

Economic Policy Vignette

Defining "Competition" for the 21st Century Telecommunications Industry

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"[C]ompetition is first and foremost only a word, a word which may or may not be used effectively, in economic discourse, to communicate propositions about realities."¹

- Kenneth G. Dennis

Economic concepts own a special place in the social sciences. Like concepts employed in other social sciences, economic concepts provide its scientists with the tools they need to better understand the workings of the target of their inquiry. Economic concepts, however, also routinely serve to inform and drive policy. This is especially true of the concept of competition.

Introduction

Assessments of competition or the lack thereof have been central to the evolution of public policy in the telecommunications industry for over a century. This centrality continues today. For instance, citing competitive concerns, the Federal Communications Commission (FCC) chose recently to alter a typical highest-bidder auction format for its impending incentive auction, by setting aside spectrum for all but the largest two mobile telephony providers.² Similarly, in a bold move, the FCC chose early in 2015 to reclassify broadband services under Title II of the Communications Act citing concerns that, absent expanded regulatory oversight, incumbent broadband providers may anti-competitively forestall both competitors and innovation.³ And beyond particular policy decisions, ongoing FCC reports focus on assessments of competition in local telephony, wireless telephony, and the provision of multichannel video programming distribution.

Yet, despite the centrality of the concept of competition to communications policy, numerous foundational questions about the concept persist. For instance, a recent query by the telecommunications oversight committee in the U.S. House of Representatives asked, "How should Congress define competition in the modern communications marketplace?"⁴ Similarly, the repeated mantra of current FCC Chairman Tom Wheeler has been "competition, competition, competition," stating that the FCC's "competition policy will take the 'see-saw' approach: when competition is high, regulation can be low; when competition is low, we are willing to act in the public interest."⁵ Of course, this approach to policy formation provokes the same definitional question posed by the Committee.

¹ Dennis, K. G. (1977). *'Competition' in the History of Economic Thought*. New York: Arno Press, 325.

² Federal Communications Commission. (2014). *Fact Sheet: FCC Mobile Spectrum Holdings Rules* (DOC-327110A1). Retrieved July 21, 2015, from <https://www.fcc.gov/document/fact-sheet-fcc-mobile-spectrum-holdings-rules>.

³ Federal Communications Commission. (2015). *Protecting and Promoting the Open Internet; Report and Order on Remand, Declaratory Ruling, and Order* (30 FCC Rcd. 5601). Washington, DC: Federal Communications Commission.

⁴ U.S. House of Representatives. Energy and Commerce Committee. (2014). *White Paper: Competition Policy and the Role of the Federal Communications Committee & Collected Responses*. Retrieved June 23, 2015, from <http://energycommerce.house.gov/CommActUpdate>.

⁵ Wheeler, T. (2014, February 10). *Prepared Remarks Of FCC Chairman Tom Wheeler, Silicon Flatirons, University Of Colorado Law School, Boulder, Colorado*. Retrieved June 23, 2015, from <https://www.fcc.gov/document/fcc-chairman-tom-wheeler-remarks-silicon-flatirons>.

Recently, a coauthor and I used the lens of economic analysis to bring a detailed focus to the understanding of "competition" in modern communications markets.⁶ In this *Economic Policy Vignette*, I focus on one important dimension of that inquiry – specifically, how policymakers might most appropriately define "competition" to establish both clear legislative foundations and guidance for regulatory implementation of competition issues in 21st century telecommunications markets.

Foundations of "competition"

At its most primal level competition manifests itself in rivalry. In business, these rivalrous actions are intended to secure the patronage of consumers. Most often, competition provokes firms to take actions that are beneficial to consumers. Competition is routinely attributed to be a cause of improved firm-level efficiency, lower prices, increased quality, accelerated innovation and more rapid development of new services. For these reasons, policymakers in the United States have championed the cause of preserving and promoting competition for at least 125 years. Yet while generally finding agreement on the desirability of competition, the more basic question lingers: how should policymakers define competition? The importance of this question cannot be overstated. Without a clear and shared understanding of what marketplace characteristics and activities constitute competition, policy interventions to promote competition are doomed. In the absence of a common definition, policy interventions may inadvertently stifle competition through well-meaning but misguided actions intended to promote competition; or, alternatively, when competition is inadequate, policymakers may fail to intervene under a mistaken illusion that competition levels are already adequate to protect consumers.

The subject of competition has been central in economics since the writings of the mercantilists of the 17th century. In this period, competition was seen as occurring between nations in the context of international trade. The more atomistic focus on competition between firms emerged with the writings of the physiocrats and ultimately gained prominence through the work of Adam Smith.⁷ It was Smith who provided a now central tenant of capitalism that competition among self-interested actors commonly promotes the aggregate economic welfare of society at large. Importantly, beginning with Smith, the word and concept of competition has often been conjoined with an adjective. Smith chose to emphasize the notion of "free competition." Smith's use of the word "free" emphasized the notion that the competition he envisioned was one in which individuals and firms could freely enter to compete for consumers' patronage. Against a medieval backdrop in which entry into professions and particular lines of commerce was heavily regulated, the adjective "free" brought two special purposes. First, it provided a reinforcing notion of individual liberty that was a common theme throughout Smith's writings. Second, it provided a marker for economists for the next two centuries that would emphasize the important role that economically "free" entry can have for the ability of markets to promote efficient resource allocation.

⁶ Delp, A. B., & Mayo, J. W. (2016, April 29). *The Evolution of 'Competition': Lessons for 21st Century Telecommunications Policy*. Georgetown Center for Business and Public Policy Working Paper. Retrieved from <http://cbpp.georgetown.edu/sites/cbpp.georgetown.edu/files/Delp-Mayo-Effective-Competition.pdf>.

⁷ Smith, A. (1937). *An Inquiry into the Nature and Causes of the Wealth of Nations*. E. Cannan (Ed.). New York: The Modern Library. (Original work published 1776).

In the years after Smith's treatise, economists honed, refined, and parsed the notion of competition. Prominent economists of the 19th century began to discuss "the law of competition" referring to the general propensity of competition to drive prices to an equilibrium level. Later still, economists came to qualify the word competition with "perfect." Today, the model of "perfect competition" provides a standard introduction for students of economics into the equilibrium tendencies of markets characterized by perfectly free entry, atomistic firms selling a homogeneous product or service and perfectly informed buyers and sellers. As a theoretical model it provides a powerful congruence of competition with the economic efficiencies anticipated by Smith some 240 years ago.

By the mid-20th century, however, it was widely recognized that the model of perfect competition bore little resemblance to modern markets. Indeed, many if not most modern markets have characteristics that strain the standard characterization of perfect competition. Firms in advanced capitalistic societies are often large in both absolute and relative terms, sell mildly-to-highly differentiated goods, and operate in markets that are subject to at least modest barriers to entry. Ironically, a core element of competition (viz., rivalry) is absent from the perfectly competitive model as firms in this market model do not compete with each other in the sense of reacting to a rival's actions, but instead simply respond to anonymous market forces.

This disconnect compelled fresh thinking from the economics community. Twentieth-century economists began serious efforts to develop models of "imperfect competition" that may more accurately resemble the structural aspects of modern markets. In imperfectly competitive market models, firms compete with each other in the sense that they account for and react to rivals' behaviors. Efforts to model imperfectly competitive models, however, have proven not to be the silver bullet that economists had sought. An early attempt to construct a general model of imperfect competition was criticized for its overreaching generality and the tendency to envision all competition as "monopolistic."⁸ Game theoretic models of competition, which have the virtue of explicitly modelling rivals' strategic reactions to each other, provided specific insights under particular assumptions. Yet the equilibrium outcomes of these models vary from very desirable economic outcomes (i.e., high output and low prices) to less "competitive" (lower output and higher prices) outcomes. Consequently, no general theory of imperfect competition has arisen that captures, or anticipates, the general economic behavior of firms in modern markets.

The 20th century incongruity between the sterile (and potentially misleading) model of perfect competition and the structure of many modern markets naturally triggered substantive debate about both the concept of competition and the appropriate policy toward competition. In the 1940s, this discourse found a new and promising pathway. It was then that John Maurice Clark, a prominent early 20th century economist, made an impassioned argument for a new concept of competition. He began by noting that models of imperfect competition, while "current" were in "an unformulated state" for applications of economic policy. He further noted that scrutiny of the alternative model of perfect competition had led economists to realize that "'perfect competition' does not and cannot exist and has presumably never existed for reasons quite apart from any inescapable tendency toward collusion, such as Adam Smith noted in his familiar remark on the gettings-together of members of a trade."⁹

⁸ Stigler, G. J. (1956). Discussion of Papers on the Report of the Attorney General's Committee on Antitrust Policy. *The American Economic Review*, 46 (2), 504-505.

⁹ Clark, J. M. (1940). Toward a Concept of Workable Competition. *The American Economic Review*, 30 (2), 241.

To advance a better platform, he defined competition as follows:

Competition is rivalry in selling goods, in which each selling unit normally seeks maximum net revenue, under conditions such that the price or prices each seller can charge are effectively limited by the free option of the buyer to buy from a rival seller or sellers of what we think of as "the same" product, necessitating an effort by each seller to equal or exceed the attractiveness of the others' offerings to a sufficient number of [buyers] to accomplish the end in view.¹⁰

This definition provides the core of Clark's theory of "workable competition," a term Clark and others came to use interchangeably with "effective competition."¹¹ Clark emphasizes three key features of competition: (1) rivalry among sellers, (2) the "free option" of buyers to buy from alternative vendors, and (3) efforts by sellers to equal or exceed the attractiveness of others' offerings.

While providing a clean foundation for defining "competition" in the policy arena, the notion of workable competition omitted an important policy consideration, leading Markham to offer an important refinement:

A possible alternative approach to the concept of workable competition may be one which shifts the emphasis from a set of specific structural characteristics to an appraisal of a particular industry's over-all performance against the background of possible remedial action. Definitions of workable competition shaped along these lines might accept as a first approximation some such principle as the following: **An industry may be judged to be workably competitive when, after the structural characteristics of its market and the dynamic forces that shaped them have been thoroughly examined, there is no clearly indicated change that can be effected through public policy measures that would result in greater social gains than social losses.**¹²

"Competition" defined for 21st century telecommunications

While the concept of "effective competition" found its way into the communications policy arena, both its definition and applications have been inconsistent over time.¹³ Consequently, a rigorous definition of "competition" that is capable of smartly guiding economic policy for the 21st century does not readily spring from a continuation or simple modification of "effective competition" as historically used by the FCC.

This does not, however, mean that a sound definition is not possible. Nor does it mean that a definition must be constructed *de novo*. Rather a modern definition can be rooted in the lineage of economic thought on competition. Three pillars form the foundation:

¹⁰ Clark, *supra* note 9, at 243. (Emphasis added).

¹¹ Clark, J. M. (1961). *Competition as a Dynamic Process*. Washington, DC: Brookings Institution.

¹² Markham, J. W. (1950). An Alternative Approach to the Concept of Workable Competition. *The American Economic Review*, 40 (3), 361. (Emphasis added).

¹³ For a detailed discussion of the application of "effective competition" at the FCC, see Delp & Mayo, *supra* note 6.

- First, we begin by emphasizing the basic definition offered by J. M. Clark,¹⁴ who argued the notion that workable or effective competition has three core elements: (1) rivalry among sellers; (2) the free option of buyers to buy from alternative vendors; and, (3) efforts by sellers to equal or exceed the attractiveness of others' offerings.
- Second, as elaborated by Bain and Qualls, "workable ... competition in markets is revealed by, and is the result of, whatever gives rise to satisfactory or workable performance – performance that enhances economic welfare to a reasonable degree."¹⁵
- Finally, to the extent that a lack of effective competition may serve as a trigger for policy intervention in markets, Markham's insight becomes a requisite element of any sound policy application of effective competition. In particular, in the absence of a "clearly indicated change that can be effected through public policy measures that would result in greater social gains than social losses,"¹⁶ the market may be considered effectively competitive.

Taking these considerations together, a market can be said to be **effectively competitive** when:

- Firms exhibit overt rivalry in their quest for consumer patronage;
- Consumers have choices among vendors, readily demonstrate their ability to change vendors, and vendors (either incumbent or *de novo*) have the ability and propensity to expand output to satisfy consumer demands;
- Rivalry among vendors manifests itself in desirable economic performance metrics, including price, output, quality, investment, and innovation; and
- No clearly indicated and cost-effective policy change can improve upon prevailing economic performance in the market at issue.

The modern definition of competition in a policy context

Although rooted in the initial academic definition of workable competition, our modern definition is manageable in a policy context. It offers a consistent foundation for policy analysis, creating the possibility that assessments of market competition will not vacillate depending on the ideological mood of Congress, regulators, or the public. It has the advantage of being grounded in measureable indicators about which consumers are likely to care deeply—do they face choices of vendors, can they readily change vendors, do firms actively vie for their patronage, and are they benefiting from marketplace rivalry?

¹⁴ Clark, *supra* note 9, at 241-256.

¹⁵ Bain, J. S., & Qualls, P. D. (1987). *Industrial Organization: A Treatise* (Vol. 6A). Greenwich, CT: JAI Press, 10.

¹⁶ Markham, *supra* note 12.

Additionally, while laying a foundation for the assessment of competition in 21st century markets, the definition has sufficient similarities with current analysis that adopting it as a standard would not require significant departures from current practices and policies. For instance, the modern effective competition standard would require very few changes in data collection and analysis commonly conducted by the FCC.

While offering advantages for communications markets, the reliance on a definition of "effective competition" will surely raise both anticipated and unanticipated challenges. An anticipated challenge of the modern definition is that it, like its early predecessor, provokes assessments of performance without providing a clear, bright-line determination of performance standards that would be sufficient for rendering a market effectively competitive. Nonetheless, benchmark analysis is certainly possible and in many cases may provide clear judgments. Another anticipated challenge that the modern definition will face is that, although it provides a roadmap for analysis, the likelihood remains that advocates will seek to hijack its application for their own ends. This challenge, however, is not new. Indeed, self-serving advocates are likely to find manipulation of policy toward their narrow self-interests to be more difficult with this definition in place. And, as noted above, by establishing the modern definition, policy swings solely based on ideological shifts in Congress, the FCC, or the public are less likely.

Conclusion

Telecommunications policy has been hindered by a lack of a consistent, grounded definition of "competition." Our efforts seek to remedy this by drawing on the discipline of economics to offer a modern definition. We specifically seek to avoid the unfortunate alternative of relying on the self-serving advocacy of parties to the telecommunications industry that inevitably declare either that competition is astoundingly robust or hopelessly failing, depending on their particular self-serving perspectives.