#### Box 2

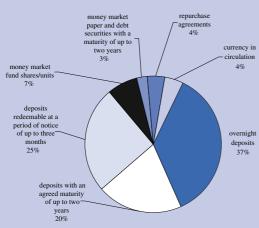
## Developments in the relative shares of the components of M3 between 1980 and 2001

The broad monetary aggregate M3 is composed of:

- a narrow monetary aggregate M1, consisting of currency in circulation and overnight deposits;
- other short-term deposits, namely deposits with an agreed maturity of up to two years and deposits redeemable at a period of notice of up to three months; and
- marketable instruments, which comprise repurchase agreements, money market fund shares/units, money market paper and debt securities with a maturity of up to two years (see Chart A).

## Chart A: Relative shares of the components of M3

 $(in\,percentages,\,end\text{-}of\text{-}year\,figures,\,2001)$ 



Source: ECB.

Note: Figures are based on notional stocks (base month January 2001)

These different components of M3 are relatively close substitutes for each other and share the feature that they can either be used directly for transaction purposes or transformed easily into assets which can be used for such purposes. At the same time, they vary as to their degree of liquidity, their remuneration and their sensitivity to changes in market interest rates. This box monitors changes in the composition of M3 over time.

For the period before September 1997, (partly estimated) figures are only available for currency in circulation, overnight deposits, short-term deposits other than overnight deposits and marketable instruments. The available information nonetheless allows shifts in the relative importance of the different M3 components to be analysed (see Chart B).



Source: ECB.

Note: Figures are based on notional stocks (base month January 2001).

#### Decrease in the share of currency in circulation in M3

The share of currency in circulation in M3 declined continuously between 1980 and 2001. Aside from the large drop in 2001 in the run-up to the euro cash changeover, the downward trend in currency in circulation, from 8.8% at the end of 1980 to 6.9% at the end of 2000, is probably linked to structural factors. A more efficient use of currency in circulation as a means of payment over time and the increasing use of electronic means of payment are likely to have been behind this development.

### Rise in the share of overnight deposits in recent years

Having remained broadly constant at around 30% in the 1980s, the relative share of overnight deposits had declined to around 26% by 1993. This was mainly linked to financial innovations in marketable instruments (see below). Subsequently, the share of overnight deposits in M3 increased constantly, to above 35% at the end of 2001. Up to the summer of 1999, this development seems to have been supported by declining short-term interest rates, which increased the attractiveness of overnight deposits compared with other short-term deposits. In addition, interest-bearing overnight deposits gained importance and probably further strengthened this trend.

#### Decline in the share of short-term deposits other than overnight deposits

The share of short-term deposits other than overnight deposits in M3 exhibits a downward trend throughout the period from 1980 to 2001. However, the main reasons for the decline differ over time. From the mid-1980s to the early 1990s it was driven by financial innovations in marketable instruments. By contrast, the further decline, which was especially pronounced between 1994 and 2000, was linked to generally falling interest rate levels as well as financial innovations in overnight deposits, increasing the relative attractiveness of overnight deposits compared with other short-term deposits.

The breakdown of short-term deposits into deposits with an agreed maturity of up to two years and deposits redeemable at a period of notice of up to three months is available from September 1997 onwards (see Chart C) and indicates substitutions between these two types of deposits. These substitutions appear to be mainly related to different developments in their respective retail rates. The interest rate on deposits redeemable at a period of notice of up to three months adjusts more slowly and to a lesser extent to market rate changes than the interest rate on deposits with an agreed maturity of up to two years. The difference in the pass-through

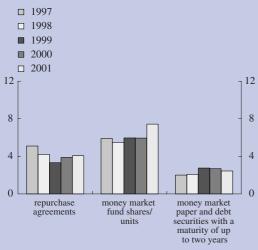
of market interest rate changes may reflect different degrees of competition in the respective markets.

# Broadly stable share of marketable instruments in recent years

Marketable instruments consist of money market fund shares/units, repurchase agreements, and money market paper and debt securities with a maturity of up to two years. Whereas in 1980 the share of marketable instruments in M3 was below 2.5%, by the end of 1993 it had increased to around 14%. The liberalisation of the financial markets in several euro area countries during the second half of the 1980s led to the creation of new financial instruments, such as money market fund shares/units or repurchase agreements. Changes in tax regulations and rising short-term interest rates up to 1992 also fuelled the increase in the share of marketable instruments in M3. Between 1994 and 2001, the share of this component in M3 was relatively stable.

# Chart D: Shares of the components of marketable instruments within M3

 $(in\ percentages,\ end\text{-}of\text{-}year\ figures)$ 

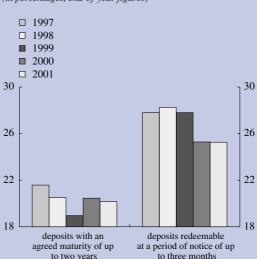


Source: ECB.

Note: Figures are based on notional stocks (base month January 2001).

## Chart C: Shares of specific deposits within M3

(in percentages, end-of-year figures)



Source: ECB.
Note: Figures are based on notional stocks (base month January 2001).

Looking at the components of marketable instruments in recent years (see Chart D), the most visible stylised fact is the increase in the share of money market fund shares/units to 7.5% in December 2001, from 6% in December 2000. This has to be seen in the context of portfolio shifts from longer-term, riskier assets into monetary assets in 2001. Within monetary assets, money market funds are one of the main channels for this substitution process, because they are particularly appropriate for temporarily "parking" funds.

Overall, one might therefore conclude that the major trends observed in the relative shares of the components of M3 in the run-up to Stage Three of EMU, which are the increasing trend of overnight deposits and the declining trend of other short-term deposits, continued in Stage Three. Furthermore, the share of currency in circulation in M3 is now significantly lower than it was at the beginning of the 1980s, while the share of marketable instruments in M3 has increased considerably over the last 20 years.