Box 1

FACTORS EXPLAINING THE ROBUST GROWTH OF M1

An important feature of monetary developments in the euro area over the past few years has been the strong growth of the narrow monetary aggregate M1. Although the annual rate of M1 growth declined slightly in February 2006, it nonetheless remained at a high level of 9.9%. With a contribution of more than 4 percentage points, M1 has been the main contributor to strong annual M3 growth in recent years. The robust expansion of the most liquid part of M3 may be of particular concern in a situation where liquidity is already ample and continuing to increase. This box reviews the growth of M1 from different angles.

Continued robust growth of both currency in circulation and overnight deposits

Insight into M1 dynamics can be gained by looking at the two components of M1, namely currency in circulation and overnight deposits. Despite having a share of only around 15% in the total M1, developments in currency in circulation have accounted for, on average, around one-quarter of annual M1 growth over the past three years (see Chart A). Even after four years, the unwinding of effects related to the cash changeover is still ongoing. The annual growth rate of currency in circulation has gradually declined, but, at 13.6% in February 2006, it is still higher than what could have been expected on the basis of developments in euro area legacy currencies prior to the changeover.

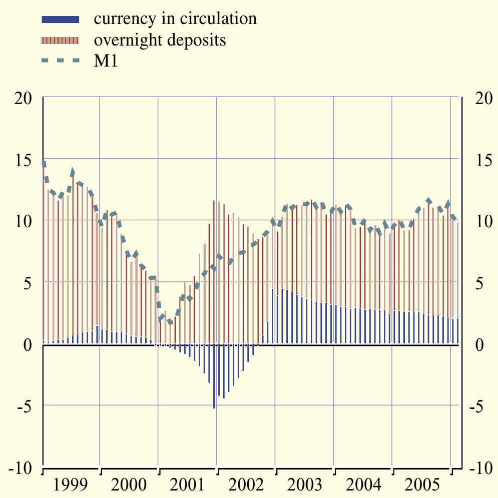
Overnight deposits also show continued strong dynamism, with an annual rate of growth of 9.2% in February 2006. This is consistent with the view that the low level of interest rates in the euro area implies a low opportunity cost of holding assets that are poorly remunerated, on the one hand, but have favourable liquidity features, on the other. Moreover, there is some evidence that the growth of overnight deposits may, in part, have been boosted by financial innovation. This relates, in particular, to the increasing popularity in some countries both of internet accounts and of other high-yielding deposits. These are recorded under overnight deposits on account of their liquidity features but may be used for saving/investment purposes rather than transaction purposes on account of their higher yield.

Households as the main holders of the liquid components contained in M1

The second angle from which M1 developments can be reviewed relates to the holding sectors. As regards currency in circulation, owing to the anonymity of currency, no official statistics are available on the breakdown by domestic holding sector, or on the split between resident and non-resident demand. At the same time, estimates suggest that between 10% and 20% of the euro banknotes in circulation reflect demand from outside the euro area. This could be part of the explanation why the growth of currency in circulation has declined more slowly in recent years than would

Chart A Contributions to annual M1 growth

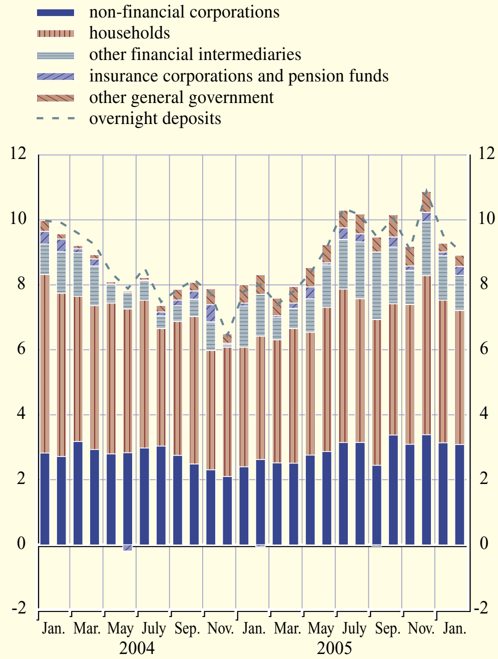
(contributions in percentage points; M1 growth in percentages; adjusted for seasonal and calendar effects)



Source: ECB.

Chart B Contributions to annual growth of overnight deposits

(contributions in percentage points; overnight deposit growth in percentages; not adjusted for seasonal or calendar effects)



Source: ECB.
Notes: Reporting sector comprises MFIs excluding the Eurosystem. Figures may not add up due to rounding.

have been expected on the basis of domestic factors or of effects related to the cash changeover.

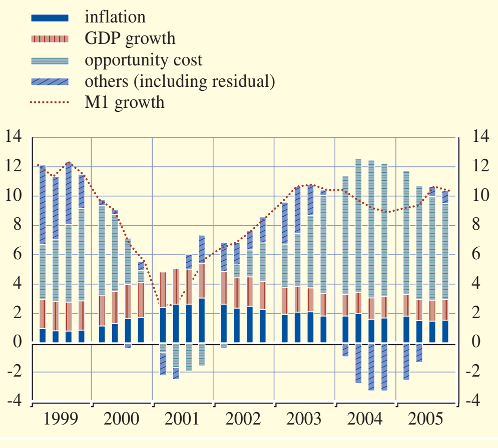
Concerning the origin of demand for overnight deposits, two points are worth emphasis. First, the contribution of other financial intermediaries to the annual growth of overnight deposits has now been more than 1 percentage point for the ninth consecutive month. Given that these sectoral data are only available for the period since 2003, it is difficult at this stage to assess whether this contribution is due to prevailing market conditions – driven, for instance, by the portfolio policies of investment funds – or, partly, to more structural phenomena such as regulatory changes. Second, the contributions of households and non-financial corporations to the growth of overnight deposits have been on a slight upward trend since early 2005, with the former's contribution amounting to more than 4 percentage points and that of the latter to more than 3 percentage points (see Chart B). Overall, the largest contribution to annual M1 growth has thus come from households.

The low level of interest rates as the main driver of recent M1 developments

Finally, M1 developments can also be reviewed in terms of their main economic determinants. In most money demand models, these are prices, real GDP and the opportunity cost of holding money. The latter is usually measured by the difference between the short-term market interest rate and the rate of return on instruments included in M1. Models that allow for so-called non-linearity in the elasticity of money with regard to the opportunity cost, i.e. for a greater effect of a variation in the interest rates in the case of lower interest rates, have recently performed much better than models where the opportunity cost impacts on money in a linear way.[1] Moreover, a non-linear specification is also more likely to pick up any impact on the interest rate elasticity related to financial innovation.

Chart C Contribution of economic determinants to annual M1 growth

(contributions in percentage points; M1 growth in percentages; adjusted for seasonal and calendar effects)



Source: ECB.

As shown in Chart C, in 2005 the contribution of developments in real GDP to annual M1 growth was about 1.5 percentage points, whereas that of the interest rates was about 7 percentage points. The latter contribution has been increasing on account of the dynamic features of the model, which captures the lags in the transmission of changes in the monetary policy stance to monetary macro-developments, throughout 2004. The lower the interest rates, the higher the impact of their variation and the longer the time of adjustment.

1 For a detailed description of the methodology used, see L. Stracca, "The functional form of the demand for euro area M1", Manchester School, Vol. 71(2), 2003, pp. 172-204.