Transmigiration across price discovery categories: Evidence from the U.S. CDS and equity markets

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Abstract

For 174 U.S. firms between Jan 2005 and Dec 2009, we extract implied credit default spreads (ICDS) from daily stock prices using an improvised calibration of the RiskMetrics CreditGrade Model. Both ICDS and credit default swap spreads (CDS) reflect the price of credit risk. We confirm cointegration between ICDS and CDS for 173 firms. Using Gonzalo-Granger (1995) and Hasbrouck (1995) measures, we sort firms into one of five categories of credit risk price discovery contribution. We find the ICDS and CDS each perform the bulk of price discovery for a similar number of firms. However, a quarterly-rolling update of price discovery measures show the CDS market dominating price discovery for an increasing number of firms. Between 01-Jan-2005 and 30-Jun-2007, CDS dominates price discovery for 52 firms. But between 01-Jan-2006 and 30-Jun 2008, with the onset of the GFC, the number increases to 150 firms. As we move away from the height of the GFC, the number of firms is reduced into other categories, but remains high relative to the pre-GFC period. Our documented transmigiration patterns can only come from analyzing a large cross-sectional sample of spot-derivative markets. Our finding is consistent with the Hong and Sraer (2011) argument that the lead-up to the GFC is described by cheap credit, low volatility and low turnover volume. Before mid-2007, CDS spreads are especially low and tranquil. We ascertain economic significance with portfolio strategies that draws trading signals from the CDS market. The profit/loss results show that the portfolio strategy conditional on identifying and updating the list of firms, for which CDS dominates price discovery, is the most profitable against all other unconditional and conditional benchmarks.

JEL classification: G14, G15.

Keywords: Price discovery, CDS, Credit risk, Trading strategy.

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