

Box 9

DEVELOPMENTS IN THE EUROPEAN CREDIT DERIVATIVES MARKETS

European credit derivatives markets have, like their US counterparts, experienced rapid growth in the past few years. If history is a guide, such rapid growth is often accompanied by an increased potential for instability should conditions take a turn for the worse. This Box discusses the financial stability implications of recent events in these markets.

In May 2005 the credit ratings of GM and Ford, both global car makers and major issuers of corporate debt, were downgraded by all three major credit rating agencies: Standard and Poor's and Fitch lowered their ratings to speculative grade, while Moody's cut its ratings to the lowest investment grade before also classifying them as non-investment grade in August 2005. GM's ratings were downgraded still further following the filing for bankruptcy of its major parts supplier and former subsidiary Delphi Corp. in October 2005. At the time of the first downgrades, GM and Ford had global debt outstanding of USD 453.1 billion. According to Lehman Brothers, one of the leading providers of bond indices, outstanding bonds from GM and Ford eligible for European high yield index inclusion totalled €12.5 billion and €8.2 billion respectively, representing 27.7% of the new high-yield European market.

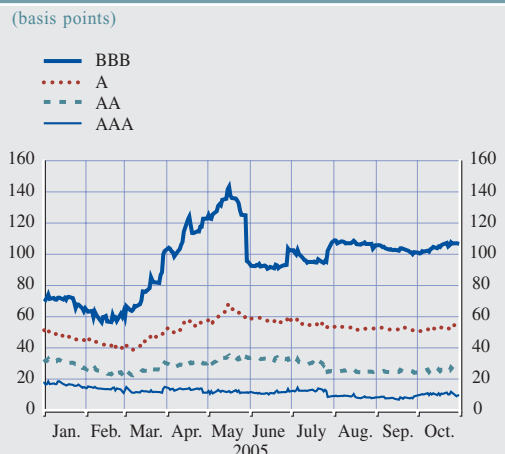
The May 2005 downgrades led to a very sharp, although only temporary, widening of yield spreads in the credit markets. The sharp spread widening in the cash market was reversed relatively quickly, and by June 2005, spreads had already retraced part of their widening and had come back to their April levels, narrowing still further during July and August 2005. Both issuers actually returned to the market in July, issuing new debt at yield levels not much higher than before the downgrades. The smooth performance of the cash markets can be attributed to

Chart B9.1 iTraxx five-year CDS spreads



Source: Bloomberg.

Chart B9.2 Corporate bond spreads in the euro area



Source: Thomson Financial Datastream.
 Note: Spread between seven to ten-year yield to maturity and euro area seven to ten-year government bond yield.

several factors, namely: the anticipation of the downgrades, reflected in the spread widening of the two issuers and the markets in general since at least mid-March¹ (see Charts B9.1 and B9.2); a more flexible management of portfolios by fixed income managers, using more customised benchmarks and increased tracking error possibility adopted after the disorderly market action of WorldCom's downgrade in 2002; and the continuing strength of credit fundamentals and corporate earnings, with European high-yield default rates remaining very low for several years. The effects of the October 2005 GM downgrade, triggered by the Delphi Corp. filing for bankruptcy, on its corporate debt prices may turn out to be longer-lasting, and the outcome will depend on additional factors (e.g. negotiations with trade unions and future developments in car sales).

The rapid development of credit derivatives is another reason for the relatively smooth behaviour of the corporate bond markets. Cash bond investors can effectively unwind their exposures to individual bond issuers or to entire sectors through the use of credit derivatives. This gives investors the possibility to withstand the immediate impact of possible downgrades and would make it less urgent to liquidate the affected issuers' bond holdings. On the other hand, investors involved in trading-oriented strategies typically prefer to stay away from the cash bond market as the credit derivatives markets offer them greater flexibility and liquidity. The resilience of the cash bond markets to adverse market events has thus been strengthened relative to the situation before the emergence of the credit derivatives markets.

While it seems that credit derivatives markets have to some extent sheltered the cash market from a rise in volatility after the credit event, some segments of the credit derivatives markets have themselves experienced significant market upheaval. The launch in June 2004 of a new

¹ Further evidence of the market's anticipation can be found in the increased use of the two issuers' credit default swap (CDS) contract terminations, which could be observed even before the downgrades were announced, and continued at a strong pace afterwards. By cancelling "redundant" contracts on dealers' books without significantly changing the market risk profile of their positions, the terminations reduce not only their exposure to the issuers but also legal and operational risks. For a more detailed description of the derivatives contract terminations, see ECB (2005), *Financial Stability Review*, June, Box 17.

single family of credit default swap (CDS) indices² – iTraxx in Europe and Asia and CDX in North America – has facilitated the development of a liquid secondary market for standardised index tranches that allows investors to express a view on spread direction and default correlation. In their search for high returns, trading-oriented and leveraged investors concentrated on buying the high yielding iTraxx equity tranche (i.e. selling credit protection by betting on a low level of defaults). Assuming that credit spreads on different tranches will continue to move in parallel, as they had done until spring 2005, many investors delta-hedged against spread widening by selling the more senior and lower yielding (the so-called mezzanine) tranches (which are less exposed to default risk, but more exposed to spread risk). Such a hedge is in principle neutral to the parallel move in credit market spreads that occurs when default correlations in the underlying asset portfolio remain broadly constant. However, the GM and Ford downgrades have increased the *idiosyncratic* risk of some names and industries within the underlying portfolio. This led to a dispersion and widening of spreads within the equity tranche, causing prices to fall. As a result, some investors were forced to unwind their exposures due to mark-to-market losses, and the price of the equity tranche fell further. On the other hand, the spreads of the mezzanine tranches narrowed, and prices rose; investors thus lost money on both legs of the position.

It was notable that the market for synthetic CDOs – which consists of large pools of CDSs – remained largely unaffected, as these instruments are mainly held to maturity by investors who usually do not follow short-term trading strategies. The low concentration of single names in the underlying portfolios – which is the result of the lessons from previous events such as Parmalat, where exposures reached up to 6% in a number of CDOs – meant that the vast majority of the CDO tranches that included the two carmakers remained unaffected by the rating changes. With higher portfolio diversification, the CDO market is now more able to cope with idiosyncratic shocks. As a consequence, CDO primary market volumes remained strong, indicating sustained interest by investors, as the overall fundamental situation has not changed. This effect was even more pronounced after the downgrades in October 2005, as rating agencies reported that Delphi was referenced in more than a third of synthetic CDOs, and GM in even more. Nevertheless, the immediate impact on the ratings of CDOs was rather mild, due both to diversification effects and gradual adjustments of the tranches' ratings over time (Delphi's ratings, for example, had fallen from investment grade at the end of 2004 to default by October 2005).

From a financial stability point of view, the main lesson to be drawn from the incident is that recent structural innovations in credit risk transfer markets have extended linkages between CDOs, corporate bonds and credit derivatives markets, and have thereby altered pricing dynamics. On one hand, the evolution of credit derivatives has allowed a smoother handling of price adjustments in the underlying cash market and has helped to diminish the market impact of mechanical bond index changes. The iTraxx credit indices have also proven their value as a hedging instrument during stressed market conditions. High levels of activity and contracting bid-offer spreads even under market stress have shown that CDS indices are now traded in Europe with a sustained level of liquidity. On the other hand, the tensions in the index tranche

² For a more detailed description of tradable CDS indices, see ECB (2005), *Financial Stability Review*, June, Box D.2. These indices have also made pricing more transparent, since CDS indices provide a market estimation of default correlation. As a consequence, trading-oriented investors, mainly hedge funds, which had previously concentrated on single-name CDS and avoided portfolio credit derivatives because of their unsatisfactory liquidity and price transparency, have rapidly entered the standardised market for CDS indices and index tranches.

market showed quite clearly that while the increased participation of hedge funds in all major segments of the credit markets adds liquidity, it also raises the potential that a liquidity squeeze and price dislocation could spread across multiple, interconnected credit markets. Since hedge funds' investments in credit markets tend to be highly leveraged, their potential impact on markets can be much greater than the notional size of these investments.