Abstract

We study the structure and pricing of idiosyncratic jumps, i.e., jumps in asset prices that occur outside market-wide jump events. Using options on individual stocks and the market index that are close to expiration as well as local estimates of market betas from returns on the underlying assets, we estimate nonparametrically the asymmetry in the risk-neutral expected idiosyncratic variation, i.e., the difference in variation due to negative and positive returns, which asymptotically is solely attributed to jumps. We derive a feasible Central Limit Theorem that allows to quantify precision in the estimation, with the limiting distribution being mixed Gaussian. We find strong empirical evidence for aggregate asymmetry in idiosyncratic risk which shows that such risk clusters cross-sectionally. Our results reveal the existence and non-trivial pricing of aggregate downside tail risk in stocks during market-neutral systematic events as well as a negative skew in the cross-sectional return distribution during such episodes.