Dynamic Competition, Online Platforms, and Regulatory Policy

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Call for Evidence: Online Platforms and the EU Digital Single Market

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Thank you for the opportunity to share some insights about dynamic competition, online platforms, and regulatory policy.

I am an economist and research fellow at the Mercatus Center, a 501(c)(3) research, educational, and outreach center affiliated with George Mason University in Arlington, Virginia, USA. I have previously served as a senior economist at the Joint Economic Committee and as deputy director of the Office of Policy Planning at the Federal Trade Commission (FTC), a federal agency that implements both competition policy and consumer protection policy. While I was at the FTC from 2001 to 2003, the FTC's Office of Policy Planning led an extensive initiative that sought to remove barriers that protected established intermediaries from competition from new, online platforms.[1] That issue remains a research topic that several of my colleagues at the Mercatus Center and I have pursued extensively in the ensuing years.

The first fundamental question for policymakers in this area is defining the policy goal. I believe the appropriate goal of competition policy related to online platforms should be the promotion of consumer welfare—a concept rigorously defined in the economics literature. Consumer welfare is maximized when every unit of every resource is employed in the use that consumers value most highly.[2] Competition policy agencies in the United States typically regard consumer

[1] See, e.g., FTC, transcripts, "Public Workshop: Possible Anticompetitive Efforts to Restrict Competition on the Internet," Federal Trade Commission, October 8–10, 2002; *Possible Anticompetitive Barriers to E-Commerce: Wine*, Report from the Staff of the Federal Trade Commission, July 2003), available at https://www.ftc.gov/sites/default/files/documents/advocacy_documents/ftc-staff-report-concerning-possible-anticompetitive-barriers-e-commerce-wine/winereport2.pdf; Brief for the FTC as Amicus Curiae, *Powers v. Harris*, No. CIV-01-445-F (W.D. Okla. 2002) FTC and U.S. Department of Justice comments on Proposed North Carolina State Bar Opinions Concerning Non-Attorneys' Involvement in Real Estate Transactions (July 11, 2002), available at https://www.ftc.gov/sites/default/files/documents/advocacy_documents/ftc-and-department-justice-comment-north-carolina-state-bar-concerning-proposed-state-bar-opinions/nonattorneyinvolvment.pdf; and the collection of papers on barriers to electronic commerce in automobiles, caskets, wine, contact lenses, and real estate in the *Journal of Law, Economics & Policy* 3, no. 2 (2007), many of which are based on research that originated at the FTC.

[2] Dennis W. Carleton and Jeffrey M. Perloff, *Modern Industrial Organization* (New York: HarperCollins, 1994): 102–07.

welfare as the sole goal of competition policy.[3] Even if policymakers choose to pursue goals other than consumer welfare, they need to understand the impact of policies on consumer welfare so they can act with full information of the relevant tradeoffs.[4]

Economics provides the theoretical and empirical tools for identifying circumstances when markets fail to maximize consumer welfare and action by competition officials might improve consumer welfare. Unfortunately, conflicting policy prescriptions can sometimes emerge from static competition theory and dynamic competition theory. Since most online platforms are quite obvious examples of innovation, it is critical that decision makers understand the implications of both theories and take dynamic competition into account when making policy choices.

Static competition and perfect markets

Static competition is the type of competition theory most commonly found in economics textbooks. In a perfectly competitive market, numerous competitors with access to the same technology and resources, selling undifferentiated products or services, compete on price. In a perfectly contestable market, the complete absence of entry barriers means that numerous *potential* competitors force incumbent firms to behave as if they faced numerous actual competitors.[5] In both types of perfect markets, no firm has "market power"—the ability to profitably raise price above cost. In theory, a perfect market maximizes consumer welfare, given the state of technology, consumer preferences, and available resources.

"Perfect market" theories are thus at the root of competition authorities' concerns about market concentration and sunk costs that serve as barriers to entry or discourage customers from switching to a new platform. Unfortunately, the perfect market theories assume that there is no innovation and provide no way of explaining innovation. Since innovation clearly increases consumer welfare, competition authorities need to utilize theory and research on dynamic competition if they are to truly achieve the goal of promoting consumer welfare.

Dynamic competition and real markets

The most prominent concept of dynamic competition is associated with economist Joseph Schumpeter. Schumpeter suggested that "competition from the new commodity, the new technology, the new source of supply, the new type of organization . . . competition which commands a decisive cost or quality advantage and which strikes not at the margins of the profits and the outputs of the existing firms but at their foundations and their very lives" triggers the most significant advances in human well-being.[6]

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[3] Timothy J. Muris, "Antitrust Enforcement at the Federal Trade Commission: In a Word—Continuity" (speech before the American Bar Association Antitrust Section annual meeting, Chicago, Illinois, August 7, 2001), available at https://www.ftc.gov/public-statements/2001/08/antitrust-enforcement-federal-trade-commission-word-continuity.
[4] Jerry Brito and Jerry Ellig, "A Tale of Two Commissions: Net Neutrality and Regulatory Analysis," *CommLaw Conspectus* 16, no. 1 (2007): 15.
[5] William J. Baumol, John C. Panzar, and Robert D. Willig, *Contestable Markets and the Theory of Industry Structure* (New York: Harcourt Brace Jovanovich, 1982).
[6] Joseph A. Schumpeter, *Capitalism, Socialism, and Democracy* (New York: Harper, 1950): 84.

Other scholars have also developed dynamic theories of competition.[7] In evolutionary competition theories, different firms have different abilities, novelty constantly arises, innovation occurs as firms grow more experienced, and there are limits to the amount of information decision makers can acquire and process.[8] Evolutionary theorists believe that competition is an open-ended process of innovation, experimentation, and feedback, and the purpose of competition is to reveal what services, costs, and prices are possible.[9] The firms that survive and grow are those that better anticipate what consumers want and find the best ways to produce it.[10]

Strategic management scholars view competition as continuous striving to develop superior capabilities to serve consumers in cost-effective ways.[11] In a dynamically competitive market, some of the most important capabilities are the abilities to innovate, to change business strategy rapidly, to drop and add services in response to customer needs, to upgrade products with new technology and features, and to change prices as market conditions change**.**

In dynamic competition, the existence of market power does not necessarily harm consumer welfare. The firm that first introduces a cost-reducing or quality-enhancing technology, feature, or service can temporarily earn higher profits—until its success is imitated. Successful competitors appear to earn rents, or payments that exceed the opportunity costs of the resources the firm uses.[12] The prospect of earning these rents motivates firms to strive for superior performance, which benefits consumers.

Dynamic competition is especially noteworthy in the types of markets considered in the subcommittee's inquiry:

> In markets built largely upon binary code, the pace and nature of change has become hyper-Schumpeterian: unrelenting and unpredictable. New disruptions flow from many unexpected quarters as innovators launch groundbreaking products and services while devising new ways to construct cheaper and more efficient versions of existing technologies. Change has been constant, uneven, and highly disruptive but it has also led to the progress and innovation seen flowing through the information sector over the past two decades.[13]

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[7] Jerry Ellig and Daniel Lin, "A Taxonomy of Dynamic Competition Theories," in *Dynamic Competition and Public Policy*, ed. Jerry Ellig (Cambridge, UK: Cambridge University Press, 2001), 16.
[8] Ibid., 21.
[9] Richard R. Nelson, "The Tension Between Process Stories and Equilibrium Models: Analyzing the Productivity-Growth Slowdown of the 1970s," in *Economics as a Process: Essays in the New Institutional Economics, ed.* Richard N. Langlois (Cambridge, UK: Cambridge University Press, 1986), 135, 147.
[10] F. A. Hayek, "Competition as a Discovery Procedure," in *New Studies in Philosophy, Politics, Economics and the History of Ideas*, F. A. Hayek (Chicago: University of Chicago Press, 1978), 179–90; Israel M. Kirzner, *Discovery and the Capitalist Process* (Chicago: University of Chicago Press, 1985), 119–49; Israel M. Kirzner, *Competition and Entrepreneurship* (Chicago: University of Chicago Press, 1973).
[11] Jay B. Barney, "Competence Explanations of Economic Profits in Strategic Management: Some Policy Implications," in *Dynamic Competition and Public Policy*, Ellig, 45.
[12] Harold Demsetz, "Industry Structure, Market Rivalry, and Public Policy," *Journal of Law & Economics* 16, no. 1 (1973): 1–9.
[13] Brent Skorup and Adam Thierer, "Uncreative Destruction: The Misguided War on Vertical Integration in the Information Economy," *Federal Communications Law Journal* 65, no. 2 (2013): 180.

Regulatory implications of dynamic competition research

Dynamic competition is not just about price. In some cases, price may be a less important factor than various aspects of quality or performance. Performance, rather than price, might be the relevant attribute for identifying whether different service providers are in the same market or determining whether a firm has market power.[14] Control over differentiated content can be a key aspect of competition,[15] rather than a threat to competition.

Business practices that appear to be restrictive, discriminatory, or an attempt to "lock in" customers can create consumer benefits by enhancing performance. For example, Apple's iPhones and iPads are "walled gardens" that restrict the services and apps allowed on the platform. The iPhone and iPad have been tremendously successful in part because Apple's closed system allows it to ensure that services are intuitive, seamless, and less vulnerable to viruses and malware.[16] Consumers willingly choose to use these restricted platforms even though other options exist. "Openness is not necessarily always good for competition, nor are closed systems always bad."[17] Most empirical research finds that vertical restrictions voluntarily adopted by business firms tend to enhance, rather than harm, efficiency and consumer welfare.[18] For this reason, restrictive business practices that competition authorities suspect harm consumers should be subject to an evidence-based "rule of reason" analysis that considers both benefits and costs to consumers, rather than a per se prohibition.

Market power need not harm consumer welfare. Profits that appear to be "mere rents" may actually be a risk premium or a return on the successful firm's investment in unique capabilities. Business practices that at first glance appear merely to transfer wealth from consumers to incumbent firms may actually be the means by which the firm collects its reward for successful innovation. Dynamic competition theory suggests that such practices should be given the benefit of the doubt if they do not demonstrably reduce economic efficiency.

Dynamic competition has the potential to reduce the significance of sunk costs as a barrier to entry. In dynamically competitive markets with heterogeneous firms, innovation allows new entrants to overcome some of the incumbent's sunk cost advantage.[19] If a new entrant can

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[14] Christopher Pleatsikas and David Teece, "New Indicia for Antitrust Analysis in Markets Experiencing Rapid Innovation," in *Dynamic Competition and Public Policy*, Ellig, 95.

[15] Alex Chisholm, chief executive, UK Competition and Markets Authority, "Platform Regulation—Antitrust Law versus Sector-Specific Legislation: Evolving Our Tools and Practices to Meet the Challenges of the Digital Economy" (speech presented at the Bundesnetzagentur conference, Bonn, Germany, October 27, 2015), 8 of printed HTML version.

[16] Skorup and Thierer, "Uncreative Destruction," 169.

[17] Chisholm, "Platform Regulation" 3 of printed HTMLversion.

[18] Francine Lafontaine and Margaret Slade, "Exclusive Contracts and Vertical Restraints: Empirical Evidence and Public Policy," in *Handbook of Antitrust Economics*, ed. Paolo Buccirossi (Boston: MIT Press, 2008), 391—414.

[19] The economic theory that posits sunk costs to be entry barriers assumes that both incumbents and potential entrants have access to the same technology, so that all can produce at the same total cost. As two of the theory's developers noted, "By entailing the complete absence of barriers to entry, perfect contestability, again like perfect competition, threatens to rule out entirely the reward mechanism that elicits the Schumpeterian innovative process. This mechanism, as we have seen, rests on the innovator's supernormal profits, which are permitted by the temporary possession of monopoly power flowing from priority in innovation. Since perfect contestability rules out all market power . . . the market mechanism's main reward for innovation is destroyed by that market form."

provide service comparable to the incumbent's at a lower total cost, or if the entrant can offer new performance features that are valuable to consumers, then entry can occur despite the presence of sunk costs. Examples abound of dominant platforms, sometimes created with substantial sunk costs, that sunk into oblivion when faced with new competition. These include smartphones, smartphone operating systems, Internet service providers, social networking sites, instant messaging platforms, web portals, web browsers, and numerous types of software.[20] "MySpace and Bebo, if you remember them, serve as useful reminders of how short-lived perceived dominance can be."[21] Since entry barriers in the form of sunk costs are less problematic due to dynamic competition, their existence is not a reliable indicator of whether a firm has market power.

Government-created entry barriers are still suspect. There is one form of barrier to entry that dynamic competition has great difficulty overcoming: government-granted protection and privileges to incumbent firms. When entry is prohibited, superior efficiency alone does not enable a new competitor to enter a market. Short of outright prohibitions, regulations that raise rivals' costs can also prevent innovative firms from entering new markets.[22] UK Competition and Markets Authority Alex Chisholm recently noted the example of the European Court of Justice's "right to be forgotten" ruling, which could curtail competition by imposing substantial compliance costs that smaller companies and potential entrants cannot afford.[23] In a wide variety of industries, established firms advocate regulation of new online platforms simply to prevent or forestall competition from these competitors that offer lower costs, greater variety, greater convenience, or other consumer benefits. (In the United States, this has occurred in industries as diverse as taxis, hotels, restaurants, auctions, automobiles sales, caskets, wine, contact lenses, legal services, and real estate.[24]) For these reasons, the type of barrier to entry that poses the most significant threat to dynamic competition is government-imposed restrictions on entry. Competition authorities should scrutinize government-created entry barriers and seek to remove them via legal action or competition advocacy if the entry barrier creates no social benefit commensurate with its cost in terms of consumer welfare.[25]

Mandated sharing or "openness" regulations could create monopolies. Competition authorities should also view with skepticism any calls to impose sharing or "openness" requirements on

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William J. Baumol and Janusz A. Ordover, "Antitrust: Source of Dynamic and Static Inefficiencies?," in *Antitrust, Innovation, and Competitiveness*, eds. Thomas M. Jorde and David J. Teece (New York: Oxford University Press, 1992), 85.

[20] On smartphones, smartphone operating systems, and Internet service providers, see Skorup and Thierer, "Uncreative Destruction," 176–79, 185. On social networking, web portals, and instant messaging, see Adam Thierer, "The Perils of Classifying Social Media Platforms as Public Utilities," *CommLaw Conspectus* 21, no. 1 (2013): 274–78, 288. On web browsers and software, see Stan Liebowitz and Stephen E. Margolis, "Network Effects and the Microsoft Case," in *Dynamic Competition and Public Policy*, ed. Ellig, 160–92.

[21] Chisholm, "Platform Regulation," 5 of printed HTML version.

[22] Christopher Koopman, Matthew Mitchell, and Adam Thierer, "The Sharing Economy and Consumer Protection Regulation: The Case for Policy Change" (Mercatus Research, Mercatus Center at George Mason University, Arlington, VA, December 2014), 7–8.

[23] Chisholm, "Platform Regulation," 5 of printed HTML version.

[24] See the references cited in footnote 1 above.

[25] Numerous examples of FTC competition advocacy letters and amicus briefs dealing with regulatory barriers to competition from online platforms are available at "Advocacy," Federal Trade Commission website, https://www.ftc.gov/policy/advocacy.

dominant platforms. Various commentators have argued that some type of sharing or openness regulation is appropriate for Facebook, Google, eBay, Twitter, and Amazon because network externalities make them natural monopolies or close to it. Such calls are grounded in speculation that the dominant platform may become a monopoly, but monopolization can become a self-fulfilling prophecy when requirements for sharing or openness discourage competitors from building their own platforms.[26]

Ex post antitrust enforcement will often be superior to ex ante regulation. Dominance does not necessarily harm consumers; seemingly restrictive practices can enhance competition; and innovative markets change rapidly. Under these circumstances, ex post enforcement—based on case-specific empirical analysis to determine whether consumers have been harmed—can better protect competition and consumers than ex ante prohibitions based on projections of the potential for harm.[27] If MySpace, for example, had been subjected to public utility regulation because of its temporary market dominance, it is quite possible that competitors like Facebook and LinkedIn would never have emerged, because the potential for regulation would have diminished the profit potential from successfully challenging MySpace.

I hope this brief summary will prove useful to the subcommittee in its inquiry. I would be happy to address any questions you may have as you proceed.

[26] Thierer, "The Perils of Classifying Social Media Platforms," 269.

[27] "The significant risks associated with premature, broad-brush ex ante legislation or rule-making point towards a need to shift away from sector-specific regulation to ex post antitrust enforcement, which is better adapted to the period we're in, with its fast-changing technology and evolving market reactions." Chisholm, "Platform Regulation," 2 of printed HTML version.