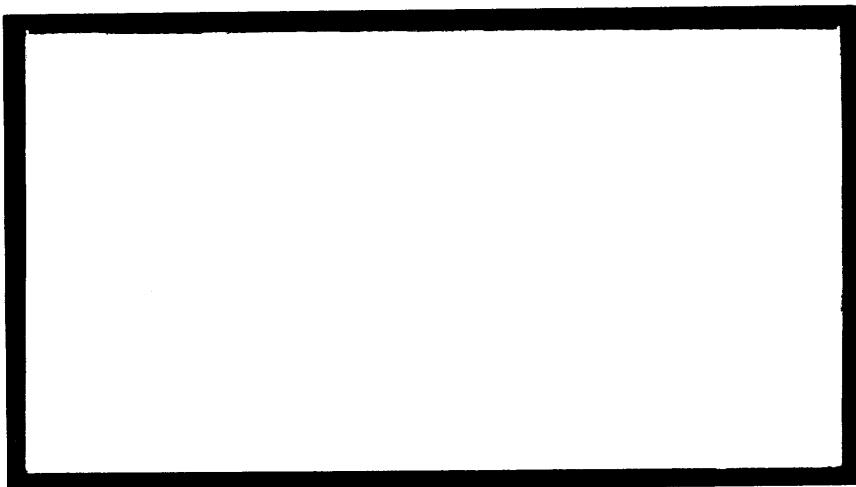


# PRICE AND COST COMPETITIVENESS

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.  
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## **PRICE AND COST COMPETITIVENESS**

ECFIN-C-1

Third quarter 1999

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

# PRICE AND COST COMPETITIVENESS

QUARTERLY REPORT –THIRD 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 For these countries, the terms "nominal effective exchange rate" and "real effective exchange rate" have been replaced by the terms "**trade-weighted currency index**" and "**relative price and cost indicators**" but the underlying concepts and their calculation remains the same.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/dg02/document/pccr/pccr\\_en.htm](http://europa.eu.int/comm/dg02/document/pccr/pccr_en.htm)", 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 – THIRD 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 major international currencies:**

- Over the course of the third quarter of 1999, the US dollar depreciated by about 3½% against the euro. The Japanese yen strengthened by almost 10% and the pound sterling finished the quarter up by 1.3% against the euro. The Swiss franc was stable against the euro. In all, the nominal effective exchange of the euro was unchanged against the currencies of 13 industrialised countries.
- The nominal effective exchange rate of the euro has depreciated by about 7% since the changeover. This depreciation has brought the nominal effective exchange rate of the euro area back to about the same level as in the first half year of 1998.

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

- Together with subdued price and cost developments, exchange rate developments led to an additional gain in the cost competitiveness of euro area producers by 1% in the third quarter of 1999, on top of the 7% gain in the first half of the year. In terms of relative unit labour costs, the cost competitiveness of the EUR11 is at its most favourable level since 1985.
- Relative unit labour costs in EUR11 compared to the USA are now 22% below their 1987-98 average. Relative to Japan, they are some 13% below their 1987-98 average.

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

- Over the *last two years*, Ireland improved considerably its cost competitiveness relative to EMU partners but more recently inflationary pressures in Ireland are visible in an increase in relative output prices. The Netherlands, Belgium, Spain and Portugal saw a deterioration in cost competitiveness relative to EMU partners ranging from 1% to 4%.
- In a *longer time perspective*, intra-EUR11 cost competitiveness is considerably better than its 1987-98 average in Finland (about 10%) and Ireland (about 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 the euro area**

- Denmark has seen a substantial deterioration in its unit labour cost competitiveness against the EUR11 over the last two years (about 7%). In Greece, the improvement in cost competitiveness at the time of entry to the ERM in 1998 has been followed by a deterioration which has reduced the overall gain in cost competitiveness over the last two years to about 3%.
- In the UK, unit labour costs relative to EUR11 are now 26-34% higher than their 1987-98 average due to a marked strengthening of the pound sterling since 1996. In Sweden, cost competitiveness worsened (2½%) relative to the euro area in the third quarter of 1999 but it remains close to its 1987-98 average.

# PRICE AND COST COMPETITIVENESS

## QUARTERLY REPORT – THIRD QUARTER 1999

### I. INTERNATIONAL DEVELOPMENTS

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

Having reached a trough of 1.01 USD on 12 July, the euro recovered sharply on the back of improved economic data for Germany to reach 1.08 USD on 5 August. Further signs of economic recovery in the euro area has helped the euro retain most of these gains despite a temporary weakening in early September. The euro dipped to an intra-day low of 1.029 on 15 September before recovering to 1.067 USD at the end of the third quarter, about 9% below its level at the changeover.

The Japanese yen has strengthened markedly on international currency markets since mid-May following the release of favourable Japanese economic data for the first and second quarters of 1999. The Japanese yen was at 124.8 JPY/EUR on 30 June but rose to 112.7 JPY/EUR at the end of September. At this rate, the Japanese yen was about 15% above its level at the changeover.

Chart 1 The euro against USD and JPY since changeover  
Index 1.1.1999 = 100 (daily data)

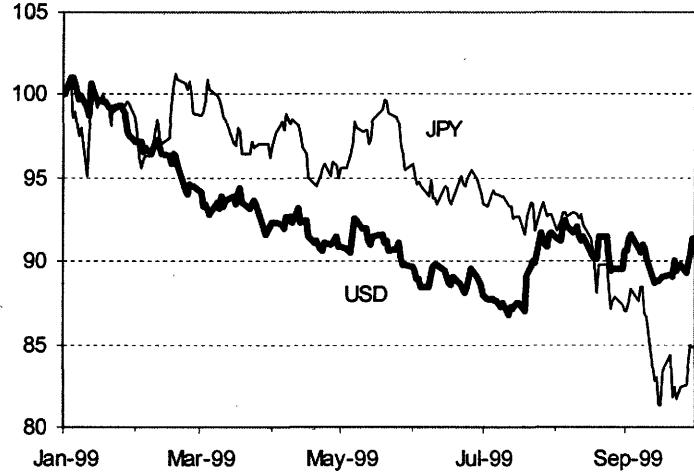
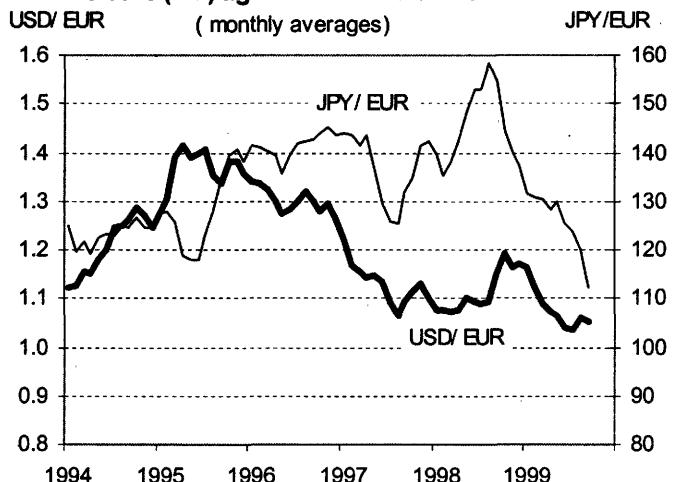


Chart 2 The euro (DM) against USD and JPY since 1994



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

Source: European Commission

The pound sterling lost some of its strength against the euro in June and July in the aftermath of monetary policy easing in the UK. Subsequently, signs that the UK economy is picking up robustly and that the interest rate cycle has turned have sent the pound higher again. By the end of September, the pound stood at 0.6475 GBP/EUR, around 8% above its level at the changeover.

The Swiss franc remained steady against the euro at close to 1.60 CHF/EUR.

Chart 3 The euro against GBP and CHF since changeover

Index 1.1.1999 = 100 (daily data)

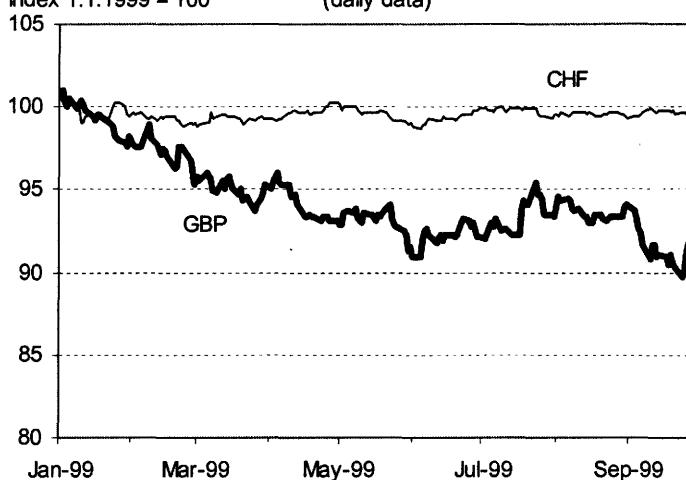
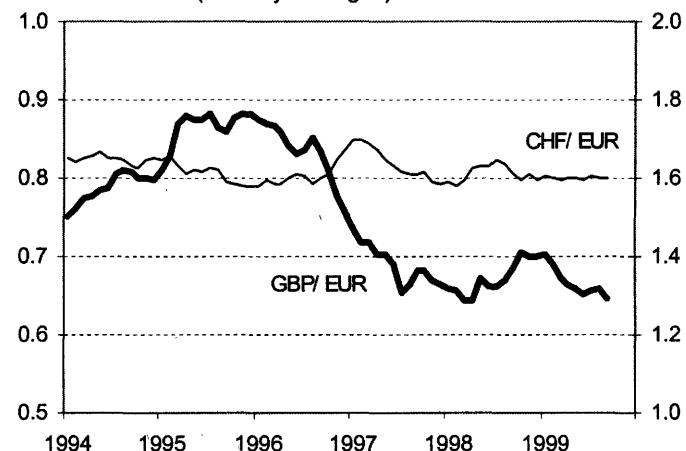


Chart 4 The euro (DM) against GBP and CHF since 1994

GBP/ EUR ( monthly averages) CHF/EUR



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 third quarter of 1999 (daily data)			Relative to the previous quarter (monthly averages)		
	30/06/99	30/09/99	% change	Average Jun-99	Average Sep-99	% change
USD/EUR	1.033	1.067	3.3%	1.038	1.050	1.2%
JPY/EUR	124.8	112.7	-9.7%	125.3	112.3	-10.4%
GBP/EUR	0.6563	0.6475	-1.3%	0.6502	0.6467	-0.5%
CHF/EUR	1.603	1.597	-0.4%	1.595	1.602	0.4%

Source: European Commission

## 2. NOMINAL EFFECTIVE EXCHANGE RATES (IC24)

After a depreciation of around 7% during the first and second quarters of the year, the euro appreciated by more than 2% in effective terms in mid-July, as measured against 13 industrialised countries (IC24 other than EUR11).

Subsequently, the nominal effective exchange rate of the euro fell back again, mainly as a consequence of the strengthening of the Japanese yen. The euro ended the third quarter at the same level as it had begun (see Table 2).

The nominal effective exchange rate of the USD depreciated by 4.3% during the third quarter as a consequence of the stronger euro/dollar exchange rate and the resurgent Japanese yen. The nominal effective exchange rate of the yen rose by no less than 13% over the third quarter (see Table 2).

Chart 5 Nominal effective exchange rates of the euro in 1999  
Index 1.1.1999 = 100 (daily data)

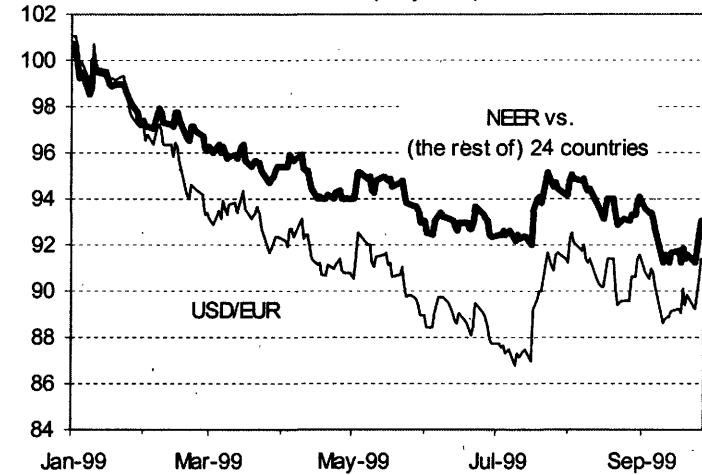
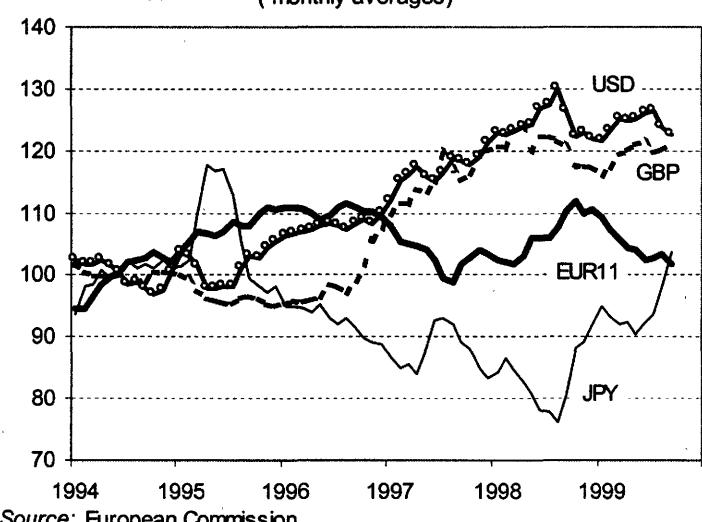


Chart 6 Nominal effective exchange rates since 1994  
1994=100 (monthly averages)



Source: European Commission

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

	During the third quarter of 1999 (daily data)			Relative to the previous quarter (monthly averages)		
	30/06/99	30/09/99	% change	Average Jun-99	Average Sep-99	% change
EUR11	102.5	102.5	0.0%	102.4	101.7	-0.8%
USD	126.6	121.1	-4.3%	126.2	122.3	-3.1%
JPY	92.5	104.5	+13.0%	92.4	103.9	+12.4%
GBP	119.9	121.7	+1.6%	121.2	121.3	0.1%

Source: European Commission

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

In the third quarter of 1999 the cost competitiveness of the euro area improved by an additional 1% on top of the 7-8% improvement registered in the first half of the year (measured by relative unit labour costs in the economy as a whole). EUR11 cost competitiveness remains at its most favourable level since 1985.

Also based on alternative measures of the real effective exchange rate – e.g. those using the GDP deflator – EUR11 price and cost competitiveness is more favourable than at any time since 1986.

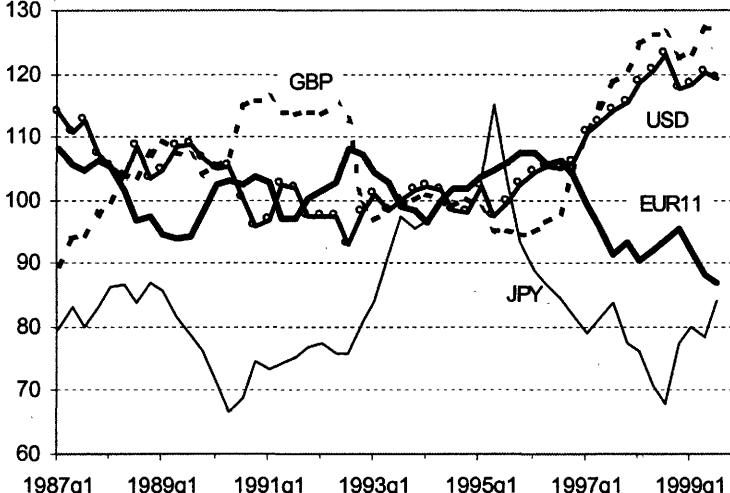
The improvement in the third quarter mainly reflects the stronger exchange rate of the Japanese yen.

The strong yen also contributed to an improvement in the cost competitiveness of the US economy and, to a lesser extent, the UK. Japanese labour cost competitiveness deteriorated by some 5.5% between the second and third quarters of 1999.

The real effective exchange rate of Japan has risen by some 16% since its low point in 1998q3 as a result of the large appreciation of the JPY. The real effective exchange rate is back at a level which corresponds to the average of the years 1987-98 (Chart 7).

In the perspective of the period since 1987, the real effective exchange rate continues to be very high and close to its peak for the USD and the GBP (Chart 7).

Chart 7 Real effective exchange rates (ULCE) since 1987  
1994=100 (vs. rest of IC23 - quarterly data)



Source: European Commission

<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, one need also 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 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.

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

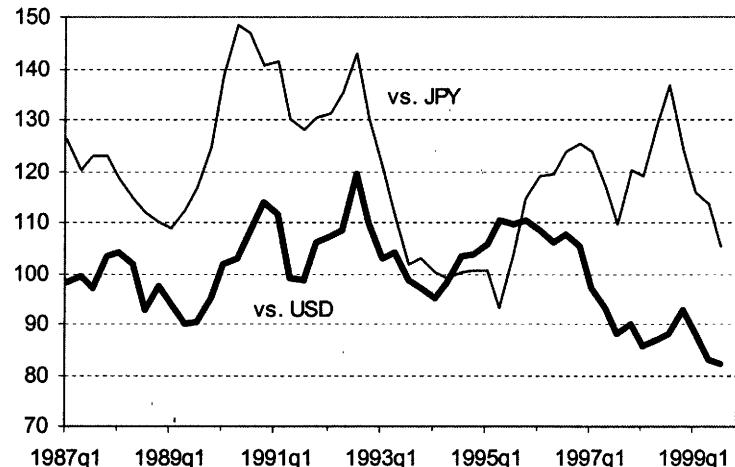
Between the last quarter of 1998 and the third quarter of 1999, the strengthening of the US dollar against the euro has led to a gain in cost competitiveness for EUR11 producers against their US competitors of around 11% (1% of which in the third quarter).

The appreciation of the Japanese yen since the fourth quarter of 1998 has led to a gain for EUR11 producers of around 20% against Japanese competitors (8% of which in the third quarter).

In a historical perspective, the unit labour cost position of euro area producers is currently very favourable relative to US producers (chart 8), better than at any time in the 1987-99 period. Unit labour costs in EUR11 relative to the United States are some 22% below their 1987-98 average (about 18% for the manufacturing sector).

After the strengthening of the Japanese yen since Autumn 1998, unit labour costs in Japan relative to EUR11 are some 13% above their 1987-98 average (almost 21% above in the manufacturing sector).

Chart 8      Real exchange rates<sup>1</sup>: EUR11 vs. USD and JPY  
1994=100      (quarterly data)



<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 share a single currency their relative price and cost competitiveness positions may change due to different movements in costs and prices. Chart 9 and Table 3 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 hence the indicators of cost and price competitiveness must be interpreted carefully.

Deviating price and cost trends among euro area Member States may 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 the level of economic development, changes in non-price competitiveness factors, or changes in underlying savings and investment patterns. An in-depth assessment of movements in real exchange rates requires a comprehensive analysis of the economic situation in each country seen in a longer time perspective. The aim of this report is merely to give a descriptive overview of movements in intra-euro area cost and price competitiveness indicators.

#### **Recent developments:**

Over the two years from the third quarter of 1997 to the third quarter of 1999 the intra-EUR11 real effective exchange rate depreciated significantly in Ireland (3½% economy-wide and 11½% in manufacturing)<sup>2</sup>. The depreciation of the Irish punt within its ERM band during 1998 outweighed the 3% revaluation of the central rate in March 1998. In addition, rapid labour productivity growth has helped restrain unit labour costs despite a pick-up in wage growth. In the course of the last year inflationary pressures in Ireland have led to an increase in the relative GDP deflator by some 1½%.

Over the last two years there was an upward movement in the real effective exchange rates of the Netherlands (by about 4½% economy-wide and by 3% in the manufacturing sector), Belgium (1% economy-wide and 4% in the manufacturing sector), Portugal (3½% economy-wide and 1½% in the manufacturing sector), and Spain (1% economy-wide and 4% in manufacturing). In the Netherlands, the upward movement in the real effective exchange rate seems appropriate in the light of historical levels and a high current account surplus at a time of strong domestic demand. In Spain and Portugal, some appreciation of the intra-EUR11 real exchange rate may be warranted as the level of economic development catches up with other euro area countries and as they benefit from large inward capital flows.

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<sup>2</sup> The changes in relative ULCE and ULCM for Italy relative to any period before 1998 are distorted by the 1998 tax reform which shifted taxation from labour costs to value added but did not significantly change competitiveness.

TABLE 3: RELATIVE COST AND PRICE INDICATORS OF INDIVIDUAL COUNTRIES RELATIVE TO THE EURO AREA (EUR11)

	Over the last year (99 Q3 / 98 Q3)			Over the last two years (99 Q3 / 97 Q3)			Relative to 1987-98 average (99 Q3 / Average 87-98)		
<b>Euro area Member States</b>									
% Change	ULCE	ULCM	PGDP	ULCE	ULCM	PGDP	ULCE	ULCM	PGDP
BLEU	-0.4	-0.5	-0.2	1.1	3.8	0.3	4.5	5.0	1.5
Germany	0.4	1.2	-0.6	-0.5	-2.8	-1.1	-0.4	1.9	0.2
Spain	-0.2	0.1	0.6	1.1	4.1	0.9	-3.1	5.5	-3.7
France	-0.7	-0.6	-0.6	0.9	2.9	-0.6	2.5	-1.2	-1.5
Ireland	0.4	-4.6	1.3	-3.5	-11.5	-0.8	-7.1	-20.9	2.1
Italy	-0.5	-0.6	0.5	-4.2	-1.7	1.0	-6.5	-2.3	-0.2
Netherlands	1.7	1.5	0.8	4.5	2.9	1.6	3.7	-2.4	0.4
Austria	-0.2	-1.1	0.5	0.7	0.5	0.5	0.6	-0.7	1.9
Portugal	1.1	0.6	2.0	3.4	1.5	3.0	18.6	11.8	16.3
Finland	-1.1	-2.6	-0.4	0.5	-3.0	-1.6	-11.9	-16.6	-9.4
<b>Non-euro area Member States</b>									
% Change	ULCE	ULCM	PGDP	ULCE	ULCM	PGDP	ULCE	ULCM	PGDP
Denmark	2.3	2.1	1.3	6.9	7.9	2.2	8.1	11.6	2.6
Greece	1.8	0.9	3.2	-2.4	-3.4	-0.9	16.0	10.4	14.6
Sweden	2.2	3.1	2.1	2.2	2.4	-2.9	2.4	-4.8	-5.3
UK	4.9	4.7	3.9	9.0	9.3	4.2	26.0	34.0	18.3
<b>Other countries</b>									
% Change	ULCE	ULCM	PGDP	ULCE	ULCM	PGDP	ULCE	ULCM	PGDP
USA	7.0	7.4	6.6	7.1	7.8	3.5	21.9	17.6	14.4
Japan	30.0	26.9	28.3	4.1	7.7	4.5	12.8	20.7	8.0

Note: the numbers for relative ULCE and ULCM in Italy compared to periods before 1998 are distorted by the 1998 tax reform.

Source : European Commission

- (1) ULCE = Based on net 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.

**Relative to the 1987-98 period:** Relative price and cost competitiveness compared to euro area partners is currently considerably worse than the 1987-98 average in **Belgium** (about 5%) and **Portugal** (about 15%). It is significantly better than the 1987-98 average in **Finland** (10-15%) and **Ireland** (about 7% for ULCE). In the remaining countries, the relative price and cost competitiveness indices are either close to their 1987-98 average (Germany, France, Italy<sup>3</sup>, Austria) or convey contrasting signals with some measures above and some below their 1987-98 average (Spain and Netherlands).

The deviation from the 1987-98 average in the case of **Belgium** underlines the need to maintain moderate labour cost increases in that country. Belgium's current account surplus indicates that the country's competitiveness is not necessarily poor. However, to the extent competitiveness has been maintained through a process of productivity gains and labour shedding in response to high labour costs, it has contributed to Belgium's poor employment performance. In the medium term, some improvement in relative costs may be called for to achieve a marked increase in employment without jeopardising external balance.

<sup>3</sup> When account is taken of the 1998 tax reform.

The large deviation from the 1987-98 average in the case of *Portugal* may be related to the country's catching-up process. In accordance with the so-called Balassa-Samuelson effect, catching-up countries tend to experience real exchange rate appreciation for broad price and cost measures covering both tradeable and non-tradeable sectors. Relative unit labour costs in the manufacturing sector – which produces tradeables – have been broadly constant since 1992. The real appreciation over the 1987-91 period may reflect an equilibrium response to the opening of the economy upon the accession to the European Community in 1986.

*Ireland* is unusual in that it has had a trend real exchange rate depreciation during the last decade of its catching-up process. The large current account surplus at a time of very strong domestic demand is indicative of a highly favourable competitiveness position. Together, these factors suggest that there may be scope for an appreciation of the real effective exchange rate relative to EMU partners in the coming years.

The large deviation from the 1987-98 average in the case of *Finland* may reflect the necessary 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. As the process of raising resource utilisation and reducing external debt progresses the real exchange rate relative to EMU partners may gradually increase in the medium term.

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

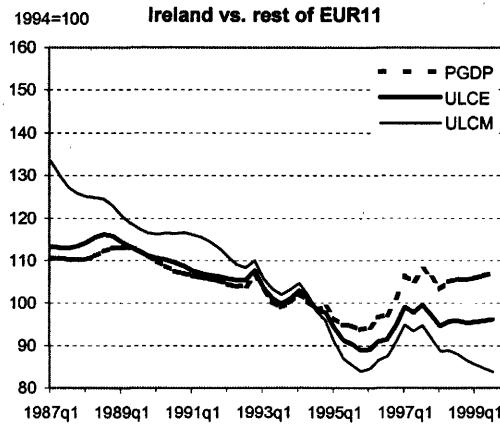
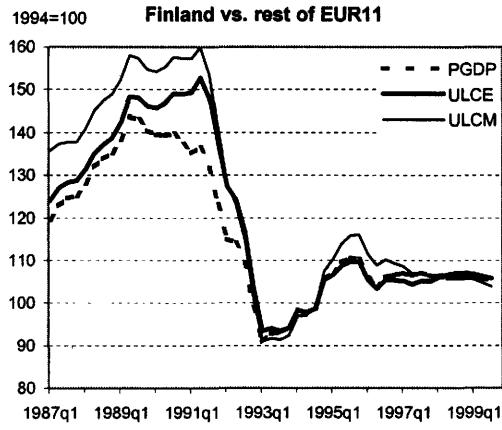
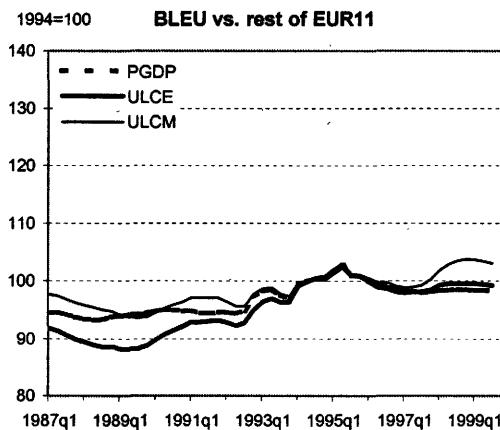
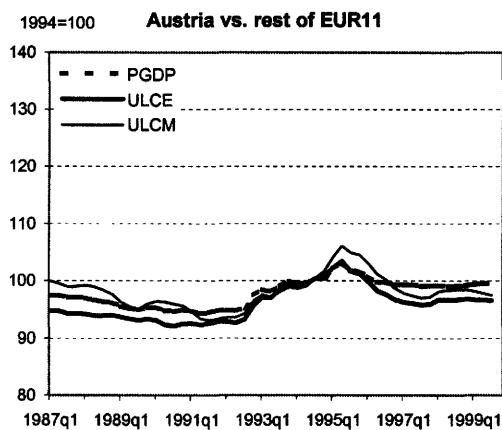
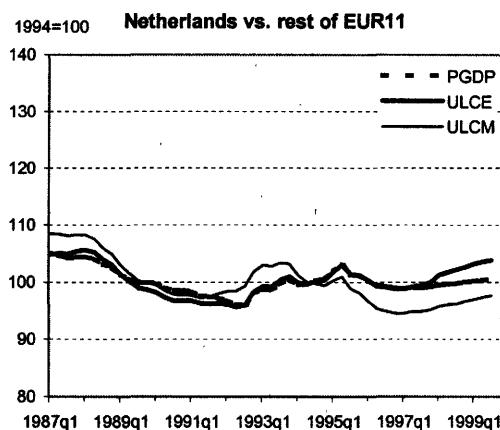
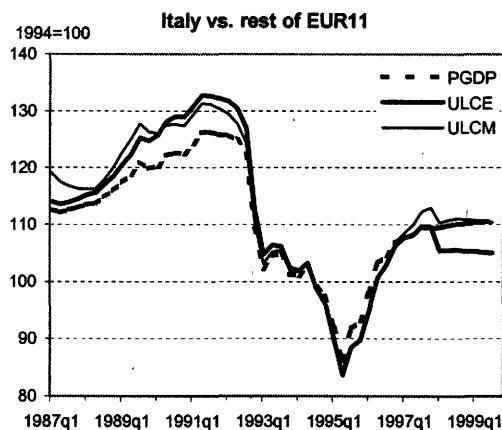
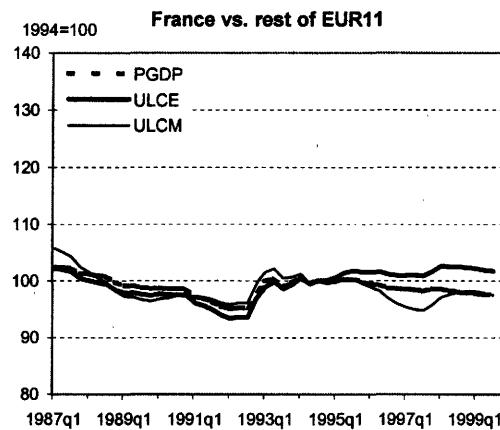
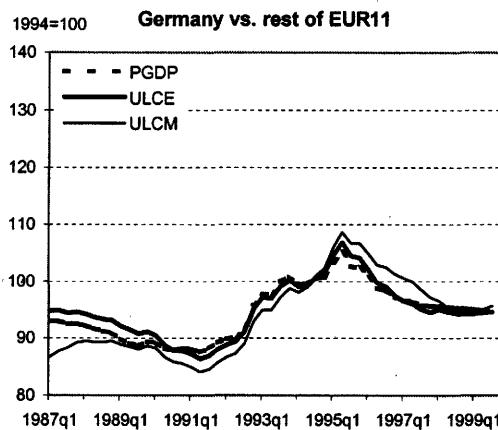
Notwithstanding its stable exchange rate against the EUR11 currencies, *Denmark* has seen a very pronounced deterioration in its unit labour cost competitiveness over the last two years (by about 7% economy-wide and 8% in the manufacturing industry). This reflects both faster wage increases and lower productivity growth rates in Denmark than in the euro area.

After several years of real exchange rate appreciation, the devaluation of the *Greek* drachma upon its entry into the ERM in March 1998 resulted in a significant depreciation in real effective terms. However, due to the strength of the Greek drachma in the new ERM and higher price and cost increases, the real effective exchange rate of the Greek drachma against EUR11 has since moved up again. This has reduced the gain in cost competitiveness over the last two years to about 2½% (3½% for manufacturing unit labour costs).

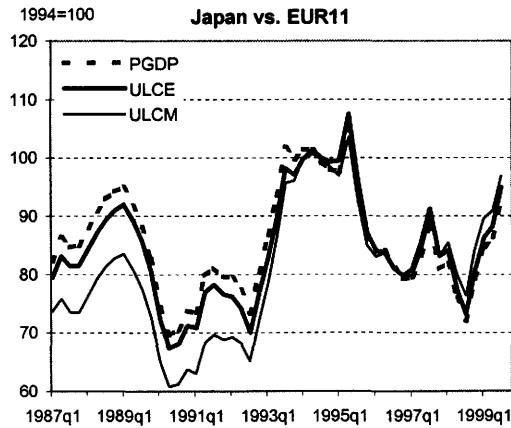
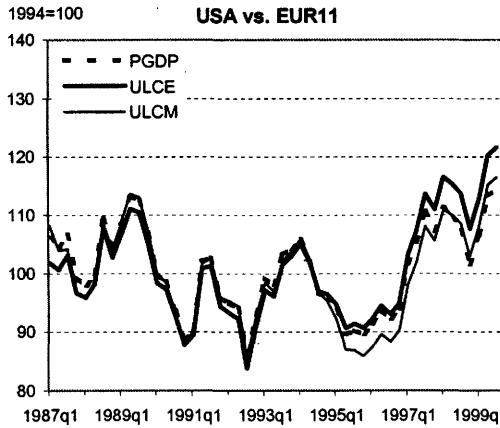
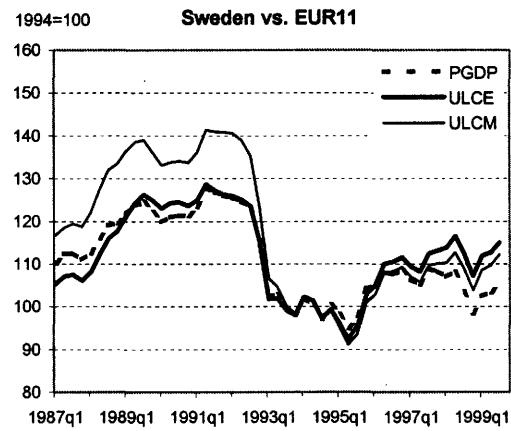
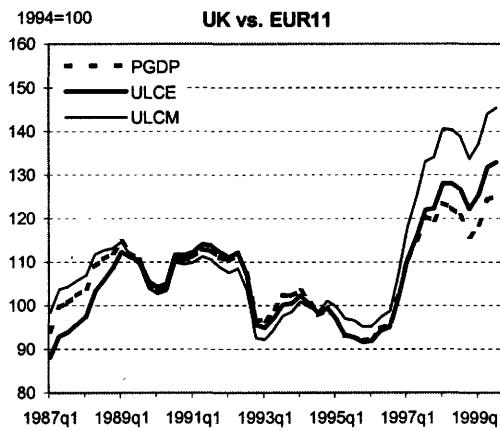
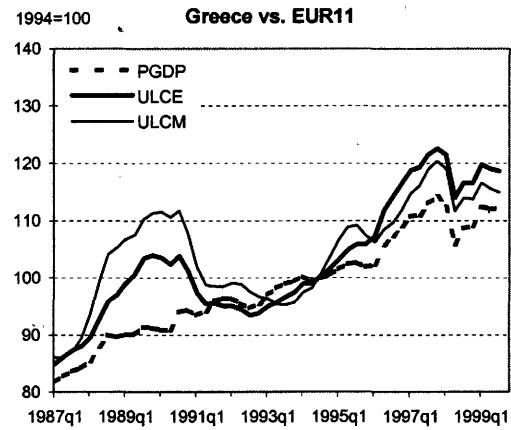
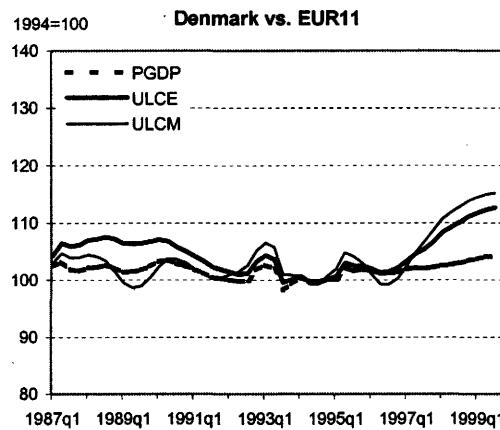
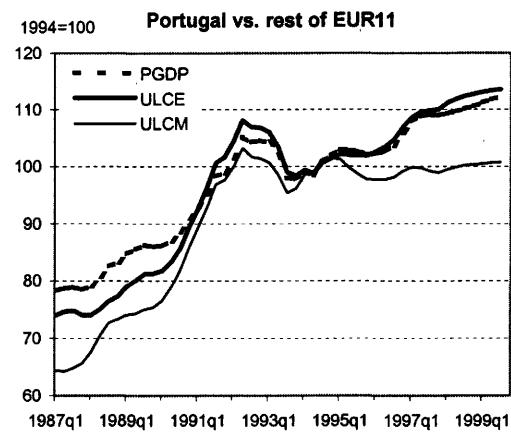
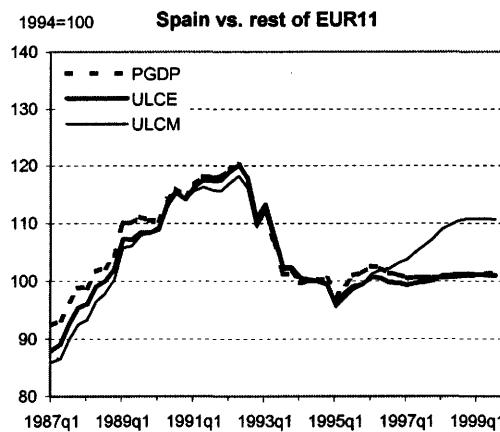
The strengthening of the pound sterling since 1996 has led to a marked deterioration in the price and cost competitiveness of the *United Kingdom* relative to the euro area. Relative unit labour costs are 26% higher than their 1987-98 average for the economy as a whole and 34% higher in the manufacturing industry. After a temporary improvement in the second half of 1998, the strengthening of the GBP against the euro led to a renewed deterioration in the course of 1999.

In *Sweden*, cost and price competitiveness worsened relative to the euro area over the last three quarters, mainly because the Swedish krona strengthened in the aftermath of the international financial turmoil in Autumn 1998 and because of a strong pick-up in the Swedish economy. In real effective terms, the krona remains close to its average over the 1987-98 period relative to the EUR11.

**Chart 9: price and cost indicators for individual countries relative to EUR11**



**Chart 9 (contd): price and cost indicators for individual countries relative to EUR11**



**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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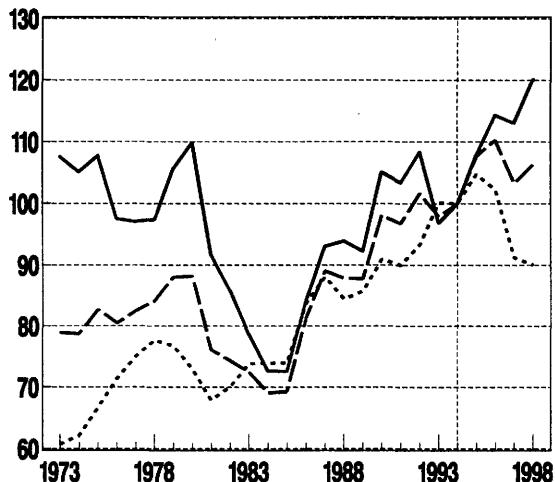
# EUR15 and EUR11

## Trade-weighted currency indices

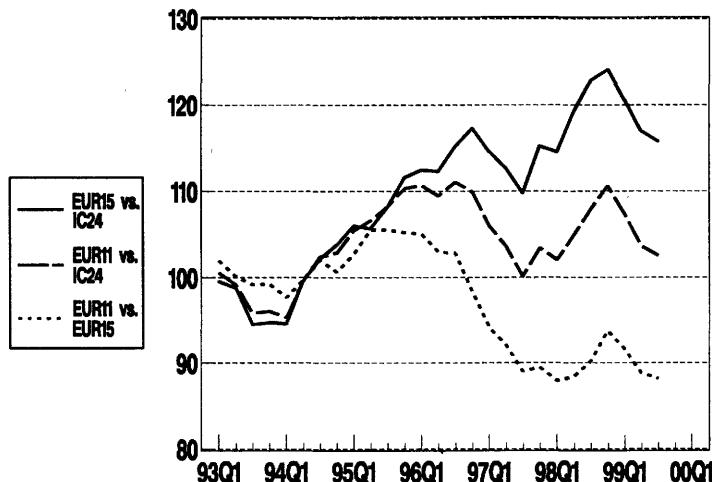
Annual data Index (1994=100)			Quarterly data Index (1994=100)			Monthly data monthly % change					
	EUR15 vs. IC24	EUR11 vs. IC24	EUR11 vs. EUR15		EUR15 vs. IC24	EUR11 vs. IC24	EUR11 vs. EUR15		EUR15 vs. IC24	EUR11 vs. IC24	EUR11 vs. EUR15
86	84.2	81.3	83.7	96Q3	115.2	111.1	102.8	SEP98	2.3	2.4	1.8
87	93.1	89.1	88.1	96Q4	117.3	109.9	98.3	OCT98	0.2	1.3	2.6
88	93.9	87.9	84.4	97Q1	114.6	106.0	94.2	NOV98	-1.9	-1.5	-0.7
89	92.3	87.8	85.7	97Q2	112.7	103.6	92.2	DEC98	0.4	0.4	0.4
90	105.1	98.1	90.9	97Q3	109.8	100.1	89.0	JAN99	-1.0	-0.9	-0.6
91	103.4	96.8	90.0	97Q4	115.2	103.4	89.5	FEB99	-1.6	-2.0	-1.8
92	108.3	101.6	93.3	98Q1	114.6	102.0	87.9	MAR99	-1.1	-1.5	-1.6
93	96.9	97.9	100.1	98Q2	119.2	104.9	88.4	APR99	-1.1	-1.0	-0.6
94	100.0	100.0	100.0	98Q3	122.9	107.9	90.2	MAY99	-0.0	-0.3	-0.5
95	107.9	107.6	104.7	98Q4	124.1	110.6	93.7	JUN99	-1.6	-1.6	-1.1
96	114.3	110.3	102.3	99Q1	120.5	107.3	91.6	JUL99	-0.2	0.2	0.6
97	113.1	103.3	91.2	99Q2	117.0	103.6	88.8	AUG99	1.2	0.8	0.3
98	120.1	106.3	90.0	99Q3	115.8	102.6	88.2	SEP99	-1.4	-1.7	-1.6

## Trade-weighted currency indices

Annual data (index 1994=100)

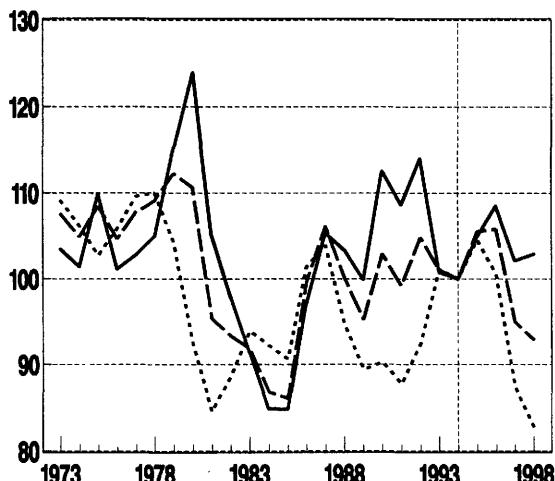


Quarterly data (Index 1994=100)

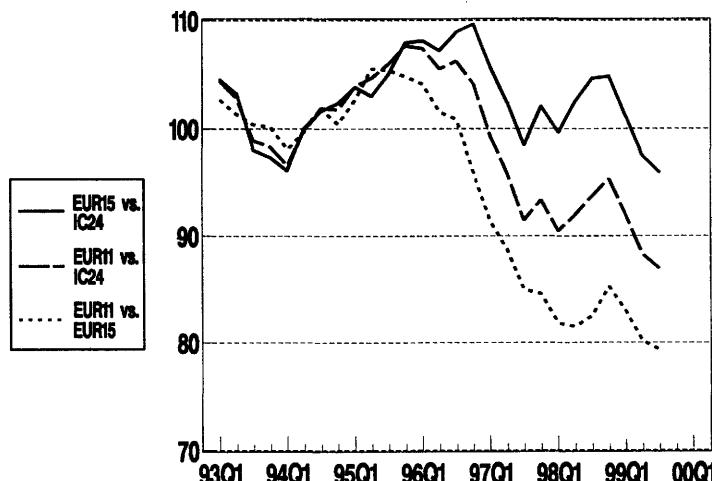


## Relative cost indicators (based on ULCE)

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	96Q3	109.4	109.2	109.9	108.9	111.2
87	103.3	101.5	99.0	105.3	110.3	96Q4	110.5	110.3	111.0	109.7	112.0
88	102.0	100.5	97.5	103.4	108.3	97Q1	107.0	106.7	107.7	105.7	108.1
89	98.5	97.4	95.7	99.9	102.8	97Q2	104.2	103.9	105.2	102.5	104.9
90	110.4	110.2	107.4	112.5	116.4	97Q3	100.5	100.2	101.7	98.5	100.8
91	107.7	107.6	105.0	108.6	112.5	97Q4	104.4	104.2	105.8	102.1	104.0
92	111.9	112.4	109.2	114.0	116.1	98Q1	102.6	102.6	104.3	99.7	101.2
93	99.2	99.6	100.0	100.7	101.9	98Q2	105.6	105.7	107.6	102.5	103.6
94	100.0	100.0	100.0	100.0	100.0	98Q3	107.8	108.1	110.2	104.6	105.4
95	105.0	105.2	106.8	104.9	108.0	98Q4	108.0	108.4	110.8	104.8	105.5
96	108.9	108.8	109.7	108.5	111.0	99Q1	104.1	104.6	107.2	101.1	101.8
97	104.0	103.7	105.1	102.1	104.4	99Q2	100.3	101.0	103.8	97.5	98.4
98	106.0	106.2	108.2	102.9	103.9	99Q3	98.7	99.5	102.6	96.0	97.1

## 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	96Q3	107.0	106.7	107.8	106.2	106.8
87	102.9	101.0	100.4	106.1	104.4	96Q4	105.3	104.9	106.7	104.1	104.3
88	98.6	96.8	97.8	100.2	99.6	97Q1	100.9	100.5	103.0	99.3	99.0
89	96.1	94.0	96.0	95.2	96.3	97Q2	98.0	97.5	100.8	95.9	95.2
90	104.0	102.5	104.0	102.9	105.0	97Q3	94.0	93.6	97.5	91.5	90.5
91	99.9	99.1	101.5	99.2	101.5	97Q4	96.4	96.1	100.8	93.3	91.9
92	104.1	103.9	105.5	104.8	106.2	98Q1	94.5	94.2	99.4	90.4	88.8
93	99.4	99.6	100.1	101.1	102.4	98Q2	96.5	96.4	102.1	92.0	90.1
94	100.0	100.0	100.0	100.0	100.0	98Q3	98.6	98.6	104.7	93.7	91.6
95	105.5	105.7	106.3	105.5	106.2	98Q4	100.5	100.5	106.9	95.3	93.2
96	106.4	106.2	107.3	105.8	106.4	99Q1	97.0	97.1	103.2	91.9	89.9
97	97.3	96.9	100.5	95.0	94.1	99Q2	93.2	93.3	99.2	88.3	86.4
98	97.5	97.4	103.3	92.8	90.9	99Q3	91.8	92.0	97.7	86.9	85.2

## 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	96Q3	101.8	101.3	102.9	100.9	99.2
87	100.8	98.9	101.1	103.9	94.9	96Q4	97.2	96.6	99.2	96.0	93.7
88	94.0	91.9	97.6	94.7	88.4	97Q1	92.9	92.3	96.0	91.4	88.3
89	93.0	89.8	95.9	89.4	88.0	97Q2	90.7	90.1	95.0	88.8	84.9
90	94.6	91.9	98.0	90.3	90.0	97Q3	87.5	86.9	92.8	85.0	80.8
91	90.1	88.6	96.1	87.7	87.6	97Q4	87.8	87.2	94.3	84.6	80.1
92	93.4	92.4	99.0	92.3	92.4	98Q1	86.2	85.6	93.6	81.8	77.5
93	99.9	99.7	100.2	101.1	102.2	98Q2	86.5	86.1	94.8	81.5	77.3
94	100.0	100.0	100.0	100.0	100.0	98Q3	88.2	87.7	96.9	82.5	78.3
95	104.3	104.4	103.8	104.6	102.2	98Q4	91.5	90.9	100.4	85.3	80.9
96	101.3	100.9	102.1	100.6	98.8	99Q1	89.2	88.6	97.5	82.9	78.7
97	89.7	89.1	94.5	87.4	83.4	99Q2	86.4	85.7	93.8	80.1	76.1
98	88.1	87.6	96.4	82.8	78.5	99Q3	85.6	84.9	92.4	79.3	75.3

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

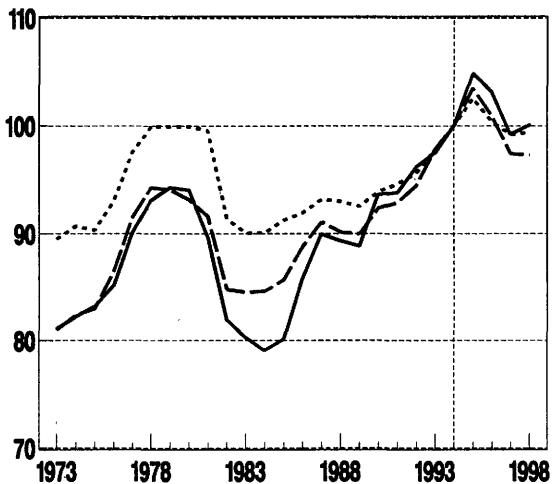
# BLEU – euro (before 1999: franc)

## Trade-weighted currency indices

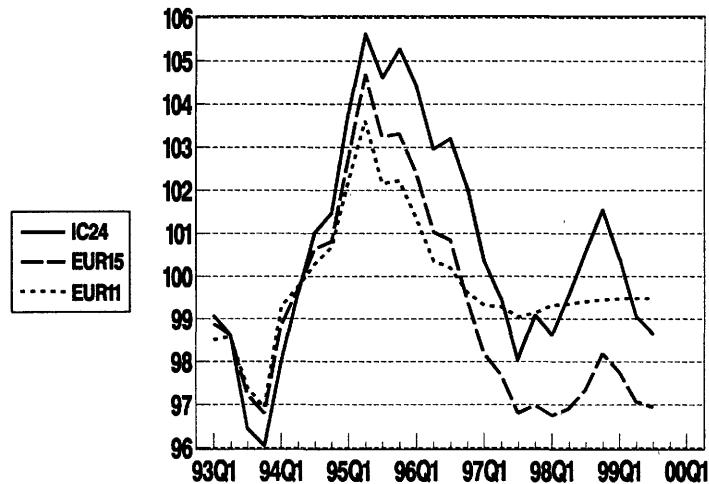
Annual data index (1994=100)				Quarterly data index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	85.8	88.8	91.9	96Q3	103.2	100.8	100.2	SEP98	0.8	0.4	0.0
87	90.0	91.1	93.2	96Q4	102.1	99.4	99.6	OCT98	0.5	0.6	0.0
88	89.3	90.2	93.0	97Q1	100.4	98.2	99.3	NOV98	-0.5	-0.1	0.0
89	88.9	90.0	92.5	97Q2	99.5	97.7	99.3	DEC98	0.1	0.1	0.0
90	93.6	92.4	93.9	97Q3	98.0	96.8	99.0	JAN99	-0.3	-0.1	0.0
91	93.8	92.9	94.6	97Q4	99.1	97.0	99.1	FEB99	-0.7	-0.4	-0.0
92	96.2	94.5	95.6	98Q1	98.6	96.7	99.3	MAR99	-0.6	-0.4	0.0
93	97.5	97.9	97.9	98Q2	99.6	96.9	99.3	APR99	-0.4	-0.1	-0.0
94	100.0	100.0	100.0	98Q3	100.6	97.4	99.4	MAY99	-0.1	-0.1	0.0
95	104.8	103.5	102.6	98Q4	101.5	98.2	99.5	JUN99	-0.6	-0.2	-0.0
96	103.2	100.9	100.4	99Q1	100.4	97.8	99.5	JUL99	0.1	0.1	0.0
97	99.2	97.4	99.2	99Q2	99.1	97.1	99.5	AUG99	0.3	-0.1	-0.0
98	100.1	97.3	99.4	99Q3	98.6	96.9	99.5	SEP99	-0.7	-0.4	0.0

## Trade-weighted currency indices

Annual data (index 1994=100)

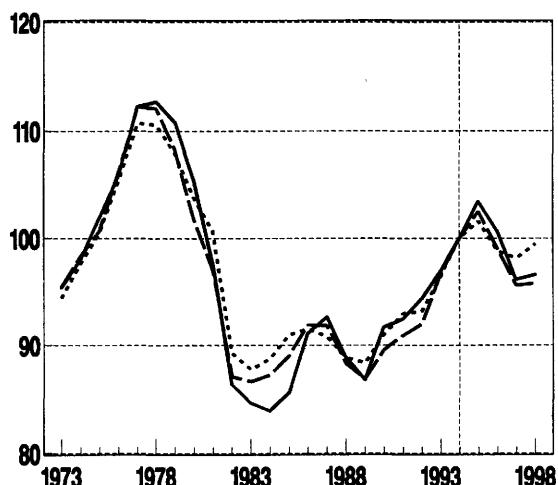


Quarterly data (index 1994=100)

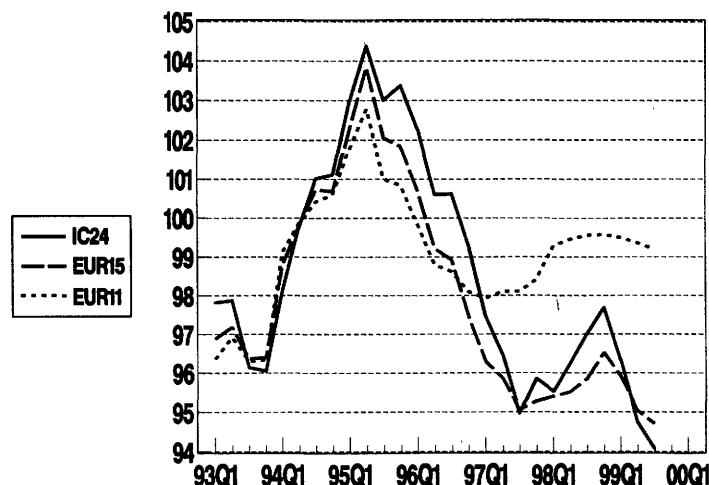


## Relative cost indicators (based on ULCE)

Annual data (index 1994=100)



Quarterly data (index 1994=100)



# 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	96Q3	102.3	101.1	102.9	100.6	101.7
87	97.7	94.4	95.1	92.6	98.0	96Q4	101.1	99.8	102.8	99.3	100.2
88	94.9	92.2	95.2	88.8	94.7	97Q1	99.2	98.0	102.0	97.5	98.0
89	94.0	91.9	96.4	86.8	92.3	97Q2	98.2	97.0	101.9	96.5	96.8
90	97.8	95.4	99.1	91.7	96.8	97Q3	96.5	95.5	100.9	95.0	95.4
91	96.3	94.0	97.4	92.5	97.3	97Q4	97.4	96.5	102.1	95.9	96.8
92	97.0	96.1	98.5	94.4	98.0	98Q1	96.7	95.9	101.5	95.5	97.1
93	98.0	97.8	97.7	97.0	99.1	98Q2	97.4	96.7	102.3	96.3	98.4
94	100.0	100.0	100.0	100.0	100.0	98Q3	98.2	97.6	103.1	97.0	99.7
95	104.2	103.4	102.7	103.4	103.2	98Q4	98.9	98.4	104.0	97.7	100.6
96	102.3	101.1	102.4	100.7	101.6	99Q1	97.7	97.1	102.7	96.3	99.2
97	97.8	96.8	101.7	96.2	96.8	99Q2	96.2	95.6	101.3	94.8	97.5
98	97.8	97.2	102.7	96.6	98.9	99Q3	95.7	95.0	100.9	94.1	96.6

## 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	96Q3	100.5	99.3	101.0	98.9	99.6
87	97.2	94.3	95.5	91.8	96.3	96Q4	99.1	97.9	100.7	97.5	97.9
88	94.6	92.1	95.9	88.3	93.3	97Q1	97.8	96.7	100.5	96.3	96.4
89	94.4	92.5	97.4	86.8	91.9	97Q2	97.3	96.2	100.9	95.9	95.7
90	96.0	93.6	97.9	89.8	94.0	97Q3	96.3	95.3	100.5	95.1	95.1
91	94.9	92.6	96.5	90.9	95.0	97Q4	96.4	95.5	100.9	95.3	95.9
92	94.9	94.0	96.9	92.0	95.2	98Q1	96.1	95.3	100.7	95.4	96.6
93	98.0	97.8	97.7	96.7	98.6	98Q2	96.2	95.5	100.7	95.5	97.5
94	100.0	100.0	100.0	100.0	100.0	98Q3	98.5	95.9	101.1	95.8	98.4
95	103.2	102.4	101.4	102.5	101.7	98Q4	97.3	96.6	101.9	96.5	99.3
96	100.6	99.4	100.6	99.1	99.6	99Q1	96.8	96.1	101.3	95.9	98.7
97	97.0	95.9	100.7	95.6	95.8	99Q2	96.1	95.3	100.6	95.0	97.7
98	96.5	95.8	101.1	95.8	98.0	99Q3	95.9	95.0	100.4	94.7	97.1

## 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	95.5	93.3	96.2	91.5	97.3	96Q3	100.1	99.0	100.5	98.6	99.7
87	96.9	94.2	95.2	90.8	97.0	96Q4	99.6	98.4	100.8	98.1	99.1
88	95.6	93.4	96.1	88.8	95.2	97Q1	99.3	98.2	101.4	97.9	98.8
89	95.6	94.1	98.0	88.3	93.8	97Q2	99.2	98.2	102.0	98.1	98.9
90	96.8	94.9	98.1	91.0	95.5	97Q3	98.9	98.0	102.0	98.1	99.2
91	96.7	94.6	97.1	93.0	97.1	97Q4	99.0	98.1	102.1	98.4	100.2
92	96.1	95.2	97.0	93.2	96.3	98Q1	99.1	98.3	102.1	99.3	101.8
93	98.1	97.8	97.6	96.5	98.1	98Q2	99.0	98.4	101.9	99.5	102.8
94	100.0	100.0	100.0	100.0	100.0	98Q3	99.0	98.4	101.8	99.6	103.5
95	102.3	101.5	100.6	101.6	101.3	98Q4	99.1	98.4	101.8	99.6	103.7
96	100.3	99.1	100.2	98.8	99.7	99Q1	99.1	98.4	101.9	99.5	103.7
97	99.1	98.1	101.9	98.1	99.3	99Q2	99.0	98.3	102.0	99.4	103.4
98	99.0	98.4	101.9	99.5	103.0	99Q3	99.0	98.3	102.2	99.2	103.0

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

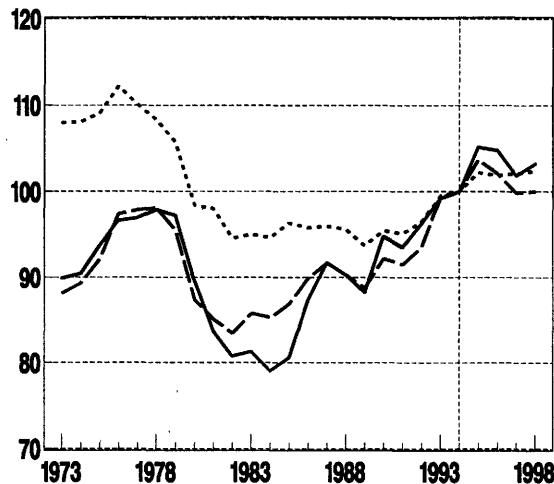
# Denmark – krone

## Trade-weighted currency indices

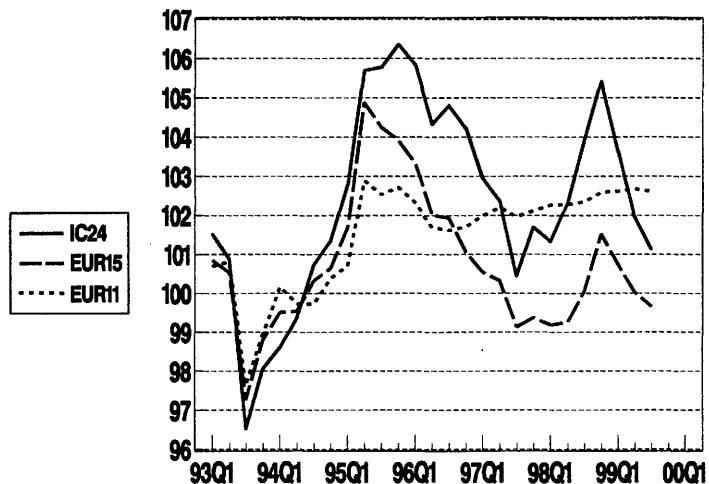
Annual data index (1994=100)				Quarterly data index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	87.3	89.9	95.8	96Q3	104.8	101.9	101.6	SEP98	1.1	0.6	0.1
87	91.7	91.7	96.0	96Q4	104.2	101.1	101.7	OCT98	0.8	1.0	0.2
88	90.3	90.3	95.6	97Q1	102.9	100.5	102.0	NOV98	-0.8	-0.2	0.0
89	88.3	88.8	93.7	97Q2	102.4	100.3	102.2	DEC98	0.2	0.1	-0.1
90	94.8	92.2	95.5	97Q3	100.5	99.1	102.0	JAN99	-0.8	-0.4	-0.0
91	93.5	91.5	95.1	97Q4	101.7	99.4	102.1	FEB99	-0.8	-0.5	0.1
92	96.3	93.5	96.5	98Q1	101.3	99.2	102.3	MAR99	-0.6	-0.3	0.0
93	99.2	99.3	99.5	98Q2	102.3	99.3	102.3	APR99	-0.6	-0.2	-0.0
94	100.0	100.0	100.0	98Q3	103.9	100.0	102.3	MAY99	-0.1	-0.1	-0.0
95	105.1	103.7	102.2	98Q4	105.4	101.5	102.6	JUN99	-0.8	-0.3	0.0
96	104.8	102.1	101.8	99Q1	103.6	100.7	102.6	JUL99	-0.1	-0.0	-0.1
97	101.9	99.8	102.1	99Q2	102.0	100.0	102.7	AUG99	0.3	0.1	0.0
98	103.2	100.0	102.4	99Q3	101.1	99.7	102.6	SEP99	-0.9	-0.4	0.1

## Trade-weighted currency indices

Annual data (index 1994=100)

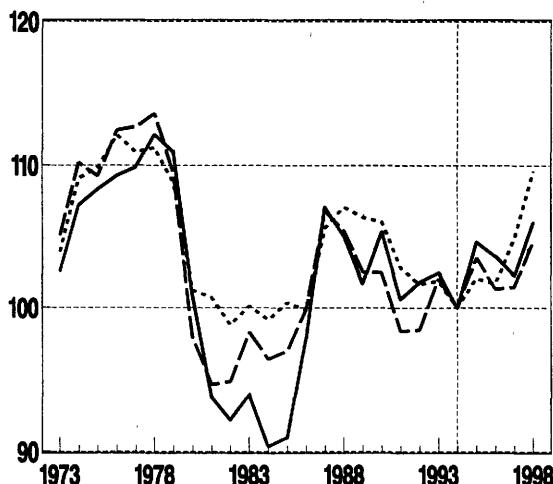


Quarterly data (index 1994=100)

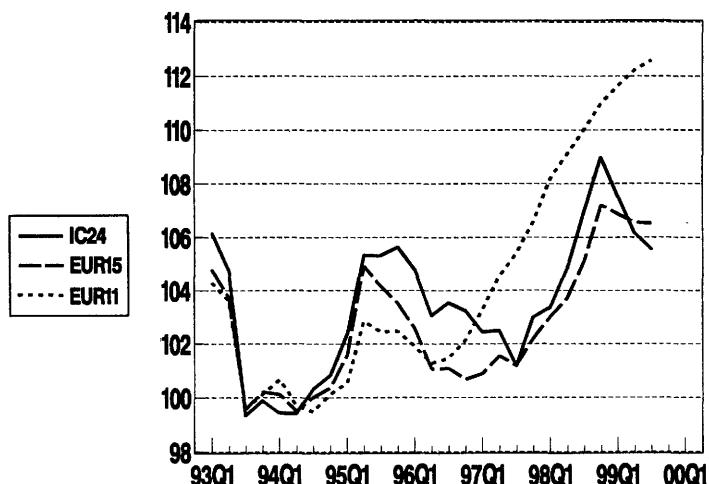


## Relative cost indicators (based on ULCE)

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	96Q3	102.3	103.4	101.7	103.5	101.3
87	102.8	101.5	97.5	107.1	104.0	96Q4	101.6	102.8	101.7	103.2	101.3
88	101.2	99.1	94.0	105.1	100.4	97Q1	100.3	101.5	101.1	102.4	101.3
89	99.0	97.0	93.1	101.7	95.1	97Q2	99.7	100.9	101.1	102.5	102.3
90	103.7	102.3	99.2	105.4	103.1	97Q3	97.8	99.0	99.5	101.2	101.7
91	99.4	98.5	97.6	100.8	99.2	97Q4	99.0	100.3	100.8	103.0	104.1
92	99.5	100.0	102.6	101.8	102.7	98Q1	98.7	100.0	100.3	103.4	104.7
93	99.8	100.3	101.3	102.5	104.8	98Q2	99.7	101.1	101.2	104.8	106.4
94	100.0	100.0	100.0	100.0	100.0	98Q3	101.4	102.8	102.7	107.0	108.6
95	103.3	103.9	101.8	104.6	106.3	98Q4	103.1	104.5	104.3	109.0	110.6
96	102.3	103.4	101.5	103.7	102.0	99Q1	101.6	102.9	102.6	107.5	109.1
97	99.2	100.4	100.6	102.3	102.4	99Q2	100.2	101.4	101.2	106.2	107.6
98	100.7	102.1	102.1	106.0	107.6	99Q3	99.6	100.7	100.5	105.6	106.9

## 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	98.8	98.6	98.8	99.9	94.8	96Q3	99.8	101.1	99.5	101.1	98.5
87	102.3	101.7	98.5	106.8	101.9	96Q4	98.9	100.3	99.4	100.7	98.5
88	101.2	99.5	95.3	105.4	99.0	97Q1	98.5	99.8	99.6	100.9	99.4
89	99.8	98.1	95.0	102.5	94.6	97Q2	98.3	99.7	100.0	101.5	101.0
90	101.2	100.0	98.2	102.5	99.0	97Q3	97.2	98.6	99.1	101.2	101.4
91	97.5	96.7	96.9	98.3	95.8	97Q4	97.5	98.9	99.3	102.2	103.1
92	96.7	97.2	100.8	98.5	98.6	98Q1	97.5	98.8	99.0	103.0	104.2
93	99.8	100.3	101.5	102.1	103.8	98Q2	97.7	99.0	98.9	103.7	105.2
94	100.0	100.0	100.0	100.0	100.0	98Q3	98.8	100.0	99.6	105.1	106.7
95	102.1	102.6	100.2	103.5	104.5	98Q4	100.5	101.6	101.1	107.2	108.8
96	99.9	101.1	99.3	101.3	99.3	99Q1	100.0	101.1	100.4	106.9	108.4
97	97.9	99.2	99.5	101.5	101.2	99Q2	99.6	100.6	99.8	106.6	107.9
98	98.6	99.8	99.6	104.7	106.2	99Q3	99.5	100.4	99.5	106.5	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	99.5	100.2	99.8	99.8	97.8	96Q3	99.8	101.2	99.2	101.5	99.2
87	102.0	102.2	98.8	105.6	103.8	96Q4	99.9	101.4	99.8	102.1	100.3
88	103.0	102.2	96.7	107.1	103.2	97Q1	100.3	101.8	100.6	103.3	102.5
89	102.2	101.7	97.0	106.4	99.3	97Q2	100.6	102.1	101.1	104.5	104.8
90	103.1	103.0	99.4	106.1	103.1	97Q3	100.5	102.0	100.9	105.4	106.7
91	101.1	100.9	98.8	102.8	100.8	97Q4	100.8	102.2	100.8	106.6	108.6
92	99.5	100.4	101.7	101.7	102.5	98Q1	101.1	102.5	100.6	108.2	110.6
93	100.0	100.5	101.4	101.9	103.5	98Q2	101.3	102.6	100.3	109.1	111.8
94	100.0	100.0	100.0	100.0	100.0	98Q3	101.6	102.9	100.2	110.0	112.8
95	100.8	101.4	99.4	102.1	103.4	98Q4	102.2	103.4	100.5	111.0	113.8
96	100.0	101.3	99.2	101.7	100.0	99Q1	102.5	103.7	100.8	111.7	114.4
97	100.5	102.0	100.9	104.9	105.6	99Q2	102.9	104.0	101.1	112.2	114.9
98	101.5	102.8	100.4	109.6	112.3	99Q3	103.2	104.2	101.4	112.6	115.2

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

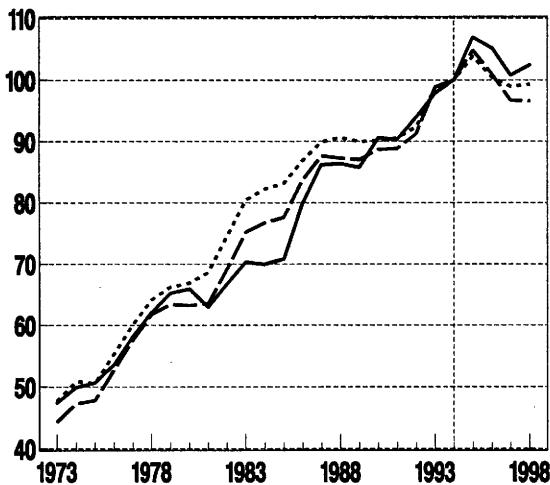
# Germany – euro (before 1999: mark)

## Trade-weighted currency indices

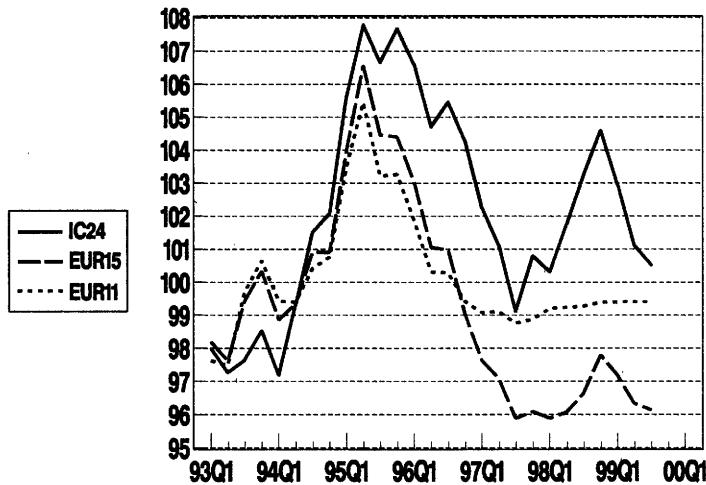
Annual data index (1994=100)				Quarterly data index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	79.9	83.7	86.9	96Q3	105.5	101.0	100.3	SEP98	1.3	0.6	0.1
87	86.2	87.7	89.9	96Q4	104.3	99.0	99.4	OCT98	0.7	0.8	0.0
88	86.4	87.3	90.6	97Q1	102.2	97.6	99.1	NOV98	-0.8	-0.2	0.0
89	85.8	87.0	90.0	97Q2	101.1	97.1	99.1	DEC98	0.2	0.1	0.0
90	90.6	88.7	90.2	97Q3	99.1	95.9	98.8	JAN99	-0.5	-0.2	-0.0
91	90.4	88.8	90.6	97Q4	100.8	96.1	98.9	FEB99	-1.0	-0.5	0.0
92	94.0	91.3	92.4	98Q1	100.3	95.9	99.2	MAR99	-0.8	-0.5	-0.0
93	97.9	98.9	98.9	98Q2	101.8	96.1	99.2	APR99	-0.5	-0.2	0.0
94	100.0	100.0	100.0	98Q3	103.3	96.6	99.3	MAY99	-0.2	-0.2	0.0
95	106.9	104.9	103.9	98Q4	104.6	97.8	99.4	JUN99	-0.8	-0.3	0.0
96	105.3	101.0	100.5	99Q1	102.9	97.2	99.4	JUL99	0.0	0.2	0.0
97	100.8	96.7	99.0	99Q2	101.1	96.3	99.4	AUG99	0.4	0.1	-0.0
98	102.5	96.6	99.3	99Q3	100.5	96.1	99.4	SEP99	-0.9	-0.5	0.0

## Trade-weighted currency indices

Annual data (index 1994=100)

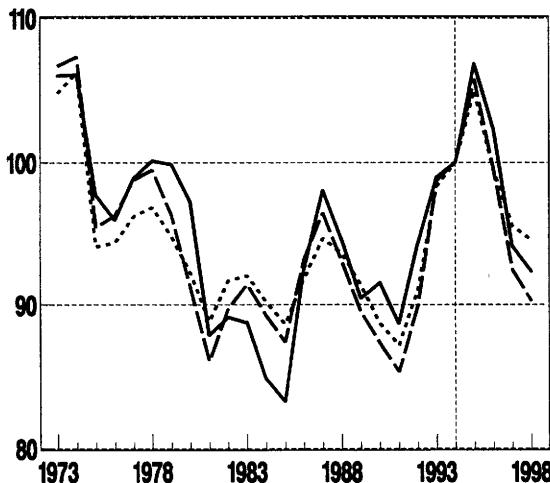


Quarterly data (index 1994=100)

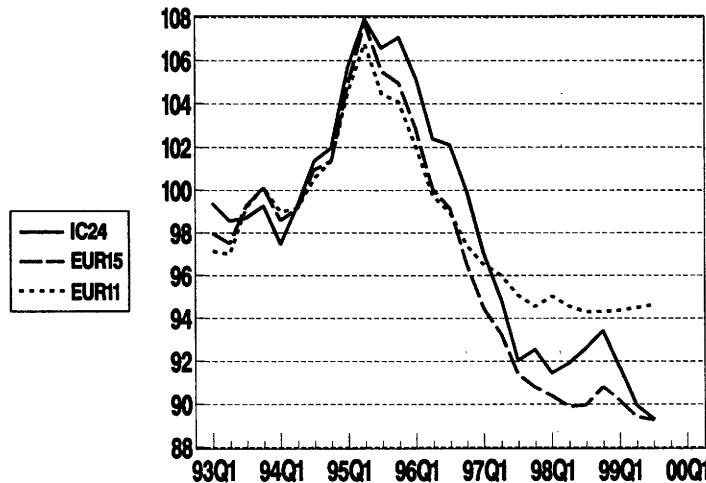


## Relative cost indicators (based on ULCE)

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	96Q3	102.1	101.9	102.2	102.1	105.3
87	95.5	94.1	95.5	98.0	91.8	96Q4	100.6	100.2	100.8	99.9	103.2
88	92.9	91.3	94.2	94.6	91.0	97Q1	98.4	97.6	98.7	97.0	100.2
89	90.2	88.2	91.0	90.5	88.7	97Q2	97.0	96.0	97.5	94.9	97.8
90	92.8	91.1	94.6	91.5	90.7	97Q3	94.7	93.6	95.6	92.0	94.2
91	91.0	89.6	94.1	88.7	87.8	97Q4	96.0	94.8	97.3	92.5	93.9
92	95.0	94.5	98.1	94.3	93.1	98Q1	95.1	93.9	96.9	91.5	91.8
93	98.9	98.8	100.0	99.0	98.0	98Q2	96.1	94.8	98.3	91.9	91.5
94	100.0	100.0	100.0	100.0	100.0	98Q3	97.0	95.8	99.6	92.6	91.7
95	105.1	105.5	105.0	106.8	108.8	98Q4	97.9	96.6	100.6	93.4	92.4
96	102.0	101.9	102.1	102.4	105.5	99Q1	96.0	94.8	98.6	91.7	90.9
97	96.5	95.5	97.3	94.1	96.5	99Q2	94.0	92.7	96.4	89.9	89.4
98	96.5	95.3	98.8	92.3	91.9	99Q3	93.2	91.9	95.5	89.3	89.2

## 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	92.8	90.9	92.2	93.2	81.8	96Q3	99.0	98.8	99.0	99.1	101.8
87	94.3	93.4	95.5	96.4	88.2	96Q4	97.0	96.5	97.1	96.5	99.2
88	91.7	90.4	94.4	93.0	87.7	97Q1	95.6	94.8	95.8	94.4	97.1
89	89.8	87.8	91.3	89.5	86.6	97Q2	95.0	94.0	95.4	93.3	95.5
90	89.3	87.5	91.9	87.3	85.4	97Q3	93.8	92.6	94.4	91.4	93.0
91	88.0	86.5	92.0	85.3	83.3	97Q4	93.8	92.5	94.9	90.8	91.6
92	91.3	90.6	95.3	89.9	88.1	98Q1	93.5	92.1	95.1	90.4	90.2
93	99.2	98.9	100.1	98.7	97.3	98Q2	93.5	92.1	95.5	89.9	89.1
94	100.0	100.0	100.0	100.0	100.0	98Q3	93.9	92.4	96.0	90.0	88.8
95	103.8	104.2	103.1	105.8	106.8	98Q4	94.8	93.2	96.9	90.8	89.6
96	99.1	99.0	99.0	99.6	102.1	99Q1	94.0	92.4	96.0	90.2	89.1
97	94.6	93.5	95.1	92.5	94.3	99Q2	93.1	91.4	94.7	89.4	88.6
98	93.9	92.4	95.9	90.3	89.5	99Q3	92.7	91.0	94.1	89.3	88.8

## 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	96Q3	98.5	98.4	98.2	99.0	102.4
87	93.3	92.8	94.7	94.7	88.0	96Q4	97.6	97.2	97.1	97.4	101.2
88	92.4	91.5	94.5	93.6	89.4	97Q1	97.3	96.6	96.5	96.5	100.5
89	90.6	89.2	91.4	91.4	88.5	97Q2	97.3	96.4	96.4	96.0	99.9
90	89.7	88.4	91.7	88.7	86.6	97Q3	96.9	95.8	95.9	95.1	98.4
91	89.5	88.3	92.3	87.1	84.8	97Q4	96.9	95.6	96.1	94.5	97.1
92	92.2	91.8	95.2	91.1	88.9	98Q1	97.1	95.7	96.5	95.0	96.5
93	99.2	99.0	100.1	98.3	96.4	98Q2	97.0	95.5	96.5	94.6	95.3
94	100.0	100.0	100.0	100.0	100.0	98Q3	96.8	95.3	96.5	94.3	94.6
95	102.9	103.3	102.3	105.0	107.0	98Q4	96.8	95.2	96.5	94.3	94.5
96	98.7	98.8	98.4	99.5	102.8	99Q1	96.7	95.0	96.2	94.4	94.7
97	97.1	96.1	96.2	95.5	99.0	99Q2	96.5	94.9	96.0	94.5	95.2
98	96.9	95.4	96.5	94.5	95.2	99Q3	96.4	94.7	95.8	94.6	95.7

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

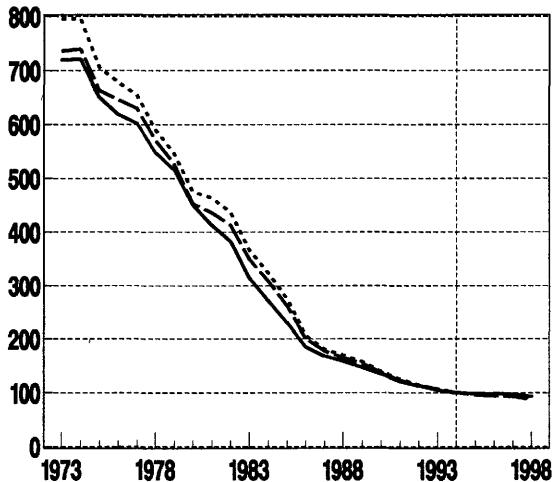
# Greece – drachma

## Trade-weighted currency indices

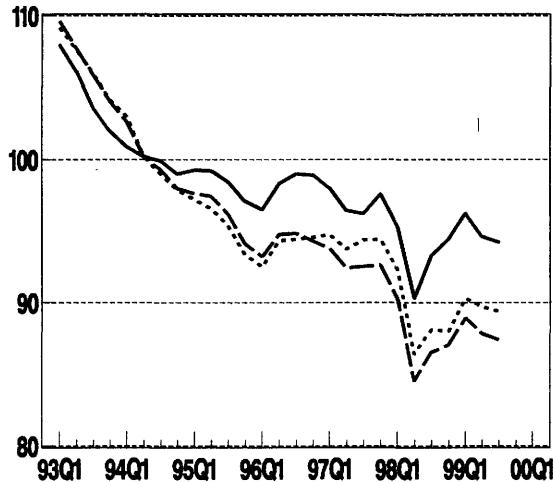
Annual data index (1994=100)				Quarterly data index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	185.2	200.6	206.1	96Q3	99.0	94.9	94.4	SEP98	-1.1	-1.8	-2.1
87	168.4	177.5	180.6	96Q4	98.9	94.3	94.6	OCT98	0.7	0.5	0.1
88	158.3	165.4	169.7	97Q1	98.0	93.8	94.8	NOV98	1.9	2.2	2.3
89	147.4	154.2	157.8	97Q2	96.4	92.4	93.7	DEC98	0.4	0.2	0.1
90	135.4	137.6	139.4	97Q3	96.2	92.5	94.4	JAN99	1.3	1.4	1.4
91	121.2	123.1	125.0	97Q4	97.6	92.6	94.4	FEB99	-0.1	0.2	0.6
92	113.0	113.1	114.3	98Q1	95.3	90.3	92.3	MAR99	-0.6	-0.5	-0.2
93	104.9	106.8	106.7	98Q2	90.3	84.5	86.4	APR99	-1.2	-1.1	-0.9
94	100.0	100.0	100.0	98Q3	93.3	86.5	88.1	MAY99	0.1	-0.0	0.1
95	98.5	96.3	95.6	98Q4	94.4	87.0	88.0	JUN99	-0.2	0.1	0.3
96	98.2	94.3	94.0	99Q1	96.2	88.9	90.3	JUL99	-0.1	-0.1	-0.2
97	97.1	92.8	94.3	99Q2	94.6	87.8	89.7	AUG99	0.0	-0.4	-0.5
98	93.3	87.0	88.7	99Q3	94.2	87.4	89.4	SEP99	-0.7	-0.5	-0.2

## Trade-weighted currency indices

Annual data (index 1994=100)

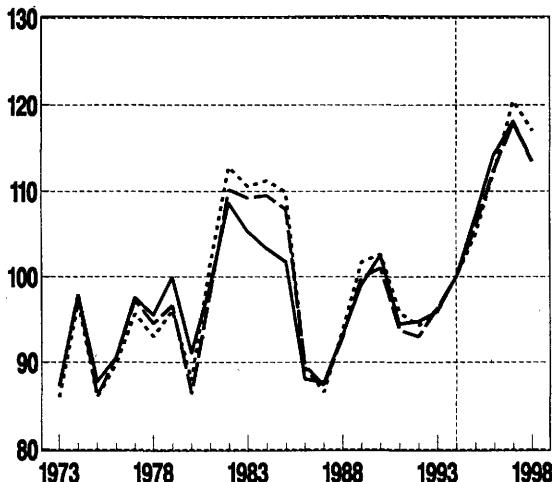


Quarterly data (index 1994=100)

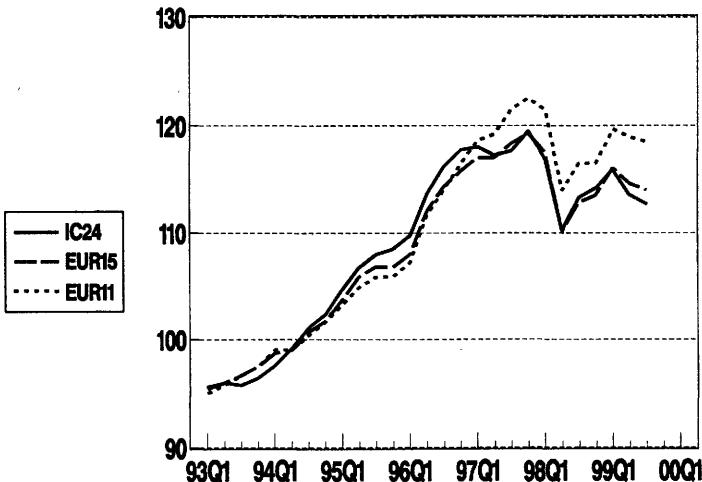


## Relative cost indicators (based on ULCE)

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	96Q3	108.9	109.5	108.9	116.2	111.8
87	85.2	82.6	94.1	87.7	87.5	96Q4	109.4	110.5	109.3	117.8	113.1
88	88.6	86.6	95.9	93.1	99.6	97Q1	108.7	110.4	108.5	118.0	113.9
89	89.0	87.9	94.7	99.1	106.3	97Q2	107.3	109.6	107.1	117.3	113.9
90	93.2	92.4	99.6	102.5	110.8	97Q3	107.5	110.0	107.3	117.7	114.7
91	94.6	93.9	99.9	94.5	98.6	97Q4	109.4	112.1	109.6	119.5	116.7
92	97.2	96.0	100.9	94.7	98.9	98Q1	107.1	109.6	107.7	117.0	114.0
93	98.6	97.9	99.1	95.9	95.8	98Q2	101.7	103.9	102.8	110.3	107.3
94	100.0	100.0	100.0	100.0	100.0	98Q3	105.1	107.4	106.6	113.3	110.0
95	103.1	104.0	102.5	107.0	110.3	98Q4	106.3	108.7	108.1	114.2	110.6
96	107.4	108.0	107.3	114.3	111.2	99Q1	108.1	110.8	110.2	115.9	112.0
97	108.2	110.5	108.1	118.1	114.8	99Q2	106.1	108.9	108.3	113.6	109.5
98	105.0	107.4	106.3	113.7	110.4	99Q3	105.4	108.5	107.7	112.7	108.5

## 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	96Q3	106.9	107.6	106.7	114.3	109.5
87	85.3	82.9	94.6	87.3	86.4	96Q4	107.2	108.5	107.0	115.7	110.6
88	88.7	87.0	96.7	92.9	98.4	97Q1	107.4	109.3	107.0	117.0	112.4
89	90.0	89.0	95.8	99.9	106.6	97Q2	106.6	109.1	106.0	117.0	113.0
90	92.1	91.2	98.4	101.0	108.5	97Q3	107.6	110.4	107.0	118.4	114.8
91	93.8	93.1	99.2	93.7	97.2	97Q4	108.7	111.5	108.3	119.3	116.0
92	95.5	94.2	99.3	92.9	96.8	98Q1	106.9	109.5	106.9	117.5	114.0
93	99.1	98.3	99.2	96.4	96.0	98Q2	100.9	103.2	101.3	110.2	106.9
94	100.0	100.0	100.0	100.0	100.0	98Q3	103.9	106.2	104.6	112.9	109.3
95	102.1	102.9	101.0	105.8	108.4	98Q4	104.9	107.3	105.9	113.5	109.8
96	105.6	106.3	105.2	112.5	108.8	99Q1	107.5	110.2	108.7	116.1	112.0
97	107.6	110.1	107.1	117.9	114.0	99Q2	106.3	109.2	107.6	114.6	110.3
98	104.1	106.5	104.6	113.5	110.0	99Q3	105.9	108.9	107.1	114.0	109.5

## 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	84.9	84.7	98.3	89.4	93.4	96Q3	106.5	107.3	106.1	114.0	109.5
87	85.2	83.0	94.4	86.6	87.1	96Q4	107.7	109.0	107.0	116.4	111.7
88	89.7	88.2	97.1	93.7	100.5	97Q1	108.7	110.7	107.6	118.7	114.6
89	91.1	90.6	96.5	101.7	108.8	97Q2	108.3	110.9	106.9	119.2	116.0
90	92.9	92.5	98.7	102.6	110.2	97Q3	110.0	112.9	108.3	121.5	118.9
91	95.5	95.0	99.8	95.8	99.3	97Q4	111.0	114.0	109.3	122.5	120.2
92	96.6	95.5	99.5	94.2	98.0	98Q1	109.5	112.3	108.0	121.4	118.9
93	99.1	98.4	99.2	96.2	95.7	98Q2	103.3	105.8	102.1	114.0	111.6
94	100.0	100.0	100.0	100.0	100.0	98Q3	106.1	108.5	105.1	116.5	113.8
95	101.3	102.1	100.4	105.0	108.0	98Q4	106.4	108.9	105.7	116.5	113.6
96	105.3	106.1	104.8	112.3	108.9	99Q1	109.5	112.3	109.0	119.7	116.5
97	109.5	112.1	108.0	120.5	117.4	99Q2	108.9	112.0	108.7	118.9	115.5
98	106.3	108.9	105.2	117.1	114.5	99Q3	108.7	111.9	108.5	118.6	114.8

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

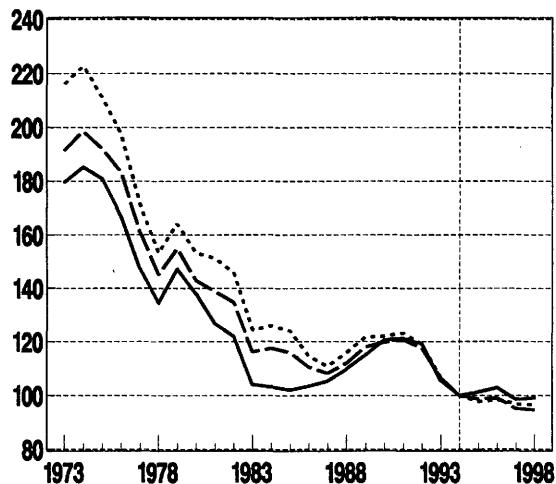
# Spain – euro (before 1999: peseta)

## Trade-weighted currency indices

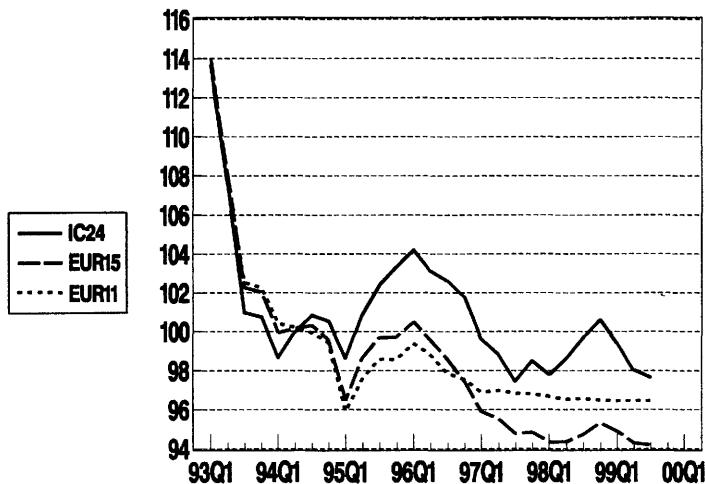
Annual data index (1994=100)				Quarterly data index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	103.5	110.6	114.7	96Q3	102.6	98.6	97.9	SEP98	1.0	0.3	-0.0
87	105.4	108.2	110.8	96Q4	101.8	97.4	97.5	OCT98	0.5	0.4	-0.0
88	109.8	111.9	115.8	97Q1	99.6	95.9	96.9	NOV98	-0.6	-0.2	-0.1
89	114.9	118.0	121.7	97Q2	98.9	95.6	97.0	DEC98	0.1	0.0	-0.0
90	120.6	119.8	122.0	97Q3	97.5	94.8	96.8	JAN99	-0.3	-0.1	0.0
91	121.3	120.7	123.2	97Q4	98.5	94.8	96.8	FEB99	-0.8	-0.4	0.0
92	119.2	117.6	119.1	98Q1	97.8	94.3	96.7	MAR99	-0.6	-0.3	0.0
93	105.6	106.5	106.5	98Q2	98.6	94.4	96.5	APR99	-0.4	-0.1	0.0
94	100.0	100.0	100.0	98Q3	99.7	94.7	96.6	MAY99	-0.1	-0.1	-0.0
95	101.3	98.6	97.6	98Q4	100.6	95.3	96.5	JUN99	-0.6	-0.2	-0.0
96	102.9	99.0	98.4	99Q1	99.4	94.9	96.5	JUL99	0.1	0.1	0.0
97	98.6	95.3	96.9	99Q2	98.0	94.3	96.5	AUG99	0.3	0.1	-0.0
98	99.2	94.7	96.6	99Q3	97.7	94.2	96.5	SEP99	-0.6	-0.3	0.0

## Trade-weighted currency indices

Annual data (index 1994=100)

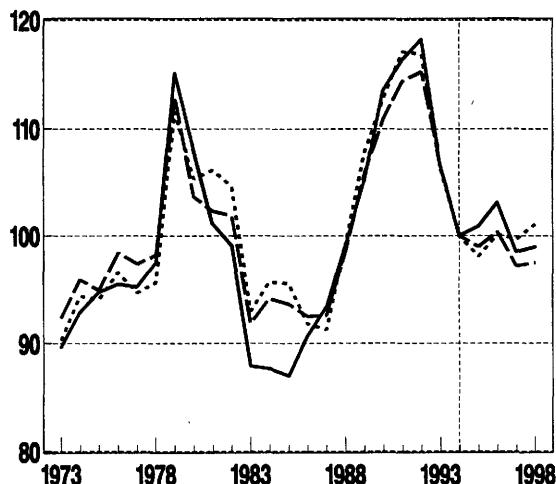


Quarterly data (index 1994=100)

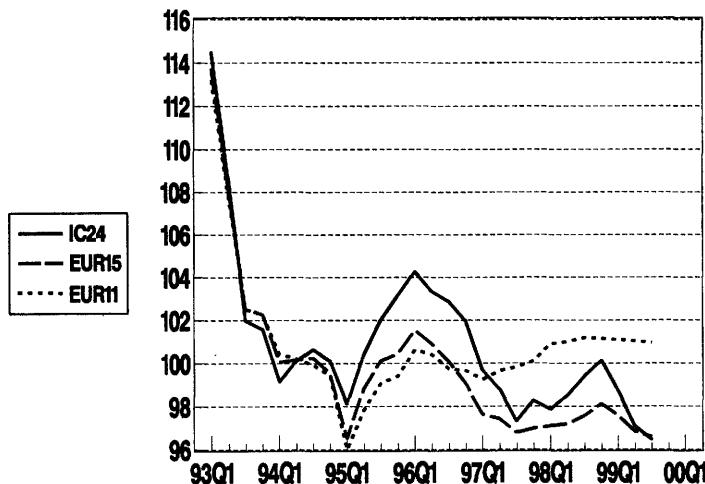


## Relative cost indicators (based on ULCE)

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	96Q3	104.2	104.3	104.1	102.9	105.5
87	97.0	95.3	98.9	93.3	89.6	96Q4	103.3	103.3	103.7	102.0	105.5
88	101.6	100.2	102.6	99.1	96.2	97Q1	101.1	101.0	102.0	99.7	103.9
89	107.8	106.9	106.4	105.2	104.4	97Q2	100.3	100.0	101.7	98.8	103.8
90	114.3	114.2	111.8	113.6	114.5	97Q3	98.8	98.5	100.5	97.3	103.0
91	115.9	116.7	112.9	116.4	115.8	97Q4	99.9	99.5	101.6	98.3	104.8
92	115.9	117.5	114.0	118.2	116.9	98Q1	99.1	98.7	100.8	97.9	104.9
93	104.3	104.7	103.4	106.6	106.3	98Q2	99.8	99.5	101.5	98.5	106.2
94	100.0	100.0	100.0	100.0	100.0	98Q3	100.8	100.5	102.4	99.4	107.6
95	102.4	102.5	102.4	100.9	100.5	98Q4	101.7	101.4	103.2	100.1	108.6
96	104.5	104.6	104.4	103.1	105.3	99Q1	100.5	100.3	101.9	98.7	107.1
97	100.0	99.7	101.5	98.5	103.9	99Q2	99.1	98.9	100.4	97.1	105.4
98	100.4	100.0	102.0	99.0	106.8	99Q3	98.7	98.5	100.0	96.5	104.8

## 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	96.3	95.4	99.6	92.5	90.3	96Q3	101.5	101.7	101.8	100.1	102.1
87	96.7	95.5	99.8	92.6	88.2	96Q4	100.4	100.6	101.1	99.1	101.9
88	101.5	100.4	103.7	98.6	94.9	97Q1	99.0	99.0	100.2	97.6	101.2
89	109.0	108.3	108.3	105.7	104.7	97Q2	98.8	98.6	100.4	97.4	101.7
90	112.3	112.2	110.5	110.9	111.3	97Q3	98.1	97.8	100.0	96.8	101.8
91	114.4	115.2	112.0	114.4	113.2	97Q4	98.3	98.0	100.2	97.0	102.8
92	113.6	115.0	112.2	115.2	113.7	98Q1	98.0	97.6	99.8	97.1	103.6
93	104.6	105.0	103.7	106.5	106.1	98Q2	98.1	97.7	99.8	97.2	104.4
94	100.0	100.0	100.0	100.0	100.0	98Q3	98.6	98.3	100.1	97.6	105.2
95	100.6	100.6	100.7	99.9	97.9	98Q4	99.4	99.0	100.7	98.1	106.1
96	101.9	102.1	102.1	100.4	101.9	99Q1	99.0	98.7	100.2	97.6	105.6
97	98.6	98.4	100.2	97.2	101.9	99Q2	98.5	98.2	99.5	96.8	104.8
98	98.5	98.1	100.1	97.5	104.8	99Q3	98.5	98.2	99.4	96.6	104.5

## 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	96.5	95.8	99.6	91.8	91.5	96Q3	101.0	101.3	101.2	99.7	102.2
87	96.2	95.2	99.4	91.2	88.7	96Q4	100.9	101.1	101.3	99.7	103.1
88	102.6	101.8	104.1	99.2	96.8	97Q1	100.4	100.5	101.0	99.2	103.7
89	110.4	110.4	109.0	107.8	107.0	97Q2	100.7	100.6	101.4	99.6	105.1
90	113.4	113.8	110.9	112.8	113.2	97Q3	100.7	100.5	101.4	99.8	106.2
91	116.6	117.7	112.8	117.1	115.7	97Q4	100.9	100.6	101.4	100.1	107.5
92	115.0	116.6	112.4	116.9	115.1	98Q1	100.9	100.6	101.1	100.9	109.0
93	104.7	105.1	103.7	106.4	105.6	98Q2	100.9	100.6	100.8	101.0	109.8
94	100.0	100.0	100.0	100.0	100.0	98Q3	101.1	100.8	100.8	101.2	110.5
95	99.7	99.7	100.0	98.1	97.5	98Q4	101.2	100.9	100.7	101.1	110.7
96	101.5	101.8	101.7	100.1	102.1	99Q1	101.3	101.1	100.8	101.1	110.8
97	100.7	100.6	101.3	99.7	105.6	99Q2	101.5	101.2	100.9	101.0	110.7
98	101.0	100.7	100.9	101.1	110.0	99Q3	101.6	101.4	101.0	100.9	110.6

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

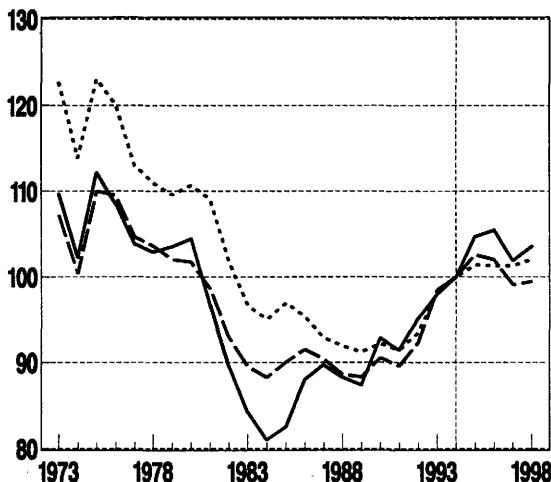
# France – euro (before 1999: franc)

## Trade-weighted currency indices

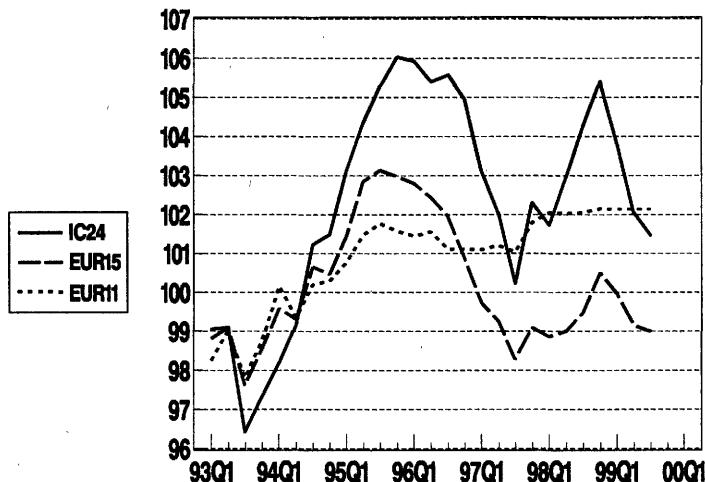
Annual data index (1994=100)				Quarterly data index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	88.0	91.5	95.3	96Q3	105.6	102.0	101.1	SEP98	1.1	0.5	0.0
87	89.7	90.4	92.9	96Q4	105.0	100.9	101.1	OCT98	0.6	0.7	0.0
88	88.3	88.6	91.9	97Q1	103.1	99.7	101.1	NOV98	-0.7	-0.2	0.0
89	87.4	88.3	91.2	97Q2	102.1	99.3	101.2	DEC98	0.1	0.1	0.0
90	92.8	90.5	92.2	97Q3	100.2	98.3	101.0	JAN99	-0.5	-0.1	-0.0
91	91.4	89.6	91.5	97Q4	102.3	99.1	101.8	FEB99	-0.9	-0.5	0.0
92	95.2	92.3	93.4	98Q1	101.7	98.8	102.1	MAR99	-0.8	-0.4	0.0
93	98.0	98.5	98.5	98Q2	103.0	99.0	102.0	APR99	-0.5	-0.2	0.0
94	100.0	100.0	100.0	98Q3	104.3	99.5	102.1	MAY99	-0.2	-0.2	0.0
95	104.7	102.6	101.4	98Q4	105.4	100.5	102.1	JUN99	-0.8	-0.3	0.0
96	105.5	102.0	101.3	99Q1	103.8	99.9	102.1	JUL99	0.1	0.2	0.0
97	101.9	99.1	101.3	99Q2	102.0	99.1	102.1	AUG99	0.3	0.1	0.0
98	103.6	99.5	102.1	99Q3	101.5	99.0	102.1	SEP99	-0.9	-0.4	0.0

## Trade-weighted currency indices

Annual data (Index 1994=100)

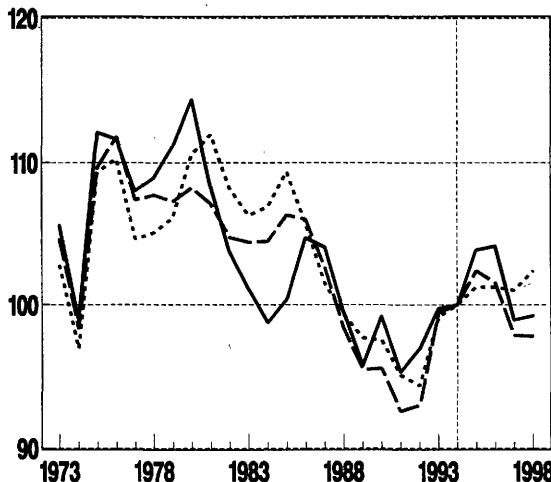


Quarterly data (index 1994=100)

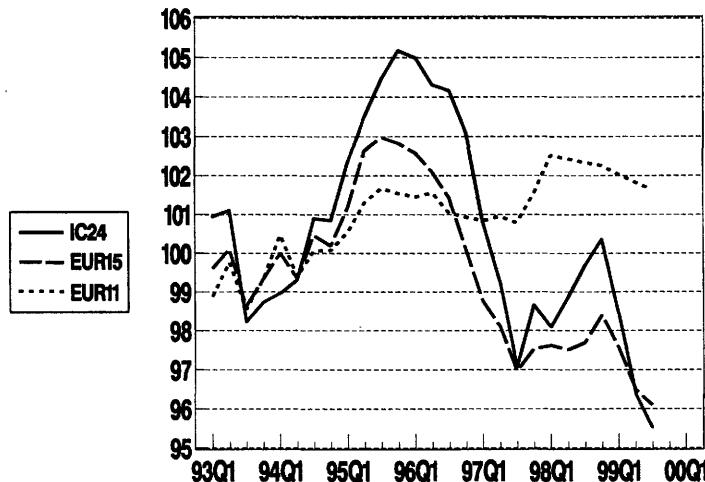


## Relative cost indicators (based on ULCE)

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	96Q3	102.5	102.0	101.2	104.2	100.3
87	102.6	102.3	100.8	104.1	105.9	96Q4	101.6	101.1	100.8	103.1	98.5
88	99.6	99.1	98.7	99.4	99.8	97Q1	99.3	99.0	99.3	100.8	95.5
89	97.1	96.2	97.4	95.8	95.4	97Q2	97.9	97.7	98.5	99.3	93.5
90	100.6	99.9	100.4	99.2	99.8	97Q3	95.7	95.6	97.0	97.1	91.2
91	96.8	96.4	98.0	95.3	97.8	97Q4	97.2	97.2	99.1	98.7	92.8
92	98.4	97.9	99.3	96.9	99.9	98Q1	96.2	96.2	98.7	98.1	92.5
93	99.5	99.6	98.0	99.7	102.2	98Q2	96.9	97.0	99.9	98.9	93.6
94	100.0	100.0	100.0	100.0	100.0	98Q3	97.7	97.8	101.1	99.7	94.7
95	102.8	102.8	101.6	103.9	102.8	98Q4	98.4	98.5	102.2	100.4	95.6
96	102.5	102.1	101.1	104.1	100.7	99Q1	96.8	96.8	100.6	98.5	93.9
97	97.5	97.4	98.5	98.9	93.2	99Q2	94.7	94.9	98.8	96.4	91.9
98	97.3	97.4	100.5	99.2	94.1	99Q3	93.9	94.1	98.2	95.5	91.0

## 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	102.8	103.8	102.9	106.0	107.2	96Q3	99.7	99.2	98.3	101.4	96.9
87	101.7	101.9	101.2	102.7	103.2	96Q4	98.4	98.0	97.5	100.1	94.7
88	98.9	98.8	99.4	98.3	97.4	97Q1	97.0	96.7	96.8	98.7	92.6
89	97.3	96.7	98.5	95.5	94.4	97Q2	96.3	96.1	96.7	98.1	91.4
90	97.7	97.0	98.3	95.6	95.3	97Q3	95.0	94.9	96.1	97.0	90.1
91	94.5	94.0	96.5	92.8	94.2	97Q4	95.5	95.4	97.2	97.5	90.9
92	95.1	94.5	96.8	93.0	95.5	98Q1	95.0	94.9	97.2	97.6	91.3
93	99.6	99.6	98.0	99.4	101.7	98Q2	94.8	94.8	97.5	97.5	91.7
94	100.0	100.0	100.0	100.0	100.0	98Q3	95.0	95.0	98.1	97.7	92.4
95	101.2	101.2	99.6	102.4	100.4	98Q4	95.8	95.7	99.1	98.4	93.3
96	99.8	99.4	98.2	101.5	97.3	99Q1	95.1	95.0	98.4	97.6	92.5
97	96.0	95.8	96.7	97.8	91.2	99Q2	94.1	94.0	97.5	96.5	91.5
98	95.2	95.1	98.0	97.8	92.2	99Q3	93.8	93.7	97.2	96.1	91.0

## 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	103.3	104.8	103.1	105.7	109.4	96Q3	99.1	98.7	97.4	101.0	96.8
87	101.5	102.1	100.8	101.5	104.3	96Q4	98.9	98.6	97.6	100.9	96.0
88	100.3	100.6	99.8	99.3	99.9	97Q1	98.7	98.5	97.7	100.8	95.3
89	98.9	98.9	99.2	97.7	96.8	97Q2	98.5	98.5	97.9	100.9	94.9
90	98.8	98.6	98.5	97.5	97.2	97Q3	98.1	98.1	97.8	100.8	94.7
91	96.5	96.4	97.1	95.1	96.7	97Q4	98.5	98.6	98.5	101.5	95.8
92	96.4	95.9	96.8	94.4	96.8	98Q1	98.5	98.5	98.8	102.5	97.1
93	99.7	99.7	97.9	99.1	101.1	98Q2	98.2	98.2	98.7	102.4	97.6
94	100.0	100.0	100.0	100.0	100.0	98Q3	98.0	98.0	98.8	102.3	98.0
95	100.1	100.0	98.6	101.3	99.9	98Q4	97.8	97.9	98.9	102.3	98.2
96	99.4	99.0	97.6	101.2	97.4	99Q1	97.5	97.5	99.0	102.0	98.0
97	98.4	98.4	98.0	101.0	95.2	99Q2	97.5	97.6	99.1	101.8	97.8
98	98.1	98.2	98.8	102.4	97.7	99Q3	97.4	97.5	99.1	101.6	97.4

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

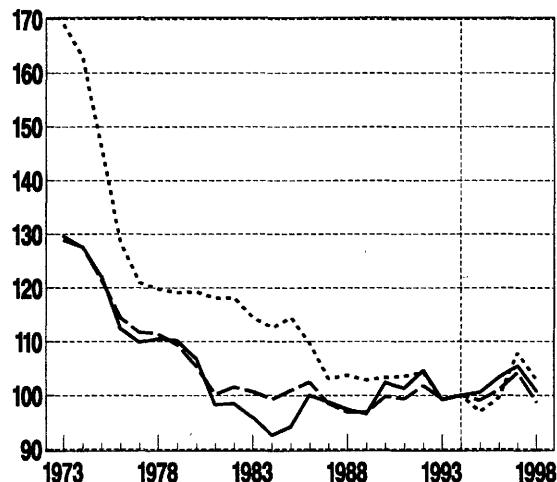
# Ireland – euro (before 1999: pound)

## Trade-weighted currency indices

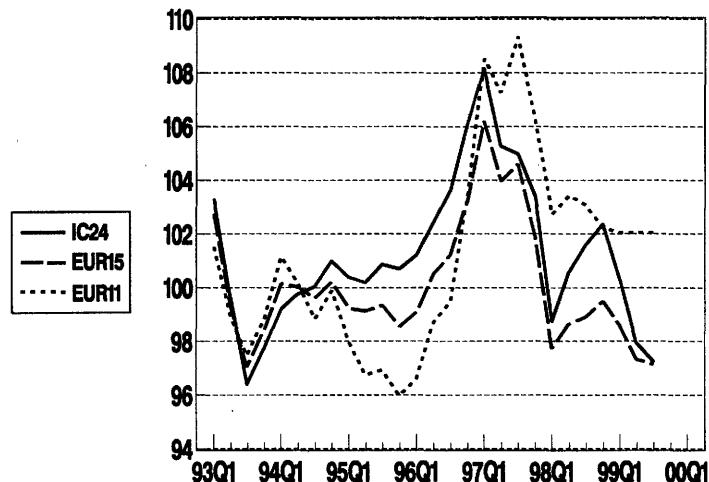
Annual data index (1994=100)			Quarterly data index (1994=100)			Monthly data monthly % change					
	vs. IC24	(the rest of) EUR15 EUR11		vs. IC24	(the rest of) EUR15 EUR11		vs. IC24	(the rest of) EUR15 EUR11			
86	100.0	102.5	109.8	96Q3	103.6	101.2	99.5	SEP98	1.1	0.4	-0.2
87	98.8	98.5	103.1	96Q4	106.1	103.3	103.5	OCT98	0.6	0.6	-0.4
88	97.4	96.9	103.7	97Q1	108.1	106.2	108.5	NOV98	-1.2	-0.5	-0.3
89	96.6	96.8	102.9	97Q2	105.3	104.0	107.3	DEC98	0.0	-0.0	-0.1
90	102.4	99.8	103.3	97Q3	105.0	104.6	109.3	JAN99	-0.5	-0.1	-0.0
91	101.4	99.4	103.5	97Q4	103.4	101.9	106.3	FEB99	-1.2	-0.7	0.0
92	104.6	101.8	104.3	98Q1	98.8	97.7	102.7	MAR99	-1.1	-0.7	-0.0
93	99.2	99.3	99.2	98Q2	100.6	98.6	103.4	APR99	-0.7	-0.3	0.0
94	100.0	100.0	100.0	98Q3	101.6	98.9	103.1	MAY99	-0.3	-0.3	-0.0
95	100.5	99.1	96.9	98Q4	102.4	99.5	102.2	JUN99	-0.9	-0.4	0.0
96	103.3	101.0	99.5	99Q1	100.3	98.6	102.0	JUL99	0.1	0.3	0.0
97	105.4	104.2	107.9	99Q2	97.9	97.3	102.0	AUG99	0.4	0.1	-0.0
98	100.8	98.7	102.9	99Q3	97.3	97.1	102.0	SEP99	-1.1	-0.6	0.0

## Trade-weighted currency indices

Annual data (index 1994=100)

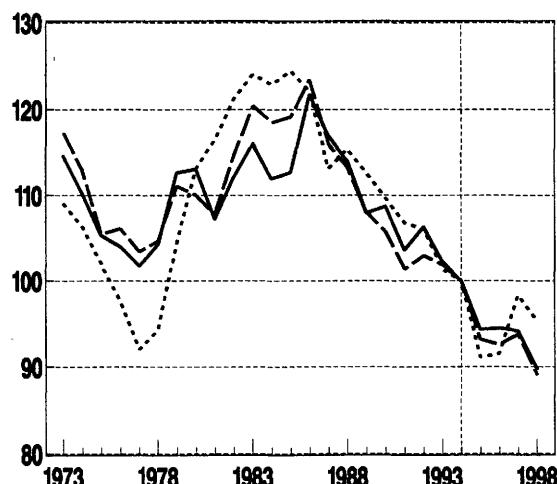


Quarterly data (index 1994=100)

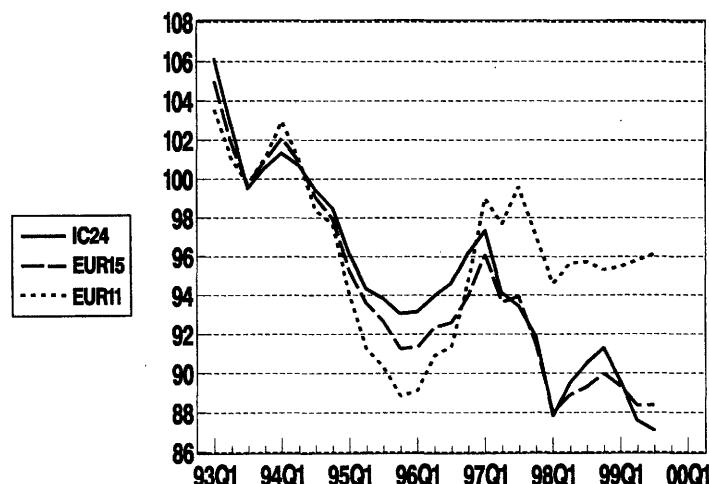


## Relative cost indicators (based on ULCE)

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	96Q3	101.8	100.7	101.2	94.6	90.3
87	109.0	110.6	106.1	116.9	128.8	96Q4	103.6	102.8	103.4	96.2	91.7
88	107.5	107.9	108.0	114.0	120.4	97Q1	105.1	104.7	105.6	97.3	92.5
89	105.6	107.0	108.8	107.9	113.5	97Q2	102.0	102.0	103.3	94.1	88.9
90	108.4	107.2	104.1	108.7	116.2	97Q3	101.6	102.2	104.1	93.4	87.6
91	104.6	102.6	101.5	103.6	112.4	97Q4	100.3	101.5	104.1	91.9	85.4
92	106.3	104.4	102.0	106.3	110.7	98Q1	96.1	97.8	101.1	87.8	80.9
93	99.2	100.3	100.0	102.2	105.3	98Q2	98.2	100.6	104.4	89.5	81.5
94	100.0	100.0	100.0	100.0	100.0	98Q3	99.5	102.4	106.5	90.5	81.5
95	100.0	98.4	99.6	94.3	89.6	98Q4	100.4	103.8	107.8	91.3	81.3
96	101.6	100.4	101.1	94.5	89.9	99Q1	98.5	102.1	105.7	89.5	78.7
97	102.2	102.6	104.3	94.2	88.6	99Q2	96.2	100.1	103.0	87.6	76.0
98	98.5	101.1	104.9	89.8	81.3	99Q3	95.6	99.8	102.0	87.1	74.7

## 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	96Q3	99.5	98.5	98.9	92.6	87.8
87	108.3	110.3	106.6	116.0	126.5	96Q4	101.1	100.3	100.8	93.9	89.0
88	107.0	107.7	108.8	113.3	118.4	97Q1	103.5	103.1	103.8	96.1	90.6
89	106.1	107.7	110.2	108.0	113.0	97Q2	101.1	101.1	102.1	93.6	87.7
90	106.1	104.9	102.7	105.7	112.4	97Q3	101.7	102.3	103.9	93.9	87.4
91	102.8	100.8	100.5	101.4	109.3	97Q4	99.3	100.5	102.8	91.5	84.4
92	103.6	101.6	100.2	102.9	107.0	98Q1	95.6	97.3	100.3	88.0	80.5
93	99.3	100.4	100.2	101.9	104.7	98Q2	96.9	99.1	102.7	88.9	80.6
94	100.0	100.0	100.0	100.0	100.0	98Q3	97.5	100.2	104.0	89.3	80.1
95	98.6	97.0	98.0	93.2	87.8	98Q4	98.3	101.4	105.0	90.0	79.8
96	99.5	98.3	98.9	92.6	87.5	99Q1	97.6	101.0	104.0	89.3	78.2
97	101.4	101.7	103.2	93.8	87.5	99Q2	96.5	100.1	102.3	88.4	76.3
98	97.1	99.5	103.0	89.0	80.2	99Q3	96.4	100.3	101.7	88.4	75.3

## 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	114.5	118.1	110.7	122.1	151.3	96Q3	98.2	97.3	97.4	91.4	87.4
87	107.7	110.4	105.5	113.1	129.0	96Q4	101.8	101.1	100.8	94.7	90.7
88	110.0	111.6	109.5	115.4	124.3	97Q1	106.4	106.2	105.4	99.0	94.9
89	109.4	112.4	111.6	112.8	118.3	97Q2	104.9	105.2	104.3	97.7	93.3
90	108.3	108.2	102.9	109.7	116.3	97Q3	107.0	107.9	106.9	99.6	94.7
91	107.3	105.8	101.8	106.8	114.6	97Q4	104.4	105.8	105.1	97.1	91.8
92	106.3	104.7	100.0	106.0	109.5	98Q1	101.3	103.2	102.8	94.6	88.6
93	99.4	100.5	100.0	101.3	103.5	98Q2	102.5	105.0	104.8	95.7	88.8
94	100.0	100.0	100.0	100.0	100.0	98Q3	102.5	105.6	105.4	95.7	87.9
95	96.6	94.9	96.1	91.1	86.7	98Q4	102.0	105.5	105.1	95.3	86.5
96	98.4	97.3	97.7	91.5	87.3	99Q1	102.1	105.9	105.1	95.5	85.5
97	105.7	106.3	105.4	98.3	93.7	99Q2	102.3	106.5	105.1	95.8	84.7
98	102.1	104.8	104.5	95.3	88.0	99Q3	102.5	107.0	105.0	96.1	83.8

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

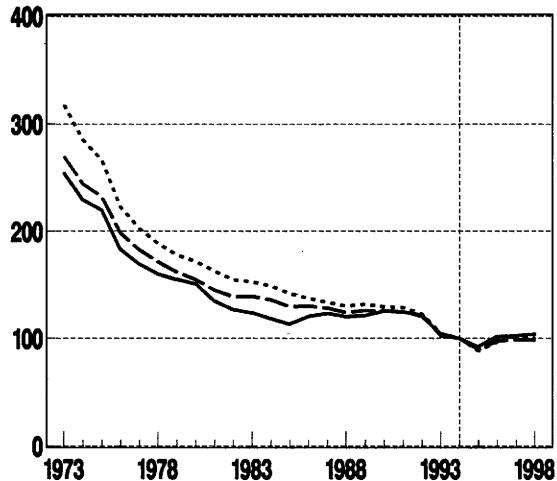
# Italy – euro (before 1999: lira)

## Trade-weighted currency indices

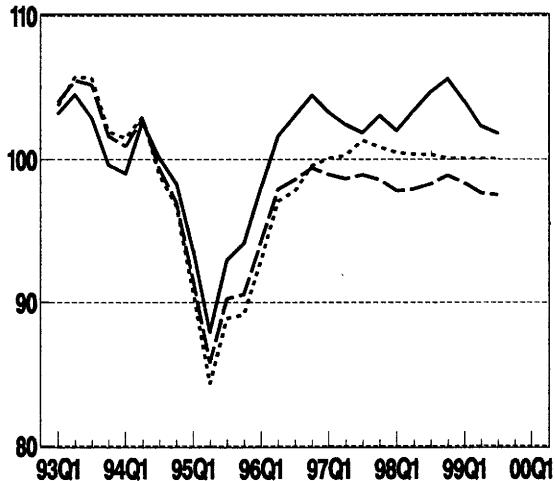
Annual data index (1994=100)				Quarterly data index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	120.4	130.0	137.3	96Q3	103.1	98.6	97.8	SEP98	1.1	0.3	-0.1
87	123.1	128.2	133.4	96Q4	104.5	99.4	99.6	OCT98	0.5	0.4	-0.1
88	120.1	124.0	130.1	97Q1	103.3	98.9	100.1	NOV98	-0.8	-0.2	-0.0
89	121.2	126.0	131.7	97Q2	102.4	98.7	100.3	DEC98	0.1	0.0	-0.1
90	125.6	125.7	129.4	97Q3	101.9	98.9	101.3	JAN99	-0.4	-0.1	0.0
91	124.4	124.8	128.6	97Q4	103.0	98.6	100.9	FEB99	-0.9	-0.4	-0.0
92	121.8	120.3	122.8	98Q1	102.0	97.8	100.5	MAR99	-0.7	-0.4	0.0
93	102.5	104.1	104.3	98Q2	103.4	97.9	100.4	APR99	-0.5	-0.1	-0.0
94	100.0	100.0	100.0	98Q3	104.7	98.3	100.3	MAY99	-0.1	-0.1	0.0
95	92.1	89.5	88.2	98Q4	105.6	98.9	100.1	JUN99	-0.8	-0.3	-0.0
96	101.8	97.5	96.8	99Q1	104.0	98.3	100.1	JUL99	0.0	0.2	-0.0
97	102.7	98.8	100.6	99Q2	102.3	97.6	100.1	AUG99	0.4	0.1	-0.0
98	103.9	98.2	100.3	99Q3	101.8	97.5	100.1	SEP99	-0.8	-0.4	-0.0

## Trade-weighted currency indices

Annual data (index 1994=100)

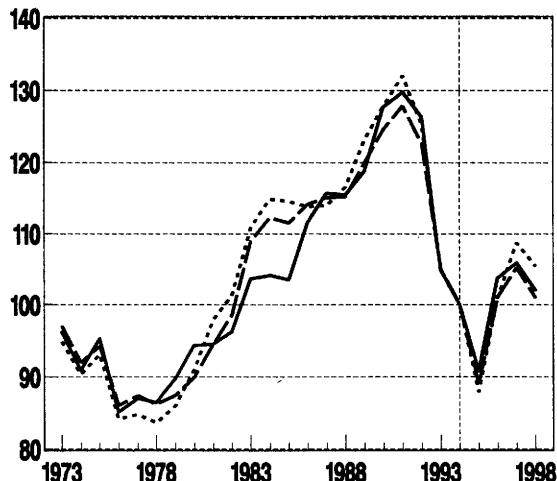


Quarterly data (index 1994=100)

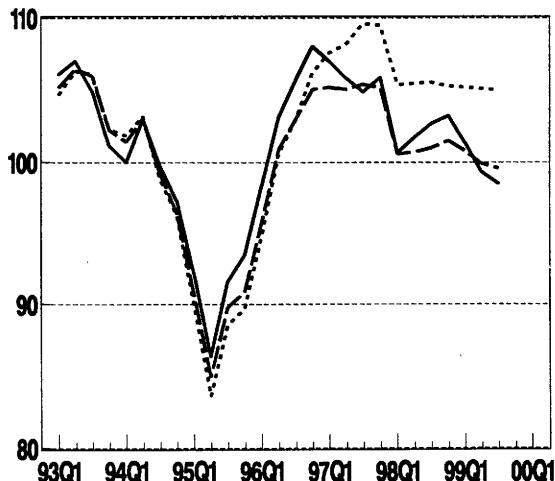


## Relative cost indicators (based on ULCE)

Annual data (index 1994=100)



Quarterly data (index 1994=100)



# 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	96Q3	107.1	107.5	110.6	105.7	106.3
87	112.3	111.9	108.1	115.7	118.2	96Q4	108.4	109.0	111.5	108.0	108.7
88	111.7	111.9	105.5	115.5	116.4	97Q1	107.0	107.6	109.7	107.0	107.8
89	114.7	114.7	108.3	118.8	121.4	97Q2	105.9	106.5	108.5	105.8	107.3
90	120.3	121.9	114.0	127.7	128.1	97Q3	105.2	105.8	107.7	104.9	107.0
91	121.0	123.7	114.7	129.8	129.7	97Q4	106.4	107.1	109.1	105.9	108.4
92	119.4	121.2	113.5	126.3	124.8	98Q1	105.3	106.1	108.1	100.7	104.4
93	101.9	102.6	103.4	104.8	104.5	98Q2	106.8	107.7	109.8	101.7	105.6
94	100.0	100.0	100.0	100.0	100.0	98Q3	108.1	109.1	111.3	102.7	106.7
95	94.4	93.6	98.2	90.9	91.1	98Q4	109.0	110.1	112.3	103.2	107.3
96	105.7	105.9	109.5	103.8	104.3	99Q1	107.3	108.4	110.6	101.4	105.4
97	106.1	106.7	108.8	105.9	107.6	99Q2	105.4	106.5	108.7	99.3	103.3
98	107.3	108.3	110.4	102.1	106.0	99Q3	104.8	105.9	108.0	98.5	102.5

## 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	96Q3	104.3	104.7	107.7	103.0	102.8
87	112.3	112.4	109.1	115.1	116.1	96Q4	105.2	105.8	108.2	105.1	104.9
88	111.8	112.4	106.7	115.2	114.5	97Q1	104.8	105.5	107.4	105.2	105.2
89	116.2	116.5	110.2	119.9	121.7	97Q2	104.6	105.3	107.0	105.1	105.6
90	117.9	119.5	112.2	124.7	123.8	97Q3	105.1	105.8	107.4	105.4	106.7
91	119.2	122.0	113.6	127.9	126.6	97Q4	105.0	105.8	107.4	105.2	107.0
92	116.4	118.0	111.2	122.2	120.7	98Q1	104.6	105.4	107.0	100.6	103.8
93	102.4	103.0	103.6	105.0	104.3	98Q2	105.0	105.9	107.6	100.7	104.3
94	100.0	100.0	100.0	100.0	100.0	98Q3	105.7	106.6	108.3	101.0	104.8
95	92.7	91.8	96.0	89.0	88.4	98Q4	106.6	107.5	109.2	101.5	105.4
96	103.0	103.2	106.7	101.1	100.8	99Q1	106.1	107.1	108.6	100.8	104.6
97	104.9	105.6	107.3	105.2	106.1	99Q2	105.5	106.4	107.7	99.9	103.7
98	105.5	106.4	108.0	101.0	104.6	99Q3	105.4	106.3	107.5	99.6	103.3

## 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	111.5	111.7	109.7	113.9	121.8	96Q3	104.0	104.6	107.3	102.9	103.2
87	112.0	112.5	108.8	114.0	117.4	96Q4	106.1	106.8	108.7	106.2	106.7
88	113.3	114.5	107.3	116.8	117.6	97Q1	106.7	107.6	108.7	107.6	108.4
89	118.2	119.3	111.3	123.2	125.4	97Q2	107.1	108.0	108.5	108.2	110.0
90	119.5	121.8	112.9	127.9	127.1	97Q3	108.5	109.5	109.5	109.6	112.3
91	122.2	125.6	114.9	132.1	130.6	97Q4	108.4	109.4	109.1	109.5	112.9
92	118.4	120.3	111.7	125.2	122.8	98Q1	108.4	109.4	108.9	105.4	110.3
93	102.5	103.2	103.7	104.8	103.9	98Q2	108.7	109.7	109.1	105.5	110.8
94	100.0	100.0	100.0	100.0	100.0	98Q3	109.0	110.1	109.4	105.6	111.0
95	91.6	90.7	95.1	87.9	87.8	98Q4	109.0	110.1	109.1	105.3	110.8
96	102.8	103.1	106.4	101.1	101.2	99Q1	109.2	110.3	109.5	105.2	110.7
97	107.7	108.6	108.9	108.7	110.9	99Q2	109.3	110.5	109.7	105.1	110.6
98	108.8	109.8	109.2	105.4	110.7	99Q3	109.4	110.6	109.8	105.0	110.4

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

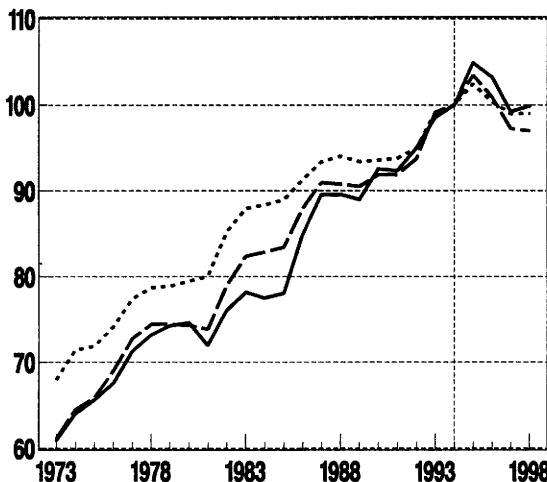
# Netherlands – euro (before 1999: guilder)

## Trade-weighted currency indices

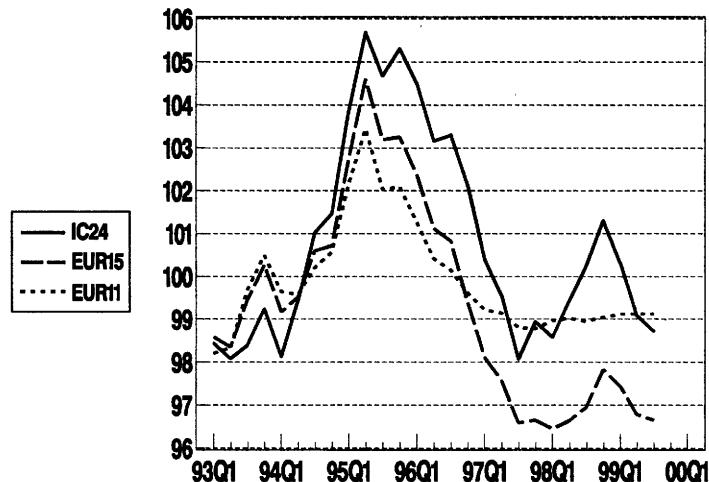
Annual data index (1994=100)			Quarterly data index (1994=100)			Monthly data monthly % change					
	vs. IC24	(the rest of) EUR15 EUR11		vs. IC24	(the rest of) EUR15 EUR11		vs. IC24	(the rest of) EUR15 EUR11			
86	84.9	88.0	91.3	96Q3	103.3	100.8	100.2	SEP98	0.8	0.4	0.0
87	89.5	91.0	93.4	96Q4	102.1	99.4	99.6	OCT98	-0.6	-0.6	0.1
88	89.6	90.8	94.0	97Q1	100.4	98.1	99.2	NOV98	-0.5	-0.1	0.0
89	89.0	90.5	93.4	97Q2	99.6	97.6	99.1	DEC98	0.2	0.1	0.1
90	92.5	91.9	93.6	97Q3	98.1	96.6	98.8	JAN99	-0.3	-0.1	0.0
91	92.4	91.9	93.8	97Q4	98.9	96.7	98.8	FEB99	-0.7	-0.4	0.0
92	95.0	93.7	94.9	98Q1	98.6	96.4	99.0	MAR99	-0.6	-0.4	-0.0
93	98.5	99.2	99.2	98Q2	99.4	96.6	99.0	APR99	-0.4	-0.1	0.0
94	100.0	100.0	100.0	98Q3	100.3	97.0	98.9	MAY99	-0.1	-0.1	-0.0
95	104.9	103.4	102.4	98Q4	101.3	97.8	99.0	JUN99	-0.5	-0.2	0.0
96	103.3	100.9	100.4	99Q1	100.3	97.4	99.1	JUL99	0.1	0.1	-0.0
97	99.2	97.2	99.0	99Q2	99.1	96.8	99.1	AUG99	0.3	0.1	0.0
98	99.9	97.0	99.0	99Q3	98.7	96.7	99.1	SEP99	-0.6	-0.3	0.0

## Trade-weighted currency indices

Annual data (index 1994=100)

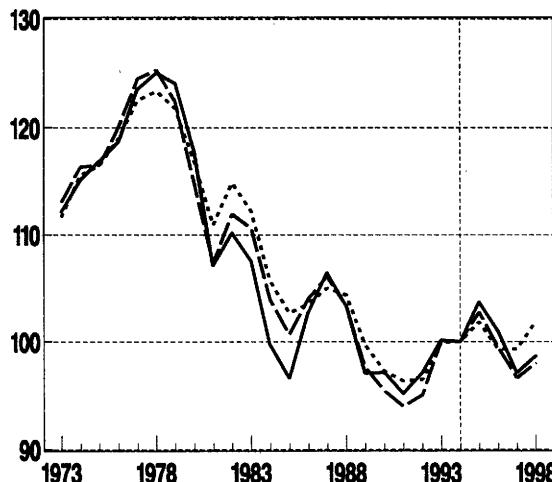


Quarterly data (index 1994=100)

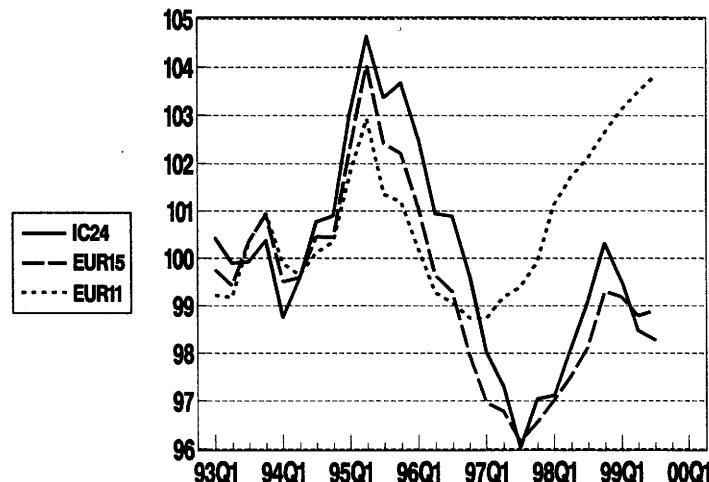


## Relative cost indicators (based on ULCE)

Annual data (index 1994=100)



Quarterly data (index 1994=100)



# 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	96Q3	100.5	101.2	101.5	100.9	96.8
87	103.5	104.2	103.9	106.4	108.5	96Q4	99.2	100.1	101.1	99.7	95.4
88	100.5	101.5	101.5	103.4	105.0	97Q1	97.5	98.5	100.1	98.0	93.7
89	96.5	97.4	100.2	97.1	98.7	97Q2	96.6	97.7	99.8	97.3	92.8
90	97.8	98.8	102.2	97.1	98.8	97Q3	95.1	96.4	98.4	96.0	91.2
91	95.8	96.5	100.6	95.2	97.0	97Q4	95.9	97.2	98.9	97.0	91.8
92	97.2	97.2	100.4	97.1	100.5	98Q1	95.6	96.9	98.0	97.1	91.4
93	99.1	99.1	100.0	100.2	103.7	98Q2	96.4	97.7	98.2	98.1	91.9
94	100.0	100.0	100.0	100.0	100.0	98Q3	97.3	98.5	98.5	99.1	92.6
95	103.3	103.7	103.1	103.7	101.4	98Q4	98.4	99.6	99.3	100.3	93.6
96	100.6	101.2	101.3	101.0	97.1	99Q1	97.5	98.7	98.2	99.5	92.9
97	96.3	97.5	99.3	97.1	92.4	99Q2	96.3	97.5	97.0	98.5	91.9
98	96.9	98.2	98.5	98.7	92.4	99Q3	96.0	97.1	96.8	98.3	91.8

## 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	102.6	105.3	106.5	104.0	105.7	96Q3	98.9	99.6	99.7	99.3	94.8
87	103.4	104.5	104.6	106.1	107.3	96Q4	97.4	98.3	99.1	98.0	93.3
88	100.6	101.8	102.4	103.3	104.1	97Q1	96.2	97.2	98.7	97.0	92.2
89	97.2	98.4	101.5	97.6	98.7	97Q2	95.7	97.0	98.8	96.8	91.8
90	96.4	97.4	101.2	95.4	96.5	97Q3	94.9	96.2	98.0	96.2	90.9
91	94.7	95.4	100.0	94.0	95.2	97Q4	95.1	96.4	97.8	96.6	90.9
92	95.5	95.3	99.1	95.0	98.1	98Q1	95.0	96.3	97.2	97.0	90.9
93	99.3	99.2	100.1	100.1	103.4	98Q2	95.4	96.6	96.8	97.5	91.1
94	100.0	100.0	100.0	100.0	100.0	98Q3	95.8	97.0	96.7	98.1	91.5
95	102.3	102.7	101.9	102.8	99.9	98Q4	96.9	98.0	97.4	99.3	92.5
96	99.0	99.7	99.6	99.5	95.1	99Q1	96.6	97.7	96.9	99.2	92.3
97	95.5	96.7	98.3	96.6	91.4	99Q2	96.2	97.2	96.3	98.6	91.9
98	95.8	97.0	97.0	98.0	91.5	99Q3	96.2	97.1	96.2	98.9	92.0

## 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	102.8	105.9	106.6	103.5	107.5	96Q3	98.4	99.2	99.2	99.1	94.8
87	103.1	104.5	104.3	105.0	108.3	96Q4	97.9	98.9	99.3	98.7	94.5
88	101.8	103.5	102.8	104.4	106.6	97Q1	97.6	98.8	99.5	98.7	94.5
89	98.5	100.4	102.2	99.7	101.1	97Q2	97.6	99.0	99.8	99.2	94.9
90	97.3	98.9	101.6	97.2	98.4	97Q3	97.4	98.9	99.5	99.4	94.9
91	96.6	97.6	100.8	96.3	97.5	97Q4	97.6	99.1	99.0	99.9	95.1
92	96.7	96.7	99.2	96.4	99.4	98Q1	97.9	99.4	98.5	101.1	95.8
93	99.4	99.3	100.1	99.9	103.0	98Q2	98.2	99.6	97.8	101.7	96.0
94	100.0	100.0	100.0	100.0	100.0	98Q3	98.3	99.7	97.3	102.1	96.2
95	101.4	101.8	101.0	101.8	99.5	98Q4	98.6	99.9	97.2	102.7	96.6
96	98.7	99.4	99.2	99.3	95.3	99Q1	98.9	100.2	97.4	103.1	97.0
97	97.6	99.0	99.5	99.3	94.8	99Q2	99.1	100.4	97.5	103.5	97.3
98	98.3	99.7	97.7	101.9	96.1	99Q3	99.3	100.5	97.8	103.8	97.6

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

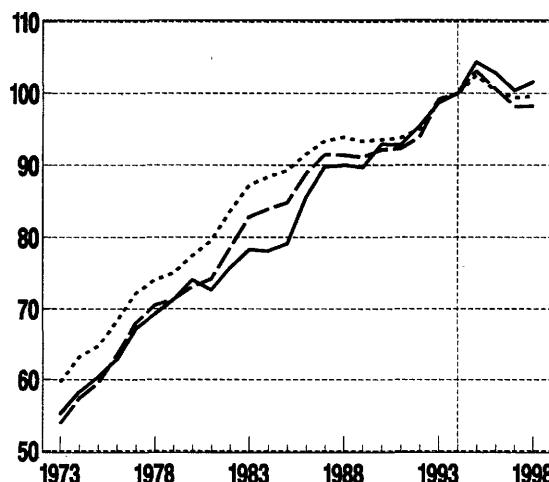
# Austria – euro (before 1999: schilling)

## Trade-weighted currency indices

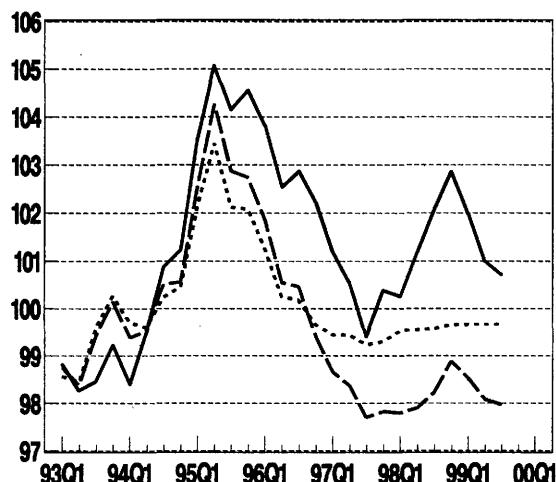
Annual data index (1994=100)				Quarterly data index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	85.6	88.9	91.5	96Q3	102.9	100.5	100.2	SEP98	0.7	0.3	0.0
87	89.8	91.5	93.4	96Q4	102.2	99.4	99.7	OCT98	0.4	0.4	0.0
88	90.0	91.4	93.9	97Q1	101.2	98.7	99.4	NOV98	-0.4	-0.1	0.0
89	89.7	91.1	93.3	97Q2	100.6	98.4	99.4	DEC98	0.1	0.1	0.0
90	92.9	92.2	93.5	97Q3	99.4	97.7	99.2	JAN99	-0.3	-0.1	-0.0
91	92.9	92.3	93.8	97Q4	100.4	97.8	99.3	FEB99	-0.6	-0.3	0.0
92	95.5	94.0	95.0	98Q1	100.3	97.8	99.5	MAR99	-0.4	-0.2	0.0
93	98.7	99.2	99.2	98Q2	101.2	97.9	99.6	APR99	-0.3	-0.1	0.0
94	100.0	100.0	100.0	98Q3	102.1	98.2	99.6	MAY99	-0.1	-0.1	0.0
95	104.3	103.1	102.4	98Q4	102.9	98.9	99.7	JUN99	-0.5	-0.2	-0.0
96	102.9	100.6	100.3	99Q1	102.0	98.5	99.7	JUL99	0.1	0.1	0.0
97	100.4	98.1	99.4	99Q2	101.0	98.1	99.7	AUG99	0.2	0.0	0.0
98	101.6	98.2	99.6	99Q3	100.7	98.0	99.7	SEP99	-0.5	-0.2	-0.0

## Trade-weighted currency indices

Annual data (index 1994=100)

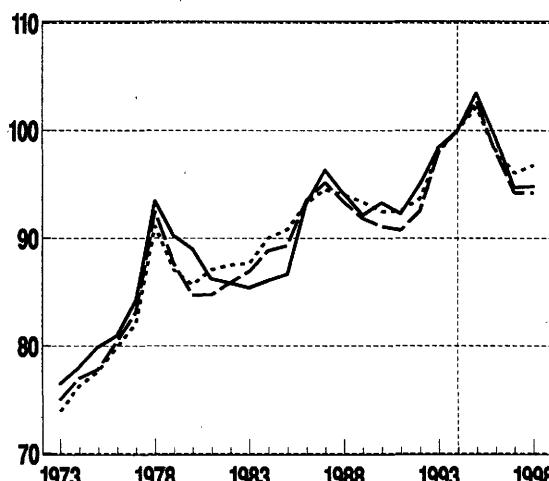


Quarterly data (index 1994=100)

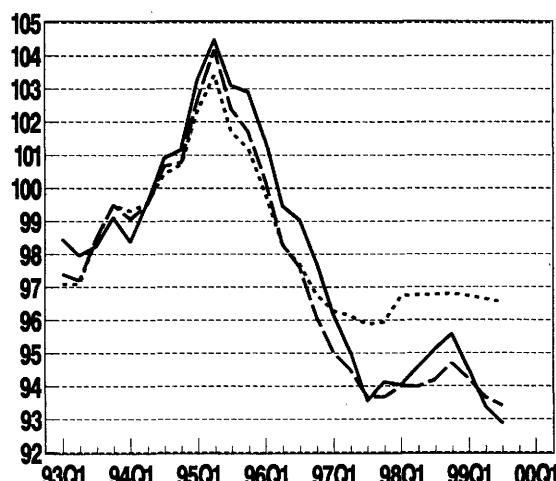


## Relative cost indicators (based on ULCE)

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	96Q3	101.7	101.4	99.9	99.0	101.6
87	98.3	97.5	97.1	96.3	101.0	96Q4	101.0	100.7	98.9	97.7	99.7
88	96.8	95.6	97.0	94.2	98.7	97Q1	99.8	99.6	97.4	96.2	97.6
89	94.6	93.6	93.8	92.2	95.0	97Q2	98.9	98.8	96.3	95.1	96.0
90	96.8	95.6	96.8	93.3	97.7	97Q3	97.5	97.5	94.9	93.6	94.3
91	94.7	94.3	95.5	92.3	94.2	97Q4	98.1	98.2	95.7	94.1	94.8
92	96.6	96.7	97.7	95.0	96.4	98Q1	97.7	97.7	95.5	94.0	94.7
93	98.9	98.9	99.6	98.4	98.8	98Q2	98.3	98.3	96.5	94.6	95.4
94	100.0	100.0	100.0	100.0	100.0	98Q3	98.9	99.0	97.4	95.1	96.0
95	102.8	103.5	102.0	103.4	106.3	98Q4	99.5	99.6	98.1	95.6	96.4
96	101.6	101.4	99.9	99.4	102.2	99Q1	98.5	98.7	97.3	94.5	95.2
97	98.6	98.5	96.1	94.7	95.7	99Q2	97.4	97.8	96.4	93.4	93.8
98	98.6	98.7	96.9	94.8	95.6	99Q3	97.1	97.6	96.1	92.9	93.0

## 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	96.8	95.6	96.0	93.5	98.8	96Q3	100.1	99.8	98.3	97.6	99.9
87	97.8	97.3	97.2	95.2	98.7	96Q4	99.1	98.9	97.0	96.1	97.8
88	96.4	95.5	97.2	93.4	96.8	97Q1	98.4	98.2	95.9	95.0	96.1
89	94.6	93.9	94.2	91.8	93.9	97Q2	98.0	98.0	95.3	94.5	95.1
90	95.0	93.8	95.3	91.1	94.6	97Q3	97.3	97.2	94.5	93.7	94.1
91	93.3	93.0	94.5	90.8	91.8	97Q4	97.3	97.3	94.6	93.7	94.2
92	94.4	94.4	95.9	92.5	93.3	98Q1	97.1	97.1	94.8	94.0	94.6
93	99.0	98.8	99.5	98.1	98.2	98Q2	97.1	97.1	95.1	94.0	94.8
94	100.0	100.0	100.0	100.0	100.0	98Q3	97.4	97.3	95.6	94.2	95.1
95	102.1	102.7	100.9	102.7	105.1	98Q4	98.0	98.0	96.3	94.7	95.6
96	100.1	99.9	98.3	98.0	100.4	99Q1	97.6	97.8	96.0	94.2	94.9
97	97.7	97.7	95.1	94.2	94.9	99Q2	97.2	97.4	95.7	93.7	94.1
98	97.4	97.4	95.4	94.2	95.0	99Q3	97.1	97.4	95.6	93.4	93.6

## 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	96.9	96.1	96.2	93.3	100.0	96Q3	100.0	99.8	98.0	97.7	100.2
87	97.5	97.3	97.1	94.5	99.4	96Q4	99.6	99.4	97.2	96.8	98.8
88	97.2	96.6	97.6	94.0	98.5	97Q1	99.4	99.3	96.5	96.3	97.9
89	95.6	95.3	94.8	93.4	95.7	97Q2	99.4	99.4	96.0	96.1	97.4
90	95.7	95.0	95.6	92.5	96.1	97Q3	99.1	99.1	95.5	95.9	97.0
91	94.7	94.6	95.0	92.5	93.6	97Q4	99.0	99.1	95.4	95.9	97.2
92	95.3	95.6	96.2	93.7	94.5	98Q1	99.2	99.2	95.7	96.7	98.1
93	99.0	98.9	99.5	98.0	97.9	98Q2	99.1	99.1	95.8	96.8	98.4
94	100.0	100.0	100.0	100.0	100.0	98Q3	99.1	99.1	95.9	96.8	98.5
95	101.5	102.2	100.4	102.2	104.9	98Q4	99.1	99.2	96.2	96.8	98.5
96	100.0	99.9	98.1	98.1	100.8	99Q1	99.2	99.4	96.4	96.7	98.2
97	99.2	99.2	95.8	96.1	97.4	99Q2	99.2	99.5	96.5	96.6	97.9
98	99.1	99.2	95.9	96.8	98.4	99Q3	99.3	99.6	96.6	96.5	97.5

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

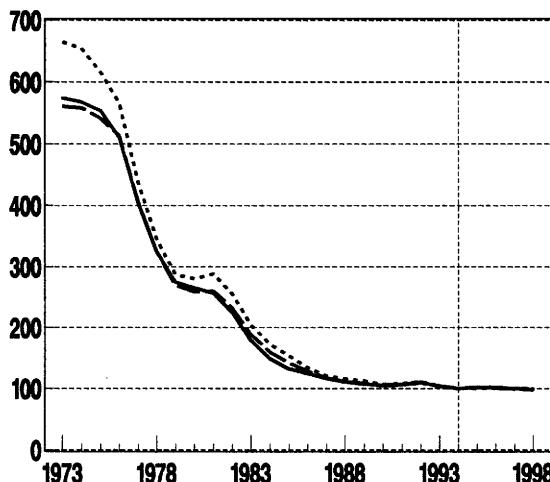
# Portugal – euro (before 1999: escudo)

## Trade-weighted currency indices

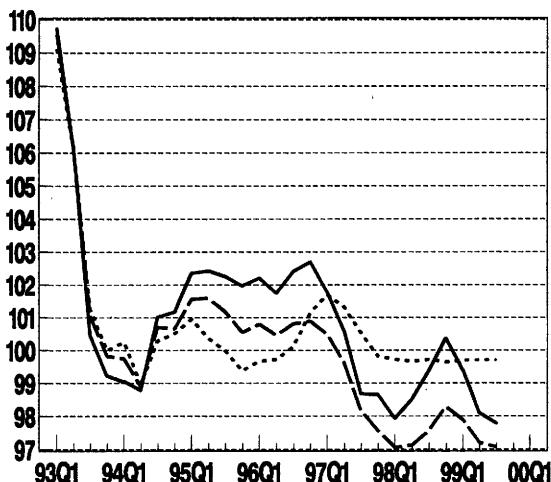
Annual data Index (1994=100)				Quarterly data Index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	124.5	128.3	133.9	96Q3	102.4	100.8	100.1	SEP98	0.7	0.3	-0.1
87	116.5	117.4	120.6	96Q4	102.7	100.9	101.1	OCT98	0.6	0.5	-0.0
88	110.8	111.4	115.8	97Q1	101.8	100.5	101.7	NOV98	-0.4	-0.1	0.0
89	107.3	108.4	112.3	97Q2	100.6	99.6	101.3	DEC98	0.2	0.1	0.0
90	105.7	104.5	106.6	97Q3	98.7	98.2	100.5	JAN99	-0.2	-0.0	0.0
91	106.8	105.8	108.3	97Q4	98.7	97.6	99.8	FEB99	-0.7	-0.4	0.0
92	110.8	109.2	110.9	98Q1	97.9	97.1	99.7	MAR99	-0.6	-0.4	0.0
93	103.8	104.1	104.1	98Q2	98.5	97.1	99.7	APR99	-0.4	-0.1	0.0
94	100.0	100.0	100.0	98Q3	99.4	97.6	99.7	MAY99	-0.2	-0.1	-0.0
95	102.3	101.2	100.2	98Q4	100.4	98.3	99.6	JUN99	-0.5	-0.2	0.0
96	102.3	100.7	100.2	99Q1	99.4	97.9	99.7	JUL99	0.1	0.2	-0.0
97	99.9	99.0	100.8	99Q2	98.1	97.2	99.7	AUG99	0.3	0.1	0.0
98	99.0	97.5	99.7	99Q3	97.8	97.1	99.7	SEP99	-0.6	-0.4	-0.0

## Trade-weighted currency indices

Annual data (index 1994=100)

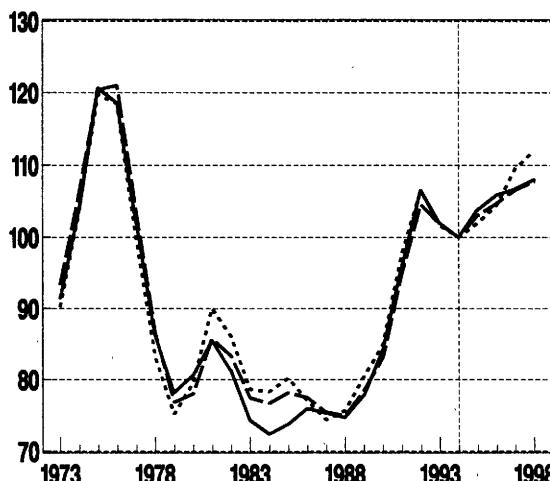


Quarterly data (Index 1994=100)

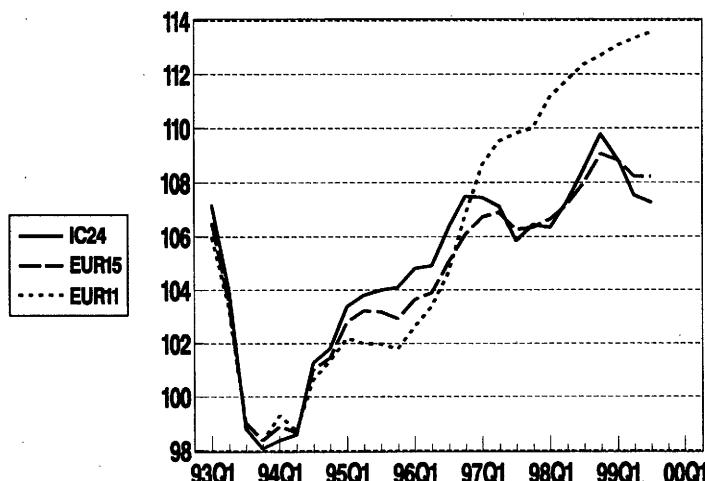


## Relative cost indicators (based on ULCE)

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	96Q3	105.3	105.4	99.5	106.3	99.6
87	79.2	78.2	91.3	75.3	64.6	96Q4	105.6	106.7	99.8	107.5	99.6
88	81.1	79.5	94.5	74.7	69.5	97Q1	104.6	107.0	99.4	107.4	98.4
89	84.8	82.6	96.6	77.8	72.4	97Q2	103.5	107.0	99.0	107.1	97.0
90	89.5	87.4	99.7	84.3	80.5	97Q3	101.7	105.8	97.8	105.8	94.9
91	96.5	94.4	101.5	95.9	92.7	97Q4	102.0	106.4	98.3	106.4	94.9
92	105.4	103.6	103.6	106.5	101.7	98Q1	101.5	106.0	97.9	106.3	94.3
93	101.5	100.3	99.9	102.0	98.4	98Q2	102.5	106.9	98.7	107.3	94.9
94	100.0	100.0	100.0	100.0	100.0	98Q3	103.7	108.2	99.8	108.8	95.8
95	103.9	104.5	104.5	103.8	101.0	98Q4	104.9	109.7	101.0	109.8	96.7
96	105.0	105.1	100.1	105.9	99.6	99Q1	104.1	109.1	100.1	108.9	95.8
97	102.9	106.6	98.6	106.7	96.3	99Q2	102.8	108.1	98.9	107.5	94.6
98	103.2	107.7	99.4	108.0	95.4	99Q3	102.5	108.2	98.7	107.3	94.3

## 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	81.3	80.8	90.8	77.5	68.3	96Q3	103.9	104.1	98.1	105.0	98.0
87	79.3	78.6	92.0	75.4	64.1	96Q4	104.1	105.2	98.3	106.1	97.9
88	81.3	79.9	95.4	75.0	69.1	97Q1	103.7	106.1	98.4	106.7	97.3
89	85.6	83.6	97.9	78.5	72.6	97Q2	103.0	106.5	98.4	106.9	96.4
90	88.5	86.5	99.0	83.1	78.9	97Q3	101.7	105.9	97.6	106.3	94.9
91	95.7	93.6	101.0	94.9	91.3	97Q4	101.4	105.9	97.5	106.3	94.4
92	103.8	101.9	102.5	104.6	99.7	98Q1	101.3	105.8	97.4	106.7	94.3
93	101.6	100.3	100.0	101.8	98.0	98Q2	101.8	106.2	97.8	107.2	94.5
94	100.0	100.0	100.0	100.0	100.0	98Q3	102.7	107.0	98.5	108.0	95.1
95	103.1	103.6	103.4	103.0	99.8	98Q4	103.7	108.3	99.4	109.1	95.9
96	103.7	103.9	98.8	104.7	98.0	99Q1	103.5	108.4	99.1	108.8	95.6
97	102.5	106.1	98.0	106.6	95.7	99Q2	102.9	108.1	98.5	108.2	94.9
98	102.4	106.8	98.3	107.7	95.0	99Q3	102.9	108.4	98.4	108.2	94.8

## 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	96Q3	103.4	103.7	97.5	104.7	98.1
87	78.9	78.6	91.7	74.4	64.8	96Q4	104.6	105.9	98.4	106.9	99.1
88	82.4	81.4	95.9	75.7	71.0	97Q1	105.3	107.9	99.3	108.7	99.8
89	87.1	85.6	98.9	80.4	74.7	97Q2	105.1	108.8	99.5	109.5	99.7
90	89.6	88.1	99.4	85.0	80.7	97Q3	104.5	109.0	99.1	109.8	99.2
91	97.9	96.2	102.0	97.7	94.0	97Q4	104.2	108.9	98.7	110.0	98.9
92	105.5	103.8	102.8	106.6	101.5	98Q1	104.6	109.3	98.8	111.2	99.4
93	101.7	100.4	100.0	101.6	97.6	98Q2	105.0	109.6	98.9	111.8	99.8
94	100.0	100.0	100.0	100.0	100.0	98Q3	105.4	110.1	99.1	112.4	100.1
95	102.1	102.6	102.5	102.0	99.3	98Q4	105.7	110.5	99.3	112.7	100.3
96	103.3	103.6	98.3	104.4	98.2	99Q1	106.0	111.1	99.6	113.1	100.5
97	104.8	108.7	99.2	109.5	99.4	99Q2	106.2	111.7	99.9	113.3	100.6
98	105.2	109.9	99.0	112.0	99.9	99Q3	106.4	112.3	100.1	113.6	100.7

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

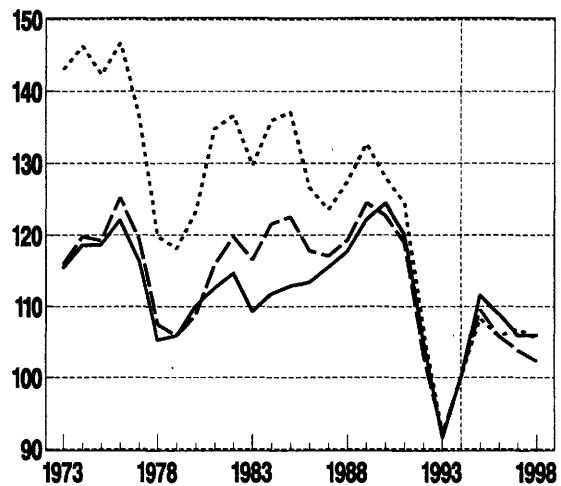
# Finland – euro (before 1999: markka)

## Trade-weighted currency indices

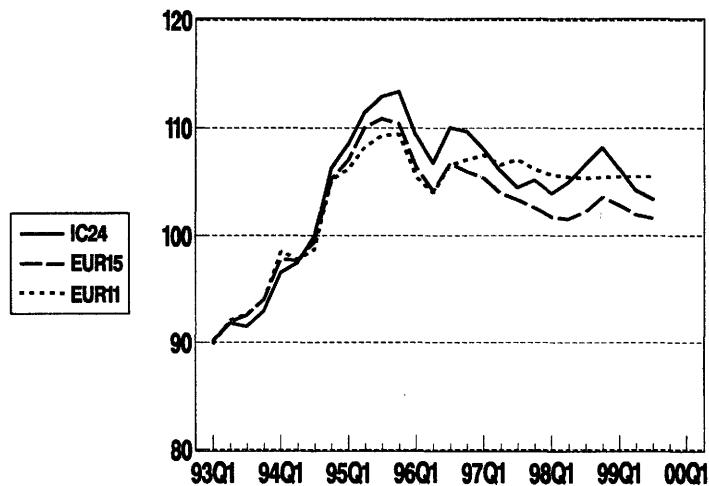
Annual data index (1994=100)				Quarterly data index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	113.4	117.8	126.6	96Q3	110.0	106.7	106.5	SEP98	1.2	0.5	-0.1
87	115.5	117.1	123.6	96Q4	109.7	106.0	107.1	OCT98	0.8	0.9	0.1
88	117.7	119.3	127.5	97Q1	108.0	105.3	107.5	NOV98	-0.8	-0.1	0.1
89	122.1	124.5	132.7	97Q2	106.0	104.0	106.6	DEC98	0.3	0.2	0.0
90	124.4	122.8	128.0	97Q3	104.5	103.3	107.1	JAN99	-0.8	-0.3	0.0
91	120.2	119.0	124.5	97Q4	105.2	102.6	106.2	FEB99	-1.1	-0.6	-0.0
92	105.3	103.1	106.8	98Q1	104.0	101.7	105.7	MAR99	-0.8	-0.4	0.0
93	91.6	92.2	92.1	98Q2	105.0	101.6	105.4	APR99	-0.6	-0.2	-0.0
94	100.0	100.0	100.0	98Q3	106.6	102.2	105.3	MAY99	-0.2	-0.1	0.0
95	111.5	109.6	108.3	98Q4	108.2	103.6	105.4	JUN99	-0.9	-0.4	-0.0
96	108.9	105.8	105.8	99Q1	106.2	102.8	105.5	JUL99	-0.0	0.1	0.0
97	105.9	103.8	106.8	99Q2	104.2	102.0	105.5	AUG99	0.4	0.1	0.0
98	105.9	102.3	105.5	99Q3	103.4	101.6	105.5	SEP99	-1.0	-0.5	0.0

## Trade-weighted currency indices

Annual data (index 1994=100)

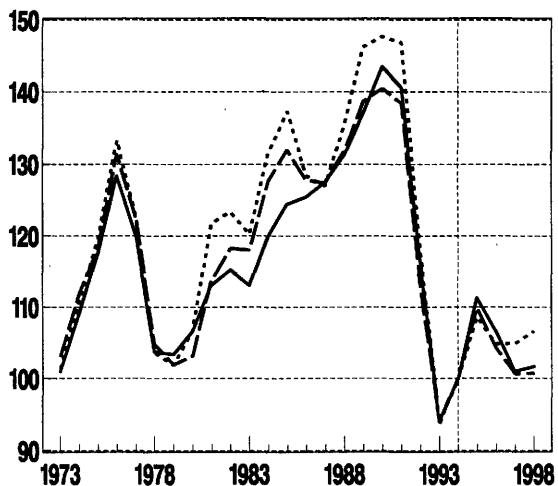


Quarterly data (index 1994=100)

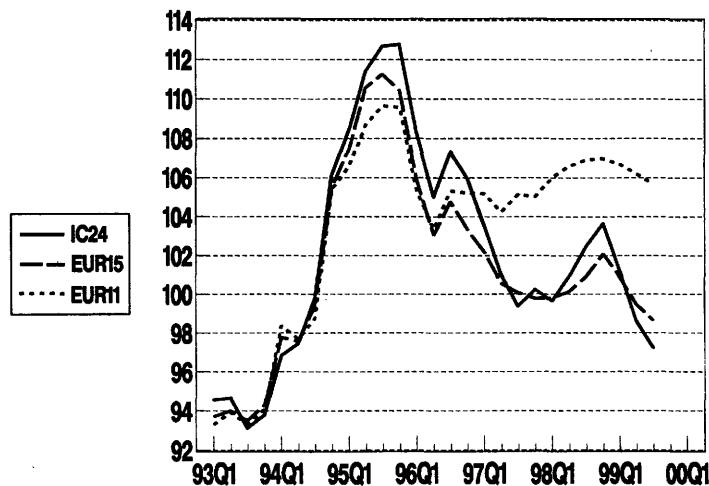


## Relative cost indicators (based on ULCE)

Annual data (index 1994=100)



Quarterly data (index 1994=100)



# 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	96Q3	106.1	108.2	110.1	107.3	112.3		
87	116.6	120.7	105.9	127.5	135.1	96Q4	105.8	107.6	109.0	106.0	110.0		
88	119.6	126.2	109.9	131.3	138.8	97Q1	104.2	105.9	106.7	103.5	106.5		
89	124.0	132.2	114.7	137.1	145.4	97Q2	102.3	104.0	104.3	101.0	103.0		
90	127.0	135.3	115.8	143.5	152.0	97Q3	100.7	102.5	102.8	99.4	100.4		
91	122.5	126.1	109.9	140.6	146.3	97Q4	101.2	103.3	103.7	100.2	100.6		
92	107.4	107.6	102.1	116.3	114.7	98Q1	99.7	102.2	102.8	99.7	99.3		
93	93.6	92.3	92.2	94.0	92.4	98Q2	100.4	103.1	104.0	100.9	100.0		
94	100.0	100.0	100.0	100.0	100.0	98Q3	101.7	104.6	105.4	102.5	101.0		
95	108.6	112.0	113.5	111.3	117.0	98Q4	103.0	105.9	106.5	103.6	101.8		
96	105.1	107.5	109.4	106.6	111.9	99Q1	100.9	103.7	103.9	101.2	99.0		
97	102.1	103.9	104.4	101.0	102.6	99Q2	98.8	101.4	101.2	98.6	96.1		
98	101.2	103.9	104.6	101.7	100.5	99Q3	97.9	100.3	99.8	97.2	94.5		

## 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	96Q3	103.5	105.7	107.4	104.8	109.2		
87	116.7	121.3	107.1	127.4	133.1	96Q4	103.0	104.8	106.1	103.3	106.8		
88	120.1	127.3	111.6	131.8	137.6	97Q1	102.5	104.3	104.9	102.2	104.5		
89	125.6	134.4	117.2	138.7	145.8	97Q2	101.3	103.1	103.2	100.6	101.9		
90	124.8	133.1	114.7	140.4	147.4	97Q3	100.8	102.7	102.6	100.1	100.6		
91	120.9	124.5	109.2	138.4	142.6	97Q4	100.0	102.2	102.2	99.8	99.6		
92	104.9	105.0	100.4	113.0	110.9	98Q1	99.0	101.4	101.7	99.8	99.1		
93	93.9	92.5	92.4	93.9	91.9	98Q2	98.8	101.4	101.8	100.1	99.0		
94	100.0	100.0	100.0	100.0	100.0	98Q3	99.3	102.0	102.4	100.9	99.3		
95	107.1	110.4	111.4	109.9	114.6	98Q4	100.6	103.3	103.3	102.1	100.1		
96	102.7	105.1	106.8	104.3	108.9	99Q1	99.8	102.3	101.9	100.9	98.5		
97	101.2	103.1	103.2	100.6	101.7	99Q2	98.9	101.2	100.2	99.5	96.8		
98	99.4	102.0	102.3	100.7	99.4	99Q3	98.5	100.7	99.2	98.6	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	118.1	123.6	107.5	128.4	145.4	96Q3	103.5	105.9	107.1	105.3	110.1		
87	117.0	123.0	107.9	127.0	137.1	96Q4	104.2	106.4	106.7	105.2	109.3		
88	123.3	132.3	113.8	135.5	145.5	97Q1	104.9	107.0	106.3	105.2	108.5		
89	130.0	141.3	120.5	146.2	155.6	97Q2	104.2	106.3	104.8	104.2	106.8		
90	128.4	138.9	116.8	147.7	156.1	97Q3	104.8	107.1	105.0	105.1	107.0		
91	126.6	131.5	111.9	146.9	152.6	97Q4	103.9	106.4	104.1	105.0	106.2		
92	108.4	109.1	101.7	117.6	116.3	98Q1	103.3	106.1	103.7	106.0	106.6		
93	93.9	92.6	92.2	93.6	91.5	98Q2	103.0	105.9	103.6	106.6	106.7		
94	100.0	100.0	100.0	100.0	100.0	98Q3	102.8	105.8	103.4	106.9	106.6		
95	105.9	109.3	110.7	108.6	113.9	98Q4	102.9	105.9	103.1	107.0	106.2		
96	102.8	105.4	106.7	104.8	109.9	99Q1	102.9	105.8	102.6	106.7	105.5		
97	104.5	106.7	105.0	104.9	107.1	99Q2	102.9	105.6	102.0	106.2	104.6		
98	103.0	105.9	103.4	106.6	106.5	99Q3	102.9	105.4	101.4	105.7	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

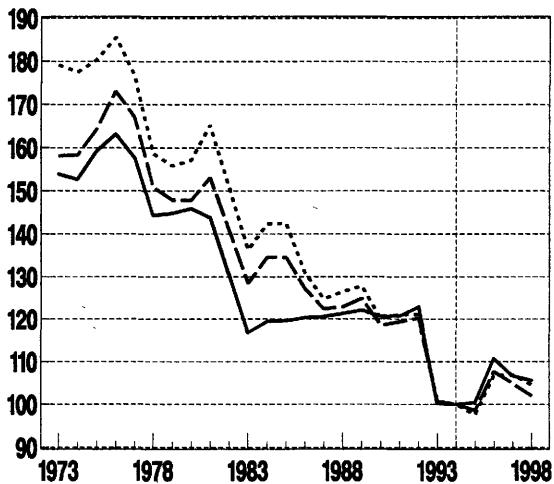
# Sweden – krona

## Trade-weighted currency indices

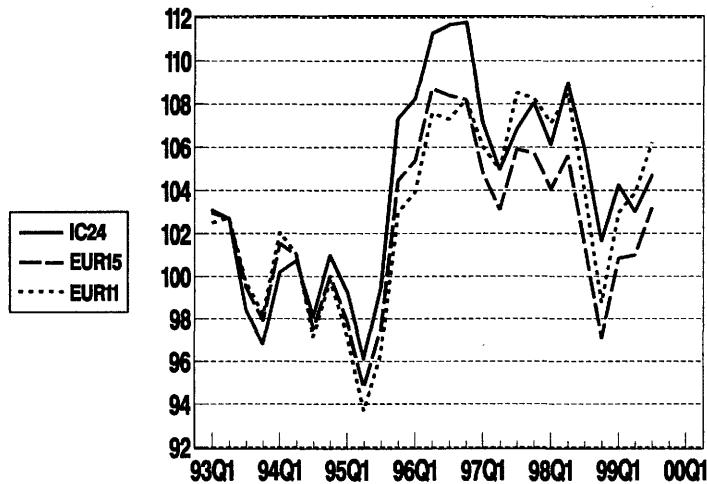
Annual data index (1994=100)				Quarterly data index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	120.4	127.2	131.0	96Q3	111.7	108.4	107.3	SEP98	-0.8	-1.7	-2.0
87	120.6	122.4	124.8	96Q4	111.8	108.2	108.2	OCT98	-2.4	-2.5	-3.0
88	121.4	122.9	126.4	97Q1	107.1	104.8	106.0	NOV98	-0.2	0.6	0.7
89	122.1	124.9	127.8	97Q2	105.0	103.1	104.9	DEC98	-1.2	-1.5	-1.5
90	120.7	118.6	120.1	97Q3	106.8	105.9	108.5	JAN99	3.1	3.8	3.7
91	120.8	119.4	121.2	97Q4	108.0	105.7	108.3	FEB99	1.2	1.8	2.2
92	122.9	120.2	121.1	98Q1	106.1	104.1	107.1	MAR99	-1.2	-0.8	-0.4
93	100.2	100.7	100.8	98Q2	109.0	105.6	108.5	APR99	-0.4	0.1	0.3
94	100.0	100.0	100.0	98Q3	105.9	101.5	104.0	MAY99	-0.9	-0.8	-0.7
95	100.5	98.6	97.5	98Q4	101.7	97.1	98.8	JUN99	0.8	1.4	1.6
96	110.7	107.7	106.7	99Q1	104.3	100.9	103.0	JUL99	1.0	1.2	1.0
97	106.7	104.9	106.9	99Q2	103.0	101.0	103.9	AUG99	0.3	-0.0	-0.1
98	105.6	102.0	104.5	99Q3	104.7	103.2	106.2	SEP99	0.5	1.0	1.4

## Trade-weighted currency indices

Annual data (Index 1994=100)

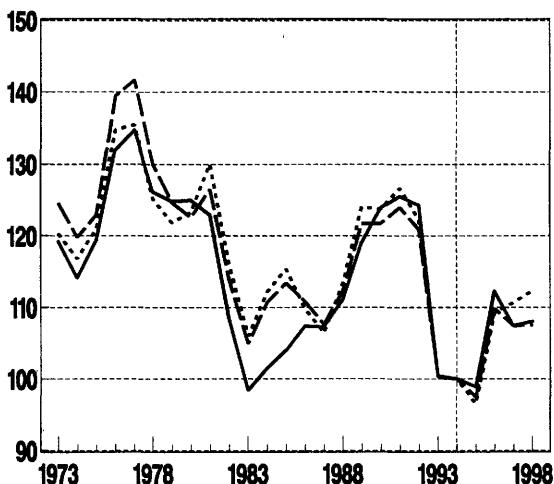


Quarterly data (Index 1994=100)

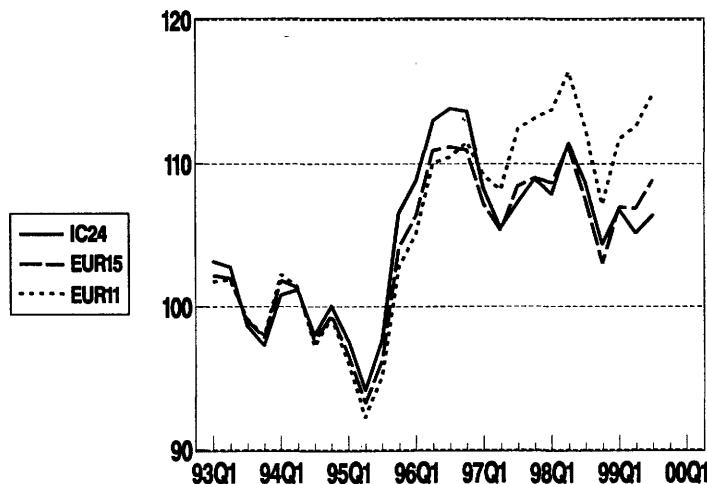


## Relative cost indicators (based on ULCE)

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	96Q3	110.0	110.7	106.7	113.8	111.5
87	105.0	110.7	109.0	107.3	119.4	96Q4	110.0	110.6	106.2	113.6	111.0
88	107.7	113.6	112.6	111.1	127.0	97Q1	105.4	105.7	102.0	108.2	105.3
89	110.6	117.8	114.3	119.1	134.1	97Q2	103.4	103.4	100.6	105.5	102.2
90	114.6	120.8	113.0	123.9	136.1	97Q3	105.1	105.0	102.9	107.3	103.5
91	120.5	124.6	113.9	125.5	140.8	97Q4	106.1	106.0	104.3	108.9	104.6
92	120.4	123.7	112.0	124.3	137.9	98Q1	103.9	103.8	102.5	107.9	103.1
93	100.3	100.3	98.3	100.4	103.6	98Q2	106.3	106.2	105.1	111.4	106.2
94	100.0	100.0	100.0	100.0	100.0	98Q3	103.0	103.0	102.0	108.7	103.6
95	100.5	101.2	104.8	98.9	97.5	98Q4	98.5	98.6	97.7	104.4	99.5
96	109.3	110.1	107.3	112.3	110.0	99Q1	100.7	100.9	100.0	106.8	102.1
97	105.0	105.0	102.5	107.5	103.9	99Q2	99.2	99.6	98.7	105.1	100.9
98	102.9	102.9	101.8	108.1	103.1	99Q3	100.6	101.1	100.2	106.4	102.4

## 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	106.2	114.6	112.2	110.8	122.1	96Q3	107.2	108.2	104.3	111.2	108.5
87	104.9	111.6	110.9	107.6	117.5	96Q4	107.1	107.9	103.7	110.9	108.0
88	108.2	115.0	115.0	112.3	126.2	97Q1	103.9	104.5	100.8	107.2	103.9
89	112.7	120.8	118.0	121.7	135.3	97Q2	102.4	102.8	99.8	105.3	101.6
90	112.7	119.2	112.7	121.7	131.9	97Q3	105.3	105.5	103.1	108.4	104.2
91	119.2	123.5	113.9	124.0	137.4	97Q4	105.1	105.1	103.1	109.0	104.3
92	117.7	120.8	110.2	120.9	133.4	98Q1	103.3	103.2	101.5	108.7	103.6
93	100.7	100.6	98.6	100.2	102.8	98Q2	104.6	104.5	102.8	111.2	105.9
94	100.0	100.0	100.0	100.0	100.0	98Q3	100.3	100.2	98.6	107.5	102.3
95	98.9	99.6	102.8	97.5	95.3	98Q4	95.8	95.7	94.1	103.0	98.2
96	106.7	107.7	105.0	109.8	107.1	99Q1	99.4	99.4	97.6	107.0	102.1
97	104.1	104.5	101.7	107.5	103.5	99Q2	99.4	99.5	97.5	106.9	102.3
98	100.9	100.9	99.2	107.6	102.5	99Q3	101.4	101.6	99.5	108.9	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	106.3	114.8	111.9	109.8	123.1	96Q3	106.4	107.5	103.4	110.5	108.3
87	104.6	111.4	110.1	106.4	118.2	96Q4	107.4	108.4	103.7	111.5	109.3
88	109.6	116.6	114.7	113.3	128.5	97Q1	105.5	106.3	101.7	109.2	106.9
89	114.2	122.8	118.0	124.0	137.3	97Q2	104.6	105.2	101.1	108.2	105.7
90	113.6	120.7	112.5	123.7	133.4	97Q3	108.4	108.8	104.7	112.4	109.6
91	121.2	125.9	114.3	126.6	139.6	97Q4	108.1	108.3	104.4	113.1	110.1
92	118.8	122.2	110.2	122.3	134.3	98Q1	106.8	106.9	103.0	113.7	110.3
93	100.8	100.8	98.8	100.2	102.4	98Q2	108.0	108.1	104.0	116.4	112.7
94	100.0	100.0	100.0	100.0	100.0	98Q3	103.4	103.4	99.5	112.4	108.9
95	97.8	98.5	101.7	96.5	95.0	98Q4	98.1	98.1	94.3	107.1	103.8
96	106.1	107.2	104.2	109.2	107.1	99Q1	102.2	102.3	98.3	111.7	108.6
97	106.6	107.1	103.0	110.7	108.1	99Q2	103.0	103.3	99.2	112.6	109.7
98	104.0	104.1	100.1	112.3	108.9	99Q3	105.3	105.6	101.5	114.9	112.3

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

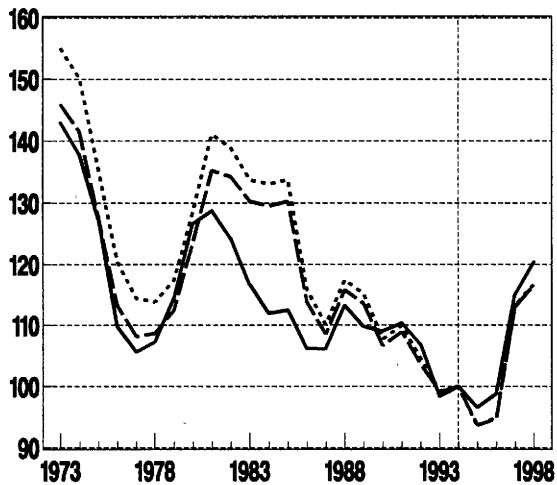
# United Kingdom – pound sterling

## Trade-weighted currency indices

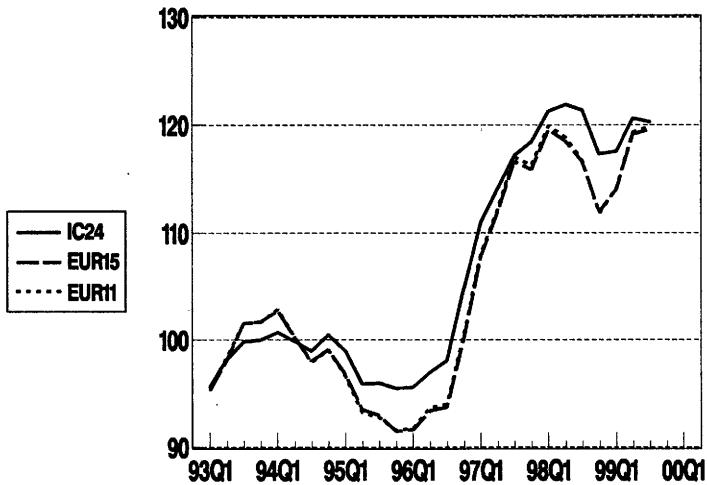
Annual data index (1994=100)				Quarterly data index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	106.2	113.8	115.9	96Q3	98.1	93.7	94.0	SEP98	-0.8	-1.9	-2.0
87	106.2	108.5	110.1	96Q4	104.8	100.1	100.5	OCT98	-2.5	-2.8	-2.9
88	113.2	115.8	117.5	97Q1	111.0	107.8	108.0	NOV98	-0.3	0.6	0.7
89	109.8	113.5	115.1	97Q2	114.0	111.9	112.1	DEC98	0.1	-0.1	-0.1
90	109.1	106.6	107.7	97Q3	117.1	116.6	117.0	JAN99	-1.0	-0.5	-0.3
91	110.4	108.9	110.0	97Q4	118.4	115.9	116.3	FEB99	1.0	2.0	2.1
92	106.9	103.6	104.6	98Q1	121.3	119.6	119.9	MAR99	1.8	2.6	2.6
93	98.4	99.1	99.2	98Q2	121.9	118.5	118.8	APR99	0.3	0.9	0.9
94	100.0	100.0	100.0	98Q3	121.4	116.6	116.7	MAY99	0.9	1.1	1.0
95	96.6	93.6	93.5	98Q4	117.3	112.0	111.8	JUN99	0.3	1.1	1.2
96	98.8	94.7	94.9	99Q1	117.6	114.1	114.1	JUL99	-1.3	-1.2	-1.1
97	115.1	113.0	113.3	99Q2	120.6	119.1	119.3	AUG99	0.1	-0.4	-0.4
98	120.4	116.6	116.8	99Q3	120.3	119.6	119.8	SEP99	1.2	2.0	2.1

## Trade-weighted currency indices

Annual data (index 1994=100)

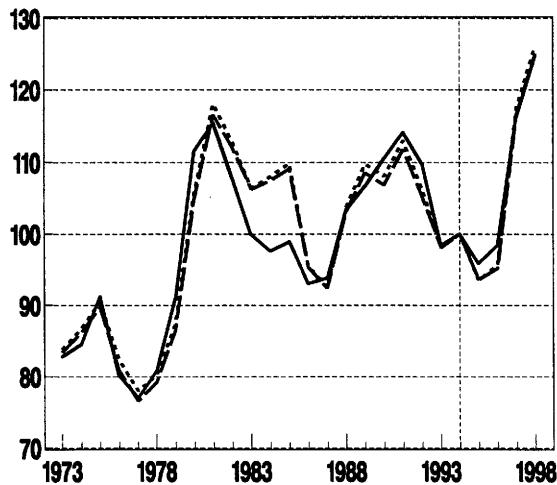


Quarterly data (index 1994=100)

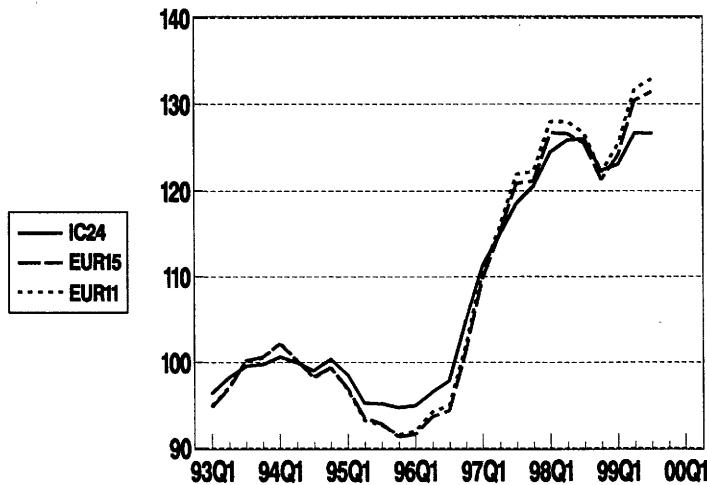


## Relative cost indicators (based on ULCE)

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	96Q3	98.7	98.7	98.8	97.8	102.6
87	98.6	98.7	94.5	93.8	104.8	96Q4	105.5	105.7	104.3	104.8	111.1
88	106.3	107.1	97.5	103.4	111.3	97Q1	111.7	112.0	108.5	111.3	119.6
89	104.4	106.6	97.7	106.7	107.2	97Q2	114.8	115.2	109.4	114.8	125.0
90	106.8	109.1	100.7	110.6	109.6	97Q3	117.8	118.3	110.2	118.6	130.2
91	111.3	112.6	102.4	114.2	112.1	97Q4	119.1	119.6	109.4	120.5	132.8
92	108.3	109.2	100.5	109.8	106.5	98Q1	121.9	122.4	110.5	124.5	137.1
93	99.5	99.8	99.5	98.5	96.3	98Q2	122.5	123.1	110.0	125.9	138.3
94	100.0	100.0	100.0	100.0	100.0	98Q3	122.0	122.7	109.3	126.0	138.2
95	96.6	96.1	97.0	95.9	100.5	98Q4	117.9	118.7	106.1	122.4	133.9
96	99.4	99.3	99.6	98.5	103.3	99Q1	118.2	119.2	107.2	123.1	134.7
97	115.8	116.2	109.4	116.2	126.8	99Q2	121.4	122.5	111.2	126.7	138.6
98	121.0	121.7	108.9	124.7	136.9	99Q3	121.1	122.4	112.1	126.7	138.8

## 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	101.3	101.4	96.8	95.3	105.7	96Q3	95.0	95.1	94.9	94.3	98.2
87	98.0	98.8	95.4	92.4	102.4	96Q4	101.7	102.0	100.1	101.4	106.7
88	106.7	108.2	99.4	103.1	109.8	97Q1	109.7	110.1	105.9	109.8	117.3
89	106.7	109.5	100.6	108.6	108.2	97Q2	114.1	114.6	107.8	115.0	124.4
90	103.8	106.2	98.6	106.9	104.8	97Q3	119.1	119.6	110.1	120.9	132.0
91	109.4	110.8	101.1	111.8	108.4	97Q4	118.4	119.0	107.5	121.1	133.0
92	104.7	105.4	97.6	105.3	101.4	98Q1	122.4	122.9	109.4	126.7	139.2
93	99.9	100.1	99.7	98.1	95.5	98Q2	121.5	121.9	107.4	126.6	139.1
94	100.0	100.0	100.0	100.0	100.0	98Q3	119.7	120.2	105.5	125.5	137.7
95	94.0	93.6	94.0	93.6	97.1	98Q4	115.2	115.8	101.7	121.3	132.9
96	95.9	95.9	95.8	95.2	99.1	99Q1	117.6	118.3	104.5	124.2	136.0
97	115.3	115.8	107.8	116.6	126.5	99Q2	123.1	123.9	110.4	130.4	142.7
98	119.7	120.2	106.0	125.0	137.2	99Q3	123.8	124.7	112.0	131.4	143.9

## 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	101.3	101.9	97.3	95.5	106.5	96Q3	95.4	95.5	95.0	94.9	98.7
87	98.0	99.1	95.8	92.5	103.0	96Q4	102.2	102.5	100.3	102.1	107.3
88	107.0	108.8	99.9	103.7	111.0	97Q1	110.0	110.5	106.0	110.5	117.9
89	107.3	110.5	101.2	109.8	109.8	97Q2	114.4	115.0	107.9	115.7	125.0
90	104.4	107.1	99.1	108.1	106.2	97Q3	119.6	120.3	110.5	121.9	133.0
91	110.3	111.9	101.7	113.0	110.0	97Q4	119.0	119.6	107.8	122.3	134.1
92	105.5	106.3	98.1	106.3	102.8	98Q1	122.9	123.5	109.6	128.0	140.5
93	100.0	100.1	99.7	98.1	95.6	98Q2	122.0	122.5	107.6	128.0	140.4
94	100.0	100.0	100.0	100.0	100.0	98Q3	120.0	120.5	105.5	126.7	138.9
95	93.9	93.5	94.1	93.5	97.0	98Q4	115.2	115.8	101.5	122.2	133.8
96	96.2	96.3	96.0	95.7	99.5	99Q1	117.9	118.6	104.5	125.4	137.2
97	115.7	116.3	108.0	117.5	127.3	99Q2	123.5	124.3	110.4	131.7	144.1
98	120.0	120.5	106.0	126.2	138.4	99Q3	124.3	125.3	112.1	132.9	145.4

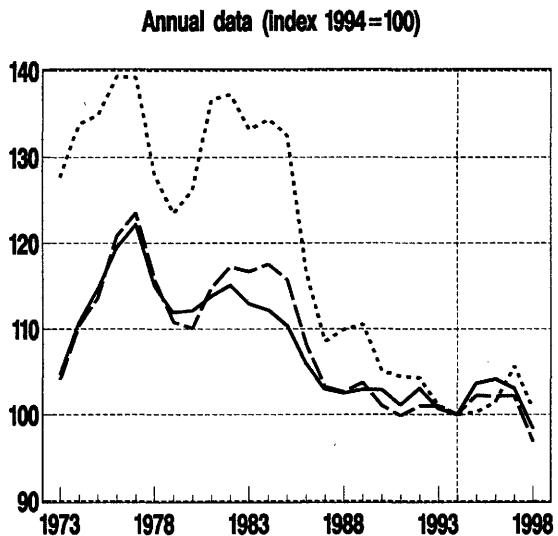
Abbreviations: IC24 = 24 Industrial Countries  
 EUR15 = 15 Member States of the European Union  
 EUR11 = Countries in the euro area  
 PCP = Deflator of private consumption  
 PGDP = Gross Domestic Product Deflator  
 PX = Price Deflator Exports of Goods and Services  
 ULCE = Nominal Unit Labour Cost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

# Norway – krone

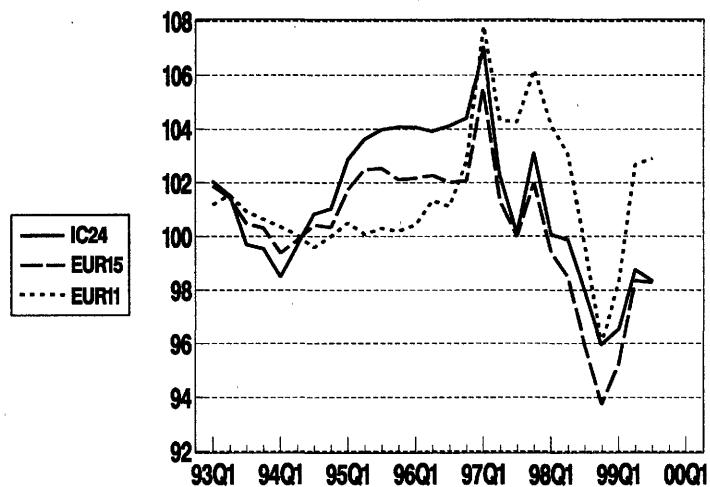
## Trade-weighted currency indices

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	96Q3	104.1	102.0	101.1	SEP98	-1.7	-2.3	-2.9
87	103.0	103.2	108.5	96Q4	104.4	102.1	102.8	OCT98	-0.8	-1.0	-1.9
88	102.5	102.6	110.0	97Q1	107.0	105.5	107.8	NOV98	1.6	2.2	2.4
89	102.9	103.7	110.6	97Q2	102.3	101.3	104.3	DEC98	-2.5	-2.5	-2.7
90	102.9	101.1	105.1	97Q3	100.1	100.0	104.3	JAN99	2.2	2.6	2.8
91	101.2	99.9	104.5	97Q4	103.1	102.0	106.2	FEB99	-1.1	-0.5	0.1
92	103.1	101.0	104.3	98Q1	100.1	99.4	104.2	MAR99	0.8	1.1	1.7
93	100.7	101.0	101.1	98Q2	99.9	98.5	103.1	APR99	1.6	2.0	2.3
94	100.0	100.0	100.0	98Q3	98.0	96.0	99.7	MAY99	0.7	0.8	1.0
95	103.6	102.2	100.3	98Q4	96.0	93.7	96.0	JUN99	-0.0	0.4	0.8
96	104.1	102.1	101.4	99Q1	96.5	95.2	98.3	JUL99	-0.0	0.0	-0.1
97	103.1	102.2	105.6	99Q2	98.8	98.3	102.7	AUG99	-0.6	-0.9	-1.0
98	98.5	96.9	100.7	99Q3	98.3	98.3	102.9	SEP99	-0.6	-0.2	0.4

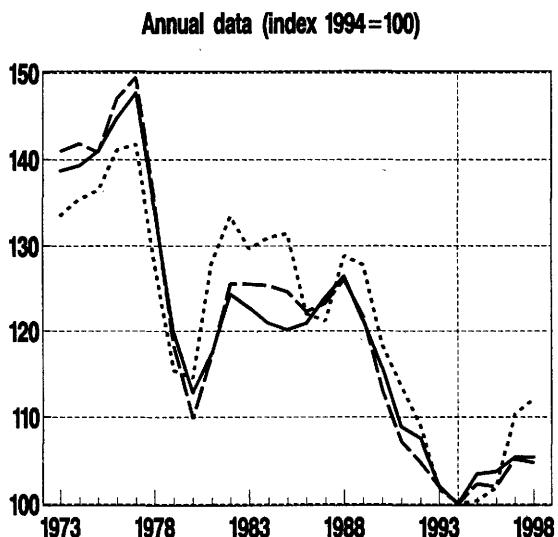
## Trade-weighted currency indices



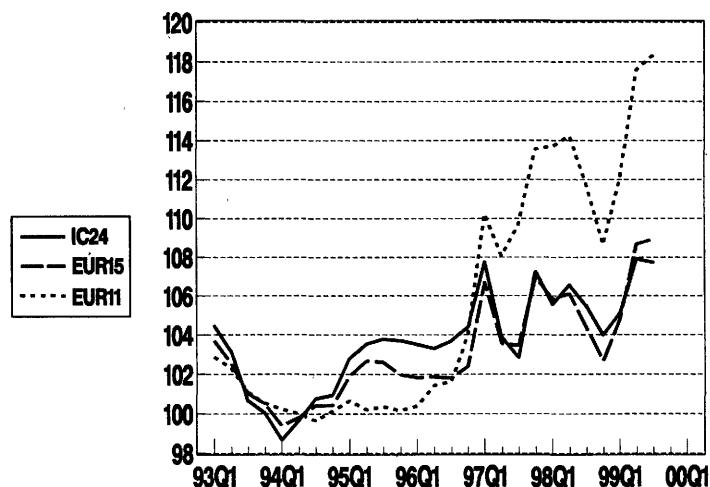
Quarterly data (index 1994=100)



## Relative cost indicators (based on ULCE)



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	96Q3	102.9	107.0	110.6	103.7	108.6
87	108.3	114.0	115.9	123.9	105.0	96Q4	103.2	107.8	112.5	104.4	110.7
88	110.1	114.2	113.2	126.4	110.2	97Q1	105.9	110.9	116.2	107.8	115.3
89	110.4	115.2	119.3	121.3	106.7	97Q2	101.3	106.1	110.9	103.9	111.7
90	109.5	113.5	121.0	115.7	104.1	97Q3	99.4	103.5	107.1	102.8	110.4
91	105.7	108.8	116.2	108.9	100.5	97Q4	102.6	105.8	107.8	107.2	114.2
92	106.4	106.6	109.1	107.6	102.4	98Q1	99.8	101.9	101.8	105.6	111.1
93	102.3	103.3	105.5	102.1	96.9	98Q2	99.9	100.9	99.1	106.6	110.9
94	100.0	100.0	100.0	100.0	100.0	98Q3	98.3	98.5	95.6	105.5	109.0
95	103.5	104.1	102.3	103.5	104.4	98Q4	96.6	96.4	92.9	104.0	107.1
96	103.1	106.7	109.4	103.7	108.0	99Q1	97.5	97.2	93.5	105.1	108.3
97	102.3	106.6	110.5	105.4	112.9	99Q2	100.0	99.9	96.2	107.9	111.4
98	98.6	99.4	97.3	105.4	109.5	99Q3	99.9	100.0	96.8	107.7	111.6

## 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	96Q3	100.9	104.9	108.4	101.8	106.1
87	108.1	114.1	116.5	123.3	103.7	96Q4	101.0	105.6	110.0	102.4	108.0
88	110.1	114.3	114.1	126.0	109.0	97Q1	104.6	109.6	114.6	106.7	113.5
89	111.3	116.2	120.7	121.7	106.8	97Q2	100.7	105.4	109.9	103.6	110.6
90	107.6	111.5	119.4	113.1	101.3	97Q3	99.6	103.7	107.0	103.5	110.3
91	104.3	107.3	115.2	107.1	98.4	97Q4	101.9	105.0	106.7	106.9	113.2
92	104.2	104.2	107.3	104.8	99.6	98Q1	99.6	101.5	101.3	105.8	110.8
93	102.6	103.4	105.6	101.9	96.7	98Q2	99.0	99.8	97.9	106.1	110.1
94	100.0	100.0	100.0	100.0	100.0	98Q3	96.8	96.9	93.8	104.4	107.6
95	102.2	102.7	100.9	102.3	102.5	98Q4	94.9	94.8	90.9	102.7	105.5
96	101.2	104.8	107.3	102.0	105.5	99Q1	96.7	96.3	92.3	104.8	107.7
97	101.7	105.9	109.5	105.2	111.9	99Q2	100.3	99.9	95.9	108.7	111.9
98	97.5	98.1	95.9	104.7	108.5	99Q3	100.6	100.4	96.6	108.9	112.4

## 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	109.6	118.3	121.5	122.0	108.7	96Q3	100.4	104.5	107.3	101.6	106.6
87	107.6	114.7	116.2	121.2	105.9	96Q4	102.1	107.0	110.3	104.0	110.8
88	113.0	118.6	115.5	128.8	114.7	97Q1	107.4	112.7	116.2	110.2	118.9
89	114.9	121.8	123.1	127.8	112.7	97Q2	104.2	109.3	111.8	108.1	117.4
90	110.3	115.7	120.6	118.3	105.9	97Q3	104.5	108.9	109.8	109.7	119.2
91	109.3	113.3	117.4	113.6	104.4	97Q4	106.8	110.2	108.9	113.6	122.8
92	107.6	108.3	108.2	109.0	103.6	98Q1	105.0	107.2	103.6	113.7	121.7
93	102.8	103.7	105.7	101.7	96.0	98Q2	104.3	105.3	99.8	114.2	121.1
94	100.0	100.0	100.0	100.0	100.0	98Q3	101.2	101.4	94.8	111.8	117.7
95	100.4	100.9	99.4	100.3	101.4	98Q4	97.9	97.7	90.7	108.6	114.1
96	100.8	104.5	106.6	101.9	106.2	99Q1	100.7	100.4	93.1	112.0	117.6
97	105.7	110.3	111.6	110.4	119.6	99Q2	105.7	105.4	98.0	117.6	123.7
98	102.1	102.8	97.1	112.1	118.6	99Q3	106.3	106.3	99.3	118.3	124.8

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

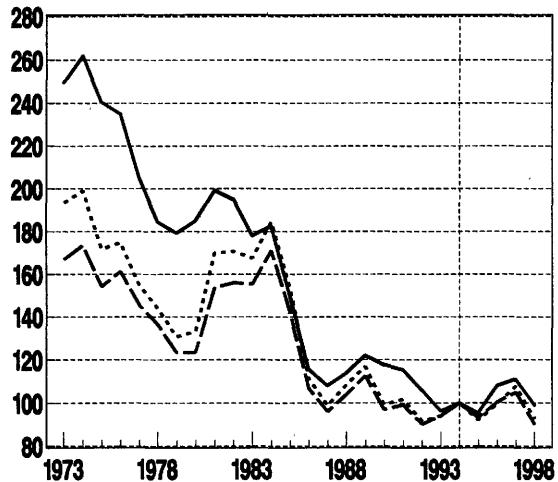
# Australia – dollar

## Trade-weighted currency indices

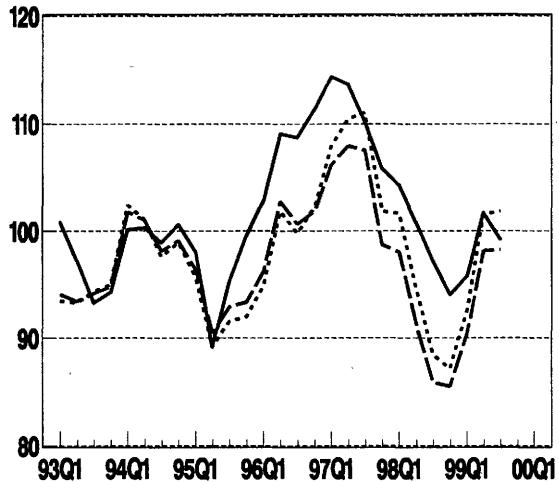
Annual data index (1994=100)				Quarterly data index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	115.6	106.8	111.4	96Q3	108.7	100.7	99.8	SEP98	-4.2	-4.5	-5.0
87	108.1	96.1	98.8	96Q4	111.3	101.8	102.2	OCT98	-0.2	1.9	1.2
88	113.9	104.0	108.4	97Q1	114.4	106.2	107.9	NOV98	3.3	5.3	5.4
89	122.0	112.6	116.8	97Q2	113.7	107.9	110.4	DEC98	-3.5	-3.1	-3.2
90	117.7	97.0	99.1	97Q3	110.1	107.5	111.1	JAN99	0.7	2.6	2.8
91	115.4	99.2	101.8	97Q4	105.8	98.7	101.8	FEB99	3.5	4.6	5.1
92	106.0	90.2	91.6	98Q1	104.3	98.0	101.7	MAR99	0.4	1.0	1.5
93	96.4	94.1	94.0	98Q2	100.8	91.3	94.6	APR99	2.1	3.3	3.5
94	100.0	100.0	100.0	98Q3	97.2	85.9	88.5	MAY99	4.0	3.8	4.0
95	95.4	93.3	92.1	98Q4	94.1	85.5	87.1	JUN99	-0.3	1.2	1.5
96	107.9	100.3	99.7	99Q1	95.8	90.4	92.7	JUL99	-0.0	0.5	0.4
97	111.0	105.0	107.8	99Q2	101.7	98.1	101.5	AUG99	-4.5	-4.2	-4.3
98	99.0	90.1	92.8	99Q3	99.2	98.2	101.8	SEP99	-1.2	1.2	1.7

## Trade-weighted currency indices

Annual data (Index 1994=100)

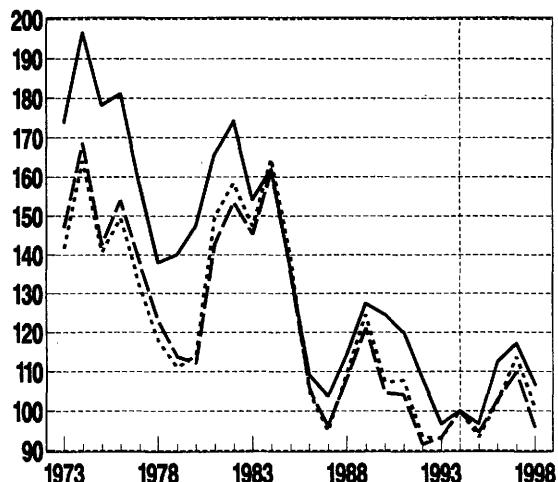


Quarterly data (Index 1994=100)

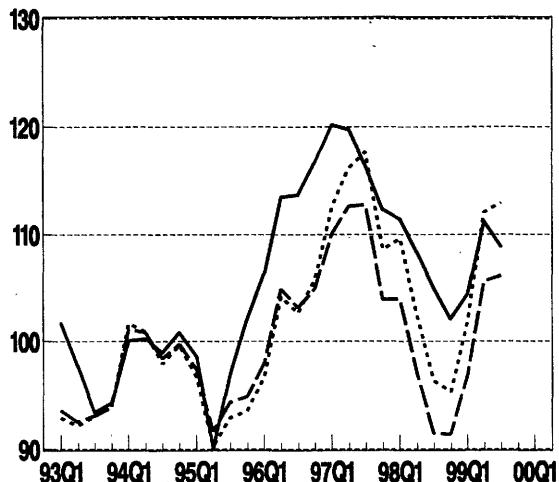


## Relative cost indicators (based on ULCE)

Annual data (Index 1994=100)



Quarterly data (Index 1994=100)



# 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	96Q3	109.6	111.2	104.2	113.7	119.1
87	105.2	106.1	104.5	103.8	105.8	96Q4	111.9	114.0	106.6	116.7	124.5
88	115.5	118.0	114.3	114.4	115.2	97Q1	114.7	117.3	110.1	120.2	130.8
89	126.5	128.8	122.3	127.4	130.4	97Q2	113.8	116.8	110.4	119.8	132.3
90	122.9	123.5	113.7	124.7	125.3	97Q3	110.2	113.2	107.9	116.4	128.9
91	118.9	118.7	108.5	120.1	118.7	97Q4	105.9	108.9	104.6	112.3	123.2
92	108.0	107.5	103.8	108.1	107.6	98Q1	104.5	107.4	103.9	111.5	120.2
93	97.3	96.6	94.8	96.7	94.0	98Q2	101.3	103.9	101.4	108.4	114.8
94	100.0	100.0	100.0	100.0	100.0	98Q3	97.9	100.4	98.8	105.0	109.9
95	96.3	96.6	96.9	96.8	101.7	98Q4	95.1	97.4	96.7	102.1	106.3
96	108.9	110.3	104.3	112.5	118.0	99Q1	97.2	99.5	99.6	104.4	108.7
97	111.1	114.0	108.3	117.1	128.8	99Q2	103.6	106.1	106.9	111.2	116.3
98	99.7	102.2	100.2	106.7	112.7	99Q3	101.5	103.9	105.3	108.9	114.5

## 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	96Q3	99.7	100.5	94.9	103.1	107.1
87	98.2	99.9	103.7	96.1	92.5	96Q4	100.7	101.8	96.0	104.9	110.6
88	110.5	113.7	116.2	108.4	103.4	97Q1	104.7	106.3	100.6	110.1	117.9
89	121.9	124.7	124.5	121.1	118.7	97Q2	106.4	108.2	103.1	112.6	122.0
90	105.4	105.7	103.6	104.6	100.6	97Q3	105.8	107.9	103.8	112.8	122.6
91	105.2	104.9	101.4	104.1	98.2	97Q4	107.3	99.1	96.4	103.9	112.5
92	93.6	92.9	94.7	91.5	88.2	98Q1	96.8	98.4	96.8	103.9	111.4
93	95.6	94.8	94.2	93.3	89.5	98Q2	90.3	91.6	91.2	97.0	102.9
94	100.0	100.0	100.0	100.0	100.0	98Q3	85.1	86.2	86.5	91.5	96.3
95	93.3	93.5	92.3	94.5	96.9	98Q4	85.0	85.9	86.7	91.3	95.7
96	99.6	100.3	95.2	102.7	106.4	99Q1	90.2	91.0	92.1	96.9	101.4
97	103.5	105.3	100.9	109.8	118.7	99Q2	98.3	99.1	100.4	105.6	110.6
98	89.2	90.4	90.2	95.8	101.4	99Q3	98.7	99.5	100.7	106.1	111.3

## 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	104.5	107.3	106.9	105.0	107.7	96Q3	99.1	100.0	94.1	102.6	107.1
87	97.9	100.0	103.3	94.8	93.7	96Q4	101.3	102.6	96.1	105.8	112.3
88	112.4	116.3	116.8	109.8	106.6	97Q1	106.8	108.6	101.7	112.6	121.8
89	124.2	128.2	125.7	124.5	122.4	97Q2	109.2	111.3	104.5	116.2	127.5
90	106.9	108.0	104.0	107.3	103.1	97Q3	109.8	112.1	105.9	117.7	129.9
91	108.1	108.3	102.3	107.7	101.5	97Q4	100.8	102.8	97.8	108.6	119.4
92	95.2	94.8	94.9	93.3	89.8	98Q1	100.8	102.6	98.6	109.7	119.4
93	95.7	94.9	94.2	93.0	88.9	98Q2	94.0	95.5	92.5	102.5	110.4
94	100.0	100.0	100.0	100.0	100.0	98Q3	88.2	89.4	87.3	96.3	102.9
95	92.2	92.3	91.3	93.3	96.3	98Q4	87.1	88.2	86.6	95.3	101.4
96	99.1	99.9	94.5	102.3	106.6	99Q1	93.0	94.1	92.7	101.8	108.3
97	106.6	108.6	102.4	113.7	124.6	99Q2	102.3	103.4	102.1	112.1	119.3
98	92.4	93.8	91.1	100.8	108.3	99Q3	103.1	104.1	102.9	113.0	120.4

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

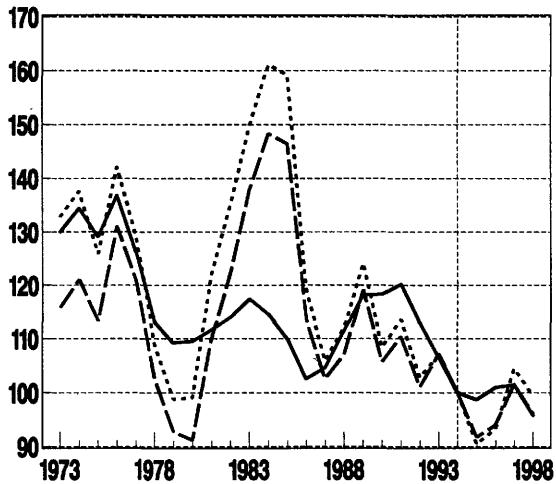
# Canada – dollar

## Trade – weighted currency indices

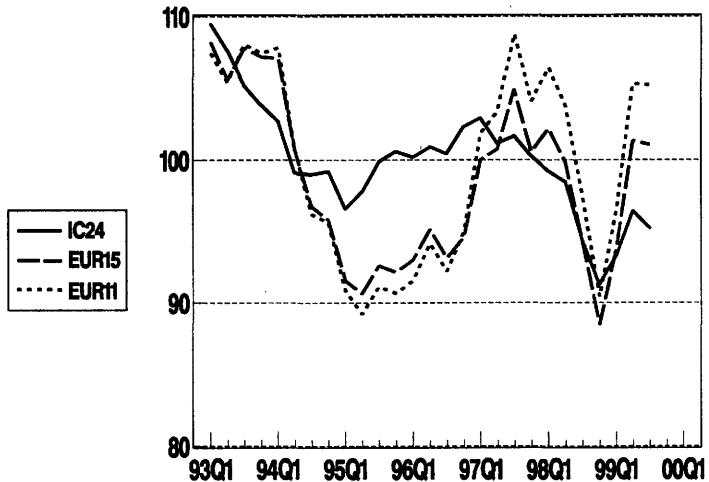
Annual data Index (1994=100)				Quarterly data Index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	102.6	113.6	119.0	96Q3	100.4	93.1	92.2	SEP98	-0.1	-3.6	-4.1
87	104.6	102.5	105.9	96Q4	102.3	94.6	95.0	OCT98	-2.4	-4.3	-5.0
88	111.5	107.0	112.0	97Q1	102.9	100.0	101.8	NOV98	0.4	2.7	2.9
89	118.2	119.1	124.1	97Q2	101.2	100.8	103.4	DEC98	-0.4	-0.7	-0.8
90	118.3	105.8	108.4	97Q3	101.7	104.9	108.8	JAN99	1.3	2.1	2.2
91	120.2	110.4	113.6	97Q4	100.3	100.5	104.1	FEB99	2.1	4.7	5.2
92	113.0	101.1	102.8	98Q1	99.2	102.2	106.5	MAR99	-0.9	1.1	1.7
93	106.5	107.2	107.1	98Q2	98.5	99.9	103.8	APR99	2.0	3.3	3.6
94	100.0	100.0	100.0	98Q3	94.4	94.3	97.5	MAY99	2.1	2.5	2.7
95	98.7	91.7	90.5	98Q4	91.3	88.5	90.4	JUN99	-0.4	1.5	1.9
96	101.0	94.0	93.2	99Q1	93.3	93.8	96.6	JUL99	-1.3	-0.8	-1.0
97	101.5	101.5	104.5	99Q2	96.4	101.3	105.3	AUG99	-0.9	-2.7	-2.8
98	95.8	96.1	99.4	99Q3	95.3	101.1	105.2	SEP99	0.7	1.6	2.1

## Trade – weighted currency indices

Annual data (index 1994=100)

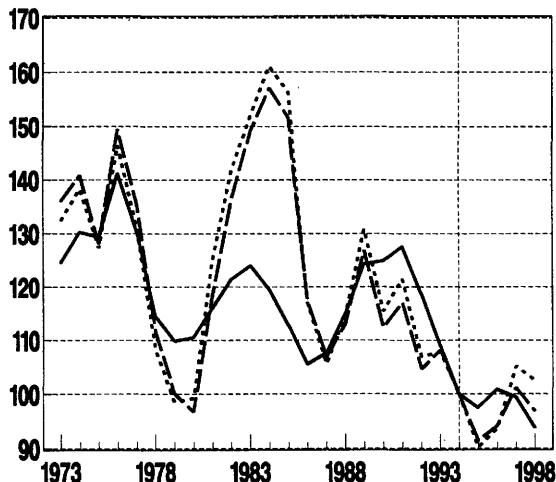


Quarterly data (index 1994=100)

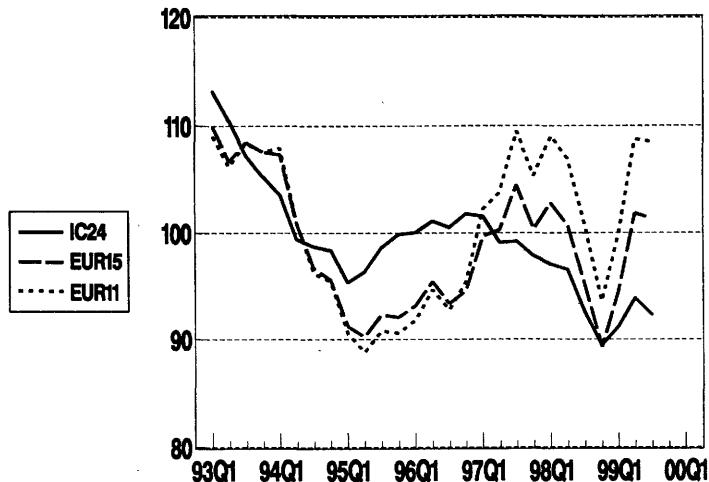


## Relative cost indicators (based on ULCE)

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	96Q3	98.6	99.9	105.1	100.5	107.7
87	110.7	111.2	107.0	107.6	106.7	96Q4	100.3	101.4	107.1	101.8	109.3
88	117.3	119.0	108.2	115.0	117.0	97Q1	100.7	101.6	107.9	101.6	109.4
89	124.0	126.7	113.5	124.4	124.7	97Q2	98.9	99.4	106.2	99.1	107.2
90	123.2	125.2	111.5	124.9	125.0	97Q3	99.4	99.5	106.9	99.2	107.9
91	125.5	125.3	107.2	127.5	128.6	97Q4	98.0	97.7	105.7	97.9	107.1
92	115.7	115.9	103.4	118.8	117.6	98Q1	97.0	96.2	104.8	97.1	106.9
93	108.5	107.7	101.1	109.0	105.7	98Q2	96.4	95.1	104.2	96.6	106.9
94	100.0	100.0	100.0	100.0	100.0	98Q3	92.3	90.8	100.1	92.6	102.8
95	97.8	98.9	101.9	97.5	102.0	98Q4	89.3	87.5	96.9	89.5	99.3
96	99.2	100.5	105.5	100.9	107.9	99Q1	91.2	89.2	99.2	91.2	101.0
97	99.3	99.5	106.7	99.4	107.9	99Q2	94.2	91.9	102.6	93.9	103.7
98	93.7	92.3	101.5	93.9	103.9	99Q3	92.9	90.7	101.5	92.3	101.6

## 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	96Q3	91.1	92.3	95.2	93.4	95.3
87	110.4	112.7	109.7	106.8	104.9	96Q4	92.5	93.6	96.4	94.6	96.6
88	115.7	118.3	111.7	113.0	112.8	97Q1	97.7	98.7	101.6	99.7	101.8
89	128.7	131.8	120.2	126.9	127.8	97Q2	98.4	99.1	102.0	100.3	102.5
90	113.5	114.8	104.7	112.4	112.3	97Q3	102.4	102.7	106.1	104.5	107.2
91	117.7	117.0	103.3	117.1	118.0	97Q4	98.0	97.9	101.6	100.3	103.8
92	104.8	104.2	96.1	104.6	104.9	98Q1	99.5	98.8	103.2	102.8	107.1
93	109.6	108.3	102.2	108.1	105.7	98Q2	97.2	96.0	100.9	100.7	105.9
94	100.0	100.0	100.0	100.0	100.0	98Q3	91.8	90.2	95.2	95.2	100.7
95	90.7	91.8	94.0	91.4	91.5	98Q4	86.2	84.3	89.1	89.3	94.5
96	92.1	93.3	96.1	94.1	95.8	99Q1	91.5	89.2	94.3	94.5	100.0
97	99.1	99.6	102.8	101.2	103.8	99Q2	99.0	96.2	101.6	101.8	107.4
98	93.5	92.1	96.9	96.8	101.9	99Q3	98.9	95.9	101.1	101.3	106.3

## 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	122.0	124.9	120.0	117.1	122.5	96Q3	90.4	91.7	94.3	92.8	95.3
87	110.2	113.1	109.3	105.5	106.5	96Q4	93.1	94.4	96.5	95.4	98.3
88	117.9	121.4	112.5	114.7	116.8	97Q1	99.8	101.0	102.8	102.2	105.6
89	131.4	135.9	121.6	130.8	132.4	97Q2	101.4	102.3	103.7	103.8	107.6
90	115.3	117.5	105.2	115.5	115.4	97Q3	106.8	107.2	108.5	109.5	114.3
91	121.3	121.1	104.4	121.5	122.3	97Q4	102.0	102.0	103.3	105.3	110.9
92	106.8	106.5	96.2	106.9	107.0	98Q1	104.2	103.6	105.3	109.0	115.7
93	109.7	108.4	102.1	107.8	104.9	98Q2	101.6	100.5	102.5	107.0	114.5
94	100.0	100.0	100.0	100.0	100.0	98Q3	95.5	93.9	96.1	100.8	108.5
95	89.6	90.6	92.9	90.2	90.9	98Q4	88.6	86.8	89.0	93.6	100.9
96	91.5	92.8	95.4	93.7	96.0	99Q1	94.8	92.6	95.0	99.9	107.5
97	102.4	103.1	104.5	105.2	109.6	99Q2	103.6	100.9	103.6	108.8	116.7
98	97.3	96.0	98.0	102.4	109.7	99Q3	103.8	100.9	103.6	108.5	115.9

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

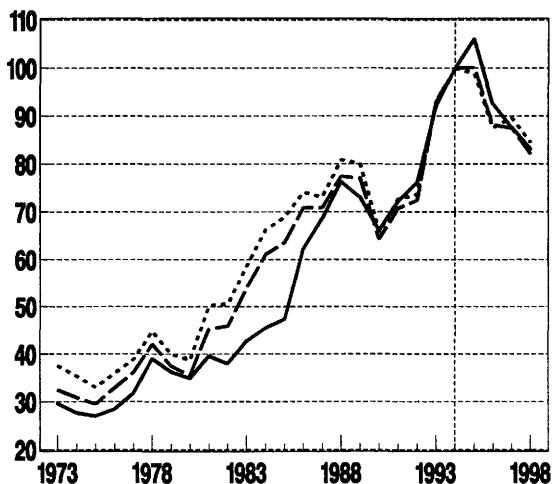
# Japan – yen

## Trade-weighted currency indices

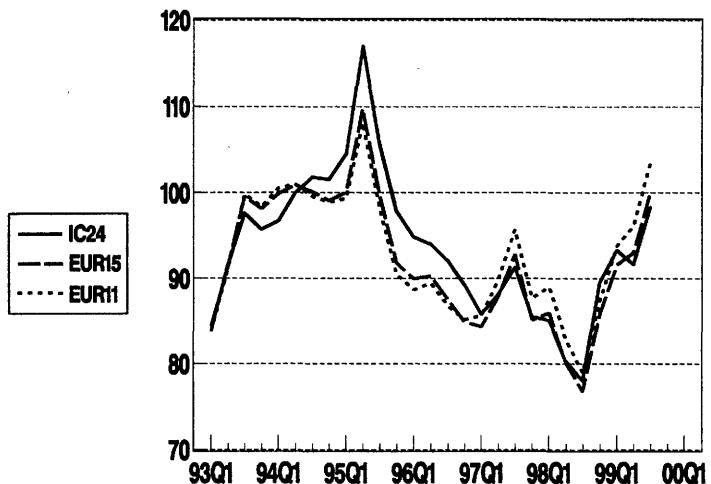
Annual data Index (1994=100)				Quarterly data Index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	62.2	70.8	74.1	96Q3	92.1	87.5	86.8	SEP98	5.7	2.9	2.4
87	68.5	70.9	73.1	96Q4	89.3	84.9	85.1	OCT98	9.7	8.1	7.3
88	76.3	77.4	80.9	97Q1	85.8	84.3	85.6	NOV98	1.2	2.8	3.0
89	73.1	77.0	80.1	97Q2	88.1	87.8	89.8	DEC98	2.7	2.2	2.1
90	66.2	64.2	65.7	97Q3	91.3	92.8	95.7	JAN99	3.7	4.3	4.4
91	72.3	70.8	72.7	97Q4	85.5	85.1	87.7	FEB99	-1.9	-0.0	0.5
92	76.2	72.4	73.6	98Q1	85.1	85.9	89.0	MAR99	-1.3	-0.0	0.5
93	92.1	93.2	93.1	98Q2	80.4	80.1	82.9	APR99	0.4	1.4	1.6
94	100.0	100.0	100.0	98Q3	78.0	76.8	79.0	MAY99	-1.9	-1.4	-1.2
95	106.0	100.1	98.8	98Q4	89.6	85.9	87.4	JUN99	2.1	3.2	3.5
96	92.5	88.1	87.5	99Q1	93.3	91.6	93.8	JUL99	1.3	1.5	1.3
97	87.6	87.5	89.6	99Q2	91.7	93.0	96.1	AUG99	4.6	3.1	3.0
98	83.1	82.1	84.5	99Q3	98.3	100.0	103.5	SEP99	6.1	6.4	6.9

## Trade-weighted currency indices

Annual data (index 1994=100)

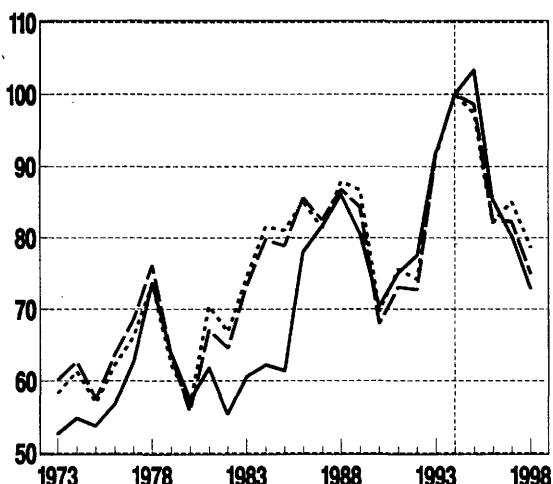


Quarterly data (index 1994=100)

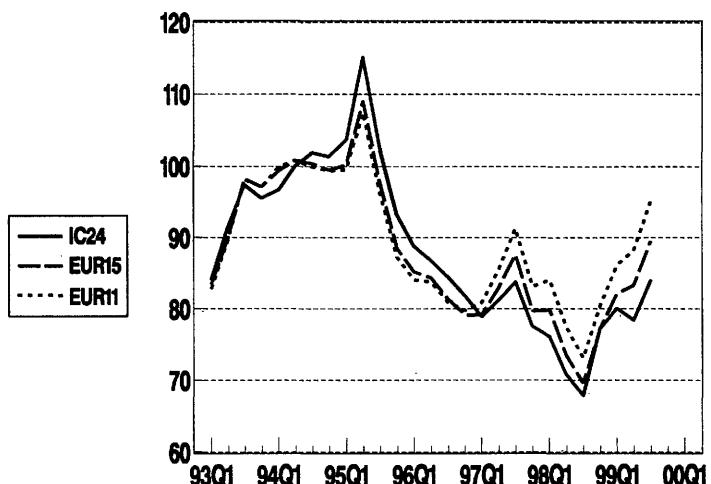


## Relative cost indicators (based on ULCE)

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	96Q3	86.4	84.8	89.8	84.4	86.3
87	82.6	82.0	94.1	81.6	72.8	96Q4	83.5	81.7	87.4	81.8	83.0
88	88.2	87.7	97.6	86.0	77.6	97Q1	80.0	78.1	84.1	78.9	79.1
89	82.0	81.7	93.2	80.5	72.1	97Q2	82.1	79.9	86.5	81.2	80.8
90	72.3	72.2	84.7	70.4	63.2	97Q3	84.9	82.6	90.1	83.8	83.5
91	77.1	77.4	88.3	75.1	66.9	97Q4	79.3	77.1	85.0	77.5	78.3
92	79.6	80.2	89.2	77.5	71.2	98Q1	78.7	76.5	85.2	76.1	78.2
93	94.2	94.5	97.8	92.0	89.2	98Q2	74.1	72.0	80.7	70.8	73.9
94	100.0	100.0	100.0	100.0	100.0	98Q3	71.6	69.5	78.0	67.9	71.5
95	102.2	102.0	99.2	103.4	101.8	98Q4	81.7	79.3	88.3	77.2	81.4
96	87.0	85.6	89.4	85.4	86.8	99Q1	84.5	82.0	90.3	80.0	83.9
97	81.6	79.4	86.4	80.3	80.4	99Q2	82.4	80.0	86.9	78.4	81.4
98	76.4	74.2	83.0	72.9	76.2	99Q3	87.7	85.1	91.3	83.9	86.2

## 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	85.9	87.2	101.3	85.6	78.8	96Q3	82.8	81.5	84.9	81.3	81.1
87	83.9	84.4	96.8	82.5	73.2	96Q4	80.1	78.6	82.4	79.1	78.2
88	89.2	89.4	101.1	86.8	77.4	97Q1	79.5	77.9	81.9	79.2	77.4
89	86.6	86.8	98.9	84.3	75.9	97Q2	82.8	80.9	85.3	82.9	80.4
90	70.7	70.5	82.8	68.0	61.2	97Q3	87.4	85.3	90.5	87.6	85.0
91	75.9	76.0	87.0	73.1	65.2	97Q4	80.0	78.0	83.6	79.7	78.4
92	75.8	76.0	85.5	72.7	67.3	98Q1	80.6	78.5	85.0	79.8	79.8
93	95.2	95.2	98.3	92.0	89.4	98Q2	74.9	72.9	79.5	73.4	74.7
94	100.0	100.0	100.0	100.0	100.0	98Q3	71.5	69.5	75.7	69.6	71.5
95	97.1	96.9	94.1	98.6	94.9	98Q4	79.7	77.3	83.6	77.3	79.6
96	83.5	82.4	84.9	82.4	81.7	99Q1	84.6	82.0	87.5	82.1	84.1
97	82.4	80.5	85.2	82.3	80.2	99Q2	85.5	82.8	86.9	83.3	84.5
98	76.6	74.5	80.9	74.9	76.3	99Q3	91.4	88.5	91.5	89.5	89.8

## 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	96Q3	82.2	81.0	84.1	80.9	81.1
87	83.6	84.5	96.4	81.3	74.1	96Q4	80.6	79.2	82.5	79.7	79.5
88	90.6	91.4	101.7	87.9	79.9	97Q1	81.0	79.5	82.7	80.9	79.9
89	88.3	89.2	99.9	86.7	78.4	97Q2	84.9	83.1	86.5	85.5	83.9
90	71.7	72.0	83.1	69.7	62.7	97Q3	90.5	88.5	92.2	91.3	89.9
91	77.9	78.4	87.9	75.6	67.4	97Q4	82.8	80.8	84.8	83.1	83.0
92	77.2	77.5	85.6	74.2	68.6	98Q1	83.9	81.8	86.5	84.0	85.4
93	95.2	95.2	98.3	91.7	88.8	98Q2	77.9	75.9	80.6	77.4	80.0
94	100.0	100.0	100.0	100.0	100.0	98Q3	74.0	72.0	76.3	73.1	76.3
95	95.9	95.7	93.1	97.3	94.3	98Q4	81.6	79.3	83.4	80.5	84.1
96	83.1	82.0	84.3	82.1	81.8	99Q1	87.2	84.7	88.0	86.2	89.6
97	84.7	82.9	86.5	85.1	84.1	99Q2	88.9	86.3	88.4	88.2	90.9
98	79.2	77.2	81.6	78.7	81.4	99Q3	95.3	92.4	93.5	95.0	96.9

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

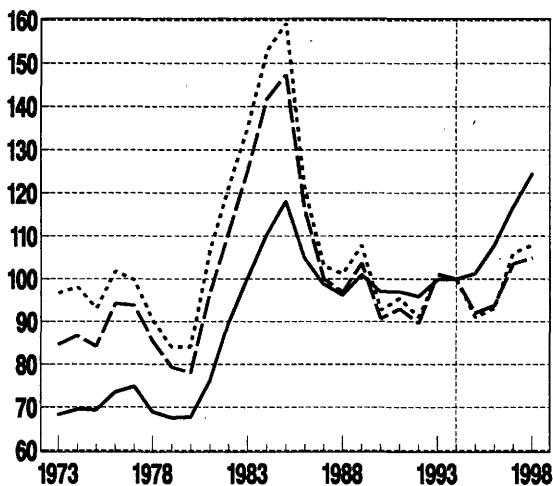
# United States – dollar

## Trade-weighted currency indices

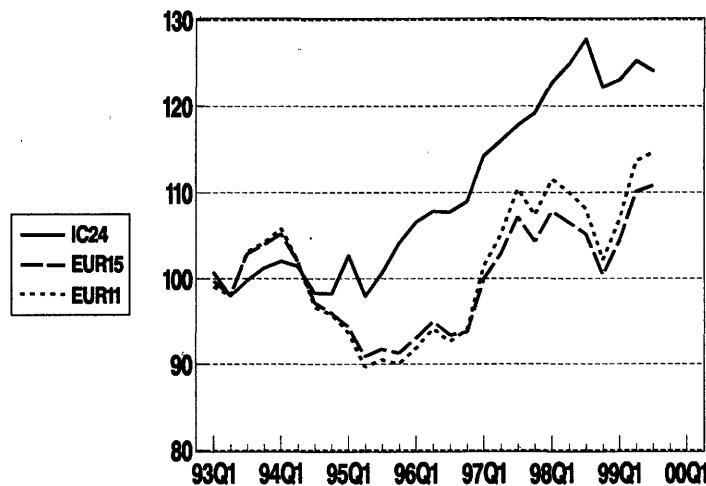
Annual data index (1994=100)				Quarterly data index (1994=100)				Monthly data monthly % change			
	vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11		vs. IC24	(the rest of) EUR15	EUR11
86	104.9	116.2	121.3	96Q3	107.8	93.4	92.6	SEP98	-2.6	-4.3	-4.8
87	98.8	100.1	103.1	96Q4	109.0	93.7	94.0	OCT98	-3.5	-3.0	-3.7
88	96.2	96.9	101.2	97Q1	114.3	100.0	101.5	NOV98	0.6	2.5	-2.6
89	100.9	103.7	107.8	97Q2	116.0	102.9	105.1	DEC98	-0.7	-0.6	-0.7
90	97.0	90.7	92.7	97Q3	117.7	107.2	110.4	JAN99	-0.5	0.7	0.8
91	97.0	93.0	95.5	97Q4	119.1	104.3	107.4	FEB99	1.4	3.1	3.6
92	96.0	89.6	91.1	98Q1	122.7	107.8	111.6	MAR99	1.6	2.5	3.0
93	99.9	101.1	101.1	98Q2	124.8	106.5	110.1	APR99	-0.2	1.5	1.7
94	100.0	100.0	100.0	98Q3	127.8	105.2	108.1	MAY99	0.1	0.6	0.7
95	101.3	92.1	91.0	98Q4	122.2	100.4	102.2	JUN99	1.0	2.1	2.4
96	107.8	93.8	93.2	99Q1	123.0	104.5	107.0	JUL99	0.1	0.4	0.3
97	116.8	103.5	106.0	99Q2	125.2	110.1	113.7	AUG99	-2.0	-2.3	-2.4
98	124.3	104.9	107.9	99Q3	124.1	110.8	114.6	SEP99	-1.2	0.6	1.0

## Trade-weighted currency indices

Annual data (Index 1994=100)

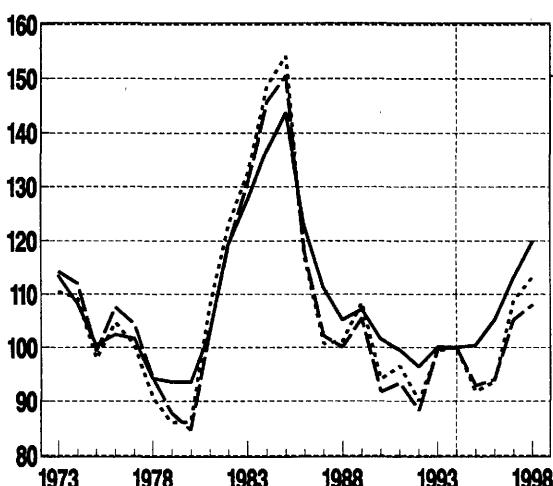


Quarterly data (Index 1994=100)

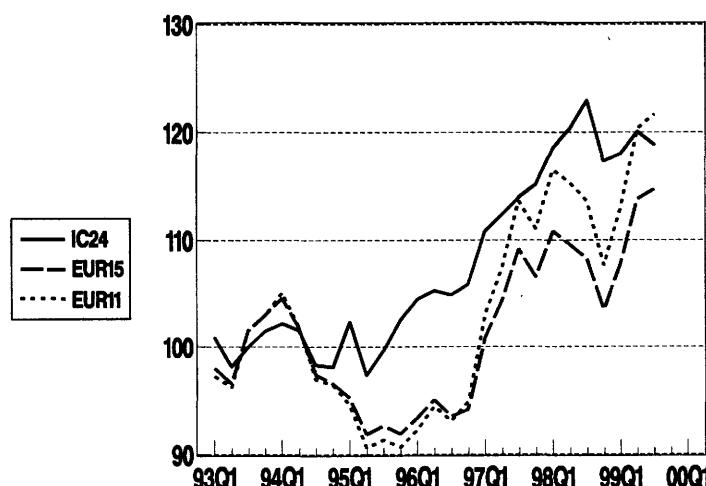


## Relative cost indicators (based on ULCE)

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	96Q3	102.7	102.6	95.9	104.9	98.9
87	108.1	109.3	102.8	111.1	114.5	96Q4	103.5	103.6	96.2	105.9	100.0
88	101.8	102.1	101.7	105.2	105.7	97Q1	108.1	108.4	100.0	110.8	104.9
89	106.0	105.6	103.4	107.2	110.4	97Q2	109.2	109.7	100.6	112.3	106.5
90	101.0	100.2	97.9	101.6	104.4	97Q3	110.3	110.9	101.2	114.0	107.8
91	99.3	98.9	99.8	99.5	102.9	97Q4	110.9	111.8	101.4	115.2	108.6
92	97.3	96.7	97.7	96.4	100.1	98Q1	113.5	114.5	103.4	118.6	111.2
93	100.4	100.3	101.2	100.1	102.6	98Q2	114.8	115.9	104.3	120.3	112.5
94	100.0	100.0	100.0	100.0	100.0	98Q3	117.0	118.3	106.1	123.0	114.8
95	98.8	98.4	95.6	100.4	96.4	98Q4	111.6	112.9	101.1	117.4	109.8
96	103.0	102.7	96.5	105.1	99.2	99Q1	112.3	113.6	101.6	118.1	110.8
97	109.6	110.2	100.8	113.1	106.9	99Q2	114.3	115.6	103.3	120.0	113.1
98	114.2	115.4	103.7	119.8	112.1	99Q3	113.3	114.5	102.3	118.9	112.5

## 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	96Q3	92.7	92.8	89.9	93.5	88.3
87	102.1	104.2	103.7	102.1	102.1	96Q4	93.1	93.3	89.6	94.1	88.8
88	99.7	100.8	104.0	100.0	98.6	97Q1	99.3	99.6	94.9	100.9	94.9
89	107.0	107.4	107.8	105.5	107.4	97Q2	102.1	102.5	97.0	104.3	97.9
90	93.9	93.3	94.1	91.8	92.7	97Q3	106.2	106.7	100.4	109.2	102.3
91	95.3	94.8	96.8	93.4	94.5	97Q4	103.2	103.6	97.2	106.5	99.9
92	91.0	90.2	92.5	88.3	90.4	98Q1	106.4	106.8	100.1	110.8	103.9
93	101.6	101.1	101.5	99.7	101.0	98Q2	104.9	105.3	98.5	109.6	103.0
94	100.0	100.0	100.0	100.0	100.0	98Q3	103.6	103.8	96.9	108.3	102.0
95	91.8	91.7	91.1	92.9	88.4	98Q4	99.0	99.1	92.2	103.5	97.6
96	93.1	93.2	90.6	94.0	88.7	99Q1	103.2	103.2	95.7	107.8	101.9
97	102.7	103.1	97.4	105.2	98.7	99Q2	109.0	108.9	100.5	113.8	107.5
98	103.4	103.7	96.9	108.0	101.6	99Q3	110.1	109.7	100.9	114.7	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	118.0	122.4	117.4	116.9	130.8	96Q3	92.1	92.3	89.1	93.0	88.4
87	101.7	104.2	103.3	100.7	103.3	96Q4	93.6	93.9	89.7	94.8	90.2
88	101.3	103.0	104.7	101.2	101.6	97Q1	101.1	101.6	95.8	103.0	98.0
89	109.1	110.4	109.0	108.4	110.8	97Q2	104.6	105.2	98.2	107.4	102.1
90	95.1	95.2	94.5	94.1	94.9	97Q3	109.9	110.5	102.3	113.6	108.1
91	97.8	97.7	97.8	96.5	97.5	97Q4	106.6	107.2	98.6	111.0	105.7
92	92.5	92.0	92.7	90.1	92.0	98Q1	110.6	111.1	101.7	116.5	111.0
93	101.7	101.2	101.4	99.4	100.3	98Q2	108.9	109.4	99.8	115.4	110.1
94	100.0	100.0	100.0	100.0	100.0	98Q3	107.0	107.3	97.7	113.7	108.7
95	90.7	90.7	90.2	91.8	87.9	98Q4	101.2	101.5	92.0	107.6	103.1
96	92.6	92.8	90.0	93.6	88.9	99Q1	106.3	106.4	96.2	113.0	108.3
97	105.5	106.1	98.7	108.7	103.4	99Q2	113.3	113.3	102.2	120.3	115.5
98	106.9	107.3	97.7	113.2	108.2	99Q3	114.6	114.5	102.9	121.7	116.7

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

**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	100.2	95.4	109.0	3.0
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	141.4	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	99.8	88.5	124.0	91.8	110.3	88.0	102.8	23.7
1993	107.7	94.5	108.7	92.4	109.8	100.5	108.2	37.8
1994	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1995	98.7	100.5	91.8	189.8	90.4	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
96Q3	92.8	100.4	106.7	224.2	85.8	91.3	89.5	297.6
96Q4	92.0	98.9	110.5	232.4	84.1	91.3	94.2	344.5
97Q1	94.0	99.5	118.6	233.2	85.2	93.9	105.1	412.6
97Q2	95.1	101.5	117.1	234.9	85.9	100.5	105.8	478.3
97Q3	99.4	101.4	115.4	231.7	91.8	105.8	109.0	565.2
97Q4	105.4	103.0	122.5	239.8	95.9	101.0	104.8	652.9
98Q1	109.7	104.7	125.4	249.8	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	297.1	112.7	106.3	99.6	1021
99Q1	115.4	110.7	114.1	295.7	110.4	108.7	104.3	1195
99Q2	111.9	107.9	118.3	280.1	109.4	110.5	110.8	1384
99Q3	112.5	108.8	110.8	277.9	113.0	111.2	111.9	1533

**Monthly data (period average)**

Month	AUS	CND	J	MX	NZ	N	CH	TR
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	296.3	111.1	105.7	101.4	1025
DEC98	118.2	113.0	114.7	293.8	113.5	107.9	99.6	1069
JAN99	116.0	111.4	110.8	301.8	110.5	105.8	101.3	1127
FEB99	114.3	109.7	114.3	296.7	109.2	109.4	104.4	1196
MAR99	116.0	111.1	117.1	288.7	111.5	110.8	107.3	1266
APR99	114.0	109.1	117.2	279.8	109.3	110.2	109.6	1329
MAY99	110.4	107.0	119.5	278.2	107.5	109.9	110.4	1382
JUN99	111.4	107.6	118.2	282.3	111.4	111.6	112.5	1443
JUL99	111.3	108.9	117.0	278.2	112.7	112.1	113.5	1491
AUG99	113.5	109.4	110.9	278.3	112.8	110.4	110.5	1523
SEP99	112.7	108.2	104.8	277.1	113.5	111.1	111.7	1587

## 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	82.2
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	89.6	90.0	110.8	117.7	121.4	113.2	87.9	93.9	96.2	76.3
1989	88.9	88.3	85.8	147.4	114.9	87.4	96.6	121.2	89.0	89.7	107.3	122.1	122.1	109.8	87.8	92.3	100.9	73.1
1990	93.6	94.6	90.6	135.4	120.6	92.8	102.4	125.6	92.5	92.9	105.7	124.4	120.7	109.1	98.1	105.1	97.0	86.2
1991	93.8	93.5	80.4	121.2	121.3	91.4	101.4	124.4	92.4	92.9	106.8	120.2	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	95.0	85.5	110.8	105.3	122.9	106.9	101.6	108.3	96.0	76.2
1993	97.5	99.2	97.9	104.9	105.6	98.0	99.2	102.5	98.5	98.7	103.8	91.6	100.2	98.4	97.9	96.9	99.9	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	105.1	106.9	98.5	101.3	104.7	100.5	92.1	104.9	104.3	102.3	111.5	100.5	96.6	107.6	107.9	101.3	106.0
1996	103.2	104.8	105.3	98.2	102.9	105.5	103.3	101.8	103.3	102.9	102.3	108.9	110.7	98.8	110.3	114.3	107.8	92.5
1997	99.2	101.9	100.8	97.1	98.6	101.9	105.4	102.7	99.2	100.4	99.9	105.9	106.7	115.1	103.3	113.1	116.8	87.6
1998	100.1	103.2	102.5	93.3	99.2	103.8	100.8	103.9	99.9	101.6	99.0	105.9	105.6	120.4	106.3	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
96Q3	103.2	104.8	105.5	99.0	102.6	105.6	103.6	103.1	103.3	102.9	102.4	110.0	111.7	98.1	111.1	115.2	107.8	92.1
96Q4	102.1	104.2	104.3	98.9	101.8	105.0	106.1	104.5	102.1	102.2	102.7	109.7	111.8	104.8	109.9	117.3	109.0	89.3
97Q1	100.4	102.9	102.2	98.0	99.6	103.1	108.1	103.3	100.4	101.2	101.8	108.0	107.1	111.0	106.0	114.6	114.3	85.8
97Q2	99.5	102.4	101.1	96.4	98.9	102.1	105.3	102.4	99.6	100.6	100.6	106.0	105.0	114.0	103.6	112.7	116.0	88.1
97Q3	98.0	100.5	99.1	96.2	97.5	100.2	105.0	101.9	98.1	89.4	88.7	104.5	106.8	117.1	100.1	109.8	117.7	91.3
97Q4	99.1	101.7	100.8	97.6	98.5	102.3	103.4	103.0	98.9	100.4	98.7	105.2	108.0	118.4	103.4	115.2	119.1	85.5
98Q1	98.6	101.3	100.3	95.3	97.8	101.7	98.8	102.0	98.6	100.3	97.9	104.0	106.1	121.3	102.0	114.6	122.7	85.1
98Q2	99.6	102.3	101.8	90.3	98.6	103.0	100.6	103.4	99.4	101.2	98.5	105.0	109.0	121.9	104.9	119.2	124.8	80.4
98Q3	100.6	103.9	103.3	93.3	99.7	104.3	101.6	104.7	100.3	102.1	99.4	106.6	105.9	121.4	107.9	122.9	127.8	78.0
98Q4	101.5	105.4	104.6	94.4	100.6	105.4	102.4	105.6	101.3	102.9	100.4	108.2	101.7	117.3	110.6	124.1	122.2	89.6
99Q1	100.4	103.6	102.9	96.2	99.4	103.8	100.3	104.0	100.3	102.0	99.4	106.2	104.3	117.8	107.3	120.5	123.0	93.3
99Q2	99.1	102.0	101.1	94.6	98.0	102.0	97.9	102.3	99.1	101.0	98.1	104.2	103.0	120.6	103.6	117.0	125.2	91.7
99Q3	98.6	101.1	100.5	94.2	97.7	101.5	97.3	101.8	98.7	100.7	97.8	103.4	104.7	120.3	102.6	115.8	124.1	98.3

**Monthly data (monthly % change)**

Month	BLEU	DK	D	GR	E	F	IRL	I	NL	A	P	SF	S	UK	EUR11	EUR15	USA	J
SEP98	0.8	1.1	1.3	-1.1	1.0	1.1	1.1	1.1	0.8	0.7	0.7	1.2	-0.8	-0.8	2.4	2.3	-2.6	5.7
OCT98	0.5	0.8	0.7	0.7	0.5	0.6	0.5	0.5	0.6	0.4	0.6	0.8	-2.4	-2.5	1.3	0.2	-3.5	9.7
NOV98	-0.5	-0.8	-0.8	1.9	-0.6	-0.7	-1.2	-0.8	-0.5	-0.4	-0.4	-0.8	-0.2	-0.3	-1.5	-1.8	0.6	1.2
DEC98	0.1	0.2	0.2	0.4	0.1	0.1	0.0	0.1	0.2	0.1	0.2	0.3	-1.2	0.1	0.4	0.4	-0.7	2.7
JAN99	-0.3	-0.8	-0.5	1.3	-0.3	-0.5	-0.5	-0.4	-0.3	-0.3	-0.2	-0.8	3.1	-1.0	-0.9	-1.0	-0.5	3.7
FEB99	-0.7	-0.8	-1.0	-0.1	-0.8	-0.9	-1.2	-0.9	-0.7	-0.7	-1.1	-1.2	1.0	-2.0	-1.6	1.4	-1.9	
MAR99	-0.6	-0.6	-0.8	-0.6	-0.6	-0.8	-1.1	-0.7	-0.6	-0.4	-0.6	-0.8	-1.2	1.8	-1.5	-1.1	-1.6	-1.3
APR99	-0.4	-0.6	-0.5	-1.2	-0.4	-0.5	-0.7	-0.5	-0.4	-0.3	-0.4	-0.6	-0.4	0.3	-1.0	-1.1	-0.2	0.4
MAY99	-0.1	-0.1	-0.2	0.1	-0.1	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.2	-0.9	0.8	-0.3	-0.3	0.1	-1.9
JUN99	-0.6	-0.8	-0.8	-0.2	-0.6	-0.8	-0.9	-0.8	-0.5	-0.5	-0.5	-0.9	0.8	0.3	-1.6	-1.6	1.0	2.1
JUL99	0.1	-0.1	0.0	-0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	-0.0	1.0	-1.3	0.2	-0.2	0.1	1.3
AUG99	0.3	0.3	0.4	0.0	0.3	0.4	0.4	0.4	0.3	0.2	0.3	0.4	0.3	0.1	0.8	-1.2	-2.0	4.6
SEP99	-0.7	-0.9	-0.9	-0.7	-0.6	-0.9	-1.1	-0.8	-0.6	-0.5	-0.6	-1.0	0.5	1.2	-1.7	-1.4	-1.2	6.1

## 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	80.9	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	115.8	109.5	68.0	101.0	87.1	92.9	115.6	111.0	109.5	120.6
1988	106.3	112.1	107.6	56.0	92.6	112.8	110.3	93.1	112.2	107.5	73.2	101.5	88.7	93.9	112.3	108.6	105.8	115.7
1989	105.8	112.2	105.2	60.4	93.8	111.0	109.4	94.6	108.4	105.5	79.1	101.5	90.6	95.1	109.5	106.7	105.0	112.2
1990	104.4	109.4	102.4	68.9	84.8	108.4	105.9	85.7	105.7	104.2	84.7	102.1	94.9	97.9	106.0	105.0	104.1	108.3
1991	102.7	106.3	100.7	78.0	95.5	105.9	103.2	97.2	103.7	102.0	90.4	101.9	99.8	100.8	103.2	104.1	102.3	106.7
1992	100.8	103.3	101.1	86.0	97.2	103.4	101.6	98.1	102.4	101.1	95.2	101.9	98.0	101.4	102.4	103.2	101.5	104.5
1993	100.4	100.5	101.1	94.0	98.7	101.5	100.0	99.3	100.8	100.3	97.7	102.2	100.1	101.2	101.6	102.4	100.5	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	98.4	98.2	98.3	104.6	101.1	98.2	99.5	102.5	98.5	98.6	101.7	97.4	100.0	100.0	98.0	97.4	97.5	98.4
1996	99.2	97.6	98.9	109.4	101.5	97.2	98.3	103.6	97.4	98.7	102.7	96.5	98.7	100.5	96.5	95.3	95.5	94.0
1997	98.6	97.4	95.7	111.5	101.4	95.7	97.0	103.3	97.0	98.2	103.0	96.4	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	103.2	97.0	97.0	104.2	95.5	97.4	100.5	91.7	88.2	91.9	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	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	78.1
1987	97.7	102.6	95.5	85.2	97.0	102.6	109.0	112.3	103.5	98.3	79.2	116.6	105.0	98.6	102.9	103.3	108.1	82.6
1988	94.9	101.2	92.9	88.6	101.6	99.6	107.5	111.7	100.5	96.8	81.1	119.6	107.7	106.3	98.6	102.0	101.8	88.2
1989	94.0	99.0	90.2	89.0	107.8	97.1	105.6	114.7	96.5	94.6	84.8	124.0	110.6	104.4	96.1	98.5	106.0	82.0
1990	97.8	103.7	92.8	93.2	114.3	100.6	108.4	120.3	97.8	96.8	89.5	127.0	114.6	106.8	104.0	110.4	101.0	72.3
1991	96.3	99.4	91.0	94.6	115.9	98.6	104.6	121.0	95.8	94.7	96.5	122.5	120.5	111.3	99.9	107.7	98.3	77.1
1992	97.0	99.5	95.0	97.2	115.9	98.4	106.3	119.4	97.2	96.6	105.4	107.4	120.4	108.3	104.1	111.9	97.3	79.6
1993	98.0	99.8	98.9	98.6	104.3	99.5	99.2	101.9	99.1	98.9	101.5	93.6	100.3	99.5	99.4	99.2	100.4	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	
1995	104.2	103.3	105.1	103.1	102.4	102.8	100.0	94.4	103.3	102.8	103.9	108.6	100.5	96.6	105.5	105.0	98.8	102.2
1996	102.3	102.3	102.0	107.4	104.5	102.5	101.6	105.7	100.6	101.6	105.0	105.1	109.3	99.4	106.4	106.9	103.0	87.0
1997	97.8	99.2	96.5	108.2	100.0	97.5	102.2	106.1	96.3	98.6	102.9	102.1	105.0	115.8	97.3	104.0	109.6	81.6
1998	97.8	100.7	96.5	105.0	100.4	97.3	98.5	107.3	96.9	98.6	103.2	101.2	102.9	121.0	97.5	106.0	114.2	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
96Q3	102.3	102.3	102.1	108.9	104.2	102.5	101.8	107.1	100.5	101.7	105.3	106.1	110.0	98.7	107.0	109.4	102.7	86.4
96Q4	101.1	101.6	100.6	109.4	103.3	101.6	103.6	108.4	99.2	101.0	105.6	105.8	110.0	105.7	105.3	110.5	103.5	83.5
97Q1	99.2	100.3	98.4	108.7	101.1	99.3	105.1	107.0	97.5	99.8	104.6	104.2	105.4	111.7	100.9	107.0	108.1	80.0
97Q2	98.2	99.7	97.0	107.3	100.3	97.9	102.0	105.9	96.6	98.9	103.5	102.3	103.4	114.8	98.0	104.2	109.2	82.1
97Q3	96.5	97.8	94.7	107.5	98.8	95.7	101.6	105.2	95.1	87.5	101.7	100.7	105.1	117.8	94.0	100.5	110.3	84.9
97Q4	97.4	99.0	96.0	109.4	99.9	97.2	100.3	106.4	95.9	98.1	102.0	101.2	106.1	119.1	96.4	104.4	110.9	79.3
98Q1	96.7	98.7	95.1	107.1	99.1	96.2	96.1	105.3	95.6	97.7	101.5	99.7	103.9	121.9	94.5	102.6	113.5	78.7
98Q2	97.4	99.7	96.1	101.7	99.8	96.9	98.2	106.8	96.4	98.3	102.5	100.4	106.3	122.5	96.5	105.6	114.8	74.1
98Q3	98.2	101.4	97.0	105.1	100.8	97.7	99.5	108.1	97.3	98.9	103.7	101.7	103.0	122.0	98.6	107.8	117.0	71.6
98Q4	98.9	103.1	97.9	106.3	101.7	98.4	100.4	109.0	98.4	99.5	104.9	103.0	108.7	117.9	100.5	108.0	111.6	81.7
99Q1	97.7	101.6	96.0	108.1	100.5	96.8	98.5	107.3	97.5	98.5	104.1	100.9	100.7	118.2	97.0	104.1	112.3	84.5
99Q2	96.2	100.2	94.0	106.1	99.1	94.7	96.2	105.4	96.3	97.4	102.8	98.8	99.2	121.4	93.2	100.3	114.3	82.4
99Q3	95.7	99.6	93.2	105.4	98.7	93.9	95.6	104.8	96.0	97.1	102.5	97.9	100.6	121.1	91.8	98.7	113.3	87.7

## 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	110.6	119.7
1988	103.2	109.7	105.7	54.7	91.3	112.3	110.8	93.2	113.3	106.2	71.8	107.2	93.6	94.6	110.1	107.0	106.2	115.0
1989	103.4	109.9	102.8	58.6	93.1	110.1	110.8	94.6	109.5	104.4	77.0	108.2	96.4	97.1	107.0	105.5	104.6	111.8
1990	101.9	108.0	100.6	68.2	94.7	107.6	104.7	97.0	106.8	102.9	82.7	108.7	100.1	100.0	104.5	104.9	103.3	109.2
1991	100.2	105.3	99.1	77.4	96.2	105.4	101.2	99.4	104.4	101.6	88.4	104.9	103.1	102.0	102.4	104.1	101.9	107.2
1992	99.9	103.9	100.6	84.9	98.8	102.9	99.8	99.8	102.3	101.3	93.5	102.2	100.6	102.2	102.2	103.8	100.8	105.3
1993	100.3	101.1	101.0	93.3	99.2	101.6	101.1	100.1	100.6	100.2	96.6	100.8	100.1	101.4	101.8	102.8	100.4	102.7
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	98.6	98.8	98.7	105.5	101.2	98.2	97.8	101.6	98.8	99.2	102.2	100.4	100.7	88.5	98.2	97.6	97.1	96.2
1996	98.0	98.6	96.8	110.0	101.6	96.8	97.2	104.0	98.0	98.6	102.8	98.7	99.4	100.5	96.3	95.2	95.3	92.5
1997	97.5	98.6	94.7	113.9	101.1	95.5	97.3	104.0	98.2	106.8	98.1	98.4	101.0	93.6	91.7	94.4	90.6	
1998	97.1	98.9	93.0	115.0	100.9	94.0	100.3	104.2	98.3	97.1	108.7	98.1	97.4	101.1	91.6	88.4	92.8	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	92.5	101.4	114.0	107.0	103.2	94.2	78.7	117.6	110.0	97.2	94.3	93.0	122.6	77.8
1987	94.4	101.5	94.1	82.6	95.3	102.3	110.6	111.9	104.2	97.5	78.2	120.7	110.7	98.7	101.0	101.5	109.3	82.0
1988	92.2	99.1	91.3	86.6	100.2	99.1	107.9	111.9	101.5	95.6	79.5	126.2	113.6	107.1	96.8	100.5	102.1	87.7
1989	91.9	97.0	88.2	87.9	106.9	96.2	107.0	114.7	97.4	93.6	82.6	132.2	117.8	106.6	94.0	97.4	105.6	81.7
1990	95.4	102.3	91.1	92.4	114.2	99.9	107.2	121.9	98.8	85.6	87.4	135.3	120.8	109.1	102.5	110.2	100.2	72.2
1991	94.0	88.5	89.6	93.9	116.7	96.4	102.6	123.7	98.5	94.3	94.4	126.1	124.6	112.6	99.1	107.6	98.9	77.4
1992	96.1	100.0	94.5	96.0	117.5	97.9	104.4	121.2	97.2	96.7	103.8	107.6	123.7	109.2	103.9	112.4	96.7	80.2
1993	97.8	100.3	98.8	97.9	104.7	99.6	100.3	102.6	99.1	98.9	100.3	92.3	100.3	99.8	99.6	99.6	100.3	94.5
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	
1995	103.4	103.9	105.5	104.0	102.5	102.8	98.4	93.8	103.7	103.5	104.5	112.0	101.2	96.1	105.7	105.2	98.4	102.0
1996	101.1	103.4	101.9	108.0	104.6	102.1	100.4	105.9	101.2	101.4	105.1	107.5	110.1	99.3	106.2	108.8	102.7	85.6
1997	96.8	100.4	95.5	110.5	99.7	97.4	102.6	106.7	97.5	98.5	106.8	103.9	105.0	116.2	96.9	103.7	110.2	79.4
1998	97.2	102.1	95.3	107.4	100.0	97.4	101.1	108.3	98.2	98.7	107.7	103.9	102.9	121.7	97.4	106.2	115.4	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
96Q3	101.1	103.4	101.9	109.5	104.3	102.0	100.7	107.5	101.2	101.4	105.4	108.2	110.7	88.7	106.7	109.2	102.6	84.8
96Q4	99.8	102.8	100.2	110.5	103.3	101.1	102.8	109.0	100.1	100.7	106.7	107.6	110.6	105.7	104.9	110.3	103.6	81.7
97Q1	98.0	101.5	97.6	110.4	101.0	99.0	104.7	107.8	98.5	98.6	107.0	105.9	105.7	112.0	100.5	106.7	108.4	78.1
97Q2	97.0	100.9	96.0	109.6	100.0	97.7	102.0	106.5	97.7	98.8	107.0	104.0	103.4	115.2	97.5	103.9	108.7	79.9
97Q3	95.5	99.0	93.6	110.0	98.5	95.6	102.2	105.8	96.4	97.5	105.8	102.5	105.0	118.3	93.6	100.2	110.9	82.6
97Q4	86.5	100.3	94.8	112.1	99.5	97.2	101.5	107.1	97.2	98.2	106.4	103.3	106.0	119.6	96.1	104.2	111.8	77.1
98Q1	95.9	100.0	93.9	109.6	98.7	96.2	97.8	106.1	96.9	97.7	106.0	102.2	103.8	122.4	94.2	102.6	114.5	76.5
98Q2	96.7	101.1	94.8	103.9	98.5	97.0	100.6	107.7	97.7	98.3	106.9	103.1	106.2	123.1	96.4	105.7	115.9	72.0
98Q3	97.6	102.8	95.8	107.4	100.5	97.8	102.4	109.1	98.5	99.0	108.2	104.6	103.0	122.7	98.6	108.1	118.3	69.5
98Q4	98.4	104.5	96.6	108.7	101.4	98.5	103.8	110.1	99.6	99.6	109.7	105.9	108.6	118.7	100.5	108.4	112.9	79.3
99Q1	97.1	102.8	94.8	110.8	100.3	96.8	102.1	108.4	98.7	98.7	109.1	103.7	100.9	119.2	97.1	104.6	113.6	82.0
99Q2	95.6	101.4	92.7	108.9	98.9	94.9	100.1	106.5	97.5	97.8	108.1	101.4	99.6	122.5	93.3	101.0	115.6	80.0
99Q3	95.0	100.7	91.9	108.5	98.5	94.1	99.8	105.9	97.1	97.6	108.2	100.3	101.1	122.4	92.0	99.5	114.5	85.1

## 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	90.4	89.0	112.7	106.4	104.0	137.3
1988	106.6	104.1	109.1	60.6	93.4	111.8	109.9	87.8	113.3	107.7	85.3	93.4	92.8	86.1	111.3	103.8	105.8	128.0
1989	108.5	105.5	108.0	64.2	92.6	111.4	112.6	89.3	112.8	104.6	90.0	93.9	93.6	89.0	109.4	103.7	102.5	127.6
1990	105.9	104.7	104.4	73.6	92.7	108.2	101.7	90.8	110.5	104.2	94.3	93.0	93.7	92.4	106.0	102.2	100.9	128.1
1991	103.8	104.4	104.1	82.4	93.0	107.1	100.1	92.2	108.9	102.8	95.1	91.4	94.3	92.8	104.9	101.6	102.9	122.2
1992	102.4	106.6	104.4	89.3	95.6	104.4	97.5	93.2	105.8	102.3	93.6	97.0	91.1	94.0	103.8	100.8	101.8	117.1
1993	100.1	102.1	102.2	94.5	97.9	100.0	100.8	100.8	101.5	100.9	96.3	100.6	98.0	101.2	102.3	103.2	101.3	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	104.0	101.1	97.1	99.1	106.6	98.3	97.8	102.2	101.7	104.4	100.4	98.8	99.0	94.3	93.6
1996	99.3	96.8	97.0	109.3	101.4	95.8	97.9	107.6	98.1	97.2	97.9	100.4	96.9	100.8	97.3	96.0	89.5	96.6
1997	102.5	98.8	96.5	111.4	102.9	96.6	98.9	105.9	100.0	95.7	98.7	98.5	96.0	95.0	97.3	92.9	86.4	98.6
1998	102.6	98.9	96.4	113.9	102.8	97.0	104.1	106.2	98.6	95.4	100.3	98.8	96.4	90.4	97.1	90.0	83.4	99.8

## 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	94.8	91.9	112.3	91.9
1987	95.1	97.5	95.5	94.1	98.9	100.8	106.1	108.1	103.9	97.1	91.3	105.9	109.0	94.5	100.4	89.0	102.8	94.1
1988	95.2	94.0	94.2	95.9	102.6	98.7	108.0	105.5	101.5	97.0	94.5	109.9	112.6	97.5	97.8	87.5	101.7	97.6
1989	96.4	93.1	91.0	94.7	106.4	97.4	108.8	108.3	100.2	93.8	96.6	114.7	114.3	97.7	96.0	95.7	103.4	93.2
1990	99.1	99.2	94.6	99.6	111.8	100.4	104.1	114.0	102.2	96.8	99.7	115.8	113.0	100.7	104.0	107.4	97.9	84.7
1991	97.4	87.6	94.1	99.9	112.9	98.0	101.5	114.7	100.8	95.5	101.5	109.9	113.9	102.4	101.5	105.0	99.8	88.3
1992	98.5	102.6	98.1	100.9	114.0	99.3	102.0	113.5	100.4	97.7	103.6	102.1	112.0	100.5	105.5	109.2	97.7	89.2
1993	97.7	101.3	100.0	99.1	103.4	98.0	100.0	103.4	100.0	99.8	99.9	92.2	98.3	99.5	100.1	100.0	101.2	97.8
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	102.7	101.8	105.0	102.5	102.4	101.6	99.6	98.2	103.1	102.0	104.5	113.5	104.8	97.0	106.3	106.8	95.6	99.2
1996	102.4	101.5	102.1	107.3	104.4	101.1	101.1	109.5	101.3	99.9	100.1	109.4	107.3	99.6	107.3	109.7	96.5	89.4
1997	101.7	100.6	97.3	108.1	101.5	98.5	104.3	108.8	99.3	96.1	98.6	104.4	102.5	108.4	100.5	105.1	100.8	86.4
1998	102.7	102.1	98.8	106.3	102.0	100.5	104.9	110.4	98.5	96.9	99.4	104.6	101.8	108.9	103.3	108.2	103.7	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
96Q3	102.9	101.7	102.2	108.9	104.1	101.2	101.2	110.6	101.5	99.9	99.5	110.1	106.7	98.8	107.8	109.9	95.9	89.8
96Q4	102.8	101.7	100.8	109.3	103.7	100.8	103.4	111.5	101.1	98.9	99.8	109.0	106.2	104.3	106.7	111.0	96.2	87.4
97Q1	102.0	101.1	98.7	108.5	102.0	99.3	105.6	109.7	100.1	97.4	99.4	106.7	102.0	108.5	103.0	107.7	100.0	84.1
97Q2	101.9	101.1	97.5	107.1	101.7	98.5	103.3	108.5	99.8	96.3	99.0	104.3	100.6	109.4	100.8	105.2	100.6	86.5
97Q3	100.9	99.5	95.6	107.3	100.5	97.0	104.1	107.7	98.4	94.9	97.8	102.8	102.9	110.2	97.5	101.7	101.2	90.1
97Q4	102.1	100.8	97.3	109.6	101.6	99.1	104.1	109.1	98.9	95.7	98.3	103.7	104.3	109.4	100.8	105.8	101.4	85.0
98Q1	101.5	100.3	98.9	107.7	100.8	98.7	101.1	108.1	98.0	95.5	97.9	102.8	102.5	110.5	99.4	104.3	103.4	85.2
98Q2	102.3	101.2	98.3	102.8	101.5	99.9	104.4	109.8	98.2	96.5	98.7	104.0	105.1	110.0	102.1	107.6	104.3	80.7
98Q3	103.1	102.7	99.8	106.6	102.4	101.1	106.5	111.3	98.5	97.4	99.8	105.4	102.0	108.3	104.7	110.2	106.1	78.0
98Q4	104.0	104.3	100.6	108.1	103.2	102.2	107.8	112.3	99.3	98.1	101.0	106.5	97.7	106.1	106.9	110.8	101.1	88.3
99Q1	102.7	102.6	98.8	110.2	101.9	100.6	105.7	110.6	98.2	97.3	100.1	103.9	100.0	107.2	103.2	107.2	101.6	90.3
99Q2	101.3	101.2	96.4	108.3	100.4	98.8	103.0	97.0	96.4	98.9	101.2	98.7	111.2	99.2	103.8	103.3	86.9	90.9
99Q3	100.9	100.5	95.5	107.7	100.0	98.2	102.0	108.0	96.8	96.1	98.7	99.8	100.2	112.1	97.7	102.6	102.3	91.3

## 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	81.0	110.6	89.2	87.6	122.5	115.4	116.9	125.4
1987	103.0	116.8	113.7	52.0	88.8	116.0	118.4	94.0	118.8	107.3	84.7	110.4	89.0	88.4	119.2	113.2	112.5	119.1
1988	99.4	116.3	109.5	58.8	90.3	112.6	117.1	96.2	115.4	104.6	67.5	111.5	91.5	91.3	114.0	110.1	109.4	112.8
1989	87.6	115.2	105.4	67.2	91.5	109.5	111.8	98.0	109.1	102.8	72.5	112.3	97.5	97.2	108.5	108.3	106.2	110.2
1990	87.9	111.2	101.1	75.7	94.2	106.8	106.2	101.7	104.9	100.4	79.7	115.3	102.7	101.4	104.9	107.1	104.8	106.4
1991	98.6	107.6	98.1	77.9	95.9	104.2	102.2	104.2	103.0	99.4	89.8	117.0	103.9	103.4	102.5	105.1	102.6	103.9
1992	98.1	105.7	100.4	83.8	99.2	101.9	101.6	103.8	102.2	99.5	96.2	110.4	101.1	102.8	103.1	105.2	100.5	101.8
1993	99.4	103.3	101.1	91.5	100.9	101.8	103.0	102.2	101.6	99.7	98.2	102.6	100.2	100.1	103.2	104.0	100.2	99.9
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	98.7	99.5	89.9	108.6	99.6	89.2	93.8	98.6	98.9	99.1	101.5	89.8	98.4	89.3	98.0	97.3	99.1	97.5
1996	97.6	98.9	97.3	116.4	100.2	98.7	91.4	101.9	97.8	96.6	103.5	97.9	101.4	99.6	95.9	94.9	97.5	92.3
1997	96.9	100.4	93.3	121.7	99.9	97.1	89.3	103.2	97.8	94.4	106.8	95.4	100.7	101.0	91.9	90.3	96.8	91.7
1998	96.5	102.7	90.1	121.8	99.8	95.8	89.1	98.2	98.8	93.3	109.0	96.0	102.3	103.5	87.3	85.7	96.3	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	98.0	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	81.6
1988	88.8	105.1	94.6	93.1	99.1	99.4	114.0	115.5	103.4	94.2	74.7	131.3	111.1	103.4	100.2	103.4	105.2	86.0
1989	88.6	101.7	90.5	99.1	105.2	95.8	107.9	118.8	97.1	92.2	77.8	137.1	119.1	106.7	95.2	99.9	107.2	80.5
1990	91.7	105.4	91.5	102.5	113.6	99.2	108.7	127.7	97.1	93.3	84.3	143.5	123.9	110.6	102.9	112.5	101.6	70.4
1991	92.5	100.6	88.7	94.5	116.4	95.3	103.6	129.8	95.2	92.3	95.9	140.6	125.5	114.2	99.2	108.6	99.5	75.1
1992	94.4	101.8	94.3	94.7	118.2	96.9	106.3	126.3	97.1	95.0	106.5	116.3	124.3	109.8	104.8	114.0	96.4	77.5
1993	97.0	102.5	99.0	95.9	106.6	99.7	102.2	104.8	100.2	98.4	102.0	94.0	100.4	98.5	101.1	100.7	100.1	82.0
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	100.9	103.9	94.3	90.9	103.7	103.4	103.8	111.3	98.9	95.9	105.5	104.9	100.4	103.4
1996	100.7	103.7	102.4	114.4	103.1	104.1	94.5	103.8	101.0	99.4	105.9	106.6	112.3	98.5	105.8	108.5	105.1	85.4
1997	96.2	102.3	94.1	118.1	98.5	98.9	94.2	105.9	97.1	94.7	106.7	101.0	107.5	116.2	95.0	102.1	113.1	80.3
1998	96.6	106.0	92.3	113.7	99.0	99.2	89.8	102.1	98.7	94.8	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
96Q3	100.6	103.5	102.1	116.2	102.9	104.2	94.6	105.7	100.9	99.0	108.3	107.3	113.8	97.8	106.2	108.9	104.9	84.4
96Q4	99.3	103.2	99.9	117.8	102.0	103.1	96.2	108.0	99.7	97.7	107.5	106.0	113.6	104.8	104.1	109.7	105.9	81.8
97Q1	97.5	102.4	97.0	118.0	99.7	100.8	97.3	107.0	98.0	96.2	107.4	103.5	108.2	111.3	99.3	105.7	110.8	78.9
97Q2	96.5	102.5	94.9	117.3	98.8	99.3	94.1	105.8	97.3	95.1	107.1	101.0	105.5	114.8	95.9	102.5	112.3	81.2
97Q3	85.0	101.2	92.0	117.7	97.3	97.1	93.4	104.9	96.0	93.6	105.8	99.4	107.3	118.6	91.5	98.5	114.0	83.8
97Q4	95.9	103.0	92.5	119.5	98.3	98.7	91.9	105.9	97.0	94.1	106.4	100.2	108.9	120.5	93.3	102.1	115.2	77.5
98Q1	95.5	103.4	91.5	97.9	98.1	97.8	100.7	97.1	94.0	108.3	99.7	107.9	124.5	90.4	89.7	118.6	76.1	
98Q2	96.3	104.8	91.9	110.3	98.5	98.9	89.5	101.7	98.1	94.6	107.3	100.9	111.4	125.9	92.0	102.5	120.3	70.8
98Q3	97.0	107.0	92.6	113.3	99.4	99.7	90.5	102.7	99.1	95.1	108.5	102.5	108.7	126.0	93.7	104.6	123.0	67.9
98Q4	97.7	109.0	93.4	114.2	100.4	91.3	103.2	100.3	95.6	109.8	103.6	104.4	122.4	98.6	104.8	117.4	77.2	
99Q1	96.3	107.5	91.7	115.9	98.7	98.5	89.5	101.4	99.5	94.5	108.9	101.2	106.8	123.1	91.9	101.1	118.1	80.0
99Q2	94.8	106.2	89.9	113.6	97.1	96.4	87.6	99.3	98.5	93.4	107.5	98.6	105.1	126.7	88.3	97.5	120.0	78.4
99Q3	94.1	105.6	89.3	112.7	96.5	95.5	87.1	98.5	98.3	92.9	107.3	97.2	106.4	126.7	86.9	96.0	118.9	83.9

## 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	55.5	117.0	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	86.9	117.2	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	72.1	90.9	109.2	117.5	100.1	110.9	105.9	67.5	119.0	109.8	97.6	109.7	111.4	108.4	98.7
1990	103.3	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	110.7	107.7	95.6
1991	103.6	106.1	87.1	81.4	95.4	107.0	110.9	104.2	105.0	101.4	86.8	121.7	116.5	101.5	104.9	108.8	106.1	92.6
1992	101.9	106.7	89.1	87.5	98.0	105.0	105.8	102.5	105.8	100.9	91.9	108.9	112.2	99.7	104.5	107.1	104.4	93.5
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	104.6	105.2	102.7	98.9
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	98.4	101.1	101.7	112.0	99.3	98.2	89.2	88.9	96.7	101.9	88.8	104.9	97.1	104.0	98.8	100.1	95.2	98.0
1996	98.5	97.3	100.2	113.2	102.3	95.5	87.0	102.4	94.0	99.3	97.4	102.7	99.4	104.6	98.5	97.1	92.0	93.8
1997	97.5	100.5	95.7	118.3	105.4	91.5	84.0	104.8	93.1	95.3	96.4	96.9	97.4	110.2	91.1	92.3	91.6	91.8
1998	98.9	104.2	89.7	118.3	107.7	90.9	80.6	102.0	92.5	94.1	96.3	94.9	97.6	113.6	85.5	86.5	90.1	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	90.1	87.7	105.5	143.0	115.8	104.2	98.6	66.7	137.2	118.3	101.7	94.4	96.6	135.1	68.8
1987	98.0	104.0	81.8	87.5	89.6	105.9	128.8	118.2	108.5	101.0	64.6	135.1	119.4	104.8	104.4	110.3	114.5	72.8
1988	94.7	100.4	91.0	99.5	96.2	120.4	116.4	105.0	98.7	69.5	138.8	127.0	111.3	99.6	108.3	105.7	77.6	
1989	92.3	95.1	88.7	106.3	104.4	95.4	113.5	121.4	98.7	95.0	72.4	145.4	134.1	107.2	96.3	102.8	110.4	72.1
1990	96.8	103.1	90.7	110.8	114.5	99.8	116.2	128.1	98.8	97.7	80.5	152.0	136.1	109.6	105.0	116.4	104.4	63.2
1991	97.3	99.2	87.8	98.6	115.8	97.8	112.4	129.7	97.0	94.2	92.7	146.3	140.8	112.1	101.5	112.5	102.9	66.9
1992	98.0	102.7	93.1	98.9	116.9	99.9	110.7	124.8	100.5	96.4	101.7	114.7	137.9	106.5	106.2	116.1	100.1	71.2
1993	99.1	104.8	98.0	95.8	106.3	102.2	105.3	104.5	103.7	98.8	98.4	92.4	103.8	98.3	102.4	101.9	102.6	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	
1995	103.2	106.3	108.8	110.3	100.5	102.8	89.6	91.1	101.4	106.3	101.0	117.0	97.5	100.5	106.2	108.0	96.4	101.8
1996	101.6	102.0	105.5	111.2	105.3	100.7	89.9	104.3	97.1	102.2	99.6	111.9	110.0	103.3	106.4	111.0	98.2	86.8
1997	96.8	102.4	96.5	114.8	103.9	93.2	88.6	107.6	92.4	95.7	96.3	102.6	103.9	126.8	94.1	104.4	106.9	80.4
1998	98.9	107.6	91.9	110.4	106.8	94.1	81.3	106.0	92.4	95.6	95.4	100.5	103.1	136.9	90.9	103.9	112.1	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
96Q3	101.7	101.3	105.3	111.8	105.5	100.3	90.3	106.3	96.8	101.6	99.6	112.3	111.5	102.6	106.8	111.2	98.9	86.3
96Q4	100.2	101.3	103.2	113.1	105.5	98.5	91.7	108.7	95.4	99.7	99.6	110.0	111.0	111.1	104.3	112.0	100.0	83.0
97Q1	98.0	101.3	100.2	113.9	103.9	95.5	92.5	107.8	93.7	97.6	98.4	106.5	105.3	119.6	99.0	108.1	104.9	79.1
97Q2	96.8	102.3	97.8	113.9	103.8	93.5	88.9	107.3	92.8	96.0	97.0	103.0	102.2	125.0	95.2	104.9	106.5	80.8
97Q3	95.4	101.7	94.2	114.7	103.0	91.2	87.6	107.0	91.2	94.3	94.9	100.4	103.5	130.2	90.5	100.8	107.8	83.5
97Q4	86.8	104.1	93.9	116.7	104.8	92.8	85.4	108.4	81.8	94.8	94.9	100.6	104.6	132.8	91.9	104.0	108.6	78.3
98Q1	97.1	104.7	91.8	114.0	104.9	92.5	80.9	104.4	91.4	94.7	94.3	99.3	103.1	137.1	88.8	101.2	111.2	78.2
98Q2	98.4	106.4	91.5	107.3	106.2	93.6	81.5	105.6	91.9	95.4	94.9	100.0	106.2	138.3	90.1	103.6	112.5	73.9
98Q3	99.7	108.6	91.7	110.0	107.6	94.7	81.5	106.7	92.6	98.0	95.8	101.0	103.6	138.2	91.6	105.4	114.8	71.5
98Q4	100.6	110.6	92.4	110.6	108.6	95.6	81.3	107.3	93.6	96.4	96.7	101.8	99.5	133.9	93.2	105.5	109.8	81.4
99Q1	99.2	109.1	80.9	112.0	107.1	93.9	78.7	105.4	92.9	95.2	95.8	99.0	102.1	134.7	89.9	101.8	110.8	83.9
99Q2	97.5	107.6	89.4	109.5	105.4	91.9	76.0	103.3	91.9	93.8	94.6	96.1	100.9	138.6	86.4	98.4	113.1	81.4
99Q3	96.6	106.9	89.2	108.5	104.8	91.0	74.7	102.5	91.8	93.0	94.3	94.5	102.4	138.8	85.2	97.1	112.5	86.2

**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	3.5	3.1	6.5	3.0	3.2	3.0	3.2	3.8	1.7	0.5	2.1	0.4	1.7	3.0	2.5	3.6	2.2		
DK	1.3	0.0	2.2	1.3	1.0	1.2	1.3	1.3	1.8	1.4	1.9	1.3	1.4	1.5	0.4	0.2	0.7	0.1	0.5	4.7	1.2	1.3	0.7	4.1	
D	22.5	24.0	0.0	24.8	17.4	20.6	18.0	21.7	28.6	37.7	21.7	18.5	16.3	16.4	6.5	2.2	10.7	1.8	6.9	14.2	23.8	27.8	9.0		
GR	0.6	0.8	0.8	0.0	1.0	0.9	0.4	1.9	0.8	0.6	0.4	0.7	0.6	0.6	0.1	0.1	0.2	0.0	0.3	0.2	0.6	1.3	0.2	2.4	
E	3.7	2.6	4.5	3.4	0.0	8.1	3.0	5.7	3.7	3.0	12.6	2.9	2.8	4.3	1.1	0.4	1.5	1.1	1.3	2.2	3.0	2.9	2.1		
EE	17.1	7.4	13.5	7.7	18.9	0.0	9.7	14.1	13.1	7.2	15.3	7.1	7.0	11.6	4.2	1.2	5.3	1.0	3.4	10.0	10.4	8.4	6.5		
FI	0.7	0.8	0.8	0.7	0.6	0.8	0.0	0.7	0.9	0.6	0.7	0.9	0.8	3.0	0.4	0.2	0.2	0.7	0.2	0.4	1.0	0.6	0.6	0.7	
RL	7.6	5.9	10.8	16.2	11.7	11.5	5.3	0.0	7.9	11.2	5.9	6.4	5.7	7.2	4.3	1.2	4.2	1.0	3.6	4.5	9.1	9.9	4.5		
NL	8.5	4.5	6.7	3.9	4.1	5.4	5.7	3.9	0.0	4.0	4.8	4.5	5.1	6.5	1.7	0.7	3.0	0.4	1.6	7.9	3.4	4.3	3.2		
A	1.6	1.6	5.7	2.6	1.3	1.6	0.9	2.7	1.9	0.0	1.4	2.1	1.6	1.1	0.4	0.2	0.6	0.1	0.5	0.8	2.9	2.6	0.7		
P	0.8	0.5	1.0	0.5	7.2	1.3	0.5	1.2	0.8	0.5	0.0	0.6	0.6	0.9	0.1	0.1	0.3	0.1	0.2	0.7	0.7	0.5	0.3		
SF	1.0	2.8	1.6	1.5	0.7	0.9	0.8	1.1	1.2	1.4	1.0	0.0	4.8	1.2	0.8	0.2	0.9	0.1	0.5	2.2	0.9	1.2	0.7		
S	2.0	9.6	3.1	2.1	1.5	2.1	1.9	1.8	2.6	2.1	2.3	8.5	0.0	2.8	1.0	0.3	1.5	0.2	0.9	7.4	1.7	1.8	1.3	6.5	
UK	11.5	10.8	10.9	8.3	9.7	12.1	22.3	9.3	11.5	6.4	12.6	11.6	10.6	0.0	5.9	2.0	7.3	1.4	7.7	18.7	7.7	9.4	8.1	24.7	
AUS	0.8	1.0	1.3	1.2	0.8	1.2	1.0	1.4	0.7	0.8	0.6	1.9	1.8	2.2	0.0	0.6	5.5	0.2	19.6	0.6	1.6	0.9	3.3	2.6	
CND	0.7	0.8	1.2	1.0	0.9	1.2	1.1	1.2	0.6	0.9	0.6	1.3	1.3	1.7	0.0	3.0	3.5	1.9	3.6	1.2	1.0	21.3	2.4		
J	4.7	6.6	7.0	4.1	4.5	6.6	6.5	6.7	3.8	3.9	2.6	7.1	7.5	8.4	37.2	6.4	0.0	3.5	25.1	4.8	9.2	4.6	21.7	13.4	
MX	0.3	0.4	0.8	0.3	1.1	0.6	0.5	0.7	0.3	0.3	0.4	0.5	0.6	0.4	1.5	1.4	0.0	1.1	0.3	0.8	0.3	10.9	1.3		
NZ	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.3	0.3	0.4	0.9	0.1	0.8	0.0	0.0	0.2	0.3	0.2	0.5	0.5	
N	0.9	5.4	1.3	0.8	0.8	0.9	1.4	0.8	1.0	0.9	1.2	3.0	7.1	1.9	0.4	0.3	0.7	0.1	0.3	0.0	0.7	0.7	2.2		
CH	2.6	1.7	4.4	1.6	1.6	3.4	1.8	3.4	1.8	4.5	1.6	1.6	1.9	2.2	1.4	0.3	1.7	0.4	1.0	0.9	0.0	2.0	1.8	7.7	
TR	1.1	0.7	2.0	4.5	1.4	1.3	0.6	2.1	1.0	1.5	0.6	1.3	1.3	1.4	0.8	0.2	0.7	0.1	0.6	0.5	1.5	0.0	0.7	4.4	
USA	9.8	9.3	15.2	10.4	10.9	13.1	15.6	14.9	8.3	7.9	8.5	13.1	14.0	20.3	22.0	81.2	47.3	84.1	20.9	11.5	16.4	14.3	0.0	28.0	
	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	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	0.0	4.1	7.5	4.4	4.2	7.1	5.2	5.1	8.1	4.1	4.2	4.7	5.3	6.5	5.2	5.5	5.0	5.2	4.2	4.2	5.0	5.0			
DK	1.7	0.0	3.2	1.9	1.4	1.9	1.0	2.2	1.9	2.2	4.1	8.4	2.4	2.1	1.6	1.6	1.5	2.1	5.1	1.8	1.8	1.8	9.9		
D	28.4	31.7	0.0	31.4	23.4	29.3	23.7	31.5	34.9	44.1	26.1	26.7	27.0	28.8	25.7	27.4	27.3	27.3	26.6	19.6	32.5	34.4	28.1		
GR	0.7	0.9	1.0	0.0	1.1	1.0	0.5	2.0	0.9	0.7	0.5	0.8	0.7	0.8	0.3	0.4	0.3	0.5	0.3	0.6	1.4	0.4	3.5		
E	4.5	3.4	6.2	4.2	0.0	9.5	4.2	7.1	4.3	3.7	13.5	4.0	4.0	6.2	3.2	3.2	3.6	4.2	3.5	3.0	4.2	3.6	5.0		
EE	20.0	10.6	19.3	10.9	22.1	0.0	13.3	18.8	15.5	9.8	17.5	11.1	11.6	17.6	13.6	11.9	13.3	11.9	12.0	12.8	14.4	11.5	13.9		
FI	1.2	1.4	1.9	1.2	1.2	1.6	0.0	1.5	1.3	1.1	1.1	1.6	1.6	1.6	4.9	2.3	3.5	2.4	3.5	2.3	1.6	1.4	2.1		
RL	10.2	9.1	16.4	19.3	14.5	15.5	8.7	0.0	9.9	13.7	7.7	10.0	10.3	13.1	19.0	12.1	11.8	12.3	12.2	6.9	13.0	13.0	12.2		
NL	10.5	6.1	9.6	5.2	5.4	7.5	7.6	5.8	0.0	5.3	5.9	6.3	7.3	9.5	5.5	4.9	6.2	4.7	5.0	9.6	5.1	5.7	6.0		
A	2.0	2.3	6.8	3.1	1.7	2.2	1.4	3.5	2.3	0.0	1.7	2.6	2.6	2.0	1.5	1.4	1.5	1.4	1.7	1.2	3.4	3.1	1.9		
P	0.9	0.6	1.3	0.6	7.5	1.6	0.7	1.4	0.9	0.6	0.0	0.8	0.7	1.2	0.4	0.7	0.6	0.8	0.5	0.9	0.6	0.6			
SF	1.4	3.4	2.6	1.9	1.1	1.5	1.3	1.8	1.5	1.7	1.3	0.0	5.8	2.2	1.8	2.5	1.7	2.2	2.7	1.6	1.6	1.6	1.9		
S	3.0	11.2	5.6	3.5	2.5	3.6	3.6	3.5	3.5	3.0	10.4	0.0	5.0	4.7	4.4	4.3	4.6	4.8	6.6	3.2	2.6	4.3	20.0		
UK	15.4	15.1	18.6	12.4	13.9	17.8	28.3	15.7	14.5	9.7	15.5	17.1	16.6	0.0	19.5	21.6	19.3	21.2	22.3	23.4	13.6	13.9	18.8	66.5	
	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 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
DE	35.7	40.8	0.0	37.5	29.8	38.7	36.0	40.3	42.9	48.8	33.4	37.6	34.7	31.7	35.1	38.0	36.3	37.7	38.1	31.8	39.0	41.0	34.8
FR	5.6	4.7	8.3	5.2	0.0	11.1	5.8	8.6	5.4	4.8	14.7	5.8	5.1	6.3	4.3	4.4	4.7	5.4	4.9	4.6	5.1	4.7	8.4
IRL	23.8	14.8	26.4	13.3	25.6	0.0	18.7	23.6	19.2	12.8	20.9	18.6	15.2	18.8	18.4	18.5	17.9	18.3	17.0	18.8	17.7	14.7	18.6
NL	2.3	2.9	4.1	1.9	2.1	3.0	0.0	2.9	2.4	2.2	1.9	3.5	3.1	5.3	3.4	5.0	3.5	4.9	3.6	3.9	2.3	2.2	3.2
AL	13.2	12.0	22.1	22.2	17.3	18.7	13.7	0.0	13.0	15.5	10.6	14.6	13.0	14.0	17.3	16.8	15.8	16.9	17.0	10.9	15.9	16.1	18.2
SF	2.2	5.6	4.0	2.6	1.8	2.5	2.6	2.7	2.4	2.3	2.0	0.0	7.3	2.7	3.4	2.5	3.1	2.4	4.6	2.3	2.2	2.2	2.7
BLEU	0.0	6.2	11.2	5.9	5.8	9.8	8.2	7.5	10.5	5.6	6.0	7.6	7.2	7.1	7.8	7.2	7.5	7.0	7.5	7.5	5.8		

## **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.