Box 5

POTENTIAL IMPLICATIONS OF RECENT CREDIT MARKET STRESS ON THE EURO AREA CREDIT CYCLE

The global re-pricing of risk in the credit market which commenced in July and August 2007 was more severe and longer-lasting than the episodes of market turbulence in May 2005 and in February-March 2006. Some market observers have suggested that the episode, which involved substantial de-leveraging by investors in securitized credit markets and which resulted in sizeable income and investment losses for banks, could – if it results in tighter credit availability – have increased the risk of a downturn in the global credit cycle. This box describes some of the important channels through which de-leveraging by the financial sector can interact with the underlying phase of the credit cycle.[1]

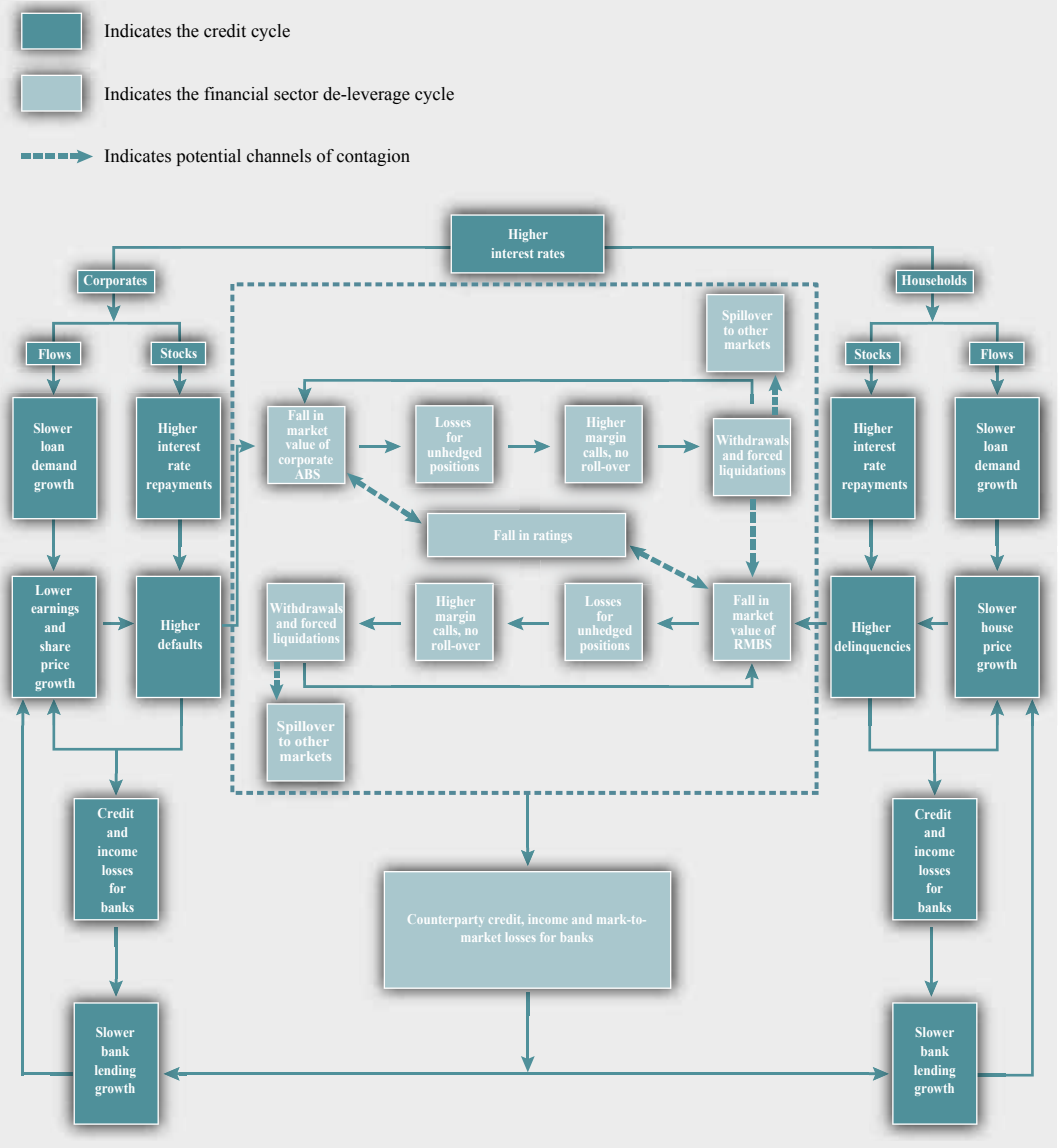
From late September 2007 until the cut-off date for this Review, signs started to emerge that the risk re-assessment in the global credit markets was adversely affecting economic confidence indicators both in the US and in the euro area. In addition, the October 2007 ECB Bank Lending Survey revealed that banks had substantially tightened their credit standards for new loans, particularly to large enterprises, from the previous quarter. Nevertheless, against the background of several years of strong profitability and comfortable capital ratios relative to regulatory requirements, the potential losses from the credit market turbulence were not seen as being sufficiently significant to materially impact on the soundness of core euro area financial institutions. This alleviated concerns that the intermediation of credit in the euro area financial system would be hampered to such an extent that it would have a bearing on the performance of the real economy. In a negative scenario, however, a protracted disruption in the money and credit markets could lead to a more persistent hoarding of liquidity by banks and further tightening of availability of credit, which could expose vulnerabilities among those firms and households which are highly indebted or particularly dependent on short-term external financing. Although the average debt-to-income ratios among euro area households and non-financial corporations – one measure of their vulnerability to tighter financing conditions – are relatively low when compared to other mature economies, pockets of vulnerability do exist at the lower ends of the household income and corporate credit quality spectrums, posing risks which could crystallise in the event of a credit crunch.

To protect themselves against the financial consequences of "normal" credit cycle fluctuations, banks ordinarily include a premium in their lending rates and make impairment charges. However, in an environment where bank loans are widely used as collateral for asset-backed securities, a sudden increase in corporate default rates and household delinquencies could have implications for the financial performance of banks not only via credit, but also through market and income risks. In view of this, an important issue for the euro area financial stability outlook is the way in which the re-pricing of credit risk feeds into the development of the euro area credit cycle, which is already at quite a mature stage in those Member States in particular where credit growth is showing signs of deceleration and/or default rates are picking up.

The figure provides a stylised illustration of the development of the credit cycle in a phase where monetary policy is being tightened. It is important to stress that the figure abstracts from many additional channels of monetary transmission, providing only an incomplete picture focusing on

1 Many of the features described in this box also relate to a more general issue regarding the links between market risk and credit risk, which is currently a topic of active research in the financial and academic communities.

Figure Channels of interaction between credit and financial sector de-leveraging cycles



Source: ECB.

the links between credit and financial sector de-leveraging cycles. The dark squares in the left and the right sides of the flow chart depict the transmission by banks of higher interest rates to borrowers in the non-financial corporate and household sectors. Higher financing costs have an impact on new lending (flow) by reducing the demand for new loans, which slows down the rate of growth in house prices and corporate sector earnings. It also affects the credit quality of banks' outstanding stock of loans by adding to borrowers' interest payments or re-financing costs, thus increasing the probability of defaults of banks' loan portfolios.[2] The combined impact is an increase

2 For an empirical investigation of banks' credit risk exposures and lending behaviour during the business cycle, see Special Feature article B "The impact of the level of short-term interest rates on bank credit risk taking".

in the expected credit and income losses of banks, which in turn tends to contribute to a tightening of bank lending standards and a reduced supply of new credit. Several possible feedback channels can be identified in this process, of which the most important ones are included in the figure.

The figure also shows - in the light squares in the middle - the potential impact of higher interest rates and expectations of higher default probabilities on the market for asset-backed securities (ABSs), which include securitised household and corporate loans in their collateral pools. The term "de-leveraging cycle" refers to the process whereby investors reduce their exposures to financial assets which have been acquired by borrowed funds or to assets which themselves contain leverage, such as many ABSs. As expectations of increased default probabilities are formed, they contribute to a widening of credit spreads and a lowering of the market value of securitised credit products, such as corporate ABSs and residential mortgage backed securities (RMBSs). To the extent that the positions of investors in these assets are incompletely hedged, they may face margin calls (higher collateral requirements) and, possibly, forced liquidations. If such sales prove challenging to execute or raise insufficient liquidity, sales may also extend to unrelated liquid assets, such as other ABS products and stock markets.[3] The increase in expected losses on securitised credits may also prompt downgrades of various ABS tranches for which rating agencies provide ratings. If these negative rating actions are large, or even involve revisions of the rating methodologies, a more general loss of confidence in ratings could constitute an additional channel for contagion from the sector that was downgraded to other parts of the securitised credit market that remain fundamentally sound. This process too has several possible feedback channels that can accelerate the price adjustment movement of the financial assets. Its impact on banks is likely to materialise in direct mark-to-market losses on the institutions' own investment exposures and counterparty credit losses on their financing exposures.

The scale of income erosion or outright losses for banks that may result from the financial sector de-leveraging process depends on multiple factors, including the initial degree of leverage in the system, the extent of spill-over to other markets, and whether the process of adjustment takes place in an orderly fashion. Should the losses be high relative to banks' value-at-risk and expected loss estimates, they might need to scale back their risk exposures across the board, which could further reduce the availability of credit in the financial system. The process is likely to continue until asset and collateral prices have adjusted to a new equilibrium level where investor confidence is restored. An important issue in the current context is how swiftly the financial market de-leveraging process will result in a new equilibrium, and to what extent the various feedback channels will be invoked before this happens. A protracted period of uncertainty is likely to contribute to a more substantial tightening of credit in the financial system, thus increasing the probability of real economic implications of the financial market turmoil.

It can be argued that the financial sector de-leveraging process and the counterparty credit risk involved in it forms a connection between market risk and credit risk. This has important implications for the expected losses in a financial system where securitisation and loan re-packaging is widespread, and could present substantial new challenges for the risk management practices of financial institutions. The Basel Committee is currently working on methodologies that would improve the understanding among banks and investors of the various links between credit risk and market risk and how these could be better taken into account in stress tests, expected loss calculations and in setting capital reserves.

3 This form of contagion to other asset markets was witnessed in the early stages of the recent market turbulence in July and August 2007.