National Competitiveness Council Bulletin

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National Competitiveness Council

UNDERSTANDING HARMONISED COMPETITIVENESS INDICATORS

- **In recent years, the weak euro exchange rate, low ECB interest rates, and low international fuel prices have all combined to improve Irish cost competitiveness**
- **Harmonised Competitiveness Indices (HCIs) provide meaningful and comparable measures of euro area countries' price and cost competitiveness, whilst taking account of exchange rate fluctuations**
- **Much of the fluctuation in Ireland's external competitiveness over recent years has been driven by changes in the euro exchange rate with both sterling and the US dollar**
- **Ireland's exposure to currency fluctuations – arising out of our high level of trade with the UK and US – reinforces the need to maintain focus on domestically influenced aspects of competitiveness**

INTRODUCTION

Discussions about competitiveness often focus on a country's export performance. In light of the ongoing interest in measuring competitiveness, this *Competitiveness Bulletin* summarises a number of different trade-weighted competitiveness indicators.

CURRENT POLICY CONTEXT

Since 2009, Ireland's cost base has improved significantly, making Irish firms more competitive internationally, and making Ireland a more attractive location for firms to base operations – although Ireland remains a high cost location for consumer goods and services (3rd most expensive in the euro area).

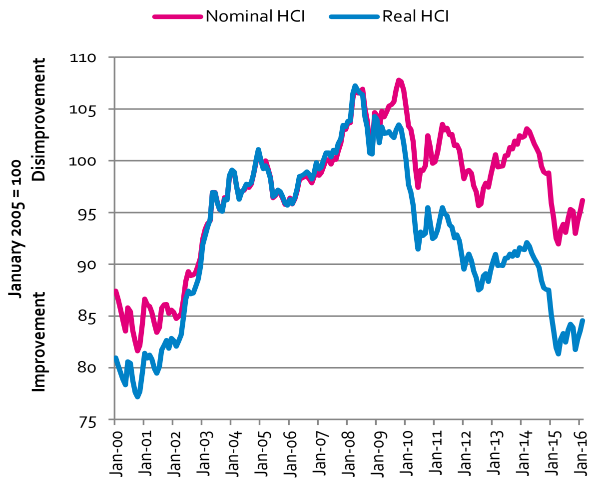
While relative cost competitiveness has improved (i.e. although costs increased, it did so at a slower rate than in many of our competitor countries), this improvement has been largely driven by external factors beyond the control of domestic policymakers. In essence, a weak euro exchange rate (primarily benefitting those countries with significant non-euro denominated exports), low ECB interest rates, and low international fuel prices have all combined to improve Irish cost competitiveness.

HOW IRELAND PERFORMS

Much of Ireland's competitiveness narrative can be illustrated using Harmonised Competitiveness Indices (HCIs). The purpose of HCIs is to provide meaningful and comparable measures of countries' price and cost competitiveness that are also consistent with the real effective exchange rates (REERs) of the euro[1].

The Central Bank of Ireland produces both a nominal and real HCI. The nominal HCI is an effective exchange rate for the Irish economy that reflects, on a trade weighted basis, movements in the exchange rate vis-à-vis 56 trading partners. The real HCI (nominal deflated by consumer prices[2]) takes into account relative price changes along with exchange rate movements. In Figure 1 below, an upward sloping line indicates a loss of competitiveness, whilst a downward sloping line indicates improving competitiveness.

Figure 1: Ireland's Harmonised Competitiveness Indicator



Source: Central Bank of Ireland

Ireland experienced a 32.5% loss in cost competitiveness (real HCI) between January 2000 and April 2008 reflecting an appreciation of the euro against the currencies of our trading partners (nominal HCI) and higher Irish price inflation relative to these countries. Looking at the nominal HCI, 22.5 percentage points of this deterioration was a result of unfavourable exchange rate movements (i.e. an appreciation of the euro vis-à-vis non-euro countries with whom Ireland trades), with the remainder of the

1 HCIs are constructed using the same methodology and data sources as the euro effective exchange rates. While the HCI of a specific country takes into account both intra and extra-euro area trade, however, the euro EERs are based on extra-euro area trade only. Therefore, the HCIs and euro EERs reflect different phenomena and are not directly comparable.
The weights for the HCIs are based on bilateral manufacturing trade flows (excluding agriculture, raw material and energy products).

2 The all-items Harmonised Index of Consumer Prices (HICP) as published by Eurostat is used for European countries, while all-item national consumer price indices are used for all other trading partners.

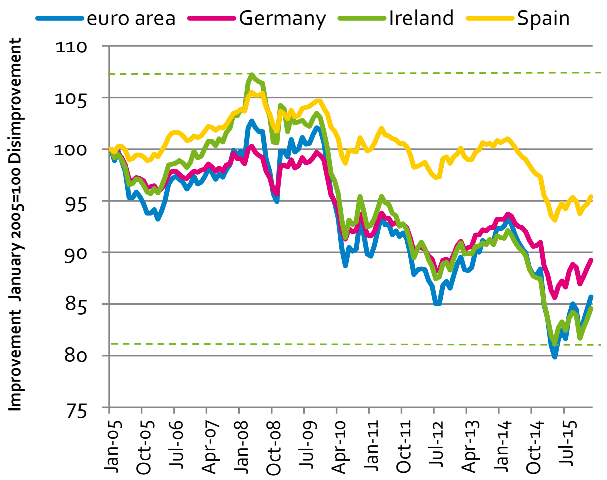
deterioration accounted for by higher inflation rates in Ireland than in our trading partners.

Throughout the recession, Ireland regained some of its competitiveness: between April 2008 and July 2012, the real HCI improved by 18.5 %, while the nominal improved by 10.6% (i.e. reflecting lower inflation in Ireland than amongst our trading partners, and in some cases, price reductions).

From mid-2012, partly driven by an appreciating euro, the HCI deteriorated again, eroding some of the gains made during the recession. Between 2012 and 2014, the nominal HCI deteriorated by proportionately more than the real HCI, suggesting that euro exchange rates were the primary factor in Ireland's loss of competitiveness. From March 2014, renewed euro depreciation provided a boost to Irish cost competitiveness, prior to the loss of competitiveness experienced in late 2015-early 2016, partially arising from the impact of a weakening sterling.

Figure 2 draws on ECB data to compare the evolution of real HCIs across a range of selected euro area countries. In short, and notwithstanding some fluctuations (particularly in 2012-2013), between 2008 and 2014 Ireland, Germany and the euro area recorded a significant competitiveness improvement. Mirroring Figure 1, further improvements in relative cost competitiveness occurred in 2014 and early 2015 (as the euro depreciated). In late 2015 and early 2016, relative cost competitiveness deteriorated in Ireland and the wider euro area.

Figure 2: Real HCI, January 2005 – February 2016



Source: European Central Bank

As a result of the scale of Ireland's non-euro denominated trade, (i.e. with the UK and US) euro exchange rates have a greater impact on our relative international competitiveness than is the case in many euro area countries.

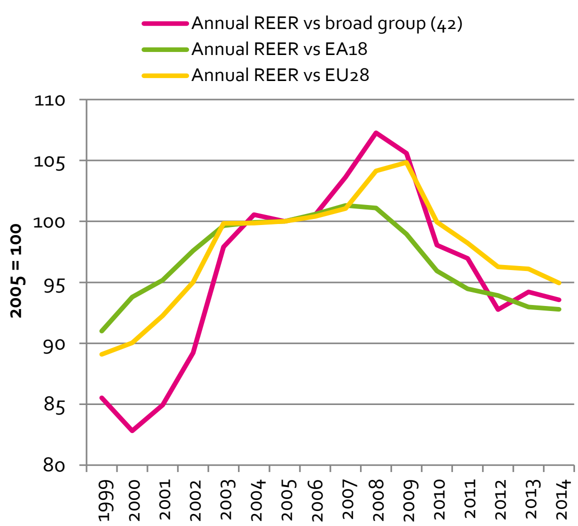
Effective Exchange Rates

HCIs are conceptually equivalent to the real effective exchange rate (REER) of a currency. However, while the HCI of a specific country takes into account both intra and extra-euro area trade, the **euro REERs are based on extra-euro area trade only**.

- The nominal effective exchange rate (NEER) or "trade-weighted currency index" tracks changes in the value of a given country's currency relative to the currencies of its principal trading partners. The NEER is calculated as a weighted average of the bilateral exchange rates of the relevant currencies.
- Changes in cost competitiveness depend not only on exchange rate movements but also on cost and price trends. The real effective exchange rate (REER) or "relative price and cost indicator", aims to assess a country's price or cost competitiveness relative to its principal competitors in international markets. The REER combines goods and services cost/prices deflators in different countries, and movements of nominal exchange rates into a single measure. It is 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 is deflated by appropriate cost or price indices (i.e. it corresponds to the NEER deflated by selected relative price or cost deflators).
- Double export weights are used to calculate NEERs and REERs, reflecting not only competition in the home markets of the various competitors, but also competition in export markets elsewhere.

As illustrated in Figure 3, against the wider EU28, Ireland's REER has declined from 104.8 in 2009 to 94.9 in 2014, representing an improvement in relative cost competitiveness. This appears to be driven primarily by lower rates of inflation in Ireland than in most other EU member states.

Figure 3: Relative Price Indicators for Ireland, 1999-2014



Source: European Commission

Ireland's REER vis-à-vis the euro area-18 has also declined over the same period (from 99 to 92.8). Against a wider comparison group of 42 trading partners, Ireland's relative improvement in cost competitiveness is more pronounced – improving from 105.6 to 93.6 over the same period.

Note on CPI and Other HCI Deflators

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 and are subject to only minor revision. As with all Harmonised Competitiveness Indicators they do, however, have a number of drawbacks from a conceptual point of view: 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. Further, 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.

It is worth noting that the Central Bank (and ECB, using the same methodology) produces a number of additional competitiveness indicators including:

- A HCI using a GDP deflator (which includes services prices, but is subject to distortions owing to taxes and subsidies);
- A HCI deflated by producer prices (a suitable approximation of traded goods prices, as the underlying basket includes a broad range of industrial products and goods that are subject to international competition. The main drawback is that it does not include services prices – a growing component of international trade); and
- A HCI deflated by unit labour cost indices for the total economy.

CONCLUSIONS

In summary, following a long period of weakening cost competitiveness, Ireland's international competitiveness improved throughout the recession. In part this was a result of improvements in cost competitiveness relative to our competitors, although favourable exchange rate movements were a major factor. The weak euro particularly benefited Ireland as a result of the large proportion of Irish exports traded in non-euro denominated currencies (i.e. sterling and dollar). Other related factors, however, must also be considered.

The performance of the internationally trading sector is often measured by trends in export growth and market share. While trends in export performance can be explained, in large part, by competitiveness factors, they can also be influenced by other factors unrelated to competitiveness, such as global demand patterns.

The traditional correlation between price competitiveness, usually measured by the REER, and export market share has weakened since the late 1990s, making trade performance increasingly dependent on factors other than price competitiveness[3]. While movements in the REER can account for part of the change in a country's external performance, the empirical literature suggests that there are other factors at play and has increasingly emphasised the importance of non-price factors in understanding competitiveness developments[4].

Similarly, the current account balance has traditionally also been used to evaluate external performance and competitiveness. The evidence here suggests that "competitiveness and current accounts do not depend solely on the performance of exporting companies, but are also closely connected with the internal allocation of resources and demand across the tradable and non-tradable sectors"[5].

Such a conclusion reiterates the impact of a range of domestic, non-price factors on overall competitiveness. Many of these non-price competitiveness factors are benchmarked in the NCC's annual Competitiveness Scorecard report, and in the international competitiveness publications of the World Bank, IMD and WEF.

Further Reading: Nominal exchange rates have a significant impact on the short term competitiveness of enterprises. The Council has published a Bulletin (16-4) analysing recent exchange rate movements, particularly the depreciation of sterling. For an overall summary of Ireland's recent competitiveness performance, see "Ireland's Competitiveness Scorecard 2015". Both publications are available from **www.competitiveness.ie**.

The NCC reports to the Taoiseach on key competitiveness issues facing the Irish economy. This Bulletin has been issued by the NCC Chair and Secretariat.

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3 Di Mauro F. and Forster K., Globalisation and the Competitiveness of the Euro Area, ECB Occasional Paper No. 97, 2008

4 This point was previously noted by the European Commission, who stated that "despite the appreciation of EU's REER, overall trade performance, as measured by the trade balance, has remained virtually unchanged since 2005. This is in stark contrast to the considerable US deficit and the sizable surplus of China and suggests that the EU has been able to compensate for the appreciation of its REER by relying increasingly on elements of non-price competitiveness". See European Commission, Member States Competitiveness Performance and Policies, Commission Staff Working Document, COM(2010) 614

5 Measures of the real exchange rate that include only tradable prices are not significantly connected with the trade balance in OECD countries: an improvement of the current account is not significantly related to a depreciation of the narrow, export price-based REER. In contrast, broad measures of the REER, which include the relative price of non-tradable goods, are significantly connected with the trade balance. See European Commission, Special Report: Competitiveness Developments within the Euro Area, Quarterly Report on the Euro Area, Vol. 8 No. 1, 2009