

## Box 6

**THE INTRODUCTION OF HARMONISED COMPETITIVENESS INDICATORS FOR EURO AREA COUNTRIES**

An assessment of the international price and cost competitiveness of individual euro area countries should help to enhance our understanding of the macroeconomic environment in the euro area at both the aggregate and individual Member State levels. To this end, the Eurosystem has recently started to publish the harmonised competitiveness indicators (HCIs)<sup>1</sup> on a regular basis, as a means of providing a comparable measure of individual euro area countries' price competitiveness that is also consistent with the real effective exchange rates (REER) of the euro. The HCIs are based on consumer price indices and are constructed using the same methodology and data sources as the euro REERs. These indicators complement other competitiveness indicators published by some Eurosystem NCBs, which may follow different methodologies and, in some cases, use different cost and price measures to account for specific circumstances in their countries.

The HCIs are calculated on the basis of weighted averages of the bilateral exchange rates of each euro area country vis-à-vis the currencies of its trading partners. For the time being, they are deflated only by seasonally adjusted consumer price indices (HICP for European countries, all-item CPI for all other partner countries).<sup>2</sup> The weights are based on bilateral data on exports and imports of manufactured goods (i.e. excluding agricultural, raw material and energy products). Exports are double-weighted to account for "third-market effects", i.e. to capture the competition faced in foreign markets from both local producers and exporters from third

1 The HCIs based on consumer price indices are simultaneously published by the ECB and Eurosystem NCBs on their websites. See [http://www.ecb.int/stats/exchange/hci/html/hci\\_2006-12.en.html](http://www.ecb.int/stats/exchange/hci/html/hci_2006-12.en.html).

2 The Eurosystem is investigating the feasibility of using other deflators as well. For the euro area as a whole, measures of real effective exchange rates are also calculated using the GDP deflator, the PPI, or measures of unit labour costs.

countries. The group of trading partners for each euro area country comprises the other euro area countries plus the same 44 extra-euro area trading partners as in the euro EER.<sup>3</sup>

A comparison of the evolution of the HCIs across euro area countries between the first quarter of 1999 and the fourth quarter of 2006 shows that most countries recorded an increase in their HCIs, which points to a deterioration in the price competitiveness of these countries (see the table below). This is not surprising given that the corresponding measure of the euro REER appreciated by 4.3% over this period. However, the table also shows that the HCI changes differed substantially across countries. At one end of the spectrum, Germany, Austria and Finland experienced a moderate decline in their HCIs, indicating an improvement in their price competitiveness, whereas, at the other end, rises in the HCIs were particularly strong in Ireland and Spain.

#### Developments in HCIs based on consumer price indices across euro area countries

(annual percentage changes; percentages)

	Change in HCI Q1 1999-Q4 2006 <sup>1)</sup>	Average annual HICP inflation (1999-2006)	Extra-euro area trade share <sup>3)</sup>
Belgium	2.5	2.0	45.9
Germany	-2.7	1.5	57.6
Ireland	17.0	3.4	67.7
Greece	4.0	3.2	43.8
Spain	11.2	3.2	37.5
France	0.8	1.8	46.9
Italy	4.3	2.3	48.2
Luxembourg	8.5	2.7	39.2
Netherlands	6.9	2.5	52.0
Austria	-2.0	1.7	38.9
Portugal	7.5	3.0	30.9
Slovenia	1.1	5.7	36.4
Finland	-2.7	1.5	60.0
<i>euro area</i> <sup>2)</sup>	4.3	2.0	

Sources: Eurostat, European Commission (Ameco database) and ECB calculations.

1) A negative (positive) number signifies an increase (decrease) in price competitiveness.

2) In the first column, the figure for the euro area refers to the REER based on consumer price indices. In the second column, the euro area HICP inflation rate refers to the countries participating in the euro area before 2007.

3) Shares are measured in overall trade terms, including third-market effects.

The cross-country divergence in HCI changes may be due to different price developments and different foreign trade specialisations. The table indicates that persistent inflation differentials among euro area countries had a significant impact on the diversity of HCI developments. The countries that appeared to have improved their price competitiveness since 1999 are those that also recorded the lowest HICP inflation rates during this period, while inflation in Ireland, Greece, Spain and Portugal has been well above the euro area average.<sup>4</sup> The country-specific pattern of foreign trade flows determines the relevance of both changes in foreign consumer prices and exchange rate developments. Concerning exchange rate developments, the extent to which a change in the euro exchange rate affects the HCI of a particular euro area country is

3 See <http://www.ecb.int/stats/exchange/hci/html/index.en.html> for additional methodological information. The ECB euro effective exchange rate indices have been adjusted to account for the adoption of the euro by Slovenia on 1 January 2007. Slovenia has been removed as a euro area trading partner and the list of trading partners in the EER-42 has been expanded to also include Chile, Venezuela and Iceland. As a result, the broadest euro EER index is now computed against 44 partner countries (EER-44).

4 Slovenia entered the euro area on 1 January 2007. The country experienced rather high inflation rates at the beginning of the period under review, which was, however, largely offset in the real exchange rate by developments in the nominal tolar exchange rate against the euro.

closely related to the exposure of that country to extra-euro area trade. The share of extra-euro area trade in total cross-border trade is the lowest for Portugal (31%) and the highest for Ireland (almost 68%). In addition, the geographical allocation of extra-euro area trade of each euro area country also affects HCI developments. For example, the appreciation of the euro vis-à-vis the US dollar over the past two years has had a rather strong impact on the HCI of Ireland, because a relatively large share of the foreign trade of that country is with the United States.

The HCIs currently available may enable a refined assessment of the economic situation – particularly of the external sector – across euro area countries and thereby of the euro area as a whole. In a monetary union where national policy-makers no longer have the possibility to use a country's nominal exchange rate to compensate for competitiveness losses, a careful examination of developments in competitiveness indicators remains particularly important. In the end, protracted losses in price competitiveness could signal impediments associated with structural rigidities in the wage and price-setting mechanisms and/or a lack of competition, which in turn would call for resolute action in these areas.

At the same time, changes in competitiveness indicators should not be interpreted in isolation. The existence of a degree of diversity is a natural phenomenon in any single currency area of the size of the euro area. For example, some divergence could be justified insofar as it reflects longer-term catching-up processes or equilibrium price and cost adjustments in response to idiosyncratic economic shocks.<sup>5</sup> Nevertheless, movements in these indicators also seem to reflect a sustained dispersion in wage developments across the euro area, while differences in labour productivity growth across euro area countries are narrower. Such developments are partly related to inertial components of wage-setting rules, such as those caused by automatic indexation clauses of wages and prices, which still exist in some euro area countries. Looking in more detail at product groups, there has been a relatively higher degree of price dispersion in the consumer services sector, probably mostly owing to the dispersion of wage developments in that sector. In future extensions of this set of HCIs, it will be useful to compare the present set of HCIs based on consumer price developments with indicators based on deflators that include fewer non-traded products and services, which may be more closely associated with the competitiveness of the countries' external sector.

<sup>5</sup> See the article entitled "Monetary policy and inflation differentials in a heterogeneous currency area" in the May 2005 issue of the Monthly Bulletin for a comprehensive discussion of inflation differentials.