How financial shocks can spread through supply chains

Financial or operating changes, such as missed debt payments, job cuts, and weak earnings, can trigger an increase in companies’ credit risk, which immediately affects the companies’ suppliers and customers, according to a team of researchers including Chicago Booth’s John R. Birge.

The researchers examined how such news leads to changes in the credit default swap (CDS) spreads of related companies in a supply chain. They find that when a company experiences an extreme jump in its CDS spread, those of its top-tier suppliers and customers increase in the same day by 59 and 71 basis points, respectively.

For example, when Ford Motor Company reported massive losses, looming layoffs, and drastic spending cuts in its November 2008 earnings report, Ford’s CDS spreads quickly widened, as did spreads for American Axle & Manufacturing, a major Ford supplier, but the changes did not affect Advanced Micro Devices, an unrelated company.