Tail Risk and Asset Prices*

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Abstract
We propose a new measure of time-varying tail risk that is directly estimable from the cross section of returns. We exploit firm-level price crashes every month to identify common fluctuations in tail risk among individual stocks. Our tail measure is significantly correlated with tail risk measures extracted from S&P 500 index options and negatively predicts real economic activity. We show that tail risk has strong predictive power for aggregate market returns: A one standard deviation increase in tail risk forecasts an increase in excess market returns of 4.5% over the following year. Cross-sectionally, stocks with high loadings on past tail risk earn an annual three-factor alpha 5.4% higher than stocks with low tail risk loadings. We explore potential mechanisms giving rise to these asset pricing facts.

Keywords: Tail risk, time-varying risk, conditional expected returns, cross section of returns

JEL codes: G11, G12, G13, G17

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