

Tech Wars: Return of the Conglomerate – Throwback or Dawn of a New Series for Competition in the Digital Era?—*

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Abstract

The conglomerate model, once thought of as a past relic, has begun to stage an astonishing comeback in a seemingly unlikely place – none other than the high-flying and perennially evolving tech industry. This comeback has coincided with an intriguing change in the nature of competition for the high-tech industry in the digital era, morphing into a multi-contact war between conglomerate-like businesses, with clashes ensuing on multiple battlefields. While this phenomenon has yet to receive proper attention in antitrust circles, multi-contact competition is not completely novel for antitrust. Antitrust has grappled with these aspects in the past, mostly in conglomerate mergers. But, there has not yet been a proper analysis of the recent rise of multi-contact competition waged by conglomerate businesses (either in substance or true form) in today's tech industry. This paper provides a foray into certain key aspects of multi-contact competition waged by conglomerate tech businesses with implications for antitrust law and analysis. Analysis shows it would be wrong to consider emerging conglomerate competition in the digital era as a throwback from the past. Careful consideration of a firm's strategy is required to properly analyze this phenomenon, as should be for antitrust analysis generally.

KEY WORDS: conglomerate, corporate form, antitrust, competition law, business strategy, multi-contact competition, technology industry, digital era

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I. Introduction: The (Unlikely) Return of the Conglomerate

There was once a time when conglomerates roamed supreme in the market's realms. These large and colorful beasts were recognized as the dominant species of the corporate form,¹⁾ and were the subject of both praise and fear.²⁾ Beginning in the 1980s, however, their fate suddenly changed for the worse, and under the assault of so-called "bust up takeovers" these creatures receded from the corporate scene.³⁾ This led commentators at the turn of the century to observe the once vaunted conglomerate form to be at risk of becoming an "endangered" species.⁴⁾ Or so they believed.

The conglomerate model has begun to stage a comeback in a seemingly unlikely place for what many believe to be an old-fashioned (and even ill-conceived) relic—none other than the high-flying and perennially evolving tech industry. The astonishing return of the conglomerate model has coincided with an intriguing change in the nature of competition for the high-tech industry, particularly where platform businesses harnessing network effects are involved. Competition in the digital era's tech industry has morphed into a *multi-contact* war – a war between conglomerate-like

1) Gerald F. Davis, Kristina A. Diekmann & Catherine H. Tinsley, *The Decline and Fall of the Conglomerate Firm in the 1980s: The Deinstitutionalization of an Organizational Form*, 59(4) AM. SOC. REV. 547 (1994) ("The diversified corporation became the dominant form of the industrial firm in the United States over the course of the twentieth century ... By 1980, the triumph of the firm-as-portfolio model seemed complete ...").

2) For an expose extolling the virtues of the conglomerate form, see James J. Ling, *The Conglomerate and Antitrust*, 39(1) ANTITRUST L.J. 19, 20 (1969) ("... the translation of a large company into a number of small or middle-sized businesses can make many an enterprise more efficient – and more effective in its market place – and, thus, more profitable."). During the same period when Ling sung these praises, conglomerates continued to be the subject of scrutiny by antitrust authorities, particularly in the context of mergers.

3) Davis, Diekmann & Tinsley, *supra* note 1, at 548.

4) See, e.g., Francesco Guerrera, *Decline sets in at the conglomerate*, FINANCIAL TIMES (Feb. 4, 2007), <https://www.ft.com/content/58d234f0-b48c-11db-b707-0000779e2340> (citing a high-level management consultant as stating that "The conglomerates are dead ... With some rare exceptions, the conglomerates' business model belongs to the past and is unlikely to reappear.").

businesses, with clashes on multiple battlefields.⁵⁾ In fact, the conglomerate model's comeback seems to have extended beyond competition toward actual corporate forms, as recently evidenced in Google's reorganization into Alphabet.⁶⁾

What does this then portend for antitrust law and analysis? Both the change in the tech industry's competitive nature and the conglomerate model's concomitant resurgence in today's digital era have garnered little, if any, attention within antitrust circles. This does not mean the multi-dimensional characteristics of market competition involving the tech industry have been completely overlooked. Much ink has been spilt over the attributes of multi-sided markets, and the network effects coursing through platforms straddling the multiple dimensions of such markets.⁷⁾ Nor is considering multi-contact competition completely novel for antitrust. Antitrust has grappled with aspects of multi-contact competition going back more than half a century ago, mostly in the conglomerate merger

5) Yong Lim, *The Rules of the Game in a New World: Antitrust and the New Frontier of Digitized Personal Information* n.7 (2017) (unpublished S.J.D. dissertation, Harvard Law School), ("Perceived boundaries between markets in the online industry have not only blurred, but are continuously shifting, and in some cases becoming obsolete as businesses, previously thought of as occupying separate markets, now compete with one another in multiple venues and dimensions ... from the perspective of competition, Facebook has long ceased to be just a social network, as Google (now Alphabet) is no longer just a search engine, Apple not simply a device manufacturer, Amazon not merely an e-commerce company, and Microsoft not only an (operating system) software provider. These companies are jousting with each other over an increasingly diverse set of businesses both within and outside their core competencies...").

6) Conor Dougherty, *Google to Reorganize as Alphabet to Keep Its Lead as an Innovator*, NYT (Aug. 10, 2015), https://www.nytimes.com/2015/08/11/technology/google-alphabet-restructuring.html?_r=0; Liz Hoffman, *Google Embraces the Conglomerate, For Good or Ill*, WSJ (Aug. 11, 2015), <https://blogs.wsj.com/moneybeat/2015/08/11/google-embraces-the-conglomerate-for-good-or-ill/>. Regulation or the threat thereof may also impact decisions on the scope and organization of firms as evidenced in Google's recent offer to reposition its online shopping business, i.e., Google Shopping, into a separate business unit from its search engine business to alleviate concerns raised by the EU authorities (James Titcomb, *Google to ringfence shopping unit to avoid further EU fines*, THE TELEGRAPH (Sep. 26, 2017), <http://www.telegraph.co.uk/technology/2017/09/26/google-ringfence-shopping-unit-avoid-eu-fines/>).

7) See, e.g., David S. Evans & Richard Schmalensee, *The Antitrust Analysis of Multi-Sided Platform Businesses*, in 1 THE OXFORD HANDBOOK OF INTERNATIONAL ANTITRUST ECONOMICS 404 (Roger D. Blair & D. Daniel Sokol eds., 2014).

context.⁸⁾ But there has not yet been a proper analysis of the recent rise of multi-contact competition waged by conglomerate businesses (either in substance or true form) in today's tech industry.⁹⁾ This paper is a preliminary foray into certain key aspects of multi-contact competition waged by conglomerate businesses in the tech industry, and its implications for antitrust law and analysis. Through the discussion, we will observe how insights from the strategic management field can prove invaluable for analysis, and that carefully considering the firm's strategy is required to properly analyze this phenomenon, as should be for antitrust analysis generally.

II. Antitrust's Encounter with Conglomerates of the Past

We would be remiss to disregard antitrust's previous experience with multi-contact competition between conglomerates, since past insights provide a helpful benchmark for analyzing the new conglomerate businesses of today's tech industry.

Let us begin by inquiring into the basic motivation for adopting the conglomerate form in the past. An important consideration driving this adoption was realizing the synergies between the different businesses making up the entire conglomerate.¹⁰⁾ But the real backbone of the rationale for forming a conglomerate was "diversification," purportedly leading to a reduction in overall risk for the firm by allowing it to weather the unfortunate failure or downturn of one or more of its businesses.¹¹⁾ This

8) Richard Posner, *Conglomerate Mergers and Antitrust Policy: An Introduction*, 44 ST. JOHN'S L. REV. 529 (1970).

9) This may be in part the result of the general decline of the conglomerate form over the past decades, decreasing its overall significance for antitrust. Another factor may be antitrust's lack of concern (and thus attention) regarding conglomerate mergers, which do not entail any significant direct overlap between the merging parties, after a flurry of challenges back in the 1970s (PHILLIP AREEDA, LOUIS KAPLOW & AARON EDLIN, *ANTITRUST ANALYSIS PROBLEMS, TEXT, AND CASES* 899 (7th ed. 2013)).

10) Guerrero, *supra* note 4 (noting "harvesting synergies between businesses" as one of the purposes of the conglomerate form).

11) J. Fred Weston, *The Nature and Significance of Conglomerate Firms*, 44 ST. JOHN'S L. REV. 66, 69-71 (1970) (explaining the theory underpinning the conglomerate form on the basis of

meant an investor in the conglomerate would also be shielded from the firm's individual businesses' volatility, in effect rendering the conglomerate into a portfolio of stock holdings for the individual investor—hence the phrase “firm-as-portfolio.”¹²⁾ A related, but no less important, attribute of the conglomerate form presented as part of its appeal was the possibility of “cross-subsidization” between the different businesses making up the firm's portfolio.¹³⁾ Like diversification (portfolio effect), cross-subsidization purportedly reduced the firm's business risks by buttressing its weak parts. It also allowed the firm to internally finance individual business needs, which was particularly beneficial when procuring outside financing might be challenging or costly.¹⁴⁾

At the same time, these virtues of the conglomerate form fueled concerns in antitrust circles. A prominent theory of harm raised was conglomerate predation, which could be financed internally through cross-subsidization, making the predation threat even more potent.¹⁵⁾ Some worried about so called “deep pocket” or entrenchment effects, namely that the conglomerate's combined resources and heft would enable it to engage in business conduct or practices on a scale impossible for rivals to match, foreclosing them from the market.¹⁶⁾ Another theory of harm, more relevant to our inquiry, was the possibility of (increased) reciprocity. Reciprocity is the practice of basing purchases not on the merits of the transaction's object

such “portfolio effects” together with synergies); Ling, *supra* note 2, at 20 (“Thus isolated from one another, the other ... companies would not be affected by a disastrous operational failure which might occur to one of the “sister” subsidiaries.”).

12) Davis, Diekmann & Tinsley, *supra* note 1, at 547.

13) Guerrero, *supra* note 4 (listing “cross-subsidizing weaker operations with revenues generated by the more profitable ones” as a major appeal for investors early on).

14) This understanding of the conglomerate form resulted in heightened equity prices, which in turn provided capital for continued expansion (*Id.*). The market would later recant this understanding as mistaken, setting the stage for the “deconglomeration” of the U.S. corporate world starting from the 1980s (Davis, Diekmann & Tinsley, *supra* note 1, at 548).

15) Weston, *supra* note 11, at 72-74.

16) *Id.* at 74-75. This theory seemingly found support in the EC's review of the GE / Honeywell merger (2001), where the primary stated concern was the possibility of the merged entity engaging in bundling, which lowered the effective price to levels that were difficult for rivals to match (Commission Decision of 3 July 2001, Declaring a Concentration to be Incompatible with the Common Market and the EEA Agreement Case COMP/M.2220 – General Electric/Honeywell, 2004 O.J. (L 48) ¶353).

(e.g., price, quality), but rather on the existence of purchases of one's goods by the other party. Conglomeration was thought to possibly facilitate such reciprocity, as it enlarged opportunities (various conglomerate goods or services) to engage in such reciprocal trading with others, even without explicit party agreement to do so.¹⁷⁾ Reciprocity was considered inimical to merit-based competition,¹⁸⁾ and thus condemned widely as late as the early 1970s.

All the above theories of harm have broadly receded in the modern antitrust world. One particular reason is the failure of deep pocket and entrenchment-based theories to recognize the possibility that the root of the concerns might be nothing more than efficiencies generated by the conduct or, more pertinently, the efficient scale and scope of the firm's business.¹⁹⁾ Allegations of predation have been met with caution due to fear that regulation might chill beneficial price competition. As for reciprocity, while it could in theory be utilized to extend or leverage a firm's market power,²⁰⁾ it could also be used to mask price discounts and drive competition.²¹⁾ This would at minimum counsel against summarily condemning the practice as was done in the past.²²⁾ Another reason for retreating enforcement was the thinking one could adopt a wait-and-see approach to see whether the conduct did generate competitive harm, rather than enjoin conglomerate mergers right away. And yet another contributing factor was undoubtedly the ascent of the Chicago school, which heavily criticized overenforcement against vertical restraints, particularly in conglomerate mergers lacking distinct areas of overlap between parties.

17) Weston, *supra* note 11, at 75-76.

18) See, e.g., *FTC v. Consol. Foods Co.*, 380 U.S. 592, 594 (1965).

19) Yong Lim & Geeyoung Min, *Competition and Corporate Governance: Teaming Up to Police Tunneling*, 36(2) *Nw. J. INT'L L. & BUS.* 267, 284 (2016) ("The fundamental weakness of the entrenchment theory is its distorted view of competitive advantages provided through economies of scale and scope, essentially rendering the theory into an aversion against "bigness" itself without discerning whether the advantages are a result of efficiency.").

20) For criticism of such a leveraging-based reciprocity theory, see Posner, *supra* note 8, at 530-531.

21) KAPLOW & EDLIN, *supra* note 9, at 891.

22) Edward D. Cavanagh, *Reciprocal Dealing: A Rebirth?*, 75(4) *ST. JOHN'S L. REV.* 633, 635 (2012).

III. The Conglomerates of the Tech Industry in the Digital Era

At first glance, the conglomerates that have emerged in the tech industry share similarities with conglomerates of the past. The business of today's tech industry conglomerates spans multiple and sometimes disparate products or services like past conglomerates. Let us use Alphabet (formerly Google) as an example.²³⁾ At the time of its restructuring into its present conglomerate form, Alphabet listed the following subsidiary businesses: Calico (longevity), Fiber (high speed internet), Google (Search, Maps, YouTube, Android, Ads, Apps), Google Ventures (venture capital business), Google Capital (investment fund), Google X (auto-driving cars, Google Glass, internet by balloon, moonshots), Life Sciences (glucose-sensing contact lens) and Nest (smoke alarms, home cameras, thermostats & connected home devices).²⁴⁾ While some businesses are more related and possible synergies are readily recognizable (e.g., Google and Fiber), this is less evident in some cases as the company itself recognizes (e.g., Calico, Life Sciences).²⁵⁾ Similar observations are possible in other modern tech conglomerates.²⁶⁾ This diversification by branching into a wide variety of businesses seems to be a deliberate strategy by the companies' management like past conglomerates.²⁷⁾ It also seems to have been spurred by the similar

23) The use of Alphabet (or Google) as an example here and subsequent discussions is not to imply in any manner liability or concerns with regard to its corporate structure or market behavior.

24) Google Inc., Current Report (Form 8-K) (Aug. 10, 2015).

25) Larry Page, *G is for Google*, GOOGLE OFFICIAL BLOG (Aug. 10, 2015), <https://googleblog.blogspot.com/2015/08/google-alphabet.html>. (noting that the new holding company would hold "companies that are pretty far afield of our main ... products" such as Life Sciences and Calico, and that the new corporate structure would allow for increased management scale as the company could "run things independently that aren't very related").

26) Reinhardt Krause, *The New Digital Conglomerates: Google, Facebook, Amazon ... And Apple?* (Jun. 11, 2016), <http://www.investors.com/news/technology/google-facebook-amazon-apple-digital-conglomerates/>.

27) See, e.g., MICROSOFT, Annual Report 2016, <https://www.microsoft.com/investor/reports/ar16/index.html>. ("Microsoft's success is based on our ability to create new and compelling products, services, and experiences for our users, to initiate and embrace disruptive technology trends, to enter new geographic and product markets, and to drive

need to generate growth and find new revenue sources.²⁸⁾

Parallels like these can be easily drawn, fitting the narrative that the conglomerate form has made a digital era comeback. If so, do such similarities call for the same treatment antitrust now confers upon conglomerates in the previous era, meaning antitrust would take a relatively lenient posture toward conglomerate mergers by these companies and the multi-contact competition they wage against one another and others?

The initial response from antitrust seems to be in line with such an approach. For example, the U.S. Federal Trade Commission (hereinafter, “FTC”) cleared Google’s acquisition of DoubleClick primarily based on the finding that the parties’ respective businesses (search and contextual advertising for Google, and third party ad serving for DoubleClick) did not overlap with one another.²⁹⁾ The possibility of anticompetitive leveraging, which could include reciprocity-like conduct, was also considered and rejected.³⁰⁾ When Google acquired Nest Labs years later, the FTC granted early termination, perhaps unsurprisingly when considering it was arguably less related to its core business than DoubleClick (thermostat and carbon monoxide detector manufacturing vs. third party online ad serving).³¹⁾ The analysis in these cases seemed to follow the conventional framework training its focus on the conduct’s impact on competition for discrete products and services on a separate and individual basis as

broad adoption of our products and services. We invest in a range of emerging technology trends and breakthroughs that we believe offer significant opportunities to deliver value to our customers and growth for the company.”) (underline by author).

28) Consider, for example, Microsoft’s continuous entry into various businesses (*e.g.*, mobile phones) to seek new generators of growth and revenue following Windows (Jay Greene, *Microsoft to Acquire LinkedIn for \$26.2 Billion*, WSJ (Jun. 14, 2016), <https://www.wsj.com/articles/microsoft-to-acquire-linkedin-in-deal-valued-at-26-2-billion-1465821523>).

29) FED. TRADE COMM’N, STATEMENT CONCERNING GOOGLE/DOUBLECLICK (FILE NO. 071-0170), at 7-8 (Dec. 11, 2007), https://www.ftc.gov/system/files/documents/public_statements/418081/071220googledc-commstmt.pdf.

30) *Id.* at 9-10 (considering and rejecting the possibility of Google engaging in conduct that might “force publishers to use AdSense,” its ad intermediation product). This was the same for concerns of harm to potential competition (*Id.* at 8-9).

31) FED. TRADE COMM’N, 20140457: GOOGLE INC.; NEST LABS, INC. EARLY TERMINATION NOTICE (Feb. 4, 2014), <https://www.ftc.gov/enforcement/premerger-notification-program/early-termination-notice/20140457>.

antitrust authorities have applied to past conglomerates.³²⁾ But is treating these new conglomerates like they are a throwback to the past the proper approach?

That might be the case if these new creatures were nothing more than offspring of the previous species, perhaps in different shades and colors but sharing the same DNA nonetheless. A closer look at the tech conglomerates' strategic motives for entering new markets and areas of business, however, shed light on some important differences in the market dynamics and the ensuing business strategy between the conglomerates before and during the digital era.³³⁾

Conglomeration observed in the digital era is still a "diversification" strategy, but with a different purpose. In the past, as previously discussed, diversification's main purpose was to allocate capital to reduce volatility and risk for the firm's stakeholders. Investors embraced this approach, at least during the conglomerate form's heydays, as a means of ensuring financial stability and increasing returns over time. They handsomely rewarded the firm's management with elevated equity prices. In today's digital era, conglomeration seems to be pursued more in fear of displacement rather than business cyclical, hedging against missing out on the "next new thing" coming out of disruptive technologies.³⁴⁾ Unless each company had radically different views of potential threats, they would

32) This is not to imply that conventional antitrust analysis turns a blind eye towards spillover effects to adjacent or separate markets, for example, through extensions of market power.

33) This is an example where insights drawn from the field of strategic management can inform antitrust law and policy. For a more general treatment of how management studies, and more specifically business strategy, can provide valuable insights for antitrust, see, Hillary Greene & Dennis Yao, *The Influences of Strategic Management on Antitrust Discourse*, 59(4), ANTITRUST BULLETIN 789 (2014).

34) Steven Davidoff Solomon, *New Buying Strategy as Facebook and Google Transform into Web Conglomerates*, N.Y. TIMES, (Aug. 5, 2014), <https://dealbook.nytimes.com/2014/08/05/new-strategy-as-tech-giants-transform-into-conglomerates/> ("But cash is not the only factor driving the conglomerate wave. Fear is, too. The Internet giants do not want to face obsolescence because of new disruptive technology. So they are riding every hot technology wave."); Nicolas Petit, *Technology Giants, The "Moligopoly" Hypothesis and Holistic Competition: A Primer*, at 18-21, 32-46 (Oct. 20, 2016), <https://orbi.uliege.be/bitstream/2268/207361/1/Technology%20Giants%20The%20Moligopoly.pdf> (referring to "paranoia" on the part of tech conglomerates regarding "disruption" and the resulting entry into new markets).

be hedging against identical or at least similar threats, leading to new battlefields opening among them in an already multi-fronted conflict.³⁵⁾ A good example is the conglomerates' entry into the digital assistant business.³⁶⁾

Conglomeration also seems to be part of a strategy to broaden the breadth and scope of a customer's engagement with the firm, by inducing them to continuously interact with the firm in all daily activities through an array of products and services.³⁷⁾ In the current data-driven economy, a customer's engagement with the firm's products allows the firm to collect personal data, and opens opportunities to generate sales or revenue while leveraging insights gleaned from collected data. The constant struggle to gain, expand and retain such *access* to current and potential customers is a hallmark of competition in this data-driven digital era. Diversification is a means, and perhaps even a necessity, for tech conglomerates to strengthen and/or extend the access they currently enjoy in the market. These strategic motives distinguish the current conglomeration in the tech industry from the past.³⁸⁾

35) Petit, *supra* note 34, at 38 ("This process often brings the moligopolists to mimic each other. When one moligopolist discovers a potential new market foothold outside of its core, other moligopolists tend to follow suit.").

36) An interesting observation here is that the means and approaches of entry are not identical as the tech conglomerates utilize different platforms and devices that leverage their existing strengths, which creates differences in the competitive intensity among them. For example, Microsoft's Cortana and Apple's Siri utilize roughly the same platforms (PC & mobile). On the other hand, Google has recently entered the fray with Google Home, ostensibly placing it near Amazon's Echo (powered by Alexa), which has sparked comparisons between the two devices (Andrew Gebhart, *Google Home vs. Amazon Echo: Alexa Takes Round 1* (Nov. 9, 2016), <https://www.cnet.com/news/google-home-vs-amazon-echo/>).

37) Rakesh Sharma, *Amazon, Facebook, Google, And The New Tech Conglomerate*, FORBES (Aug. 9, 2014), <https://www.forbes.com/sites/rakeshsharma/2014/08/09/amazon-facebook-google-and-the-new-tech-conglomerate/#7f4fb003788f> ("Competitive advantage in the technology sweepstakes ... rests in user numbers. Aspiring conglomerates, such as Amazon, Google, and Facebook are fighting a platform war. Their rush is to develop a cohesive platform, where users move seamlessly between experiences with a common underlying platform."). Such a strategy is not limited to the tech industry or digital markets, but has become more prominent for network economies (Ravi S. Achrol & Gregory T. Gundlach, *Network Organization and Systems Competition: A Marketing Analysis*, 59(4) ANITRUST BULLETIN 743, 767-768 (referring to such a strategy as "relationship marketing").

38) N. Venkat Venkatraman, *Alphabet Isn't a Typical Conglomerate* (Aug. 15, 2015), <https://>

Another distinguishing strategic motive for conglomeration in the digital era is the generation and exploitation of data-driven network effects. Network effects are not a peculiar attribute of a data-driven market. The existence of network effects has long been recognized (*e.g.*, newspaper business when only printed versions were available), and their implications for antitrust have been the subject of extensive discussion, particularly in platform businesses. Network effects can boost economies of scale for a single side (direct network effects) or multiple sides (indirect network effects) of a platform, assuming the effects are positive for the relevant sides. This was true in the pre-digital era and remains the same today. But economies of scope can also be amplified by network effects coursing through multiple businesses or platforms, not just multiple sides of a platform. This is more apparent in a data-driven economy.³⁹⁾

Let us use a simple, if somewhat crude, example. Alphabet's G (Google) observes that individual A has recently searched Italian towns that host famous wineries. Google already knows A is an avid traveler based on her YouTube videos. Google is also aware A enjoys wine through her emails with friends. Based on this information, Google thinks there is a high possibility A is planning to go on a winery tour in Italy, resulting in various ads from Italy tour companies on A's Gmail page. But in fact, A was planning to go to an Italian restaurant with a fellow wine lover and was curious about the makers of the fine wines she was soon to consume. A had perused local Italian restaurants on a popular restaurant rating site. Had Google provided the service or a similar one, it might have given A ads including offers from restaurants with excellent wine lists. This would have

hbr.org/2015/08/alphabet-isnt-a-typical-conglomerate ("Alphabet is not a throwback to the bygone conglomerate model whose main purpose was to allocate financial capital across divisions and rebalance the portfolio through acquisitions and divestments. It is designed to spawn companies armed with deep science and technology that share a common worldview on machine learning, big data, algorithms, analytics, and the cloud.").

39) OECD, DATA-DRIVEN INNOVATION FOR GROWTH AND WELL-BEING: INTERIM SYNTHESIS REPORT 29 (2014), <https://www.oecd.org/sti/inno/data-driven-innovation-interim-synthesis.pdf> ("The diversification of services leads to even better insights if data linkage is possible. This is because data linkage enables 'super-additive' insights, leading to increasing returns to scope'. Linked data is a means to contextualise data and thus a source for insights and value that are greater than the sum of its isolated parts (data silos)."); Sharma, *supra* note 37 ("The technology conglomerate ... is less about profits and more about platforms.").

generated more revenue for both Google and its advertising customers, because A might have clicked on an ad instead of simply ignoring them.⁴⁰⁾

As shown in this example, the scope (variety) of the data an entity collects can be valuable. In the digital era, personal data is the thread tying different businesses to make it possible to realize efficiencies of scope, which may not have been feasible in the previous era.⁴¹⁾ Data can also amplify the indirect network effects existing within individual platforms that have been threaded by the conglomerate.⁴²⁾ Such data-driven network effects increase the value of the tech conglomerate's access to consumers, enabling it to derive greater revenue in the process of monetizing the access whether by direct sales or intermediation.

It should now be apparent why diversification has become a seemingly integral part of the tech conglomerates' strategy. And if access competition is a core element of market competition, *i.e.*, if tech conglomerates are all vying for valuable access, it should not come as a surprise that the tech conglomerates, while retaining their core competencies, are converging upon one another, resulting in the multi-contact competition one observes today. Conglomeration now is not the same as past conglomeration. What does this imply for antitrust policy? Some initial observations are made in the following section.

IV. What Conglomerate Competition in the Digital Era Means for Antitrust

Past conglomerate theories of predation and entrenchment were

40) Some of our readers may recall that Google actually acquired Zagat back in 2011 (Bianca Bosker, *Google Buys Zagat: Here's Why*, HUFFINGTON POST (Sep. 8, 2011), http://www.huffingtonpost.com/2011/09/08/google-buys-zagat_n_953863.html).

41) There is an interesting question of whether such data-driven economies of scope might quickly taper off as firm add businesses, because companies can derive the same insights from non-identical data sets, and in some cases with a small amount and variety of data. This may be true to some extent, but the fact that tech conglomerates continue to change their privacy policies to make it more feasible to combine and share data over their different businesses seems to indicate that data-driven economies of scope are meaningful for even companies that already enjoy significant scale and scope of collected data.

42) MAURICE E. STUCKE & ALLEN P. GRUNES, *BIG DATA AND COMPETITION POLICY* 190-191 (2016).

predicated on how conglomerates were expected to conduct their business, such as their willingness to subsidize a weaker business through their stronger brethren. Game theory further teaches us that seemingly unprofitable predation can be rational when carried out over multiple markets (e.g., undertaking predation in one market to discipline rivals or prevent entry into other more lucrative markets), a strategy the conglomerate form might enable. However, recent tech industry conglomeration does not seem to pursue cross-subsidized stability, making these theories of harm less relevant in our case.⁴³⁾

Reciprocity on the other hand presents a more intriguing question. One could conceive of a situation where the multi-contact competition settles into a stable state, where tech conglomerates recognize and respect each other's core competency. They would preserve the status quo by relying on one another's services or products for core competencies. There even seems to be precedent for this in Apple's reliance on Google's navigation service (Google Maps), setting it as the default iPhone service until 2012.⁴⁴⁾ Conglomerates would settle into an oligopolistic-like cross-relationship, with each conglomerate's core business(es) being protected from competition. Competition would occur, but only on the fringes outside the core businesses, while smaller rivals would be excluded.⁴⁵⁾

The author is not aware of any quantitative studies or data indicating such an outcome has already occurred or is likely to do so in the near future. Rather, qualitative evidence, albeit limited, would seem to raise doubts whether such reciprocity would be achievable.⁴⁶⁾ Tech conglomerates

43) The fact that it is not uncommon for many of the tech conglomerates' services to be ostensibly free-of-charge would also create complications for predation or entrenchment-based theories.

44) Bianca Bosker, *Apple's Lost Mappportunity: How Did a Tech Star Lose Its Way?*, HUFFINGTON POST (Sep. 22, 2012), http://www.huffingtonpost.com/2012/09/22/apple-maps-ios-6_n_1906005.html.

45) Note that this would not require a formal agreement between the parties to achieve this outcome, although one might conceivably mount an attack on the individual agreements to use another's services as part of an overall scheme.

46) From a theoretical point of view, reciprocity among multiple parties like our case naturally entails problems of coordination. On the other hand, once coordination is achieved, it may be more stable than the typical price oligopoly since cheating would mean an encroachment on another's core competency – an act that would seem easier to detect and

have continuously encroached upon one another's core competencies in varying degrees in the past. Just to name a few examples, Google has challenged Facebook with Google Plus, Amazon has challenged Apple with its Fire phone, and Microsoft continues to battle Google on search with its Bing engine.⁴⁷⁾ The intensity of competition for access seems to be heating up rather than cooling down.⁴⁸⁾ The core competencies of tech conglomerates also seem to be subject to change and have already converged in certain areas (*e.g.*, cloud computing), setting up an inevitable showdown between them, and making stable reciprocity more unlikely.

A related, more general, question is whether the rise of such conglomerates and the multi-contact nature of competition among them has the tendency to intensify competition or dampen it. If the latter were true, we would be facing a structural issue in data-driven markets.⁴⁹⁾ There are reasons to believe competition would intensify. Conglomeration may lower entry barriers by making entry easier due to the wide set of skills and knowhow of conglomerates and their advantages in scale, particularly if they are able to leverage their existing efficiencies into other markets. Data-driven network effects magnify the risks of becoming lazy, thus increasing incentives to vigorously compete. Even if reciprocity were to occur, competition would naturally intensify in the fringes. These fringes are

more difficult to carry out, thus reducing incentives to cheat.

47) Petit, *supra* note 34, at 37-38 (arguing that the tech conglomerates do encroach upon one another's core competency, but in limited fashion by seeking "low-end" footholds).

48) Consider the example of competition by the firms to serve as the ultimate digital assistant for individuals (Tom Warren, *Amazon is Beating Google in the Race to the Home Computer*, THE VERGE (Sep. 28, 2017), <https://www.theverge.com/2017/9/28/16378096/amazon-echo-alexa-google-home-competition> ("Amazon, Apple, Google, Microsoft, and Samsung are all chasing voice-based artificial intelligence with smart digital assistants that you talk to. It's a future we've been promised for years: a computer you can talk to at home, and now the competition to make it a reality is really heating up.")). This aspect of access seems to encompass or at least touch upon everyone's core competency.

49) If this were the case, one might be more willing to police restraints on intra-network/platform competition (*i.e.*, competition within or based on a particular platform), since this implies that inter-network/platform competition is structurally weak. There are some who advocate for a more structural approach, *i.e.*, breaking up the tech conglomerates (Jonathan Taplin, *Is It Time to Break Up Google?*, NYT (Apr. 22, 2017), <https://www.nytimes.com/2017/04/22/opinion/sunday/is-it-time-to-break-up-google.html>). See also Lina M. Khan, *Amazon's Antitrust Paradox*, 126 Yale L.J. 710, 802 (2017) (advocating treatment of the businesses of dominant tech conglomerates as "essential facilities").

disruptive, defeating reciprocity in the long run. One may think this would lead tech conglomerates to put off fringe competition too, but this would only increase the risks of being displaced not by one another but other smaller rivals. On the other hand, one may wonder whether the existence of multiple points of competition, compared to typical single-product oligopoly, would dampen incentives to deviate from oligopolistic outcomes. The ensuing war would be fought on multiple fronts, magnifying deviation costs. However, this mutual destruction-based theory of harm only works when market barriers are high and it is difficult for rivals other than the conglomerates to enter the market—an assumption unlikely to be sustainable in the current tech industry.

One other observation is made regarding the assessment of competitive harm. The multi-contact nature of competition among tech conglomerates is another reason to avoid being confined to the conventional approach of compartmentalized analysis of individual product or service markets. The FTC followed this approach in the Google/DoubleClick merger and proceeded to individually analyze markets defined in accordance with the parties' products. However, this approach may miss the mark if the merging parties' strategy was less about increasing or sustaining market power and more towards strengthening their to-be-combined access to customers. If the focus is on access, similarities or differences between the relevant products or services may be less important, as products formerly viewed as distant from each other may be competing against one another. In the living room, a digital assistant such as Amazon's Echo may be directly competing with an iPhone placed on a couch table. This competition would be decided by who the individual chooses to conjure up, Alexa or Siri.⁵⁰⁾

Another, perhaps tangential, issue is whether conglomeration increases the risk of regulatory capture or government action distortion. The concern

50) This further leads to the question of how to measure and analyze access competition. One might consider measuring access in terms of the length or intensity of engagement within a defined window of access (e.g., morning rush hour commuting by car drivers). Note that this is not to argue that access analysis can replace all other analysis or that access should serve as the sole dimension of competition. The point is that conventional analysis may fail to properly capture the true impact of a certain conduct on market competition, and that access assessment could compliment the overall analysis.

is that conglomeration would increase incentives for the firm to seek preferential but socially inefficient treatment from regulators (or legislators). It would have more to gain from such activities due to its breadth of businesses compared to single business firms. At the same time, conglomeration may make it more difficult to obtain net beneficial regulation because a rule favorable to one part of the conglomerate's business may be detrimental to other parts of its business.⁵¹⁾ Another question is, to the extent the tech conglomerate's businesses are data-driven, whether conglomeration might facilitate the evasion of privacy rules through the bundling of services subject to different levels of privacy regulation. Conglomeration could, in theory, increase the firm's incentives to lobby for socially suboptimal levels of privacy regulation, as this could benefit the conglomerate's overall business.

V. Conclusion

The new tech industry conglomerates, while sharing certain common features with past conglomerates, differ in their strategic motives for diversification. Such differences can inform antitrust analysis when assessing the multi-contact competition between conglomerates and the potential competitive harm stemming from their conduct, and thus should be carefully considered. Proper analysis of the unfolding digital era tech wars also requires antitrust flexibility from the strictures of distinct individual products forming the basis of conventional antitrust analysis. This departure will require fashioning new tools and metrics to support the analysis.

51) Adi Ayal, *FARINESS IN ANITRUST: PROTECTING THE STRONG FROM THE WEAK* 69-70 (2014).