Leverage Network and Market Contagion

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Abstract

Using unique account-level data that track hundreds of thousands of margin investors' leverage ratios, trading activity, and portfolio holdings at a daily frequency, we examine the effect of margin trading on stock prices during the recent market turmoil in China. We show that idiosyncratic shocks to individual stocks can be amplified and transmitted to other securities with which they share common ownership by levered investors; consistent with margin-induced trading being a possible driver, this transmission effect is particularly strong in market downturns. Further, using a network-based approach, we show that stocks that have more as well as stronger connections to other stocks through common margin ownership have lower returns and higher crash risk going forward. At the aggregate level, the cross-sectional asymmetry in the leverage network negatively forecasts future market returns.

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