Directorate C: National Accounts, Prices and Key Indicators
Unit C-4: Price statistics. Purchasing Power Parities. Housing statistics

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Euro changeover and inflation in Latvia

Latvia joined the euro area on 1 January 2014. It is the 18th EU Member State using the single European currency, the euro.

This note assesses the euro changeover impact on inflation in Latvia, as estimated by Eurostat on the basis of the Harmonised Indices of Consumer Prices (HICP).

Eurostat estimates that the month-on-month rate of change of the Latvian all-items HICP would have likely been between 0.12 and 0.21 percentage points (pp) smaller in January 2014 had the euro changeover not taken place. This estimated effect on the monthly inflation rate for January 2014 appears to be the total (one-off) euro changeover impact during and immediately after the introduction of the euro, as in other months the impacts were statistically not significant.

The Latvian euro changeover impact is in line with what was observed in the first-wave changeover in 2002 and that of Slovenia in 2007, Cyprus and Malta in 2008, Slovakia in 2009 and Estonia in 2011. Therefore, Eurostat considers that the euro changeover effects in Latvia have been noticeable but were not of a magnitude that could drive headline inflation.

Graph 1: Observed all-items HICP versus the expected index for Latvia

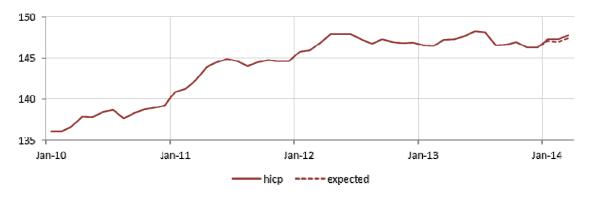


Table 1: Euro changeover impact on inflation

Month	Observed monthly rate, %	Expected monthly rate range*, %	Euro changeover impact*, pp	Significance
Oct-2013	0.21	-	-	-
Nov-2013	-0.44	-	-	-
Dec-2013	-0.01	-	-	-
Jan-2014	0.68	[0.47 , 0.56]	[0.12 , 0.21]	Significant
Feb-2013	-0.01	[-0.12, 0.06]	[-0.13, 0.07]	Non-significant
Mar-2014	0.31	[0.13 , 0.41]	[-0.10, 0.18]	Non-significant

^{*} See overleaf how the expected monthly rate and the impact were calculated.

ESTIMATING THE IMPACT OF THE EURO CHANGEOVER

In practice it is not possible to estimate precisely the inflation level if the euro changeover in Latvia had not taken place, and isolating the effect from the realised inflation is not a straightforward exercise. Several causes for prices changes are interacting and some can overlap with genuine euro changeover effects; some changeover effect factors may amplify each other or cancel each other out. However, it is possible to determine if there is empirical evidence for a price level change that could not be plausibly attributed to any other factor than the euro changeover

Eurostat estimated the euro changeover impact by producing, for each of the month during and immediately after the introduction of the euro, a forecast using HICP past data and other relevant auxiliary information of the Latvian HICP sub-indices.

The forecasting model produced an 'expected price development' for each HICP sub-index as a range, which was compared to the results from the observed indices. If the observed monthly rate of change fell inside the prediction interval, then the price change was considered to have been as expected. Sub-indices whose price changes fell outside the range were listed for further investigation to find out what could have caused higher than predicted price changes.

The list of sub-indices with unusual price changes was presented and analysed in a meeting at the Central Statistical Bureau of Latvia in September 2014. In the meeting Central Statistical Bureau experts and other stakeholders provided information on the identified sub-indices and provided possible reasons for the price changes.

In most cases of the sub-indices on that list, a plausible explanation—other than euro changeover—for the higher than expected price changes could be identified. The remaining sub-indices were attributed to a likely euro changeover impact list. The final list of concerned sub-indices included in particular 'COICOP0533 - repair of household appliances', 'COICOP0622 - dental services', 'COICOP1111 - restaurants, cafés and the like', 'COICOP1211 - hairdressing saloons and personal grooming establishments'.

The total euro changeover impact on the all-items HICP of Latvia was calculated as the difference between the observed rate and the minimum and maximum expected monthly rates, the boundaries of the range (see column 4 of table 1). The expected monthly rate range for the all-items HICP was derived using observed values for all other sub-indices except for those that were identified having a likely euro impact; in the case of the latter the forecast result was used instead.

When the difference between the observed rate and expected rate range did not contain zero the impact is considered statistically significant; as Table 1 shows this is the case only for the month of January.

Eurostat's assessment is that in Latvia the total (one-off) impact of the changeover on consumer price inflation is likely to be between 0.12 and 0.21 percentage points in January 2014. Non-significant differences between the actual and the expected monthly rates were observed in the two following months. These observations are in line with the experience of the first-wave changeover in 2002, of Slovenia in 2007, Cyprus and Malta in 2008, Slovakia in 2009 and Estonia in 2011.