Box 1

ACTUAL VERSUS PERCEIVED INFLATION DEVELOPMENTS IN THE COUNTRIES THAT JOINED THE EU IN MAY 2004

This box briefly examines actual and perceived inflation developments in nine of the countries that joined the EU in May 2004 (EU9).[1] At the time of EU accession consumers' inflation perceptions increased, albeit to varying extents, in most of these countries. In a few countries inflation perceptions had already started to rise in 2003, after the date for EU accession was set (see Chart A).

With regard to actual inflation, most of these nine countries experienced a hike in inflation related to EU accession resulting mainly from an increase in indirect taxes and administered prices. Food prices also increased noticeably due to the countries' integration into the EU Common Agricultural Policy and the removal of the remaining intra-EU trade barriers for agricultural products, which further stimulated exports and related price arbitrage. The prospect of additional tax-induced price increases following EU accession fuelled higher demand in early 2004, giving further impetus to inflationary pressures. Additionally, inflation was pushed up by high global oil prices in 2004. Price developments after EU entry suggest that accession-related price adjustments faded out broadly after one year in the EU9, although inflation remained high in the Baltic States.

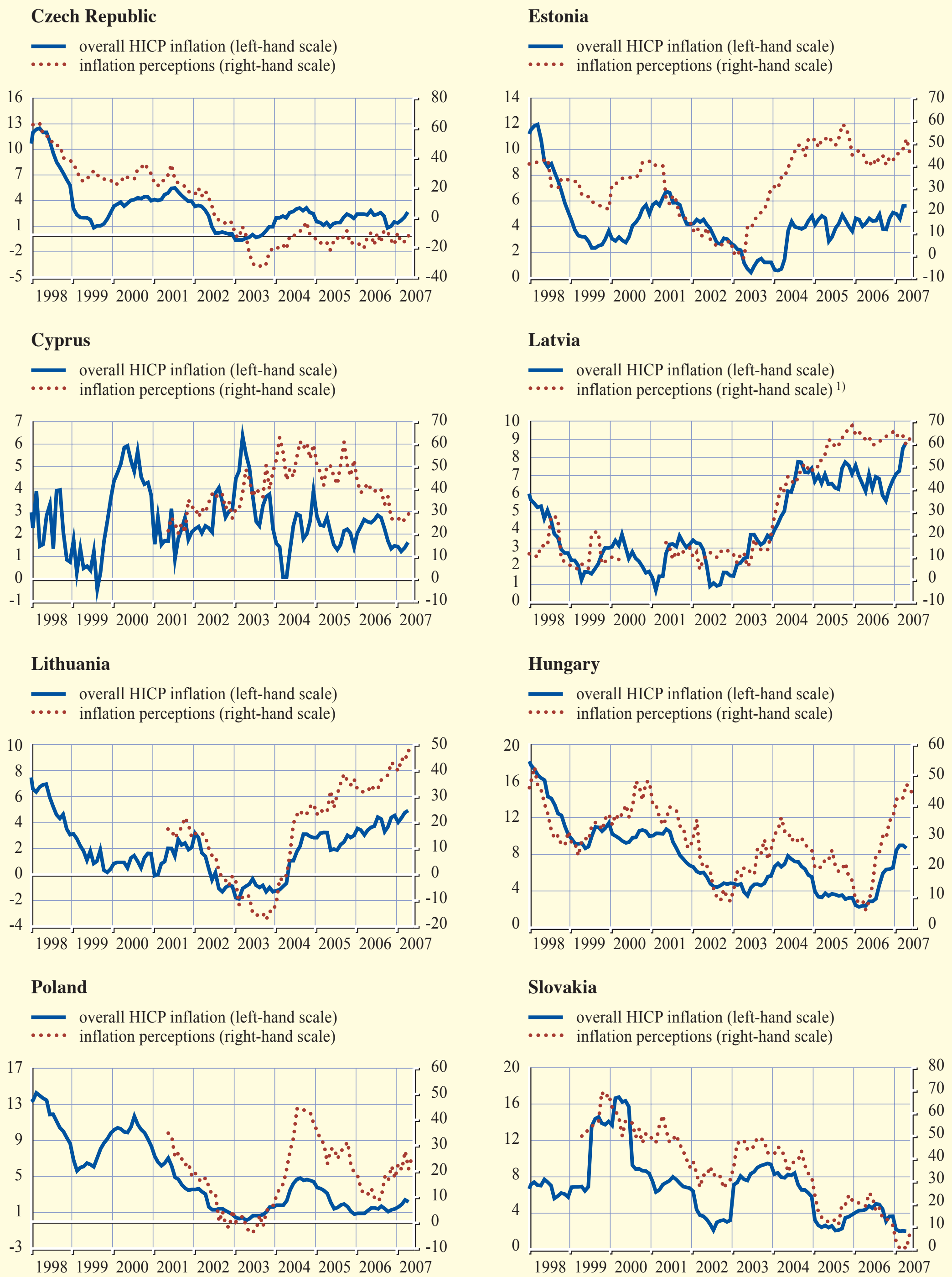
Consumers' inflation perceptions are surveyed every month by the European Commission, which subsequently aggregates the survey results into a "balance statistic". This indicator is calculated as the difference between a weighted average of the percentage of respondents stating that consumer prices have either "risen a lot" or "risen moderately" over the previous 12 months and a weighted average of the percentage of respondents stating that prices have either "fallen" or "stayed about the same" over the same period. The more moderate answers are attributed half the weight of the more extreme answers. Hence, the balance statistic only gives information on the perceptions of the directional change in prices over the previous 12 months. In particular, such a qualitative indicator does not provide any indication of the magnitude of the inflation rate perceived by consumers. Accordingly, this caveat has to be kept in mind when interpreting data presented in Chart A.[2]

As Chart A indicates, prior to EU accession in May 2004 there had been quite similar consumers' inflation perceptions and actual inflation developments in some of the EU9. EU accession was associated with a discrepancy between consumers' inflation perceptions and actual inflation

1 Malta is excluded from the analysis due to a lack of data.
2 For more details on the European Commission's survey and the derivation of the balance statistic, see Box 1 in the article entitled "Measured inflation and inflation perceptions in the euro area" in the May 2007 issue of the Monthly Bulletin.

Chart A Inflation perceptions and the HICP in various countries that joined the EU in May 2004

(annual percentage changes; percentage balances, seasonally adjusted)

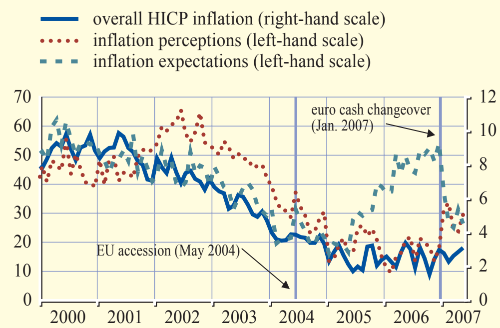


Source: European Commission Consumer Survey.
1) Inflation perceptions data for Latvia are missing for the period from April 2000 to April 2001.

developments in most of these nine countries and in particular in Estonia, Cyprus, Latvia, Lithuania and Poland. In 2006 inflation perceptions reversed or stabilised in Cyprus, Latvia and Poland but divergent developments in the indicator of perceived inflation and actual inflation remained high in Estonia and Lithuania. By contrast, in the Czech Republic, Hungary, Slovenia and Slovakia the link between actual inflation and inflation perceptions remained broadly stable before and after accession. In Hungary, however, inflation perceptions increased considerably in 2006. This may partly reflect recent fiscal consolidation efforts, which included significant increases in indirect taxes and administered prices.

Chart B Actual, perceived and expected inflation in Slovenia

(annual percentage changes; percentage balances, seasonally adjusted)



Source: Eurostat.

A number of arguments can be put forward to explain the divergent developments in the indicator of perceived inflation and actual inflation that occurred after EU accession in most of the EU9. Some frequently purchased items (in particular food), which can be expected to have a disproportionate impact on inflation expectations relative to actual inflation, were affected by price adjustments related to EU accession. At the same time, the rise in energy prices that was caused by factors unrelated to EU accession may have also contributed to the sharp increase in inflation perceptions. Furthermore, owing to the large media coverage of EU enlargement, consumers may have become more sensitive to price movements and changes in their purchasing power. Given that price levels in most EU9 countries are still significantly lower than in the euro area, high expectations concerning the price equalisation effects of EU accession could have also had a reinforcing impact on the discrepancy between consumers' inflation perceptions and actual inflation developments. Furthermore, considering that owner-occupied housing costs are currently excluded from the HICP basket, high house price increases in some EU9 countries may partly explain the discrepancy between consumers' inflation perceptions and actual inflation developments. A number of empirical studies have also highlighted the role of psychological factors in explaining the discrepancy between consumers' inflation perceptions and actual inflation developments. These factors include, above all, the role of a priori expectations.[3]

In this context recent developments in Slovenia, which introduced the euro in January 2007, are of particular interest. Before 2005 there was a close link between consumers' inflation expectations and actual inflation developments in Slovenia. However, in the second half of 2005, the European Commission's survey indicator of consumers' inflation expectations started to deviate increasingly from actual HICP inflation developments. Subsequently, inflation expectations increased consistently until the end of 2006 despite relatively flat inflation rates in the same period (see Chart B). In early 2007, following the cash changeover inflation perceptions rose, whilst inflation expectations declined notably. The euro area witnessed

3 E. Traut-Mattausch, S. Schulz-Hardt, T. Greitemeyer and D. Frey (2004), "Expectancy confirmation in spite of disconfirming evidence: the case of price increases due to the introduction of the euro", European Journal of Social Psychology, Vol. 34, No. 6, pp. 739-60.

similar divergent developments in the indicator of perceived inflation and actual inflation after the adoption of the euro.[4]

Aware of the risk of price increases related to the cash changeover, the Slovenian authorities undertook several measures to minimise the impact of the cash changeover. These included a long and early dual pricing period, an extensive information campaign, the introduction of price monitoring teams and a dual currency circulation period of only two weeks. These measures appear to have been successful in containing cash changeover effects on inflation. It is estimated that the cash changeover added only 0.2-0.3% to the level of the HICP. Against this background, the increase in inflation perceptions in Slovenia at the beginning of 2007 appears to have already reversed somewhat.

4 See the article entitled "Measured inflation and inflation perceptions in the euro area" in the May 2007 issue of the Monthly Bulletin.