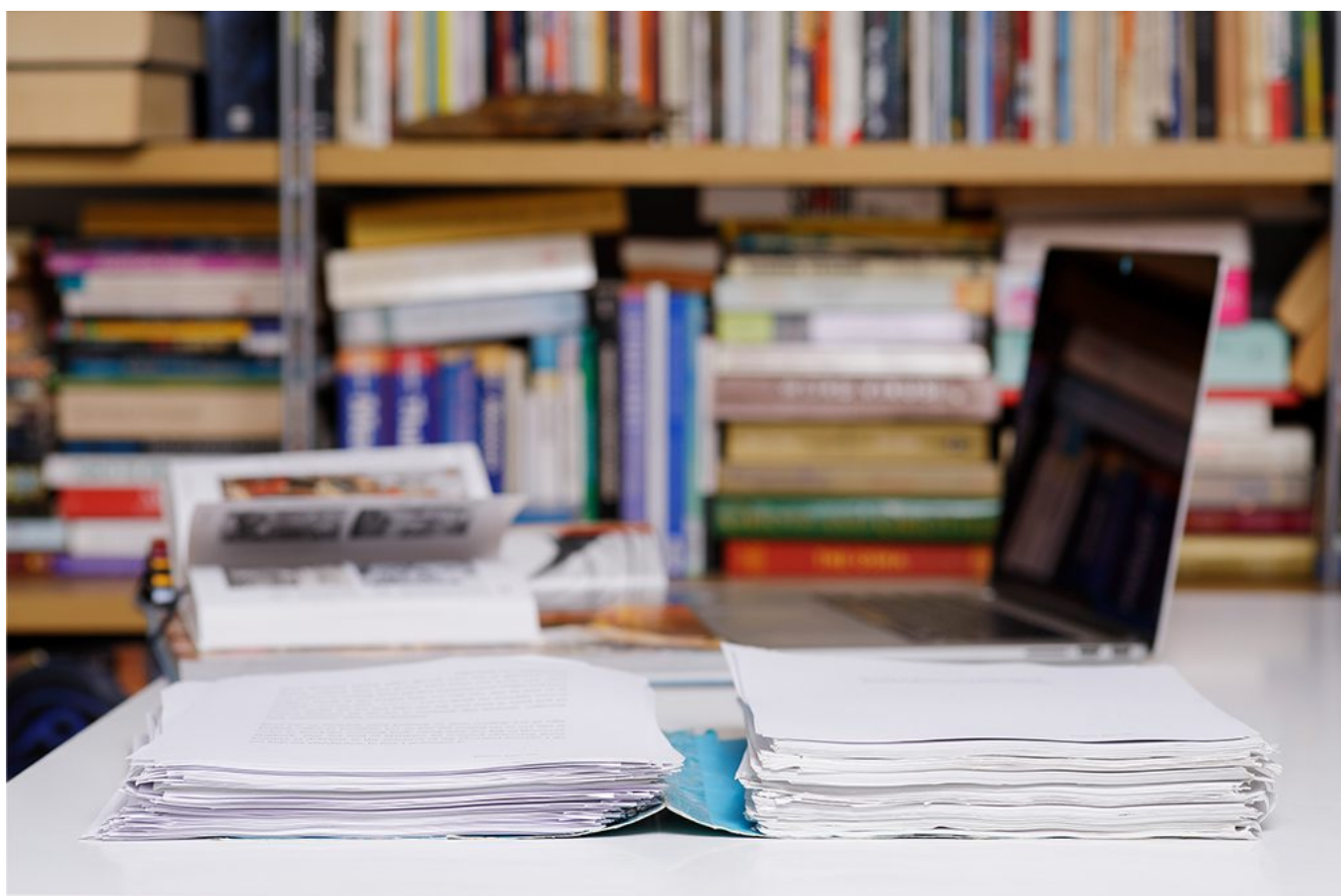


Why firms pursue scientific publications, and when they avoid them



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Peer-reviewed publications can be a road to attracting new investors — and competitors.

Many R&D-focused firms are doing groundbreaking research and developing new

technologies. In highly competitive industries, it can be important to get the news out there, in order to attract investors and other professionals to the firm.

Firms try to bridge information asymmetries in various ways. Press releases can broadcast news of developments, but they are, by nature, promotional and difficult to verify without technical know-how. Earnings-per-share forecasts in financial disclosures are another way that works for some industries, but in research-heavy sectors — like biotechnology, where earnings performance is negative until products are launched — they often don't paint a true picture.

One way that firms have aimed to spread the word of their activities is through publishing research in scientific journals. IESE's [David Wehrheim](#) has published [a recent paper](#) on the subject in *Management Science* with co-authors Stefano Baruffaldi and Markus Simeth. They examined the reasons why firms seek such publications, the benefits and limitations of this approach, and why some big firms — like Google — have called a halt to the practice.

Why publish?

Large companies such as Alphabet (Google), IBM and Merck are included in the prestigious *Nature Index*, which lists the most academically productive institutions.

Why would this be? Disclosure of information about what a company is working on can help attract scientists to the firm and build its reputation within the academic community. It can help commercialize the technology and stimulate share price. Crucially, it can also attract investors.

"Since scientific publication is peer-reviewed, you end up with essentially an audited document; it's certified," Wehrheim says. "It allows investors to assess where the firm is heading and the relevance of its research activities, even when the investors themselves may not be experts in the field."

The authors looked into whether scientific publications had capital market consequences by examining the behavior of firms that suffered a sudden information asymmetry with investors. Broker house mergers and closure events can cause a swift and unexpected decline by reducing sell-side analyst coverage.

They found that firms responded to such events by increasing disclosure through scientific publications, while other methods that might prove slower or less accurate (like earnings-guidance forecast provisions or filing for patents) did not experience a significant increase. The research likewise showed that scientific publications resulted in more searches for the company ticker on Google, increased news coverage, more company searches via Bloomberg and more downloads from financial databases.

This shows that scientific publications are a credible signal as to the state and progress of research at such companies. So why are all firms not rushing to take advantage of such disclosure methods?

Why a firm might decide not to publish

Publishing results provides information not only to potential investors, but to potential competitors.

Firms doing research into new areas risk giving away their intellectual property to others, who might use it to develop future products.

This risk is far from abstract. In May 2023, Jeff Dean, head of artificial intelligence at Google, announced that the company would [no longer be sharing its findings](#) with the world. Dean told staff that OpenAI had kept abreast of Google's developments by reading journals and had leveraged some of Google's discoveries in the creation of ChatGPT. From now on, Google would prioritize keeping information in-house until its products were already on the market.

Weighing up the benefits versus the drawbacks of disclosure requires a trade-off, Wehrheim says, and getting the balance right will be specific to each company.

On the one hand, making information available is important from an economic perspective, because economic growth is driven by cumulative knowledge production — basically, others need to develop things for me to develop them further.

On the other hand, “managers walk a very thin line between their need to fulfill obligations to their investors and keep financing costs under control, and an awareness of the greater implications.”

About the research

The authors used a quasi-experimental design to examine changes in a firm's information environment caused by broker house mergers and closure events between 2000 and 2010, and the effects of subsequent scientific publications.

<https://www.iese.edu/insight/wp-content/uploads/sites/3/2023/11/The-pros-and-cons-to-publishing-company-research-in-scientific-journals.mp4>



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