

Box 5

Direct impact of changes in administered prices and indirect taxes on euro area HICP developments

Governments influence prices of consumer goods and services to varying degrees and through different channels. This can be through a direct determination of the price, through various market or product regulations, or through indirect taxes and subsidies. The impact on the euro area HICP is usually less significant than at the country level, while the frequency with which the measures impact on HICP is higher. This reflects the different timing of the implementation of these various measures across countries and the fact that some country measures influence prices in opposite directions. Nonetheless, when analysing inflation developments, it is important to have good estimates of the impact of these governmental measures on prices. Currently, however, reliable estimates of the effects of changes in administered prices and indirect taxes on the HICP do not exist for the euro area. The main reason for this is that only a few euro area countries compile such estimates regularly, and then only on the basis of national CPIs.

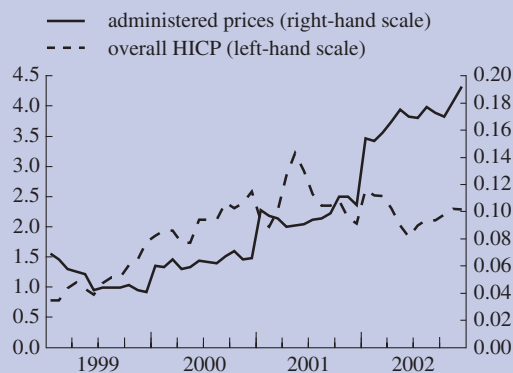
This box presents two rough estimates of changes in administered prices and indirect taxes and their direct impact on inflation. It reviews, in particular, their contributions to the annual HICP inflation rate in the euro area over the past few years. The indirect impact, such as second-round effects triggered by changes in government measures, is not considered in this box.

Administered prices

To measure administered prices is by no means a straightforward task. For example, some measures are only implemented at a regional or local level, some are income-dependent, and some depend on the consumer's socio-economic characteristics. In addition, some causes of price changes are borderline cases, i.e. they fall between the definitions of administered pricing and market pricing (e.g. telephone tariffs, basic foodstuffs subject to the EU's Common Agricultural Policy). However, one approach to compiling a very rough and partial measure showing the impact of administered prices on HICP inflation is to identify the HICP components – at the lowest level of aggregation available – that are considered to be heavily influenced by administered price setting. In the analysis below, the following individual euro area sub-components are included in the measure: refuse collection (HICP weight in 2003 0.5%), sewerage collection (0.5%), medical and paramedical services (0.9%), dental services (0.6%), hospital services (0.7%), passenger transport by railway (0.4%), postal services (0.2%), education (0.9%) and social protection (0.9%). Their aggregate HICP weight is 5.6% and they account for 13.6% of the services component.

Chart A: Changes in administered prices and overall HICP

(annual percentage point contribution to HICP inflation; annual percentage changes)



Sources: Eurostat and ECB calculations.

Although not all of these items are directly administered by governments in all euro area countries, these components may be subject to some kind of specific regulation in most countries. However, the list of items is not exhaustive, as it does not cover all the items that might be administered at the national level (e.g. rents). In addition, although this measure of administered prices is constructed from the highest level of disaggregation available for the euro area HICP, a further breakdown is required to obtain a more precise and reliable measure. For example, it is not possible to separate out television licences as they are currently included in the broader category of cultural services.

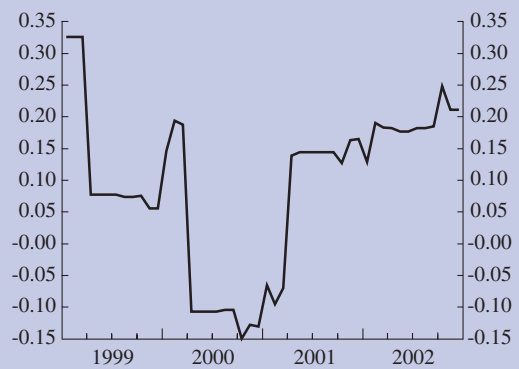
Chart A depicts the contribution from this synthetic administered price index to the year-on-year rate of change in overall HICP together with actual HICP inflation. It suggests that the impact from changes in administered prices on HICP inflation increased slightly in 2001 and 2002. This development reflects price increases in most of the components listed above, but particularly for dental services in 2002. The contribution of changes in administered prices to the overall annual rate of change in the HICP currently stands at approximately 0.2 percentage point. It is important to note that the sharp increases in January 2001 and 2002 mostly reflect an extension of the HICP coverage (concerning health, social protection and education services), and are not only due to changes in government policies. Hence, notwithstanding these statistical artefacts, the contribution to inflation from changes in administered prices was broadly stable in the period prior to 2002.

Indirect taxation

As regards indirect taxes, it is also possible to construct a synthetic measure by aggregating different taxes. This measure is obtained by aggregating country information on value-added tax (VAT) with energy and tobacco excise duties. However, it is very crude since it relies on a number of simplifying assumptions. For example, it is assumed that half of the energy and tobacco price components are tax-related. In addition, it is assumed that any tax change has been passed on to consumers immediately and in full. This assumption of a full pass-through is sometimes unsatisfactory, reflecting the fact that retailers may absorb at least part of a tax increase in the form of lower profit margins.

Chart B: Changes in indirect taxation

(annual percentage point contribution to HICP inflation)



Source: ECB calculations.

Chart B shows that the contribution from changes in indirect taxes to HICP inflation has been broadly stable over the last two years. Between 1999 and early 2001, however, developments in this measure showed some volatility. The temporary decline in most of 2000 and early 2001 can mainly be explained by changes in average VAT rates in some euro area countries. The contribution to overall HICP inflation in the euro area from changes in indirect taxation was similar to that from changes in administered prices in late 2002, i.e. around 0.2 percentage point.