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RESEARCH ARTICLE:

The Impact of Pharmaceutical M&A on Innovation

Mergers and acquisitions (M&A) play a unique and fundamental role in the development of new treatments and cures across the pharmaceutical ecosystem. A recent research article by competition and economics experts from Cornerstone Research, "The impact of pharmaceutical M&A on innovation: Insights from the literature," explores this in depth.[1]

Through a first-of-its-kind review of academic literature, the authors—Lorenzo Cattivelli, Anca Cojoc, Penka Kovacheva and Maria Salgado—discuss the many ways that pharmaceutical M&A contributes to innovation. The authors also point out that limited evidence exists to support misguided claims that M&A harms pharmaceutical innovation.

The key benefits of pharmaceutical M&A identified by the authors are detailed below:

Overall:

- "[P]harmaceutical mergers can create economies of scale and scope, enhance asset complementarity, increase entrants' incentives to innovate, improve funding access, and optimize resource allocation across research projects, all bolstering innovation."

Achieving economies of scale and scope:

- "By generating economies of scope and knowledge spillovers, mergers can have a positive impact on innovation, as shown by Jullien and Lefouili (2018).[2] Similarly, Cockburn and Henderson (2001) find that economies of scope lead to superior research and development performance in the pharmaceutical industry."[3]

Combining complementary assets:

- "In innovative industries like the pharmaceutical industry, mergers often involve large firms acquiring technologies from smaller, more innovative companies.[4] Studies argue that such technology transfers can spur innovation when firms have complementary assets."

Attracting investment and funding innovation:

- "While large firms find it optimal to buy other firms to gain access to successful innovation, small firms have greater incentives to invest in R&D when facing an active takeover market, as they benefit from the acquisition... The change in allocation of resources generated by the prospect of an acquisition can align private and social incentives to invest in projects with the highest social return, increasing aggregate investments and consumer welfare."
- "Financial frictions are particularly relevant in the pharmaceutical industry, where it can take 10 to 15 years and over USD 2.5 billion to develop a drug and obtain regulatory approval to market it."[5]
- "In the presence of costly external finance, as is the case in the pharmaceutical industry,[6] smaller firms with variable and uncertain cash flows tend to reduce investments in innovation. Mergers provide cash flows and cheaper internal funds to target firms, driving innovation by small risk-averse firms..."

Incentivizing R&D and scientific risk-taking:

- "Pharmaceutical mergers can also affect innovation by changing the resource allocation among projects. For example, mergers can incentivize firms to pursue the optimal R&D mix, as shown by Maksimovic and Phillips (2001), among others."[7]
- "Mergers enable parties to internalize the impact of their investments on each other's probability of success, boosting investments in socially desirable projects."[8]

The authors also examine the limitations of existing empirical studies on pharmaceutical M&A. In one example, they note that "all the empirical studies that quantify the impact of pharmaceutical mergers on innovation do not analyze how the impact on innovation affects consumer welfare.... For example, Cunningham et al. (2021) do not offer any evidence that the 'killer' acquisitions they claim to identify are ones that resulted in the 'killing' of new, viable therapeutics."[9]

The article's key findings underscore the need for a balanced approach to merger enforcement by the Federal Trade Commission and Department of Justice. M&A plays a unique and differentiated role in the world-class U.S. life sciences ecosystem, and policymakers must recognize this reality and preserve M&A as a fundamental path for companies of all sizes to bring new innovations to patients.

[1] Kovacheva, et al. The impact of pharmaceutical M&A on innovation: Insights from the literature and gaps remaining. Concurrences Law & Economics. No. 3-2024. https://www.cornerstone.com/wp-content/uploads/2024/07/04.concurrences_3-2024_law_economics_pharmaceutical_m_a-2.pdf

[2] B. Jullien and Y. Lefouili, Horizontal Mergers and Innovation, CEPR Discussion Paper No. 12773, 2018 ("Jullien and Lefouili (2018)"). Specifically, Jullien and Lefouili show that mergers can have a positive impact on innovation when there are significant knowledge spillovers and when merging firms can benefit from asset complementarities and coordination of research activities. Furthermore, to the extent a merger leads to economies of scope and scale that allow the merged firm to conduct R&D more efficiently and less costly, this may enable the merged firm to charge lower drug prices. See, e.g., B. Mermelstein, V. Nocke, M. A. Satterthwaite and M. D. Whinston, Internal versus External Growth in Industries with Scale Economies: A Computational Model of Optimal Merger Policy, Journal of Political Economy, Vol. 128, No. 1, 2020, pp. 301–341. Indeed, the majority of new drugs never manage to generate enough sales to cover the average R&D costs. J. DiMasi and H. Grabowski, R&D Costs and Returns to New Drug Development: A Review of the Evidence, in The Oxford Handbook of the Economics of the Biopharmaceutical Industry, P. M. Danzon and S. Nicholson (eds.), Oxford University Press, 2012, pp. 22–46.

[3] I. M. Cockburn and R. M. Henderson, Scale and Scope in Drug Development: Unpacking the Advantages of Size in Pharmaceutical Research, Journal of Health Economics, Vol. 20, No. 6, 2001, pp. 1033–1057.

[4] J. Asker and V. Nocke, Collusion, Mergers, and Related Antitrust Issues, in Handbook of Industrial Organization, Vol. 5, K. Ho, A. Hortaçsu and A. Lizzeri (eds.), Elsevier, Amsterdam, 2021, pp. 177–279.

[5] PhRMA, Biopharmaceuticals in Perspective, 2020 ("PhRMA Chart Pack"), at 27; Lakdawalla (2018), supra note 5, at 411.

[6] Nicholson (2012), supra note 5.

[7] Maksimovic and Phillips (2001), supra note 5.

[8] The authors find that this result is robust to multiple extensions of the model, one of which allows for market power.

[9] For instance, one of the anecdotal examples that the authors offer for a "killer acquisition" is Questcor's supposed failure to develop Synacthen. A closer look into the development history of Synacthen, however, suggests that the drug would not have been successfully developed even if Questcor never acquired it. Specifically, after the acquisition, Questcor sublicensed Synacthen to another company. That company, West Therapeutic Development, in partnership with Assertio Therapeutics, also failed to obtain regulatory approval for the drug in the U.S., and subsequently abandoned development efforts. The failure of the new licensee and its development partner to develop Synacthen for commercialization in the U.S. market cannot be explained with the same "killer acquisition" motive that Cunningham et al. (2021), supra note 34, attribute to Questcor. See FTC press release, FTC Approves Sublicense for Synacthen Depot Submitted by Mallinckrodt ARD Inc, 14 July 2017, https://www.ftc.gov/news-events/news/press-releases/2017/07/ftc-approves-sublicense-synacthen-depot-submitted-mallinckrodt-ard-inc; Assertio Therapeutics, Inc. press release, Assertio Therapeutics Announces Submission of NDA for FDA Approval of Cosyntropin Depot, 20 December 2018, https://www.globenewswire.com/news-release/2018/12/20/1670383/0/en/Assertio-Therapeutics-Announces-Submission-of-NDA-for-FDA-Approval-of-Cosyntropin-Depot.html; Assertio Therapeutics, Inc. press release, Assertio Therapeutics Provides Regulatory Update on Long-Acting Cosyntropin, 21 October 2019, https://www.globenewswire.com/news-release/2019/10/21/1932625/0/en/Assertio-Therapeutics-Provides-Regulatory-Update-on-Long-Acting-Cosyntropin.html; Assertio Therapeutics, Inc. press Release, Assertio Therapeutics Announces Sale of NUCYNTA® Franchise to Collegium Pharmaceutical for $375.0 Million, 6 February 2020, https://www.globenewswire.com/news-release/2020/02/06/1981407/0/en/Assertio-Therapeutics-Announces-Sale-of-NUCYNTA-Franchise-to-Collegium-Pharmaceutical-for-375-0-Million.html.

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