



**PUBLICATION OF ADDITIONAL HARMONISED COMPETITIVENESS INDICATORS
WITHIN THE JOINT EUROSISTEM DISSEMINATION FRAMEWORK:
EXPLANATORY NOTE**

Introduction

The purpose of Harmonised Competitiveness Indicators (HCIs) is to provide meaningful and comparable measures of euro area countries' price and cost competitiveness that are also consistent with the real effective exchange rates (EERs) of the euro. They are constructed using the same methodology and data sources as the euro EERs.^[1]

The HCIs reflect a common understanding between Eurosystem national central banks (NCBs). They complement other competitiveness indicators published by some NCBs, which may follow different methodologies and, in some cases, use different price and cost measures in order to account for the specific circumstances in their countries. The relevant links are provided in the Annex.

1. Methodology

The HCIs are conceptually equivalent to the real EER of a currency. They are calculated on the basis of weighted averages of bilateral exchange rates vis-à-vis the currencies of the trading partners of each euro area country and are deflated by appropriate cost or price indices.^[2] The methodology is based on the following elements:

1.1 Trade basis

The weights are based on bilateral data on trade in manufactured goods, as defined in Sections 5 to 8 of the Standard International Trade Classification (i.e. excluding agricultural, raw material and energy products) for the periods 1995-1997 and 1999-2001.

1.2 Weighting method

The weights incorporate information on both exports and imports. Import weights are the simple shares of each partner country in the total imports. Exports are double-weighted in order to account for “third-market effects”, i.e. to capture the competition faced in foreign markets from both domestic producers and exporters from third countries.^[3] The final overall weights of each partner country are obtained as the weighted average^[4] of the export and import weights.

Two sets of weights are currently available, based on trade data for the periods 1995-97 and 1999-2001.^[5] The final HCIs result from the linking, at the beginning of 1999, of the indices based on 1995-97 weights to those based on 1999-2001 weights. Weights are updated every five years in order to account for shifts in international trade flows. The next update is scheduled for 2009.

1.3 Trading partners

The HCIs based on the GDP deflators and on unit labour costs are compiled vis-à-vis the other 15 euro area countries and the group of 21 trading partners, which comprises the 11 non-euro area EU Member States, Australia, Canada, China, Hong Kong, Japan, Norway, Singapore, South Korea, Switzerland and the United States. The HCIs based on consumer prices are additionally calculated vis-à-vis the other 15 euro area countries and the group of 41 trading partners, which comprises the group of 21 plus Algeria, Argentina, Brazil, Chile, Croatia, Iceland, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, the Philippines, Russia, South Africa, Taiwan, Thailand, Turkey and Venezuela.

1.4 Deflators

The HCIs are deflated with the following variables:

- Consumer price indices: the all-items Harmonised Index of Consumer Prices^[6] as published by Eurostat is used for European countries, while all-item national consumer price indices are used for all other trading partners;
- GDP deflators: for European countries, they are derived from their quarterly national accounts as published by Eurostat; for the other trading partners, they are derived from their national accounts as published by the BIS, the OECD and the IMF;
- Unit labour costs for the total economy: unit labour costs are compiled as the ratio of the compensation per employee and labour productivity, with labour productivity measured as GDP at constant prices divided by the total number of persons employed; for European countries, the available data are derived from their quarterly national accounts as published by

Eurostat; for the other trading partners, these data are derived from their national accounts as published by the BIS, the OECD and the IMF.

Seasonally adjusted data are used in order to eliminate the effect of seasonal patterns and temporal disaggregation is performed based on annual series if quarterly data are not available.

Non-deflated HCIs are available on the ECB website, in the Statistical Data Warehouse (<http://sdw.ecb.europa.eu/browseSelection.do?DATASET=3&node=6374972>).

1.5 Caveats

Indicators based on consumer price indices are the most widely used indicators of price competitiveness since they offer the best data quality and comparability across countries, are available on a timely basis (also for emerging market economies) and are subject to only minor revision. As all Harmonised Competitiveness Indicators they do, however, have a number of drawbacks from a conceptual point of view (e.g. the indicators based on consumer price indices exclude some tradable goods, such as capital goods; they are affected by indirect taxes and subsidies; and they are only indirectly related to production costs).^[7]

Indicators based on unit labour costs usually show some volatility and are subject to more significant revisions, owing to the specificities of the compilation of statistics on wages and employment.

The indicators based on GDP deflators can be affected by the volatility of quarterly GDP series, in particular, for smaller economies. Whole year results may be more reliable indicators of underlying trends. The comparability of these indicators can also be affected by distortions owing to taxes and subsidies.

Overall, comparability across countries can be affected by the inclusion of prices or costs of goods and services that are not internationally tradable, and thus might only indirectly affect the price competitiveness of the export sector.

2. Other competitiveness indicators

In addition to several Eurosystem NCBs, the European Commission and other international organisations, such as the BIS, the OECD and the IMF, publish similar competitiveness indicators. Any discrepancies between these and the HCIs can be due to methodological differences, the use of different data sources, different weights and/or a different coverage in terms of trading partners.

Annex: References to competitiveness indicators published by Eurosystem NCBs

NCB	Link/Publication
National Bank of Economic Indicators for Belgium Belgium	http://www.nbb.be/doc/dq/e/dq3/IEE.pdf Monthly Report, page 76 in the Statistical Section: In English: http://www.bundesbank.de/volkswirtschaft/vo_monatsbericht_2008.en.php
Deutsche Bundesbank	In German: http://www.bundesbank.de/volkswirtschaft/vo_monatsbericht_2008.php Zeitreihen-Datenbank/Indikatoren der preislichen Wettbewerbsfähigkeit: http://www.bundesbank.de/statistik/statistik_zeitreihen.php?lang=de&open=devisen&func=list&tr=www_s331_b01113
Central Bank and Financial Services Authority of Ireland	www.centralbank.ie/frame_main.asp?pg=sta_late.asp&nv=sta_nav.asp
Bank of Greece	www.bankofgreece.gr/en/statistics/stat_stat.asp#sdos See Table VI.2, Real Effective Exchange Rate Index, CPI-deflated in the Bulletin of Conjunctural Indicators Boletín Estadístico, Tables 20.06 and 20.07 In English: 20.6 (www.bde.es/infoest/a2006e.pdf), 20.7 (www.bde.es/infoest/a2007e.pdf)
Banco de España	In Spanish: 20.6 (www.bde.es/infoest/a2006.pdf), 20.7 (www.bde.es/infoest/a2007.pdf)
Banque de France	In English: www.banque-france.fr/gb/publications/bulletin/stat_2006.htm See chapter entitled “Statistics”, Table 4 – “The competitiveness of France’s economy”. In French: www.banque-france.fr/fr/publications/bulletin/bulbdf.htm See items “Actualités”, part 1 – “La situation économique de la France” and “Statistiques”, figure 4 – “Compétitivité de l’économie française”
Banca d’Italia	Data: http://www.bancaditalia.it/statistiche;internal&action=_setlanguage.action?LANGU AGE=en Supplements to the Statistical Bulletin, Balance of Payments (recent releases in PDF format) and Statistical Database (BIP on-line) (full database, downloadable) contain indicators based on producer price indices. http://www.bancaditalia.it/pubblicazioni/relann The statistical annex to the Annual Report (Italian unabridged version only) includes indicators based on unit labour costs and on producer price indices. Methodology: In English: http://www.bancaditalia.it/statistiche/quadro_norma_metodo/metodoc/nomed66/en_suppl_66_05.pdf

NCB	Link/Publication
Central Bank of Cyprus	<p>In Italian: http://www.bancaditalia.it/statistiche/quadro_norma_metodo/metodoc/nomed66/supp1_66_05.pdf</p> <p>Economic analysis: http://www.bancaditalia.it/pubblicazioni/econo/bollec;internal&action=_setlanguage.action?LANGUAGE=en Economic Bulletin and http://www.bancaditalia.it/pubblicazioni/relann;internal&action=_setlanguage.action?LANGUAGE=en Annual Report.</p> <p>Publication in Greek: "Οικονομικό Δελτίο" www.centralbank.gov.cy/nqcontent.cfm?a_id=6326&lang=gr</p> <p>Publication in English: "Economic Bulletin" www.centralbank.gov.cy/nqcontent.cfm?a_id=6326&lang=en</p> <p>See in Section A entitled: "Macroeconomic Developments and Projections" Part 3 entitled "Domestic Competitiveness and Balance of Payments", Chart A.25 "Real and nominal effective exchange rates of the Cyprus currency (IMF weights)".</p>
Banque centrale du Luxembourg	<p>See "La compétitivité telle qu'appréhendée par les indicateurs du taux de change effectif réel:mise à jour", BCL Bulletin 2005/2, p. 40. www.bcl.lu/en/publications/rapports_annuels/AR_2007/Chapitre_1.pdf</p>
De Nederlandsche Bank	<p>See "Can price-cost competitiveness indicators explain export growth?" www.statistics.dnb.nl</p> <p>See Statistical Bulletin, Table 13.1, Economic key indicators for the Netherlands and the euro area, lines 3.1.1 and 3.1.2.</p>
Oesterreichische Nationalbank	<p>Indikatoren der preislichen Wettbewerbsfähigkeit: In English: http://www.oenb.at/en/stat_melders/datenangebot/preise/preise_wettbewerbsfaehigke.it.jsp#tcm:16-2882</p> <p>In German: http://www.oenb.at/de/stat_melders/datenangebot/preise/wettbewerbsfaehigkei/indikatoren_der_preislichen_wettbewerbsfaehigkeit.jsp#tcm:14-3552</p>
Banco de Portugal	<p>Data: BPstat Estatísticas online for CPI and GDP deflator: apl1.bportugal.pt/estatisticasweb (See time series domain, in the field of the Foreign exchange rate statistics – Exchange rate indices – Effective exchange rate indices for Portugal).</p> <p>Annual report for Units Labour Cost Indices: www.bportugal.pt/publish/relatorio/Chap2_economic_policies.xls</p> <p>Methodology: www.bportugal.pt/publish/bolecon/antigos/bol_dez04_e.pdf</p>
Národná banka Slovenska	<p>Monetary Survey (chapter 4.2, table 15) In English: http://www.nbs.sk/en/publications-issued-by-the-nbs/nbs-publications/the-monetary-survey In Slovak: http://www.nbs.sk/sk/publikacie/publikacie-nbs/menovy-prehľad</p>

NCB**Link/Publication**

Suomen Pankki - www.bof.fi/en/tilastot/indikaattorit/taulukot.htm
Finlands Bank

^[1]For details, see “The effective exchange rates of the euro following the recent euro area and EU enlargements” (ECB Monthly Bulletin, March 2007, pp 77-79, pdf 2.15 MB [en](#)) “The update of the euro effective exchange rates” (ECB, September 2004, pdf 156 kB [en](#)) and “The effective exchange rates of the euro” (ECB Occasional Paper No 2, February 2002, pdf 533 kB [en](#)).

^[2]Unlike the euro real EER, the HCI for a euro area country is also calculated vis-à-vis the other euro area countries. Within the framework of Economic and Monetary Union, the bilateral nominal exchange rates among the former currencies of the originally participating Member States have been irrevocably fixed since 1999.

^[3]See Section II.3 in ECB Occasional Paper No 2 for a more detailed description of this weighting method and the capturing of third-market effects.

^[4]Calculated according to the proportion of exports and imports in the total foreign trade of the country concerned. See formula II.6 in ECB Occasional Paper No 2.

^[5]At the time of the last update of the weights, 2001 was the most recent year for which manufacturing trade data for all trading partners were available.

^[6]For a definition, see the ECB’s Glossary (<http://www.ecb.europa.eu/home/glossary/html/glossh.en.html#528>).

^[7]For a detailed discussion of the merits and limitations of various indicators of cost and price competitiveness, see the article entitled “Developments in the euro area’s international cost and price competitiveness” in the August 2003 issue of the ECB’s Monthly Bulletin.