

ncertainty is certain when predicting financial markets. How investors feel about that uncertainty can determine how companies perform on the stock market, especially for technology firms making their initial public offerings (IPOs).

Assistant Professor of Finance David Dicks has an academic interest in uncertainty. He enjoys getting out a pencil and a legal pad to do the math by hand for the financial models related to that uncertainty. His latest research examined times of increased innovation in technology sectors and how those waves can impact the uncertainty that investors feel about buying in.

"When you're thinking about new innovation, of course, that is something that's uncertain in the sense that we don't really know the probability of success," Dicks said.

The research, "Uncertainty, Investor Sentiment, and Innovation," published in *The Review of Financial Studies*, found that investors are less likely to be held back by their uncertainty about an asset if they can invest in multiple assets that have a similar level of uncertainty. For example, when they can invest in multiple technology IPOs, simply put, it helps to diversify the investors'

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portfolios. More diversity typically means less financial risk; that is true for traditional investments in a 401k but also for far more specialized investors who follow IPOs closely.

Market observers may have noticed that there are periods when new technologies seem to trend, and

investments in those innovations are "hot." At those times, it can be unclear what drives innovation and readiness to join the public equity market. However, Dicks' model found an explanation for the positive investor sentiment surrounding an IPO boom. When investors can mitigate risk by investing in multiple things, the uncertainty about individual assets is less of an issue.

"What we show in this paper is that behavior can be explained by a simple hedging motive," Dicks said. "So, the reason that you're more enthusiastic about innovation is because you're hedged; you're willing to invest more in this because you know that there's a lot of other innovation coming."

hat influx of innovation can be represented by a grouping of IPOs in a close time frame. When investors have options, it allows them to mitigate their risk, which decreases the uncertainty involved in investing. If technologies can jump on that "wave" as more companies go public, the timing can be very advantageous.

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As Dicks considers future research, he could look at those decisions about when a company decides to go public. He said it would be interesting to move the focus to entrepreneurs and the impact of their uncertainty on innovation. With additional complexities added to the model, the uncertainty and risk aversion of entrepreneurs could be introduced into the analysis.

One Thing is Certain

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