**ECONOMIC
AND MONETARY
DEVELOPMENTS**

Exchange rate
and balance
of payments
developments

Box 10

**UPDATE OF THE OVERALL TRADE WEIGHTS FOR THE EFFECTIVE EXCHANGE RATES OF THE EURO
AND COMPUTATION OF A NEW SET OF EURO INDICATORS**

Up to now, the ECB has computed and published nominal and real effective exchange rates
(EERs) of the euro against both a narrow group of trading partners encompassing 12 partner
countries and a broad group of trading partners comprising 38 partner countries. These
computations followed a methodology agreed in 1999 with the national central banks of the then

15 EU Member States.[1] According to this methodology, the EER indicators are constructed by applying overall trade weights to the bilateral exchange rates of the euro against the currencies of the euro area's trading partners. The weights are designed to also capture the effect of competition in third markets and were based on the average exports and imports recorded in the period 1995-97. Since overall trade patterns tend to change only gradually, it was envisaged to update the weights at five-year intervals. This box introduces the new set of euro EER indicators following the first update of the underlying weights. The new indicators, which are based on manufacturing trade data for the period 1999-2001, are linked to the (revised) set of indicators based on the 1995-97 weighting scheme at the beginning of 1999 (see the "General notes" in the "Euro area statistics" section and the "Methodological notes" available on the ECB's website for technical details).

The list of trading partners has been extended to encompass all EU Member States and accession countries. Accordingly, Latvia, Lithuania, Malta and Bulgaria have been added to the corresponding trading partner groups (all other Member States and Romania were already included). As a consequence, the broad group now consists of 42 trading partners and has been renamed the "EER-42", while the narrow group of trading partners will be referred to as the "EER-12". In addition, a new group of trading partners has been created to take account of the recent EU enlargement, as well as the increasing involvement of China in world trade. Hence, this new group comprises the countries included in the EER-12, the ten new EU Member States and China and is named the "EER-23". The EER-42 group of partner countries covers about 90% of euro area external trade in manufacturing goods, whereas the EER-23 and EER-12 groupings cover about 75% and 60% of such trade respectively.

Compared with the 1995-97 weighting scheme, the weight of the United States has increased, while that of the United Kingdom – the second most important trading partner of the euro area – has declined (see the table below). Another notable development is the increase in the weights of the new EU Member States and of China, which has now emerged as the fourth largest trading partner of the euro area, after Japan and before Switzerland and Sweden.

Real EER indices are derived by adjusting the nominal indices for relative price and cost developments between the euro area and its trading partners. For the EER-12 and EER-23 groups, real EER indices are computed employing consumer prices (CPI), producer or wholesale prices (PPI), unit labour costs in manufacturing (ULCM), GDP deflators (GDPD) and unit labour costs in the total economy (ULCT). For both the euro area and European partner countries, the cost and price measures are based on harmonised concepts (HICP, PPI, ESA 95-based ULC and GDP deflators). For the EER-42, the CPI (HICP when available) remains the only price index considered, owing to a lack of timely and comparable data on other price and cost measures for some of the countries included in this group.

The EER-12 indicators are available from January 1990, while the EER-42 and EER-23 indices are available from January 1993. As euro exchange rates have only been available since the formation of the euro area, earlier EER data are based on a basket of euro legacy currencies.[2]

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1 For an in-depth description of this methodology, the reader is referred to L. Buldorini, S. Makrydakis and C. Thimann (2002), "The effective exchange rates of the euro", ECB Occasional Paper No 2.

2 In order to avoid the repeated linking of the indices due to past and future euro area enlargements, the composition of the euro area is assumed to be fixed for the whole period over which the EER indicators are computed. This implies, for instance, that Greece is treated as a member of the euro area since the formation of the euro area in 1999, although it only joined on 1 January 2001.

Table Weights in the ECB's EER-12, EER-23 and EER-42 indices

Partner countries	Overall weights					
	EER-12 index		EER-23 index		EER-42 index	
	1995-1997 (revised)	1999-2001	1995-1997 (revised)	1999-2001	1995-1997 (revised)	1999-2001
EER-42 group					**100**	**100**
EER-23 group			**100**	**100**	**80.9**	**82.0**
EER-12 group	**100**	**100**	**86.2**	**82.7**	**68.8**	**66.6**
Australia	1.27	1.13	1.11	0.94	0.76	0.70
Canada	1.96	2.22	1.76	1.93	1.48	1.64
Denmark	3.02	2.72	2.76	2.39	2.51	2.17
Hong Kong	5.74	5.24	2.82	2.37	2.08	1.82
Japan	16.36	14.52	13.68	11.45	9.66	8.52
Norway	1.55	1.35	1.43	1.20	1.31	1.10
Singapore	3.82	3.45	3.20	2.69	1.75	1.55
South Korea	4.77	4.84	3.79	3.55	2.82	2.72
Sweden	5.66	5.07	5.14	4.47	4.60	3.99
Switzerland	7.94	7.08	7.30	6.31	6.47	5.60
United Kingdom	22.12	21.48	20.36	19.18	18.15	17.14
United States	25.78	30.91	22.84	26.19	17.24	19.68
Additional countries in the EER-23 group			**13.8**	**17.3**	**12.1**	**15.3**
China			5.02	6.93	4.22	5.92
Cyprus			0.15	0.13	0.13	0.11
Czech Republic			2.08	2.52	1.90	2.30
Estonia			0.18	0.21	0.15	0.18
Hungary			1.68	2.44	1.51	2.19
Latvia			0.10	0.12	0.08	0.10
Lithuania			0.18	0.19	0.14	0.16
Malta			0.16	0.12	0.15	0.11
Poland			2.55	2.98	2.29	2.72
Slovakia			0.75	0.86	0.68	0.78
Slovenia			0.94	0.85	0.84	0.76
Additional countries in the EER-42 group					**19.1**	**18.0**
Algeria					0.30	0.28
Argentina					0.55	0.42
Brazil					1.55	1.36
Bulgaria					0.27	0.31
Croatia					0.45	0.36
India					1.40	1.28
Indonesia					0.94	0.71
Israel					1.14	1.09
Malaysia					1.18	1.10
Mexico					0.87	1.23
Morocco					0.62	0.57
New Zealand					0.13	0.11
Philippines					0.38	0.52
Romania					0.68	0.84
Russia					2.16	1.70
South Africa					1.02	0.84
Taiwan					2.21	2.29
Thailand					1.17	0.99
Turkey					2.06	2.04

Source: ECB.

The nominal EER indicators are available daily for the EER-12 and EER-23, as they constitute a summary measure of short-term foreign exchange market developments. All other indicators are available monthly, with the exception of the real EER indices based on ULCT, ULCM and GDPD, which are published at a quarterly frequency.

From this issue of the Monthly Bulletin onwards, the EER-23 index, which includes the most important trading partners of the euro area and all non-euro area EU Member States, will be the standard reference series in the Monthly Bulletin. The EER-23 and EER-42 indices are

**Chart A Euro nominal effective exchange rate against the currencies of the EER-12 and EER-23 groups of trading partners** [1]

(monthly data; index: 1999 Q1 = 100)

- —— EER-23
- ••••• EER-12

Source: ECB.
1) An upward movement of the index represents an appreciation of the euro. The latest observations are for August 2004.

Chart B Euro nominal effective exchange rate against the currencies of the EER-23 and EER-42 groups of trading partners [1]

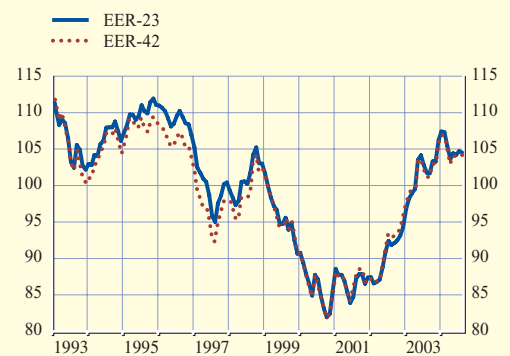(monthly data; index: 1999 Q1 = 100)

- —— EER-23
- ••••• EER-42
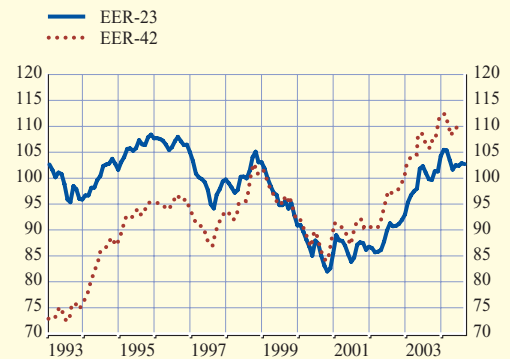
Source: ECB.
1) An upward movement of the index represents an appreciation of the euro. The latest observations are for August 2004.

published in Section 8.1 of the "Euro area statistics" section and on the ECB's website, whereas all EER-12 indicators and the daily nominal EER indices are only available on the ECB's website.

Chart A shows that the evolution of the previous reference series – the nominal EER of the euro against 12 currencies – and the new reference series are highly correlated, as the new EU Member States and China account for only about 17% of the overall weighting of the EER-23. The devaluation of the Chinese renminbi in 1994 and the rise of major euro legacy currencies against the Hungarian forint and the Polish zloty in the first half of the 1990s somewhat affect the series. Chart B compares developments in the nominal EER of the euro against the currencies of 23 and 42 trading partners. It shows that the nominal EER-23 fluctuated without a clear trend over the period, while the nominal EER-42 increased by about 50% over the same period. This mainly reflects lower inflation rates in the countries included in the EER-23 index than in the countries in the EER-42 index, and their impact on developments in nominal exchange rates. This is confirmed in Chart C, which shows the CPI-deflated real EER-23 and the corresponding real EER-42. The two indices move closely together, indicating that assessments based on real EER indicators do not depend on the use of different groups of partner countries.

Chart C Euro real effective exchange rate (CPI-deflated) against the currencies of the EER-23 and EER-42 groups of trading partners [1]

(monthly data; index: 1999 Q1 = 100)

- —— EER-23
- ••••• EER-42

Source: ECB.
1) An upward movement of the index represents an appreciation of the euro. The latest observations are for August 2004.