Box 6

FACTORS LIMITING THE SCOPE AVAILABLE FOR INCREASES IN DOMESTIC PRICES

The Governing Council of the ECB aims to maintain the annual rate of change in the euro area HICP below, but close to, 2% over the medium term. This defines the overall scope available for increases in consumer prices, irrespective of the nature and origin of the increases. Over the period from January 1999 to December 2011, average inflation in the euro area was very close to this objective, at 2.03%. This box looks at some special factors that have affected inflation since 1999, such as increases in oil prices and indirect taxes. It shows that trend increases in these factors limit the room for other price increases that are domestic in origin, such as wage and profit developments, given that price stability, as defined above, is to be maintained over the medium term.

Price effects implied by changes in indirect tax rates and oil prices

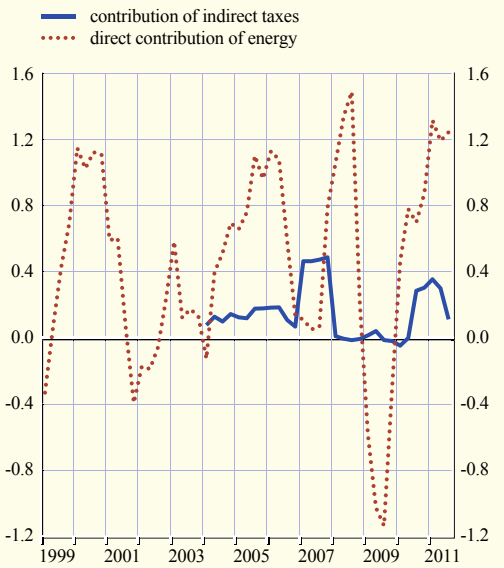
Looking at the first 13 years of Monetary Union, from 1999 to 2011, shows that changes in indirect taxes and oil prices have, on balance, put upward pressure on euro area HICP inflation that had to be counterbalanced by domestic factors.

Where indirect taxes are concerned, upward pressure is the result of, for instance, an increase in the indirect tax rate, as this implies a stronger increase in the tax component of consumer prices

than in the pre-tax component. Calculated as the difference between HICP inflation and Eurostat's measure of HICP inflation at constant tax rates, the direct impact of indirect taxes averaged almost 0.2 percentage point per annum over the period under review.[1] The impact was almost always positive, with only a very short period of slightly negative values in early 2010 (see Chart A). Stronger than average price increases were also recorded for administered prices, i.e. prices which are set directly or influenced significantly by the government. These prices have increased, on average, by 2.5% per annum since 1999.

Chart A The contribution of indirect taxes and energy prices to HICP inflation

(percentage points)



Source: Eurostat.
Notes: Data on the contribution of indirect taxes are not available before 2004 (see footnote 1). The last observation is that for the third quarter of 2011. It should be noted that the contributions of indirect taxes and energy prices are not strictly separable, because the latter already include some impact from indirect taxation.

In the case of oil prices, the direct impact can be seen in consumer prices for liquid fuels almost immediately and, with some lag, also in consumer prices for gas and other sources of energy. One way of gauging the direct impact of oil price shocks is hence to look at the growth in overall consumer energy prices. In the period from 1999 to 2011, the annual growth rate of the energy component of the HICP averaged 5.2%, which is significantly above the average increase in the euro area HICP. The indirect effects that oil price shocks have on consumer prices via higher energy input costs along the production chain have exerted further upward pressure on overall euro area HICP inflation, but such effects are more difficult to quantify.[2]

Implications for domestic price and wage-setting

The price effects discussed above reflect claims of governments and commodity producing countries on the value added of the euro area economy. These claims reduce the room available for wages and profits to grow in line with price stability. The simple quantifications above suggest that in the period from 1999 to 2011, around half a percentage point of an average rate of HICP inflation of 2.0% was de facto absorbed by increases in both government-induced prices and oil prices, and was thereby unavailable for domestic income growth.[3]

1 HICP inflation at constant tax rates (HICP-CT), as published by Eurostat, is only available as of 2004. The average impact of taxes over the period from 2004 to 2010 was 0.15 percentage point (see the box entitled "Gauging the impact of indirect taxation on euro area inflation", *Monthly Bulletin*, ECB, March 2011). Estimates for the whole period from 1999 to 2010 suggest a somewhat higher average contribution of 0.2 percentage point. This also corresponds more closely to the average contribution of indirect taxes of 0.2 percentage point to the growth in the GDP deflator in that period.

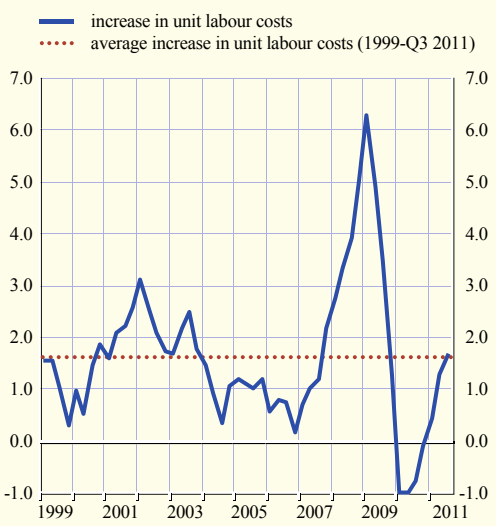
2 The estimation of indirect effects is subject to considerable uncertainties. Eurosystem staff computations put the indirect effect of a 10% increase in oil prices on HICP inflation in the euro area in the range 0.1-0.3 percentage point. There is also some evidence of a reduced impact over time, perhaps stemming from the lower energy intensity of economic activity. See Table 12 in Task Force of the Monetary Policy Committee of the ESCB, "Energy markets and the euro area macroeconomy", *Occasional Paper Series*, No 113, ECB, June 2010, p.76.

3 Around half a percentage point roughly sums up the following impacts: i) less than 0.20 percentage point from indirect taxes (see also note 2 in Chart A); ii) 0.05 percentage point from growth in administered prices in excess of 2.0%; iii) 0.33 percentage point from growth in energy prices in excess of 2.0%; and iv) 0.15 percentage point from indirect effects of oil prices (see footnote 2 above).

These figures have to be compared with an average increase of clearly less than 2% that was accounted for by domestic cost factors. Wages adjusted for productivity, as measured by unit labour costs, increased by 1.6%, on average, between 1999 and the third quarter of 2011, and developments in the mark-up on wages, as measured by profit margins, added another 0.1 percentage point (see Chart B).[4]

Chart B Unit labour costs in the euro area

(year-on-year percentage changes)



Source: Eurostat.
Note: Last observation is that for the third quarter of 2011.

While the above analysis is backward-looking, there are reasons to assume that changes in indirect taxes and oil prices are likely to remain important also when looking forward. In particular, indirect taxes are likely to continue to be a major element in governments' budget policies, both with regard to the fiscal consolidation necessary in many countries and with respect to a general tendency to rebalance the fiscal burden from direct to indirect taxes in order to reduce labour costs and the tax-bias against saving.[5] In addition, in view of the persistently strong growth in emerging markets' demand for commodities, further upward pressure on commodity prices cannot be ruled out looking ahead. Overall, social partners in the euro area will therefore need to continue to take due account of the likely limitations in the scope for domestic income distribution that are associated with indirect tax and terms-of-trade effects.

4 The profit margin indicator is obtained from the difference between the growth rate of the GDP deflator at basic prices and the growth rate of unit labour costs. Note that the concepts of GDP deflator and HICP are not directly comparable. The average annual growth rate of the GDP deflator at factor cost over the period from 1999 to the third quarter of 2011 was 1.8%.

5 See Box 12, entitled "Fiscal devaluation – a tool for economic adjustment", *Monthly Bulletin*, ECB, December 2011. See also Johansson, Å. et al., "Taxation and Economic Growth", *OECD Economic Department Working Papers,* No 620, OECD, 2008, who find that VAT and property taxes are the least harmful taxes for growth, while labour and corporate income taxes are the most damaging.