

Box 5

Broad versus narrow indices for the effective exchange rate of the euro

The ECB compiles and publishes nominal and real effective exchange rates (EERs) for the euro against the currencies of a narrow group of trading partners – comprising 12 industrialised countries plus Hong Kong SAR, Singapore and South Korea – and against a broad group of trading partners, which includes 26 emerging economies in addition to the countries covered in the narrow index.¹ The set of nominal EER indices summarises euro exchange rate developments, while the set of real EER indicators provides summary measures of the price and cost competitiveness of the euro area.

The use of both a narrow and a broad set of EERs for the euro stems from the need to handle the usual trade-off between trade coverage and data quality. A broad measure has the advantage of covering a larger group of partner countries, yet at the same time this constitutes its major limitation, as timely data on a comprehensive set of alternative price deflators is often not available for a number of emerging economies. Moreover, some of these countries have experienced high inflation and, occasionally, a marked and prolonged depreciation of their currencies. Such developments tend to be reflected in a decoupling of real and nominal EERs.

Against this background, it is revealing to regularly compare developments in the narrow and broad EER indices. Overall, the following analysis corroborates the consistency of the indices, suggesting that the

¹ For more detailed account of the weighting scheme employed, see Buldorini, L., Makrydakis, S., Thimann, C. (2002), “The effective exchange rates of the euro”, ECB Occasional Paper No. 2.

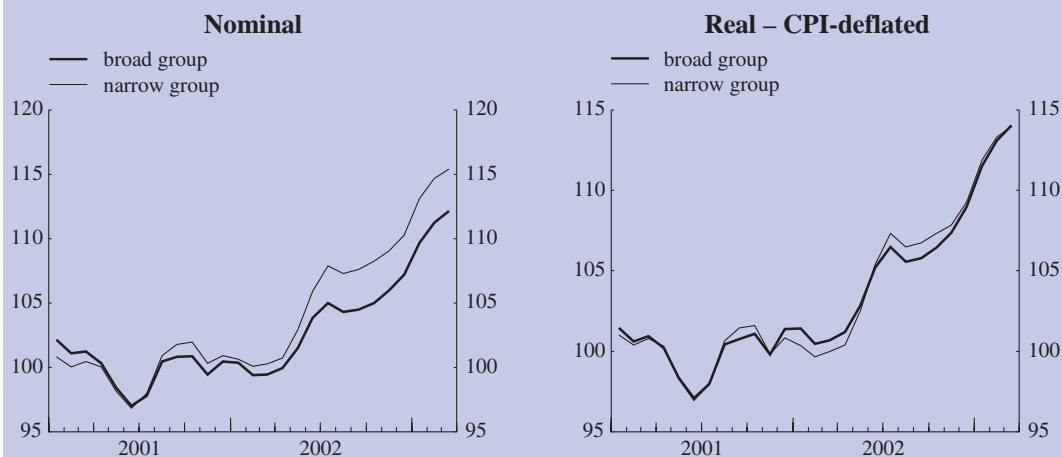
rebound of the euro in 2002/03 has been very broadly based. The euro appreciated vis-à-vis the currencies of both the euro area's major trading partners and many emerging market economies.

More specifically, in February 2003 the nominal EER of the euro vis-à-vis the broad group of trading partners was almost 9.1% higher than its average level in 2002, while it was more than 8% stronger against the narrow group of trading partners (see chart). Within the narrow group, the euro appreciated particularly significantly against the US dollar as well as against currencies that traditionally show a strong co-movement with the US currency, such as the Canadian dollar and the currencies of the non-Japan Asian countries included in the narrow index. The euro also recovered against the Japanese yen and the pound sterling and was relatively stable against the Danish krone, the Swedish krona and the Swiss franc.

The strengthening of the euro according to the broad index was influenced by two factors: first, as the euro appreciated against the US dollar, it strengthened by roughly the same magnitude against currencies which move closely with the US currency or which are formally pegged to it. The strong appreciation of the euro vis-à-vis the Chinese yuan renminbi and the new Taiwan dollar was particularly notable. Second, in nominal terms the euro strengthened quite significantly vis-à-vis the Brazilian real and the Mexican peso – which were subject to depreciating pressure amid turbulence in Latin American financial markets – and against the Turkish lira and the Russian rouble.

Nominal and real effective exchange rates of the euro against different groups of trading partners

(monthly data; index: 2001 = 100)



Source: ECB.

After accounting for inflation differences between the euro area and its trading partners, the discrepancy observed between the narrow and the broad index receded in the period under review: in February 2003, both real EER indices (based on consumer prices) were 8.4% stronger than their average level in 2002 (see chart). As far as the narrow group of partner countries is concerned, the greater appreciation of the euro in real than in nominal terms reflects rather subdued inflation in the United Kingdom and Switzerland as well as deflation in Japan and Hong Kong SAR. Conversely, the lower real than nominal appreciation of the euro for the broad group of trading partners is the result of high inflation rates in some of the countries – such as Turkey and Brazil – whose currencies depreciated most strongly against the euro in this period.