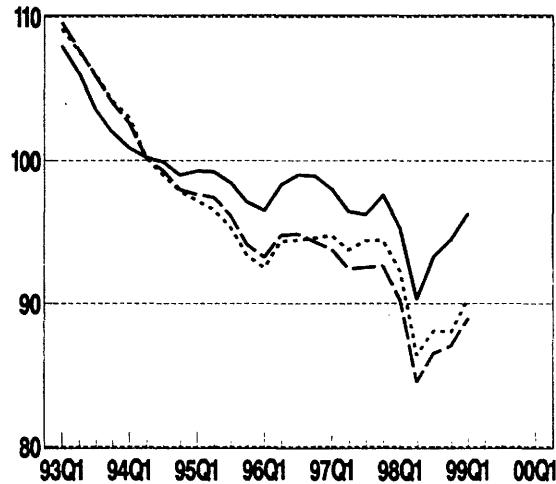
Annual data Index (1994=100)				Quarterly data index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	185.2	200.6	206.1	96Q1	96.5	93.2	92.5	MAR98	-5.6	-5.9	-5.6
87	168.4	177.5	180.6	96Q2	98.3	94.8	94.3	APR98	-3.4	-3.9	-3.8
88	158.3	165.4	169.7	96Q3	99.0	94.9	94.4	MAY98	1.8	1.2	0.7
89	147.4	154.2	157.8	96Q4	98.9	94.3	94.6	JUN98	2.1	1.8	1.9
90	135.4	137.6	139.4	97Q1	98.0	93.8	94.8	JUL98	2.0	1.9	1.9
91	121.2	123.1	125.0	97Q2	96.4	92.4	93.7	AUG98	-0.5	-0.8	-1.0
92	113.0	113.1	114.3	97Q3	96.2	92.5	94.4	SEP98	-1.1	-1.6	-2.1
93	104.9	106.8	106.7	97Q4	97.6	92.6	94.4	OCT98	0.7	0.5	0.1
94	100.0	100.0	100.0	98Q1	95.3	90.3	92.3	NOV98	1.9	2.2	2.3
95	98.5	96.3	95.6	98Q2	90.3	84.5	86.4	DEC98	0.4	0.2	0.1
96	98.2	94.3	94.0	98Q3	93.3	86.5	88.1	JAN99	1.3	1.4	1.5
97	97.1	92.8	94.3	98Q4	94.4	87.0	88.0	FEB99	-0.2	0.2	0.5
98	93.3	87.0	88.7	99Q1	96.3	89.0	90.3	MAR99	-0.6	-0.5	-0.2

## Trade-weighted currency indices

Annual data (index 1994=100)

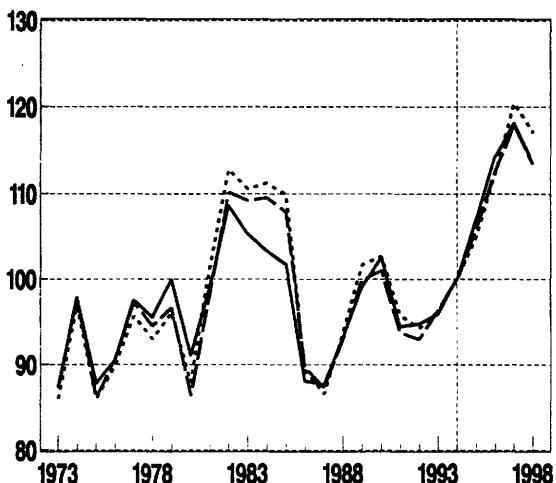


Quarterly data (index 1994=100)

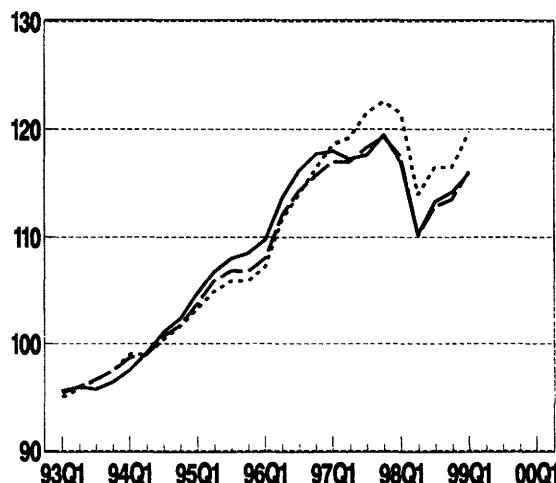


## Relative cost indicators (based on ULCE)

Annual data (index 1994=100)



Quarterly data (index 1994=100)



# Greece — drachma

## Relative price and cost indicators vs. (the rest of) 24 industrial countries

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	82.8	81.8	95.6	88.1	90.1	96Q1	104.1	104.7	103.9	109.7	109.1
87	85.2	82.6	94.1	87.7	87.5	96Q2	107.2	107.6	107.2	113.6	110.7
88	88.6	86.6	95.9	93.1	99.6	96Q3	108.9	109.5	108.9	116.2	111.8
89	89.0	87.9	94.7	99.1	106.3	96Q4	109.4	110.5	109.3	117.8	113.1
90	93.2	92.4	99.6	102.5	110.8	97Q1	108.7	110.4	108.5	118.0	113.9
91	94.6	93.9	99.9	94.5	98.6	97Q2	107.3	109.6	107.1	117.3	113.9
92	97.2	96.0	100.9	94.7	98.9	97Q3	107.5	110.0	107.3	117.7	114.7
93	98.6	97.9	99.1	95.9	95.8	97Q4	109.4	112.1	109.6	119.5	116.7
94	100.0	100.0	100.0	100.0	100.0	98Q1	107.1	109.6	107.7	117.0	114.0
95	103.1	104.0	102.5	107.0	110.3	98Q2	101.7	103.9	102.8	110.3	107.3
96	107.4	108.0	107.3	114.3	111.2	98Q3	105.1	107.4	106.6	113.3	110.0
97	108.2	110.5	108.1	118.1	114.8	98Q4	106.3	108.7	108.1	114.2	110.6
98	105.0	107.4	106.3	113.7	110.4	99Q1	108.1	110.8	110.3	115.9	112.0

## Relative price and cost indicators vs. (the rest of) EUR15

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	84.5	84.1	98.1	89.6	92.0	96Q1	102.5	103.0	101.9	108.0	106.7
87	85.3	82.9	94.6	87.3	86.4	96Q2	105.7	106.1	105.3	112.0	108.5
88	88.7	87.0	96.7	92.9	98.4	96Q3	106.9	107.6	106.7	114.3	109.5
89	90.0	89.0	95.8	99.9	106.6	96Q4	107.2	108.5	107.0	115.7	110.6
90	92.1	91.2	98.4	101.0	108.5	97Q1	107.4	109.3	107.0	117.0	112.4
91	93.8	93.1	99.2	93.7	97.2	97Q2	106.6	109.1	106.0	117.0	113.0
92	95.5	94.2	99.3	92.9	96.8	97Q3	107.6	110.4	107.0	118.4	114.8
93	99.1	98.3	99.2	96.4	96.0	97Q4	108.7	111.5	108.3	119.3	116.0
94	100.0	100.0	100.0	100.0	100.0	98Q1	108.9	109.5	106.9	117.5	114.0
95	102.1	102.9	101.0	105.8	108.4	98Q2	100.9	103.2	101.3	110.2	106.2
96	105.6	106.3	105.2	112.5	108.8	98Q3	103.9	106.2	104.6	112.9	109.3
97	107.6	110.1	107.1	117.9	114.0	98Q4	104.9	107.3	105.9	113.5	109.8
98	104.1	106.5	104.6	113.5	110.0	99Q1	107.6	110.2	108.7	116.1	112.0

## Relative price and cost indicators vs. (the rest of) the countries in the euro area (EUR11)

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	84.9	84.7	98.3	89.4	93.4	96Q1	101.8	102.3	101.1	107.2	106.2
87	85.2	83.0	94.4	86.6	87.1	96Q2	105.2	105.7	104.8	111.6	108.4
88	89.7	88.2	97.1	93.7	100.5	96Q3	106.5	107.3	106.1	114.0	109.5
89	91.1	90.6	96.5	101.7	108.8	96Q4	107.7	109.0	107.0	116.4	111.7
90	92.9	92.5	98.7	102.6	110.2	97Q1	108.7	110.7	107.6	118.7	114.6
91	95.5	95.0	99.8	95.8	99.3	97Q2	108.3	110.9	106.9	119.2	116.0
92	96.6	95.5	99.5	94.2	98.0	97Q3	110.0	112.9	108.3	121.5	118.9
93	99.1	98.4	99.2	96.2	95.7	97Q4	111.0	114.0	109.3	122.5	120.2
94	100.0	100.0	100.0	100.0	100.0	98Q1	109.5	112.3	108.0	121.4	118.9
95	101.3	102.1	100.4	105.0	108.0	98Q2	103.3	105.8	102.1	114.0	111.6
96	105.3	106.1	104.8	112.3	108.9	98Q3	106.1	108.5	105.1	116.5	113.8
97	109.5	112.1	108.0	120.5	117.4	98Q4	108.4	108.9	105.7	116.5	113.6
98	106.3	108.9	105.2	117.1	114.5	99Q1	109.5	112.3	109.1	119.7	116.5

Abbreviations: IC24 = 24 Industrial Countries  
 EUR15 = 15 Member States of the European Union  
 EUR11 = Countries in the euro area  
 PCP = Deflator of private consumption  
 PGDP = Gross Domestic Product Deflator  
 PX = Price Deflator Exports of Goods and Services  
 ULCE = Nominal Unit Labour Cost in total Economy  
 ULCM = Nominal Unit Labour Cost in Manufacturing industry

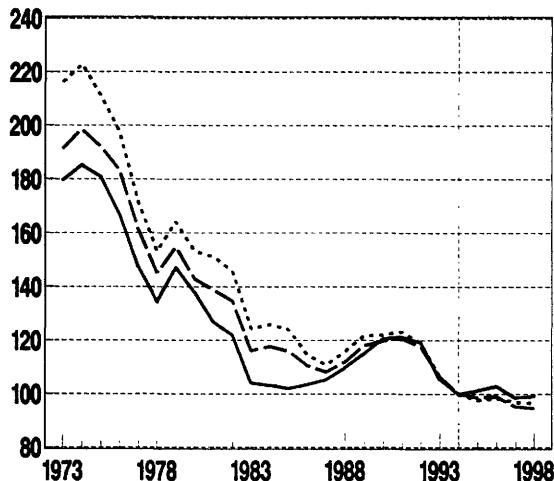
# Spain – euro (before 1999: peseta)

## Trade-weighted currency indices

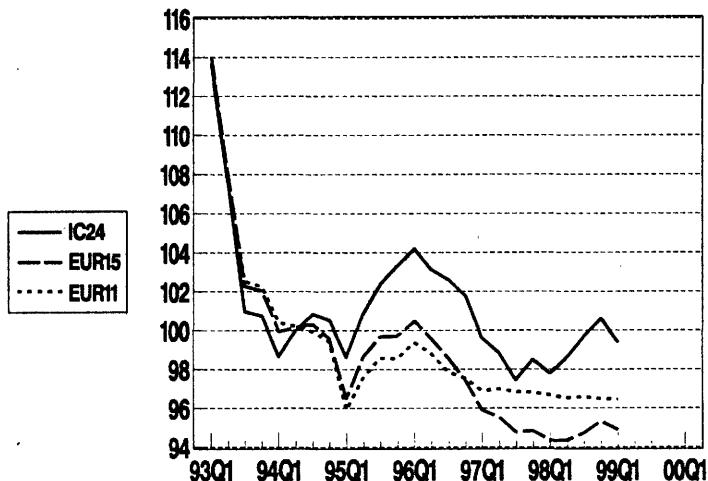
Annual data Index (1994=100)				Quarterly data Index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	103.5	110.6	114.7	96Q1	104.2	100.5	99.4	MAR98	-0.2	-0.3	-0.1
87	105.4	108.2	110.8	96Q2	103.1	99.6	98.8	APR98	0.3	-0.1	-0.1
88	109.8	111.9	115.8	96Q3	102.6	98.6	97.9	MAY98	1.0	-0.5	-0.1
89	114.9	118.0	121.7	96Q4	101.8	97.4	97.5	JUN98	0.1	-0.2	0.0
90	120.6	119.8	122.0	97Q1	99.6	95.9	96.9	JUL98	0.0	0.0	0.0
91	121.3	120.7	123.2	97Q2	98.9	95.6	97.0	AUG98	0.6	0.2	0.0
92	119.2	117.6	119.1	97Q3	97.5	94.8	96.8	SEP98	1.0	0.3	-0.0
93	105.6	106.5	106.5	97Q4	98.5	94.8	96.8	OCT98	0.5	0.4	-0.0
94	100.0	100.0	100.0	98Q1	97.8	94.3	96.7	NOV98	-0.6	-0.2	-0.1
95	101.3	98.6	97.6	98Q2	98.6	94.4	96.5	DEC98	0.1	0.0	-0.0
96	102.9	99.0	98.4	98Q3	99.7	94.7	96.6	JAN99	-0.3	-0.1	0.0
97	98.6	95.3	96.9	98Q4	100.6	95.3	96.5	FEB99	-0.8	-0.3	0.0
98	99.2	94.7	96.6	99Q1	99.4	94.9	96.5	MAR99	-0.6	-0.3	0.0

## Trade-weighted currency indices

Annual data (index 1994=100)

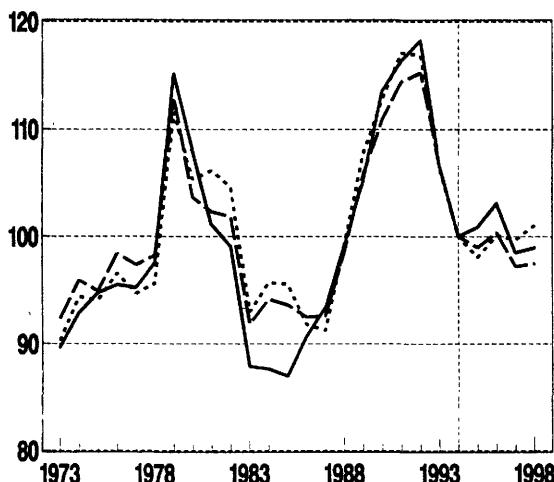


Quarterly data (index 1994=100)

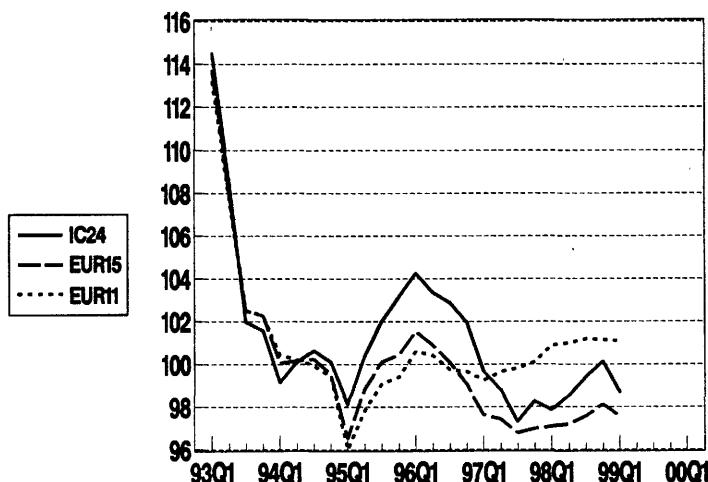


## Relative cost indicators (based on ULCE)

Annual data (index 1994=100)



Quarterly data (index 1994=100)



# Spain – euro (before 1999: peseta)

## Relative price and cost indicators vs. (the rest of) 24 industrial countries

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	94.1	92.5	96.3	90.6	87.7	96Q1	105.7	105.9	105.4	104.3	105.1
87	97.0	95.3	98.9	93.3	89.6	96Q2	104.7	104.9	104.3	103.4	105.1
88	101.6	100.2	102.6	99.1	96.2	96Q3	104.2	104.3	104.1	102.9	105.5
89	107.8	106.9	106.4	105.2	104.4	96Q4	103.3	103.3	103.7	102.0	105.5
90	114.3	114.2	111.8	113.6	114.5	97Q1	101.1	101.0	102.0	99.7	103.9
91	115.9	116.7	112.9	116.4	115.8	97Q2	100.3	100.0	101.7	98.8	103.8
92	115.9	117.5	114.0	118.2	116.9	97Q3	98.8	98.5	100.5	97.3	103.0
93	104.3	104.7	103.4	106.6	106.3	97Q4	99.9	99.5	101.6	98.3	104.8
94	100.0	100.0	100.0	100.0	100.0	98Q1	99.1	98.7	100.8	97.9	104.9
95	102.4	102.5	102.4	100.9	100.5	98Q2	99.8	99.5	101.5	98.5	106.2
96	104.5	104.6	104.4	103.1	105.3	98Q3	100.8	100.5	102.4	99.4	107.6
97	100.0	99.7	101.5	98.5	103.9	98Q4	101.7	101.4	103.2	100.1	108.6
98	100.4	100.0	102.0	99.0	106.8	99Q1	100.5	100.3	101.9	98.7	107.1

## Relative price and cost indicators vs. (the rest of) EUR15

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	96.3	95.4	99.6	92.5	90.3	96Q1	103.2	103.4	103.1	101.5	101.7
87	96.7	95.5	99.8	92.6	88.2	96Q2	102.4	102.6	102.4	100.9	102.0
88	101.5	100.4	103.7	98.6	94.9	96Q3	101.5	101.7	101.8	100.1	102.1
89	109.0	108.3	108.3	105.7	104.7	96Q4	100.4	100.6	101.1	99.1	101.9
90	112.3	112.2	110.5	110.9	111.3	97Q1	99.0	99.0	100.2	97.6	101.2
91	114.4	115.2	112.0	114.4	113.2	97Q2	98.8	98.6	100.4	97.4	101.7
92	113.6	115.0	112.2	115.2	113.7	97Q3	98.1	97.8	100.0	96.8	101.8
93	104.6	105.0	103.7	106.5	106.1	97Q4	98.3	98.0	100.2	97.0	102.8
94	100.0	100.0	100.0	100.0	100.0	98Q1	98.0	97.6	99.8	97.1	103.6
95	100.6	100.6	100.7	99.9	97.9	98Q2	98.1	97.7	99.8	97.2	104.4
96	101.9	102.1	102.1	100.4	101.9	98Q3	98.6	98.3	100.1	97.6	105.2
97	98.6	98.4	100.2	97.2	101.9	98Q4	99.4	99.0	100.7	98.1	106.1
98	98.5	98.1	100.1	97.5	104.8	99Q1	99.0	98.7	100.2	97.6	105.6

## Relative price and cost indicators vs. (the rest of) the countries in the euro area (EUR11)

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	96.5	95.8	99.6	91.8	91.5	96Q1	102.2	102.5	102.3	100.6	101.2
87	96.2	95.2	99.4	91.2	88.7	96Q2	101.8	102.2	101.9	100.4	101.9
88	102.6	101.8	104.1	99.2	96.8	96Q3	101.0	101.3	101.2	99.7	102.2
89	110.4	110.4	109.0	107.8	107.0	96Q4	100.9	101.1	101.3	99.7	103.1
90	113.4	113.8	110.9	112.8	113.2	97Q1	100.4	100.5	101.0	99.2	103.7
91	116.6	117.7	112.8	117.1	115.7	97Q2	100.7	100.6	101.4	99.6	105.1
92	115.0	116.6	112.4	116.9	115.1	97Q3	100.7	100.5	101.4	99.8	106.2
93	104.7	105.1	103.7	106.4	105.6	97Q4	100.9	100.6	101.4	100.1	107.5
94	100.0	100.0	100.0	100.0	100.0	98Q1	100.9	100.6	101.1	100.9	109.0
95	99.7	99.7	100.0	98.1	97.5	98Q2	100.9	100.6	100.8	101.0	109.8
96	101.5	101.8	101.7	100.1	102.1	98Q3	101.1	100.8	100.8	101.2	110.5
97	100.7	100.6	101.3	99.7	105.6	98Q4	101.2	100.9	100.7	101.1	110.7
98	101.0	100.7	100.9	101.1	110.0	99Q1	101.3	101.1	100.8	101.1	110.8

Abbreviations: IC24 = 24 Industrial Countries  
 EUR15 = 15 Member States of the European Union  
 EUR11 = Countries in the euro area  
 PCP = Deflator of private consumption  
 PGDP = Gross Domestic Product Deflator  
 PX = Price Deflator Exports of Goods and Services  
 ULCE = Nominal Unit Labour Cost in total Economy  
 ULCM = Nominal Unit Labour Cost in Manufacturing industry

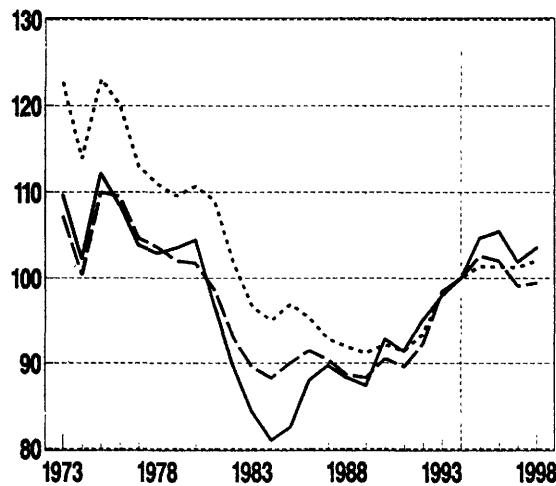
# France – euro (before 1999: franc)

## Trade-weighted currency indices

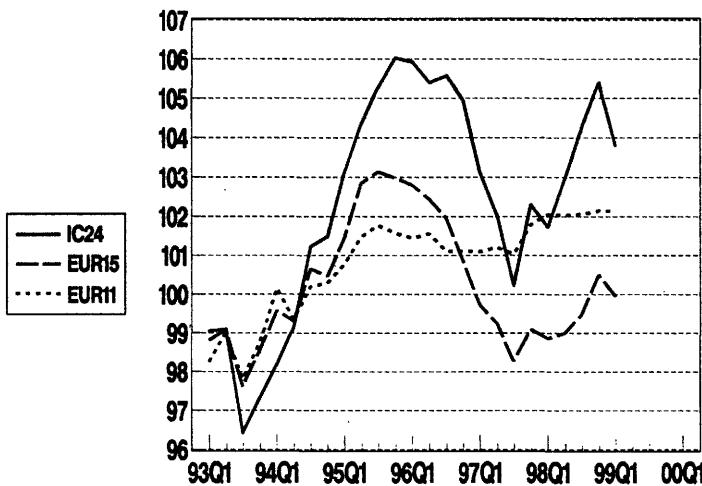
Annual data Index (1994=100)				Quarterly data Index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	88.0	91.5	95.3	96Q1	105.9	102.8	101.4	MAR98	-0.1	-0.4	-0.1
87	89.7	90.4	92.9	96Q2	105.4	102.4	101.6	APR98	0.5	0.0	0.1
88	88.3	88.6	91.9	96Q3	105.6	102.0	101.1	MAY98	1.3	-0.7	-0.0
89	87.4	88.3	91.2	96Q4	105.0	100.9	101.1	JUN98	0.0	-0.3	-0.0
90	92.8	90.5	92.2	97Q1	103.1	99.7	101.1	JUL98	0.0	0.0	0.0
91	91.4	89.6	91.5	97Q2	102.1	99.3	101.2	AUG98	0.7	0.3	0.0
92	95.2	92.3	93.4	97Q3	100.2	98.3	101.0	SEP98	1.1	0.5	0.0
93	98.0	98.5	98.5	97Q4	102.3	99.1	101.8	OCT98	0.6	0.7	0.0
94	100.0	100.0	100.0	98Q1	101.7	98.8	102.1	NOV98	-0.7	-0.2	0.0
95	104.7	102.6	101.4	98Q2	103.0	99.0	102.0	DEC98	0.1	0.1	0.0
96	105.5	102.0	101.3	98Q3	104.3	99.5	102.1	JAN99	-0.5	-0.1	-0.0
97	101.9	99.1	101.3	98Q4	105.4	100.5	102.1	FEB99	-0.9	-0.4	0.0
98	103.6	99.5	102.1	99Q1	103.8	99.9	102.1	MAR99	-0.8	-0.4	0.0

## Trade-weighted currency indices

Annual data (index 1994=100)

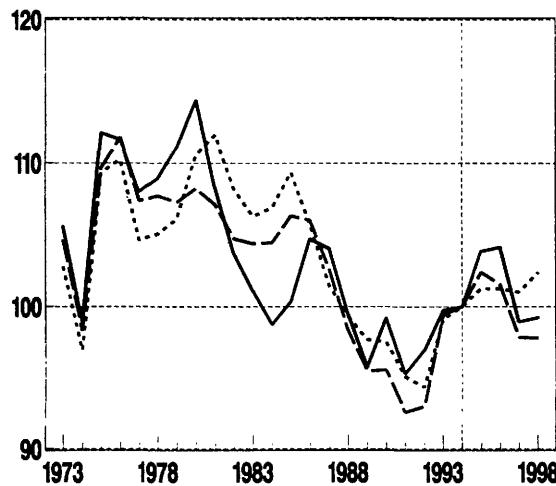


Quarterly data (index 1994=100)

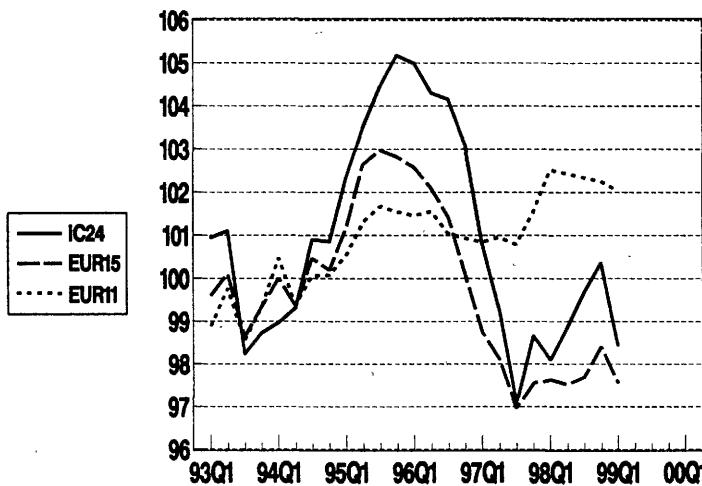


## Relative cost indicators (based on ULCE)

Annual data (index 1994=100)



Quarterly data (index 1994=100)



# France – euro (before 1999: franc)

## Relative price and cost indicators vs. (the rest of) 24 industrial countries

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	101.2	101.4	100.2	104.7	105.5	96Q1	103.3	103.0	101.4	105.0	102.8
87	102.6	102.3	100.8	104.1	105.9	96Q2	102.6	102.2	100.9	104.3	101.4
88	99.6	99.1	98.7	99.4	99.8	96Q3	102.5	102.0	101.2	104.2	100.3
89	97.1	96.2	97.4	95.8	95.4	96Q4	101.6	101.1	100.8	103.1	98.5
90	100.6	99.9	100.4	99.2	99.8	97Q1	99.3	99.0	99.3	100.8	95.5
91	96.8	96.4	98.0	95.3	97.8	97Q2	97.9	97.7	98.5	99.3	93.5
92	98.4	97.9	99.3	96.9	99.9	97Q3	95.7	95.6	97.0	97.1	91.2
93	99.5	99.6	98.0	99.7	102.2	97Q4	97.2	97.2	99.1	98.7	92.8
94	100.0	100.0	100.0	100.0	100.0	98Q1	96.2	96.2	98.7	98.1	92.5
95	102.8	102.8	101.6	103.9	102.8	98Q2	96.9	97.0	99.9	98.9	93.6
96	102.5	102.1	101.1	104.1	100.7	98Q3	97.7	97.8	101.1	99.7	94.7
97	97.5	97.4	98.5	98.9	93.2	98Q4	98.4	98.5	102.2	100.4	95.6
98	97.3	97.4	100.5	99.2	94.1	99Q1	96.6	96.8	100.6	98.4	93.9

## Relative price and cost indicators vs. (the rest of) EUR15

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	102.8	103.8	102.9	106.0	107.2	96Q1	100.9	100.5	98.7	102.6	99.5
87	101.7	101.9	101.2	102.7	103.2	96Q2	100.4	99.9	98.5	102.1	98.3
88	98.9	98.8	99.4	98.3	97.4	96Q3	99.7	99.2	98.3	101.4	96.9
89	97.3	96.7	98.5	95.5	94.4	96Q4	98.4	98.0	97.5	100.1	94.7
90	97.7	97.0	98.3	95.6	95.3	97Q1	97.0	96.7	96.8	98.7	92.6
91	94.5	94.0	96.5	92.6	94.2	97Q2	96.3	96.1	96.7	98.1	91.4
92	95.1	94.5	96.8	93.0	95.5	97Q3	95.0	94.9	96.1	97.0	90.1
93	99.6	99.6	98.0	99.4	101.7	97Q4	95.5	95.4	97.2	97.5	90.9
94	100.0	100.0	100.0	100.0	100.0	98Q1	95.0	94.9	97.2	97.8	91.3
95	101.2	101.2	99.6	102.4	100.4	98Q2	94.8	94.8	97.5	97.5	91.7
96	99.8	99.4	98.2	101.5	97.3	98Q3	95.0	95.0	98.1	97.7	92.4
97	96.0	95.8	96.7	97.8	91.2	98Q4	95.8	95.7	99.1	98.4	93.3
98	95.2	95.1	98.0	97.8	92.2	99Q1	95.1	95.0	98.4	97.6	92.5

## Relative price and cost indicators vs. (the rest of) the countries in the euro area (EUR11)

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	103.3	104.8	103.1	105.7	109.4	96Q1	99.7	99.4	97.6	101.5	98.8
87	101.5	102.1	100.8	101.5	104.3	96Q2	99.7	99.3	97.7	101.6	98.1
88	100.3	100.6	99.8	99.3	99.9	96Q3	99.1	98.7	97.4	101.1	96.8
89	98.9	98.9	99.2	97.7	96.8	96Q4	98.9	98.6	97.6	100.9	96.0
90	98.8	98.6	98.5	97.5	97.2	97Q1	98.7	98.5	97.7	100.8	95.3
91	96.5	96.4	97.1	95.1	96.7	97Q2	98.5	98.5	97.9	100.9	94.9
92	96.4	95.9	96.8	94.4	96.8	97Q3	98.1	98.1	97.8	100.8	94.7
93	99.7	99.7	97.9	99.1	101.1	97Q4	98.5	98.6	98.5	101.1	95.8
94	100.0	100.0	100.0	100.0	100.0	98Q1	98.5	98.5	98.8	102.5	97.1
95	100.1	100.0	98.6	101.3	99.9	98Q2	98.2	98.2	98.7	102.4	97.6
96	99.4	99.0	97.6	101.2	97.4	98Q3	98.0	98.0	98.8	102.3	98.0
97	98.4	98.4	98.0	101.0	95.2	98Q4	97.8	97.9	98.9	102.3	98.2
98	98.1	98.2	98.8	102.4	97.7	99Q1	97.7	97.7	99.0	102.0	98.0

Abbreviations: IC24 = 24 Industrial Countries  
 EUR15 = 15 Member States of the European Union  
 EUR11 = Countries in the euro area  
 PCP = Deflator of private consumption  
 PGDP = Gross Domestic Product Deflator  
 PX = Price Deflator Exports of Goods and Services  
 ULCE = Nominal Unit Labour Cost in total Economy  
 ULCM = Nominal Unit Labour Cost in Manufacturing industry

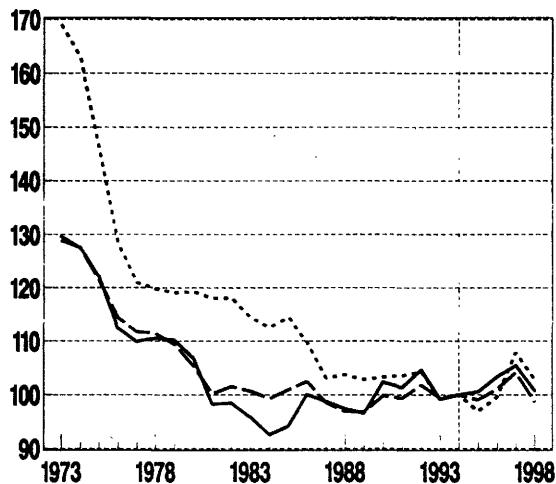
# Ireland – euro (before 1999: pound)

## Trade-weighted currency indices

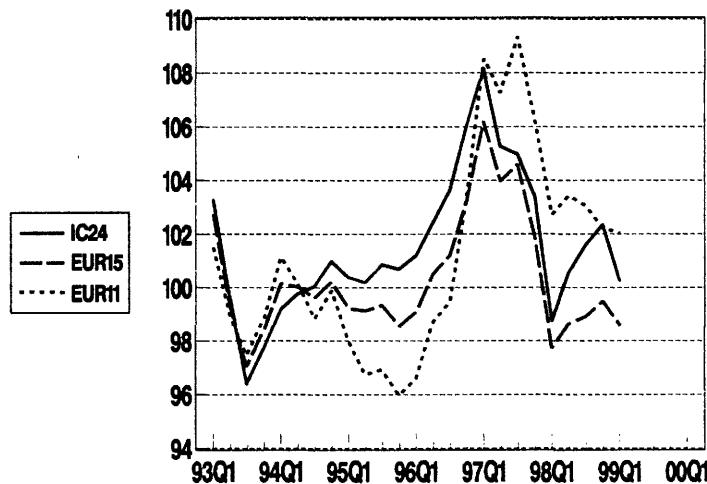
Annual data index (1994=100)				Quarterly data index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	100.0	102.5	109.8	96Q1	101.2	99.1	96.6	MAR98	-0.3	-0.5	0.0
87	98.8	98.5	103.1	96Q2	102.4	100.5	98.7	APR98	1.3	0.9	0.9
88	97.4	96.9	103.7	96Q3	103.6	101.2	99.5	MAY98	1.6	1.1	-0.1
89	96.6	96.8	102.9	96Q4	106.1	103.3	103.5	JUN98	-0.1	-0.3	0.1
90	102.4	99.8	103.3	97Q1	108.1	106.2	108.5	JUL98	-0.2	-0.1	-0.2
91	101.4	99.4	103.5	97Q2	105.3	104.0	107.3	AUG98	0.6	0.2	-0.2
92	104.6	101.8	104.3	97Q3	105.0	104.6	109.3	SEP98	1.1	0.4	-0.2
93	99.2	99.3	99.2	97Q4	103.4	101.9	106.3	OCT98	0.6	0.6	-0.4
94	100.0	100.0	100.0	98Q1	98.8	97.7	102.7	NOV98	-1.2	-0.5	-0.3
95	100.5	99.1	96.9	98Q2	100.6	98.6	103.4	DEC98	0.0	-0.0	-0.1
96	103.3	101.0	99.5	98Q3	101.6	98.9	103.1	JAN99	-0.5	-0.1	-0.0
97	105.4	104.2	107.9	98Q4	102.4	99.5	102.2	FEB99	-1.2	-0.6	0.0
98	100.8	98.7	102.9	99Q1	100.3	98.6	102.0	MAR99	-1.1	-0.7	0.0

## Trade-weighted currency indices

Annual data (index 1994=100)

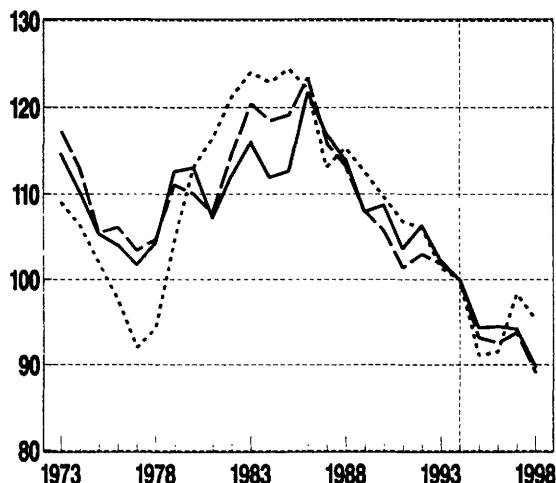


Quarterly data (Index 1994=100)

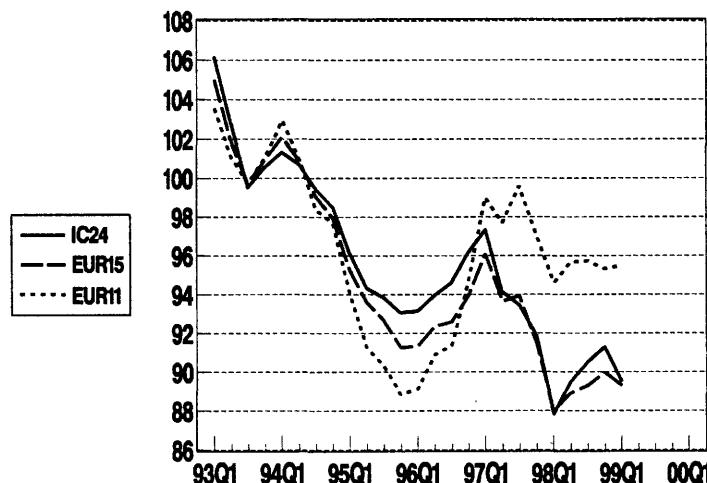


## Relative cost indicators (based on ULCE)

Annual data (index 1994=100)



Quarterly data (Index 1994=100)



# Ireland — euro (before 1999: pound)

## Relative price and cost indicators vs. (the rest of) 24 industrial countries

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	111.8	114.0	108.2	121.7	143.0	96Q1	100.1	98.5	99.5	93.2	88.3
87	109.0	110.6	106.1	116.9	128.8	96Q2	101.0	99.6	100.3	94.0	89.5
88	107.5	107.9	108.0	114.0	120.4	96Q3	101.8	100.7	101.2	94.8	90.3
89	105.6	107.0	108.8	107.9	113.5	96Q4	103.6	102.8	103.4	96.2	91.7
90	108.4	107.2	104.1	108.7	116.2	97Q1	105.1	104.7	105.8	97.3	92.5
91	104.6	102.6	101.5	103.6	112.4	97Q2	102.0	102.0	103.3	94.1	88.9
92	106.3	104.4	102.0	106.3	110.7	97Q3	101.6	102.2	104.1	93.4	87.6
93	99.2	100.3	100.0	102.2	105.3	97Q4	100.3	101.5	104.1	91.9	85.4
94	100.0	100.0	100.0	100.0	100.0	98Q1	96.1	97.8	101.1	87.3	80.9
95	100.0	98.4	99.6	94.3	89.6	98Q2	98.2	100.6	104.4	89.5	81.5
96	101.6	100.4	101.1	94.5	89.9	98Q3	99.5	102.4	106.5	90.5	81.5
97	102.2	102.6	104.3	94.2	88.6	98Q4	100.4	103.8	107.8	91.3	81.3
98	98.5	101.1	104.9	89.8	81.3	99Q1	98.5	102.1	105.6	89.5	81.7

## Relative price and cost indicators vs. (the rest of) EUR15

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	113.5	116.5	110.9	123.4	145.7	96Q1	98.1	96.5	97.4	91.4	85.9
87	108.3	110.3	106.6	116.0	126.5	96Q2	99.2	97.9	98.5	92.4	87.3
88	107.0	107.7	108.8	113.3	118.4	96Q3	99.5	98.5	98.9	92.6	87.8
89	106.1	107.7	110.2	108.0	113.0	96Q4	101.1	100.3	100.8	93.9	89.0
90	106.1	104.9	102.7	105.7	112.4	97Q1	103.5	103.1	103.8	96.1	90.6
91	102.8	100.8	100.5	101.4	109.3	97Q2	101.1	101.1	102.1	93.6	87.7
92	103.6	101.6	100.2	102.9	107.0	97Q3	101.7	102.3	103.9	93.9	87.4
93	99.3	100.4	100.2	101.9	104.7	97Q4	99.3	100.5	102.8	91.5	84.4
94	100.0	100.0	100.0	100.0	100.0	98Q1	95.6	97.3	100.3	88.0	80.5
95	98.6	97.0	98.0	93.2	87.8	98Q2	96.9	99.1	102.7	88.9	80.6
96	99.5	98.3	98.9	92.6	87.5	98Q3	97.5	100.2	104.0	89.3	80.1
97	101.4	101.7	103.2	93.8	87.5	98Q4	98.3	101.4	105.0	90.0	79.8
98	97.1	99.5	103.0	89.0	80.2	99Q1	97.6	101.0	104.0	89.3	78.2

## Relative price and cost indicators vs. (the rest of) the countries in the euro area (EUR11)

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	114.5	118.1	110.7	122.1	151.3	96Q1	96.0	94.4	95.4	89.1	84.5
87	107.7	110.4	105.5	113.1	129.0	96Q2	97.8	96.5	97.1	90.9	86.6
88	110.0	111.6	109.5	115.4	124.3	96Q3	98.2	97.3	97.4	91.4	87.4
89	109.4	112.4	111.6	112.6	118.3	96Q4	101.8	101.1	100.8	94.7	90.7
90	108.3	108.2	102.9	109.7	116.3	97Q1	106.4	106.2	105.4	99.0	94.9
91	107.3	105.8	101.8	106.8	114.6	97Q2	104.9	105.2	104.3	97.7	93.3
92	106.3	104.7	100.0	106.0	109.5	97Q3	107.0	107.9	106.9	99.6	94.7
93	99.4	100.5	100.0	101.3	103.5	97Q4	104.4	105.8	105.1	97.1	91.8
94	100.0	100.0	100.0	100.0	100.0	98Q1	101.3	103.2	102.8	94.6	88.6
95	96.6	94.9	96.1	91.1	86.7	98Q2	102.5	105.0	104.8	95.7	88.8
96	98.4	97.3	97.7	91.5	87.3	98Q3	102.5	105.6	105.4	95.7	87.9
97	105.7	106.3	105.4	98.3	93.7	98Q4	102.0	105.5	105.1	95.3	86.5
98	102.1	104.8	104.5	95.3	88.0	99Q1	102.1	105.9	105.1	95.5	85.5

Abbreviations: IC24 = 24 Industrial Countries  
 EUR15 = 15 Member States of the European Union  
 EUR11 = Countries in the euro area  
 PCP = Deflator of private consumption  
 PGDP = Gross Domestic Product Deflator  
 PX = Price Deflator Exports of Goods and Services  
 ULCE = Nominal Unit Labour Cost in total Economy  
 ULCM = Nominal Unit Labour Cost in Manufacturing industry

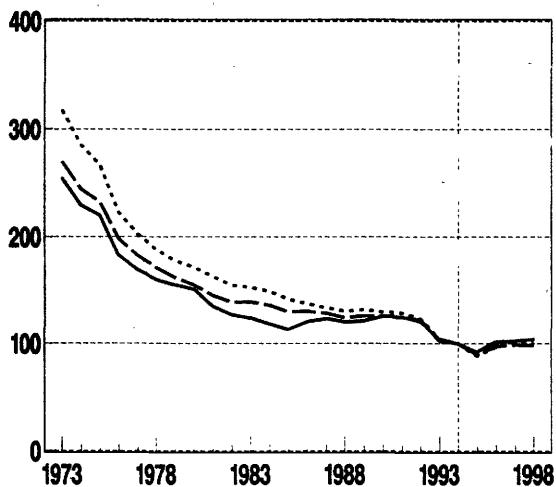
# Italy – euro (before 1999: lira)

## Trade-weighted currency indices

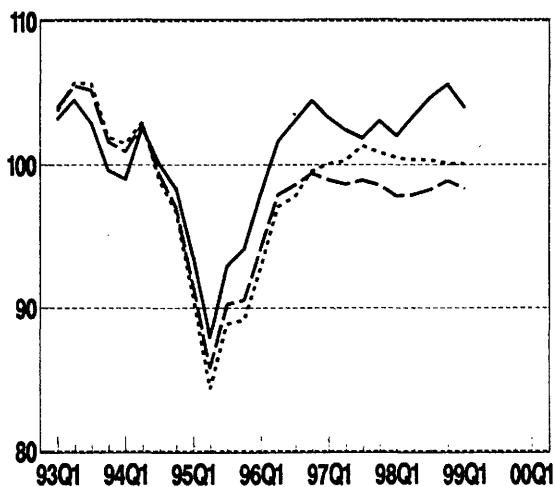
Annual data Index (1994=100)			Quarterly data Index (1994=100)			Monthly data monthly % change					
	vs. IC24	(the rest of) EUR15 EUR11		vs. IC24	(the rest of) EUR15 EUR11		vs. IC24	(the rest of) EUR15 EUR11			
86	120.4	130.0	137.3	96Q1	98.1	94.3	93.0	MAR98	0.3	-0.0	0.2
87	123.1	128.2	133.4	96Q2	101.6	97.9	97.1	APR98	0.3	-0.3	-0.3
88	120.1	124.0	130.1	96Q3	103.1	98.6	97.8	MAY98	1.4	-0.8	0.2
89	121.2	126.0	131.7	96Q4	104.5	99.4	99.6	JUN98	0.1	-0.1	0.1
90	125.6	125.7	129.4	97Q1	103.3	98.9	100.1	JUL98	-0.1	-0.1	-0.1
91	124.4	124.8	128.6	97Q2	102.4	98.7	100.3	AUG98	0.6	0.2	-0.1
92	121.8	120.3	122.8	97Q3	101.9	98.9	101.3	SEP98	1.1	0.3	-0.1
93	102.5	104.1	104.3	97Q4	103.0	98.6	100.9	OCT98	0.5	0.4	-0.1
94	100.0	100.0	100.0	98Q1	102.0	97.8	100.5	NOV98	-0.8	-0.2	-0.0
95	92.1	89.5	88.2	98Q2	103.4	97.9	100.4	DEC98	0.1	0.0	-0.1
96	101.8	97.5	96.8	98Q3	104.7	98.3	100.3	JAN99	-0.4	-0.1	0.0
97	102.7	98.8	100.6	98Q4	105.6	98.9	100.1	FEB99	-0.9	-0.4	0.0
98	103.9	98.2	100.3	99Q1	104.0	98.3	100.1	MAR99	-0.7	-0.4	0.0

## Trade-weighted currency indices

Annual data (index 1994=100)

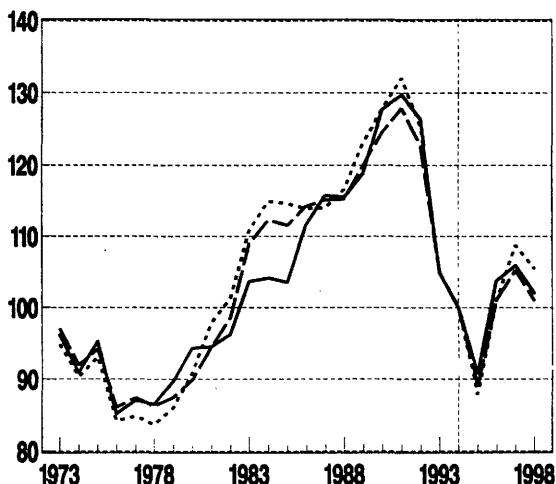


Quarterly data (index 1994=100)

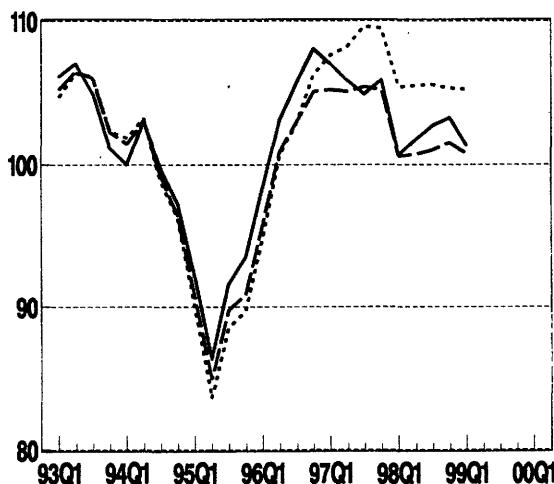


## Relative cost indicators (based on ULCE)

Annual data (index 1994=100)



Quarterly data (index 1994=100)



# Italy – euro (before 1999: lira)

## Relative price and cost indicators vs. (the rest of) 24 industrial countries

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	108.1	107.0	105.6	111.6	115.8	96Q1	101.7	101.4	106.4	98.4	98.7
87	112.3	111.9	108.1	115.7	118.2	96Q2	105.6	105.7	109.7	103.1	103.6
88	111.7	111.9	105.5	115.5	116.4	96Q3	107.1	107.5	110.6	105.7	106.3
89	114.7	114.7	108.3	118.8	121.4	96Q4	108.4	109.0	111.5	108.0	108.4
90	120.3	121.9	114.0	127.7	128.1	97Q1	107.0	107.6	109.7	107.0	107.8
91	121.0	123.7	114.7	129.8	129.7	97Q2	105.9	106.5	108.5	105.8	107.3
92	119.4	121.2	113.5	126.3	124.8	97Q3	105.2	105.8	107.7	104.9	107.0
93	101.9	102.6	103.4	104.8	104.5	97Q4	106.4	107.1	109.1	105.9	108.4
94	100.0	100.0	100.0	100.0	100.0	98Q1	105.3	106.1	108.1	100.7	104.4
95	94.4	93.6	98.2	90.9	91.1	98Q2	106.8	107.7	109.8	101.7	105.6
96	105.7	105.9	109.5	103.8	104.3	98Q3	108.1	109.1	111.3	102.7	106.7
97	106.1	106.7	108.8	105.9	107.6	98Q4	109.0	110.1	112.3	103.2	107.3
98	107.3	108.3	110.4	102.1	106.0	99Q1	107.3	108.4	110.6	101.3	105.4

## Relative price and cost indicators vs. (the rest of) EUR15

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	111.1	110.9	109.3	114.2	119.4	96Q1	99.2	98.9	103.5	95.8	95.3
87	112.3	112.4	109.1	115.1	116.1	96Q2	103.4	103.5	107.3	100.9	100.5
88	111.8	112.4	106.7	115.2	114.5	96Q3	104.3	104.7	107.7	103.0	102.8
89	116.2	116.5	110.2	119.9	121.7	96Q4	105.2	105.8	108.2	105.1	104.9
90	117.9	119.5	112.2	124.7	123.8	97Q1	104.8	105.5	107.4	105.2	105.2
91	119.1	122.0	113.6	127.9	126.6	97Q2	104.6	105.3	107.0	105.1	105.6
92	116.4	118.0	111.2	122.7	120.5	97Q3	105.1	105.8	107.4	105.4	106.7
93	102.4	103.0	103.6	105.0	104.3	97Q4	105.0	105.8	107.4	105.2	107.0
94	100.0	100.0	100.0	100.0	100.0	98Q1	104.8	105.4	107.0	100.6	103.8
95	92.7	91.8	96.0	89.0	88.4	98Q2	105.0	105.9	107.6	100.7	104.3
96	103.0	103.2	106.7	101.1	100.8	98Q3	105.7	106.6	108.3	101.0	104.8
97	104.9	105.6	107.3	105.2	106.1	98Q4	106.6	107.5	109.2	101.5	105.4
98	105.5	106.4	108.0	101.0	104.6	99Q1	106.1	107.0	108.6	100.8	104.6

## Relative price and cost indicators vs. (the rest of) the countries in the euro area (EUR11)

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	111.5	111.7	109.7	113.9	121.8	96Q1	98.3	98.0	102.8	94.9	94.7
87	112.0	112.5	108.8	114.0	117.4	96Q2	103.0	103.2	107.1	100.6	100.6
88	113.3	114.5	107.3	116.6	117.6	96Q3	104.0	104.6	107.3	102.9	103.2
89	118.2	119.3	111.3	123.2	125.4	96Q4	106.1	106.8	108.7	106.2	106.7
90	119.5	121.8	112.9	127.9	127.1	97Q1	106.7	107.6	108.7	107.6	108.4
91	122.2	125.6	114.9	132.1	130.6	97Q2	107.1	108.0	108.5	108.2	110.0
92	118.4	120.3	111.7	125.2	122.8	97Q3	108.5	109.5	109.5	109.6	112.3
93	102.5	103.2	103.7	104.8	103.9	97Q4	108.4	109.4	109.1	109.5	112.9
94	100.0	100.0	100.0	100.0	100.0	98Q1	108.4	109.4	108.9	105.4	110.3
95	91.6	90.7	95.1	87.9	87.8	98Q2	108.7	109.7	109.1	105.5	110.8
96	102.8	103.1	106.4	101.1	101.2	98Q3	109.0	110.1	109.4	105.6	111.0
97	107.7	108.6	108.9	108.7	110.9	98Q4	109.0	110.1	109.4	105.3	110.8
98	108.8	109.8	109.2	105.4	110.7	99Q1	109.2	110.3	109.5	105.2	110.7

Abbreviations: IC24 = 24 Industrial Countries  
 EUR15 = 15 Member States of the European Union  
 EUR11 = Countries in the euro area  
 PCP = Deflator of private consumption  
 PGDP = Gross Domestic Product Deflator  
 PX = Price Deflator Exports of Goods and Services  
 ULCE = Nominal Unit Labour Cost in total Economy  
 ULCM = Nominal Unit Labour Cost in Manufacturing Industry

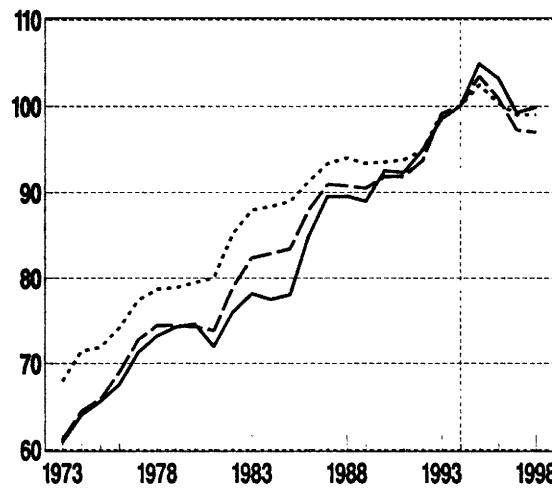
# Netherlands – euro (before 1999: guilder)

## Trade-weighted currency indices

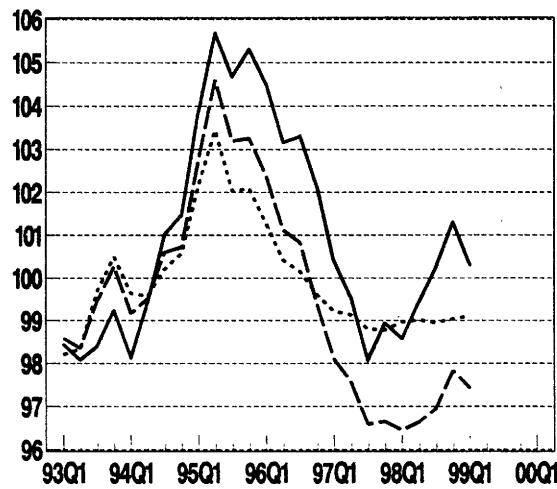
Annual data index (1994=100)			Quarterly data index (1994=100)			Monthly data monthly % change		
	vs. IC24	(the rest of) EUR15 EUR11		vs. IC24	(the rest of) EUR15 EUR11		vs. IC24	(the rest of) EUR15 EUR11
86	84.9	88.0	91.3	96Q1	104.5	102.4	101.3	MAR98
87	89.5	91.0	93.4	96Q2	103.2	101.1	100.4	APR98
88	89.6	90.8	94.0	96Q3	103.3	100.8	100.2	MAY98
89	89.0	90.5	93.4	96Q4	102.1	99.4	99.6	JUN98
90	92.5	91.9	93.6	97Q1	100.4	98.1	99.2	JUL98
91	92.4	91.9	93.8	97Q2	99.6	97.6	99.1	AUG98
92	95.0	93.7	94.9	97Q3	98.1	96.6	98.8	SEP98
93	98.5	99.2	99.2	97Q4	98.9	96.7	98.8	OCT98
94	100.0	100.0	100.0	98Q1	98.6	96.4	99.0	NOV98
95	104.9	103.4	102.4	98Q2	99.4	96.6	99.0	DEC98
96	103.3	100.9	100.4	98Q3	100.3	97.0	98.9	JAN99
97	99.2	97.2	99.0	98Q4	101.3	97.8	99.0	FEB99
98	99.9	97.0	99.0	99Q1	100.3	97.4	99.1	MAR99

## Trade-weighted currency indices

Annual data (index 1994=100)

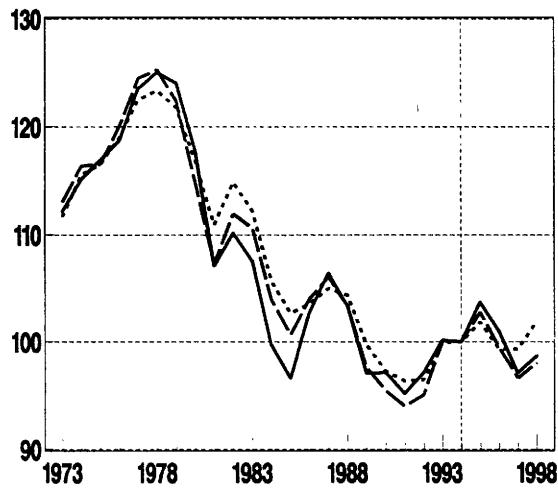


Quarterly data (index 1994=100)

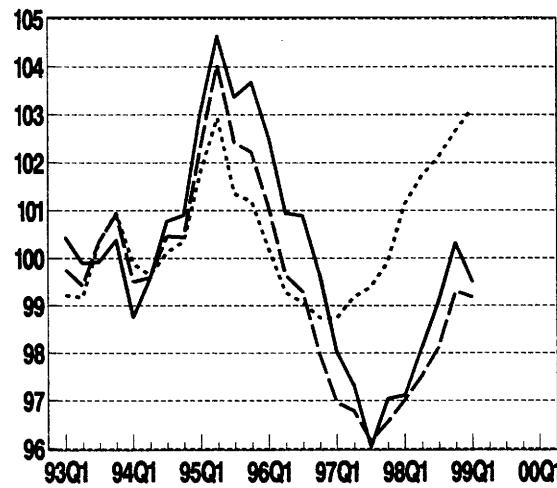


## Relative cost indicators (based on ULCE)

Annual data (index 1994=100)



Quarterly data (index 1994=100)



# Netherlands – euro (before 1999: guilder)

## Relative price and cost indicators vs. (the rest of) 24 industrial countries

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	101.1	103.2	104.2	102.7	104.2	96Q1	102.0	102.6	102.0	102.5	99.1
87	103.5	104.2	103.9	106.4	108.5	96Q2	100.5	101.1	100.9	100.9	97.1
88	100.5	101.5	101.5	103.4	105.0	96Q3	100.5	101.2	101.5	100.9	96.8
89	96.5	97.4	100.2	97.1	98.7	96Q4	99.2	100.1	101.1	99.7	95.4
90	97.8	98.8	102.2	97.1	98.8	97Q1	97.5	98.5	100.1	98.0	93.7
91	95.8	96.5	100.6	95.2	97.0	97Q2	96.6	97.7	99.8	97.3	92.8
92	97.2	97.2	100.4	97.1	100.5	97Q3	95.1	96.4	98.4	96.0	91.2
93	99.1	99.1	100.0	100.2	103.7	97Q4	95.9	97.2	98.9	97.0	91.8
94	100.0	100.0	100.0	100.0	100.0	98Q1	95.6	96.9	98.0	97.1	91.4
95	103.3	103.7	103.1	103.7	101.4	98Q2	96.4	97.7	98.2	98.1	91.9
96	100.6	101.2	101.3	101.0	97.1	98Q3	97.3	98.5	98.5	99.1	92.6
97	96.3	97.5	99.3	97.1	92.4	98Q4	98.4	99.6	99.3	100.3	93.6
98	96.9	98.2	98.5	98.7	92.4	99Q1	97.5	98.6	98.2	99.5	92.9

## Relative price and cost indicators vs. (the rest of) EUR15

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	102.6	105.3	106.5	104.0	105.7	96Q1	100.6	101.1	100.3	101.1	97.1
87	103.4	104.5	104.6	106.1	107.3	96Q2	99.2	99.8	99.4	99.6	95.4
88	100.6	101.8	102.4	103.3	104.1	96Q3	98.9	99.6	99.7	99.3	94.8
89	97.2	98.4	101.5	97.8	98.7	96Q4	97.4	98.3	99.1	98.0	93.3
90	96.4	97.4	101.2	95.4	96.5	97Q1	96.2	97.2	98.7	97.0	92.3
91	94.7	95.4	100.0	94.0	95.2	97Q2	95.7	97.0	98.8	96.8	91.8
92	95.5	95.3	99.1	95.0	98.1	97Q3	94.9	96.2	98.0	96.2	90.9
93	99.3	99.2	100.1	100.1	103.4	97Q4	95.1	96.4	97.8	96.6	90.9
94	100.0	100.0	100.0	100.0	100.0	98Q1	95.0	96.3	97.2	97.0	90.9
95	102.3	102.7	101.9	102.8	99.9	98Q2	95.4	96.6	96.8	97.5	91.1
96	99.0	99.7	99.6	99.5	95.1	98Q3	95.8	97.0	96.7	98.1	91.5
97	95.5	96.7	98.3	96.6	91.4	98Q4	96.9	98.0	97.4	99.3	92.5
98	95.8	97.0	97.0	98.0	91.5	99Q1	96.6	97.7	96.9	99.2	92.3

## Relative price and cost indicators vs. (the rest of) the countries in the euro area (EUR11)

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	102.8	105.9	106.6	103.5	107.5	96Q1	99.6	100.2	99.5	100.2	96.6
87	103.1	104.5	104.3	105.0	108.3	96Q2	98.7	99.4	98.9	99.3	95.3
88	101.8	103.5	102.8	104.4	106.6	96Q3	98.4	99.2	99.2	99.1	94.8
89	98.5	100.4	102.2	99.7	101.1	96Q4	97.9	98.9	99.3	98.7	94.5
90	97.3	98.9	101.6	97.2	98.4	97Q1	97.6	98.8	99.5	98.7	94.5
91	96.6	97.6	100.8	96.3	97.5	97Q2	97.6	99.0	99.8	99.2	94.9
92	96.7	96.7	99.2	96.4	99.4	97Q3	97.4	98.9	99.5	99.4	94.9
93	99.4	99.3	100.1	99.9	103.0	97Q4	97.6	99.1	99.0	99.9	95.1
94	100.0	100.0	100.0	100.0	100.0	98Q1	97.9	99.4	98.5	101.1	95.8
95	101.4	101.8	101.0	101.8	99.5	98Q2	98.2	99.6	97.8	101.7	96.0
96	98.7	99.4	99.2	99.3	95.3	98Q3	98.3	99.7	97.3	102.1	96.2
97	97.6	99.0	99.5	99.3	94.8	98Q4	98.6	99.9	97.2	102.7	96.6
98	98.3	99.7	97.7	101.9	96.1	99Q1	98.9	100.2	97.4	103.1	97.0

Abbreviations: IC24 = 24 Industrial Countries  
 EUR15 = 15 Member States of the European Union  
 EUR11 = Countries in the euro area  
 PCP = Deflator of private consumption  
 PGDP = Gross Domestic Product Deflator  
 PX = Price Deflator Exports of Goods and Services  
 ULCE = Nominal Unit Labour Cost in total Economy  
 ULCM = Nominal Unit Labour Cost in Manufacturing industry

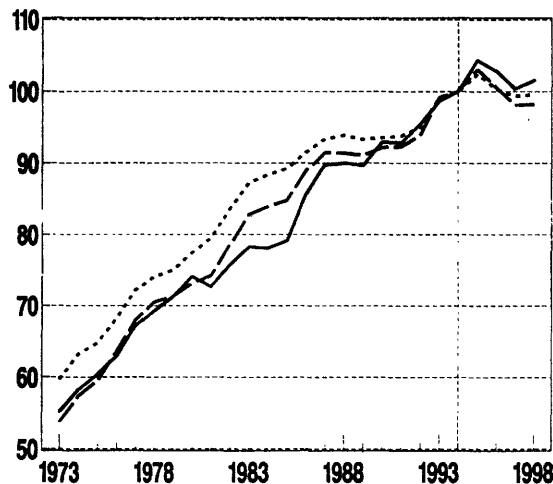
# Austria – euro (before 1999: schilling)

## Trade-weighted currency indices

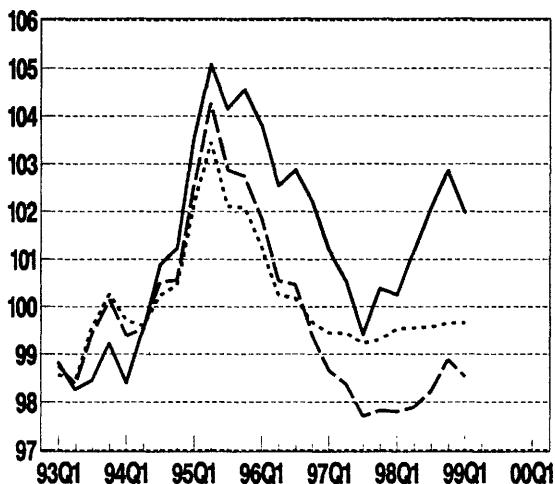
Annual data Index (1994=100)				Quarterly data Index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	85.6	88.9	91.5	96Q1	103.8	101.9	101.2	MAR98	-0.0	-0.2	-0.0
87	89.8	91.5	93.4	96Q2	102.5	100.6	100.2	APR98	0.4	0.0	0.0
88	90.0	91.4	93.9	96Q3	102.9	100.5	100.2	MAY98	0.8	0.4	-0.0
89	89.7	91.1	93.3	96Q4	102.2	99.4	99.7	JUN98	0.1	-0.1	-0.0
90	92.9	92.2	93.5	97Q1	101.2	98.7	99.4	JUL98	0.1	0.0	0.0
91	92.9	92.3	93.8	97Q2	100.6	98.4	99.4	AUG98	0.4	0.2	0.0
92	95.5	94.0	95.0	97Q3	99.4	97.7	99.2	SEP98	0.7	0.3	0.0
93	98.7	99.2	99.2	97Q4	100.4	97.8	99.3	OCT98	0.4	0.4	0.0
94	100.0	100.0	100.0	98Q1	100.3	97.8	99.5	NOV98	-0.4	-0.1	0.0
95	104.3	103.1	102.4	98Q2	101.2	97.9	99.6	DEC98	0.1	0.1	0.0
96	102.9	100.6	100.3	98Q3	102.1	98.2	99.6	JAN99	-0.3	-0.1	-0.0
97	100.4	98.1	99.4	98Q4	102.9	98.9	99.7	FEB99	-0.6	-0.3	-0.0
98	101.6	98.2	99.6	99Q1	102.0	98.5	99.7	MAR99	-0.4	-0.2	0.0

## Trade-weighted currency indices

Annual data (index 1994=100)

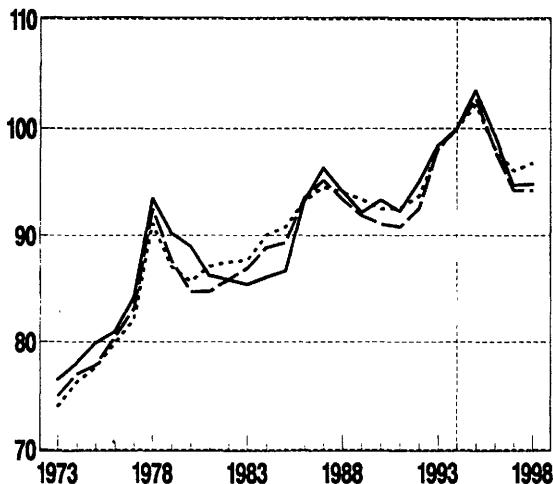


Quarterly data (index 1994=100)

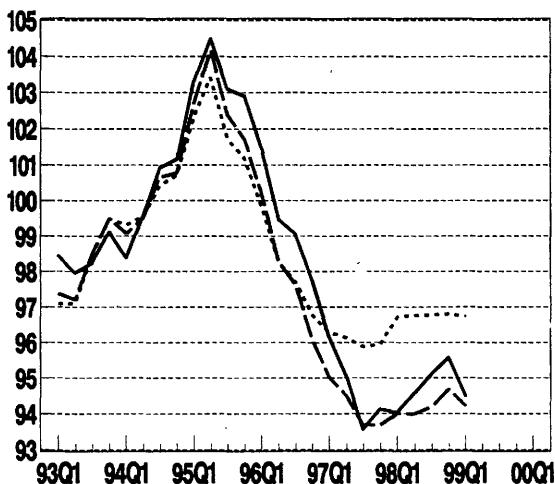


## Relative cost indicators (based on ULCE)

Annual data (index 1994=100)



Quarterly data (index 1994=100)



# Austria – euro (before 1999: schilling)

## Relative price and cost indicators vs. (the rest of) 24 industrial countries

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	95.9	94.2	94.6	93.2	98.6	96Q1	102.3	102.5	101.1	101.5	104.9
87	98.3	97.5	97.1	96.3	101.0	96Q2	101.2	101.1	99.8	99.5	102.5
88	96.8	95.6	97.0	94.2	98.7	96Q3	101.7	101.4	99.9	99.0	101.6
89	94.6	93.6	93.8	92.2	95.0	96Q4	101.0	100.7	98.9	97.7	99.7
90	96.8	95.6	96.8	93.3	97.7	97Q1	99.8	99.6	97.4	96.2	97.6
91	94.7	94.3	95.5	92.3	94.2	97Q2	98.9	98.8	96.3	95.1	96.0
92	96.6	96.7	97.7	95.0	96.4	97Q3	97.5	97.5	94.9	93.6	94.3
93	98.9	98.9	99.6	98.4	98.8	97Q4	98.1	98.2	95.7	94.1	94.8
94	100.0	100.0	100.0	100.0	100.0	98Q1	97.7	97.7	95.5	94.0	94.7
95	102.8	103.5	102.0	103.4	106.3	98Q2	98.3	98.3	96.5	94.6	95.4
96	101.6	101.4	99.9	99.4	102.2	98Q3	98.9	99.0	97.4	95.1	96.0
97	98.6	98.5	96.1	94.7	95.7	98Q4	99.5	99.6	98.1	95.6	96.4
98	98.6	98.7	96.9	94.8	95.6	99Q1	98.5	98.7	97.3	94.5	95.1

## Relative price and cost indicators vs. (the rest of) EUR15

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	96.8	95.6	96.0	93.5	98.8	96Q1	101.0	101.2	99.5	100.2	103.2
87	97.8	97.3	97.2	95.2	98.7	96Q2	100.0	99.9	98.4	98.3	101.0
88	96.4	95.5	97.2	93.4	96.8	96Q3	100.1	99.8	98.3	97.6	99.9
89	94.6	93.9	94.2	91.8	93.9	96Q4	99.1	98.9	97.0	96.1	97.8
90	95.0	93.8	95.3	91.1	94.6	97Q1	98.4	98.2	95.9	95.0	96.1
91	93.3	93.0	94.5	90.8	91.8	97Q2	98.0	98.0	95.3	94.5	95.1
92	94.4	94.4	95.9	92.5	93.3	97Q3	97.3	97.2	94.5	93.7	94.1
93	99.0	98.8	99.5	98.1	98.2	97Q4	97.3	97.3	94.6	93.7	94.2
94	100.0	100.0	100.0	100.0	100.0	98Q1	97.1	97.1	94.8	94.0	94.6
95	102.1	102.7	100.9	102.7	105.1	98Q2	97.1	97.1	95.1	94.0	94.8
96	100.1	99.9	98.3	98.0	100.4	98Q3	97.4	97.3	95.6	94.2	95.1
97	97.7	97.7	95.1	94.2	94.9	98Q4	98.0	98.0	96.3	94.7	95.6
98	97.4	97.4	95.4	94.2	95.0	99Q1	97.6	97.7	96.0	94.2	94.9

## Relative price and cost indicators vs. (the rest of) the countries in the euro area (EUR11)

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	96.9	96.1	96.2	93.3	100.0	96Q1	100.6	100.8	99.1	99.8	103.0
87	97.5	97.3	97.1	94.5	99.4	96Q2	99.9	99.8	98.2	98.3	101.2
88	97.2	96.6	97.6	94.0	98.5	96Q3	100.0	99.8	98.0	97.7	100.2
89	95.6	95.3	94.8	93.4	95.7	96Q4	99.6	99.4	97.2	96.8	98.8
90	95.7	95.0	95.6	92.5	96.1	97Q1	99.4	99.3	96.5	96.3	97.9
91	94.7	94.6	95.0	92.5	93.6	97Q2	99.4	99.4	96.0	96.1	97.4
92	95.3	95.6	96.2	93.7	94.5	97Q3	99.1	99.1	95.5	95.9	97.0
93	99.0	98.9	99.5	98.0	97.9	97Q4	99.0	99.1	95.4	95.9	97.2
94	100.0	100.0	100.0	100.0	100.0	98Q1	99.2	99.2	95.7	96.7	98.1
95	101.5	102.2	100.4	102.2	104.9	98Q2	99.1	99.1	95.8	96.8	98.4
96	100.0	99.9	98.1	98.1	100.8	98Q3	99.1	99.1	95.9	96.8	98.5
97	99.2	99.2	95.8	96.1	97.4	98Q4	99.1	99.2	96.2	96.8	98.5
98	99.1	99.2	95.9	96.8	98.4	99Q1	99.2	99.4	96.4	96.7	98.2

Abbreviations: IC24 = 24 Industrial Countries  
 EUR15 = 15 Member States of the European Union  
 EUR11 = Countries in the euro area  
 PCP = Deflator of private consumption  
 PGDP = Gross Domestic Product Deflator  
 PX = Price Deflator Exports of Goods and Services  
 ULCE = Nominal Unit Labour Cost in total Economy  
 ULCM = Nominal Unit Labour Cost in Manufacturing industry

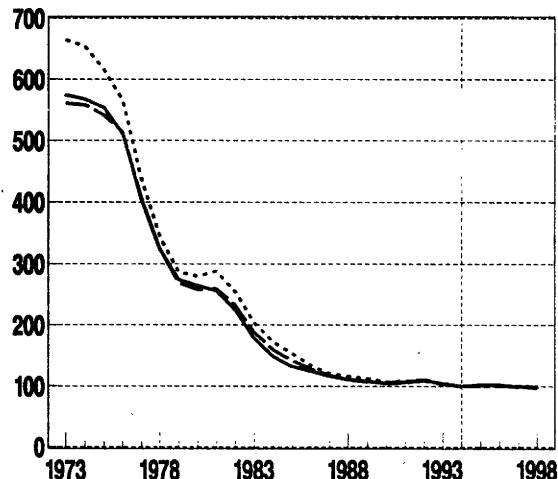
# Portugal – euro (before 1999: escudo)

## Trade-weighted currency indices

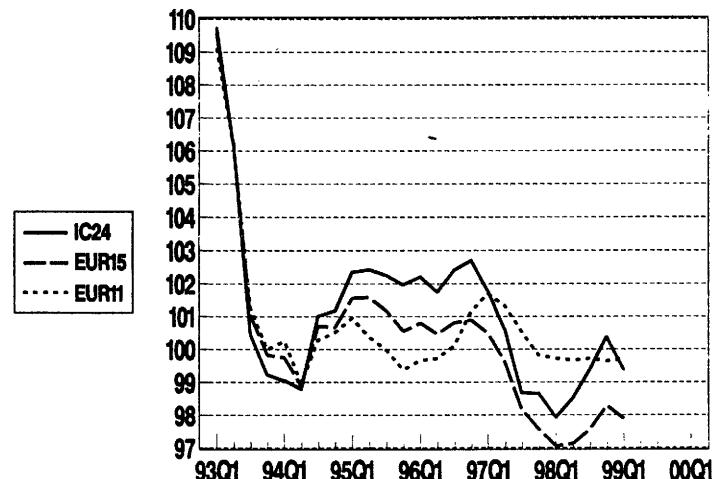
Annual data Index (1994=100)				Quarterly data Index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	124.5	128.3	133.9	96Q1	102.2	100.8	99.7	MAR98	-0.2	-0.3	0.0
87	116.5	117.4	120.6	96Q2	101.7	100.5	99.7	APR98	0.1	-0.1	-0.1
88	110.8	111.4	115.8	96Q3	102.4	100.8	100.1	MAY98	1.0	0.7	0.0
89	107.3	108.4	112.3	96Q4	102.7	100.9	101.1	JUN98	-0.1	-0.2	0.0
90	105.7	104.5	106.6	97Q1	101.8	100.5	101.7	JUL98	0.1	0.1	0.1
91	106.8	105.8	108.3	97Q2	100.6	99.6	101.3	AUG98	0.4	0.2	-0.0
92	110.6	109.2	110.9	97Q3	98.7	98.2	100.5	SEP98	0.7	0.3	-0.1
93	103.8	104.1	104.1	97Q4	98.7	97.6	99.8	OCT98	0.6	0.5	-0.0
94	100.0	100.0	100.0	98Q1	97.9	97.1	99.7	NOV98	-0.4	-0.1	0.0
95	102.3	101.2	100.2	98Q2	98.5	97.1	99.7	DEC98	0.2	0.1	0.0
96	102.3	100.7	100.2	98Q3	99.4	97.6	99.7	JAN99	-0.3	-0.1	0.0
97	99.9	99.0	100.8	98Q4	100.4	98.3	99.6	FEB99	-0.7	-0.4	0.0
98	99.0	97.5	99.7	99Q1	99.4	97.9	99.7	MAR99	-0.6	-0.4	0.0

## Trade-weighted currency indices

Annual data (index 1994=100)

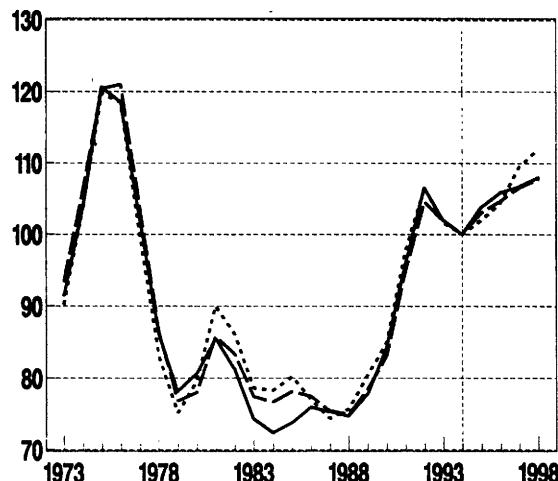


Quarterly data (index 1994=100)

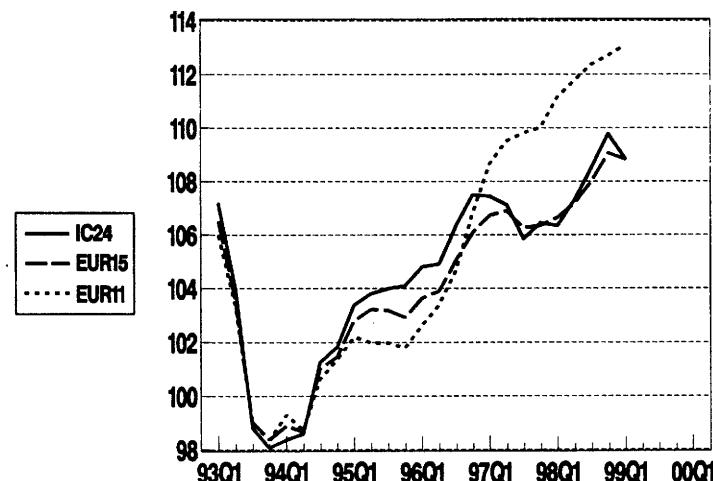


## Relative cost indicators (based on ULCE)

Annual data (index 1994=100)



Quarterly data (index 1994=100)



# Portugal – euro (before 1999: escudo)

## Relative price and cost indicators vs. (the rest of) 24 industrial countries

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	79.7	78.7	88.6	76.0	66.7	96Q1	104.7	104.4	101.5	104.8	99.9
87	79.2	78.2	91.3	75.3	64.6	96Q2	104.5	104.1	99.6	104.9	99.2
88	81.1	79.5	94.5	74.7	69.5	96Q3	105.3	105.4	99.5	106.3	99.6
89	84.8	82.6	96.6	77.8	72.4	96Q4	105.6	106.7	99.8	107.5	99.6
90	89.5	87.4	99.7	84.3	80.5	97Q1	104.6	107.0	99.4	107.4	98.4
91	96.5	94.4	101.4	95.9	92.7	97Q2	103.5	107.0	99.0	107.1	97.0
92	105.4	103.6	103.6	106.5	101.7	97Q3	101.7	105.8	97.8	105.8	94.9
93	101.5	100.3	99.9	102.0	98.4	97Q4	102.0	106.4	98.3	106.4	94.9
94	100.0	100.0	100.0	100.0	100.0	98Q1	101.5	106.0	97.9	106.3	94.3
95	103.9	104.5	104.5	103.8	101.0	98Q2	102.5	106.9	98.7	107.3	94.9
96	105.0	105.1	100.1	105.9	99.6	98Q3	103.7	108.2	99.8	108.5	95.8
97	102.9	106.6	98.6	106.7	96.3	98Q4	104.9	109.7	101.0	109.8	96.7
98	103.2	107.7	99.4	108.0	95.4	99Q1	104.0	109.1	100.1	108.9	95.8

## Relative price and cost indicators vs. (the rest of) EUR15

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	81.3	80.8	90.8	77.5	68.3	96Q1	103.5	103.2	100.2	103.6	98.3
87	79.3	78.6	92.0	75.4	64.1	96Q2	103.4	103.1	98.5	103.9	97.9
88	81.3	79.9	95.4	75.0	69.1	96Q3	103.9	104.1	98.1	105.0	98.0
89	85.6	83.6	97.9	78.5	72.6	96Q4	104.1	105.2	98.3	106.1	97.9
90	88.5	86.5	99.0	83.1	78.9	97Q1	103.7	106.1	98.4	106.7	97.3
91	95.7	93.6	101.0	94.9	91.3	97Q2	103.0	106.5	98.4	106.9	96.4
92	103.8	101.9	102.5	104.6	99.7	97Q3	101.7	105.9	97.6	106.3	94.9
93	101.6	100.3	100.0	101.8	98.0	97Q4	101.4	105.9	97.5	106.3	94.4
94	100.0	100.0	100.0	100.0	100.0	98Q1	101.3	105.8	97.4	106.7	94.3
95	103.1	103.6	103.4	103.0	99.8	98Q2	101.8	106.2	97.8	107.2	94.5
96	103.7	103.9	98.8	104.7	98.0	98Q3	102.7	107.0	98.5	108.0	95.1
97	102.5	106.1	98.0	106.6	95.7	98Q4	103.7	108.3	99.4	109.1	95.9
98	102.4	106.8	98.3	107.7	95.0	99Q1	103.5	108.3	99.1	108.8	95.6

## Relative price and cost indicators vs. (the rest of) the countries in the euro area (EUR11)

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	81.5	81.4	91.1	77.0	69.6	96Q1	102.5	102.2	99.3	102.6	97.7
87	78.9	78.6	91.7	74.4	64.8	96Q2	102.8	102.5	98.0	103.4	97.7
88	82.4	81.4	95.9	75.7	71.0	96Q3	103.4	103.7	97.5	104.7	98.1
89	87.1	85.6	98.9	80.4	74.7	96Q4	104.6	105.9	98.4	106.9	99.1
90	89.6	88.1	99.4	85.0	80.7	97Q1	105.3	107.9	99.3	108.7	99.8
91	97.9	96.2	102.0	97.7	94.0	97Q2	105.1	108.8	99.5	109.5	99.7
92	105.5	103.8	102.8	106.6	101.5	97Q3	104.5	109.0	99.1	109.8	99.2
93	101.7	100.4	100.0	101.6	97.6	97Q4	104.2	108.9	98.7	110.0	98.9
94	100.0	100.0	100.0	100.0	100.0	98Q1	104.6	109.3	98.8	111.2	99.4
95	102.1	102.6	102.5	102.0	99.3	98Q2	105.0	109.6	98.9	111.8	99.8
96	103.3	103.6	98.3	104.4	98.2	98Q3	105.4	110.1	99.1	112.4	100.1
97	104.8	108.7	99.2	109.5	99.4	98Q4	105.7	110.5	99.3	112.7	100.3
98	105.2	109.9	99.0	112.0	99.9	99Q1	106.0	111.1	99.6	113.1	100.5

Abbreviations: IC24 = 24 Industrial Countries  
 EUR15 = 15 Member States of the European Union  
 EUR11 = Countries in the euro area  
 PCP = Deflator of private consumption  
 PGDP = Gross Domestic Product Deflator  
 PX = Price Deflator Exports of Goods and Services  
 ULCE = Nominal Unit Labour Cost in total Economy  
 ULCM = Nominal Unit Labour Cost in Manufacturing industry

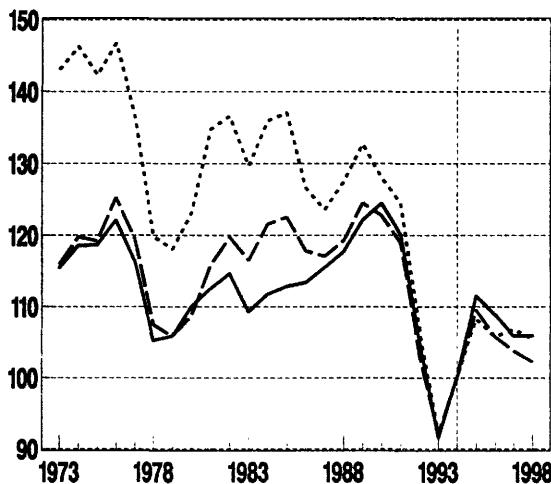
# Finland – euro (before 1999: markka)

## Trade-weighted currency indices

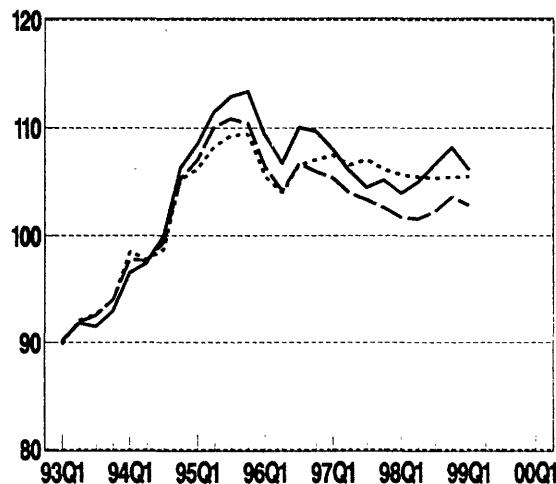
Annual data Index (1994=100)				Quarterly data Index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	113.4	117.8	126.6	96Q1	109.3	106.4	105.5	MAR98	-0.3	-0.6	-0.1
87	115.5	117.1	123.6	96Q2	106.8	104.2	104.0	APR98	0.4	-0.1	-0.0
88	117.7	119.3	127.5	96Q3	110.0	106.7	106.5	MAY98	1.3	0.7	-0.1
89	122.1	124.5	132.7	96Q4	109.7	106.0	107.1	JUN98	0.2	-0.1	-0.0
90	124.4	122.8	128.0	97Q1	108.0	105.3	107.5	JUL98	0.0	0.1	-0.0
91	120.2	119.0	124.5	97Q2	106.0	104.0	106.6	AUG98	0.9	0.4	-0.0
92	105.3	103.1	106.8	97Q3	104.5	103.3	107.1	SEP98	1.2	0.5	-0.1
93	91.6	92.2	92.1	97Q4	105.2	102.6	106.2	OCT98	0.8	0.9	0.1
94	100.0	100.0	100.0	98Q1	104.0	101.7	105.7	NOV98	-0.8	-0.1	0.1
95	111.5	109.6	108.3	98Q2	105.0	101.6	105.4	DEC98	0.3	0.2	0.0
96	108.9	105.8	105.8	98Q3	106.6	102.2	105.3	JAN99	-0.8	-0.4	0.0
97	105.9	103.8	106.8	98Q4	108.2	103.6	105.4	FEB99	-1.1	-0.6	-0.0
98	105.9	102.3	105.5	99Q1	106.2	102.8	105.5	MAR99	-0.8	-0.4	0.0

## Trade-weighted currency indices

Annual data (index 1994=100)

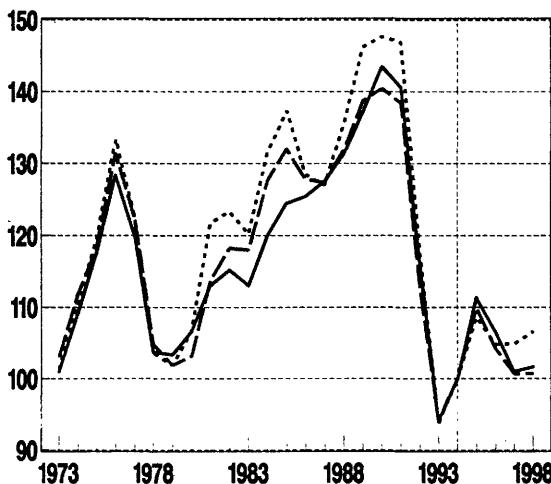


Quarterly data (index 1994=100)

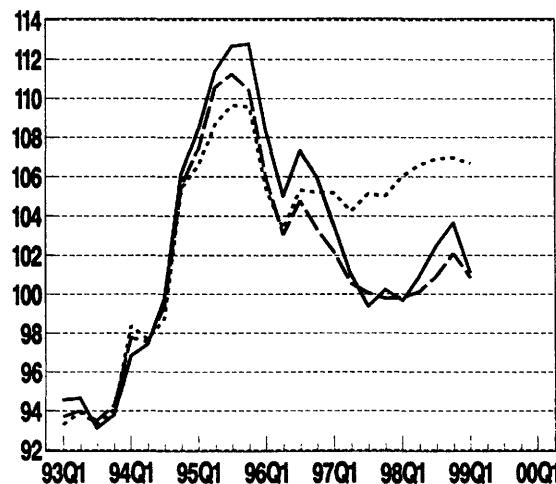


## Relative cost indicators (based on ULCE)

Annual data (index 1994=100)



Quarterly data (index 1994=100)



# Finland – euro (before 1999: markka)

## Relative price and cost indicators vs. (the rest of) 24 industrial countries

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	114.6	117.6	102.9	125.4	137.2	96Q1	105.5	108.7	110.9	108.2	114.7
87	116.6	120.7	105.9	127.5	135.1	96Q2	102.9	105.5	107.6	105.0	110.7
88	119.6	126.2	109.9	131.3	138.8	96Q3	106.1	108.2	110.1	107.3	112.3
89	124.0	132.2	114.7	137.1	145.4	96Q4	105.8	107.6	109.0	108.0	110.0
90	127.0	135.3	115.8	143.5	152.0	97Q1	104.2	105.9	106.7	103.5	106.5
91	122.5	126.1	109.9	140.6	146.3	97Q2	102.3	104.0	104.3	101.0	103.0
92	107.4	107.6	102.1	116.3	114.7	97Q3	100.7	102.5	102.8	99.4	100.4
93	93.6	92.3	92.2	94.0	92.4	97Q4	101.2	103.3	103.7	100.2	100.6
94	100.0	100.0	100.0	100.0	100.0	98Q1	99.7	102.2	102.8	99.7	99.3
95	108.6	112.0	113.5	111.3	117.0	98Q2	100.4	103.1	104.0	100.9	100.0
96	105.1	107.5	109.4	106.6	111.9	98Q3	101.7	104.6	105.4	102.5	101.0
97	102.1	103.9	104.4	101.0	102.6	98Q4	103.0	105.9	106.5	103.6	101.8
98	101.2	103.9	104.6	101.7	100.5	99Q1	100.9	103.7	103.9	101.2	99.0

## Relative price and cost indicators vs. (the rest of) EUR15

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	116.8	120.8	106.1	127.8	139.7	96Q1	103.2	106.3	108.2	105.9	111.5
87	116.7	121.3	107.1	127.4	133.1	96Q2	101.0	103.5	105.5	103.0	108.1
88	120.1	127.3	111.6	131.8	137.6	96Q3	103.5	105.7	107.4	104.8	109.2
89	125.6	134.4	117.2	138.7	145.8	96Q4	103.0	104.8	106.1	103.3	106.8
90	124.8	133.1	114.7	140.4	147.4	97Q1	102.5	104.3	104.9	102.2	104.5
91	120.9	124.5	109.2	138.4	142.6	97Q2	101.3	103.1	103.2	100.6	101.9
92	104.9	105.0	100.4	113.0	110.9	97Q3	100.8	102.7	102.6	100.1	100.6
93	93.9	92.5	92.4	93.9	91.9	97Q4	100.0	102.2	102.2	99.8	99.6
94	100.0	100.0	100.0	100.0	100.0	98Q1	99.0	101.4	101.7	99.8	99.1
95	107.1	110.4	111.4	109.9	114.6	98Q2	98.8	101.4	101.8	100.1	99.0
96	102.7	105.1	106.8	104.3	108.9	98Q3	99.3	102.0	102.4	100.9	99.3
97	101.2	103.1	103.2	100.6	101.7	98Q4	100.6	103.3	103.3	102.1	100.1
98	99.4	102.0	102.3	100.7	99.4	99Q1	99.7	102.3	101.9	100.9	98.5

## Relative price and cost indicators vs. (the rest of) the countries in the euro area (EUR11)

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	118.1	123.6	107.5	128.4	145.4	96Q1	102.4	105.7	107.7	105.3	111.3
87	117.0	123.0	107.9	127.0	137.1	96Q2	100.9	103.7	105.4	103.4	108.7
88	123.3	132.3	113.8	135.5	145.5	96Q3	103.5	105.9	107.1	105.3	110.1
89	130.0	141.3	120.5	146.2	155.6	96Q4	104.2	108.4	106.7	105.2	109.3
90	128.4	138.9	116.8	147.7	156.1	97Q1	104.9	107.0	106.3	105.2	108.5
91	126.6	131.5	111.9	146.9	152.6	97Q2	104.2	106.3	104.8	104.2	106.8
92	108.4	109.1	101.7	117.6	116.3	97Q3	104.8	107.1	105.0	105.1	107.0
93	93.9	92.6	92.2	93.6	91.5	97Q4	103.9	106.4	104.1	105.0	106.2
94	100.0	100.0	100.0	100.0	100.0	98Q1	103.3	106.1	103.7	106.0	106.6
95	105.9	109.3	110.7	108.6	113.9	98Q2	103.0	105.9	103.8	106.6	106.7
96	102.8	105.4	106.7	104.8	109.9	98Q3	102.8	105.8	103.4	106.9	106.6
97	104.5	106.7	105.0	104.9	107.1	98Q4	102.9	105.9	103.1	107.0	106.2
98	103.0	105.9	103.4	106.6	106.5	99Q1	102.9	105.8	102.6	106.7	105.5

Abbreviations: IC24 = 24 Industrial Countries  
EUR15 = 15 Member States of the European Union  
EUR11 = Countries in the euro area  
PCP = Deflator of private consumption  
PGDP = Gross Domestic Product Deflator  
PX = Price Deflator Exports of Goods and Services  
ULCE = Nominal Unit Labour Cost in total Economy  
ULCM = Nominal Unit Labour Cost in Manufacturing Industry

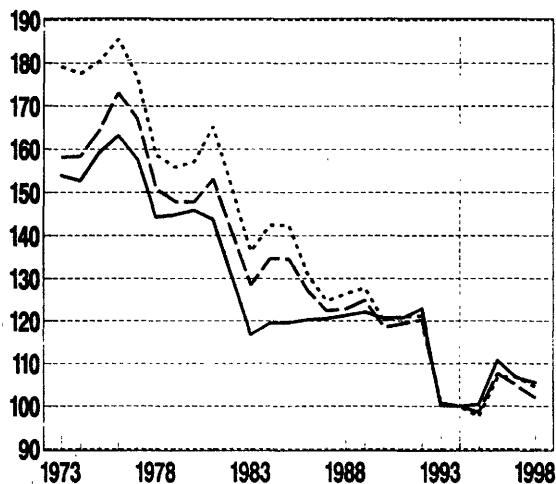
# Sweden – krona

## Trade-weighted currency indices

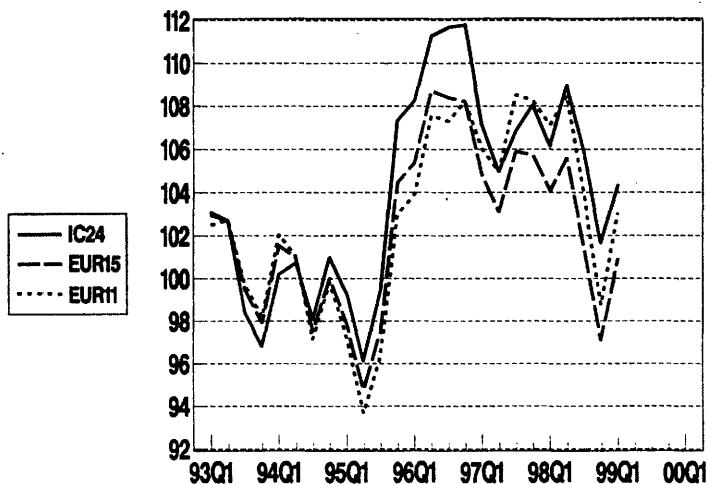
Annual data Index (1994=100)						Quarterly data Index (1994=100)						Monthly data monthly % change					
	vs. (the rest of) IC24 EUR15 EUR11				vs. (the rest of) IC24 EUR15 EUR11				vs. (the rest of) IC24 EUR15 EUR11				vs. (the rest of) IC24 EUR15 EUR11				
86	120.4	127.2	131.0	96Q1	108.2	105.4	103.9	MAR98	2.0	1.8	2.0						
87	120.6	122.4	124.8	96Q2	111.3	108.7	107.6	APR98	1.7	1.2	1.1						
88	121.4	122.9	126.4	96Q3	111.7	108.4	107.3	MAY98	0.9	0.2	-0.5						
89	122.1	124.9	127.8	96Q4	111.8	108.2	108.2	JUN98	-1.7	-2.1	-1.8						
90	120.7	118.6	120.1	97Q1	107.1	104.8	106.0	JUL98	-0.7	-0.7	-0.6						
91	120.8	119.4	121.2	97Q2	105.0	103.1	104.9	AUG98	-1.5	-2.1	-2.3						
92	122.9	120.2	121.1	97Q3	106.8	105.9	108.5	SEP98	-0.8	-1.7	-2.0						
93	100.2	100.7	100.8	97Q4	108.0	105.7	108.3	OCT98	-2.4	-2.5	-3.0						
94	100.0	100.0	100.0	98Q1	106.1	104.1	107.1	NOV98	-0.2	0.6	0.7						
95	100.5	98.6	97.5	98Q2	109.0	105.6	108.5	DEC98	-1.2	-1.5	-1.5						
96	110.7	107.7	106.7	98Q3	105.9	101.5	104.0	JAN99	3.3	4.0	3.9						
97	106.7	104.9	106.9	98Q4	101.7	97.1	98.8	FEB99	-1.0	-1.6	-1.9						
98	105.6	102.0	104.5	99Q1	104.3	100.9	103.0	MAR99	-1.2	-0.8	-0.4						

## Trade-weighted currency indices

Annual data (index 1994=100)

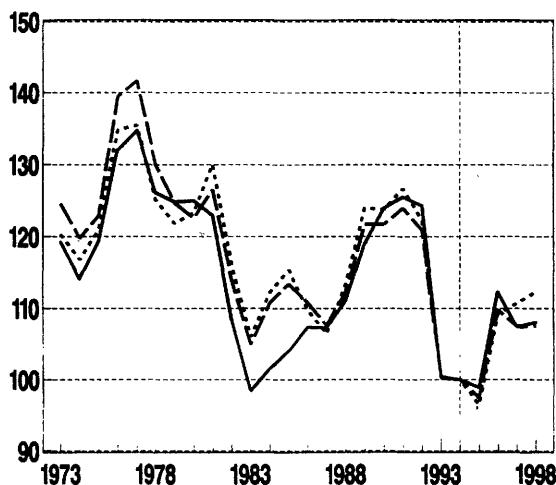


Quarterly data (index 1994=100)

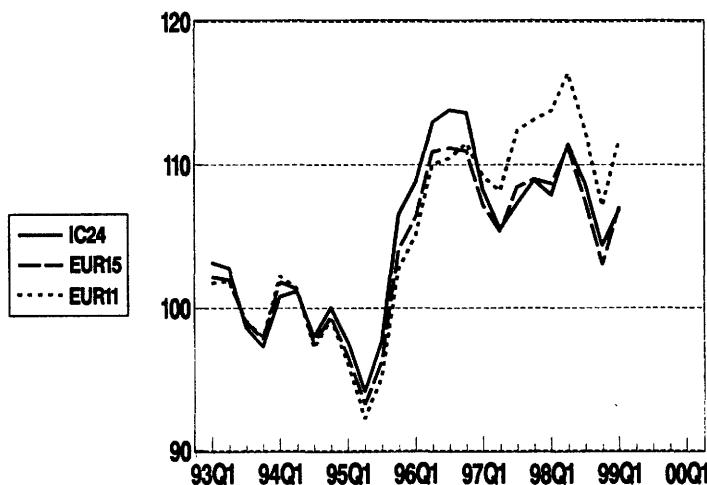


## Relative cost indicators (based on ULCE)

Annual data (index 1994=100)



Quarterly data (index 1994=100)



# Sweden - krona

## Relative price and cost indicators vs. (the rest of) 24 industrial countries

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	103.4	110.0	107.3	107.4	118.3	96Q1	107.3	108.3	108.2	108.8	106.8
87	105.0	110.7	109.0	107.3	119.4	96Q2	109.9	110.8	108.2	113.0	110.9
88	107.7	113.6	112.6	111.1	127.0	96Q3	110.0	110.7	106.7	113.8	111.5
89	110.6	117.8	114.3	119.1	134.1	96Q4	110.0	110.6	106.2	113.6	111.0
90	114.6	120.8	113.0	123.9	136.1	97Q1	105.4	105.7	102.0	108.2	105.3
91	120.5	124.6	113.9	125.5	140.8	97Q2	103.4	103.4	100.6	105.5	102.2
92	120.4	123.7	112.0	124.3	137.9	97Q3	105.1	105.0	102.9	107.3	103.5
93	100.3	100.3	98.3	100.4	103.6	97Q4	106.1	106.0	104.3	108.9	104.6
94	100.0	100.0	100.0	100.0	100.0	98Q1	103.9	103.8	102.5	107.9	103.1
95	100.5	101.2	104.8	98.9	97.5	98Q2	106.3	106.2	105.1	111.4	106.2
96	109.3	110.1	107.3	112.3	110.0	98Q3	103.0	103.0	102.0	108.7	103.6
97	105.0	105.0	102.5	107.5	103.9	98Q4	98.5	98.6	97.7	104.4	99.5
98	102.9	102.9	101.8	108.1	103.1	99Q1	100.8	101.0	100.1	106.8	102.2

## Relative price and cost indicators vs. (the rest of) EUR15

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	106.2	114.6	112.2	110.8	122.1	96Q1	104.9	105.9	105.7	106.4	103.7
87	104.9	111.6	110.9	107.6	117.5	96Q2	107.7	108.8	106.3	110.9	108.2
88	108.2	115.0	115.0	112.3	126.2	96Q3	107.2	108.2	104.3	111.2	108.5
89	112.7	120.8	118.0	121.7	135.3	96Q4	107.1	107.9	103.7	110.9	108.0
90	112.7	119.2	112.7	121.7	131.9	97Q1	103.9	104.5	100.8	107.2	103.9
91	119.2	123.5	113.9	124.0	137.4	97Q2	102.4	102.8	99.8	105.3	101.6
92	117.7	120.8	110.2	120.9	133.4	97Q3	105.3	105.5	103.1	108.4	104.2
93	100.7	100.6	98.6	100.2	102.8	97Q4	105.1	105.1	103.1	109.0	104.3
94	100.0	100.0	100.0	100.0	100.0	98Q1	103.3	103.2	101.5	108.7	103.6
95	98.9	99.6	102.8	97.5	95.3	98Q2	104.6	104.5	102.8	111.2	105.9
96	106.7	107.7	105.0	109.8	107.1	98Q3	100.3	100.2	98.6	107.5	102.3
97	104.1	104.5	101.7	107.5	103.5	98Q4	95.8	95.7	94.1	103.0	98.2
98	100.9	100.9	99.2	107.6	102.5	99Q1	99.5	99.5	97.6	107.0	102.2

## Relative price and cost indicators vs. (the rest of) the countries in the euro area (EUR11)

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	106.3	114.8	111.9	109.8	123.1	96Q1	103.6	104.7	104.4	105.1	103.0
87	104.6	111.4	110.1	106.4	118.2	96Q2	106.8	108.0	105.4	110.0	107.8
88	109.6	116.6	114.7	113.3	128.5	96Q3	106.4	107.5	103.4	110.5	108.3
89	114.2	122.8	118.0	124.0	137.3	96Q4	107.4	108.4	103.7	111.5	109.3
90	113.6	120.7	112.5	123.7	133.4	97Q1	105.5	106.3	101.7	109.2	106.9
91	121.2	125.9	114.3	126.6	139.6	97Q2	104.6	105.2	101.1	108.2	105.7
92	118.8	122.2	110.2	122.3	134.3	97Q3	108.4	108.8	104.7	112.4	109.6
93	100.8	100.8	98.8	100.2	102.4	97Q4	108.1	108.3	104.4	113.1	110.1
94	100.0	100.0	100.0	100.0	100.0	98Q1	106.8	106.9	103.0	113.7	110.3
95	97.8	98.5	101.7	98.5	95.0	98Q2	108.0	108.1	104.0	116.4	112.7
96	106.1	107.2	104.2	109.2	107.1	98Q3	103.4	103.4	99.5	112.4	108.9
97	106.6	107.1	103.0	110.7	108.1	98Q4	98.1	98.1	94.3	107.1	103.8
98	104.0	104.1	100.1	112.3	108.9	99Q1	102.3	102.4	98.4	111.8	108.6

Abbreviations: IC24 = 24 Industrial Countries  
 EUR15 = 15 Member States of the European Union  
 EUR11 = Countries in the euro area  
 PCP = Deflator of private consumption  
 PGDP = Gross Domestic Product Deflator  
 PX = Price Deflator Exports of Goods and Services  
 ULCE = Nominal Unit Labour Cost in total Economy  
 ULCM = Nominal Unit Labour Cost in Manufacturing industry

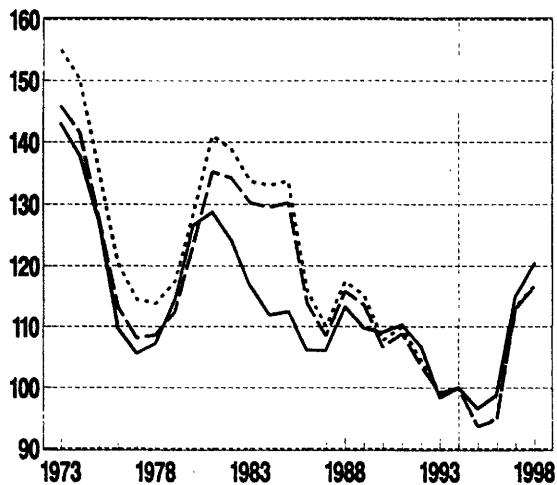
# **United Kingdom – pound sterling**

## **Trade – weighted currency indices**

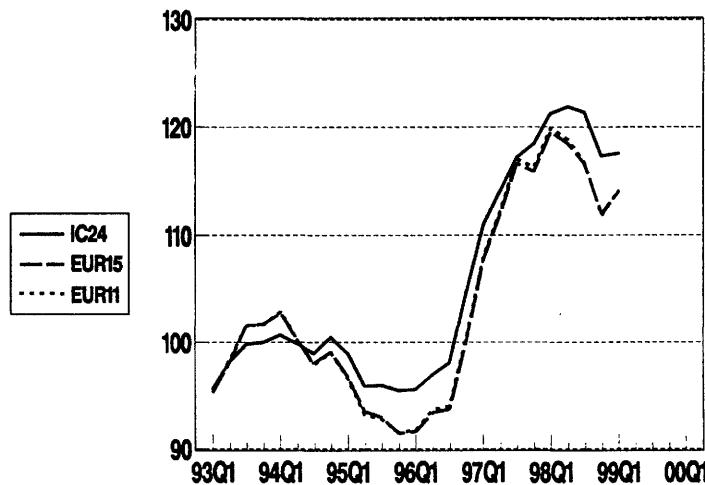
Annual data Index (1994=100)			Quarterly data index (1994=100)			Monthly data monthly % change					
	vs. (the rest of) IC24 EUR15 EUR11			vs. (the rest of) IC24 EUR15 EUR11			vs. (the rest of) IC24 EUR15 EUR11				
86	106.2	113.8	115.9	96Q1	95.6	91.6	91.8	MAR98	2.0	1.9	2.0
87	106.2	108.5	110.1	96Q2	97.0	93.4	93.7	APR98	0.6	-0.0	0.0
88	113.2	115.8	117.5	96Q3	98.1	93.7	94.0	MAY98	-3.1	-4.1	-4.1
89	109.8	113.5	115.1	96Q4	104.8	100.1	100.5	JUN98	-1.9	-1.7	-1.6
90	109.1	106.6	107.7	97Q1	111.0	107.8	108.0	JUL98	-0.1	-0.0	-0.0
91	110.4	108.9	110.0	97Q2	114.0	111.9	112.1	AUG98	-0.4	-1.0	-1.2
92	106.9	103.6	104.6	97Q3	117.1	116.6	117.0	SEP98	-0.8	-1.9	-2.0
93	98.4	99.1	99.2	97Q4	118.4	115.9	116.3	OCT98	-2.5	-2.8	-2.9
94	100.0	100.0	100.0	98Q1	121.3	119.6	119.9	NOV98	-0.3	0.6	0.7
95	96.6	93.6	93.5	98Q2	121.9	118.5	118.8	DEC98	0.1	-0.1	-0.1
96	98.8	94.7	94.9	98Q3	121.4	116.6	116.7	JAN99	-1.0	-0.5	-0.3
97	115.1	113.0	113.3	98Q4	117.3	112.0	111.8	FEB99	1.0	2.0	2.1
98	120.4	116.6	116.8	99Q1	117.6	114.1	114.2	MAR99	1.8	2.6	2.6

## **Trade – weighted currency indices**

### Annual data (index 1994=100)

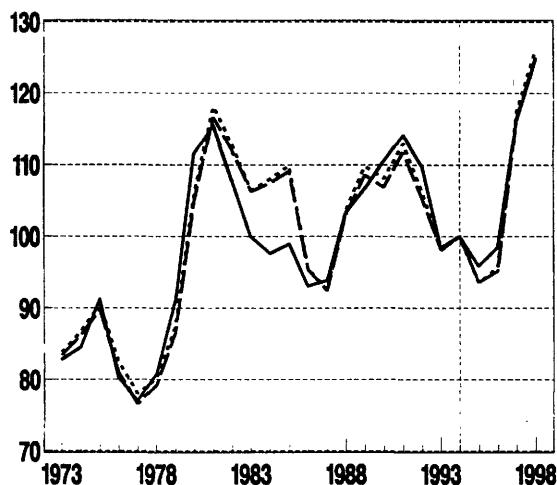


#### Quarterly data (index 1994 = 100)

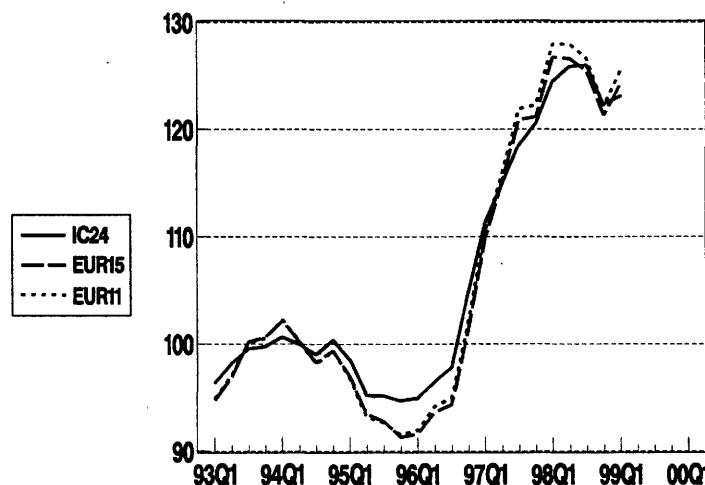


## **Relative cost indicators (based on ULCE)**

#### Annual data (index 1994 = 100)



### Quarterly data (index 1994 = 100)



# United Kingdom – pound sterling

## Relative price and cost indicators vs. (the rest of) 24 industrial countries

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	98.2	97.2	92.6	93.1	101.7	96Q1	96.0	95.7	97.1	95.0	99.4
87	98.6	98.7	94.5	93.8	104.8	96Q2	97.5	97.4	98.4	96.5	100.8
88	106.3	107.1	97.5	103.4	111.3	96Q3	98.7	98.7	98.8	97.8	102.6
89	104.4	106.6	97.7	106.7	107.2	96Q4	105.5	105.7	104.3	104.8	111.1
90	106.8	109.1	100.7	110.6	109.8	97Q1	111.7	112.0	108.5	111.3	119.6
91	111.3	112.6	102.4	114.2	112.1	97Q2	114.8	115.2	109.4	114.8	125.0
92	108.3	109.2	100.5	109.8	106.5	97Q3	117.8	118.3	110.2	118.6	130.2
93	99.5	99.8	99.5	98.5	96.3	97Q4	119.1	119.6	109.4	120.5	132.8
94	100.0	100.0	100.0	100.0	100.0	98Q1	121.9	122.4	110.5	124.5	137.1
95	96.6	96.1	97.0	95.9	100.5	98Q2	122.5	123.1	110.0	125.9	138.3
96	99.4	99.3	99.6	98.5	103.3	98Q3	122.0	122.7	109.3	126.0	138.2
97	115.8	116.2	109.4	116.2	126.8	98Q4	117.9	118.7	106.1	122.4	133.9
98	121.0	121.7	108.9	124.7	136.9	99Q1	118.2	119.2	107.2	123.1	134.7

## Relative price and cost indicators vs. (the rest of) EUR15

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	101.3	101.4	96.8	95.3	105.7	96Q1	92.5	92.2	93.3	91.6	95.0
87	98.0	98.8	95.4	92.4	102.4	96Q2	94.5	94.4	95.1	93.6	97.0
88	106.7	108.2	99.4	103.1	109.8	96Q3	95.0	95.1	94.9	94.3	98.2
89	106.7	109.5	100.6	108.6	108.2	96Q4	101.7	102.0	100.1	101.4	106.7
90	103.8	106.2	98.6	106.9	104.8	97Q1	109.7	110.1	105.9	109.8	117.3
91	109.4	110.8	101.1	111.8	108.4	97Q2	114.1	114.6	107.8	115.0	124.4
92	104.7	105.4	97.6	105.3	101.4	97Q3	119.1	119.6	110.1	120.9	132.0
93	99.9	100.1	99.7	98.1	95.5	97Q4	118.4	119.0	107.5	121.1	133.0
94	100.0	100.0	100.0	100.0	100.0	98Q1	122.4	122.9	109.4	126.7	139.2
95	94.0	93.6	94.0	93.6	97.1	98Q2	121.5	121.9	107.4	126.6	139.1
96	95.9	95.9	95.8	95.2	99.1	98Q3	119.7	120.2	105.5	125.5	137.7
97	115.3	115.8	107.8	116.6	126.5	98Q4	115.2	115.8	101.7	121.3	132.9
98	119.7	120.2	106.0	125.0	137.2	99Q1	117.6	118.3	104.6	124.2	136.0

## Relative price and cost indicators vs. (the rest of) the countries in the euro area (EUR11)

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	101.3	101.9	97.3	95.5	106.5	96Q1	92.7	92.5	93.5	91.9	95.2
87	98.0	99.1	95.8	92.5	103.0	96Q2	94.8	94.8	95.4	94.2	97.4
88	107.0	108.8	99.9	103.7	111.0	96Q3	95.4	95.5	95.0	94.9	98.7
89	107.3	110.5	101.2	109.8	109.8	96Q4	102.2	102.5	100.3	102.1	107.3
90	104.4	107.1	99.1	108.1	106.2	97Q1	110.0	110.5	108.0	110.5	117.9
91	110.3	111.9	101.7	113.0	110.0	97Q2	114.4	115.0	107.9	115.7	125.0
92	105.5	106.3	98.1	106.3	102.8	97Q3	119.6	120.3	110.5	121.9	133.0
93	100.0	100.1	99.7	98.1	95.6	97Q4	119.0	119.6	107.8	122.3	134.1
94	100.0	100.0	100.0	100.0	100.0	98Q1	122.9	123.5	109.6	128.0	140.5
95	93.9	93.5	94.1	93.5	97.0	98Q2	122.0	122.5	107.6	128.0	140.4
96	96.2	96.3	96.0	95.7	99.5	98Q3	120.0	120.5	105.5	126.7	138.9
97	115.7	116.3	108.0	117.5	127.3	98Q4	115.2	115.8	101.5	122.2	133.8
98	120.0	120.5	106.0	126.2	138.4	99Q1	117.9	118.6	104.5	125.4	137.3

Abbreviations: IC24 = 24 Industrial Countries  
EUR15 = 15 Member States of the European Union  
EUR11 = Countries in the euro area  
PCP = Deflator of private consumption  
PGDP = Gross Domestic Product Deflator  
PX = Price Deflator Exports of Goods and Services  
ULCE = Nominal Unit Labour Cost in total Economy  
ULCM = Nominal Unit Labour Cost in Manufacturing Industry

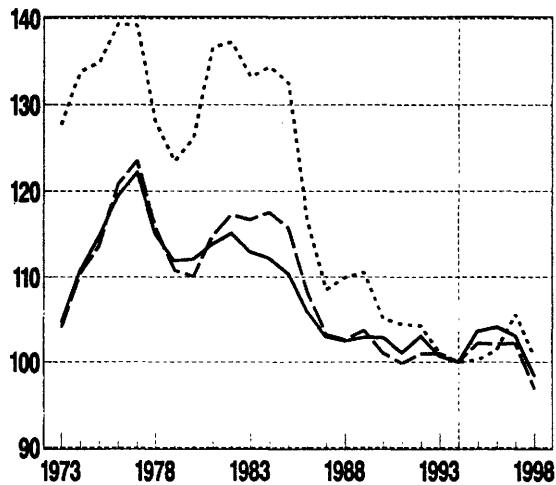
# Norway – krone

## Trade-weighted currency indices

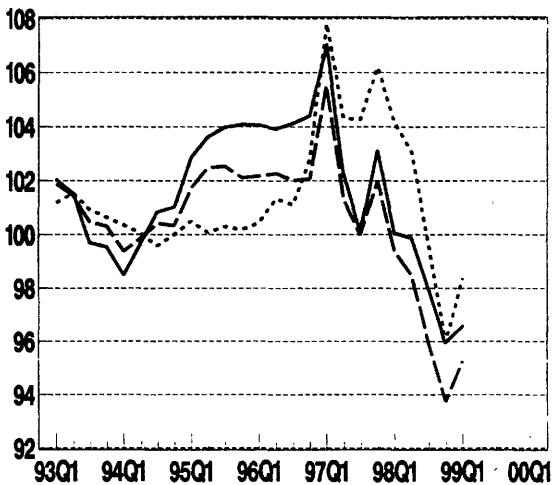
Annual data Index (1994=100)				Quarterly data Index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	105.9	108.2	116.7	96Q1	104.1	102.2	100.4	MAR98	-0.2	-0.3	0.3
87	103.0	103.2	108.5	96Q2	103.9	102.3	101.3	APR98	0.3	-0.1	0.0
88	102.5	102.6	110.0	96Q3	104.1	102.0	101.1	MAY98	0.4	-0.1	-1.1
89	102.9	103.7	110.6	96Q4	104.4	102.1	102.8	JUN98	-0.8	-1.0	-0.7
90	102.9	101.1	105.1	97Q1	107.0	105.5	107.8	JUL98	-0.2	-0.2	-0.3
91	101.2	99.9	104.5	97Q2	102.3	101.3	104.3	AUG98	-1.0	-1.4	-1.8
92	103.1	101.0	104.3	97Q3	100.1	100.0	104.3	SEP98	-1.7	-2.3	-2.9
93	100.7	101.0	101.1	97Q4	103.1	102.0	106.2	OCT98	-0.8	-1.0	-1.9
94	100.0	100.0	100.0	98Q1	100.1	99.4	104.2	NOV98	1.6	2.2	2.4
95	103.6	102.2	100.3	98Q2	99.9	98.5	103.1	DEC98	-2.5	-2.5	-2.7
96	104.1	102.1	101.4	98Q3	98.0	96.0	99.7	JAN99	2.3	2.7	3.0
97	103.1	102.2	105.6	98Q4	96.0	93.7	96.0	FEB99	-1.2	-0.6	0.0
98	98.5	96.9	100.7	99Q1	96.6	95.2	98.4	MAR99	0.8	1.1	1.7

## Trade-weighted currency indices

Annual data (index 1994=100)

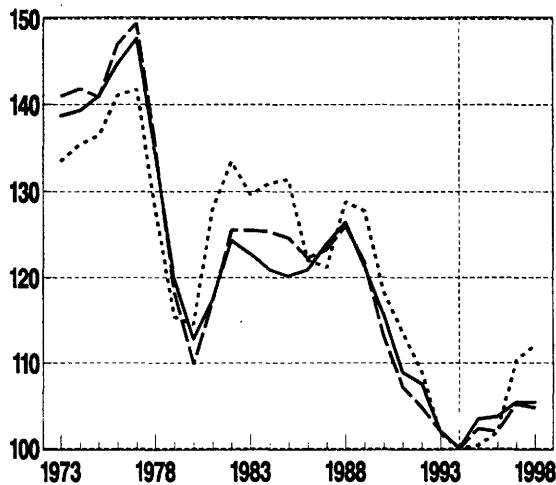


Quarterly data (index 1994=100)

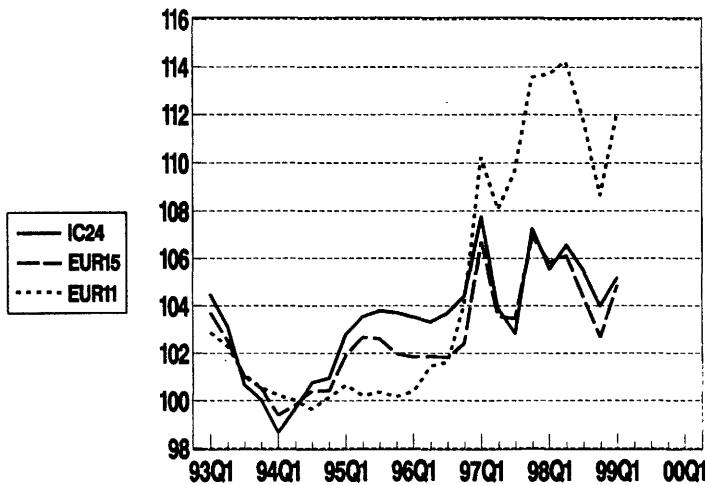


## Relative cost indicators (based on ULCE)

Annual data (index 1994=100)



Quarterly data (index 1994=100)



# Norway – krone

## Relative price and cost indicators vs. (the rest of) 24 industrial countries

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	106.9	113.8	118.0	120.9	103.1	96Q1	103.3	105.8	106.4	103.5	105.8
87	108.3	114.0	115.9	123.9	105.0	96Q2	102.9	106.2	108.3	103.3	106.8
88	110.1	114.2	113.2	126.4	110.2	96Q3	102.9	107.0	110.6	103.7	108.6
89	110.4	115.2	119.3	121.3	106.7	96Q4	103.2	107.8	112.5	104.4	110.7
90	109.5	113.5	121.0	115.7	104.1	97Q1	105.9	110.9	116.2	107.8	115.3
91	105.7	108.8	116.2	108.9	100.5	97Q2	101.3	106.1	110.9	103.9	111.7
92	106.4	106.6	109.1	107.6	102.4	97Q3	99.4	103.5	107.1	102.8	110.4
93	102.3	103.3	105.5	102.1	96.9	97Q4	102.6	105.8	107.8	107.2	114.2
94	100.0	100.0	100.0	100.0	100.0	98Q1	99.8	101.9	101.8	105.6	111.1
95	103.5	104.1	102.3	103.5	104.4	98Q2	99.9	100.9	99.1	106.8	110.9
96	103.1	106.7	109.4	103.7	108.0	98Q3	98.3	98.5	95.6	105.5	109.0
97	102.3	106.6	110.5	105.4	112.9	98Q4	96.6	96.4	92.9	104.0	107.1
98	98.6	99.4	97.3	105.4	109.5	99Q1	97.5	97.3	93.5	105.2	108.3

## Relative price and cost indicators vs. (the rest of) EUR15

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	108.4	115.9	120.4	122.3	104.6	96Q1	101.6	103.9	104.4	101.8	103.4
87	108.1	114.1	116.5	123.3	103.7	96Q2	101.4	104.6	106.6	101.9	104.7
88	110.1	114.3	114.1	126.0	109.0	96Q3	100.9	104.9	108.4	101.8	106.1
89	111.3	116.2	120.7	121.7	106.8	96Q4	101.0	105.6	110.0	102.4	108.0
90	107.6	111.5	119.4	113.1	101.3	97Q1	104.6	109.6	114.6	106.7	113.5
91	104.3	107.3	115.2	107.1	98.4	97Q2	100.7	105.4	109.9	103.6	110.6
92	104.2	104.2	107.3	104.8	99.6	97Q3	99.6	103.7	107.0	103.5	110.3
93	102.6	103.4	105.6	101.9	96.7	97Q4	101.9	105.0	106.7	106.9	113.2
94	100.0	100.0	100.0	100.0	100.0	98Q1	99.6	101.5	101.3	105.8	110.8
95	102.2	102.7	100.9	102.3	102.5	98Q2	99.0	99.8	97.9	106.1	110.1
96	101.2	104.8	107.3	102.0	105.5	98Q3	96.8	96.9	93.8	104.4	107.6
97	101.7	105.9	109.5	105.2	111.9	98Q4	94.9	94.6	90.9	102.7	105.5
98	97.5	98.1	95.9	104.7	108.5	99Q1	96.8	96.3	92.3	104.9	107.7

## Relative price and cost indicators vs. (the rest of) the countries in the euro area (EUR11)

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	109.6	118.3	121.5	122.0	108.7	96Q1	100.1	102.5	103.0	100.4	102.6
87	107.6	114.7	116.2	121.2	105.9	96Q2	100.7	104.1	105.9	101.4	105.0
88	113.0	118.6	115.5	128.8	114.7	96Q3	100.4	104.5	107.3	101.6	106.6
89	114.9	121.8	123.1	127.8	112.7	96Q4	102.1	107.0	110.3	104.0	110.8
90	110.3	115.7	120.6	118.3	105.9	97Q1	107.4	112.7	116.2	110.2	118.9
91	109.3	113.3	117.4	113.6	104.4	97Q2	104.2	109.3	111.8	108.1	117.4
92	107.6	108.3	108.2	109.0	103.8	97Q3	104.5	108.9	109.8	109.7	119.2
93	102.8	103.7	105.7	101.7	96.0	97Q4	106.8	110.2	108.9	113.6	122.8
94	100.0	100.0	100.0	100.0	100.0	98Q1	105.0	107.2	103.6	113.7	121.7
95	100.4	100.9	99.4	100.3	101.4	98Q2	104.3	105.3	99.8	114.2	121.1
96	100.8	104.5	106.6	101.9	106.2	98Q3	101.2	101.4	94.8	111.8	117.7
97	105.7	110.3	111.6	110.4	119.6	98Q4	97.9	97.7	90.7	108.6	114.1
98	102.1	102.8	97.1	112.1	118.6	99Q1	100.8	100.5	93.1	112.1	117.7

Abbreviations: IC24 = 24 Industrial Countries  
 EUR15 = 15 Member States of the European Union  
 EUR11 = Countries in the euro area  
 PCP = Deflator of private consumption  
 PGDP = Gross Domestic Product Deflator  
 PX = Price Deflator Exports of Goods and Services  
 ULCE = Nominal Unit Labour Cost in total Economy  
 ULCM = Nominal Unit Labour Cost in Manufacturing industry

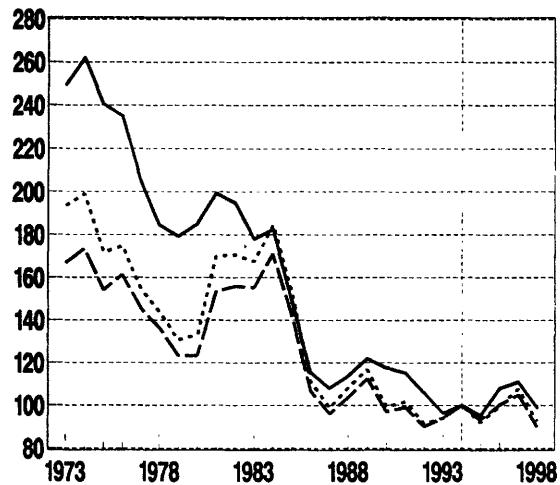
# Australia – dollar

## Trade-weighted currency indices

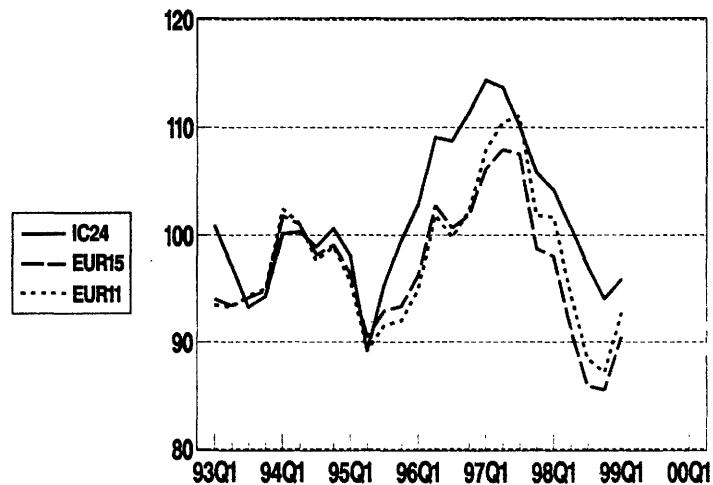
Annual data index (1994=100)				Quarterly data index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	115.6	106.8	111.4	96Q1	102.9	96.2	94.9	MAR98	0.5	-0.5	-0.0
87	108.1	96.1	98.8	96Q2	109.1	102.8	101.9	APR98	-1.6	-3.2	-3.2
88	113.9	104.0	108.4	96Q3	108.7	100.7	99.8	MAY98	-2.9	-4.7	-5.5
89	122.0	112.6	116.8	96Q4	111.3	101.8	102.2	JUN98	-2.1	-3.5	-3.3
90	117.7	97.0	99.1	97Q1	114.4	106.2	107.9	JUL98	2.5	2.6	2.6
91	115.4	99.2	101.8	97Q2	113.7	107.9	110.4	AUG98	-3.3	-4.8	-5.1
92	106.0	90.2	91.6	97Q3	110.1	107.5	111.1	SEP98	-4.2	-4.5	-5.0
93	96.4	94.1	94.0	97Q4	105.8	98.7	101.8	OCT98	-0.2	1.9	1.2
94	100.0	100.0	100.0	98Q1	104.3	98.0	101.7	NOV98	3.3	5.3	5.4
95	95.4	93.3	92.1	98Q2	100.8	91.3	94.6	DEC98	-3.5	-3.1	-3.2
96	107.9	100.3	99.7	98Q3	97.2	85.9	88.5	JAN99	0.8	2.8	2.9
97	111.0	105.0	107.8	98Q4	94.1	85.5	87.1	FEB99	3.4	4.5	5.0
98	99.0	90.1	92.8	99Q1	95.8	90.4	92.7	MAR99	0.4	1.0	1.5

## Trade-weighted currency indices

Annual data (index 1994=100)

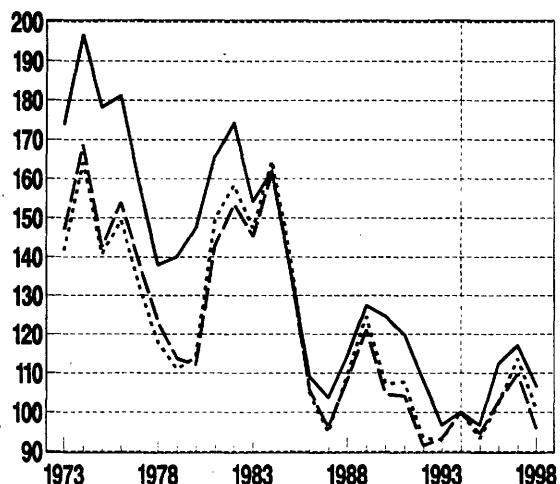


Quarterly data (index 1994=100)

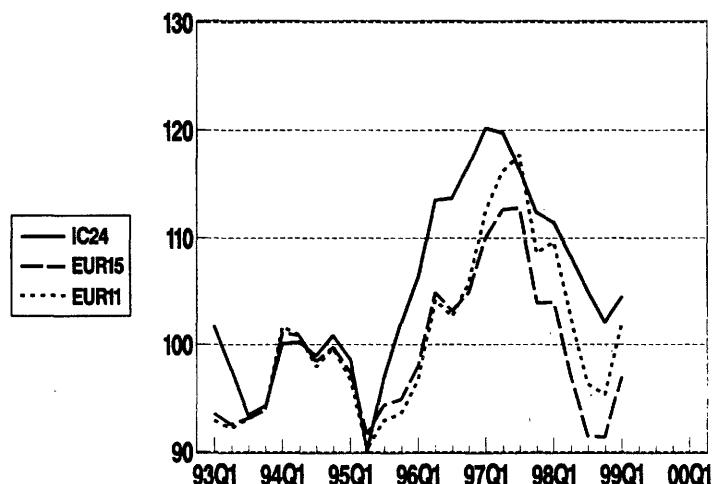


## Relative cost indicators (based on ULCE)

Annual data (index 1994=100)



Quarterly data (index 1994=100)



# Australia – dollar

## Relative price and cost indicators vs. (the rest of) 24 industrial countries

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	107.3	108.1	102.8	109.2	111.3	96Q1	104.1	104.8	101.0	106.3	110.8
87	105.2	106.1	104.5	103.8	105.6	96Q2	110.2	111.3	105.4	113.5	118.0
88	115.5	118.0	114.3	114.4	115.2	96Q3	109.8	111.2	104.2	113.7	119.1
89	126.5	128.8	122.3	127.4	130.4	96Q4	111.9	114.0	106.6	116.7	124.5
90	122.9	123.5	113.7	124.7	125.3	97Q1	114.7	117.3	110.1	120.2	130.8
91	118.9	118.7	108.9	120.1	118.7	97Q2	113.8	116.6	110.4	119.8	132.3
92	108.0	107.5	103.8	108.1	107.6	97Q3	110.2	113.2	107.9	116.4	128.9
93	97.3	96.6	94.8	96.7	94.0	97Q4	105.9	108.9	104.6	112.3	123.2
94	100.0	100.0	100.0	100.0	100.0	98Q1	104.5	107.4	103.9	111.5	120.2
95	96.3	96.6	96.9	96.8	101.7	98Q2	101.3	103.9	101.4	108.4	114.8
96	108.9	110.3	104.3	112.5	118.0	98Q3	97.9	100.4	98.8	105.0	109.9
97	111.1	114.0	108.3	117.1	128.8	98Q4	95.1	97.4	96.7	102.1	106.3
98	99.7	102.2	100.2	106.7	112.7	99Q1	97.2	99.6	99.6	104.4	108.7

## Relative price and cost indicators vs. (the rest of) EUR15

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	104.1	106.4	106.8	105.7	105.5	96Q1	95.9	96.2	92.3	98.0	100.4
87	98.2	99.9	103.7	96.1	92.5	96Q2	102.1	102.7	97.5	104.9	107.8
88	110.5	113.7	116.2	108.4	103.4	96Q3	99.7	100.5	94.9	103.1	107.1
89	121.9	124.7	124.5	121.1	118.7	96Q4	100.7	101.8	96.0	104.9	110.6
90	105.4	105.7	103.6	104.6	100.6	97Q1	104.7	106.3	100.6	110.1	117.9
91	105.2	104.9	101.4	104.1	98.2	97Q2	106.4	108.2	103.1	112.6	122.0
92	93.6	92.9	94.7	91.5	88.2	97Q3	105.9	107.9	103.8	112.8	122.6
93	95.6	94.8	94.2	93.3	89.5	97Q4	97.3	99.1	96.4	103.9	112.5
94	100.0	100.0	100.0	100.0	100.0	98Q1	96.8	98.4	96.8	103.9	111.4
95	93.3	93.5	92.3	94.5	96.9	98Q2	90.3	91.6	91.2	97.0	102.9
96	99.6	100.3	95.2	102.7	106.4	98Q3	85.1	86.2	86.5	91.5	96.3
97	103.5	105.3	100.9	109.8	118.7	98Q4	85.0	85.9	86.7	91.3	95.7
98	89.2	90.4	90.2	95.8	101.4	99Q1	90.2	91.1	92.2	96.9	101.5

## Relative price and cost indicators vs. (the rest of) the countries in the euro area (EUR11)

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	104.5	107.3	106.9	105.0	107.7	96Q1	94.7	95.1	91.3	96.7	99.6
87	97.9	100.0	103.3	94.8	93.7	96Q2	101.4	102.0	96.8	104.2	107.6
88	112.4	116.3	116.8	109.8	106.6	96Q3	99.1	100.0	94.1	102.6	107.1
89	124.2	128.2	125.7	124.5	122.4	96Q4	101.3	102.6	96.1	105.8	112.3
90	106.9	108.0	104.0	107.3	103.1	97Q1	106.8	108.6	101.7	112.6	121.8
91	108.1	108.3	102.3	107.7	101.5	97Q2	109.2	111.3	104.5	116.2	127.5
92	95.2	94.8	94.9	93.3	89.8	97Q3	109.8	112.1	105.9	117.7	129.9
93	95.7	94.9	94.2	93.0	88.9	97Q4	100.8	102.8	97.8	108.6	119.4
94	100.0	100.0	100.0	100.0	100.0	98Q1	100.8	102.6	98.6	109.7	119.4
95	92.2	92.3	91.3	93.3	96.3	98Q2	94.0	95.5	92.5	102.5	110.4
96	99.1	99.9	94.5	102.3	106.6	98Q3	88.2	89.4	87.3	96.3	102.9
97	106.6	108.6	102.4	113.7	124.6	98Q4	87.1	88.2	86.6	95.3	101.4
98	92.4	93.8	91.1	100.8	108.3	99Q1	93.1	94.1	92.8	101.9	108.3

Abbreviations: IC24 = 24 Industrial Countries  
 EUR15 = 15 Member States of the European Union  
 EUR11 = Countries in the euro area  
 PCP = Deflator of private consumption  
 PGDP = Gross Domestic Product Deflator  
 PX = Price Deflator Exports of Goods and Services  
 ULCE = Nominal Unit Labour Cost in total Economy  
 ULCM = Nominal Unit Labour Cost in Manufacturing industry

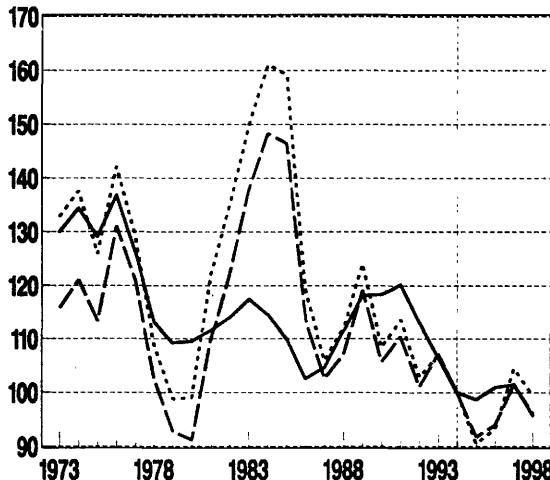
# Canada – dollar

## Trade-weighted currency indices

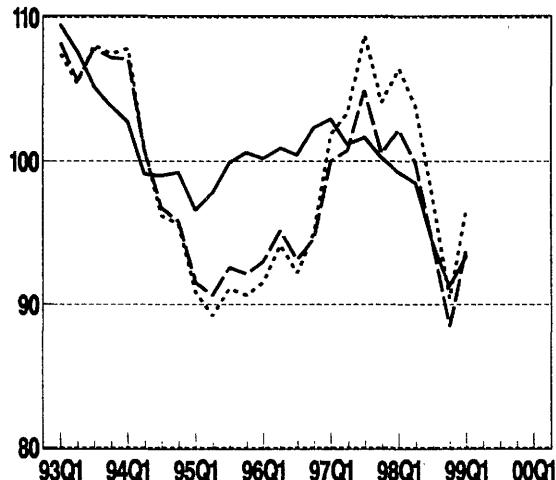
Annual data Index (1994=100)				Quarterly data Index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	102.6	113.6	119.0	96Q1	100.2	93.0	91.6	MAR98	-1.5	1.4	1.9
87	104.6	102.5	105.9	96Q2	100.9	95.2	94.2	APR98	-0.8	-1.5	-1.5
88	111.5	107.0	112.0	96Q3	100.4	93.1	92.2	MAY98	-1.0	-2.3	-3.2
89	118.2	119.1	124.1	96Q4	102.3	94.6	95.0	JUN98	-1.0	-0.8	-0.5
90	118.3	105.8	108.4	97Q1	102.9	100.0	101.8	JUL98	-1.3	-1.0	-1.0
91	120.2	110.4	113.6	97Q2	101.2	100.8	103.4	AUG98	-2.8	-3.2	-3.6
92	113.0	101.1	102.8	97Q3	101.7	104.9	108.8	SEP98	-0.1	-3.6	-4.1
93	106.5	107.2	107.1	97Q4	100.3	100.5	104.1	OCT98	-2.4	-4.3	-5.0
94	100.0	100.0	100.0	98Q1	99.2	102.2	106.5	NOV98	0.4	2.7	-2.9
95	98.7	91.7	90.5	98Q2	98.5	99.9	103.8	DEC98	-0.4	-0.7	-0.8
96	101.0	94.0	93.2	98Q3	94.4	94.3	97.5	JAN99	1.3	2.2	2.3
97	101.5	101.5	104.5	98Q4	91.3	88.5	90.4	FEB99	2.0	4.6	5.1
98	95.8	96.1	99.4	99Q1	93.4	93.9	96.6	MAR99	-0.9	1.1	1.7

## Trade-weighted currency indices

Annual data (index 1994=100)

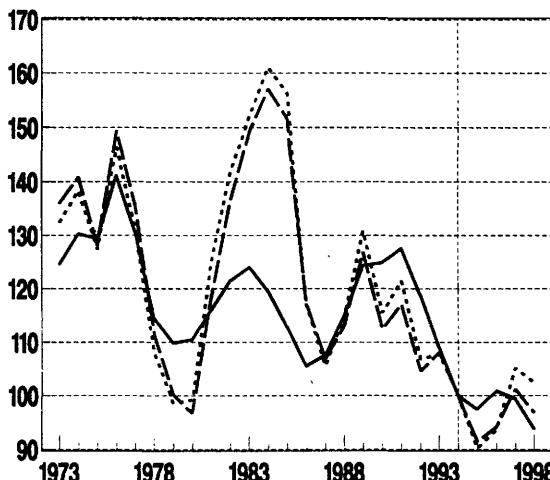


Quarterly data (index 1994=100)

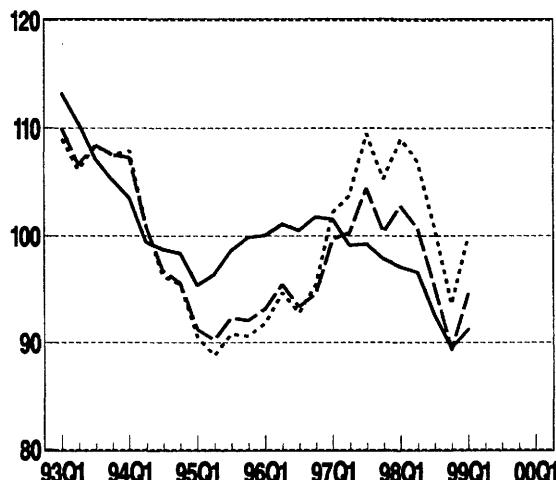


## Relative cost indicators (based on ULCE)

Annual data (index 1994=100)



Quarterly data (index 1994=100)



# Canada – dollar

## Relative price and cost indicators vs. (the rest of) 24 industrial countries

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	108.6	107.7	105.7	105.5	100.9	96Q1	98.8	100.2	104.4	100.0	106.5
87	110.7	111.2	107.0	107.6	106.7	96Q2	99.3	100.6	105.4	101.1	108.0
88	117.3	119.0	108.2	115.0	117.0	96Q3	98.6	99.9	105.1	100.5	107.7
89	124.0	126.7	113.5	124.4	124.7	96Q4	100.3	101.4	107.1	101.8	109.3
90	123.2	125.2	111.5	124.9	125.0	97Q1	100.7	101.6	107.9	101.6	109.4
91	125.5	125.3	107.2	127.5	128.0	97Q2	98.9	99.4	106.2	99.1	107.2
92	115.7	115.9	103.4	118.8	117.6	97Q3	99.4	99.5	106.9	99.2	107.9
93	108.5	107.7	101.1	109.0	105.7	97Q4	98.0	97.7	105.7	97.9	107.1
94	100.0	100.0	100.0	100.0	100.0	98Q1	97.0	96.2	104.8	97.1	106.9
95	97.8	98.9	101.9	97.5	102.0	98Q2	96.4	95.1	104.2	96.6	106.9
96	99.2	100.5	105.5	100.9	107.9	98Q3	92.3	90.8	100.1	92.6	102.8
97	99.3	99.5	106.7	99.4	107.9	98Q4	89.3	87.5	96.9	89.5	99.3
98	93.7	92.3	101.5	93.9	103.9	99Q1	91.2	89.2	99.2	91.2	101.1

## Relative price and cost indicators vs. (the rest of) EUR15

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	121.2	123.3	119.7	117.5	119.4	96Q1	91.4	92.7	95.4	93.2	94.3
87	110.4	112.7	109.7	106.8	104.9	96Q2	93.3	94.6	97.5	95.4	97.1
88	115.7	118.3	111.7	113.0	112.8	96Q3	91.1	92.3	95.2	93.4	95.3
89	128.7	131.8	120.2	128.9	127.8	96Q4	92.5	93.6	96.4	94.6	96.6
90	113.5	114.8	104.7	112.4	112.3	97Q1	97.7	98.7	101.6	99.7	101.8
91	117.7	117.0	103.3	117.1	118.0	97Q2	98.4	99.1	102.0	100.3	102.5
92	104.8	104.2	96.1	104.6	104.9	97Q3	102.4	102.7	106.1	104.5	107.2
93	109.6	108.3	102.2	108.1	105.7	97Q4	98.0	97.9	101.6	100.3	103.8
94	100.0	100.0	100.0	100.0	100.0	98Q1	99.5	98.8	103.2	102.8	107.1
95	90.7	91.8	94.0	91.4	91.5	98Q2	97.2	96.0	100.9	100.7	105.9
96	92.1	93.3	96.1	94.1	95.8	98Q3	91.8	90.2	95.2	95.2	100.7
97	99.1	99.6	102.8	101.2	103.8	98Q4	86.2	84.3	89.1	89.3	94.5
98	93.5	92.1	96.9	96.8	101.9	99Q1	91.6	89.2	94.3	94.6	100.0

## Relative price and cost indicators vs. (the rest of) the countries in the euro area (EUR11)

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	122.0	124.9	120.0	117.1	122.5	96Q1	90.1	91.4	94.2	91.8	93.4
87	110.2	113.1	109.3	105.5	106.5	96Q2	92.5	93.8	96.7	94.7	96.9
88	117.9	121.4	112.5	114.7	116.8	96Q3	90.4	91.7	94.3	92.8	95.3
89	131.4	135.9	121.6	130.8	132.4	96Q4	93.1	94.4	96.5	95.4	98.3
90	115.3	117.5	105.2	115.5	115.4	97Q1	99.8	101.0	102.8	102.2	105.6
91	121.3	121.1	104.4	121.5	122.3	97Q2	101.4	102.3	103.7	103.8	107.6
92	106.8	106.5	96.2	106.9	107.0	97Q3	106.6	107.2	108.5	109.5	114.3
93	109.7	108.4	102.1	107.8	104.9	97Q4	102.0	102.0	103.3	105.3	110.9
94	100.0	100.0	100.0	100.0	100.0	98Q1	104.2	103.6	105.3	109.0	115.7
95	89.6	90.6	92.9	90.2	90.9	98Q2	101.6	100.5	102.5	107.0	114.5
96	91.5	92.8	95.4	93.7	96.0	98Q3	95.5	93.9	96.1	100.8	108.5
97	102.4	103.1	104.5	105.2	109.6	98Q4	88.6	86.8	89.0	93.6	100.9
98	97.3	96.0	98.0	102.4	109.7	99Q1	94.8	92.6	95.1	99.9	107.5

Abbreviations: IC24 = 24 Industrial Countries  
EUR15 = 15 Member States of the European Union  
EUR11 = Countries in the euro area  
PCP = Deflator of private consumption  
PGDP = Gross Domestic Product Deflator  
PX = Price Deflator Exports of Goods and Services  
ULCE = Nominal Unit Labour Cost in total Economy  
ULCM = Nominal Unit Labour Cost in Manufacturing industry

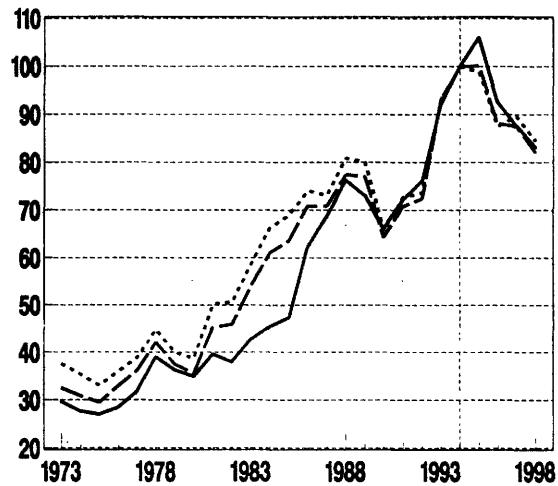
# Japan — yen

## Trade-weighted currency indices

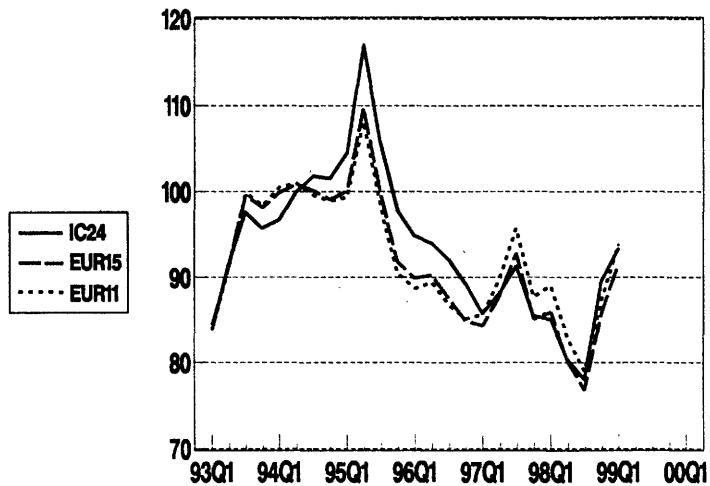
Annual data Index (1994=100)				Quarterly data Index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	62.2	70.8	74.1	96Q1	94.9	90.0	88.7	MAR98	-2.4	-2.4	-2.0
87	68.5	70.9	73.1	96Q2	94.0	90.3	89.5	APR98	-2.4	-3.1	-3.0
88	76.3	77.4	80.9	96Q3	92.1	87.5	86.8	MAY98	-2.3	-3.3	-4.1
89	73.1	77.0	80.1	96Q4	89.3	84.9	85.1	JUN98	-3.1	-3.1	-2.9
90	66.2	64.2	65.7	97Q1	85.8	84.3	85.6	JUL98	-0.3	0.0	-0.0
91	72.3	70.8	72.7	97Q2	88.1	87.8	89.8	AUG98	-2.4	-3.0	-3.3
92	76.2	72.4	73.6	97Q3	91.3	92.8	95.7	SEP98	5.7	2.9	2.4
93	92.1	93.2	93.1	97Q4	85.5	85.1	87.7	OCT98	9.7	8.1	7.3
94	100.0	100.0	100.0	98Q1	85.1	85.9	89.0	NOV98	1.2	2.8	3.0
95	106.0	100.1	98.8	98Q2	80.4	80.1	82.9	DEC98	2.7	2.2	2.1
96	92.5	88.1	87.5	98Q3	78.0	76.8	79.0	JAN99	3.7	4.3	4.4
97	87.6	87.5	89.6	98Q4	89.6	85.9	87.4	FEB99	-1.9	-0.1	0.4
98	83.1	82.1	84.5	99Q1	93.3	91.6	93.9	MAR99	-1.3	-0.0	0.5

## Trade-weighted currency indices

Annual data (index 1994=100)

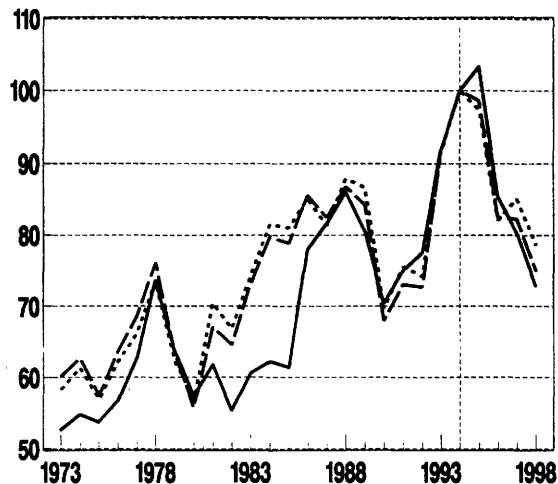


Quarterly data (index 1994=100)

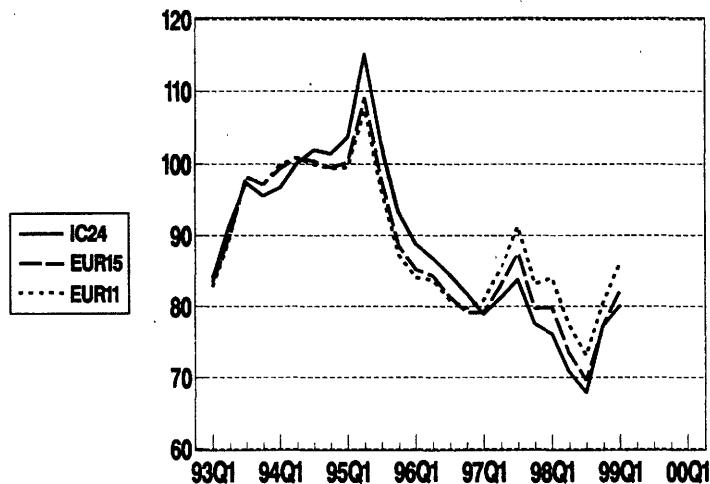


## Relative cost indicators (based on ULCE)

Annual data (index 1994=100)



Quarterly data (index 1994=100)



# Japan — yen

## Relative price and cost indicators vs. (the rest of) 24 industrial countries

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	78.1	77.8	91.9	78.0	68.8	96Q1	89.7	88.9	90.0	88.8	89.6
87	82.6	82.0	94.1	81.6	72.8	96Q2	88.5	87.3	90.6	86.8	88.6
88	88.2	87.7	97.6	86.0	77.6	96Q3	86.4	84.8	89.8	84.4	86.3
89	82.0	81.7	93.2	80.5	72.1	96Q4	83.5	81.7	87.4	81.8	83.0
90	72.3	72.2	84.7	70.4	63.2	97Q1	80.0	78.1	84.1	78.9	79.1
91	77.1	77.4	88.3	75.1	68.9	97Q2	82.1	79.9	86.5	81.2	80.8
92	79.6	80.2	89.2	77.5	71.2	97Q3	84.9	82.6	90.1	83.8	83.5
93	94.2	94.5	97.8	92.0	89.2	97Q4	79.3	77.1	85.0	77.5	78.3
94	100.0	100.0	100.0	100.0	100.0	98Q1	78.7	76.5	85.2	76.1	78.2
95	102.2	102.0	99.2	103.4	101.8	98Q2	74.1	72.0	80.7	70.8	73.9
96	87.0	85.6	89.4	85.4	86.8	98Q3	71.6	69.5	78.0	67.9	71.5
97	81.6	79.4	86.4	80.3	80.4	98Q4	81.7	79.3	88.3	77.2	81.4
98	76.4	74.2	83.0	72.9	76.2	99Q1	84.5	82.0	90.3	80.0	83.9

## Relative price and cost indicators vs. (the rest of) EUR15

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	85.9	87.2	101.3	85.6	78.8	96Q1	85.7	85.0	85.4	85.1	83.6
87	83.9	84.4	96.8	82.5	73.2	96Q2	85.7	84.6	86.8	84.3	83.9
88	89.2	89.4	101.1	86.8	77.4	96Q3	82.8	81.5	84.9	81.3	81.1
89	86.6	86.8	98.9	84.3	75.9	96Q4	80.1	78.6	82.4	79.1	78.2
90	70.7	70.5	82.8	68.0	61.2	97Q1	79.5	77.9	81.9	79.2	77.4
91	75.9	76.0	87.0	73.1	65.2	97Q2	82.8	80.9	85.3	82.9	80.4
92	75.8	76.0	85.5	72.7	67.3	97Q3	87.4	85.3	90.5	87.6	85.0
93	95.2	95.2	98.3	92.0	89.4	97Q4	80.0	78.0	83.6	79.7	78.4
94	100.0	100.0	100.0	100.0	100.0	98Q1	80.6	78.5	85.0	79.8	79.8
95	97.1	96.9	94.1	98.6	94.9	98Q2	74.9	72.9	79.5	73.4	74.7
96	83.5	82.4	84.9	82.4	81.7	98Q3	71.5	69.5	75.7	69.6	71.5
97	82.4	80.5	85.2	82.3	80.2	98Q4	79.7	77.3	83.6	77.3	79.6
98	76.6	74.5	80.9	74.9	76.3	99Q1	84.6	82.1	87.5	82.1	84.2

## Relative price and cost indicators vs. (the rest of) the countries in the euro area (EUR11)

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	86.3	88.0	101.4	85.1	80.5	96Q1	84.6	83.9	84.4	84.0	83.0
87	83.6	84.5	96.4	81.3	74.1	96Q2	85.0	84.0	86.2	83.7	83.7
88	90.6	91.4	101.7	87.9	79.9	96Q3	82.2	81.0	84.1	80.9	81.1
89	88.3	89.2	99.9	86.7	78.4	96Q4	80.6	79.2	82.5	79.7	79.5
90	71.7	72.0	83.1	69.7	62.7	97Q1	81.0	79.5	82.7	80.9	79.9
91	77.9	78.4	87.9	75.6	67.4	97Q2	84.9	83.1	86.5	85.5	83.9
92	77.2	77.5	85.6	74.2	68.6	97Q3	90.5	88.5	92.2	91.3	89.9
93	95.2	95.2	98.3	91.7	88.8	97Q4	82.8	80.8	84.8	83.1	83.0
94	100.0	100.0	100.0	100.0	100.0	98Q1	83.9	81.8	86.5	84.0	85.4
95	95.9	95.7	93.1	97.3	94.3	98Q2	77.9	75.9	80.6	77.4	80.0
96	83.1	82.0	84.3	82.1	81.8	98Q3	74.0	72.0	76.3	73.1	76.3
97	84.7	82.9	86.5	85.1	84.1	98Q4	81.6	79.3	83.4	80.5	84.1
98	79.2	77.2	81.6	78.7	81.4	99Q1	87.2	84.7	88.0	86.2	89.6

Abbreviations: IC24 = 24 Industrial Countries  
 EUR15 = 15 Member States of the European Union  
 EUR11 = Countries in the euro area  
 PCP = Deflator of private consumption  
 PGDP = Gross Domestic Product Deflator  
 PX = Price Deflator Exports of Goods and Services  
 ULCE = Nominal Unit Labour Cost in total Economy  
 ULCM = Nominal Unit Labour Cost in Manufacturing industry

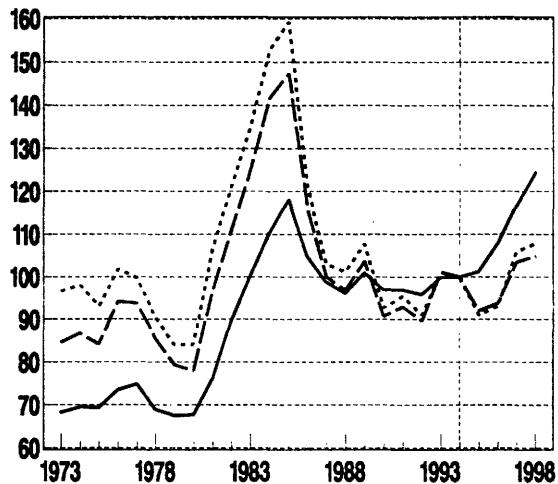
# United States – dollar

## Trade-weighted currency indices

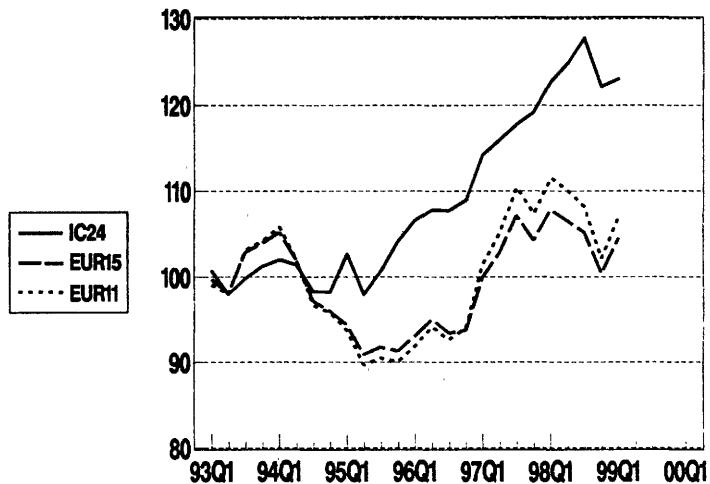
Annual data Index (1994=100)				Quarterly data Index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	104.9	116.2	121.3	96Q1	106.6	93.1	91.8	MAR98	0.6	0.2	0.6
87	98.8	100.1	103.1	96Q2	107.8	95.0	94.1	APR98	0.6	-0.6	-0.6
88	96.2	96.9	101.2	96Q3	107.8	93.4	92.6	MAY98	0.4	-1.4	-2.2
89	100.9	103.7	107.8	96Q4	109.0	93.7	94.0	JUN98	2.0	0.6	0.8
90	97.0	90.7	92.7	97Q1	114.3	100.0	101.5	JUL98	0.5	0.4	0.4
91	97.0	93.0	95.5	97Q2	116.0	102.9	105.1	AUG98	2.0	-0.2	-0.5
92	96.0	89.6	91.1	97Q3	117.7	107.2	110.4	SEP98	-2.6	-4.3	-4.8
93	99.9	101.1	101.1	97Q4	119.1	104.3	107.4	OCT98	-3.5	-3.0	-3.7
94	100.0	100.0	100.0	98Q1	122.7	107.8	111.6	NOV98	0.6	2.5	2.6
95	101.3	92.1	91.0	98Q2	124.8	106.5	110.1	DEC98	-0.7	-0.6	-0.7
96	107.8	93.8	93.2	98Q3	127.8	105.2	108.1	JAN99	-0.5	0.7	0.9
97	116.8	103.5	106.0	98Q4	122.2	100.4	102.2	FEB99	1.4	3.1	3.6
98	124.3	104.9	107.9	99Q1	123.0	104.5	107.0	MAR99	1.6	2.5	3.0

## Trade-weighted currency indices

Annual data (index 1994=100)

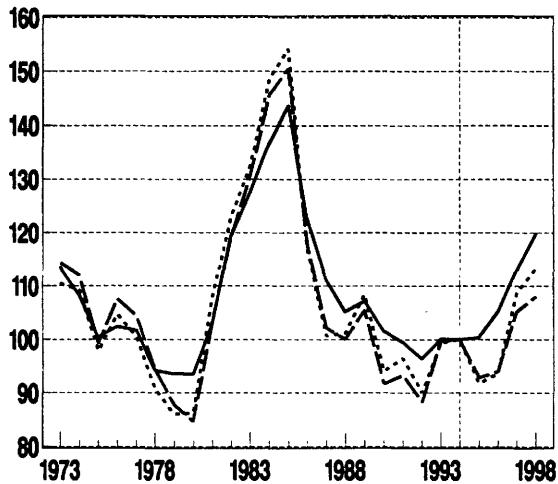


Quarterly data (index 1994=100)

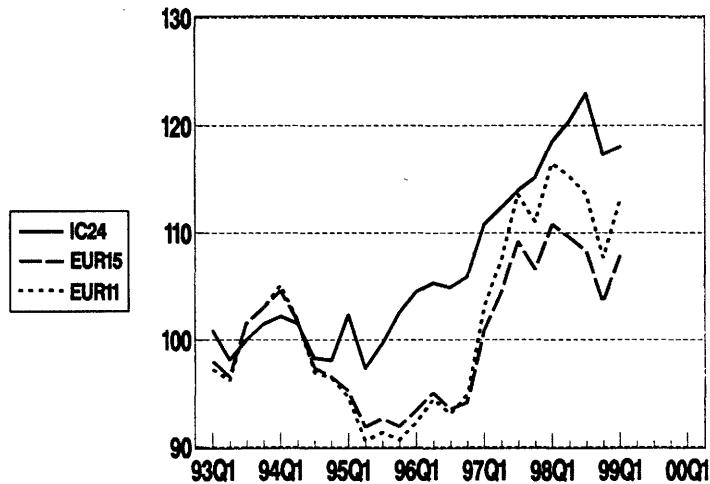


## Relative cost indicators (based on ULCE)

Annual data (index 1994=100)



Quarterly data (index 1994=100)



# United States – dollar

## Relative price and cost indicators vs. (the rest of) 24 industrial countries

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	120.1	122.6	112.3	122.6	135.1	96Q1	102.4	101.9	96.9	104.5	98.7
87	108.1	109.3	102.8	111.1	114.5	96Q2	103.2	102.9	96.9	105.3	99.3
88	101.8	102.1	101.7	105.2	105.7	96Q3	102.7	102.6	95.9	104.9	98.9
89	106.0	105.6	103.4	107.2	110.4	96Q4	103.5	103.6	96.2	105.9	100.0
90	101.0	100.2	97.9	101.6	104.4	97Q1	108.1	108.4	100.0	110.8	104.9
91	99.3	98.9	99.8	99.5	102.9	97Q2	109.7	109.7	100.6	112.3	106.5
92	97.3	96.7	97.7	96.4	100.1	97Q3	110.3	110.9	101.2	114.0	107.8
93	100.4	100.3	101.2	100.1	102.6	97Q4	110.9	111.8	101.4	115.2	108.6
94	100.0	100.0	100.0	100.0	100.0	98Q1	113.5	114.5	103.4	118.6	111.2
95	98.8	98.4	95.6	100.4	96.4	98Q2	114.8	115.9	104.3	120.3	112.5
96	103.0	102.7	96.5	105.1	99.2	98Q3	117.0	118.3	106.1	123.0	114.8
97	109.6	110.2	100.8	113.1	106.9	98Q4	111.6	112.9	101.1	117.4	109.8
98	114.2	115.4	103.7	119.8	112.1	99Q1	112.3	113.6	101.6	118.1	110.8

## Relative price and cost indicators vs. (the rest of) EUR15

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	117.6	121.4	117.2	117.8	128.2	96Q1	92.5	92.5	90.8	93.4	87.9
87	102.1	104.2	103.7	102.1	102.1	96Q2	94.3	94.3	92.1	95.0	89.7
88	99.7	100.8	104.0	100.0	98.6	96Q3	92.7	92.8	89.9	93.5	88.3
89	107.0	107.4	107.8	105.5	107.4	96Q4	93.1	93.3	89.6	94.1	88.8
90	93.9	93.3	94.1	91.8	92.7	97Q1	99.3	99.6	94.9	100.9	94.9
91	95.3	94.8	96.8	93.4	94.5	97Q2	102.1	102.5	97.0	104.3	97.9
92	91.0	90.2	92.5	88.3	90.4	97Q3	106.2	106.7	100.4	109.2	102.3
93	101.6	101.1	101.5	99.7	101.0	97Q4	103.2	103.6	97.2	106.5	99.9
94	100.0	100.0	100.0	100.0	100.0	98Q1	106.4	106.8	100.1	110.8	103.9
95	91.8	91.7	91.1	92.9	88.4	98Q2	104.9	105.5	98.5	109.8	103.0
96	93.1	93.2	90.6	94.0	88.7	98Q3	103.6	103.8	96.9	108.3	102.0
97	102.7	103.1	97.4	105.2	98.7	98Q4	99.0	99.1	92.2	103.5	97.6
98	103.4	103.7	96.9	108.0	101.6	99Q1	103.2	103.2	95.7	107.8	101.9

## Relative price and cost indicators vs. (the rest of) the countries in the euro area (EUR11)

Annual data (index 1994=100)						Quarterly data (index 1994=100)					
	PCP	PGDP	Deflator PX	ULCE	ULCM		PCP	PGDP	Deflator PX	ULCE	ULCM
86	118.0	122.4	117.4	116.9	130.8	96Q1	91.4	91.4	89.8	92.3	87.4
87	101.7	104.2	103.3	100.7	103.3	96Q2	93.6	93.7	91.4	94.4	89.6
88	101.3	103.0	104.7	101.2	101.6	96Q3	92.1	92.3	89.1	93.0	88.4
89	109.1	110.4	109.0	108.4	110.8	96Q4	93.6	93.9	89.7	94.8	90.2
90	95.1	95.2	94.5	94.1	94.9	97Q1	101.1	101.6	95.8	103.0	98.0
91	97.8	97.7	97.8	96.5	97.5	97Q2	104.6	105.2	98.2	107.4	102.1
92	92.5	92.0	92.7	90.1	92.0	97Q3	109.9	110.5	102.3	113.6	108.1
93	101.7	101.2	101.4	99.4	100.3	97Q4	106.6	107.2	98.6	111.0	105.7
94	100.0	100.0	100.0	100.0	100.0	98Q1	110.6	111.1	101.7	116.5	111.0
95	90.7	90.7	90.2	91.8	87.9	98Q2	108.9	109.4	99.8	115.4	110.1
96	92.6	92.8	90.0	93.6	88.9	98Q3	107.0	107.3	97.7	113.7	108.7
97	105.5	106.1	98.7	108.7	103.4	98Q4	101.2	101.5	92.0	107.6	103.1
98	106.9	107.3	97.7	113.2	108.2	99Q1	106.3	106.4	96.2	113.0	108.3

Abbreviations: IC24 = 24 Industrial Countries  
 EUR15 = 15 Member States of the European Union  
 EUR11 = Countries in the euro area  
 PCP = Deflator of private consumption  
 PGDP = Gross Domestic Product Deflator  
 PX = Price Deflator Exports of Goods and Services  
 ULCE = Nominal Unit Labour Cost in total Economy  
 ULCM = Nominal Unit Labour Cost in Manufacturing Industry

**Table A1: Bilateral exchange rate of the US dollar against the EU currencies**  
 (Price of one US dollar in terms of the currencies of each of the countries/currency areas indicated)

Annual data (period average)

Year	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	ECU	EUR11
1986	44.58	8.08	2.166	139.8	6.919	0.746	2.444	15.23	149.6	5.066	7.117	0.682	1.018	-	-	
1987	37.31	8.83	1.798	135.4	123.9	6.007	0.672	1.298	2.024	12.63	140.9	4.391	6.336	0.611	0.867	
1988	36.72	6.72	1.754	141.6	116.3	5.949	0.656	1.300	1.974	12.33	143.8	4.180	6.124	0.562	0.845	
1989	39.37	7.31	1.871	162.4	118.4	6.375	0.705	1.720	1.120	13.22	157.4	4.287	6.445	0.611	0.908	
1990	33.37	6.18	1.614	158.4	101.8	5.439	0.604	1.197	1.819	11.36	142.5	3.819	5.915	0.562	0.787	
1991	34.11	6.39	1.656	181.9	103.8	5.633	0.620	1.238	1.867	11.68	144.8	3.039	6.041	0.586	0.808	
1992	32.12	6.03	1.560	190.5	102.2	5.288	0.587	1.757	10.98	134.8	4.473	5.809	0.589	0.568	0.772	
1993	34.53	6.48	1.653	229.0	126.9	5.686	0.682	1.570	1.857	11.63	160.4	5.212	7.776	0.666	0.853	
1994	33.40	6.35	1.653	231.7	123.6	4.242	0.624	1.888	1.140	11.40	165.8	5.212	7.712	0.653	0.842	
1995	28.48	5.60	1.433	231.7	124.6	4.989	0.624	1.629	1.805	10.08	150.0	4.365	7.131	0.634	0.765	
1996	30.95	5.80	1.504	240.7	126.6	5.115	0.625	1.543	1.685	12.58	154.2	4.592	6.767	0.641	0.788	
1997	35.94	6.60	1.732	146.8	146.2	5.832	0.625	1.702	1.952	12.19	175.1	5.186	7.632	0.611	0.882	
1998	36.28	6.70	1.759	295.3	149.3	5.896	0.702	1.736	1.982	12.37	180.1	5.343	7.951	0.604	0.893	

Quarterly data (period average)

Qtr	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	ECU	EUR11
96Q1	30.17	5.69	1.468	241.4	123.7	5.034	0.633	1.573	1.643	10.32	152.3	4.531	6.780	0.653	0.777	
96Q2	31.28	5.87	1.522	242.3	127.4	5.157	0.637	1.555	1.702	10.71	156.4	4.718	6.731	0.658	0.797	
96Q3	30.85	5.78	1.497	238.0	126.6	5.095	0.622	1.622	1.780	10.54	153.6	4.534	6.634	0.643	0.785	
96Q4	31.54	5.87	1.531	241.3	128.9	5.075	0.608	1.522	1.717	10.77	154.6	4.584	6.684	0.613	0.793	
97Q1	34.17	6.32	1.637	260.1	140.0	5.591	0.627	1.627	1.862	11.66	166.2	4.934	7.364	0.613	0.849	
97Q2	35.37	6.53	1.714	270.1	144.0	5.780	0.656	1.691	1.726	12.08	172.6	4.149	7.703	0.611	0.875	
97Q3	37.31	6.88	1.807	283.9	152.5	6.087	0.678	1.763	2.035	12.72	183.0	5.389	7.833	0.616	0.916	
97Q4	36.20	6.68	1.765	275.9	148.2	5.879	0.677	1.735	1.791	12.35	179.7	5.382	7.836	0.603	0.890	
98Q1	37.52	6.93	1.819	293.1	154.2	6.095	0.727	1.792	2.050	12.80	186.1	5.514	8.019	0.608	0.920	
98Q2	37.01	6.84	1.794	309.1	152.3	6.015	0.702	1.770	2.021	12.62	183.6	5.451	7.813	0.605	0.909	
98Q3	36.34	6.73	1.762	281.7	149.6	5.908	0.702	1.987	1.987	12.40	180.4	5.360	8.008	0.595	0.895	
98Q4	34.32	6.33	1.664	281.7	141.7	5.578	0.669	1.646	1.755	11.70	170.6	5.059	7.986	0.597	0.850	
99Q1	35.93	6.62	1.742	287.4	148.2	5.842	0.701	1.725	1.963	12.26	178.6	5.295	7.995	0.612	0.891	

Monthly data (period average)

Month	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	ECU	EUR11
MAR98	37.67	6.96	1.826	305.9	154.9	6.122	0.731	1.798	2.058	12.85	186.9	5.542	7.987	0.602	0.922	
APR98	37.46	6.92	1.815	316.3	154.1	6.085	0.720	1.793	2.044	12.77	186.0	5.511	7.831	0.598	0.917	
MAY98	36.64	6.77	1.776	307.3	150.9	5.955	0.706	1.751	2.001	12.50	181.9	5.397	7.701	0.610	0.902	
JUN98	36.95	6.82	1.781	304.0	152.1	6.007	0.711	1.765	2.019	12.61	183.4	5.445	7.908	0.606	0.908	
JUL98	37.08	6.85	1.798	289.1	152.8	6.028	0.715	1.773	2.027	12.85	184.0	5.465	7.989	0.608	0.911	
AUG98	36.88	6.88	1.788	301.1	151.8	5.995	0.712	1.764	2.017	12.58	183.1	5.438	8.132	0.612	0.908	
SEP98	35.11	6.48	1.702	292.8	144.5	5.707	0.680	1.682	1.920	11.98	174.5	5.180	7.904	0.595	0.887	
OCT98	33.81	6.23	1.639	281.9	139.3	5.495	0.657	1.621	1.848	11.53	168.1	4.987	7.846	0.590	0.838	
NOV98	34.89	6.39	1.682	282.7	143.0	5.639	0.676	1.664	1.868	11.83	172.4	5.114	7.932	0.602	0.859	
DEC98	34.45	6.36	1.670	280.6	142.1	5.602	0.673	1.654	1.882	11.53	171.3	5.078	7.824	0.606	0.853	
JAN99	34.76	6.41	1.685	278.4	143.4	5.651	0.679	1.668	1.889	11.88	172.2	5.123	7.824	0.606	0.862	
FEB99	36.09	6.63	1.745	287.3	148.5	5.853	0.703	172.8	1.967	12.28	178.9	5.306	7.949	0.614	0.892	
MAR99	37.07	6.83	1.797	296.4	152.9	6.028	0.724	177.8	2.025	12.64	184.2	5.484	8.215	0.617	0.919	

**Table A2: Bilateral exchange rate of the US dollar against the non-EU currencies**  
**(Price of one US dollar in terms of the currencies of each of the countries indicated)**

Annual data (period average)

Year	AUS	CND	J	MX	NZ	N	CH	TR
1986	1.493	1.390	1.67	9	0.592	1.907	7.391	1.793
1987	1.427	1.326	1.44	4	1.350	1.688	6.731	1.489
1988	1.277	1.231	1.28	1	2.273	6.525	6.510	1.461
1989	1.264	1.184	1.37	8	2.459	1.676	6.802	1.634
1990	1.281	1.167	1.44	5	2.811	1.676	6.252	1.386
1991	1.284	1.146	1.34	4	3.019	1.729	6.476	1.431
1992	1.361	1.208	1.26	6	3.095	1.659	6.208	1.404
1993	1.472	1.290	1.11	0	3.090	1.849	7.090	1.477
1994	1.367	1.365	1.02	1	3.372	1.685	7.053	1.366
1995	1.349	1.372	0.93	8	6.399	1.524	6.337	1.182
1996	1.278	1.364	1.08	7	1.454	6.456	6.235	4.5567
1997	1.345	1.384	1.20	9	7.919	1.510	7.068	1.450
1998	1.590	1.412	1.30	5	9.122	1.864	7.551	1.449

Quarterly data (period average)

Qtr	AUS	CND	J	MX	NZ	N	CH	TR
96Q1	1.323	1.369	105	7	7.519	1.487	6.414	1.190
96Q2	1.263	1.364	107	5	7.486	1.467	6.533	1.243
96Q3	1.268	1.370	109	0	7.560	1.446	6.440	1.222
96Q4	1.257	1.351	112	8	7.836	1.418	6.437	1.287
97Q1	1.286	1.358	121	1	7.864	1.418	6.825	1.287
97Q2	1.300	1.386	119	6	7.819	1.448	7.089	1.446
97Q3	1.359	1.384	117	9	7.810	1.546	7.121	1.489
97Q4	1.441	1.407	125	1	8.086	1.616	7.423	1.488
98Q1	1.500	1.430	128	1	8.422	1.726	7.544	1.475
98Q2	1.590	1.448	135	7	8.663	1.721	7.521	1.493
98Q3	1.671	1.537	139	9	9.474	1.968	7.642	1.489
98Q4	1.603	1.542	119	4	10.02	1.899	7.498	1.360
99Q1	1.578	1.512	116	5	9.975	1.860	7.661	1.425

Monthly data (period average)

Month	AUS	CND	J	MX	NZ	N	CH	TR
MAR98	1.493	1.416	129	0	8.568	1.745	7.582	1.488
APR98	1.533	1.423	132	2	8.498	1.608	7.535	1.507
MAY98	1.587	1.445	134	9	8.579	1.858	7.454	1.479
JUN98	1.654	1.464	140	1	8.917	1.950	7.574	1.493
JUL98	1.618	1.485	140	6	8.899	1.928	7.624	1.514
AUG98	1.696	1.532	144	7	9.371	1.904	7.726	1.495
SEP98	1.700	1.522	134	6	9.863	1.983	7.576	1.402
OCT98	1.618	1.543	120	8	10.18	1.913	7.437	1.337
NOV98	1.575	1.540	120	3	9.890	1.872	7.452	1.384
DEC98	1.616	1.542	117	1	9.906	1.912	7.607	1.361
JAN99	1.584	1.520	113	2	10.19	1.860	7.453	1.383
FEB99	1.563	1.498	118	0	8.640	1.719	7.198	1.426
MAR99	1.586	1.517	119	6	9.735	1.879	7.816	1.466

**Table A3: Bilateral exchange rate of the US dollar against the EU currencies**  
 (index 1994=100)

Annual data																
Year	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	ECU	EUR11
1986	133.5	127.1	133.6	57.7	104.5	124.8	111.6	92.3	134.4	133.6	90.2	97.2	92.3	104.4	120.8	
1987	111.7	107.6	110.8	55.8	92.1	108.3	100.8	80.4	111.3	110.8	85.0	84.3	82.2	93.5	102.9	
1988	108.9	105.8	110.8	58.4	86.9	98.4	115.9	105.5	85.1	116.6	108.6	86.7	79.4	82.3	100.4	
1989	117.9	115.1	115.9	66.9	88.4	98.1	98.1	90.4	76.3	94.5	94.9	82.3	83.6	93.5	107.8	
1990	99.9	97.3	99.6	65.3	76.1	77.5	101.6	92.8	74.3	100.7	99.6	85.9	73.3	76.7	93.40	
1991	102.1	100.5	100.5	75.0	77.5	76.6	95.4	87.8	76.3	102.1	102.7	87.0	77.5	86.7	95.91	
1992	98.1	94.9	96.2	75.6	76.6	76.6	87.9	87.9	76.3	96.6	87.3	81.3	81.3	87.0	91.67	
1993	103.4	102.0	102.0	94.5	94.8	102.1	102.1	102.1	102.1	102.1	102.0	96.7	109.6	100.8	101.3	
1994	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
1995	88.2	88.2	88.4	88.4	95.6	95.6	99.3	99.3	99.3	99.3	99.3	88.4	99.4	99.5	99.79	
1996	92.7	103.9	106.9	92.8	94.6	94.6	92.2	92.2	95.6	92.7	92.7	93.0	89.5	98.1	93.53	
1997	107.0	105.4	108.6	108.5	108.5	108.5	108.5	108.5	108.5	108.5	108.5	108.5	108.5	108.5	108.5	
1998	108.6	105.4	108.5	108.5	121.8	111.6	111.6	106.3	105.1	107.7	109.0	108.5	108.5	103.1	92.4	106.0

Quarterly data																
Qtr	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	ECU	EUR11
96Q1	90.3	89.3	90.5	99.5	92.4	90.8	94.7	90.7	90.4	90.5	90.5	91.8	86.9	87.9	100.0	
96Q2	83.6	92.4	93.4	99.2	94.6	94.6	91.9	95.3	93.0	93.6	93.9	92.4	90.5	87.3	100.4	
96Q3	92.3	90.9	92.4	94.4	99.5	96.3	93.3	91.0	94.4	94.4	94.4	92.4	87.6	86.0	93.18	
96Q4	94.4	92.4	94.4	94.4	99.5	96.3	93.3	91.0	94.4	94.4	94.4	92.4	88.0	86.7	94.10	
97Q1	102.3	99.5	102.2	102.2	107.3	104.6	100.8	100.8	98.8	98.8	100.2	100.2	100.2	94.4	95.5	100.8
97Q2	105.9	102.9	102.9	102.9	112.7	108.2	104.2	104.2	104.2	104.2	105.8	105.8	104.1	100.4	103.9	103.9
97Q3	111.7	108.3	111.5	111.5	117.1	114.0	114.0	109.8	109.8	109.4	111.5	111.5	110.8	103.4	101.6	108.7
97Q4	108.4	105.2	109.1	112.2	113.8	110.8	110.8	106.2	106.2	106.2	111.2	111.2	110.2	105.8	105.8	105.6
98Q1	112.3	109.2	112.2	112.2	120.9	115.2	109.9	108.9	111.2	111.2	111.2	111.2	110.2	105.8	105.8	105.6
98Q2	110.7	107.6	107.6	105.7	105.7	113.8	122.7	106.5	106.5	106.5	110.9	110.9	110.7	104.8	104.8	104.8
98Q3	108.8	105.8	105.8	105.7	105.7	112.8	112.8	106.6	106.6	106.6	107.9	107.9	106.7	103.8	103.8	103.8
98Q4	102.7	98.6	102.6	102.6	116.2	116.2	116.2	105.7	105.7	105.7	105.7	105.7	102.6	97.1	100.9	100.9
99Q1	107.6	104.2	107.5	107.5	118.5	110.7	110.7	105.4	105.4	105.4	107.0	107.0	107.5	103.7	93.7	105.7

Monthly data																
Month	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	ECU	EUR11
MAR98	112.8	109.6	112.7	126.1	115.7	110.4	109.4	111.6	113.2	112.7	112.7	112.7	106.3	106.3	92.2	109.5
APR98	112.1	109.0	112.0	126.1	130.4	105.8	105.8	111.2	112.4	112.4	112.0	112.0	105.5	105.5	91.6	108.9
MAY98	109.7	106.5	109.6	126.7	112.7	107.4	105.6	108.7	110.1	109.6	109.7	109.7	99.5	99.5	93.5	107.1
JUN98	110.6	107.4	110.5	125.4	113.6	108.3	106.4	109.5	111.1	111.1	110.5	110.5	104.5	104.5	92.8	107.8
JUL98	111.0	107.8	110.2	110.3	124.5	114.0	108.7	107.9	110.5	111.5	110.9	110.9	104.9	104.9	93.1	108.2
AUG98	110.4	107.2	110.3	124.2	113.4	108.1	106.8	109.5	110.5	110.5	110.4	110.4	104.3	104.3	93.8	107.8
SEP98	105.1	102.0	105.1	120.8	120.8	104.1	104.1	104.7	104.7	104.7	105.6	105.6	99.4	99.4	92.5	102.9
OCT98	101.3	98.1	101.1	116.3	104.3	99.1	98.3	100.6	101.6	101.6	101.1	101.1	95.7	95.7	90.4	99.47
NOV98	103.8	100.6	103.7	103.0	103.0	106.9	116.6	116.6	101.7	101.7	103.3	103.3	104.0	104.0	98.1	102.0
DEC98	103.1	100.0	103.9	103.9	115.7	107.1	101.9	101.9	103.5	103.5	103.9	103.9	104.5	104.5	92.7	101.3
JAN99	104.0	100.9	104.4	107.7	118.5	110.9	105.6	105.6	107.2	107.2	108.2	108.2	107.9	107.9	94.1	102.3
FEB99	107.8	107.6	107.6	110.9	122.2	114.2	108.7	108.7	110.4	110.4	111.4	111.4	104.8	104.8	94.4	106.0
MAR99	111.0	107.6	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	106.5	106.5	94.4	108.1

**Table A4: Bilateral exchange rate of the US dollar against the non-EU currencies**  
**index 1994=100**

**Annual data (period average)**

Year	AUS	CND	J	MX	NZ	N	CH	TR
1986	109.2	101.8	164.4	17.6	113.2	104.8	131.3	2.3
1987	104.4	97.1	141.4	40.0	100.5	95.4	109.0	3.9
1988	93.4	90.1	125.4	67.4	90.5	92.3	106.9	4.9
1989	92.4	86.7	134.9	72.9	99.2	97.9	119.7	7.4
1990	93.7	85.5	140.6	83.4	99.4	88.6	101.5	9.1
1991	94.0	83.9	131.6	89.5	102.6	91.8	104.8	14.3
1992	94.7	88.5	124.0	91.8	110.3	88.0	102.8	23.7
1993	97.7	94.5	108.7	92.4	109.8	100.5	106.2	37.8
1994	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1995	98.7	100.5	98.1	189.8	89.8	89.8	86.5	158.6
1996	93.5	99.9	106.4	225.4	86.3	91.5	90.4	279.5
1997	98.4	101.3	118.4	234.9	89.6	100.2	106.2	519.5
1998	116.3	108.5	127.8	270.5	110.6	107.1	106.1	902.3

**Quarterly data (period average)**

Qtr	AUS	CND	J	MX	NZ	N	CH	TR
96Q1	96.8	100.3	103.5	223.0	88.2	90.9	87.1	223.8
96Q2	92.4	99.1	105.7	222.0	85.8	91.3	89.5	265.9
96Q3	92.8	100.4	106.7	224.2	85.8	91.3	89.5	297.6
96Q4	92.0	98.9	110.6	232.4	84.1	91.3	94.2	344.5
97Q1	94.0	99.5	118.6	233.4	85.2	93.9	105.2	412.6
97Q2	95.1	99.1	101.5	234.9	85.9	100.5	105.8	478.3
97Q3	98.4	101.4	117.1	234.7	85.7	105.8	109.0	585.2
97Q4	105.4	110.3	122.5	239.8	95.9	101.0	104.8	652.9
98Q1	109.7	104.7	125.4	256.8	102.6	107.0	108.0	777.9
98Q2	116.3	105.9	132.9	256.9	111.0	106.6	109.3	880.0
98Q3	122.2	110.8	137.0	281.0	116.8	108.3	107.6	948.6
98Q4	117.3	112.9	116.9	112.7	112.2	106.3	99.6	102.1
99Q1	115.4	110.7	110.7	114.0	295.9	110.4	108.6	119.5

**Monthly data (period average)**

Month	AUS	CND	J	MX	NZ	N	CH	TR
MAR98	109.2	103.7	126.3	254.1	103.6	107.5	109.0	821.0
APR98	112.1	104.7	129.5	252.0	107.3	106.8	110.3	854.2
MAY98	116.1	105.8	132.1	254.4	110.2	105.7	108.3	878.2
JUN98	121.0	107.3	137.5	264.5	115.7	107.4	109.3	908.3
JUL98	118.3	108.8	137.7	263.9	114.4	108.1	110.8	934.3
AUG98	124.1	112.2	141.7	277.9	118.3	109.5	109.4	954.0
SEP98	124.4	111.5	131.8	302.5	117.7	107.4	102.6	957.8
OCT98	118.4	113.0	118.3	301.2	113.6	105.4	97.9	971.2
NOV98	115.2	112.8	117.8	298.3	114.1	105.7	101.4	102.5
DEC98	118.2	113.0	114.7	293.8	113.5	107.9	99.6	106.9
JAN99	115.9	111.3	110.8	302.7	110.4	105.7	101.3	112.9
FEB99	114.3	109.7	114.3	298.7	109.4	109.4	104.4	119.4
MAR99	116.0	111.1	117.1	288.7	111.5	107.3	107.3	126.6

**Table B: Trade-weighted currency indices  
vs. (the rest of) 24 Industrial Countries (IC24)**

Annual data (Index 1994=100)

Year	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	EUR11	EUR15	USA	J
1986	85.8	87.3	79.9	185.2	103.5	88.0	100.0	120.4	84.9	85.6	124.5	113.4	120.4	106.2	81.3	84.2	104.9	62.2
1987	90.0	91.7	86.2	168.4	105.4	89.7	98.8	123.1	89.5	89.8	116.5	115.5	120.6	106.2	89.1	93.1	98.8	68.5
1988	89.3	90.3	86.4	158.3	109.8	88.3	97.4	120.1	89.5	90.0	119.8	117.7	121.4	113.2	87.9	93.9	98.2	76.3
1989	88.9	88.3	85.8	147.4	114.9	87.4	96.6	121.2	89.5	89.7	107.3	122.1	122.1	113.2	87.6	92.3	100.9	73.1
1990	93.8	94.8	93.5	135.4	114.8	92.4	102.6	122.3	92.4	92.9	107.3	122.4	122.4	120.2	98.1	98.1	97.0	86.2
1991	93.8	94.8	93.5	90.6	121.4	90.4	121.4	121.4	92.4	92.4	106.8	120.4	120.8	110.4	96.8	103.4	97.0	72.3
1992	96.2	96.3	94.0	113.0	119.2	95.2	104.6	121.8	95.9	95.5	110.8	105.3	122.9	106.9	101.6	108.3	98.0	76.0
1993	97.5	99.2	97.9	104.9	104.9	98.0	99.6	102.5	98.5	98.5	103.8	99.1	100.6	98.4	97.9	99.9	96.9	92.1
1994	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1995	104.8	105.9	98.5	101.3	100.7	104.9	102.1	104.3	104.3	104.3	102.3	102.3	102.3	100.5	100.5	100.5	107.6	106.0
1996	103.2	104.8	105.3	98.2	102.9	98.2	104.8	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	114.3	107.8	106.0
1997	99.2	101.9	100.8	103.2	102.5	97.1	101.9	103.6	99.6	99.6	101.9	101.9	101.9	101.9	101.9	101.9	114.3	87.6
1998	100.1	103.2	103.2	103.2	102.5	93.3	99.2	103.6	103.6	103.6	99.0	99.0	100.4	105.6	105.6	120.1	124.3	83.1

Quarterly data (Index 1994=100)

Qtr	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	ERM	EUR15	USA	J
96Q1	104.4	105.8	106.8	104.7	96.5	104.2	105.9	101.2	98.1	104.5	103.8	102.5	102.2	109.3	108.2	95.6	112.5	106.6
96Q2	103.0	104.3	105.5	104.8	98.7	103.1	104.4	101.6	101.6	103.6	103.3	102.9	102.4	102.4	111.3	112.3	107.8	
96Q3	103.2	104.1	105.5	104.8	98.0	102.6	105.6	101.8	101.8	105.0	103.6	103.3	102.9	102.9	111.5	112.3	94.0	
96Q4	102.1	104.2	104.8	102.2	98.7	102.2	104.3	101.7	101.7	104.5	103.3	102.3	102.2	102.2	111.7	112.3	92.1	
97Q1	100.4	102.9	102.4	102.4	98.0	100.0	99.8	101.1	100.8	100.1	100.4	100.2	100.2	100.8	100.9	109.0	89.3	
97Q2	99.5	102.4	102.1	101.1	96.4	99.6	102.1	100.2	99.9	100.3	100.5	100.3	100.6	100.6	100.5	114.0	85.8	
97Q3	98.0	100.1	99.1	99.2	96.2	99.6	97.5	100.2	99.9	100.2	100.2	100.2	100.6	100.6	100.5	112.7	88.1	
97Q4	99.1	101.7	100.8	101.7	99.1	99.7	98.6	100.2	99.7	100.3	100.4	100.3	100.4	100.5	100.5	116.0	88.1	
98Q1	98.8	101.3	100.3	101.3	95.3	97.8	97.8	100.8	98.8	100.3	99.8	99.8	100.3	100.4	100.4	109.8	117.7	
98Q2	99.6	102.3	101.8	102.3	99.6	100.3	99.6	100.3	99.6	100.3	100.7	100.7	100.7	100.7	100.7	115.0	85.5	
98Q3	100.8	103.9	103.3	103.3	93.3	99.3	99.7	100.4	100.4	100.4	100.4	100.4	100.4	100.4	100.4	122.7	78.0	
98Q4	101.5	105.4	104.6	104.6	94.4	100.6	94.4	102.4	103.6	102.4	103.6	102.4	102.4	102.4	102.4	124.1	89.6	
99Q1	100.4	103.6	102.9	102.9	96.3	103.6	99.4	103.6	100.3	104.0	100.3	102.0	102.0	102.0	102.0	123.0	93.3	

Monthly data (monthly % change)

Month	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	EUR11	EUR15	USA	J
MAR98	-0.1	-0.3	-0.1	-5.6	-0.2	-0.1	-0.3	-0.1	-0.3	-0.1	-0.4	-0.1	-0.2	-0.1	-0.1	-0.1	-0.6	
APR98	0.3	0.6	1.4	-3.4	0.3	1.8	1.0	-1.1	-1.6	-0.1	-0.9	-0.8	-0.1	-0.3	-0.1	-0.4	-2.4	
MAY98	-1.0	-1.3	-0.2	0.0	-0.1	0.1	0.0	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.1	-0.3	-2.3	
JUN98	0.0	0.2	0.0	0.0	2.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-2.0	
JUL98	0.5	0.9	0.1	0.8	-0.5	0.7	-0.5	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-2.4	
AUG98	0.5	0.9	1.1	-0.5	0.6	0.7	0.6	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-2.4	
SEPT98	0.5	1.1	0.1	-0.1	0.1	1.1	0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-2.4	
OCT98	0.5	0.8	0.7	-0.7	0.7	-0.7	-0.5	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-2.5	
NOV98	-0.5	-0.8	-0.8	-0.8	-0.6	-0.7	-0.6	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-2.7	
DEC98	0.1	0.2	0.2	0.2	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	-0.7	
JAN99	-0.3	-0.9	-0.5	-0.5	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-3.7	
FEB99	-0.7	-0.8	-1.0	-0.8	-0.8	-0.8	-0.8	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-1.4	
MAR99	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-1.3	

## Table C1: Price deflator private consumption

Annual data (Index 1994=100): In national currency vs. (the rest of) 24 Industrial countries (IC24)

Year	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	EUR11	EUR15	USA	J
1986	109.6	111.1	114.7	44.7	90.9	115.0	111.8	89.8	119.1	112.1	64.0	101.1	85.9	92.4	119.1	113.7	114.5	125.6
1987	108.6	112.0	110.7	50.6	92.0	114.3	110.3	91.2	115.6	109.5	68.0	101.0	87.1	92.9	115.6	111.0	109.5	120.7
1988	106.3	112.2	107.6	60.4	92.6	112.8	92.6	93.2	112.8	105.6	73.2	101.5	88.7	93.3	112.3	112.5	105.8	115.8
1989	105.8	112.2	105.2	60.4	92.6	111.0	109.4	94.6	108.4	105.4	79.1	101.5	90.6	95.1	109.5	106.7	108.6	110.7
1990	104.4	109.4	102.4	68.9	94.8	108.4	105.9	95.7	105.7	104.2	84.7	102.1	94.9	97.9	106.5	105.0	105.7	112.2
1991	102.7	108.3	100.3	78.0	95.3	103.9	103.3	97.2	103.7	102.0	90.4	102.0	90.4	99.8	103.2	104.1	104.1	109.3
1992	100.8	103.3	101.1	84.0	97.2	103.4	101.6	98.1	102.4	101.1	95.2	101.9	98.1	101.4	102.4	101.3	102.5	104.5
1993	100.4	100.5	100.1	94.0	98.7	101.5	100.5	100.0	100.0	100.0	98.3	100.3	100.2	100.2	102.0	101.5	102.3	102.3
1994	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1995	99.4	98.2	98.3	100.6	98.2	101.1	98.2	99.5	100.2	100.5	98.5	100.0	98.6	100.0	100.0	100.0	100.0	100.0
1996	98.6	97.6	96.9	100.4	97.2	101.5	101.4	97.7	101.7	102.7	97.4	100.3	98.7	100.7	98.5	99.5	99.5	99.5
1997	97.7	97.4	95.7	101.4	95.7	101.5	101.2	97.0	103.3	103.3	97.0	103.0	98.4	100.6	94.2	92.0	93.9	93.1
1998	97.7	97.6	94.2	112.5	101.2	93.9	97.7	97.7	103.2	104.2	97.0	104.2	95.5	97.4	100.5	91.7	88.2	91.9

## Table C2: Relative price indicators based on private consumption deflator

Annual data (Index 1994=100): vs. (the rest of) 24 Industrial countries (IC24)

Year	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	EUR11	EUR15	USA	J
1986	94.1	97.0	91.6	95.5	82.8	94.1	101.2	111.8	108.1	101.1	95.9	79.7	114.6	103.4	98.2	96.8	95.7	120.1
1987	97.7	102.8	92.9	92.9	85.2	97.0	102.6	109.0	112.3	103.5	98.3	79.2	116.6	105.0	98.6	103.3	108.1	62.6
1988	94.9	94.9	90.2	92.9	88.6	92.8	101.6	99.6	111.7	100.5	96.8	84.8	124.0	110.7	106.3	102.5	101.8	88.2
1989	94.0	89.0	92.8	90.2	88.0	90.7	105.6	111.4	96.5	96.5	94.6	84.8	124.0	110.6	104.4	96.5	106.0	82.0
1990	97.8	103.3	92.8	93.2	93.2	114.3	100.6	108.4	120.3	114.3	97.8	96.5	122.5	114.6	106.8	110.4	110.4	72.3
1991	96.3	99.4	91.1	94.6	94.6	115.6	99.6	104.6	112.0	112.0	95.8	94.7	122.5	114.6	106.8	110.7	110.7	77.1
1992	97.0	99.5	99.5	95.0	95.0	115.9	98.4	106.3	119.4	97.2	95.6	94.7	105.4	120.5	110.4	108.3	109.9	79.6
1993	98.0	99.8	98.9	98.6	98.6	104.3	99.9	99.2	100.9	99.0	98.9	98.9	103.6	101.5	100.0	99.4	99.2	94.2
1994	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1995	98.5	104.2	103.3	105.1	102.4	102.4	102.8	103.1	102.4	102.4	94.4	103.3	102.8	103.9	105.5	105.5	105.5	102.2
1996	102.3	102.3	102.3	102.3	102.3	104.5	102.1	102.1	102.1	102.1	102.1	102.1	102.1	102.1	102.1	102.1	102.1	102.1
1997	97.8	99.8	99.2	98.5	98.5	102.0	100.4	97.5	102.5	102.5	98.7	98.7	98.6	102.9	105.3	105.3	105.3	81.6
1998	97.8	97.8	97.8	96.5	96.5	100.7	96.5	96.5	97.3	97.3	96.5	96.5	96.5	103.2	102.9	102.9	102.9	76.4

Quarterly data (Index 1994=100): relative to 24 Industrial countries (IC24)

Qtr	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	EUR11	EUR15	USA	J	
96Q1	103.6	103.3	103.8	101.8	104.1	105.7	103.3	100.1	101.7	102.0	102.5	104.7	105.5	107.3	96.0	108.2	102.4	89.7	
96Q2	102.1	102.3	102.1	102.1	102.1	104.2	102.5	101.8	100.5	101.2	100.5	101.2	101.2	101.0	109.3	103.2	103.2	86.4	
96Q3	101.1	101.1	101.1	100.6	100.9	104.9	101.6	103.3	101.8	100.5	101.8	101.8	101.8	101.0	108.7	109.4	107.0	83.5	
96Q4	99.2	100.3	99.7	98.4	108.7	101.7	100.7	101.1	100.8	104.0	99.7	105.6	105.6	105.3	105.3	105.5	105.5	83.5	
97Q1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	83.5	
97Q2	98.2	99.7	97.0	107.3	97.0	99.7	100.3	99.3	102.0	105.9	96.6	97.5	102.3	103.4	103.4	111.7	114.8	114.2	82.1
97Q3	96.5	97.6	94.7	97.0	97.0	99.8	99.8	99.7	100.3	100.3	95.1	97.5	101.7	101.7	101.7	117.8	119.3	119.3	84.5
97Q4	96.4	99.0	96.0	96.0	96.0	99.4	99.4	99.2	100.3	100.3	95.9	98.1	102.0	101.7	101.7	119.3	119.3	119.3	84.5
98Q1	96.7	98.7	98.7	99.1	99.1	101.7	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	84.5
98Q2	97.4	99.9	96.1	101.4	105.1	100.8	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	78.7	
98Q3	98.2	101.4	97.7	97.7	97.7	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	74.7	
98Q4	98.9	103.1	97.9	106.3	106.3	101.7	101.7	101.7	101.7	101.7	101.7	101.7	101.7	101.7	101.7	101.7	101.7	71.6	
99Q1	97.7	101.6	96.0	108.1	108.1	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	71.6	

## Table D1: Price deflator GDP

Annual data (Index 1994=100): In national currency vs. (the rest of) 24 Industrial countries (IC24)

Year	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	EUR11	EUR15	USA	J	
1986	106.3	109.8	111.7	44.1	89.3	115.2	114.0	88.9	121.5	110.1	63.2	103.7	91.4	91.6	115.9	110.5	116.9	125.0	
1987	105.0	110.6	109.2	49.0	90.5	114.0	112.0	90.9	116.4	108.6	67.2	104.5	91.8	92.9	113.4	109.1	110.8	119.0	
1988	103.2	109.7	105.7	59.7	91.3	112.3	110.8	93.2	113.3	109.5	104.4	77.1	107.2	93.6	94.6	110.1	107.0	106.2	115.0
1989	103.4	109.9	102.8	59.6	93.1	110.1	110.8	94.6	109.6	104.6	77.1	108.7	93.4	96.4	97.1	107.0	105.5	104.8	115.0
1990	101.9	105.3	102.6	68.2	94.7	107.6	104.7	97.0	106.8	102.9	82.7	108.7	100.1	100.1	104.5	104.5	104.9	109.2	
1991	100.2	105.9	100.6	84.9	98.6	105.4	101.2	98.4	102.3	101.4	83.4	104.9	103.1	103.3	102.4	102.4	102.4	107.2	
1992	89.9	103.9	100.6	84.9	98.6	102.9	100.2	99.6	102.3	101.3	93.5	102.2	100.6	100.6	102.8	102.8	102.8	105.3	
1993	100.3	101.0	100.0	93.3	99.2	100.6	100.1	100.1	100.6	100.2	96.6	100.8	100.1	100.1	102.6	102.6	102.6	102.7	
1994	100.0	100.0	100.0	93.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
1995	98.6	98.8	98.7	100.5	100.2	99.8	97.8	100.1	99.9	98.9	99.2	100.2	100.4	100.7	99.5	97.6	97.6	96.2	
1996	98.0	98.6	96.8	110.0	101.6	96.8	97.2	104.0	98.0	98.0	98.6	102.8	98.7	98.3	99.4	95.3	95.3	92.5	
1997	97.5	98.0	95.7	113.0	101.1	95.3	94.7	100.3	98.2	98.1	106.6	98.1	98.1	98.1	98.1	94.4	94.4	90.6	
1998	97.1	98.9	93.0	115.0	100.9	94.0	100.3	104.2	98.3	98.3	97.1	108.7	98.1	97.4	101.1	91.6	91.6	89.3	

## Table D2: Relative price indicators based on GDP deflator

Annual data (Index 1994=100): vs. (the rest of) 24 Industrial countries (IC24)

Year	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	EUR11	EUR15	USA	J	
1986	91.2	95.9	89.2	81.8	94.1	92.5	101.4	114.0	102.3	110.6	103.2	94.2	78.7	117.6	110.7	94.3	93.0	122.6	
1987	94.4	105.5	94.1	82.6	95.3	102.8	110.6	111.9	111.9	111.9	104.2	97.5	78.2	120.7	110.7	101.0	101.5	109.3	
1988	92.2	99.1	91.3	86.6	100.2	99.1	99.1	107.9	111.9	114.7	101.1	95.6	79.5	126.2	113.6	107.7	106.8	102.1	
1989	91.9	97.0	88.2	87.7	91.9	106.9	96.9	107.9	97.4	114.7	93.4	93.6	82.6	122.6	117.8	96.8	97.4	81.7	
1990	95.4	102.3	91.2	92.4	114.2	99.2	114.2	114.2	114.2	121.9	98.8	95.6	87.4	135.3	120.8	102.5	105.6	105.6	
1991	94.0	98.5	98.6	93.9	93.9	96.5	96.4	102.6	102.7	124.7	95.6	94.3	94.3	128.6	112.6	109.1	102.5	102.5	
1992	96.1	100.5	94.5	96.6	96.6	117.5	117.5	117.5	117.5	121.2	97.2	96.7	103.6	123.7	112.6	112.6	112.6	72.2	
1993	97.8	100.3	98.8	97.9	104.7	99.6	104.7	104.7	99.1	102.6	99.9	98.9	100.3	92.3	103.9	112.4	98.9	98.9	
1994	100.0	100.0	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
1995	103.4	103.9	105.5	104.5	102.5	102.5	102.5	102.5	102.5	103.6	103.5	110.5	5	112.0	101.2	98.6	98.4	102.0	
1996	101.1	103.4	101.9	108.0	104.6	104.6	104.6	104.6	104.6	105.9	101.2	101.4	105.1	107.5	101.2	99.3	108.8	85.6	
1997	96.8	100.4	95.5	110.5	99.5	102.1	102.1	102.1	102.1	106.7	97.7	97.5	106.6	103.9	105.0	116.2	96.9	103.7	79.4
1998	97.2	102.1	95.3	107.4	107.4	100.0	100.0	100.0	100.0	100.0	98.2	98.2	98.7	103.9	102.9	121.7	97.4	106.2	74.2

Quarterly data (Index 1994=100): relative to 24 Industrial countries (IC24)

Qtr	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	EUR11	EUR15	USA	J
98Q1	102.5	104.3	104.1	104.7	105.9	103.0	104.7	101.4	98.5	101.4	102.5	104.4	102.5	104.4	108.7	107.5	108.2	88.9
98Q2	101.0	103.4	101.7	107.6	104.9	102.0	100.7	107.5	100.7	101.2	101.4	105.4	101.4	105.4	105.7	105.8	107.4	87.3
98Q3	101.1	101.9	101.9	109.5	104.3	102.0	101.1	102.8	109.0	100.5	100.7	106.7	100.7	106.7	108.2	108.7	109.2	84.8
98Q4	99.8	102.8	101.2	110.5	103.3	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	101.1	104.9	110.3	103.6	81.7
97Q1	98.0	101.5	97.6	110.4	101.0	101.0	101.0	101.0	101.0	101.0	101.0	101.0	101.0	101.0	105.9	103.9	108.4	78.1
97Q2	97.0	100.8	96.0	109.6	101.6	100.0	99.6	101.0	101.0	101.0	101.0	101.0	101.0	101.0	104.0	115.2	109.7	79.9
97Q3	95.5	99.0	93.8	112.0	101.0	98.5	95.8	102.2	102.2	102.2	98.4	97.5	105.8	102.5	105.8	103.6	104.2	82.6
97Q4	96.5	100.3	94.8	109.8	101.2	101.2	101.2	101.2	101.2	101.2	101.2	101.2	101.2	101.2	106.0	119.6	104.2	77.1
98Q1	95.9	100.0	93.8	109.3	103.8	101.9	99.5	101.2	101.2	101.2	101.2	101.2	101.2	101.2	106.0	119.6	104.2	82.6
98Q2	96.7	101.1	94.8	109.3	103.7	101.9	99.5	101.2	101.2	101.2	101.2	101.2	101.2	101.2	106.0	122.4	102.6	76.5
98Q3	97.6	102.8	95.8	107.9	103.7	101.9	99.5	101.2	101.2	101.2	101.2	101.2	101.2	101.2	106.0	123.1	102.6	72.0
98Q4	98.4	104.5	96.6	108.7	103.8	101.9	99.5	101.2	101.2	101.2	101.2	101.2	101.2	101.2	106.0	122.7	108.1	69.5
99Q1	97.1	102.9	94.8	109.3	103.8	101.9	99.5	101.2	101.2	101.2	101.2	101.2	101.2	101.2	106.0	118.7	108.4	79.3

## Table E1: Price Deflator Exports of Goods and Services

Annual data (Index 1994=100): In national currency vs. (the rest of) 24 industrial countries (IC24)

Year	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	EUR11	EUR15	USA	J
1986	109.6	109.4	113.0	51.6	93.0	113.8	108.2	87.7	122.7	110.5	71.2	90.7	89.1	87.2	116.6	109.2	107.1	147.7
1987	105.7	106.3	110.8	55.9	93.9	112.3	107.4	87.8	116.0	108.2	78.4	91.7	89.0	89.4	112.6	106.4	104.0	137.3
1988	106.6	104.5	106.0	60.6	93.4	111.8	111.8	87.8	113.3	104.6	89.3	92.3	86.7	86.0	103.8	103.8	105.8	128.0
1989	108.5	105.9	104.7	104.4	64.2	92.6	112.4	112.6	89.3	112.6	104.2	90.4	93.7	93.7	103.7	102.5	102.5	128.6
1990	105.8	103.8	104.4	73.6	92.7	108.2	101.7	90.8	104.5	104.2	94.3	93.0	92.4	92.4	106.0	102.2	102.2	122.1
1991	103.4	102.4	104.4	82.3	93.0	107.4	100.1	92.0	100.8	102.8	105.9	92.8	94.3	94.3	101.6	101.8	101.8	117.1
1992	102.4	102.1	102.0	94.5	95.6	97.5	104.4	95.6	104.4	93.2	105.8	102.3	93.6	93.6	94.0	103.0	102.3	106.1
1993	100.1	100.0	100.0	97.9	100.0	100.0	100.0	98.3	100.0	100.5	100.5	100.9	100.6	100.6	103.2	103.2	103.2	106.2
1994	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1995	98.0	96.8	98.2	99.2	97.8	99.2	101.0	101.1	99.9	100.6	98.6	97.8	98.3	98.3	99.8	99.8	99.8	99.8
1996	99.3	98.5	98.8	98.5	98.5	98.5	101.4	95.8	95.8	97.3	98.1	97.2	96.9	96.9	96.9	96.9	96.9	96.9
1997	102.5	102.6	98.9	96.4	113.9	102.8	97.0	104.1	106.2	98.9	105.9	98.5	96.4	95.0	95.0	97.3	97.3	97.3
1998	102.6	102.6	98.9	96.4	113.9	102.8	97.0	104.1	106.2	98.9	105.9	98.5	96.4	95.4	95.4	97.1	97.1	97.1

## Table E2: Relative price indicators based on Export Price Deflator

Annual data (Index 1994=100): vs. (the rest of) 24 industrial countries (IC24)

Year	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	EUR11	EUR15	USA	J
1986	94.1	95.5	90.3	95.6	96.3	100.2	108.2	105.6	104.2	94.6	88.6	102.9	107.3	92.6	94.6	91.9	112.3	91.9
1987	95.1	97.5	98.5	94.1	88.9	100.8	106.1	108.1	103.9	97.1	91.3	105.9	109.0	94.5	100.4	99.6	102.8	94.1
1988	94.0	94.0	94.2	95.9	92.6	102.6	108.0	105.5	101.5	97.0	94.5	109.9	112.6	97.5	97.5	97.5	102.8	97.6
1989	96.4	93.0	94.0	94.7	106.7	97.4	106.4	108.3	100.5	98.6	94.6	94.7	111.4	97.5	97.5	103.4	93.4	93.4
1990	99.1	99.2	94.6	94.6	99.6	111.8	100.4	114.0	102.2	98.2	96.8	99.7	115.8	113.0	100.7	107.4	107.4	84.7
1991	97.4	97.6	98.1	98.1	99.9	112.9	112.9	112.9	110.5	104.8	100.6	103.5	103.5	102.4	102.4	105.0	105.0	88.3
1992	98.5	102.6	98.5	98.1	99.9	114.9	114.9	114.9	113.5	100.4	97.5	103.6	103.6	102.1	112.9	109.5	109.5	89.7
1993	97.7	101.3	100.0	100.0	103.4	98.0	100.0	100.0	103.4	100.0	99.6	99.9	99.9	98.3	100.0	100.0	100.0	97.7
1994	100.7	101.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1995	102.7	101.7	101.1	101.8	102.5	101.6	102.4	101.6	101.6	102.0	101.5	104.5	113.5	104.5	104.5	106.8	106.8	99.2
1996	102.4	102.4	101.5	102.1	107.3	101.7	104.4	101.1	109.5	101.3	99.9	100.1	107.3	107.3	99.6	105.7	105.7	86.4
1997	101.7	100.6	97.3	100.6	108.1	101.5	104.3	108.8	108.8	108.8	104.3	104.1	104.1	104.1	104.1	105.7	105.7	86.4
1998	102.7	102.1	98.8	102.1	98.8	106.3	102.0	100.5	102.0	104.9	110.4	98.5	96.9	99.4	104.6	108.2	108.2	83.0

Quarterly data (Index 1994=100): relative to 24 Industrial countries (IC24)

Qtr	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	EUR11	EUR15	USA	J
96Q1	102.4	101.8	103.8	103.8	105.4	101.4	99.5	106.4	102.0	101.1	101.5	110.9	108.2	97.1	108.2	109.6	90.0	
96Q2	101.7	100.7	102.2	102.2	107.8	104.3	100.3	100.3	101.2	110.6	107.7	109.6	108.7	108.7	108.2	96.9	90.6	
96Q3	102.9	101.7	100.8	100.8	108.9	104.1	104.1	104.1	101.5	99.5	99.5	110.7	108.7	98.8	108.7	95.9	89.7	
96Q4	102.8	101.1	100.8	100.8	109.3	103.7	100.8	100.8	101.5	100.8	100.8	109.7	109.8	99.8	109.7	96.2	87.4	
97Q1	102.0	101.1	98.7	101.8	107.7	108.7	102.5	102.5	100.8	109.7	100.1	97.4	99.4	100.4	108.5	107.7	100.0	84.1
97Q2	101.9	101.1	97.5	101.7	107.5	101.7	101.7	101.7	99.5	108.5	99.6	99.6	99.6	99.6	100.6	105.2	105.2	86.5
97Q3	100.9	99.5	97.5	107.3	109.7	101.5	101.5	101.5	101.5	101.5	98.4	98.4	98.4	98.4	102.8	101.7	101.7	90.1
97Q4	102.1	100.8	100.8	100.8	97.3	101.6	101.6	101.6	101.6	101.6	101.6	101.6	101.6	101.6	101.6	101.6	101.6	85.0
98Q1	100.5	100.3	100.5	100.5	98.6	101.1	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	105.8	105.8	85.0
98Q2	102.3	102.3	101.2	101.2	96.3	102.8	101.5	101.5	99.9	101.5	101.5	99.5	97.9	97.9	102.8	102.8	102.8	86.7
98Q3	103.1	102.1	102.7	102.7	99.6	101.6	101.6	101.6	101.6	101.6	101.6	99.6	99.6	99.6	102.4	102.4	102.4	86.7
98Q4	104.0	104.3	100.6	100.6	108.1	103.2	103.2	103.2	103.2	103.2	103.2	101.6	101.6	101.6	106.9	106.9	106.9	88.3
99Q1	102.7	102.6	98.8	98.8	101.3	100.9	100.9	100.9	100.9	100.9	100.9	100.6	100.6	100.6	107.2	107.2	107.2	90.3

**Table F1: Unit Labour Costs in Economy as a whole (ULCE)**

Annual data (Index 1994=100): In national currency vs. (the rest of) 24 Industrial countries (IC24)

Year	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	EUR11	EUR15	USA	J
1986	106.1	112.0	115.8	47.5	87.6	119.0	121.7	92.7	121.0	109.0	61.0	110.6	89.2	87.6	122.5	115.4	116.9	125.4
1987	103.0	116.8	113.7	52.0	88.6	116.0	118.4	94.0	118.8	107.3	64.7	110.4	88.0	88.4	119.2	113.2	112.5	119.1
1988	99.4	115.2	109.5	58.8	90.3	91.5	109.5	111.8	98.2	109.1	104.6	102.9	91.5	91.3	114.0	110.1	110.4	112.8
1989	97.6	115.2	105.4	67.0	91.2	91.5	109.5	111.8	98.2	109.1	102.2	102.2	97.5	97.5	112.3	108.5	108.3	110.2
1990	97.9	111.2	101.1	75.7	94.2	106.8	106.2	101.2	101.4	100.4	72.5	112.3	102.7	104.9	104.9	107.1	104.8	106.4
1991	98.6	110.7	108.1	77.1	95.2	104.2	102.2	101.4	101.3	100.9	99.4	99.4	89.8	89.8	117.3	103.9	103.9	110.3
1992	98.1	105.7	100.4	83.8	99.2	101.9	101.9	101.6	103.8	102.2	99.2	110.4	100.5	102.5	102.5	105.1	105.2	101.8
1993	99.4	103.3	101.1	91.5	100.9	100.9	100.9	100.8	100.2	100.2	99.7	98.2	102.6	100.1	102.8	103.1	100.0	100.2
1994	100.0	100.0	100.0	91.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1995	98.7	99.5	99.5	99.9	99.9	108.6	99.2	99.2	93.8	98.8	99.1	101.5	99.8	98.4	99.3	99.3	99.1	99.5
1996	97.6	98.8	97.3	116.4	98.7	108.6	99.6	99.6	97.8	99.6	99.6	103.5	99.5	99.4	99.6	99.6	99.4	99.7
1997	96.9	100.4	93.3	121.7	99.7	99.9	97.1	97.1	94.2	99.3	99.3	106.8	95.4	100.7	99.7	99.7	99.3	91.7
1998	96.5	102.7	90.1	121.8	99.8	95.8	95.1	95.1	98.2	98.2	98.2	99.0	96.0	102.3	103.5	85.7	85.7	87.7

**Table F2: Relative price indicators based on ULCE**

Annual data (Index 1994=100): vs. (the rest of) 24 Industrial countries (IC24)

Year	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	EUR11	EUR15	USA	J
1986	91.1	97.8	92.5	88.1	90.6	104.7	121.7	111.6	102.7	93.2	76.0	125.4	107.4	93.1	99.6	97.2	122.6	78.0
1987	92.6	107.1	88.0	87.7	93.3	104.1	116.9	115.7	106.4	96.3	75.3	127.5	107.3	93.8	106.1	105.3	111.1	81.8
1988	88.8	105.1	94.6	93.1	99.1	95.5	114.0	114.0	103.4	94.2	74.2	137.3	111.3	103.4	103.4	105.2	88.0	88.0
1989	86.8	101.7	90.5	99.1	105.1	99.8	107.9	118.8	97.1	92.2	77.8	137.1	119.1	106.7	95.2	89.9	107.1	80.5
1990	91.1	105.4	91.5	102.5	102.5	102.5	108.7	122.7	97.1	93.3	84.3	143.6	123.9	102.9	112.5	112.5	101.6	70.4
1991	92.5	100.6	88.7	94.5	111.5	113.6	108.3	113.6	103.6	95.3	127.8	140.6	125.5	114.2	99.2	108.6	108.6	75.5
1992	94.4	101.8	90.6	94.3	94.7	111.8	96.9	106.3	97.3	95.2	95.2	116.3	124.3	109.8	104.8	114.0	98.4	77.5
1993	97.0	102.5	99.0	85.9	85.9	106.6	99.0	104.8	100.2	98.4	88.4	104.0	94.0	98.5	101.1	100.7	100.0	92.0
1994	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1995	103.4	104.6	106.8	107.0	107.0	100.9	103.9	103.9	103.7	103.4	103.4	103.8	111.3	98.9	105.5	105.5	103.4	103.4
1996	100.7	103.7	102.4	104.3	103.1	103.8	104.1	94.5	103.8	101.1	99.4	106.6	106.6	12.3	108.5	108.5	102.0	80.3
1997	96.2	102.3	94.1	118.7	98.5	98.9	94.2	105.6	97.1	94.7	106.7	101.1	107.5	116.5	116.5	113.1	113.1	80.3
1998	96.6	106.0	92.3	113.7	99.0	99.7	102.1	98.7	98.7	94.6	108.0	101.7	108.1	124.7	92.8	102.9	119.8	72.9

Quarterly data (Index 1994=100): relative to 24 Industrial countries (IC24)

Qtr	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	EUR11	EUR15	USA	J
96Q1	102.3	104.8	105.2	109.7	104.3	105.0	93.2	98.4	102.5	101.5	104.8	108.2	108.8	95.0	107.4	108.1	104.5	88.8
96Q2	100.6	103.4	102.4	113.6	104.3	104.3	104.3	94.0	103.1	100.9	99.5	105.0	105.0	113.0	107.5	105.3	104.8	86.8
96Q3	100.6	103.5	102.1	116.2	102.9	102.9	102.9	104.6	105.7	100.6	98.0	106.3	106.3	113.8	107.8	104.9	104.9	84.4
96Q4	99.3	103.2	102.4	99.9	117.8	103.0	96.2	107.0	99.7	97.7	102.5	102.5	102.5	106.0	107.7	109.7	105.7	81.8
97Q1	97.5	102.4	97.0	118.0	99.7	100.8	100.8	97.0	100.8	98.0	98.0	98.2	107.4	103.5	106.2	109.7	110.8	78.9
97Q2	96.5	102.5	94.9	117.3	98.8	99.3	104.1	94.1	105.8	99.7	95.3	107.1	107.1	101.0	105.5	102.5	112.3	81.2
97Q3	95.0	101.2	92.0	117.7	97.3	97.3	97.3	94.9	104.9	96.0	96.0	99.4	99.4	118.5	98.5	114.0	114.0	83.8
97Q4	95.9	103.0	95.5	119.5	98.7	98.7	98.7	91.9	104.7	97.7	97.7	97.7	108.9	120.0	93.5	108.9	108.9	77.5
98Q1	95.5	103.4	91.5	117.9	98.1	87.8	100.7	87.8	97.1	97.1	94.0	106.4	106.4	100.6	99.4	90.4	90.4	76.1
98Q2	96.3	104.8	91.9	110.0	98.5	98.5	98.5	91.7	98.5	101.1	97.1	94.6	106.3	100.9	99.7	124.5	92.7	70.8
98Q3	97.0	107.0	92.6	113.3	99.4	99.4	99.4	97.7	102.7	99.1	99.1	99.1	108.5	108.5	102.5	93.7	123.0	67.9
98Q4	97.7	109.0	93.4	114.2	100.1	98.7	100.1	91.3	103.2	100.1	99.5	99.5	104.4	104.4	117.4	95.3	104.8	80.0
99Q1	96.3	107.5	91.7	115.9	98.4	98.7	98.7	91.7	102.7	99.1	99.1	99.1	106.8	106.8	123.1	91.1	118.1	80.0

# Table G1: Unit Labour Costs in Manufacturing (ULCM)

Annual data (Index 1994=100): In national currency vs. (the rest of) 24 Industrial countries (IC24)

Year	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	EUR11	EUR15	USA	J
1986	110.4	106.5	102.7	48.6	84.7	119.9	143.0	96.2	122.8	115.2	53.6	121.0	98.3	95.8	116.1	114.8	128.9	110.5
1987	108.9	113.4	106.5	52.0	85.1	118.1	130.4	96.0	121.2	112.5	55.7	117.9	99.0	98.7	117.2	118.5	115.9	106.2
1988	106.0	111.2	105.4	62.9	87.7	113.1	123.6	96.9	117.9	109.7	62.7	117.9	104.6	98.3	113.4	115.3	109.9	101.8
1989	103.9	107.7	103.3	72.0	90.9	109.2	109.2	100.9	117.5	105.9	67.5	117.9	109.8	97.6	109.8	111.4	109.4	98.7
1990	103.9	108.8	100.1	81.9	95.0	107.5	113.6	101.9	106.8	105.1	76.1	122.2	112.8	100.5	107.0	107.7	107.0	95.6
1991	103.6	106.1	99.1	81.4	95.4	107.0	105.0	100.9	104.2	105.8	101.4	86.8	112.5	116.5	101.5	104.9	108.8	106.1
1992	101.9	106.7	99.1	87.5	98.0	105.8	102.5	100.9	105.8	100.9	91.9	108.9	104.9	99.7	112.2	104.5	107.1	92.6
1993	101.6	105.6	100.2	91.4	100.6	104.4	106.1	101.9	105.2	100.1	94.8	100.8	103.3	97.9	104.8	105.2	104.4	93.5
1994	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.9
1995	98.4	101.1	100.7	101.0	101.7	112.0	99.3	98.2	89.2	98.2	98.9	100.9	104.9	104.9	100.4	104.9	104.9	100.0
1996	98.5	97.3	100.0	95.2	102.3	113.2	105.3	95.5	87.0	102.4	94.0	99.3	102.7	99.4	96.5	97.1	92.0	93.8
1997	97.5	100.5	95.7	118.3	118.3	105.4	91.4	95.5	104.7	93.0	94.1	96.4	96.4	96.4	96.4	96.4	92.3	91.8
1998	98.9	104.2	89.7	118.3	107.7	90.7	90.9	80.6	80.6	80.6	90.2	92.6	94.1	94.9	97.6	95.6	91.6	91.6

# Table G2: Relative price indicators based on ULCM

Annual data (Index 1994=100): vs. (the rest of) 24 Industrial countries (IC24)

Year	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	EUR11	EUR15	USA	J
1986	94.8	93.0	82.0	91.8	87.7	105.5	143.0	115.8	128.6	104.2	98.6	66.7	137.2	118.3	101.7	94.4	96.6	135.1
1987	98.8	100.4	91.8	87.5	89.6	99.6	96.2	106.3	120.4	116.2	105.7	98.7	127.0	119.4	104.8	104.4	114.3	72.6
1988	94.7	95.3	95.1	98.8	106.3	104.4	106.3	104.4	112.4	112.4	112.4	98.5	138.8	127.0	111.3	115.3	105.7	77.6
1989	92.3	95.1	95.1	98.8	106.3	104.4	95.5	104.4	112.4	112.4	112.4	95.7	125.4	125.4	113.4	110.4	110.4	72.1
1990	96.8	103.1	90.7	110.8	114.5	99.8	99.8	116.2	128.1	116.2	116.2	98.8	80.5	97.7	105.6	105.0	102.8	63.2
1991	97.3	99.2	89.7	87.8	102.7	93.1	93.1	98.8	112.4	129.7	129.7	97.0	94.2	146.3	140.8	109.6	110.2	66.9
1992	98.0	102.7	93.1	93.1	99.9	110.9	115.8	97.8	112.4	124.7	124.7	100.5	96.4	101.7	137.9	106.2	116.5	71.2
1993	99.1	104.1	98.0	95.8	106.3	102.2	102.2	105.3	104.5	104.5	103.7	98.8	92.4	103.6	96.3	102.4	102.4	89.2
1994	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1995	103.2	108.3	108.3	110.8	110.8	100.5	100.5	102.8	102.8	102.8	101.4	106.3	101.0	117.0	97.5	106.5	106.5	101.8
1996	101.6	102.0	105.0	114.5	114.5	105.3	105.3	100.7	89.9	104.3	102.7	92.4	92.4	92.4	111.9	103.0	103.0	86.8
1997	98.6	102.4	98.6	114.8	103.9	93.3	93.3	91.4	91.4	91.4	91.4	91.4	95.7	95.6	102.4	102.4	102.4	80.4
1998	98.9	107.6	91.9	110.4	110.4	81.3	94.1	81.3	81.3	81.3	81.3	92.4	95.6	95.6	102.4	102.4	102.4	76.2

Quarterly data (Index 1994=100): relative to 24 Industrial countries (IC24)

Qtr	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	EUR11	EUR15	USA	J
96Q1	103.0	104.2	108.0	108.1	105.1	102.8	88.3	98.7	99.1	104.9	99.9	114.7	106.8	99.4	108.4	111.2	98.7	89.6
96Q2	101.7	101.3	105.3	111.8	105.5	100.3	90.3	106.3	99.6	102.5	101.6	99.8	112.3	111.5	102.8	106.3	111.2	88.6
96Q3	100.2	101.3	103.2	113.1	105.5	98.5	91.7	108.7	95.4	95.4	99.7	99.7	110.5	111.0	104.3	104.3	112.0	83.0
96Q4	98.0	102.3	100.2	113.9	103.8	93.5	88.9	107.3	92.8	92.8	97.6	97.6	106.3	106.5	102.2	104.9	104.9	80.8
97Q1	96.8	102.3	97.8	113.9	103.8	93.5	95.5	103.7	90.7	90.7	97.6	97.6	106.3	106.5	102.2	104.9	104.9	83.3
97Q2	95.4	101.7	94.0	114.7	103.0	91.2	87.7	107.6	91.2	91.2	94.9	94.9	104.8	104.8	108.8	109.7	99.3	88.6
97Q3	96.1	97.8	93.9	116.7	104.0	85.4	80.5	108.4	92.8	92.8	94.8	94.8	104.8	104.8	106.3	106.3	106.3	78.3
97Q4	97.1	104.7	91.8	114.0	104.0	90.9	89.5	104.4	91.4	91.4	94.7	94.7	104.8	104.8	103.1	101.2	101.2	78.2
98Q1	98.4	97.1	91.8	114.0	107.3	107.3	107.3	107.3	107.3	107.3	107.3	107.3	107.3	107.3	137.1	88.8	80.1	73.9
98Q2	98.4	98.4	98.4	114.0	107.3	107.3	107.3	107.3	107.3	107.3	107.3	107.3	107.3	107.3	138.3	80.1	103.6	71.5
98Q3	99.7	108.6	91.7	110.0	107.6	94.7	81.5	106.7	92.6	92.6	95.4	95.4	106.7	106.7	103.6	103.6	103.6	71.5
98Q4	100.6	110.6	92.4	112.0	107.1	93.9	81.6	108.6	95.6	95.6	96.4	96.4	106.7	106.7	105.4	105.4	105.4	81.4
99Q1	99.2	109.1	90.9	112.0	107.1	93.9	81.7	105.4	92.9	92.9	95.1	95.1	105.4	105.4	104.7	104.7	104.7	83.9

**Table H1: Double Export Weights (1997) in relation to (the rest of) 24 industrial countries (IC24)**

	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	AUS	CND	J	MX	NZ	N	CH	TR	USA	EUR11
BLEU	0.0	2.6	4.8	3.1	2.9	5.0	3.1	6.5	3.0	3.2	3.1	3.8	3.2	3.2	3.2	2.1	0.5	1.7	3.0	1.7	2.5	3.6	2.2	
DK	0.3	2.0	2.0	1.1	1.1	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.2	1.2	1.2	1.2	1.2	1.2	4.1	
D	2.2	2.5	2.0	1.8	1.7	1.4	2.0	6	16.0	21.7	29.6	37.7	21.7	18.5	16.3	10.7	2.2	10.7	1.9	6.9	14.2	23.8	9.0	
GR	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.2	0.2	0.2	0.2	0.2	0.2	2.4	
E	0.3	0.7	0.4	0.5	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.1	1.1	1.1	1.1	1.1	1.1	2.1	
F	1.7	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.0	1.0	1.0	1.0	1.0	1.0	5.5	
IRL	0.7	1.1	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	5.5	
I	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	5.5	
NL	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	5.5	
AL	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	5.5	
P	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	5.5	
SF	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	5.5	
UK	1.0	0.8	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	5.5	
AUS	0.6	0.8	1.0	1.2	1.0	0.8	1.2	1.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	5.5	
CND	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	5.5	
MX	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	5.5	
NZ	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	5.5	
CH	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	5.5	
TR	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	5.5	
USA	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	5.5	
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

**Table H2: Double Export Weights (1997) in relation to the (rest of the) European Union (EUR15)**

	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	AUS	CND	J	MX	NZ	N	CH	TR	USA	EUR11
BLEU	0.7	4.1	7.5	4.4	4.2	7.1	5.2	5.1	8.1	4.1	4.2	4.1	4.7	5.3	6.5	5.6	5.2	5.2	4.2	4.2	5.0	5.0	5.0	
DK	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	9.0	
D	2.8	7	3.1	2.7	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.5	
GR	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	3.5	
E	4.5	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	3.5	
F	2.0	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	3.5	
IRL	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	3.5	
NL	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	3.5	
AL	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	3.5	
AP	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	3.5	
SF	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	3.5	
UK	15.4	15.1	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2		
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

**Table H3: Double Export Weights (1997) in relation to the (rest of the) EUR11 countries**

	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	AUS	CND	J	MX	NZ	N	CH	TR	USA
BLEU	35.7	40.6	0.0	37.5	28.8	38.7	40.3	42.9	48.8	33.4	37.6	34.7	31.7	35.1	38.0	36.9	37.7	36.1	31.8	31.8	31.8	34.6	
DEF	23.5	26.3	0.3	13.3	26.6	11.0	18.7	23.8	18.0	14.6	15.6	15.6	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	
IRL	12.0	12.0	1.4	22.2	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	
NL	13.2	12.2	1.4	7.7	7.7	10.5	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	
AP	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	
P	2.0	2.0	1.4	0.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
SF	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
BLEU	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

## TECHNICAL ANNEX

### **INTRODUCTION**

The quarterly report on price and cost competitiveness presents recent changes in the nominal and real effective exchange rates of the euro area (EUR11), of the 15 individual EU Member States, as well as of the United States, Japan, Norway, Australia, and Canada. Aggregate measures for the European Union (EUR15) are presented as well.

The nominal effective exchange rate (NEER) (or, equivalently, the "Trade-weighted currency index") describes changes in the average value of a currency with reference to a given base period and a given group of reference countries. It is calculated as a weighted geometric average of the bilateral exchange rates against the currencies of competing countries. In this report, three alternative groups of competitor countries are considered: a group of 24 industrial countries (IC24), the 15 Member states of the European Union (EUR15) and the countries in the euro area (EUR11).

The real effective exchange rate (REER) (or, equivalently, the "Relative price and cost indicators") is calculated as the sum of the nominal rate and a trade-weighted price or cost deflator. The REER attempts to show the movement in the prices or costs of production of domestically produced goods relative to the prices or costs of goods produced by competitor countries, when expressed in a common currency.

Double export weights are used to calculate NEERs and REERs, reflecting not only competition in the home markets of the various competitors, but also competition in export markets elsewhere.

DG II's system for the calculation of effective exchange rates permits the user to make individual choices of competitor countries, reference period, method to calculate trade weights and, in the case of real effective exchange rates, price or cost deflators. This technical annex describes the standard measures used in this series of Quarterly Reports. Differently defined nominal and real exchange rates can be provided to interested persons or organisations upon request. Please fax your request to the European Commission, Directorate-General for Economic and Financial Affairs (DG II-C-1), fax n° 32-2-299.35.05.

### **METHOD**

#### **1. Choice of reference period**

The choice of the reference period in assessing developments in nominal and real effective exchange rates is necessarily arbitrary and should not be seen as implying that exchange rates prevailing in this reference period were in equilibrium.

The reference year is 1994.

**2. Calculation and application of trade weights  
(that transform the bilateral exchange rates into effective exchange rates)**

The trade weights used are double export weights. This implies that the bilateral exchange rates between the currency of a given country and the currencies of its competitor countries are weighted according to both:

- (1) the competitors' share in the total supply of competing goods (including the supply by domestic producers) in each market separately; and
- (2) the relative share of each market in the total exports of the given country.

The weight matrices of year t-1 are used to calculate the change in the effective exchange rate between the year t and t-1. If no weights are available for the year t-1, the weights of the latest year available are used.

**3. Price and cost deflators  
(to transform the nominal effective exchange rates into real effective rates)**

Five real effective exchange rates (each based on a different deflator) have been calculated in order to provide a comprehensive assessment of a country's price and cost competitiveness. The following deflators have been used:

- (1) the deflator of private consumption;
- (2) the GDP deflator;
- (3) the price deflator of exports of goods and services (PX);
- (4) Unit Labour Costs in Economy as a whole (ULCE); and
- (5) Unit Labour Costs in Manufacturing (ULCM).

**4. German unification**

The competitiveness indicators presented here reflect developments in unified Germany wherever possible. In practice, this means that pan-German data are used to calculate the weight matrices. The deflators, however, are unified only from 1995 on. Earlier data refer to western Germany only. Consequently, the transitional high rates of inflation observed in the new German Länder after unification (between 1991 and 1994) are not reflected in the real effective exchange rate of the German mark as presented in this report. The introduction of pan-German data causes a break not only in the German series, but also in all other series of effective exchange rates because of Germany's role as a competitor.

## **DATA SOURCES**

### **1. Nominal bilateral exchange rates and deflators**

Exchange rate data are taken from DGII's internal TXI data base which contains the official daily rates recorded at 14.15 hours. Monthly data are calculated as the arithmetic mean of the daily rates. Quarterly and yearly data are geometric means of these monthly figures.

Annual data for the deflators (including Commission forecasts for the current year) come from DGII's AMECO data base. As the calculation of real effective exchange rates requires a full data set, missing data have been estimated. The annual data have been transformed into quarterly data by applying a straight-forward spline method.

### **2. Weight matrices:**

The double export weight matrices are derived from trade matrices with domestic production for the home market on the diagonal. The source of data on bilateral exports is the DoT (IMF) data base. The source of data on domestic production (defined as GDP - exports) is national accounts' data from AMECO. Table H in Part 2 of the report reproduces the most recent weight matrices used in calculating effective exchange rates.

## **COUNTRY COVERAGE**

### **1. Competitors**

The report presents nominal and real effective exchange rates relative to a group of 24 industrial countries (IC24), relative to the European Union as a whole (EUR15) and relative to the countries in the euro area (EUR11). IC24 consists of the 15 EU Member States plus United States, Canada, Japan, Switzerland, Norway, Australia, New Zealand, Mexico, and Turkey.

### **2. Markets**

Besides the countries considered as competitors, the following markets are distinguished: other Europe (including the Central and Eastern European Countries and the countries that used to be part of the USSR), other Asia/Oceania, other Western hemisphere, Africa, the Middle East and the rest of the World (including North Korea and Cuba). The conventions used in DoT/IFS (IMF) are followed strictly with two exceptions: (1) the industrial countries are not treated as a separate category; (2) the former East and West Germany are considered as a single entity: Germany.

