Looking on the bright side of financial derivatives

Financial derivatives got a bad name after the crisis. But research by David Wehrheim finds a silver lining: options trading is actually positively linked to firm innovation over the longer term. Here's why.

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Do financial markets induce short-termism in managers of publicly traded companies? Not when the financial instruments stimulate informed trades, says research published in the *Journal of Financial Economics.*

The surprising finding by Iván Blanco and **David Wehrheim** is that there's a direct link between options trading and how well companies allocate resources to innovation. In other words, the more options traders are following a publicly traded company, the more effectively managers innovate — measured in the number and quality of patents created. They call their paper "The Bright Side of Financial Derivatives."

The benefits of trader scrutiny

Why would options trading be linked to managers' positive push for innovation? After all, many have accused CEOs of sacrificing long-term pursuits to meet the market's quarterly profit expectations (perhaps to feel more secure about holding on to their jobs). But it appears that managers learn from market prices and that prices are more informative when options markets are more active, so that companies are attracting more savvy scrutiny.

You see, options traders tend to be highly leveraged, and with these high stakes, it behooves them to understand firm fundamentals before they go long — or short — in equity options. As Wehrheim explains:

"Options are interesting because they provide superior incentives to traders to collect information on firm fundamentals. The traders have an incentive to seek out the annual report, to read the annual report, and, together with many other sources of information, to try to understand how value is created. So, if profitability is low today, maybe it's because the company has invested in some innovation projects and we will see the results in a couple of years."

With greater options trading activity, CEOs seem to feel freer "to pursue a more creative, diverse and risky innovation strategy," as the paper explains. These CEOs also seem to understand that if they cut R&D spending to hit a short-term target, informed traders will see through their myopic move.

Specifically, their research suggests that an increase of 200 percent in the dollar volume of options traded is associated with a 31 percent increase in innovation (measured in cite-weighted patents). They note that this result is both economically and statistically significant.

So, think twice before derivatives-bashing. Warren Buffett may have called certain financial derivatives "weapons of mass destruction," but options trading appears to act more like a shield against dangerously short-term thinking.

Methodology, very briefly

The co-authors analyzed 548 U.S. publicly traded firms in five R&D-intensive industries where patents are a meaningful indicator of innovation at the firm level. They examined options trading, governance, R&D spending, patent data and more for these companies in more than 3,000 instances from 1996 to 2004.

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