

Box 5

GAUGING THE IMPACT OF INDIRECT TAXATION ON EURO AREA HICP INFLATION

Fiscal policy adjustments, such as changes in VAT rates or other indirect taxes, can have a direct and immediate effect on overall HICP inflation. For the euro area, one of the tools used for estimating the impact of changes in indirect taxes on inflation is the HICP index at constant tax rates (HICP-CT), which has been published by Eurostat on a monthly basis since October 2009.¹ For reasons of simplicity, this index, developed by Eurostat in consultation with the ECB, is calculated assuming “mechanically” an immediate and full pass-through of any changes in indirect taxes to consumer prices. If all tax rates in a given year remain unchanged from December of the previous year, the monthly changes in the HICP and the HICP-CT will coincide. Any differences between HICP and HICP-CT developments provide an estimate of the upper limit for the actual impact of any changes in indirect tax rates. Furthermore, owing to the way in which the HICP-CT is constructed, the impact is concentrated in the month when the change in the tax rate becomes effective. It is also worth highlighting the fact that, in reality, the pass-through of changes in tax rates can be slower and/or incomplete, depending on the economic environment in which they are implemented, as well as on the extent to which they are absorbed by profit margins. For statistical purposes, however, there is no practical alternative to assuming a full and immediate pass-through, given that the index has to be compiled on a monthly and timely basis.²

Chart A shows that the mechanical impact of changes in indirect taxes on euro area HICP inflation has varied significantly over time. In the period from December 2003 to December 2010, it amounted to 0.15 percentage point per year, calculated as the difference between HICP and HICP-CT developments. In the same period the largest difference, of around 0.5 percentage point, was recorded in 2007 and was due mainly to the increase in the standard rate of VAT in Germany, from 16% to 19%. From 2008 to the middle of 2010 the mechanical impact of changes in indirect taxes on HICP inflation was virtually negligible, at least for the euro area as a whole. However, in the second half of 2010 it rose to over

Chart A Mechanical impact¹⁾ of changes in indirect taxes on the annual rate of euro area HICP inflation



Sources: Eurostat and ECB calculations.

1) Calculated as the difference between annual HICP and annual HICP-CT inflation rates.

1 See http://epp.eurostat.ec.europa.eu/portal/page/portal/hicp/methodology/hicp_constant_tax_rates.

2 For more information on the attributes and interpretation of the HICP-CT, see the box entitled “New statistical series measuring the impact of indirect taxes on inflation”, *Monthly Bulletin*, November 2009.

0.3 percentage point, owing to increases in indirect tax rates in several euro area countries.

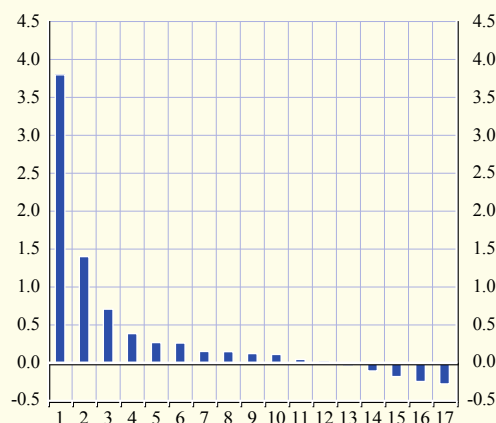
Chart B displays the average mechanical impact in 2010 of changes in indirect taxes on the annual rate of HICP inflation in each euro area country. Greece stands out as having experienced the largest mechanical impact on inflation, of 3.8 percentage points. This includes the impact of the gradual increase in VAT rates in 2010, with the standard rate rising from 19% to 23%, and the impact of significant hikes in excise duties on alcoholic beverages, tobacco and fuels. These measures were part of the necessary fiscal consolidation in Greece. However, as their impact will wane in the coming months, HICP inflation rates in Greece are expected to ease significantly. In addition to those in Greece, increases in indirect taxes in Estonia, Spain, Portugal, Luxembourg, Slovenia, Malta, Slovakia, the Netherlands and Italy also contributed positively to HICP inflation in these countries in 2010.

Looking ahead increases in indirect taxes that have already been implemented or announced are expected to continue to exert upward pressure on euro area HICP inflation in 2011, with their average annual contribution most likely being even greater than it was in 2010. Given the scale of the current fiscal imbalances in several euro area countries, the extent to which changes in indirect taxes play a role in related fiscal consolidation adjustment needs will continue to pose upside risks to euro area HICP inflation. Despite the benefits achieved through adjustments to the expenditure side of governments' balance sheets,³ some adjustment to indirect taxes remains quite likely. Consequently, the implementation of such measures needs to be monitored closely in order to assess their potential impact on euro area inflation developments.

³ Past experience in euro area countries suggests that a strong focus on reducing spending and, at the same time, introducing structural reforms to support potential growth can make a valuable contribution to achieving large reductions in government debt and helping countries to reap the benefits of consolidation. For further details, see, for instance, Nickel, C., Rother, P. and Zimmermann, L., "Major public debt reductions – Lessons from the past, lessons for the future", *Working Paper Series*, No 1241, ECB, September 2010; the box entitled "Experience with government debt reduction in euro area countries", *Monthly Bulletin*, ECB, September 2009; and the box entitled "The Greek economic and financial adjustment programme", *Monthly Bulletin*, ECB, May 2010.

Chart B Average mechanical impact¹⁾ in 2010 of changes in indirect taxes on the annual rate of HICP inflation in each euro area country²⁾

(percentage points)



1 Greece	7 Malta	13 Cyprus
2 Estonia	8 Slovakia	14 Germany
3 Spain	9 euro area	15 Finland
4 Portugal	10 Netherlands	16 France
5 Luxembourg	11 Italy	17 Belgium
6 Slovenia	12 Austria	

Sources: Eurostat and ECB calculations.

1) Calculated as the difference between annual HICP and annual HICP-CT inflation rates.

2) There are no HICP-CT data available for Ireland.