ARE A COMPETITION AUTHORITY AND AN INDUSTRY REGULATOR EQUIVALENT?

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INTRODUCTION

FTC Commissioner Ohlhausen has raised the question: Can antitrust enforcement achieve all the same beneficial outcomes as industry regulation? In this essay I will address the case of broadband service, since that was the topic of the conference.[1] I believe the answer is "no," and this essay will explain why.

I will make an important initial assumption, which is that the competition authority I analyze is being contrasted with a regulator that maximizes consumer welfare—and not employment, the market share of the government-owned firm, or any number of other options.[2] Under this assumption, a regulator maximizing consumer welfare and the competition authority have very similar goals. The proponents of the view that these agencies will—or should—achieve the same ends might posit that the best way to help consumers is for the regulator to restrict itself only to protecting competition. With all its tools, the industry regulator can simply mimic the antitrust agency. And if a problem is not "anticompetitive," then there is no reason for the industry regulator to fix

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1. This essay is adapted from a panel presentation on Competition Policy given by Professor Morton at the 15th annual Silicon Flatirons Center Digital Broadband Migration Conference at the University of Colorado Law School (Feb. 8, 2015). Video of this panel is available at http://www.siliconflatirons.com/events.php?id=1495 under "Competition Policy."

2. *Compare* Treaty on the Functioning of the European Union, art. 102, Oct. 26, 2012, 2012 O.J. (C 326) 89, *with* Sherman Act, 15 U.S.C. §§ 1–7 (2014).

it. Therefore, the two agencies would be interchangeable.

I. AFFECTING MONOPOLY OUTCOMES

There are at least two reasons why this proposition is not going to be true under current US laws and institutions. The first point is straightforward. Suppose the market contains a monopolist that appeared many years before due to "historical accident" and not due to any violation of the antitrust laws. This monopolist would likely not be violating any of the competition laws in the United States: it is not violating Section 1 of the Sherman Act because there is not anyone else in the market with whom to collude;[3] it is not violating Section 2 of the Sherman Act because it is already a monopolist and is not engaging in monopolization;[4] and it is not violating the Clayton Act because there is no one in the market with whom to merge.[5] Under the competition laws of the United States, the antitrust authority would not have authority to challenge this monopolist, yet the monopolist would be able to choose a high price, set a low quantity, and deliver a low quality due to its market power.[6]

In this setting, the U.S. Department of Justice ("DOJ") or the Federal Trade Commission ("FTC") are not going to be able to improve consumer welfare unless, for instance, they decide to use antitrust law to challenge and break up the monopolist. (Recall I have ruled out by assumption monopolization behavior.) We saw a variant of this approach in the DOJ's case against the former regulated AT&T.[7] For some

3. Collusion requires two or more firms; my example contains a monopolist, which is defined to be one firm that controls the entire market for a particular good or service. One firm therefore cannot collude on its own. *See infra* note 39.

4. My example begins with a pure monopolist which, by definition, is the only firm in the market for a particular good or service. Monopolization requires that a firm become the only firm in the market, which by definition has already happened. *See* U.S. DEPT. OF JUSTICE, COMPETITION AND MONOPOLY: SINGLE-FIRM CONDUCT UNDER SECTION 2 OF THE SHERMAN ACT 14 (2008) [hereinafter COMPETITION AND MONOPOLY].

5. *But see* Steven C. Salop & Jonathan C. Baker, *Antitrust, Competition Policy, and Inequality*, 104 GEO. L.J. ONLINE 1, 22–23 (2015) (recommending that U.S. antitrust law target exploitative monopolistic conduct in the same way that the EU prohibits abuse of dominance).

6. *See* COMPETITION AND MONOPOLY, *supra* note 4, at 22. A firm that is a monopolist is by definition a firm that controls the entire market for a particular good or service (the Greek prefix mono- being the clue to this definition). *See Mono-*, OXFORD ENGLISH DICTIONARY (2nd ed. 1989). The firm cannot merge without a partner and there are no other firms in the market for that good or service.

7. *See* United States v. AT&T Corp., 552 F. Supp. 131, 166 (D.D.C. 1982) *aff'd sub nom.* Maryland v. United States, 460 U.S. 1001 (1983) ("To the extent, then, that the proposed decree proceeds on the assumption that the structural reorganization will make it impossible, or at least unprofitable, for AT&T to engage in anticompetitive practices, it is fully consistent with the public interest in the enforcement of antitrust laws.") (explaining how antitrust laws are used to challenge monopolists).

reason—perhaps the industry-specific regulator is captured and is not preventing high prices and low quality or perhaps technology is improving the alternatives to the monopolist—the antitrust agency decides to use its power to end the firm's monopoly position. Such an action would create competition, and by creating competition, would then give the antitrust authority something to do going forward. However, notice that making the antitrust and industry regulators more similar in the setting of a monopoly market structure requires quite a strong action by a competition authority. Breaking up the monopolist is not a tweak around the edge; it is a wholesale re-design of the market structure that the authority began with.[8] This may be one scenario that Commissioner Ohlhausen envisioned when she suggested that the antitrust authority be placed in charge of more regulated industries.[9]

So, the first difference between the regulator and the antitrust authority occurs when the market structure is a monopoly. In this setting, and under my assumptions, there is no behavior the antitrust authority can affect with its tool kit. However, now we turn to the issue of how an industry regulator can affect price, quantity, technology choice, etc. Notice that asking this question in the broadband setting requires addressing the following: Does broadband fit the monopoly paradigm? Many will say that cable broadband faces fierce competition from mobile broadband, satellite services, telco services, and fiber overbuilding.[10] Others will note that there are limitations of each of these technologies in providing fast broadband: mobile is still developing capacity and is very expensive, DSL is relatively slow, satellite lacks high-speed uplink capability, and overbuilding does not reach all households.[11] Using its

8. *See* Anne K. Bingaman, Assistant Attorney Gen., Antitrust Div., U.S. Dept. of Justice, Address at The National Press Club: Promoting Competition in Telecommunications (Feb. 28, 1995).

9. *See* Maureen Ohlhausen, Commissioner, Fed. Trade Comm'n, Remarks at the panel presentation on Competition Policy at the 15th annual Silicon Flatirons Center Digital Broadband Migration Conference at the University of Colorado Law School (Feb. 8, 2015). *See* Video of Competition Policy panel, *supra* note 1.

10. *E.g.*, Mark Israel, Comcast/Time Warner Cable: Implications for Broadband Competition, Presentation Before FCC Staff, *in* Ex Parte of Comcast Corp., *Applications of Comcast Corp. and Time Warner Cable Inc. for Consent to Transfer Control of Licenses and Authorizations* [hereinafter "*Comcast-TWC Merger Apps.*"], MB Dkt. No. 14-57, 8, 26 (filed May 8, 2014), http://apps.fcc.gov/ecfs/document/view?id=7521123582 (stating that the merger poses no harm to competition). *See also* Public Interest Statement of Comcast Corp. & Charter Commc'ns, *Comcast-TWC Merger Apps.*, MB Dkt. No. 14-57, 11 (filed June 5, 2014), http://apps.fcc.gov/ecfs/document/view?id=7521215151 (arguing that the merger will spur competition).

11. *See* John B. Horrigan, Report: Consumers and Choice in the Broadband and Wireless Markets, *in* Ex Parte of Public Knowledge, *Comcast-TWC Merger Apps.*, MB Dkt. No. 14-57, 2–7 (filed Nov. 13, 2014), http://apps.fcc.gov/ecfs/document/view?id=60001010631 (documenting the lack of choice consumers face in broadband providers); CTC Tech. & Energy, Report: State of the Art and Evolution of Cable Television and Broadband

measure of high capacity (25 Mbps down / 3 Mbps up), the FCC calculates that this capacity is unavailable to 8% of Americans living in urban areas, 53% of Americans living in rural areas, and 63% of Americans living on tribal lands and in the U.S. territories.[12] If a significant percentage of American consumers have one or zero fast fiber optic cables (by the definition of the regulator) into their house, then regulators might characterize that situation as one where firms have market power, and they might be concerned about outcomes such as price, quantity, and innovation.

In general, what is it that the industry regulator can do that is superior to the antitrust authority in a setting where firms have market power? This section of the essay will remind readers of the underlying reason why regulation is controversial. Observers often compare a regulated market to one with perfect competition, or to other markets that have lots of competition.[13] But regulation typically cannot achieve these competitive outcomes; when the regulated firm possesses market power, regulation is necessarily imperfect.[14] This year, as those of you who follow the economics world may know, a French economics professor, Jean Tirole, won the Nobel Prize in Economics.[15] He won, in part, for his work in the area of the economics of regulation, and the point above is a central theme of that work.

First, let us review why governments do not typically regulate prices, quantities, and investments in competitive markets (governments, of course, often regulate over standards of safety, environment, labor, etc.).[16] Competing firms all desire the business of consumers and try to

Technology, *in* Ex Parte of Public Knowledge, *Comcast-TWC Merger Apps.*, MB Dkt. No. 14-57, 1–3 (filed Nov. 13, 2014), http://apps.fcc.gov/ecfs/document/view?id=60001010629 (stating that mobile capacity is still being developed); Reply Comment of Consumers Union & Common Cause, *Comcast-TWC Merger Apps.*, MB Dkt. No. 14-57, 2–3 (filed Dec. 17, 2014), http://apps.fcc.gov/ecfs/document/view?id=60001009971 ("Not only do DSL's slower download speeds fail to meet the Commission's current definition of broadband, but the Commission itself has stated that they are inadequate to meet consumers' evolving needs."); Reply Comment of Free Press, *Comcast-TWC Merger Apps.*, MB Dkt. No. 14-57, 16 (filed Dec. 23, 2014), http://apps.fcc.gov/ecfs/document/view?id=60001011044 (noting that Verizon long ago halted its fiber deployment plans, and that Comcast's claims that its merger will hasten fiber development are false).

12. *2015 Broadband Progress Report and Notice of Inquiry on Immediate Action to Accelerate Deployment*, GN Dkt. No. 14-126, Report & Order, FCC 15-10, 4 (issued Jan. 29, 2015), https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-10A1.pdf.

13. *See, e.g.*, Scott Hempling, *Competition "vs." Regulation: Have We Achieved Conversational Clarity? (Part I)*, SCOTT HEMPLING, ATT'Y AT LAW LLC (May 2008), http://www.scotthemplinglaw.com/essays/competition-v-regulationI.

14. JEAN-JACQUES LAFFONT & JEAN TIROLE, A THEORY OF INCENTIVES IN PROCUREMENT AND REGULATION 1–8 (1993).

15. Press Release, The Royal Swedish Academy of Sciences, The Prize in Economic Sciences 2014 (Oct. 13, 2014), http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/2014/press.pdf.

16. *See, e.g.*, OSHA Laws & Regulations, 29 C.F.R. §§ 1900–1926 (2015),

gain it by producing higher quality, more innovative, or lower priced products. This dynamic has been studied for centuries in the economics literature, and absent externalities, information asymmetries, and other imperfections, it maximizes social welfare.[17] Therefore, a regulator would ordinarily not improve the situation by intervening. Now contrast that structure to one of monopoly. Let us assume the situation involves a natural monopolist: a firm digging up the street to lay pipes for natural gas distribution, for example. Society only wants one set of pipes, as more would be a wasteful duplication of infrastructure, but if there is only one pipe, then its owner can charge monopoly prices for fuel. This then raises the question of how to optimally regulate a firm in this setting.

Jean Tirole and his frequent co-author Jean-Jacques Laffont created and synthesized the theory relevant to this case.[18] They advanced the economics literature by laying out a model of a regulated firm with market power and including a variety of real-world features that previous work had omitted.[19] For example, one easy way to obtain the competitive quantity is for the firm to charge marginal cost and for the government to pay the fixed costs of the firm.[20] However, that essentially requires the government to own the firm. In many settings the government does not want to own or subsidize the regulated firm, as this would require additional taxes that create deadweight loss. So one constraint that the model imposes is that the firm earns enough revenue to cover its costs.[21] A second aspect of their model that causes deviation from competitive outcomes is the very realistic assumption of asymmetric information between the firm and the regulator.[22] The firm's managers are likely to know soft information about investment options, technology choices, opportunities for cost reduction, outsourcing partners, and so forth that are unknown to the regulator. While the regulator may hire experienced managers from industry (if that is permitted by 'revolving door' rules), the market environment is always changing and therefore the choices available to the firm going forward on costs, technology, etc. will typically be different from those the regulators themselves may have experienced.

What is the consequence of this information gap? Perhaps the regulator wants to induce adoption of a new technology but does not

https://www.osha.gov/law-regs.html; EPA Laws & Regulations, 40 C.F.R. §§ 60-399 (2015), http://www2.epa.gov/laws-regulations/laws-and-executive-orders.

17. *See generally* PAUL KRUGMAN & ROBIN WELLS, MICROECONOMICS (3d ed. 2012).

18. LAFFONT & TIROLE, *supra* note 14, at 53, 165.

19. *Id.*

20. *Id.* at 55–75.

21. *Id.*

22. *Id.* at 1–3, 84–86, 295.

know exactly how costly it will be. For example, what is the cost of laying a new generation gas line? The regulator likely knows a plausible cost range for the work. The firm will announce a high cost, regardless of the truth, as this is what it hopes to be paid by the regulator. The regulator must choose a high enough reward to induce adoption in case the high-end estimate proves correct, but it knows in advance that this will be a waste of resources if the technology is low-cost. The problem is that it is not reasonable to think the regulator can obtain information that is private to the firm, hard to verify, and which the firm has an incentive not to discuss or disclose. Economists call the additional resources spent (in this example, on laying the gas line) in this type of setting the "informational rent," because it reflects payments to the firm that it gets because of its superior information.[23] Informational rent is an unavoidable cost of regulating a firm with market power.

A second major real-world problem featured in the work of Jean Tirole is what economists call "unobservable effort." Effort in this context is unseen actions that managers take that affect performance.[24] A manager could choose travel regulations that minimize cost or not, could take decisions with great care or haste, could hire subcontractors who are efficient rather than friends, could work extra hard at times when demand is high, etc. There are all sorts of activities that a manager can undertake that either cannot be seen at all by the regulator, that would be very costly to learn about, or that are so subjective that they would be impossible to use to compensate or fire the manager. Yet, many of these activities affect the firm's cost or quality. What can a regulator do to induce this unobservable and immeasurable "effort?"

Suppose the regulator must approve prices each period and wants to choose the lowest price that allows the firm to cover its costs (as is common in electricity distribution and generation, for example).[25] If the regulator simply asks the firm to report its costs and then sets a rate that covers those costs, the manager has no incentive to exert effort to lower, or control, costs at all.[26] It will make the same profit regardless of its cost level. The firm will be inefficient and consumers will pay high costs under this scheme. Regulators therefore often create some type of incentive scheme that, for example, might pay a fixed amount plus a fraction of verified costs. In this situation, if the firm spends an extra dollar unnecessarily consumers pay only a portion of that additional

23. *Id.* at 76.

24. *Id.* at 346.

25. *See, e.g.,* State of Connecticut, Public Utilities Regulatory Authority, *Regulations of Connecticut State Agencies*, CT.GOV, http://www.ct.gov/pura/lib/pura/regs/16-1-1to345-9_title_16_comprehensive.pdf (last visited Sept. 10, 2015) (unofficial compilation of Regulations of Connecticut State Agencies).

26. LAFFONT & TIROLE, *supra* note 14, at 165–208.

cost.[27] The firm will not have perfect incentives to cost-minimize because it can still pass on some of its costs to consumers. But managers will exert more than zero effort due to the financial incentive.

In a perfectly competitive market, if a firm saves a dollar of costs, it can choose to keep the whole dollar. The regulator could try this approach. However, if the regulator mimicked competition by paying only a fixed amount to the firm, regardless of cost, then how would that fixed number be determined? Lobbying by the regulated firm and regulatory capture become major issues. And of course the firm would be exposed to much more risk in that situation if, for example, input prices changed. All of these factors create tradeoffs and mean that the regulator cannot achieve a perfectly competitive outcome.

A final modeling issue I will mention is that the regulator may have trouble committing to policies over time. Today's regulator may make a decision and the firm may be suspicious that after the next election or a change of leadership at the agency there will be a different policy.[28] The firm may be considering a technology choice that will last for many years. The firm may be choosing a level of investment in infrastructure that will yield returns for many years. These kinds of problems are actually quite difficult for a regulator to handle. How do you induce optimal long-term investment on the part of the firm if it is afraid of expropriation in the future? The good news is that the economic models in this literature shed light on which policies will work better than others depending on the circumstances.[29]

In conclusion, will regulation of a firm with market power naturally create deviation from the competitive outcome? Yes, it will, because of budget constraints, informational asymmetries, and incentive problems such as those described above. But it is important to remember what we are comparing to imperfect regulation is lack of regulation. Lack of regulation may be perfectly right in a setting without features of a natural monopoly, or in a setting where market power is likely to be temporary.[30] Lack of regulation may be a good choice if the regulator is captured and will simply replicate the monopoly outcome while protecting the regulated firm from entrants.[31] However, many of the other speakers at this conference have emphasized how dreadful regulation is for consumers and innovation, and implicitly compared regulated outcomes

27. *Id.*

28. *See, e.g.*, Caitlin Nish*, Election Leaves Uncertainty for Adviser Regulation,* WALL ST. J. (Nov. 9, 2012, 12:11 PM), http://on.wsj.com/ZH3A1m.

29. LAFFONT & TIROLE, *supra* note 14, at 165–208.

30. KRUGMAN & WELLS, *supra* note 17, at 355.

31. George J. Stigler, *The Theory of Economic Regulation*, 2 BELL J. ECON. & MGMT. SCI. 3, 4–9 (1971).

to perfectly competitive outcomes.[32] But that usually is not the right counterfactual. In the imperfectly competitive example I focus on here, the alternative if the government does not regulate is worse: society will experience the profit-maximizing actions of firms that we may worry have durable and significant market power. In the case of broadband, if deviation from competitive outcomes occurs, then in addition to welfare losses in the broadband market, we may put at risk welfare in the large swath of GDP that consumers access through broadband.[33]

Today, a firm with monopoly power is a little bit like the measles. Here in America we do not have much of either one; when we do not experience them it is easy to forget how bad they are and easy to slip in to the mistake of thinking that alternatives are attractive. Getting a vaccine might not be fun, somewhat like paying a regulated price. However, measles is a terrible disease relative to the vaccine. Monopolies protected by entry barriers are in turn usually terrible for consumers' economic health compared to regulation; they charge high prices, produce less innovation, and can get away with providing low quality.[34] This is the alternative outcome we should expect when we remove regulation of this type of firm, not outcomes generated by competitive markets.

The United States has very good competition authorities, and they stop consumers from being subjected to monopolies very often. Natural monopolies, such as natural gas distribution, are usually regulated.[35] Therefore, U.S. consumers are fortunate in not actually experiencing durable monopoly power very much. In that pleasant environment it is very easy to think it would be fine if the regulator backed off because we can see where it is making mistakes. But do we really want to give a durable monopolist free choice to set prices, provide service, control innovation, and chose the technologies we are all going to use next?

II. WELFARE-IMPROVING POLICIES THAT DO NOT FALL UNDER THE ANTITRUST LAWS

I now return to my initial question: How does an industry regulator differ from a competition authority? The second reason we will not get the same outcomes if we replace the regulator with the competition

32. *See* Video of Competition Policy panel, *supra* note 1.

33. THE BOSTON CONSULTING GRP., INTERNET ECONOMY IN THE G-20: THE $4.2 TRILLION GROWTH OPPORTUNITY (2012), https://www.bcg.com/documents/file100409.pdf. In 2010, the Internet economy comprised 4.7% of annual GDP. Boston Consulting Group estimates that by 2016 this figure will reach 5.4%. *Id.*

34. KRUGMAN & WELLS, *supra* note 17, at 355.

35. REGULATORY ASSISTANCE PROJECT, ELECTRICITY REGULATION IN THE U.S.: A GUIDE 3 (2011), http://www.raponline.org/docs/RAP_Lazar_ElectricityRegulationInTheUS_Guide_2011_03.pdf.

authority is that the regulator has a lot more tools. The regulator can decide things like rate of return, technology choice, interconnection rules, shared cost rules, access, etc.—policies that are not part of the Sherman Act, for example.[36] An industry regulator typically is empowered by a statute(s) that permits regulation of these dimensions using some kind of formal process.[37] U.S. regulators often have wide discretion to alter rules if outcomes are not considered to be in the public interest. As we noted above, the antitrust laws only cover certain kinds of behavior, and in an imperfectly competitive environment, society may benefit from restricting or promoting certain actions of the regulated firm.

The following example considers the structure of the contract between a content provider and a cable system. This example is inspired by the reported negotiation between Netflix and Comcast in 2014 and uses only publicly available information.[38] Suppose that the structure of the contract is that Netflix pays a lump sum for favorable speeds from Comcast. Netflix's total and average costs rise as a consequence. But not all of Netflix's consumers are Comcast subscribers. The increase in Netflix's costs is due to only a subset of consumers; the remaining consumers also pay higher prices though they are not causing the higher costs. Meanwhile, Comcast receives a lump sum in exchange for making download speeds faster. But not all of Comcast's customers subscribe to Netflix. What kind of incentive does Comcast have to build infrastructure when some fraction of their customers at any point in the network subscribe to Netflix, and many do not? You could imagine that this kind of contracting does not maximize Comcast's incentive to build capacity correctly, and that this is not socially optimal.

An industry regulator might conclude that the contract just described is not good for social welfare because it does not incentivize creation of the right amount of infrastructure in the right places. The regulator might decide to forbid that form of contract. Instead, the regulator might require contracts to be of the following form: a consumer may contract with Comcast for Netflix to arrive at X megabits a second; or perhaps, a consumer may contract with Comcast for overall service at X megabits per second. Such a contract would allow Comcast to sell speed to any consumer that valued speed, and the higher the price Comcast charged for speed, the fewer consumers would purchase a given speed. Contracts of this form might create greater inducement for cable systems to build out their networks in an efficient way. Moreover, such a

36. *See, e.g.*, Communications Act of 1934, 47 U.S.C. § 151 (2013).

37. *Id.*

38. *See* Edward Wyatt & Noam Cohen, *Comcast and Netflix Reach Deal on Service*, N.Y. TIMES (Feb. 23, 2014), http://nyti.ms/1fuxxuG.

contract would not raise the price of Netflix's operation, but rather would load the preference for speed onto the consumer's cable bill. This would likely keep the cost of content lower.

The initial contract form was not primarily a competition problem; in my example it was just inefficient. For example, such a contract is almost certainly not collusion or a merger.[39] The contract is unlikely to be a violation of Section 2 of the Sherman Act unless it was designed to entrench the monopolist.[40] We see that the major problem with the contract in this example is whether it induces efficient investment in infrastructure and efficient entry and pricing of content, both of which strongly affect consumer welfare.[41] A regulator might say: "We prefer one form of contract over another because that is going to be better for consumers."

III. INNOVATION

A third area in which the industry regulator has more tools than the competition authority is in the area of promoting innovation. Protecting and stimulating innovation is a setting of real interest and importance. The exercise of market power typically involves high prices and less innovation, and what innovation exists is controlled by the incumbent firm.[42] Innovation is an important topic for comparing antitrust to regulation because innovation may not be a merger problem, or a monopolization problem, or a collusion problem.

If there is a lack of innovation in an industry, an antitrust authority

39. *See generally Price Fixing, Bid Rigging, and Market Allocation Schemes: What They Are and What to Look For*, UNITED STATES DEPT. OF JUSTICE, ANTITRUST DIV., http://www.justice.gov/sites/default/files/atr/legacy/2007/10/24/211578.pdf (discussing the most common forms of collusion under the antitrust laws); *see also* Robert Lande & Howard Marvel, *The Three Types of Collusion: Price Fixing, Rivals, and Rules,* 2000 WIS. L. REV. 941, 944–948 (2000) (describing "classic" "type I" collusion where firms collude to mimic the actions of a monopoly and "type II" collusion where firms agree to jointly take action to harm rivals); MATT SWARTZ & DANIEL LEE, THE CORPORATE, SECURITIES, AND M&A LAWYER'S JOB: A SURVIVAL GUIDE 7–13 (2007) (explaining mergers and acquisitions); UNITED STATES DEPT. OF JUSTICE & FED. TRADE COMM'N, ANTITRUST GUIDELINES FOR COLLABORATIONS AMONG COMPETITORS 4–5 (Apr. 2000), https://www.ftc.gov/sites/default/files/documents/public_events/joint-venture-hearings-antitrust-guidelines-collaboration-among-competitors/ftcdojguidelines-2.pdf (explaining how mergers differ from collaborations between competitors under the antitrust laws).

40. *See, e.g.,* Verizon Commc'ns, Inc. v. Law Offices of Curtis V. Trinko, LLP., 540 U.S. 398, 407 (2004) ("It is settled law that this offense [monopolization or attempt to monopolize in violation of Section 2 of the Sherman Act] requires in addition to the possession of monopoly power in the relevant market, 'the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.'") (quoting United States v. Grinnell Corp. 384 U.S. 563, 570–571 (1966)).

41. *See* KRUGMAN & WELLS, *supra* note 17, at 303.

42. *See id.* at 355.

typically cannot mandate its direction or amount, even if these choices have a large effect on social welfare.[43] If the status quo incentives, market structure, contract forms, etc. are disincentivizing innovation, then we might want a regulator to make changes. For example, the customer-buys-speed contract discussed above might make entry by small content providers easier. Rather than requiring an entrant to be of a size to have an individualized negotiation with, and make a large lump-sum payment to, a cable network, the entrant just has to attract viewers who value it. Those viewers will purchase speed from their cable providers if they find niche content they value. A niche content provider could find it has an easier time entering and growing under this scheme because there are no barriers to accessing interested consumers.

Let us take the example of the live streaming video platform Twitch using the framework of my initial Netflix example.[44] Speed of delivery mattered to Twitch's business model on the first day, but there were hardly any customers. Twitch might not have been in a position to ask cable networks to ensure a fast delivery speed for its video content. And if the cable network did respond, where would Twitch get the large sum required to pay for access? On the other hand, if the people who love Twitch can say to their broadband provider, "I am willing to pay to have this content to arrive at 50 Mbps," then Twitch's problem is much reduced. Twitch has to have some consumers who really want the service, which should be true if the innovation is valuable. We see from this example that the terms on which contracts are written and the parties who are permitted to write them might affect innovation, investment incentives, and prices. The antitrust laws do not cover these issues, but an industry regulator can often address them.

We see from the examples above that it is too simplistic to say that any problem harming consumers and social welfare will necessarily be a violation of the U.S. antitrust laws. The antitrust laws prevent much economic harm, but nowhere near all of it. The examples given here—monopoly market structure and contracts that imperfectly incentivize infrastructure or innovation—can be bad for the economy and social welfare and not violate the antitrust laws. In such cases consumers can be better off with an industry regulator empowered with the tools to fix these problems. We know that such a regulator will never achieve the same outcomes as a competitive industry because of problems like asymmetric information and imperfect managerial incentives. But failing to regulate a durable monopoly is likely to result in poor outcomes for

43. *See generally* Sherman Act, 15 U.S.C. §§ 1–7 (2014) (*prohibiting* business activities deemed anti-competitive); Clayton Act, 15 U.S.C. §§ 12–27 (2014) (specifying *prohibited* conduct).

44. Evan Dashevsky, *Amazon Buys Twitch, But What Is It?*, PC MAG., (Aug. 26, 2014, 11:10 AM), http://www.pcmag.me/a/2465070.

consumers.

To make the case for abandoning regulation, it must be true that monopoly pricing and monopoly levels of innovation are better for consumers than outcomes from regulation. This would be likely in instances where the regulator is captured, and is essentially acting in the interests of the firm rather than consumers.[45] A captured regulator not only imitates the monopoly outcome, but also creates barriers to entry for new entrants and protects the incumbent.[46] That could result in long-run harm that is worse than a monopolist who is overthrown eventually. Dual oversight of the firm, both by an industry regulator and an antitrust regulator may help prevent the long run effects of capture.[47] Secondly, governments could choose to regulate firms that do not have durable market power, but simply temporary popularity, perhaps due to a novel product.[48] Rents due to this kind of innovation are usually considered dynamically efficient. In that case, regulation would commonly reduce welfare. Such a case does not fit the framework of my example, which primarily focuses on firms that have some degree of natural monopoly, and whose position is durable. It is clear that there could be cases where lack of regulation of a firm with durable market power is superior to regulation. However, comparing the outcome of regulation to outcomes from a competitive market certainly cannot prove this proposition.

45. Stigler, *supra* note 31, at 5–6.

46. *Id.*

47. *See* Gene Kimmelman, Remarks at the panel presentation on Competition Policy at the 15th annual Silicon Flatirons Center Digital Broadband Migration Conference at the University of Colorado Law School (Feb. 8, 2015). *See* Video of Competition Policy panel, *supra* note 1. *See generally* United States v. AT&T Corp., 552 F. Supp. 131, 166 (D.D.C. 1982), *aff'd sub nom.* Maryland v. United States, 460 U.S. 1001 (1983).

48. For example, Apple at one point had more than 90% of the tablet market. *See* Sammy Walrus IV, *Steve Jobs Wasn't Lying: Apple's iPad Market Share Was Really More Than 90% Last Year*, BUS. INSIDER (Mar. 6, 2011, 9:03 AM), http://www.businessinsider.com/ipad-share-2011-3. A (misguided, in my view) policy could be to regulate a temporary monopoly of that type.