Box 5

Effective exchange rates for the euro

This issue of the ECB Monthly Bulletin contains, for the first time, the effective exchange rate (EER) indices for the euro as compiled by the European Central Bank (ECB) in collaboration with the national central banks of the 15 EU Member States. The resulting EER series are regarded as appropriate indices for summarising exchange rate developments relevant for the euro area, and the Eurosystem intends to use them as a common means of measuring exchange rate movements. Until now, the Eurosystem has relied on the existing series calculated by the Bank for International Settlements (BIS). Given that the underlying method is broadly the same and the partner country coverage is very similar, the differences between the ECB and BIS series are only minor. The new EER series will be published regularly in the "Euro area statistics" section of the Monthly Bulletin and, together with complete backdata, on the ECB's Web site, which also contains further information on these series. The main features of the methodology for compiling the ECB's euro EER indices are explained below.

Effective exchange rates are important indicators for assessing the external economic conditions affecting a country or currency area. The *nominal* effective exchange rate is a summary measure of the external value of the currency of a country or area vis-à-vis the currencies of the most important trading partners of that country or area, while the *real* effective exchange rate – obtained by deflating the nominal rate with appropriate price indices – is the most commonly used indicator of international price and cost competitiveness. The monitoring of effective exchange rate developments constitutes an important element of the ECB's evaluation of the monetary situation in the euro area, in particular as part of the second pillar of the monetary policy strategy of the Eurosystem, i.e. the broadly based assessment of the outlook for price developments (the strategy was outlined in the article entitled "The stability-oriented monetary policy strategy of the Eurosystem" in the January 1999 issue of the ECB Monthly Bulletin).

At this stage two effective exchange rate indices will be published: a nominal EER and the corresponding real EER using consumer price indices as deflators. The *nominal* EER will be available on a daily basis and the *real* EER will be available on a monthly basis. The ECB's *nominal* EER is defined as a geometric weighted average of bilateral euro market exchange rates against the currencies of 13 partner countries (see the table below). The importance as a trading partner for the euro area as well as data availability constituted the principal criteria for selecting the partner countries. The ECB's *real* EER is the geometric weighted average of relative consumer prices between the euro area and each trading partner, expressed in common currency. The price indices used for the euro area, the other EU Member States and Norway are the Harmonised Indices of Consumer Prices (HICPs) published by Eurostat, while for the other countries the national consumer price indices (CPIs) are used.

The weights for the 13 trading partners are derived from the euro area's manufacturing trade (SITC 5-8) with these countries, averaged over the period from 1995 to 1997. Individual country weights are the average of export and import shares, whereby the method of "double-weighting" is adopted in the derivation of export shares in order to capture third-market effects, i.e. considering the fact that euro area exporters compete in foreign markets with both domestic producers and other exporters.[1] Although the weighting scheme is fixed, as the weights are applied uniformly over the whole period for which the index is computed, the weights will be updated every five years so that gradual shifts in trade patterns can be taken into account. For the period prior to the launch of the euro, the EER index uses trade weights to determine "theoretical" euro exchange rates. These weights are based on the three-year average (1995-97) of the manufacturing trade of each euro area Member State in extra-euro area trade (see the table below).

1 *For a detailed description of the double-weighting method to capture third-market effects, see P. Turner and J. Van't dack* "Measuring International Price and Cost Competitiveness"*, BIS Economic Paper No. 39, 1993.*

Weights of the 13 major trading partners in the ECB's effective exchange rate index
(as percentages)

Partner countries	EER weights
United States	24.72
United Kingdom	23.92
Japan	14.78
Switzerland	8.71
Sweden	6.14
Korea	4.80
Hong Kong SAR [1]	3.83
Denmark	3.45
Singapore	3.44
Canada	1.93
Norway	1.68
Greece	1.47
Australia	1.12

Source: ECB.
Weights may not add up to 100% due to rounding.
1) Special administrative region.

Weights for the "theoretical" euro
(as percentages)

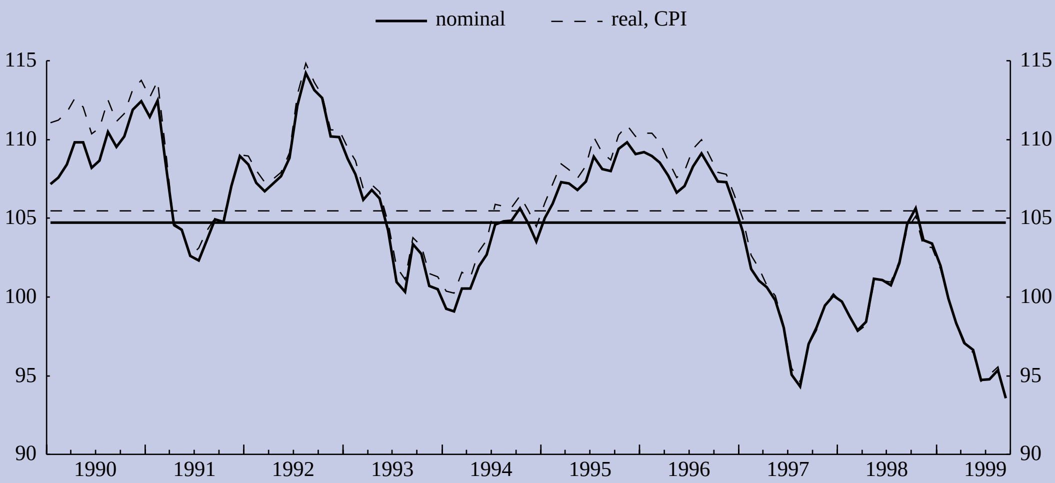
EMU legacy currencies	"Theoretical" euro weights
Deutsche Mark	34.66
French franc	17.83
Italian lira	14.34
Dutch guilder	9.19
Belgian and Luxembourg franc	8.01
Spanish peseta	4.95
Irish pound	3.75
Finnish markka	3.27
Austrian schilling	2.91
Portuguese escudo	1.08

Source: ECB.
Weights may not add up to 100% due to rounding.

The base period for both effective exchange rate indicators in the ECB Monthly Bulletin is the first quarter of 1999 (1999 Q1 = 100). This enables a straightforward assessment of the performance of the euro since its introduction, while being sufficiently broad in order to minimise any bias when selecting a particular trading day as the base for the index. However, it should be noted that the choice of base period bears no relation to an "equilibrium value" of the euro and should not, therefore, be interpreted as such.

Both effective exchange rate series have been moving in parallel over the past couple of years (see the graph below), thus suggesting that price development patterns in the euro area have been closely in line with those in

Nominal and real effective exchange rates [1]
(monthly averages; index 1999 Q1 = 100)



Source: ECB.
1) Data are ECB calculations. An upward movement of the index represents an appreciation of the euro. Horizontal lines are averages over the period shown (January 1990 to September 1999).

its major trading partners. The effective exchange rate of the euro vis-à-vis the currencies of the euro area's 13 major trading partners deflated by consumer prices, which can be seen as one of the indicators of competitiveness, declined by around 5% in the third quarter when compared with the first quarter of 1999, thus indicating an improvement in competitiveness. From a historical perspective, in September 1999 the real effective exchange rate of the euro stood at around 12% below its 1990-98 average level.

The ECB is planning to supplement the set of euro EER indicators against the group of 13 major partner countries by including additional deflators, in particular producer price indices, unit labour costs, GDP and import and export price deflators, to enable a more comprehensive assessment of euro area price and cost competitiveness to be carried out. In addition, a nominal and real effective exchange rate index against a broader group of partner countries is also planned for release in due course.