## Box 9

## RECENT ISSUES IN THE EURO AREA MONEY MARKET: CAUSES, CONSEQUENCES AND PROPOSED MITIGATING MEASURES

In early August 2007 two interrelated factors seemed to simultaneously cause an evaporation of liquidity in the euro area money market. First, those banks which knew that they were exposed to US sub-prime related assets - either directly or indirectly via contingent liquidity lines – started to build up precautionary balances in anticipation of likely future liquidity needs. Second, liquidity providing banks in the interbank market became wary of lending funds to other banks as a result of uncertainty about counterparty asset quality. The result of this hoarding of liquidity was that interbank money market rates at long-term maturities increased sharply and remained elevated until the cut-off date of this FSR. The ECB and other major central banks met the increased liquidity needs in a series of operations, some of which were also extended to longer term maturities. While the operations were successful in bringing down and stabilising overnight interest rates close to the key policy rates, banks' willingness to lend funds in the interbank market remained affected by the disturbances. Against this background, the need to find a solution to the root cause of banks' unwillingness to extend credit in the interbank market has been accelerated by the risk that the volatility in the term money market could have implications on banks' ability to fund themselves which, in a negative scenario, could in turn hamper the intermediation of credit to the non-financial sectors of the economy. This box discusses the sources of the problems in the interbank money markets and presents some private sector initiatives to mitigate market tension.

Beyond the motives to hoard liquidity for the purposes of pre-cautionary saving, the unwillingness of banks to lend funds in the interbank money market reflects the negative implications of adverse selection incentives. In a situation where financial institutions are not able to distinguish between potential counterparties that are exposed to assets for which investors' risk aversion has increased and those for which it has not, lenders in the unsecured interbank market have an incentive to hoard funds and raise the liquidity premiums in their lending rates. Central banks as the ultimate liquidity providers to the financial system may mitigate banks' funding liquidity problems by conducting operations that make additional liquidity available to everyone in the financial system. However, if the liquidity injections are carried out at rates that are lower than prevailing market rates – these being elevated due to liquidity hoarding incentives – in theory interbank trading activity may shrink further with the risk that the system will become increasingly reliant on the funds provided by the central bank.

While central bank operations can contribute to ensure that banks' very short-term liquidity needs are met, to rid itself from the adverse selection problems the market needs to develop mechanisms that allow investors to distinguish between different types of counterparty and to apply fair margins in transactions. At the time when this Review went to print, at least three alternative but interrelated proposals had been put forward and partially implemented by banks and market participants which, from different angles, try to address the sources of the problems created by asymmetric information and adverse selection.

<sup>1</sup> In the secured market, banks can obtain funds as long as they are able to post sufficient collateral.

(i) Transparency about exposures: The textbook solution to adverse selection problems is for those institutions which do not hold bad assets to be transparent, i.e. to signal their superior credit quality to the market by revealing their exposures.<sup>2</sup> This allows the market to move from a "pooling" equilibrium, where all institutions are treated as if they held bad assets and are penalised by high interest rates, towards a "separating" equilibrium, where institutions with good assets are able to borrow on more reasonable terms and conditions. Economic theory suggests that for signalling to be beneficial for high credit quality institutions, signalling costs must be negatively correlated with the borrowing institution's credit quality (which is unknown to the liquidity providing institutions). This means that for the institutions holding low quality assets, revealing their exposures should involve a higher cost, for example in the form of reputational risk, which has to be balanced against the benefit from lower future borrowing rates. If the perceived cost exceeds the benefit, an institution is less likely to signal its type.

Such signalling incentives have been manifested in the form of voluntary disclosure by a number of financial institutions of their holdings of US sub-prime mortgage related assets. However, the complexity of the products which are at the core of the current confidence problems – reflected by the heterogeneity of the underlying asset pools and pricing models – has made it difficult for counterparties and market participants to obtain the necessary information about counterparty exposures on a comparable basis. In such circumstances the signals become "noisy", which implies that lenders cannot be sure that the disclosing institutions are truly the high quality types with lowest signalling costs. As a result, the complexity and diversity of assets and the lack of a harmonised reporting framework appears to have prevented market-driven transparency from achieving its full potential to bring the necessary clarity to the market. To work effectively, it might be necessary for market participants to agree upon a common yardstick in the form of generally accepted valuation standard against which various assets can be valued, something that looks rather challenging to achieve in the near term.

(ii) Re-intermediation: A feature that linked the problems in asset-backed securities markets to banks was the holdings of such assets by off-balance sheet vehicles to which the sponsoring banks had committed to provide contingent liquidity and credit lines. One way for banks to deal with the problematic off-balance sheet exposures is for them to absorb the assets held by the vehicles onto their own balance sheets and either hold them to maturity or sell them at some stage. While the credit commitments of some banks to off-balance sheet vehicles have turned out to be quite large relative to their capital, stress tests using even rather extreme scenarios suggest that overall, euro area LCBGs are sufficiently well capitalised to manage rather substantial increases in their risk-weighted assets (see Box 11). However, the impact on banks' earnings is likely to be more profound and it could increase the risk of a slowdown in new loan origination. This, in turn, would tighten the financing conditions for households and non-financial corporations and could, to the extent that banks are not managing their risks appropriately, contribute to a deterioration in the credit quality of banks. In addition, banks with good quality assets or no access to alternative short-term funding sources outside the interbank market would suffer unduly from protracted market uncertainty and reduced access to retail funding sources until the re-intermediation process is completed. For these reasons, even if some extent of re-intermediation seems a necessary way out of the banks' non-performing

<sup>2</sup> Normally this is often done by obtaining independent ratings for assets which reflect their credit quality. However, an important feature of the recent turmoil has been the loss of confidence in ratings of many types of securitised credits and asset backed securities.

exposures, the implications of it to intermediation of credit both in interbank markets and to non-bank borrowers needs to be closely monitored.

(iii) Independent asset management vehicle: The process of re-intermediation could either lead to a situation where the assets of banks' off-balance sheet vehicles have to be sold at low prices relative to their book values or the assets have to be taken onto the sponsoring banks' balance sheets, thus implying capital charges for the banks concerned. As an alternative solution, in late September 2007 a consortium of large US banks proposed the creation of a special financial vehicle – the Master-Liquidity Enhancement Conduit (M-LEC) – which would purchase the best-quality assets from bank-sponsored off-balance sheet vehicles and hold these assets over a period of one year given the expectation that market conditions would have sufficiently recovered by then to allow the assets to be traded.

The M-LEC initiative resembles a private-sector driven "market maker of last resort" solution. In past episodes where an overhang of bad debt has plagued the financial system such solutions took the form of independent asset management companies (AMCs, often called "junk banks") which had taken up to expedite restructuring and disposition of distressed assets in situations where markets either had ceased to function or were unable to assign a fair value to the assets. AMCs have been successfully used for resolving unsound financial institutions and selling their assets for example in the US, Spain and the Nordic countries. To provide sufficient accountability, the proposed vehicle would be capitalised by issuing capital notes to various stakeholders of the original off-balance sheet vehicles, mostly the sponsoring banks, and the proceeds from the liquidation of the assets at the expiry of the initiative would also be distributed among these stakeholders.

The following issues would have to be considered when balancing the pros and cons of such an initiative: (i) how acute are the current and expected liquidity needs of bank-sponsored off-balance sheet vehicles; (ii) what would be the implications of large-scale sales of assets by off-balance sheet vehicles for financial markets and banks' funding prospects; (iii) how could it be ensured that the assets to be transferred to the M-LEC would be fairly valued (i.e. appropriate discounts are taken) so as to minimise the risk of moral hazard; and (iv) what is the likelihood that market conditions will have improved sufficiently at the time when the M-LEC is supposed to expire. If the answers to points (i) and (ii) are such that they can be seen as constituting potential systemic risks, and the answers to points (iii) and (iv) do not raise particular concerns from this point of view, then an initiative such as the proposed M-LEC vehicle could potentially be seen as useful also from the broader financial stability perspective.