

Leverage-Induced Fire Sales and Stock Market Crashes

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Abstract

This paper provides direct evidence of leverage-induced fire sales leading to a major stock market crash. Our analysis uses proprietary account-level trading data for brokerage- and shadow-financed margin accounts during the Chinese stock market crash in the summer of 2015. We find that margin investors heavily sell their holdings when their account-level leverage edges toward their maximum leverage limits, controlling for stock-date and account fixed effects. Stocks that are disproportionately held by investors who are close to receiving margin calls experience high selling pressure and significant abnormal price declines that subsequently reverse over the next 40 trading days. Relative to regulated brokerage accounts, unregulated and highly-leveraged shadow-financed margin accounts contributed more to the market crash, despite the fact that these shadow accounts held a much smaller fraction of market assets.