

Box 1

SOME CONSIDERATIONS REGARDING THE DRIVING FORCES BEHIND NON-FINANCIAL CORPORATIONS' M3 DEPOSIT HOLDINGS

The slowdown observed in annual M3 growth in recent months largely reflects developments in the M3 holdings of non-financial corporations. These only account for around 20% of the stock of M3, but as non-financial corporations are typically more active in managing their liquid resources, they can at times play a central role in shaping the dynamics of broad money. This may be particularly relevant in the context of the financial turmoil and the severe economic downturn, with considerable changes being observed in the interest rate cycle. Against this background, this box looks at the possible driving forces behind recent developments in non-financial corporations' M3 deposit holdings (i.e. short-term deposits and repurchase agreements) from a macroeconomic perspective.¹

Non-financial corporations' M3 deposit holdings from a longer-term perspective

The annual growth rate of non-financial corporations' M3 deposit holdings has been negative since February, standing at -1.6% in May. This reflects the relatively strong overall contraction observed in those corporations' deposit holdings since the fourth quarter of 2008. This reduction in M3 deposit holdings is not unprecedented. Indeed, during the major cyclical downturn in the early 1990s the annual growth rate of non-financial corporations' M3 deposit holdings remained negative in real terms for a protracted period of time (see Chart A). To put recent developments into perspective, it should also be noted that the most recent peak in M3 deposit holdings in early 2007 was the highest ever recorded during the period for which data are available. This may point to deposit holdings overshooting somewhat with regard to measures of the sector's turnover or profitability (as illustrated, for instance,

¹ M3 deposit holdings do not include currency in circulation, money market fund shares/units or debt securities with a maturity of up to two years. These are, however, included in M3 holdings. Non-financial corporations' M3 deposit holdings account for 80% of their M3 holdings. In any case, the two series exhibit very similar patterns in terms of their annual growth rates.

by the ratio of M3 deposits to the gross operating surplus; see Chart A), which may, in turn, have warranted unwinding in the form of the shedding of such assets. A look at non-financial corporations' motives for holding liquid assets may help us to better understand these recent developments.²

The role of economic activity in shaping non-financial corporations' M3 deposit holdings

One set of considerations relates to the need to hold liquid assets for transaction purposes. In particular, firms need to maintain liquidity buffers of a certain size in order to cater for any lack of synchronisation between payments for production inputs and receipts from the sale of goods and services. This implies that the growth of non-financial corporations' M3 deposit holdings strengthens and weakens in line with economic activity, an observation which is supported by the fact that the growth of those M3 deposit holdings exhibits a high degree of co-movement with the growth of gross value added in industry and services on the one hand and a composite confidence indicator for these two sectors on the other (see Chart B). In this respect, the rapid deterioration in actual and expected activity at the end of 2008 is consistent with the adjustment of non-financial corporations' liquidity buffers.

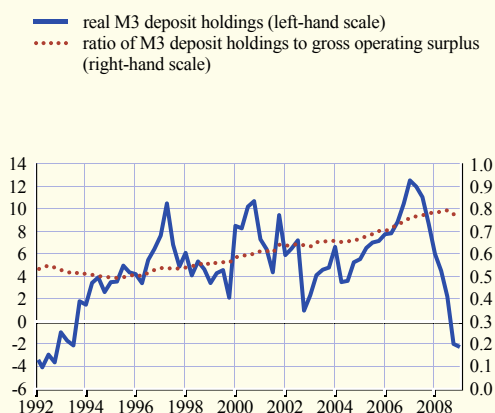
Other factors explaining non-financial corporations' M3 deposit-holding behaviour

A second set of considerations relates to the fact that non-financial corporations are typically active in their management of financial assets and liabilities. To a large extent, their decisions

² For a broader discussion of the determinants of money holdings at the sectoral level from a longer-term perspective, see the article entitled "Sectoral money holding: determinants and recent developments" in the August 2006 issue of the Monthly Bulletin. Moreover, non-financial corporations' broader investment and financing behaviour up to the fourth quarter of 2008 is analysed in the box entitled "Integrated euro area accounts for the fourth quarter of 2008" in the May 2009 issue of the Monthly Bulletin.

Chart A Real M3 deposit holdings and gross operating surplus of non-financial corporations

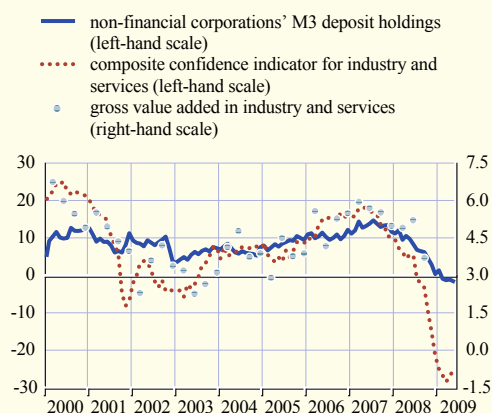
(annual percentage changes; percentages; not adjusted for seasonal or calendar effects)



Sources: ECB, ECB estimates and Eurostat.
 Notes: Real M3 deposit holdings have been deflated using the HICP inflation rate. The gross operating surplus used for the calculation of the ratio is a four-quarter moving sum. As of the first quarter of 1999, the gross operating surplus is based on the integrated euro area accounts. For the preceding period, it is based on ECB estimates.

Chart B Non-financial corporations' M3 deposit holdings and economic activity

(annual percentage changes; percentage balances; not adjusted for seasonal or calendar effects)



Sources: ECB, ECB calculations, Eurostat and European Commission Business and Consumer Surveys.
 Notes: The composite confidence indicator is calculated as a weighted average of the industrial confidence indicator and the services confidence indicator, using as weights the gross value added of the respective sub-sectors. Gross value added in industry and services excludes the category "public administration, education, health and other services", which mainly reflects government activities.

regarding portfolio allocation and reallocation are driven by the opportunity costs of holding highly liquid assets relative to either the returns that could be earned by pursuing alternative financial investment opportunities with potentially higher yields or the savings that could be made by repaying their debt and/or buying back their own shares. At the same time, these opportunity costs are weighed against the costs implied by investment or production opportunities that cannot be pursued owing to a lack of immediately available funds.

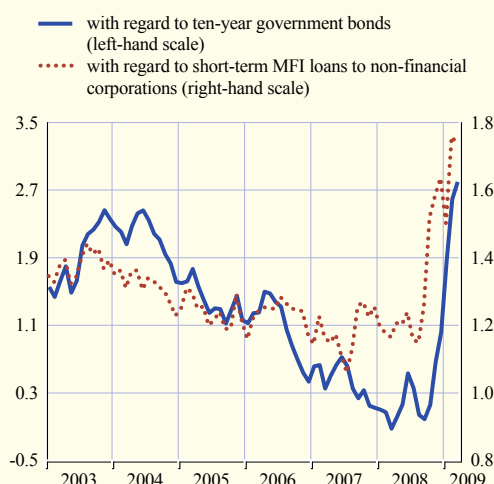
Recent developments in MFI interest rates suggest that opportunity cost considerations have indeed played a role in shaping non-financial corporations' M3 deposit holdings. In particular, the steepening observed in the yield curve since October 2008 has increased the opportunity cost of holding M3 deposits relative to longer-term financial assets, as can be seen in the sharp increase in the spread between interest rates on short-term time deposits and ten-year government bond yields (see Chart C). Moreover, in recent months interest rates on short-term time deposits³ have reacted faster than interest rates on short-term MFI loans to the decline in short-term money market interest rates, thereby increasing the spread between the two. As a result, some non-financial corporations, having previously found it attractive to use some of their borrowed funds in order to acquire monetary assets, which then served as liquidity buffers,⁴ have reacted to the new configuration of interest rates by using these liquidity buffers to reduce their MFI loans. Indeed, this interpretation is compatible with the reduction observed in recent months in MFI lending to non-financial corporations, which has been driven mainly by shorter maturities (i.e. MFI loans with an original maturity of up to one year; see Chart D).

3 This holds for interest rates on deposits with agreed maturities of up to one year and up to two years.

4 This is akin to using a credit line as a buffer against liquidity shocks, for which firms pay a fee.

Chart C Opportunity cost of holding short-term deposits for non-financial corporations

(percentages per annum)

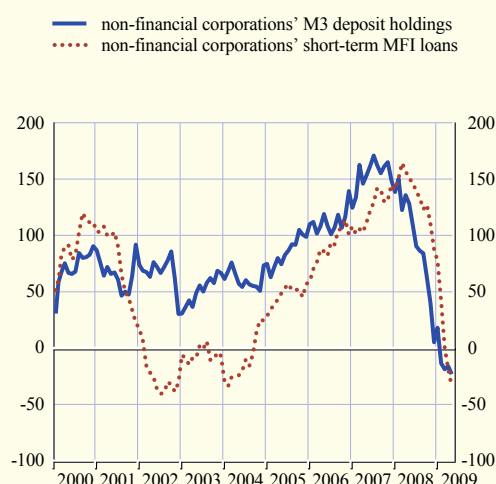


Source: ECB.

Notes: "Short-term MFI loans" refers to MFI loans with a variable rate or a rate fixed for a period of up to one year. "Short-term deposits" refers to deposits with an agreed maturity of up to one year.

Chart D Non-financial corporations' M3 deposits and short-term MFI loans

(annual flows; EUR billions; not adjusted for seasonal or calendar effects)



Source: ECB.

Note: "Short-term MFI loans" refers to MFI loans with an original maturity of up to one year.

While these considerations suggest that the use of liquidity buffers is the result of a voluntary decision, recent developments in non-financial corporations' M3 deposit holdings may, to some extent, reflect a necessary response to the current financing situation. More specifically, funding through the banking system is reported to have become increasingly difficult to obtain, at least for some firms. Likewise, access to the financial markets has become restricted for some firms. In addition, the reduction in firms' earnings is limiting the amount of internal funding available to them. In such an environment, some firms may have needed to use their liquidity buffers in order to accommodate their funding requirements, thereby reducing non-financial corporations' M3 deposit holdings.

On balance, all of these considerations are probably relevant as regards recent developments in the M3 deposit holdings of the non-financial corporation sector, although there are likely to be differences across individual industries and firms. Overall, non-financial corporations' reduction of both short-term deposits and loans is part of the more general downsizing of their balance sheets and is in line with the impact of the sharp cyclical downturn.