Antitrust issues in e-commerce

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Introduction

E-commerce, the purchase of services and goods online, has grown rapidly and is today commonplace among US and worldwide consumers. Retail e-commerce sales have grown from $1.3 trillion in 2014 to $4.2 trillion in 2020 and are expected to reach $6.5 trillion in 2023.[2] Similarly, the number of digital buyers, people who purchase goods and services online, has grown from 1.3 billion in 2014 to more than 2 billion in 2020.[3] In the United States alone, retail e-commerce sales have increased from $524 billion in 2018 to almost $800 billion in 2020, are expected to reach $1.2 trillion in 2024, and to account for 19% of all retail purchases.[4] The growth of e-commerce and "tech" firms has affected the economy and consumers in many significant ways.

There is renewed interest by the media, academia, and government in the role that tech companies play in facilitating or hindering the exchange of goods, services, resources, innovation, and ideas. Furthermore, the growth of technology has significantly affected antitrust and competition analysis. The importance of innovation, the dynamic nature of the tech sector, the blurring of the lines between online and "brick-and-mortar" businesses have made antitrust analysis more complex and added additional uncertainty, requiring a careful approach by antitrust practitioners, regulators, and legislators that can balance the long-term and short-term incentives to innovate and compete.[5]

This is a rich and rapidly expanding field of study. Because of the sheer size of the subject matter, I will only scratch the surface of many complex issues and leave others outside of the scope of this article. In particular, I focus on "market definition," analyses aimed at identifying all market competitors in a given segment,[6] and the analysis of entry and growth. What emerges is that while e-commerce has generally benefited consumers and promoted competition, it has also rendered antitrust analysis and competition policy more complex, dynamic, and perhaps uncertain.

Market Definition

There is no unique definition of e-commerce. While shopping is one of the most popular online activities, e-commerce encompasses a broad range of economic activities and business models ranging from the delivery of tangible goods purchased online,[7] to intermediation services between buyers and sellers in a variety of settings,[8] to the provision of goods and services that are to be consumed entirely online.[9] This is obviously not an exhaustive list of e-commerce models, nor it is suggesting that these models are mutually exclusive. For example, Amazon is both an online retailer and a platform used by third-party merchants. In fact, as discussed below, multiple products are often offered by the same e-commerce firm, which creates challenges for the antitrust analysis.

Despite the many forms that e-commerce might assume, its benefits for competition and consumers have been recognized by antitrust agencies across the globe. For example, the European Commission found that e-commerce greatly increases price transparency and benefits consumers.[10] The US Federal Trade Commission (FTC) and Department of Justice (DOJ) in a joint submission to the Organisation for Economic Co-operation and Development (OECD) recognized that "E-commerce continues to expand distribution mechanisms, increase growth in retail markets, improve consumer choice, and spur innovation, among other things."[11] The Canadian Competition Bureau has studied the impact of e-commerce and technological innovation in several industries as a tool to increase consumer welfare.[12]

A primary effect of the growth of e-commerce on antitrust analysis is the blurring of the lines between traditional, "brick-and-mortar" firms and their e-commerce competitors. This typically has been found to lead to an expansion of the set of firms competing to fulfill the needs of a defined group of customers. Intuitively, consumers benefit because they can purchase from firms without physical retail locations in their proximity. In fact, consumers can purchase from firms that have no retailing physical location at all (as in the case of Amazon, up until recently).[13]

An example of the growing role played by e-commerce in market definition analysis is provided by the evolving FTC analysis of competition in the office supplies superstores (OSS) space. Staples and Office Depot first proposed to merge in 1997 when the FTC succeeded in blocking the merger. Importantly, in 1997 online sales did not play a role in the FTC analysis. However, more than 15 years later in 2013 the FTC concluded that the merger of two other large OSS rivals, Office Depot and Office Max, would not lead to price increases in part because of the explosive growth in online commerce. Finally, in 2015 while reviewing the merger between Staples and Office Depot/Office Max the FTC found that the retail "market for office supplies had been reshaped since 1997 by the growth of mass merchants like Wal-Mart, club stores like Costco, and online retailers." However, the FTC opposed the merger primarily because another group of customers, business-to-business customers, "was not adequately served by online competitors like Amazon."[14] It appears that in both 2013 and 2015 the FTC gave significant weight to the role of online sales in its analysis of mergers in the OSS space.[15]

The market definition analysis is not affected only by the competition between traditional brick-and-mortar firms and new online competitors but also by the adoption of multi-channel strategies by both brick-and-mortar and online competitors. As suggested by the US antitrust agencies "[t]he increasingly blurred lines between online and offline sales and distribution has led to companies engaging in myriad distribution methods to compete. This multi-channel approach allows companies to match supply-side output with demand-side requirements. These supply-side responses to demand-side shifts in consumer behavior may be an indication that competition is working rather than being a sign of trouble."[16] For example, large traditionally brick-and-mortar retailers such as Wal-Mart now have a significant and growing online presence.[17] Recent mergers have combined traditional brick-and-mortar companies with online sellers: Amazon purchased

Whole Foods in 2017. Nordstrom purchased HauteLook in 2011. Neither merger raised anticompetitive concerns.

Finally, consumers have benefited from e-commerce not only because of the growth of online-only retailers (for example, Amazon) or because of the growing online presence of traditional, large brick-and-mortar retailers (for example, Wal-Mart), but also because technological innovations allow small businesses to scale up and compete with larger firms despite not having access to the same financial resources or infrastructure. Two significant examples are Amazon Marketplace and Shopify.

Amazon Marketplace supports small businesses which can offer their products to, and compete for the dollars of, final consumers who visit the Amazon website. Third-party sales on Amazon Marketplace have increased from about 25% of total Amazon sales in 2007 to more than 55% of Amazon sales in 2020.[18] Shopify offers an alternative online route to small businesses: started as a platform to help small businesses launch their online website, today Shopify offers a host of services including payment, marketing, customer engagement tools, logistical support, as well as financing. Recently, Shopify reported that consumers spent a total of $120B on its platform, which is almost double what they spent in 2019. To put this figure in perspective, analysts estimate that Amazon Marketplace's third-party gross merchandise value was about $275B in 2020 and $130B in 2017. In other words, Shopify is now as large as Amazon Marketplace was three years ago.[19]

The growth of Amazon Marketplace and Shopify speak to two related phenomena. On the one hand, both expand the options available to final consumers. On the other hand, they expand the options available to small businesses that want to grow online, in part competing for small business attention, in part perhaps offering complementary channels.

The blurring of the lines between online and traditional retailers, the growing multi-channel competition, and the growth of alternative channels for small businesses to reach their customers all point to an increased complexity of the marketplace and of the "market definition" exercise.

Entry & Growth

The analysis of entry into a properly defined antitrust market is related to the definition of the antitrust market itself. The US Horizontal Merger Guidelines (HMG) state that the threat of entry might be enough to alleviate concerns related to a merger between market participants. In fact, firms that would rapidly and easily enter the market are considered market participants and may be attributed market shares. However, for this to be the case, entry should be timely, likely, and sufficient.[20]

The growth of e-commerce complicates the entry analysis along several dimensions. First, as discussed in the previous section, the growth of e-commerce is, in and of itself, a massive "entry" phenomenon which has disrupted and benefited consumers across many industries such as retailing, medical care, media consumption, book publishing, etc. Some industries have been created *ex novo*, such as social media. Several of these "new entrants" have grown to become some of the largest companies in the world and are now the object of renewed antitrust scrutiny.

Moving from a 50,000-foot view to the nitty-gritty details of analyzing the timeliness, likelihood, and sufficiency of entry, several characteristics of e-commerce and its underlying technology confound the analysis. On the one hand, e-commerce makes entry and competition easier by reducing, for example, marketing and/or logistics cost necessary to operate at scale. As discussed above, e-commerce channels such as Amazon Marketplace and Shopify allow small businesses to enter the fray and eventually grow. Most of Shopify's customers are first-time entrepreneurs,[21] and a new industry of hedge funds referred to as "Amazon Aggregators" invests substantial financial and human capital resources to transform the most successful small businesses operating online into global brands. For example, Anker Innovations Technology, a Chinese global electronics brand company, started selling cell phone chargers on Amazon and grew to be worth more than $10 billion.[22] It is hard to know what would have happened in the "but-for" world without e-commerce, but it seems likely that Anker Innovations has benefited from the ease of entry offered by e-commerce.

On the other hand, certain commentators have suggested that key characteristics of e-commerce such as big data or network effects create substantial barriers to entry. For example, it has been suggested that long-standing firms with access to large datasets on consumers may have a substantial competitive advantage.[23] Others have pointed out that it is not the amount of data that creates a competitive advantage, as there are many alternative sources of data available to firms (reflecting the multiple digital footprints left by consumers on the internet), but rather the entrepreneurial and managerial ability of firms to build tools and organizational know-how to use the data to provide value to customers. These authors mention several examples such as "Airbnb, Uber, and Tinder where a simple insight into customer needs allowed entry into markets where incumbents already had access to big data."[24]

Other examples worth mentioning are Shopify and TikTok. With respect to Shopify, it might be argued that Shopify competes (indirectly) with Amazon and Amazon Marketplace for dollars spent on consumer goods. Furthermore, perhaps the two firms compete (directly) to offer alternative e-commerce platforms/channels to small businesses. If the two companies are indeed competing, it should be noted that Shopify started operating in 2006, giving Amazon and Amazon Marketplace a twelve- and six-year head start, respectively. Despite this disadvantage, Shopify has grown significantly and is expected to continue to do so in the future.[25] The growth of TikTok in the social media space is another interesting example. Despite Facebook's (and others') significant advantages in the social media space, including access to big data and substantial network effects, TikTok has more than doubled its users in the US since 2018, the year in which it was released internationally, from almost 20 million to more than 45 million, and it is expected to keep growing significantly faster than Facebook.[26] An important caveat is that, from an antitrust enforcement perspective, these examples, while interesting, might overstate the ease of entry depending on how one would define the relevant market in each case. However, from a competition and industrial policy point of view, these are examples of how the industry dynamics in the e-commerce/technology space might be different from the rest of the economy.

Another complicating factor in the analysis of entry in the e-commerce/technology space is how rapidly technology firms diversify their offerings, entering adjacent (or not so adjacent) spaces. Going back to the Shopify example: Shopify started as a platform helping small businesses open their own online storefront. Over time the firm expanded its services, aspiring to become a one-stop shop for all small online businesses. Its services today include payment processing, fulfillment and inventory, and, as of last year, financing. In January 2020 Shopify started its “Shopify Capital” program which helps small businesses with loans to finance their operations.[27] With this program, Shopify entered a space where it competes not only with established financial institutions such as banks and networks of angel and venture capital investors, but also with other e-commerce players such as Amazon[28] and PayPal. PayPal started as an online payment system in 1998 but began offering consumer credit in 2000 and, in 2013, launched PayPal Working Capital which offers loans to online merchants.[29] These examples show how different entry dynamics and growth patterns in the tech industry are likely to complicate the antitrust analysis. The risk is that because of the unpredictability of entry, one might underestimate the (long-term) degree of competitiveness of a given industry.[30]

Conclusion

In this article I discussed the impact of the growth of e-commerce on antitrust analysis, particularly on issues related to market definition, entry, and growth. While each antitrust case is decided on its own merits, e-commerce generally has benefitted consumers by spurring more competition, lower prices, and higher innovation across multiple industries. It also made antitrust analysis more complex by blurring the lines between traditional and new firms as well as impacting entry and growth across several industries in different ways. The increased complexity of antitrust analysis might suggest caution when evaluating far-reaching changes in policy and enforcement.

References

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[2] Retail e-commerce sales worldwide from 2014 to 2023. Available at: https://www.statista.com/statistics/379046/worldwide-retail-e-commerce-sales/ (last accessed on March 2, 2021).

[3] Number of digital buyers worldwide from 2014 to 2021. Available at: https://www.statista.com/statistics/251666/number-of-digital-buyers-worldwide/ (last accessed on March 2, 2021).

[4] "US Ecommerce Growth Jumps to More than 30%, Accelerating Online Shopping Shift by Nearly 2 Years," eMarketer Editors, *Insider Intelligence*, October 12, 2020. Available at: https://www.emarketer.com/content/us-ecommerce-growth-jumps-more-than-30-accelerating-online-shopping-shift-by-nearly-2-years (last accessed on February 27, 2021).

[5] For a more extensive discussion see the former Assistant Attorney General and head of Antitrust Division at the US Department of Justice Makan Delrahim's remarks at the University of Haifa. Available at: https://www.justice.gov/opa/speech/assistant-attorney-general-makan-delrahim-delivers-remarks-university-haifa-israel (last accessed on March 19, 2021).

[6] Antitrust market definition is a somewhat technical exercise. Importantly, "antitrust markets" don't necessarily correspond to what business people or consumers would call "markets." Nevertheless, the core of this exercise revolves around identifying what firms are vying for customer attention which ultimately sheds light on competition and its effects on price, quality, innovation, etc.

[7] For example, Amazon.

[8] For example, Amazon Marketplace. Other examples include Expedia which connects customers looking for a flight to airlines selling tickets; Uber and Lyft which help people who need a ride find drivers; Seamless and Grubhub which match restaurants to their customers.

[9] For example, Spotify and Netflix subscription services for online consumption of music and movies/series, respectively.

[10] "First, price transparency has increased with online trade. Consumers are now able to instantaneously obtain and compare product and price information online and switch swiftly from one channel (online/offline) to another." *Final report on the E-commerce Sector Inquiry*, European Commission (May 10, 2017), p. 4. Available at: https://ec.europa.eu/competition/antitrust/sector_inquiry_final_report_en.pdf (last accessed on February 28, 2021).

[11] *Implications of E-commerce for Competition Policy - Note by the United States*, Joint submission by the FTC and DOJ (June 6, 2018), p. 1. ("*FTC/DOJ OECD Submission*" elsewhere) Available at: https://www.ftc.gov/system/files/attachments/us-submissions-oecd-2010-present-other-international-competition-fora/e-commerce_united_states.pdf (last accessed on February 28, 2021).

[12] See discussion in Canada, Micah Wood, Laura Weinrib, Kevin MacDonald and David Dueck in *E-commerce Competition Enforcement Guide* ed. Claire Jeffs (January 2019), Law Business Research, p. 141.

[13] "Moreover, online and offline marketplaces increasingly interact and compete with each other. This development has required the Agencies to consider the effects of these sales and the interaction between the marketplaces when considering the competitive effects of conduct or transactions." *FTC/DOJ OECD Submission*, p. 3.

[14] *FTC/DOJ OECD Submission*, p. 7.

15 An interesting thought experiment is whether the reverse would apply, and under what circumstances: if competition from online retailers is enough to prevent a price increase following a merger between brick-and-mortar competitors, is the same competition enough to prevent price increases following a merger between predominantly online retailers? This does not appear to be a far-fetched theory, although I am not aware of cases where such question has been considered.

16 *FTC/DOJ OECD Submission*, p. 3.

17 Wal-Mart online sales grew 44%, 40%, and 37% in 2017, 2018, and 2019, respectively [see Trefis Team, “How Much In Online Revenue Can Walmart Generate In 2020?,” *Forbes*, March 2, 2020. Available at: https://www.forbes.com/sites/greatspeculations/2020/03/02/how-much-in-online-revenue-can-walmart-generate-in-2020/?sh=5ccd81782e26 (last accessed on March 2, 2021)]. Because of the COVID pandemic Wal-Mart online sales grew 65% in 2020. Wal-Mart is today the second largest online retailer [see Tricia McKinnon, “5 Reasons Walmart’s eCommerce Strategy is Winning,” *Indigo Digital*, November 27, 2020. Available at: https://www.indigo9digital.com/blog/4-secrets-to-walmarts-ecommerce-sucess (last accessed on March 2, 2021)].

18 Percentage of paid units sold by third-party sellers on Amazon platform as of 4th quarter 2020. Available at: https://www.statista.com/statistics/259782/third-party-seller-share-of-amazon-platform/ (last accessed on March 2, 2021). The complex relationship between Amazon as a retailer and Amazon as a marketplace is still debated and outside of the scope of this article.

19 Benedict Evans, “Shopify,” *Benedict Evans Newsletter*, February 17, 2021. Available at: https://www.ben-evans.com/benedictevans/2021/2/17/shopify (last accessed on March 2, 2021).

20 The timeliness criterion formulates that entry is rapid enough so that customers are not harmed by a merger. The likelihood criterion refers to the profitability of entry. And the sufficiency criterion refers to the fact that entry should be sufficient (for example, products to be close enough substitutes) to deter any consumer harm. See Section 9 of the HMG. Available at: https://www.justice.gov/atr/horizontal-merger-guidelines-08192010 (last accessed on March 2, 2021).

21 Vipal Monga, “Shopify’s Secret Weapon is Thousands of New Business Owners,” *Wall Street Journal*, February 16, 2021. Available at: https://www.wsj.com/articles/shopifys-secret-weapon-is-thousands-of-new-business-owners-11613484000 (last accessed on March 3, 2021).

22 Spencer Soper, “Wall Street is Investing Billions to Scale Tiny Mom-and-Pop Sellers on Amazon,” *Bloomberg*, February 9, 2021. Available at: https://www.bloomberg.com/news/articles/2021-02-09/wall-street-is-investing-billions-to-scale-tiny-mom-and-pop-sellers-on-amazon (last accessed on March 3, 2021).

23 See, for example, *Big Data and Competition Policy*, Maurice Stucke and Allen Grunes, 2016, Oxford University Press.

24 Anja Lambrecht and Catherine Tucker, “Can Big Data Protect a Firm from Competition?” *Competition Policy International Antitrust Chronicle*, January 2017.

25 Danielle Bochove, “Shopify Slips After Warning Revenue Growth Will Slow in 2021,” *Bloomberg*, February 17, 2021. Available at: https://www.bloomberg.com/news/articles/2021-02-17/shopify-beats-estimates-sees-revenue-growth-slowing-in-2021 (last accessed March 2, 2021).

26 Number of TikTok users in the United States from 2019 to 2024. Available at: https://www.statista.com/statistics/1100836/number-of-us-tiktok-users/ (last accessed on March 2, 2021). And Number of Facebook users in the United States from 2017 to 2025. Available at: https://www.statista.com/statistics/408971/number-of-us-facebook-users/ (last accessed on March 2, 2021).

27 See https://www.shopify.com/capital and the January 14, 2020 press release announcing the program. Available at: https://news.shopify.com/shopify-capital-lends-small-businesses-a-hand-with-starter-loans (last accessed March 2, 2021).

[28] Amazon's short-term business loans program, Amazon Lending, was launched in 2011 [see Retail News Editor, "Amazon Lending Surpassed $3 Billion in Loans to Small Businesses Since Its Launch in 2011," *EPR Retail News*, June 8, 2017. Available at: https://eprretailnews.com/2017/06/08/amazon-lending-surpassed-3-billion-in-loans-to-small-businesses-since-its-launch-in-2011-894767575/ (last accessed on March 2, 2021)]. In 2020 Amazon launched a digital credit line for small businesses, together with Goldman Sachs [see Ron Shevlin, "Amazon And Goldman Sachs: A Small Business Lending Wake-Up Call For Banks," *Forbes*, June 15, 2020. Available at: https://www.forbes.com/sites/ronshevlin/2020/06/15/amazon-and-goldman-sachs-a-small-business-lending-wake-up-call-for-banks/?sh=3e3232978917 (last accessed on March 2, 2021)].

[29] Alistair Barr, "PayPal Launches Financing Business to Drive More Sales," *USA Today*, September 24, 2013. Available at: https://www.usatoday.com/story/tech/2013/09/24/paypal-working-capital/2858933/ (last accessed on March 2, 2021).

[30] In 2005 when the FTC effectively blocked the merger between Blockbuster and Hollywood Video, Netflix annual revenue was almost $700 million while Blockbuster revenue in the year prior was just shy of $6 billion. However, just five years later Blockbuster filed for bankruptcy and Netflix revenues grew to $2.2 billion. In addition to the difficulties faced by the regulators in predicting the future, this might point to a fundamental lack of alignment between antitrust enforcers and firms. While companies routinely make decisions, especially strategic ones such as mergers, evaluating their competitive landscape five years down the line, antitrust enforcers are typically unwilling to credit a (potential) rival's growth five years down the line as a competitive force sufficient to prevent anticompetitive harm today. Data on Netflix revenue are available at: https://www.macrotrends.net/stocks/charts/NFLX/netflix/revenue (last accessed on March 2, 2021). Data on Blockbuster revenues from Frank Olito, "The rise and fall of Blockbuster," *Insider*, August 20, 2020. Available at: https://www.businessinsider.com/rise-and-fall-of-blockbuster (last accessed on March 2, 2021).