Box I

Measurement issues related to the inclusion of negotiable instruments in euro area M3

The broad monetary aggregate M3 in the euro area includes negotiable instruments, namely money market fund shares/units, money market paper and debt securities with an initial maturity of up to two years. These negotiable instruments are part of euro area M3, since they are characterised by a relatively high degree of liquidity and low price volatility and, hence, represent close substitutes for other components of M3, such as time deposits.

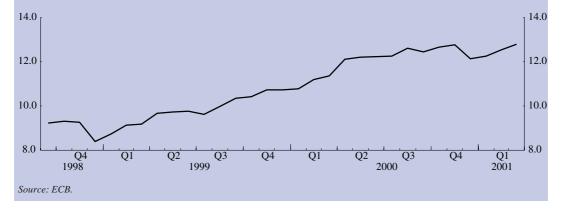
M3 is intended to measure the money holdings of euro area residents, since these holdings are deemed to be particularly relevant for an assessment of the implications of monetary developments for price stability within the euro area. Therefore, from a conceptual point of view, holdings of negotiable instruments by non-euro area residents should be excluded from M3. In practice, however, it is difficult to identify the residency of the holders of short-term negotiable instruments. As such instruments are frequently placed on the market via investment banks, held by end-investors through custody accounts and/or redeemed via international settlement systems, the issuing Monetary Financial Institutions (MFIs) often do not have reliable information about the residency of the actual holders of the instruments they have issued. These instruments are also traded to some extent on secondary markets.

Prior to the start of Stage Three of Economic and Monetary Union (EMU), the amounts outstanding of these negotiable instruments were rather small and were subject to only moderate growth over time. Furthermore, there was little evidence of non-euro area residents holding negotiable instruments issued by euro area MFIs to any significant extent. It was against this background that the decision was taken to include in the definition of M3 all negotiable instruments issued by euro area MFIs (excluding those issues held by euro area MFIs themselves).

Since the start of Stage Three of EMU the expansion of the negotiable instruments included in M3 has become very dynamic. The annual rate of growth of negotiable instruments has risen significantly since the final quarter of 1999, reaching temporarily more than 20%. As a consequence of the high annual rate of growth of negotiable instruments, the share of these instruments in the stock of euro area M3 has risen from below 10% prior to the start of Stage Three of EMU to 12% to 13% at present (see Chart A). There is evidence that this growth has to a significant extent been driven by demand from investors resident outside the euro area.

Chart A: Share of negotiable instruments in M3

 $(as\ a\ percentage\ of\ the\ stock\ of\ M3)$



The increase in the holdings of negotiable instruments of euro area residents as well as of non-euro area residents since late 1999 might reflect both conjunctural and structural factors. The rise in short-term interest rates since autumn 1999 and the flattening of the yield curve in the euro area have generally increased the attractiveness of these short-term assets. Moreover, the correction in global stock markets since the second quarter of 2000 and the temporarily high volatility in these markets led to portfolio shifts into more secure assets such as short-term negotiable paper.

In addition to conjunctural effects, the increase in the demand for short-term negotiable instruments could also reflect some more lasting structural developments, in particular changes caused by a reduction in the worldwide supply of high-quality fixed income securities resulting from the process of budget consolidation in most industrialised countries. Short-term negotiable instruments issued by euro area MFIs could represent an alternative to investment in government bonds, in particular in an environment of a flat yield curve. In this respect, it should also be noted that demand on the part of non-euro area residents for money market paper and debt securities with a maturity of up to two years is very much focused on paper with the highest investment grade and, hence, on that paper which is the closest substitute for government bonds. Finally, the ageing population structure in many industrialised countries and the need for the reform of public pension systems have increasingly led to the emergence of private pension funds in a number of countries, thereby generally fuelling the demand for high-quality paper.

Previous issues of the Monthly Bulletin have pointed to the fact that M3 growth is influenced by non-euro area residents' holdings of negotiable instruments. While these holdings were initially small, there are indications that they have, over recent months, increasingly been leading to an upward distortion of M3 growth.

In assessing the impact on M3 growth, a distinction needs to be made between the non-euro area resident holdings of money market paper and short-term debt securities with an initial maturity of up to two years on the one hand and those of money market fund shares/units on the other. While for the former reliable quantitative estimates are not yet available, sufficiently reliable data are now available for the latter.

As far as the holdings of money market fund shares/units of non-euro area residents are concerned, the impact on the annual rate of growth of M3 was very small until late summer 2000 (see Chart B). Thereafter, this distortion gradually became more sizeable and it currently amounts to around half a percentage point. At the same time, as can be seen from Chart B, the impact resulting from the non-euro area resident holdings of money market fund shares/units has not affected the trend developments in monetary growth since the start of Stage Three of EMU, with the exception of the developments in the most recent past.

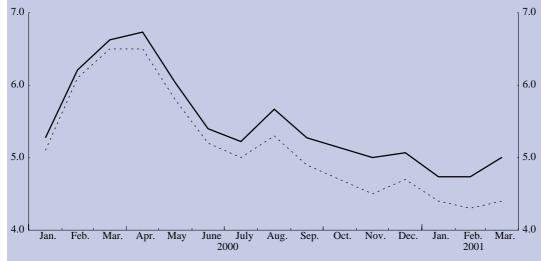
With regard to non-euro area residents' holdings of money market paper and short-term debt securities with an initial maturity of up to two years issued by euro area MFIs, a statistical project is currently under way to provide a more precise evaluation of this phenomenon. Preliminary information in this regard suggests that the impact on the annual growth rate of M3 in March 2001 of non-euro area residents' holdings of money market paper and debt securities with an initial maturity of up to two years might have been similar to that of non-euro area residents' holdings of money market fund shares/units. When these preliminary estimates of non-euro area residents' holdings of money market paper and short-term debt securities are taken into account, the upward effect on the annual growth rate of M3 increases further. While this has an impact on the level of the annual growth rate of M3, the currently available information indicates that trend developments in overall M3 growth since the start of Stage Three of EMU remain broadly unaffected.

Towards the end of this year the ECB intends to publish a revised M3 series, taking into account the total effect on the annual growth rate of M3 caused by non-euro area residents' holdings of all negotiable

Chart B: The influence on M3 growth of the holdings of money market fund shares/units of non-euro area residents

(annual percentage changes)

M3
M3 excluding the holdings of money market fund shares/units of non-euro area residents



Source: ECB.

instruments. In the meantime, the ECB will continue to inform the public about the development of the non-resident holdings and explain how these are taken into account in the regular assessment of monetary developments. In particular, the ECB will provide regular monthly information on the effects of non-euro area residents' holdings of money market fund shares/units on annual M3 growth, starting with the press release on monetary developments for April 2001.

The Eurosystem's money and banking statistics are calculated on the basis of the fully harmonised consolidated balance sheet of the MFIs of the euro area and are, in particular, based on homogeneous definitions for the money-issuing and money-holding sectors and financial instrument categories. Moreover, monetary data for the euro area are available in a timely manner, on a monthly basis. Therefore, the ECB's monetary data are among the highest quality economic statistics available for the euro area. The generally high quality of monetary data for the euro area will be further enhanced with the identification of non-euro area residents' holdings of negotiable paper. The information on M3 thus remains reliable and will continue to be the focus when assessing monetary developments under the first pillar of the ECB's monetary policy strategy.