Box 1

Estimates of the nominal and real money gap in the euro area

Measures of excess liquidity (or liquidity shortfalls) refer to positive (or negative) deviations of the actual stock of M3 from an estimate of the equilibrium level of M3. These measures are useful for a medium term-oriented monetary analysis, since they ensure that past excessive or weak monetary growth which is no longer visible in the annual growth rate of M3, but which may still contain information about risks to price stability, is taken into account. A simple measure of excess liquidity is an estimate of a nominal or real money gap reflecting the deviation of the actual stock of M3 from a level in line with the reference value for M3 growth in nominal and real terms respectively, starting from a somewhat arbitrary base period.\(^1\)

The chart below shows the deviation of the actual nominal M3 stock from the level of M3 as implied by the reference value for M3 (4½%), from December 1998 onwards. This measure can be labelled the nominal money gap. Adjusted for non-euro area residents’ holdings of money market fund shares/units, the nominal money gap was relatively stable between the second quarter of 2000 and the first quarter of 2001, and increased slightly in April 2001. When interpreting the nominal money gap, it should be borne in mind, however, that part of the higher level of M3 was used to finance the higher price level which mainly resulted from the oil price increase and the depreciation of the euro after early 1999.

Estimates of the nominal and real money gap

\((\text{as a percentage of the stock of M3})\)

\[ \begin{align*}
\text{nominal (based on M3 adjusted for holdings of money market fund shares/units by non-euro area residents) } & 1) \\
\text{real (based on M3 adjusted for holdings of money market fund shares/units by non-euro area residents) } & 2)
\end{align*} \]

\[ \begin{align*}
\text{1) The nominal money gap is constructed as the deviation of the actual stock of M3 adjusted for holdings of money market fund shares/units by non-euro area residents from the level consistent with monetary growth at the reference value of 4½%, taking December 1998 as the base period.} \\
\text{2) The real money gap equals the nominal money gap less the deviation of consumer prices from the definition of price stability, taking December 1998 as the base period.}
\end{align*} \]

Provided that second-round effects remain small, the past shock to the price level owing to oil price and exchange rate developments should not imply any longer-term upward pressures on future inflation. In such a situation, it might be more appropriate to look at a measure of the real money gap which corresponds to the nominal money gap less the deviation of the Harmonised Index of Consumer Prices (HICP) from the ECB’s definition of price stability embedded in the derivation of the reference value (see the chart above). The

\(^1\) See the article entitled “Framework and tools of monetary analysis” in the May 2001 issue of the Monthly Bulletin.
upward deviation of the HICP from the HICP level implied by the ECB’s definition of price stability had a considerable dampening effect on the real money gap adjusted for the holdings of money market fund shares/units in 2000 and in the first four months of 2001. In April 2001 the real money gap adjusted for the holdings of money market fund shares/units by non-euro area residents was slightly positive when taking December 1998 as the base period. If the preliminary indications of non-residents’ holdings of the other negotiable instruments included in M3 were taken into account, the real money gap would probably be slightly lower. In any case, there are several caveats in using this measure, one of them being the somewhat arbitrary choice of the base period, which requires that the interpretation of the real money gap should concentrate more on the change in the gap rather than on its level.