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CONTAGION IN THE CREDIT DEFAULT SWAP MARKET: THE CASE OF THE GM AND FORD CRISIS IN 2005

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NON-TECHNICAL SUMMARY

We analyse the impact of the crisis experienced by General Motors (GM) and Ford in May 2005 on the credit default swap (CDS) market. Both firms' CDS premia increased sharply just before the downgrading of their credit ratings in May 2005. All other CDS premia also rose markedly during this period for US and European firms. Did the GM and Ford crisis spread to the rest of the market?

To answer this question, we construct a sample of 226 five-year maturity CDSs on major US and European firms. These companies are included into the main CDS indices of these two geographical areas. By construction, this sample contains the most liquid and representative CDS of the market on the most traded maturity.

As contagion is often characterized by increasing correlations, we study the evolution in the correlations between CDS premia around this period, by calculating them through different measures. The estimated correlations significantly increased during the crisis, especially in the first week, which suggests contagion phenomena. Both the US and the European markets were affected. Their similar response points to the strong international integration of the credit markets.

We also test whether the link between the CDS and the other markets was affected by the crisis. Theoretically, as a CDS is aimed at protecting investors against a borrower's default, its premium should be roughly equal to the borrower's bond spread, for a given maturity. In practice, the CDS premium is never equal to the bond spread, but is very close to it. Usually, the CDS market is considered to lead the bond market, in the sense that price innovations go from the CDS market to the bond price. We verify this link on our sample. We also show that this relationship between the two markets is somewhat mitigated by the crisis. At that time, CDS spreads tended to increase more than bond spreads, as investors bid up the price of protection. This could point to the speculative nature of the market.

Usually, a rise in a CDS premium is linked to the firm's financial difficulties and should therefore go with a decline in its stock price. Our results confirm this co-movement at the firm-level. They also show that the stock market has a lead over the CDS market, which is a still controversial issue in the economic literature. Here again, the usual relationship weakened during the crisis. Especially, GM and Ford stock prices did not fall continuously during the crisis, as expected, although their volatility surged.

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