



AMERICAN ANTITRUST INSTITUTE

MERGERS & COOPTIVE ACQUISITIONS

ALEXANDROS KAZIMIROV

APRIL 3, 2025

AAI Working Paper No. 25-01.

AAI Working Papers are works in progress that may be revised and published elsewhere.

The views expressed are the author's and do not purport to reflect the views of the American Antitrust Institute.

ACKNOWLEDGEMENTS

The author would like to thank Randy Stutz for his unwavering support from inception to completion of this project; Kathleen Bradish and David Fisher for their thoughtful comments and constructive feedback.

TABLE OF CONTENTS

ABSTRACT	2
INTRODUCTION	3
I. COMPETITION & INNOVATION.....	4
A. Scouting, Staking & Sapping.....	4
B. Intent & Outcome	7
II. QUASI-MERGERS.....	8
A. Google & Character AI	9
B. Microsoft & Inflection AI	11
C. Amazon & Adept AI	13
III. EFFECTS.....	15
A. Defining Markets.....	15
B. Revealing Intent.....	17
1. Exclusive & Non-Exclusive Licenses.....	18
2. Price Premium	18
3. Product Discontinuation	19
4. Synergistic Offset.....	19
C. Causation & Harm	20
IV. REMEDIES	22
CONCLUSION	25

MERGERS & COOPTIVE ACQUISITIONS

By Alexandros Kazimirov^{*†}

ABSTRACT

A new wave of emerging companies developing foundation models has unleashed fierce competition in generative artificial intelligence. These emergents have significant innovation capabilities threatening incumbent tech companies. To protect themselves, incumbents have responded by partnering with leading product developers and subsuming smaller startups through quasi-mergers.

To determine whether quasi-mergers are cooptive acquisitions, this paper scrutinizes the Google-Character, Microsoft-Inflection and Amazon-Adept transactions. These case studies describe the deployment of acquired assets before and after the merger, and explore their potential effects. However, the analysis is plagued by the uncertainty inherent in nascent competition. Consequently, through contextual comparisons of circumstantial evidence like exclusive licensing agreements, price premiums, market product proximity and product discontinuation, the paper assesses the relative risk of harm to innovation.

Even if there is high probability of harm, the structure of a quasi-merger shields incumbents from government intervention because enforcement agencies cannot use injunctive relief to restrict employee mobility. To avoid agency inertia, the paper proposes potential remedies involving founders, their employees and enforcement agencies, without limiting the exit options of startups.

^{*} Research Fellow, American Antitrust Institute (AAI). AAI is an independent, nonprofit organization devoted to promoting competition that protects consumers, businesses, and society. See <http://www.antitrustinstitute.org>.

[†] The views expressed are solely the author's and do not purport to reflect the views of AAI.

INTRODUCTION

In high technology, innovation between incumbents and emergents is an asymmetrical process. While an incumbent's main purpose is to maintain dominance, its desire to protect existing power induces risk aversion, making innovation incremental. In contrast, a startup is founded on the inherently risky premise of exploiting an incumbent's weakness by releasing a destructive force of ingenuity.¹ This system of incentives and risk asymmetry has defined competition in Silicon Valley.²

Although an incumbent may not know its particular weakness, it is aware of its vulnerability to the disruptive force aiming to displace it. To protect itself, the incumbent uses various techniques such as scouting, staking and occasionally, sapping. Cooption can take different forms and may be pursued for different reasons.³ It can enhance an incumbent's capability in the short-term or preempt an emergent's ascent in the long-term. Ultimately however, acquisitions of nascent competitors to prevent them from becoming a tangible threat curb the creative potential of startups and slow the pace of innovation.

Artificial intelligence startups bear substantial disruptive potential which makes them significant threats to existing tech incumbents. This new wave of emergent companies relies on a multi-layered technology stack which includes engineering talent, cloud computing, semiconductor chips and datasets.⁴ Each layer of this value chain can be accessed by an incumbent to distort the process of development. In turn, by distorting the process of development, the incumbent can determine which emergents become competitors and which do not.⁵

To assess whether such distortion exists, Part I of this paper begins by describing patterns of cooption. It expands the legal literature on the quasi-merger, a novel transactional device which combines elements of an acquihire and a conventional merger. The paper then proceeds with the main question: whether quasi-mergers are synergistic

¹ See Joseph A. Schumpeter, *Capitalism, Socialism and Democracy*, Harper & Brothers, 3rd ed (1942). For an approach which views competition as a discovery process of well-informed decisions, see Friedrich August von Hayek, *The Meaning of Competition*, Econ Journal Watch 13 (2016).

² See James Hardy, *History of Silicon Valley*, History Cooperative (Oct. 9, 2020), <https://historycooperative.org/history-of-silicon-valley>.

³ See Mark Lemley and Matthew Wansley, *Coopting Disruption*, Cardozo Legal Studies Research Paper No. 2024-24, Stanford Law and Economics Olin Working Paper No. 589 (Feb. 1, 2024); C. S. Hemphill and Tim Wu, *Nascent Competitors*, 168 U. Pa. L. Rev. 1879 (2020); Mark Lemley and Andrew McCreary, *Exit Strategy*, 101 Boston Univ. Law Rev. 1 (Jan. 2021).

⁴ Charles Ide, *What Goes Into AI? Exploring the GenAI Technology Stack*, Towards Data Science (Oct. 11, 2024), <https://towardsdatascience.com/what-goes-into-ai-exploring-the-genai-technology-stack-7147d147997b>. For a detailed analysis of consolidation in the cloud market see Diana L. Moss, *The Cloud Technology Market: Storm of Innovation or Rainy Days for Competition?*, American Antitrust Institute (Jun. 21, 2023).

⁵ See Mark J. Niefer and Aaron D. Hoag, *Artificial Intelligence, Uncertainty, and Merger Review*, Artificial Intelligence and Competition Policy (eds. A. Abbott, T. Schrepel), Concurrences (Draft of Sep. 3, 2024), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4977123.

or cooptive acquisitions. To answer the question, Part II scrutinizes three cases of startups which were subsumed by incumbents: Google's transaction with CharacterAI, Microsoft's transaction with InflectionAI, and Amazon's transaction with AdeptAI. Part III examines the effects of these agreements and provides contextual comparisons of evidence to assess the relative risk to competition. Finally, Part IV puts forth proposals to protect the disruptive potential of nascent competitors without compromising their exit options.

I. COMPETITION & INNOVATION

This part explores the antagonistic relationship between incumbents and emergents and how it shapes the process of competition and innovation. It illustrates the duelling motivations of a startup: striving to displace the incumbent or complete a successful exit. Incumbents leverage the prospect of an exit in several ways.

A. Scouting, Staking & Sapping

Scouting is the process by which an incumbent seeks to position itself as a potential exit for an emergent. Incumbents recognize that, as initial public offerings have become less attractive to many startups, the prospect of being acquired by a big tech company has become more attractive.⁶ To this end, an incumbent employs its venture capital ties to establish informal contacts with an emergent. By leveraging its ability to access key decision-makers, the incumbent signals its interest to the startup's investors, who in turn put pressure on founders to exit. And while the incentives of founders and their investors are not always aligned, the relationship rarely becomes adversarial.

Still, even if the founders are receptive to an exit, a conventional acquisition may entail board approvals, complex deal structuring, extensive disclosures, and an assessment and allocation of regulatory, intellectual property, and litigation risk prior to closing. In contrast, an acquihire streamlines this process.⁷ Typically, an acquihire focuses more on the target company's software developers and less on other assets, including intellectual property. The buyer's consideration is allocated to the departing engineers in the form of stock incentives and to the investors of the acquihired company in cash.⁸

This type of acquisition optimizes internal processes, too. Market incumbency cements an organization's corporate hierarchy, slowing decision-making. It also

⁶ Lemley & McCreary, *supra* note 3, at 7 ("[I]n recent years, even IPOs have grown more and more scarce. They now account for fewer than one in ten exits for startups.").

⁷ See Neha Bhargava and Vishwanath Venugopalan, *Acqui-Hires Revolutionizing Strategy & Transforming Organizational Structures*, Wharton Mack Center for Technological Innovation (Jan. 31, 2013).

⁸ John F. Coyle and Gregg D. Polsky, *Acqui-Hiring*, 63 Duke L. J. 281, 296-300 (Oct. 30, 2013) (discussing deal consideration and compensation pools).

reinforces risk aversion, prolonging innovation processes. Acquiring a small, nimble emergent with competency in a specific area can generate synergies and shift momentum. Suddenly, the slow-moving incumbent can overcome its rigid structure by gaining know-how and expertise without the arduous task of internal reorganization and reallocation of resources. By bringing in an intact, closely-knit group of software engineers who have been working together on the same product and share the same vision, the buyer gets all the upside without sacrificing other product lines.

Likewise, product integration becomes less of a concern because either the startup was unable to develop a finished product and successfully bring it to market before it ran out of money, or the buyer is not interested in the product in the long term. In either case, the buyer can simply shelve the product and assign the engineers to other departments. And an incumbent usually does so even if the acquired product has long-term prospects: it discontinues the product's development because it threatens the prospects of its existing product lines.⁹

Staking occurs when an incumbent invests capital in a startup without fully acquiring it. The main motivation is to exert significant influence on the startup's founders without incurring regulatory scrutiny. Although the incumbent eschews total control, it can nonetheless achieve influence through board seats, prior approvals or advance notice for product development, exclusivity agreements, access to its platforms, or even by offering services that help develop the underlying technology. For example, Amazon's investment in Anthropic secured Amazon Web Services as the primary cloud compute provider to Anthropic. Similarly, Microsoft's investment in OpenAI designated Microsoft's Azure as the main source of cloud compute for OpenAI's models.¹⁰

An incumbent may attempt to invest in a startup directly, establish a joint venture with it, or complete a quasi-merger. A quasi-merger combines an acquihire with a licensing deal. Like an acquihire, some or all of the startup's employees depart to join the incumbent. Unlike an acquihire, however, the emerging company survives the acquisition. This begets the question of what happens to the startup's intellectual property. If the incumbent acquires it, then it has completed an ordinary acquihire and it can shut it down or try to integrate it to its existing product suite. If the emergent retains it, then it may reemerge as a potent threat

⁹ Herbert Hovenkamp, *Antitrust and Platform Monopoly*, 130 Yale L. J. 1952, 2043 (Jun. 2021); Lemley & Wansley, *supra* note 3, at 5 ("even if Incumbent integrates the innovation into its own products, it is unlikely to do so in a way that eliminates or disrupts its core market").

¹⁰ Tim Bradshaw, Madhumita Murgia, George Hammond and Camilla Hodgson, *How Microsoft's multibillion-dollar alliance with OpenAI really works*, Financial Times (Dec. 15, 2023), <https://www.ft.com/content/458b162d-c97a-4464-8afc-72d65afb28ed>. On January 21, 2025, Microsoft and OpenAI agreed to move to a model where Microsoft has a right of first refusal instead of exclusivity as a cloud service provider (<https://blogs.microsoft.com/blog/2025/01/21/microsoft-and-openai-evolve-partnership-to-drive-the-next-phase-of-ai/>).

and subvert the outcome of the acquisition. The incumbent therefore has to lock it in place without acquiring it. Hence, the merger parties enter a licensing agreement.

Non-exclusive licenses give the incumbent access to the technology while preserving the emergent's ability to offer its services to other companies.¹¹ Exclusive licenses, on the other hand, strictly bind the emergent to the incumbent.¹² The result is a precarious situation where the startup's team of developers and investors has departed, its intellectual property is restricted, and its remaining employees continue on in a lingering, largely ineffectual entity.

Sapping is the process by which an incumbent degrades an emergent's capability to innovate. This can happen gradually by exploiting chokepoints in the supply chain or through other forms of exclusionary conduct leveraging access to critical inputs.¹³ When such measures target a specific emergent, they can be detrimental to the emergent's flexibility and its ability to grow. Of course, exclusionary unilateral conduct can give rise to an antitrust claim by the affected market participants. To avoid this, incumbents may sap under the guise of a merger.

Sapping can also happen suddenly when incumbents carry out killer acquisitions of nascent competitors.¹⁴ These are defined as instances where an incumbent "eliminates or impedes a nascent competitor through acquisition or exclusion, that poses the requisite level of competitive threat, and without fully offsetting competitive benefits."¹⁵ A killer acquisition manifests a desire to preempt an emergent from becoming a force of disruption. This practice is inherently tied to the incumbent's intent behind an acquisition. But motivations may be mixed.¹⁶

Commonly, "[a]n incumbent may buy a startup because it finds the technology intriguing and potentially threatening. It may improve the incumbent's product but also thwart potential competition. The question antitrust courts face is

¹¹ Lemley & McCreary, *supra* note 3, at 100.

¹² *Id.* ("exclusive licenses and many joint ventures might allow only the incumbent to use the technology. That is worrisome, and antitrust needs to police that conduct as well").

¹³ For example, NVIDIA's CUDA software (which is used for building applications for its graphic processing units) has limited compatibility with products of other chip manufacturers, making the prospect of a transition to a different GPU a particularly costly proposition. Similarly, Microsoft's restrictive switching cost relating to its Azure cloud service has received scrutiny from the Federal Trade Commission as potential anti-competitive behavior.

¹⁴ See Colleen Cunningham, Florian Ederer and Song Ma, *Killer Acquisitions*, 129 J. Pol. Econ. 649 (Mar. 20, 2021); Hovenkamp, *supra* note 9, at 2046 ("a killer acquisition yields no efficiencies because the acquiring firm never puts the acquired assets to any use. Economically a merger-plus-shutdown is no different than the output reduction that attends a cartel. Indeed, the only reason these acquisitions occur is because the alternative of agreeing with a firm to shut down a plant in exchange for a payment of money would be unlawful per se").

¹⁵ Hemphill & Wu, *supra* note 3, at 1890.

¹⁶ Hovenkamp, *supra* note 9, at 2047.

whether the synergies that the merger creates will offset the loss to competition and innovation from extinguishing an independent company.”¹⁷

When it comes to quasi-mergers, the hiring of software engineers can improve the incumbent’s products and enhance its innovation processes. And this is achieved by nominally keeping the emergent alive, which might have otherwise failed under the insurmountable costs required to develop its product.¹⁸

Therefore, the main issue is whether marginal synergies and lingering entities are enough to offset any anti-competitive effect. Put differently, if certain acquisitions can be justified by creating synergistic effects, how can courts tell whether they offset the loss of competition?

B. Intent & Outcome

One reason that courts have not made such a determination is because certain acquisitions never reach them in the first place. These types of transactions are below the Hart-Scott-Rodino Act thresholds and therefore do not trigger merger review by government agencies, which could otherwise challenge them. More fundamentally however, antitrust law struggles to resolve this issue due to its reliance on intensive factual analysis on a case-by-case basis.¹⁹ And finally, by framing anticompetitive conduct in terms of price and output, it is difficult to account for situations where harm to competition is not rooted in robust economic analysis.²⁰

Despite its broad scope, which includes a prophylactic purpose to protect competition in its incipiency, §7 of the Clayton Act still requires a “determination of the product and geographic dimensions of the relevant market.”²¹ But what is the purpose of a foundation model? And how does it relate to the search engine market? Moreover, assessing market share is equally uncertain.²² Emergents operate on the basis of incurring losses in the short term to make gains in the long term. During their early phase, they do not rely on revenues and may not have even entered a market with a finished product. Traditional rules of review which prescribe an arbitrary snapshot in time make it difficult, if not impossible, to

¹⁷ Lemley & Wansley, *supra* note 3, at 34.

¹⁸ *Id.* (discussing the failing firm defense).

¹⁹ Hovenkamp, *supra* note 9, at 2002 (“It is also why antitrust is so fact intensive, particularly on issues pertaining to market power or competitive effects. Indeed, the biggest advantage that antitrust has over legislative regulation is its fact-driven methodology”).

²⁰ Hovenkamp, *supra* note 9, at 2041 (“Most of these acquisitions are not reasonably calculated to produce price increases or innovation reductions in the short run by facilitating collusion in the postmerger market. Their purpose, instead, is to prevent the eventual emergence of substantial rivals”).

²¹ 15 U.S.C. § 18. See also Herbert Hovenkamp, *Prophylactic Merger Policy*, 70 Hastings L. J. 45, U of Penn, Inst. for Law & Econ Research Paper No. 18-3 (2018); Peter C. Carstensen and Robert H. Lande, *The Merger Incipiency Doctrine and the Importance of “Redundant” Competitors*, 2018 Wis. L. Rev. 783, 794-795 (2018).

²² See Louis Kaplow, *Why (Ever) Define Markets?*, 124 Harv. L. Rev. 437 (2010).

assess future harm to competition in this context.²³ Specifically, when it comes to nascent competitors, their main economic value is based not on sales but on their capability to innovate and the threat that they pose to an incumbent as future competitors.²⁴ Because this capability is hard to quantify and highly speculative, the old principles underpinning merger review become less relevant.²⁵

And so the question remains: Are quasi-mergers synergistic or cooptive acquisitions? If there is a spectrum of anti-competitive conduct, with acquihires on the lower end and killer acquisitions on the higher end, where are quasi-mergers?

Intent evidence can be instructive.²⁶ Uncovering the incumbent's intent becomes easier by observing certain clues which have probative value. Clues such as a price premium paid to the startup's investors or market product proximity. Ultimately however, the best indicator of the incumbent's intent is the outcome of the acquisition.²⁷ Namely, what the incumbent does with the acquired engineers and intellectual property. Therefore, to answer this question, the following part consists of three case studies of quasi-mergers which include an emergent's pre-acquisition outlook and the post-acquisition deployment of its assets and employees by its acquirer.

II. QUASI-MERGERS

Scouting, staking and sapping are not mutually exclusive strategies. An incumbent may try to buy an emergent and when an outright acquisition seems unattainable, choose to strategically invest in it instead. Then, the incumbent may use its influence to nudge the emergent toward a path that avoids competition with its own products, either directly or in an adjacent market. Importantly, the incumbent can apply this playbook across an entire technology space affecting multiple emergents.

²³ Kevin A. Bryan and Erik Hovenkamp, *Startup Acquisitions, Error Costs, and Antitrust Policy*, 87 U. Chi. L. Rev. 331, 347-348 (2020).

²⁴ Lemley & Wansley, *supra* note 3, at 66 ("If antitrust enforcers were to have a case against Google's acquisition of DeepMind in 2014, the case would need to have been based not on its current or immediate future products but on its capability to innovate").

²⁵ Bryan & Hovenkamp, *supra* note 23, at 347 ("Relatedly, evaluating potential effects on future competition is necessarily more speculative than the analysis of mergers between established firms, where one can reasonably focus on static effects. This makes it much harder (if not impossible) to rely on rigorous empirical methods to estimate anticompetitive effects").

²⁶ *United States v. Microsoft Corp.*, 253 F.3d 34, 59 (D.C. Cir. 2001) (en banc) (per curiam) ("Evidence of the intent behind the conduct of a monopolist is relevant only to the extent it helps us understand the likely effect of the monopolist's conduct").

²⁷ Lemley & Wansley, *supra* note 3, at 30 ("what impact do different kinds of startup acquisitions have on technological progress? Is the acquisition synergistic or coopting? We can gain insight into this question based on what the acquiror does with the startups' assets and employees after the acquisition").

Notably, the Microsoft-OpenAI, Amazon-Anthropic and Google- Anthropic partnerships have received attention from the Federal Trade Commission.²⁸ In a staff report, the Commission describes how these arrangements help the incumbents access, learn and develop the underlying technology while integrating OpenAI's and Anthropic's products into their own platforms.²⁹ These partnerships are examples of an incumbent's staking playbook. But they are not isolated incidents, nor pursued by happenstance. Together with the Microsoft-InflectionAI, Amazon-AdeptAI and Google-CharacterAI transactions, they constitute a pattern of behavior which reveals the incumbents' larger strategy.³⁰ To begin with, this part attempts to uncover the intent behind each acquisition separately by observing its outcome. But in the end, scrutinizing an incumbent's actions in isolation risks missing the forest for the trees.

A. Google & Character AI

Character Technologies, Inc. (Character) is an artificial intelligence startup based in Menlo Park, California. It was founded in 2021 by Noam Shazeer and Daniel De Freitas. Before launching Character, Shazeer and De Freitas were working at Google, specifically as part of the Meena and LaMDA projects on conversational models.³¹ Despite developing an AI-powered chatbot, Google ultimately did not release the product. Convinced that the company's rigid corporate hierarchy rendered it unwilling to take risks, Shazeer and De Freitas decided to leave Google, believing that "some things are easier to do as a startup."³² They focused on developing a "personalized superintelligence" which would compete with OpenAI. Hence, Character started as a full-stack AI contender developing its own models which allowed users to interact with them through personalized characters. This distinct feature attracted a young and vibrant user base. The fortuitous timing of the venture attracted \$193 million from investors.³³

On August 2, 2024, Character announced that it was entering into an agreement with Google. The terms of the agreement resembled the structure of a quasi-merger. Namely, (i) both of Character's co-founders and 30 members of Character's research team (out of approximately 130 employees) would join Google and (ii) Character would provide Google with a non-exclusive license for

²⁸ Federal Trade Commission, FTC Staff Report on AI Partnerships & Investments 6(b) Study (Jan. 2025), <https://www.ftc.gov/reports/ftc-staff-report-ai-partnerships-investments-6b-study>.

²⁹ *Id.* at 22, 36.

³⁰ Erin Griffith and Cade Metz, *The New A.I. Deal: Buy Everything but the Company*, N.Y. Times (Aug. 8, 2024), <https://www.nytimes.com/2024/08/08/technology/ai-start-ups-google-microsoft-amazon.html>.

³¹ Google Gets Character.AI Co-Founders, The Batch (Aug. 7, 2024), <https://www.deeplearning.ai/the-batch/google-acquires-character-ai-talent-and-tech-in-strategic-move/>.

³² Rachel Metz and Julia Love, *Character.AI Co-Founders Hired by Google in Licensing Deal*, Bloomberg (Aug. 3, 2024), <https://www.bloomberg.com/news/articles/2024-08-02/character-ai-co-founders-hired-by-google-in-licensing-deal>.

³³ *Supra* note 31.

its current model technology, enabling the company to continue operations.³⁴ Character's departing team would receive stock incentives from Google. Character's investors would be bought out at a valuation of about \$88 per share, roughly 2.5 times the value of shares in Character's 2023 Series A, which valued the company at \$1 billion.³⁵ Character's remaining employees would receive a one-off stock redemption, and the license fee from Google would function as a source of revenue to help sustain Character's new mission. Whereas the hired engineers would be assigned to work on Google's Gemini model, Character would stop developing its own models and use open-source models such as Meta's Llama 3.1 to focus on building AI applications.³⁶

Until the quasi-merger, Character had taken an integrated approach, which included developing its own language models, adapting them for the platform and building a global user base. However, after the acquisition, the company decided to move to open-source language models. Character's transition to fine-tune open-source models was effectively a bow out from the race to develop foundation models.³⁷ Apparently, after the quasi-merger, competing with OpenAI was no longer financially viable. In essence, Character repurposed its mission further downstream toward AI applications and user interaction, where it enjoyed an edge over its competitors. In the meantime, Noam Shazeer would become the co-technical lead of Google's Gemini, the incumbent's AI flagship unit which competes with OpenAI's GPT large language models.³⁸

Character was launched as a competitor to OpenAI. Due to large financing needs, it raised nearly \$200 million from venture capital investors at a time when the artificial intelligence frenzy was at its peak. After the quasi-merger, however, Character was dislodged from the foundation model contest and diverted further downstream. According to the merger parties, this decision was due to the fact that developing cutting-edge foundation models became enormously expensive and hard to keep up. Perhaps Character needed to readjust its purpose in a changing market. Perhaps it was forced to. In sum, as a result of the quasi-merger, (i) Google took a non-exclusive license of Character's intellectual property, (ii) Character's software engineers were reassigned to Google's Gemini unit, (iii)

³⁴ Kalley Huang, Natasha Mascarenhas and Stephanie Palazzolo, *Google Hires Character.AI Cofounders and Licenses Its Models*, The Information (Aug. 2, 2024), <https://www.theinformation.com/articles/google-hires-character-ai-cofounders-and-licenses-its-models>.

³⁵ *Id.*

³⁶ *Id.*

³⁷ Cristina Criddle, *Character.ai abandons making AI models after \$2.7bn Google deal*, Financial Times (Oct. 2, 2024), <https://www.ft.com/content/f2a9b5d4-05fe-4134-b4fe-c24727b85bba>

³⁸ Erin Woo, *Google Makes Former Character.AI CEO Shazeer a Co-Leader of Gemini AI*, The Information (Aug. 22, 2024), <https://www.theinformation.com/briefings/google-makes-former-character-ai-ceo-shazeer-a-co-leader-of-gemini-ai>.

Character pivoted away from foundation models to applications, and (iv) Google paid a modest premium price to Character's investors.

B. Microsoft & Inflection AI

Inflection AI, Inc. (Inflection) is also an artificial intelligence company based in Palo Alto, California. It was founded in 2022 by Mustafa Suleyman, Karén Simonyan and Reid Hoffman. Before launching Inflection, Suleyman and Simonyan were working at DeepMind, an AI pioneer that was acquired by Google in 2014.³⁹ Hoffman backed the initiative financially through his venture fund Greylock Partners. Inflection's initial mission was twofold. First, to develop an AI general assistant called "Pi" which could handle a multitude of tasks.⁴⁰ Second, to release its own foundation model which could power Pi while competing against other large language models such as GPT-4, LLaMA and Gemini.⁴¹ Before its quasi-merger with Microsoft, Inflection had raised more than a billion dollars at a \$4 billion valuation.⁴²

On March 19, 2024, Inflection announced that it was entering into an agreement with Microsoft.⁴³ As with Google-Character, this transaction resembled the structure of a quasi-merger. Namely, (i) Inflection's co-founders Mustafa Suleyman and Karén Simonyan, and almost all its employees would join Microsoft, and (ii) Microsoft would pay \$620 million to Inflection to license and use its AI models.⁴⁴ Inflection would continue operating after the acquisition with a new CEO, a new mission and a new team. Inflection's departing team would receive stock incentives from Microsoft. Inflection's investors would receive a modest return of about 1.1 to 1.5 times their investment from the license fee and retain equity in the surviving entity.⁴⁵ Within Microsoft, Mustafa Suleyman, Karén Simonyan and the rest of former Inflection employees would form Microsoft AI, a

³⁹ Andrew Ross Sorkin, Ravi Mattu, Bernhard Warner, Sarah Kessler, Michael J. de la Merced, Lauren Hirsch and Ephrat Livni, *Is Microsoft Building an Unassailable Lead in A.I.?*, N.Y. Times (Mar. 20, 2024), <https://www.nytimes.com/2024/03/20/business/dealbook/microsoft-suleyman-ai-inflection.html>.

⁴⁰ Kylie Robison, *Why Microsoft's surprise deal with \$4 billion startup Inflection is the most important non-acquisition in AI*, Fortune (Mar. 20, 2024), <https://fortune.com/2024/03/19/microsoft-surprise-deal-inflection-ai-mustafa-suleyman-reid-hoffman-questions/>; *Introducing Pi, Your Personal AI* (May 2, 2023), <https://inflection.ai/blog/pi>.

⁴¹ *Inflection-1: Pi's Best-in-Class LLM* (Jun. 22, 2023), <https://inflection.ai/blog/inflection-1>; *Inflection-2: The Next Step Up* (Nov. 22, 2023), <https://inflection.ai/blog/inflection-2>; *Inflection-2.5: meet the world's best personal AI* (Mar. 7, 2024), <https://inflection.ai/blog/inflection-2-5>.

⁴² Julie Bort, *Here's how Microsoft is providing a 'good outcome' for Inflection AI VCs, as Reid Hoffman promised*, TechCrunch (Mar. 21, 2024), <https://techcrunch.com/2024/03/21/microsoft-inflection-ai-investors-reid-hoffman-bill-gates/>.

⁴³ *The new Inflection: An important change to how we'll work* (Mar. 19, 2024), <https://inflection.ai/blog/the-new-inflection>.

⁴⁴ Jessica E. Lessin, Natasha Mascarenhas and Aaron Holmes, *Microsoft Agreed to Pay Inflection \$650 Million While Hiring Its Staff*, The Information (Mar. 21, 2024), <https://www.theinformation.com/articles/microsoft-agreed-to-pay-inflection-650-million-while-hiring-its-staff>.

⁴⁵ *Supra* note 42.

new unit focused on advancing AI innovation capabilities and integrating the Copilot, Bing and Edge teams.⁴⁶ Meanwhile, Inflection would have to repurpose its mission further downstream, focusing on the business-user interface while hosting its Inflection-2.5 model on Microsoft's cloud computing platform, Microsoft Azure.⁴⁷

Until the acquisition, Inflection was developing two product lines: a chatbot and a foundation model. For both, Inflection relied on the engineering capabilities of its team. After the acquisition, virtually all of this team is no longer part of Inflection.⁴⁸ Although Microsoft's license is non-exclusive and Inflection retains its intellectual property, the startup no longer employs the people capable of further developing it to remain a credible contestant in the foundation model arena. This in turn diminishes the value of its technology and decreases its chances of being licensed by other companies. It puts the nominally alive emergent back at square one, with Microsoft's licensing fee as its only lifeline. Its long-term prospects depend on its ability to build a new team from scratch and pursue a new business model in a saturated market where other major players have a first-mover advantage.

As with Character, it is plausible that the founders of Inflection realized that they were lagging behind their competitors and decided to exit to an incumbent.⁴⁹ In this sense, absorbing the engineering talent of Inflection to enhance Microsoft's innovation processes may constitute a synergistic effect. Perhaps Microsoft's AI unit has a greater chance of developing and bringing products to market than a standalone emergent. However, it remains questionable whether, in this post-acquisition world, the market exerts the same impetus on Microsoft to actually do it.

Inflection was launched as a technology company developing cutting edge AI assistants and foundation models.⁵⁰ Its own performance evaluations compared its products to those of OpenAI, Meta and Google. It raised more capital than Character and yet, like Character, it was dislodged from the contest and relegated

⁴⁶ Satya Nadella, *Mustafa Suleyman, DeepMind and Inflection Co-founder, joins Microsoft to lead Copilot*, Microsoft Press Release (Mar. 19, 2024), <https://blogs.microsoft.com/blog/2024/03/19/mustafa-suleyman-deepmind-and-inflection-co-founder-joins-microsoft-to-lead-copilot/>.

⁴⁷ Manish Singh, *Microsoft hires Inflection founders to run new consumer AI division*, TechCrunch (Mar. 19, 2024), <https://techcrunch.com/2024/03/19/microsoft-hires-inflection-founders-to-run-new-consumer-ai-division/>.

⁴⁸ Shirin Ghaffary and Rachel Metz, *Microsoft to Pay Inflection AI \$650 Million After Scooping Up Most of Staff*, Bloomberg (Mar. 21, 2024), <https://www.bloomberg.com/news/articles/2024-03-21/microsoft-to-pay-inflection-ai-650-million-after-scooping-up-most-of-staff>.

⁴⁹ Devin Coldewey, *After raising \$1.3B, Inflection is eaten alive by its biggest investor, Microsoft*, TechCrunch (Mar. 19, 2024), <https://techcrunch.com/2024/03/19/after-raising-1-3b-inflection-got-eaten-alive-by-its-biggest-investor-microsoft/>.

⁵⁰ Alex Heath, *Microsoft reuses its OpenAI playbook*, The Verge (Mar. 23, 2024), <https://www.theverge.com/2024/3/22/24109260/microsoft-openai-playbook-inflection-ai>.

to competing in subsidiary markets further downstream. Inflection remains in operation and retains its intellectual property, but its capability to innovate in the foundation model market has been substantially diminished if not totally eliminated. In sum, as a result of the quasi-merger, (i) Microsoft took a non-exclusive license of Inflection's intellectual property, (ii) almost all of Inflection's employees were reassigned to Microsoft's AI unit, and (iii) Inflection pivoted away from foundation models to user interfaces.

C. Amazon & Adept AI

Adept AI Labs Inc. (Adept) is an artificial intelligence company based in San Francisco, California. It was founded in 2022 by David Luan, Kelsey Szot, Niki Parmar and Ashish Vaswani, although Parmar and Vaswani departed within a year to launch their own company.⁵¹ Luan, Adept's CEO who previously worked at Google and OpenAI, initially described Adept's purpose as creating a general purpose assistant (similar to Inflection's Pi).⁵² Powering this assistant entailed training powerful multimodal models, fine-tuning them into agents, and then delivering a refined product version.⁵³ In practice, Adept's aspirations were not so different from other model-building companies like Anthropic, Cohere and OpenAI, except that Adept's model would be more task-focused and business-oriented.⁵⁴ While Adept was unable to release a product to the public, it raised more than \$400 million from investors and attained an approximately \$1 billion valuation.⁵⁵

On June 28, 2024, Adept announced that it was entering into an agreement with Amazon.⁵⁶ The deal followed the familiar quasi-merger pattern. Amazon would (i) hire Adept's cofounders and two-thirds of its employees, and (ii) license Adept's intellectual property through a non-exclusive license, while Adept would resume operations.⁵⁷ Amazon's license fee would primarily be directed to Adept's investors as a return on their investment; a small part of it would also function as

⁵¹ John Victor and Amir Efrati, *Two Co-Founders of Adept, an OpenAI Rival, Suddenly Left to Start Another Company*, The Information (Jan 13, 2023), <https://www.theinformation.com/briefings/two-co-founders-of-adept-an-openai-rival-suddenly-left-to-start-another-company>.

⁵² David Luan, *Introducing Adept* (Apr. 26, 2022), <https://www.adept.ai/blog/introducing-adept>.

⁵³ Kenrick Cai and Alex Konrad, *Adept Raises \$350 Million To Build AI That Learns How To Use Software For You*, Forbes (Mar. 14, 2023), <https://www.forbes.com/sites/kenrickcai/2023/03/14/adept-ai-startup-raises-350-million-series-b/>.

⁵⁴ *Id.*

⁵⁵ Ananya Mariam Rajesh and Krystal Hu, *AI startup Adept raises \$350 mln in fresh funding*, Reuters (Mar. 16, 2023), <https://www.reuters.com/technology/adept-raises-350-mln-series-b-funding-2023-03-14/>.

⁵⁶ An update from Adept (Jun. 28, 2024), <https://www.adept.ai/blog/adept-update>.

⁵⁷ Taylor Soper, *Amazon hires founders from well-funded enterprise AI startup Adept to boost tech giant's 'AGI' team*, GeekWire (Jun. 28, 2024), <https://www.geekwire.com/2024/amazon-hires-founders-from-well-funded-enterprise-ai-startup-adept-to-boost-tech-giants-agi-team/>.

a lifeline for the remaining team.⁵⁸ While Amazon would use the acquired team to set up a new unit developing foundation models, Adept would reposition itself further downstream in the agentic AI market.⁵⁹

Adept was founded on the premise of delivering a general-purpose model capable of completing tasks for its user.⁶⁰ In the process of building its product, it did not shy away from identifying itself as one of the major contenders to develop “artificial general intelligence” even if it envisioned a narrower purpose than that of its peers. But while Adept’s mission is nominally the same after the quasi-merger with Amazon, Adept’s remaining team is forced to survive with diminished engineering capacity and its long-term viability in question. It cannot continue building agents because its in-house models meant to power them have become obsolete. If Adept can re-emerge as a potent innovator, it will have to do so without an in-house foundational capability supporting its own downstream products. Instead, it will have to rely on an open-source model, like Character, or lease a model from Amazon’s cloud suite. Recognizing the opportunity, Amazon assigned David Luan and his team to lead a new unit called AGI SF Lab, building foundational capabilities for Amazon’s Nova models.⁶¹

Like Character and Inflection, Adept was displaced from the foundation model layer and pushed further downstream. Before the quasi-merger, Adept’s prospects were doubtful.⁶² It raised more than \$400 million but failed to bring a product to market. Consequently, consolidation with an incumbent firm may have been a necessary evil. Here, an incumbent was willing to bet on the prospect of this technology, capitalizing on an opportunity to enter a space which is not congested and create dependencies with the startup it displaced. In sum, as a result of the quasi-merger, (i) Amazon took a non-exclusive license of Adept’s intellectual property, (ii) Adept’s software engineers joined Amazon’s AGI SF Lab, and (iii) Adept adjusted its business model to limit itself to agentic applications.

⁵⁸ Reed Albergotti, *Investors in Adept AI will be paid back after Amazon hires startup’s top talent*, Semafor (Aug. 2, 2024), <https://www.semafor.com/article/08/02/2024/investors-in-adept-ai-will-be-paid-back-after-amazon-hires-startups-top-talent>.

⁵⁹ Artificial intelligence agents are task-based properties of a foundation model. Kyle Wiggers, *Amazon hires founders away from AI startup Adept*, TechCrunch (Jun. 28, 2024), <https://techcrunch.com/2024/06/28/amazon-hires-founders-away-from-ai-startup-adept/>.

⁶⁰ *Id.*

⁶¹ David Luan, Pieter Abbeel, *Amazon opens new AI lab in San Francisco focused on long-term research bets*, Press Release (Dec. 9, 2024), <https://www.amazon.science/blog/amazon-opens-new-ai-lab-in-san-francisco-focused-on-long-term-research-bets>; Kyle Wiggers, *Amazon forms an AI agent-focused lab led by Adept’s co-founder*, TechCrunch (Dec. 9, 2024), <https://techcrunch.com/2024/12/09/amazon-forms-a-new-ai-agent-focused-lab-led-by-adept-co-founder/>.

⁶² Alex Heath, *This is Big Tech’s playbook for swallowing the AI industry*, The Verge (Jul. 1, 2024), <https://www.theverge.com/2024/7/1/24190060/amazon-adept-ai-acquisition-playbook-microsoft-inflection>.

III. EFFECTS

To successfully challenge one of these transactions prospectively under §7 of the Clayton Act, the government would have to establish market definition, causation and a reasonable probability of harm. This part addresses each step in this process and considers the challenges that nascent competition presents along the way.

A. Defining Markets

The market-definition inquiry begs the question: what is the product that each emergent was designing? In all three cases one might observe two product lines reflecting a more general trend in the space: some emergents focus on foundation models while others on end-user applications. Of course, those that focus more on the end-user experience still have to rely on foundation models. This relationship makes the foundation-layer contest a preamble to the vertical dependencies that the winner will establish with companies that build applications on the margins of its models.⁶³ This prospect makes a presence in the foundation layer an attractive proposition—one that an emergent may not want to give up on too early. But this dual orientation diffuses innovation capability which impacts product development. If Character or Inflection had focused from the beginning only on developing a consumer-facing product, they would not have expended resources training their own in-house models and instead would have allocated all of their assets toward accelerating product development on the application side. Product differentiation is important in determining whether there is a foundation and an application market, and whether Character, Inflection and Adept belong to one or the other. From their statements, it is safe to assume that initially these companies aspired to compete in both markets, before eventually shifting to focus on applications.

If the three emergents were at some point nascent competitors in the foundation model market, delineation of the boundaries of this market is required.⁶⁴ It is an inquiry inherently tied to the purpose of the technology.⁶⁵ Specifically, are foundation models meant to replace search engines or amplify them? Is the foundation model market a potential complement to search or a potential

⁶³ Winning the foundation model race becomes important for the familiar reasons associated with the platform economy. See Niefer & Hoag, *supra* note 5, at 6-8.

⁶⁴ Hemphill & Wu, *supra* note 3, at 1886 (discussing definition of nascent competition based on Microsoft: “a nascent competitor had three important features: (1) that the Netscape browser held promise as the foundation of an innovative new software development platform; (2) that the potential of Netscape’s innovation had not fully come to fruition but might have done so in the future; and (3) that this prospect posed a serious threat to Windows”).

⁶⁵ *Microsoft*, 253 F.3d at 81 (“Defining a market for an attempted monopolization claim involves ... a detailed description of the purpose of a browser—what functions may be included and what are not—and an examination of the substitutes that are part of the market and those that are not”).

substitute? Relatedly, are the AI emergents direct competitors to incumbents or proximate rivals?

Foundation models and search engines are partly interchangeable and partly complementary.⁶⁶ If a user is seeking access to information, the query lies within the search engine's domain. In contrast, a user prompt seeking to contextualize information or synthesize content likely lies within the foundation model's domain.⁶⁷ Overlap in more open-ended questions obscures domain demarcation. This obscurity illustrates the interrelatedness of the two systems and the inherent arbitrariness in making static judgments about an evolving technology. Furthermore, it reinforces the notion that both technologies exist in markets that are within close proximity. It is not a coincidence that Google, Microsoft and Amazon are all dominant firms in the search and e-commerce markets. Perhaps the incumbents sensed a threat similar to the one Microsoft sensed in 2001, when "efforts to gain market share in one market (browsers) served to meet the threat to Microsoft's monopoly in another market (operating systems)."⁶⁸

Assuming the emergents indeed occupied proximate markets and were viewed as contenders by the incumbents, what were the incumbents ultimately seeking to accomplish with these transactions? One possible explanation is product integration. But a buyer cannot plausibly claim product integration as a goal when it does not obtain the acquired firm's product. Besides, to the incumbents, product integration can be sufficiently achieved through partnerships with the frontrunners (OpenAI and Anthropic).⁶⁹

Another explanation could be the incumbents' desire to expand in a new market. Here, entry was a more plausible motivation than product integration. Indeed, four months after its transaction with Adept, Amazon rolled out a new foundation model, Nova.⁷⁰ Microsoft also released a smaller, open-source model (Phi-4) to test the waters.⁷¹ Google, which had already entered the foundation model race in 2023, released the second version of its Gemini model (2.0 Flash).⁷² And while it might appear as if entry was achieved via internal reallocation of resources, in reality, this expansion was possible due to the talent pool created by these

⁶⁶ United States v. du Pont & Co, 351 U.S. 377, 395.

⁶⁷ Specifically, a text-based generative AI model, also known as a large language model.

⁶⁸ *Microsoft*, 253 F.3d at 60.

⁶⁹ *Supra* note 28.

⁷⁰ Introducing Amazon Nova: A New Generation of Foundation Models, Press Release (Dec. 03, 2024), <https://press.aboutamazon.com/2024/12/introducing-amazon-nova-a-new-generation-of-foundation-models>.

⁷¹ Ece Kamar, *Introducing Phi-4: Microsoft's Newest Small Language Model Specializing in Complex Reasoning*, Press Release (Dec. 13, 2024), <https://techcommunity.microsoft.com/blog/aipatformblog/introducing-phi-4-microsoft's-newest-small-language-model-specializing-in-comple/4357090>.

⁷² Sundar Pichai, Demis Hassabis, Koray Kavukcuoglu, *Introducing Gemini 2.0: our new AI model for the agentic era*, Press Release (Dec. 11, 2024), <https://blog.google/technology/google-deepmind/google-gemini-ai-update-december-2024/#ceo-message>.

acquisitions, particularly the engineering talent that was tapped to set up internal AI-focused units. Instead of entry by internal reorganization, there was entry by displacement. And paradoxically, it was the emergent that was dislodged.

One reason for this may be that entry costs favor incumbents.⁷³ In a space where the value chain consists of graphical processing units, data, cloud and engineers, Google, Microsoft and Amazon can easily amass data and cloud compute, given their integration and dominance in these upstream markets. Only diverting engineering talent would entail sacrificing progress in other product lines. In part, this too was averted through these quasi-mergers. In contrast, an emergent has to raise capital to lease cloud compute, obtain data and compete for talent.⁷⁴

Another purpose, however, may have been to preempt emergents from ever becoming full-fledged, direct competitors.

B. Revealing Intent

It is an open question whether preemption is the main outcome sought by an incumbent. But it may certainly be a factor among several it has considered, or simply an added bonus. To uncover the incumbent's motivation, intent evidence becomes highly relevant.⁷⁵ In turn, "[t]he simplest form of intent evidence is documents showing a specific concern with future threats, coupled with conduct that eliminates the threat. When the parties say something specific and detailed about their anticompetitive plan, we should believe them. Leading examples include Microsoft's Tidal Wave memo and Facebook's detailed internal assessments of particular threats and what to do about them."⁷⁶

The incumbent's own perspective of the potency of the emergent's threat carries substantial probative value. However, while direct evidence is the best evidence one can hope for, it is not a *sine qua non*. What is more, one cannot count on the availability of direct evidence, especially as sophisticated firms grow wiser with experience. Incumbents can and have created a culture of concealment which obfuscates their plans.⁷⁷ Spending valuable enforcement resources in pursuit of

⁷³ *Microsoft*, 253 F.3d at 82 ("Because a firm cannot possess monopoly power in a market unless that market is also protected by significant barriers to entry").

⁷⁴ There is another view which holds that curating open-source models can be a more efficient and less capital-intensive approach to develop this technology. If this approach proves correct, then the entry barrier is substantially lower. In this scenario, the anti-competitive effects of horizontal acquisitions of startups by incumbents in the foundation model space become less alarming.

⁷⁵ Hemphill & Wu, *supra* note 3, at 1903 ("Given the uncertainties and faced with a lack of clear economic evidence of effects, we suggest that strong evidence of anticompetitive intent is a fruitful way to draw the line").

⁷⁶ *Id.* at 1904.

⁷⁷ A culture of concealment means that in-house teams do not just train and filter their executives' statements, but have expanded this practice to lower level management, even if internal communications by these employees do not carry the same probative value. David Streitfeld, *How Google Spent 15 Years Creating*

an ever-elusive smoking gun is counterproductive.⁷⁸ Simply put, 2025 is not the early days of tech incumbency. Therefore, if the goal is to discover clues which may give away cooptive intent, ex post circumstantial evidence may be a more realistic alternative.⁷⁹ This kind of evidence can include a combination of exclusive and non-exclusive licenses, price premiums, product terminations and synergistic offsets or a lack thereof.

1. Exclusive & Non-Exclusive Licenses

In theory, non-exclusive licenses between incumbents and emergents tend to be more synergistic than exclusive licenses. Unlike exclusive licenses, they keep access to the intellectual property open to the incumbent's rivals.⁸⁰ Character, Inflection and Adept all agreed to license their intellectual property on a non-exclusive basis. Yet, in all three cases, incumbents used license agreements not because they were interested in the technology per se, but as means to cash out the startups' venture capital investors. The remaining shell of the emergent after the quasi-merger stood little chance of wielding the remaining intellectual property in such a way that would pose a competitive threat to the incumbent. Therefore, while these agreements have no exclusionary value, they cannot be credited as synergistic either.

2. Price Premium

A price premium can be used as economic evidence of cooptive intent.⁸¹ An incumbent's willingness to acquire a startup at a high cost may be indicative of its expectation to avert a greater cost by competing with it in the long term. This also implies that the incumbent recognizes its target as a long-term threat. But whether the price paid for a startup acquisition lies in premium territory is not always entirely clear. In Inflection's case, for example, the price was slightly higher than the initial investment. It is difficult to assert a price premium when investors are merely recouping

a Culture of Concealment, N.Y. Times, (Nov. 20, 2024),

<https://www.nytimes.com/2024/11/20/technology/google-antitrust-employee-messages.html>.

⁷⁸ C. Scott Hemphill, *Disruptive Incumbents: Platform Competition in an Age of Machine Learning*, 119 Columbia Law Review 1973, 1984 ("A top Facebook official reportedly wrote colleagues that the purpose of the transaction was to eliminate a potential competitor"), ("The danger posed by the growth of the internet was articulated by CEO Bill Gates in an internal memo to his top lieutenants describing a coming Internet Tidal Wave") (citation omitted) (quotation marks omitted).

⁷⁹ *United States v. Falstaff Brewing Corp.*, 410 U.S. 526, 534 n.13 (1973) ("circumstantial evidence is the lifeblood of antitrust law").

⁸⁰ *Supra* note 11; Bryan & Hovenkamp, *supra* note 23, at 341 ("However, in such cases there may still be a material risk of anticompetitive harm if the acquisition prevents the acquirer's rivals from obtaining access to a promising new technology developed by the startup. That is, if the acquirer is dominant in its product market, then its motivation for the acquisition may be (in whole or in part) to exclude its smaller rivals from gaining access to the startup technology").

⁸¹ *Supra* note 76.

their investment. Then again, Character was bought at 2.5 times its valuation but still less than what would typically be considered an outsized return (e.g. 10x). Assuming Character doubted its prospects and needed to readjust its purpose in a changing market, this price might have been generous for a failing firm.⁸² A generous price raises suspicion of cooptive intent. But maybe it was not so generous because Character bears indicia of success: it has a solid user base and a differentiated product in a frothy market. Ultimately, determination of a “premium” is subject to interpretation, but it could be argued that Character’s acquisition included a modest price premium.

3. Product Discontinuation

Product displacement is a clearer sign that innovation has been harmed.⁸³ It is ex post evidence which, absent a credible offset, reveals the incumbent’s cooptive intent. In the cases of Character, Inflection and Adept, there was clear product discontinuation in foundation models. All three initially planned to develop models on par with OpenAI and others. After their acquisition, this ambition was abandoned because they lost their innovative capability—the engineering talent. The offset to this loss does not pertain to product integration.⁸⁴ Nor is it related to the product’s potential catalog value; adding an acquired model to a cloud platform in a model-as-a-service function is hardly an efficiency if this product has become obsolete by the time it is listed. Instead, the potential efficiency stems from the technical expertise of the software engineers.⁸⁵

4. Synergistic Offset

First, to determine whether the acquired engineers materially enhance the incumbent’s innovation processes, one can track the performance of the incumbent and see if it has affected its overall market position. One way to tell is to search for observable “wins” by Google, Microsoft and Amazon in the aftermath of the acquisitions. For example, a comparison of their released foundation models shows whether they outperform their

⁸² In Adept’s case, there is no public information about the price.

⁸³ Axel Gautier & Robert Maitry, *Big Tech Acquisitions & Product Discontinuation*, *Journal of Competition Law & Economics*, 1, 14 (2024) (“we cannot conclude that product discontinuation is harmful for competition or for innovation. The reason is that ... the acquirer ... may be interested in the technology developed by the startup and integrate this technology in its products. ... To understand better the motivations of the acquirer and thereby assess correctly the potential anticompetitive effects of the acquisition plus discontinuation, one needs to dig deeper and analyze further not only the evolution of the products, but also the evolution of the acquirer’s technology and its team”).

⁸⁴ *Id.* (“It may be interested in the technology developed by the startup and integrate this technology in its products. For instance, AI is a complement to many existing products of GAFAM like search engines, cloud solutions, or tools for software development”).

⁸⁵ *Id.* (“Or, it may be interested in buying teams of engineers specialized in one field”).

competitors.⁸⁶ Second, to evaluate whether the benefit of the incumbent's innovation enhancement offsets the loss from product displacement, one has to speculate on the trajectory of the startup's discontinued product in the but-for world and compare it to the incumbent's post-acquisition performance. In essence, the purpose is to discover if observable gains (achieved by the incumbent ex post) likely overshadow the loss of the potential innovation of the emergent. But the benefit of hindsight does not confer the privilege of foresight.⁸⁷ The difficulty lies in the fact that the degree of certainty with which one can determine loss is tied to the foreseeability of the discontinued product's success.⁸⁸ If application of engineering expertise leads to variable outcomes, foreseeing each outcome is an ambiguous endeavor.⁸⁹ In one scenario, Character's model may have grown to outperform Google's Gemini. In another, Adept may have never reached the success of Amazon's Nova.⁹⁰

* * *

In all three cases, clues are prone to ambiguous interpretation. It is hard to definitively presume anti-competitive intent without a clear smoking gun. And incumbents have carefully crafted a culture of concealment to prevent this from happening. Therefore, while certain acquisitions may offer circumstantial evidence of anti-competitive motivation, it will otherwise not reveal cooptive intent on its own, at least not with a comfortable level of certainty.

C. Causation & Harm

If intent evidence alone offers no satisfactory answer to the question of whether quasi-mergers are synergistic or cooptive acquisitions, the analysis remains deadlocked on the effects of product discontinuation vis-a-vis its offsets. And

⁸⁶ See LLM leaderboards based on the Quality Index (<https://artificialanalysis.ai/leaderboards/models>) and the GPQA Benchmark performance (<https://llm-stats.com/>).

⁸⁷ This innate uncertainty is also present before a merger is consummated. There, the government bears the burden of proof that a merger will harm consumer welfare by comparing two counterfactuals. But if one cannot answer with certainty even ex post, how realistic is it for the government to meet the "requirement of certainty and actuality of injury to competition" ex ante? (S. Rep. No. 1775, 81st Cong., 2d Sess. 6). Traditionally, this question has been answered with a non-interventionist stance, i.e. to err on the side of caution and leave markets to self correct. But between a non-interventionist regulator and a pre-emptive incumbent, the market's self-correcting force is often inhibited from properly functioning. See Deborah L. Feinstein, *The Forward-Looking Nature of Merger Analysis*, Advanced Antitrust U.S. (2014).

⁸⁸ *Microsoft*, 253 F.3d at 94 ("We fear that these efficiencies are common in technologically dynamic markets where product development is especially unlikely to follow an easily foreseen linear pattern").

⁸⁹ John M. Yun, *Are We Dropping the Crystal Ball? Understanding Nascent & Potential Competition in Antitrust*, 104 Marq. L. Rev. 613, 636-643 (2021) (discussing how comparison between two counterfactuals introduces a degree of uncertainty).

⁹⁰ Another potential offset may be that not only is there no loss of innovation due to the software developers continuing to innovate as part of the incumbent, but that the emergent will innovate better after the quasi-merger, because it will not be constrained by product diffusion. Whether the emergent can remain a promising startup in the applications market is an assertion which has to stand the test of time.

while the technology may be novel, the problem of establishing harm to competition is not.⁹¹ For one thing, reviewing transactions in isolation, whereby provable causation is shown by a specific act, sets a high threshold that cannot be met even with ample circumstantial evidence.⁹² And then, even the relative probability of a quasi-merger being harmful to competition is difficult to assess.⁹³ But “uncertainty about causation need not frustrate government enforcement, which can focus on the management of risks. ... The statutes authorize the United States and the FTC as enforcers to “prevent” antitrust violations, with no causation requirement.”⁹⁴ And so, when it is hard to appreciate the danger of anticompetitive consequences to determine whether an acquisition is possibly a sapping device, it may be wiser to look carefully at relative probabilities of harm through wider industry acts.⁹⁵

Despite the similar patterns in all three cases, some minor differences stand out. Google was already a competitor with Character when it made the decision to acquire its team. Its acquisition included a modest price premium. In combination with Character's exit from the foundation model race, this could raise concerns of a horizontal merger resulting in unilateral effects.⁹⁶ In contrast, Amazon's deal with Adept can be construed as a vertical acquisition, given that Amazon had not released a foundation model before it hired Adept's team. In this case, the effects may be closer to reduced incentives to innovate.⁹⁷ Consequently, if Google's deal

⁹¹ *Microsoft*, 253 F.3d at 79 (“We may infer causation when exclusionary conduct is aimed at producers of nascent competitive technologies as well as when it is aimed at producers of established substitutes. Admittedly, in the former case there is added uncertainty, inasmuch as nascent threats are merely potential substitutes. But the underlying proof problem is the same--neither plaintiffs nor the court can confidently reconstruct a product's hypothetical technological development in a world absent the defendant's exclusionary conduct”).

⁹² Bryan & Hovenkamp, *supra* note 23, at 348 (“While there is good reason to believe that persistent acquisitions by dominant incumbents may produce harmful effects in the aggregate, it is often difficult to establish this in any individual case under the existing standards of merger review”).

⁹³ *Microsoft*, 253 F.3d at 79 (“Given this rather edentulous test for causation, the question in this case is not whether Java or Navigator would actually have developed into viable platform substitutes, but (1) whether as a general matter the exclusion of nascent threats is the type of conduct that is reasonably capable of contributing significantly to a defendant's continued monopoly power and (2) whether Java and Navigator reasonably constituted nascent threats at the time Microsoft engaged in the anticompetitive conduct at issue. As to the first, suffice it to say that it would be inimical to the purpose of the Sherman Act to allow monopolists free reign to squash nascent, albeit unproven, competitors at will--particularly in industries marked by rapid technological advance and frequent paradigm shifts. ... As to the second, the District Court made ample findings that both Navigator and Java showed potential as middleware platform threats”).

⁹⁴ Hovenkamp, *supra* note 9, at 2042.

⁹⁵ *United States v. H&R Block, Inc.*, 833 F. Supp. 2d 36, 49 (D.D.C. 2011) (quoting *Hosp. Corp. of Am. v. FTC*, 807 F.2d 1381, 1389 (7th Cir. 1986)).

⁹⁶ Niefer & Hoag, *supra* note 5, at 9 (“a typical concern would be that the models are competing for the same users and the merger would reduce head-to-head competition, harming users by raising the cost of access to the model or by reducing the quality of the model relative to a world in which both developers remained independent; that is, the typical concern would be that the merger results in unilateral effects”).

⁹⁷ Niefer & Hoag, *supra* note 5, at 10 (“the typical concern would be that the merger would reduce the incentive for the merged firm to innovate, harming consumers through the development of a less desirable model relative to the situation in which both developers remain independent. In this case, many of the types

is on the higher end of the anticompetitive spectrum of probabilities and Amazon's deal is on the lower end, Microsoft's deal with Inflection is likely situated in the middle.

By conducting empirical case studies and contextual comparisons of evidence, antitrust enforcers can pursue action based on prioritization of risks. They can also draw lessons from precedent while closely monitoring the viability of post-merger startups. Other partnerships between incumbents and leading developers can be informative of an incumbent's strategy as well.⁹⁸ When evaluating the likelihood of competitive harm, the agencies can exercise their discretion to bring enforcement cases under §7 of the Clayton Act where the relative risk is the highest.⁹⁹ This may be better than agency inertia, but it also requires implementing an effective remedy.

IV. REMEDIES

Redressability of quasi-mergers presents two problems: one of form and one of substance. Since the agreement involves two companies, which continue nominally independent of each other after the quasi-merger, the issue of formality arises first. It is a question of whether a quasi-merger can be construed as an acquisition. One approach is to treat the agreement as a sale of (all or substantially all) assets, where the assets in question are software engineers. Another approach can be adapting the de facto merger doctrine to scrutinize an agreement that attempts to circumvent merger review by the antitrust enforcers. In terms of substance, the problem is more complex. First, it is imperative to keep markets contestable, rather than trying to restore contestability. And second, a potential remedy should not impose limits on the exit options of emergents, undermining the system of incentives in place.

One proposal has emphasized that “[l]imiting the dominant firm's acquisition to a nonexclusive license of all relevant intellectual-property rights essentially permits the firm to acquire the integration value of the target, but not the exclusion value.”¹⁰⁰ Limiting the incumbent to a nonexclusive license solves the problem to the extent that the acquired assets are intellectual-property rights. But there is no exclusionary value when the technology has become obsolete without the labor of the software engineers. In all three quasi-mergers, the agreement included a non-exclusive license because the

of tools and evidence relied upon in the case of a typical merger raising unilateral effects concerns still would apply”).

⁹⁸ *Supra* note 28.

⁹⁹ Here, it is Google>Microsoft>Amazon. For an approach which invokes the incipency doctrine see Robert H. Lande, *Antitrust Ideas that Progressives Should Resurrect: Conglomerate Merger Legislation, No-Fault Monopolization, and Merger Incipency*, 53 U. Balt. L. Rev., 481, 502-512 (2024). In contrast, for a more measured approach see Jonathan Barnett, *The Case Against Preemptive Antitrust in the Generative Artificial Intelligence Ecosystem*, Artificial Intelligence and Competition Policy (eds. A. Abbott, T. Schrepel), Concurrences (2024).

¹⁰⁰ Hovenkamp, *supra* note 9, at 2045.

intellectual property was rendered competitively ineffectual owing to the loss of engineering talent.

Lemley and Wansley recommend an anti-competitive presumption that would apply to a few designated incumbents seeking to acquire nascent competitors developing “potentially disruptive technologies.”¹⁰¹ This presumption would be rebuttable if the incumbent showed that the emergent was going to fail and only the incumbent could rescue it.¹⁰² It is a policy that shifts the burden from the government to the acquirer.¹⁰³ But it also entails fewer exit options for startups. Is this a realistic policy in the current regulatory environment? Is it enough to reverse the IPO stagnation? And how could it be enforced in the quasi-merger context?

The fundamental problem is that injunctive relief cannot, and should not, be used to restrict employee mobility. In an important sense, that is the whole point of quasi-mergers—they are structured to shield the incumbent from antitrust enforcers. But does the structuring purpose align with acquisition incentives? To an incumbent, quasi-mergers may make sense from an antitrust point of view, but to everyone else involved, they are flawed in several ways. They withhold the cherished “exit” acclaim from founders. They deflate the expectation of outsized returns for venture capital investors. They split the startup’s employees into two groups, abandoning one in a lingering entity with an uncertain future. These compromises are imposed on all three constituencies to afford greater protection to the incumbent from regulatory scrutiny, but they go against the prevailing cultural norms. And the protection is not total: an enforcer can proceed on a de facto merger basis or under a sale of assets theory.¹⁰⁴ All that remains then, is to adequately deter the acquirer of a nascent competitor in proportion to the potential harm to competition.

An incumbent strengthening its innovation capability by acquiring talent, indicates a desire to transition from third-party product integration to in-house product development. But when this transition is not followed by detachment from existing partnerships, the government can aptly enforce it. If quasi-mergers thin the herd by displacing laggards, while partnerships coopt frontrunners from displacing incumbents, then agencies should focus on targeting exclusivity arrangements, rights of first refusal, cloud purchase commitments and governance agreements, to separate the incumbents from emergents that are not merger parties. Put simply, the incumbent’s dilemma should be the following: for every developer acquired through a quasi-merger, the incumbent

¹⁰¹ Lemley & Wansley, *supra* note 3, at 66.

¹⁰² Lemley & Wansley dislike “new rules that apply only to individual identified companies” but propose a rule that would only apply to Google, Amazon, Apple, Microsoft, Meta and maybe Nvidia. Despite this contradiction, their proposal has merit but also certain practical limitations when it comes to quasi-mergers. *Id.* at 62.

¹⁰³ Hovenkamp, *supra* note 9, at 2044 (“Large digital platforms should simply be forbidden from acquiring another firm except for unconditioned nonexclusive rights to intellectual property”).

¹⁰⁴ See the UK’s Competition and Markets Authority review of the Microsoft-InflectionAI agreement, <https://www.gov.uk/cma-cases/microsoft-slash-inflection-ai-inquiry#cma-clearance-decision>.

should proportionately relinquish control over emerging companies, whose products it has previously relied on (e.g. Anthropic, OpenAI, etc).¹⁰⁵ The agencies can issue a “de-staking notice” outlining their terms and if the incumbent is unwilling to disengage, the government can subsequently target the agreements between them.¹⁰⁶

A less intrusive option is also available. Silicon Valley operates with a non-adversarial decorum. A gentlemen’s agreement between the founders and all other employees of the startup which precludes partial desertions to incumbents without (i) a viable long-term plan for the surviving entity with a timeline of deliverables or (ii) all investors and employees exiting together, could put in writing what is already the customary practice. Furthermore, it can function as a trust-building instrument between founders and their employees, without inhibiting the optionalities of the startup.

The quasi-merger structure sacrifices the interests of some employees to benefit the incumbent which seamlessly avoids regulatory scrutiny. This is largely unnecessary. Founders who are targeted by incumbents have leverage; they do not have to jump ship leaving some behind. The agreement’s non-binding character does not create obligations or restrict the exit options of the startup. But founders who disregard the interests of their employees and continue to participate in such transactions will likely find it difficult to attract supporters in their next venture.

¹⁰⁵ Partnership agreements can be categorized in this order: (i) governance, (ii) product (parity agreements, integration processes, access to expertise, information sharing, etc.), and (iii) cloud purchase commitments. For transactions that resemble vertical acquisitions, enforcers can prioritize cloud purchase commitments, incentivizing emergents to diversify their cloud service providers. For horizontal acquisitions, governance and product agreements should be prioritized. But ultimately, it is a question of prosecutorial discretion.

¹⁰⁶ Herbert Hovenkamp, *Structural Antitrust Relief Against Digital Platforms*, 7 J. Law Innov., 1, 40 (May 2024) (“For example, consider an injunction striking down a Microsoft exclusive licensing agreement that had required an application producer to use Internet Explorer when engaging the internet. With the exclusivity provision removed, the application producer might be able very quickly to reprogram its software to a different browser or insert a browser choice step that the customer could use to select one”).

CONCLUSION

Artificial intelligence holds immense potential, prompting fierce competition among foundation model developers. Threatened incumbents may be tempted to engage in anticompetitive practices. The cases of Character, Inflection and Adept have shown that quasi-mergers may be cooptive acquisitions, but the rapid pace of innovation complicates efforts to accurately assess the impact of these agreements. Circumstantial evidence may offer clues, but not certainty. In such circumstances, an approach that investigates industry patterns and prioritizes enforcement action based on relative risk of harm may prove more effective than agency inertia. Although quasi-mergers are intentionally designed to shield incumbents from government scrutiny, this challenge is not insurmountable. Antitrust enforcers can look beyond formalities and implement remedies that extend beyond transaction-specific solutions. And founders can be peer pressured to start looking out for their own.