UNCLOUDING THE CRYSTAL BALL: HOW TO DEMYSTIFY AND REFOCUS ANTITRUST LAW FOR DYNAMIC MARKETS

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I. INTRODUCTION

The Fourth Industrial Revolution has brought about a rise in dynamic and complex markets, defined by frequent and disruptive innovation. These markets—such as telecommunications, augmented reality, and artificial intelligence—are becoming essential to and integrated into society. While dynamic markets benefit consumers through increasingly innovative products and services, they pose unique challenges to the existing framework of American antitrust law.

From its inception in the late 1800s, antitrust law in the United States has sought to balance the positive and negative effects of market consolidation to protect market competition. One opportunity for regulators to monitor consolidation is through the review of horizontal mergers. But horizontal merger analysis—which examines a proposed union of two market

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† J.D., 2022, University of California, Berkeley School of Law. I would like to acknowledge and give thanks to Professor Talha Syed for sharing his insight and expertise, as well as my parents, Naresh and Priti Ghatlia for their support and encouragement throughout this process.
1. See Klaus Schwab, The Fourth Industrial Revolution, BRITANNICA, https://www.britannica.com/topic/The-Fourth-Industrial-Revolution-2119734 (last visited Nov. 9, 2020) [https://perma.cc/3JLJ-RRE4]. This Fourth Industrial Revolution will include the “convergence of digital, biological, and physical innovations” and will rapidly change the products and services offered to consumers. These markets include science, artificial intelligence, telecommunications, and augmented reality. Id.
competitors—is a daunting task. Courts are asked to do the near-impossible: ascertain the effects of a potential merger on a market and determine if those effects will be anticompetitive. In essence, courts take on the role of “fortuneteller[s]” and must “peer[] into a crystal ball” to predict the future.

Analyzing the impact of a merger on an entire market could easily lead judges down an unadministrable rabbit hole. There are hundreds of potential effects and several different market players, including consumers, producers, and state and federal governments. Each player has their own objectives within a market, and these objectives may conflict. A court facing this rabbit hole must narrow its analysis if it hopes to reach a decision. But this raises difficult questions: Which effects matter? Whose interests should be protected, and how?

Courts and regulators face added difficulties when addressing these questions in dynamic markets. Unlike non-dynamic (static) markets, where the overarching structure of the market remains stable from year to year, dynamic markets are consistently upset by rapid technological innovations. For example, the milk market is static: while there might be new entrants, such as producers of almond and oat milk, the overall structures in which milk is made, bought, and sold have not significantly changed in the last hundred years. In contrast, the telecommunications market, a dynamic market, has seen constant, dramatic shifts in the underlying technologies, deployment, and types of services provided in the last thirty years, and it has become essential to consumers’ everyday lives. The unpredictable nature of dynamic markets adds difficulty to the jobs of regulators in protecting the market and its players.

The predominant Chicago School framework of antitrust has narrow answers to the questions of which effects and whose interests the law should consider: it focuses only on short-term economic market effects, including price and innovation, and their impact on consumers. Practitioners and scholars have dubbed this focus as “consumer welfare.” In a horizontal merger analysis, the consumer welfare approach directs courts and regulators to assess the potential anticompetitive effects of a merger, as well as its

5. Id. at 186, 188.
8. See id.
10. Id. at 942–43.
potential efficiencies. Generally, consumer welfare increases when efficiencies in the market allow producers and sellers to offer better products and services at cheaper prices, and when these efficiencies outweigh any reduction in competition.

However, the Chicago School framework is ill-equipped to predict the effects of mergers in dynamic markets, which are increasingly commonplace in the twenty-first century. The recent case *New York v. Deutsche Telekom AG*, litigated in the Southern District of New York, shows why. In this case, the court found that the proposed merger of two telecommunications services, Sprint and T-Mobile, would not lead to anticompetitive effects for market consumers and thus did not violate antitrust law. Adhering in large part to the Chicago School framework, the court concluded that the short-term efficiencies and increases in network abilities outweighed any potential harms to competition from the merger. This Note argues that two errors in *Deutsche Telekom* represent deficiencies in modern antitrust law that must be corrected to accurately regulate mergers in dynamic markets like the telecommunications industry. Namely, merger analysis in these markets should account for both the effects of the merger in the long term, and on the economy as a whole.

Part II of this Note discusses the basics of antitrust law and provides a primer on horizontal mergers. Part III presents an overview of *Deutsche Telekom* and highlights evidence used by the court in its efforts to predict the future of the telecommunications market. Part IV analyzes the merits of the court’s decision in two sections. First, it discusses three errors made in the case. The court: (1) focused only on short-term efficiencies, (2) primarily studied consumer effects, ignoring overall effects on the economy, and (3) incorrectly prioritized witness testimony over documentation. Second, it examines how the first two of these errors reflect broader inadequacies in antitrust law. To accurately predict the future of dynamic markets, courts must broaden their efficiency analyses to account for the long-term effects of a merger and expand their goals to examine effects on the overall economy. In broadening their efficiency analyses, courts should balance potential short-term gains in efficiency with the long-term harms of consolidation of capital and power in dynamic markets, which can lead to higher prices and less innovation. Courts focusing on broader economic effects will better protect consumer, business, and government interests, as well as economic success. Both regulators and

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judges should leverage the deficiencies in this case and the renewed political focus on antitrust law today to promote larger structural antitrust reform.

II. BACKGROUND

Reviewing antitrust law in the United States illuminates the policies and practices at play in Deutsche Telekom. This Part provides relevant background on antitrust law in the United States. First, it presents a brief history of the laws that form the cornerstone of antitrust enforcement. Second, it summarizes the prevailing analytical framework of antitrust law, the Chicago School, which heavily emphasizes consumer welfare and which the court relied upon in Deutsche Telekom. Third, it provides an overview of the horizontal merger doctrine and reviews courts’ rationales in deciding previous merger cases. This background will help inform the policies and practices at play in Deutsche Telekom.

A. A BRIEF HISTORY OF ANTITRUST LAW

The late 1800s and early 1900s ushered in a consolidation of power in U.S. markets through the creation of monopolistic trusts. The most famous example is Standard Oil, a trust owned by only one businessman that controlled almost all oil production and transportation in the country. Standard Oil amassed its large market concentration through anticompetitive behaviors such as buying out other firms. These practices gave Standard Oil great leverage in setting prices above the competitive level.

In response to the rise of trusts and their anticompetitive practices, Congress enacted the first major antitrust laws. Congress passed the Sherman Act in 1890 to curb attempted or successful monopolization and market collusion. In 1914, Congress reinforced the Sherman Act with the passage of the Clayton Act. Provisions of the Clayton Act advanced the Sherman Act by “prevent[ing] competitive conditions from deteriorating even when competition [is] not clearly problematic at the time.” Specifically, § 7 of the Clayton Act outlaws horizontal mergers that would “substantially . . . lessen

15. See generally Standard Oil Co. of New Jersey v. United States, 221 U.S. 1 (1911).
16. Id.
competition, or . . . tend to create a monopoly.”

Together, these laws enable courts to remedy anticompetitive conduct and, and along with the FTC Act, are to this day the “core federal antitrust laws.”

Each act promotes the goal of antitrust: protecting “economic freedom and opportunity by promoting free and fair competition in the marketplace.” Free and fair competition results in lower prices, better quality, more quantity and choice, and greater innovation. These benefits are achieved by balancing the positive and negative effects of market consolidation. On the one hand, consolidation of power and limited competition can increase investment and innovation through economies of scale. On the other hand, they can also lead to monopolistic behaviors that increase prices and reduce supply. While monopolies themselves are not inherently unlawful, a monopoly’s behavior can be unlawful if it has undue anticompetitive market effects. Therefore, antitrust law depends heavily on the distinction between pro-competitive and anticompetitive behavior to protect consumers.

B. FRAMEWORKS OF ANTITRUST LAW

This Section briefly summarizes the current conceptual framework for antitrust analysis and provides background to the later discussion of its deficiencies in dynamic markets.

The predominant framework for antitrust analysis is the Chicago School framework. Named after the various lawyers and economists at the University of Chicago, the Chicago School’s approach to the goals of antitrust is purely economic. Courts and regulators ignore potential political and moral implications of mergers (or horizontal agreements, alleged monopolization, etc.); instead, they assess only the economic harms and gains in a market, such

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21. Most notably, in 1911 the Supreme Court ordered the split of Standard Oil into various smaller companies that would compete against each other. See Standard Oil Co. of New Jersey v. United States, 221 U.S. 1 (1911).
24. Id.
25. Id.
27. See Evans & Hylton, supra note 3, at 203.
28. Id. at 206.
as higher prices or higher-quality products. This reliance on economics has “rendered antitrust a more mathematically rigorous and technically demanding field” than other areas of law.\textsuperscript{31}

Economic analysis in the Chicago School focuses on “consumer welfare,” a term made famous by Judge Robert Bork.\textsuperscript{32} While scholars disagree on the exact definition of consumer welfare, courts in merger cases often conduct consumer welfare analysis by measuring the short-term effects of a merger on consumers in the aggregate, examining whether they will receive better prices, quality, quantity, and innovation from a merger.\textsuperscript{33} One of the most important ways that antitrust regulators assess the effects of a merger on consumer welfare is by examining the potential realization of efficiencies,\textsuperscript{34} which can positively impact consumers in a market.\textsuperscript{35} Economic efficiency gains occur when a merger allows the merged firm to compete more effectively—for instance, by consolidating resources or combining human capital—resulting in lower prices and higher quality goods.\textsuperscript{36} But efficiency analysis is never exact, as determining potential efficiencies is a forward-looking exercise and judges

\begin{itemize}
  \item \textsuperscript{31} See Michael Baye & Joshua Wright, \textit{Is Antitrust Too Complicated for Generalist Judges? The Impact of Economic Complexity and Judicial Training on Appeals}, 54 J. L. & ECON. 1, 2 (2011).
  \item \textsuperscript{32} See Hovenkamp, supra note 12, at 2472.
  \item \textsuperscript{33} See id. Economists generally have two market concerns. First, there is a concern that some consumers will be priced out of the market because they will not pay higher prices for the goods. This loss is called the deadweight loss. See Herbert Hovenkamp, \textit{Antitrust’s Protected Classes}, 88 MICH. L. REV. 1, 6 (1989). The second concern is while the total surplus (or the total of both consumer and producer welfare) might remain the same or even grow in monopolistic markets, producer surplus will grow more than consumer surplus. This imbalance in surplus is caused by producer profits from selling higher cost products to remaining consumers. In general, economists look for growth in overall total surplus as this number indicates the growing wealth of an economy. See id. At 6. The Chicago School’s misleading emphasis on consumer welfare refers only to total surplus, and not to specific consumer surplus. See Ginsburg, supra note 9, at 942–43. In championing a focus on total surplus, a Chicago view analysis of antitrust only considers the first concern of deadweight loss caused by lower output and higher prices in the market. See Hovenkamp, supra note 12, at 2473. Chicago School followers do not think it is relevant to discern producer profits from consumer profits, as this wealth shift “had no discernible net impact on consumer welfare” since both producers and consumers can adjust their spending based on their preferences. Daniel A. Crane, \textit{The Tempting of Antitrust: Robert Bork and the Goals of Antitrust Policy}, 79 ANTITRUST L.J. 835, 846 (2014).
  \item \textsuperscript{34} U.S. DEPT OF JUSTICE & FED. TRADE COMM’N, supra note 11, at 4.
  \item \textsuperscript{36} See DEPT OF JUSTICE & FED. TRADE COMM’N, supra note 11, at 4; Lina Khan, \textit{Amazon’s Antitrust Paradox}, YALE L. J. 710, 716 (2017).
\end{itemize}
must make predictions based only on information available to them in the present.

While the Chicago School remains the dominant antitrust framework, a new approach to antitrust, the Neo-Brandesian School, has gained popularity. Neo-Brandesians criticize the Chicago School for permitting companies to consolidate capital and power so long as prices remain low, arguing that this consolidation can create a cyclical effect of propping up powerful individuals at the expense of the working class. In contrast, Neo-Brandesians want antitrust law to focus on the welfare of all individuals and the general society, not just direct consumers. To that end, Neo-Brandesians argue that instead of focusing solely on short-term economic effects, antitrust regulators should consider the aggregation of political power stemming from concentration, the protection of small businesses, and other fairness concerns unrelated to direct economic indicators. Further, Neo-Brandesians believe that the Chicago School is unequipped to deal with dynamic markets, many of which are structured in a way that traditional economics cannot fairly evaluate. For example, the well-known Neo-Brandesian scholar Lina Khan has asserted that Amazon, a large dynamic player in the supply chain and home goods market, cannot be adequately regulated under the Chicago School framework because Amazon strives for low prices for direct consumers—the basic criteria for the Chicago School—at the expense of their workers and potential competitors in the internet sales market.

C. HORIZONTAL MERGER ENFORCEMENT: THE SEMANTICS

While the New Brandeis School is gaining steam in academic circles, the Chicago School still dominates the current judicial regulation of mergers. This Section examines how courts evaluate horizontal mergers under the Chicago School’s consumer welfare framework. This context is necessary to understand the analysis and critique of Deutsche Telekom, discussed in Parts III and IV.

39. See Khan, supra note 36 at 740.
40. See id. at 720.
42. See generally Khan, supra note 36.
Horizontal mergers refer to the combination of two potential or actual competitors in a market and are regulated under § 7 of the Clayton Act. In a § 7 analysis, courts must establish a “reasonable probability,” not just a possibility, of anticompetitive behavior by the merged entity to block a merger. Courts must essentially predict the competitive effects of the merger, including economic efficiencies and gains or losses in consumer welfare. While merger analysis is quite case- and fact-specific, courts follow general guidelines and use a variety of tools and economic indicators to aid their predictions.

To comport with the goals of antitrust law and allow each side a fair hearing, courts utilize a three-step burden-shifting test during horizontal merger analyses. As a threshold step before applying this test, courts establish the relevant market in terms of geography and products to help determine where their focus should be.

In the first step, plaintiffs must establish a prima facie case showing that the merger will significantly decrease competition through evidence of consolidation and lack of viable competitors in the defined market. Plaintiffs can use one of two common economic methods to establish a presumption of anticompetitiveness: they can show that the newly merged company will have greater than thirty percent of the market share, or use the Herfindahl-Hirschman Index (HHI) to indicate that the merged company’s market share will reach a certain threshold that the Department of Justice (DOJ) and Federal Trade Commission (FTC) have deemed “presumptively anticompetitive.” Each method uses market concentration as a proxy for market power. This proxy assumes that as a firm gains market share, it will wield more control and

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43. DEP’T OF JUSTICE & FED. TRADE COMM’N, supra note 11, at 1.
45. See id.
49. See Deutsche Telekom, 439 F. Supp. 3d at 199.
50. Id. at 206. The HHI is “calculated by adding the squares of [all] the individual firms’ market shares” in the market. Id. Moderately concentrated markets have an HHI between 1500 and 2500, while highly concentrated markets have an HHI above 2500. Id. If a merger increases HHI by 200 points or more and is above 2500, the merger is presumed to be anticompetitive and plaintiffs will have met their burden of proof. DEP’T OF JUSTICE & FED. TRADE COMM’N, supra note 11, at 19. Hence, this is a fairly objective and economic parameter by which one can assess the potential level of concentration in the market.
can exercise its power through anticompetitive behaviors. If met, the plaintiff’s prima facie case creates a presumption that the merger will be anticompetitive and should be enjoined.

In the second step, defendants may bring evidence rebutting this presumption and showing the court that the merger will, on balance, not have anticompetitive effects. This evidence should “cast doubt on the accuracy” of the prima facie case. Defendants can successfully rebut a plaintiff’s case with different sources of evidence, including unique market circumstances that show the merger will not harm market competition. Defendants can also present indicators showing ease of market entry—which increases the likelihood of competition—and evidence of market trends towards competition.

Finally, in the third step, the burden shifts back to the plaintiff, who can bring additional evidence to the court, such as market trends or documents showing that the market would suffer from the merged firm’s likely anticompetitive behaviors. Courts will weigh all the evidence to make a final decision.

D. A WINDOW INTO MERGER ANALYSIS

This Section highlights the various types of evidence that courts can examine within a horizontal merger analysis. Current antitrust law values economic measures of consumer welfare and uses efficiencies as a measure of this welfare. The cases below show how courts have used different efficiency measures, including past behavior, barriers to entry, and market circumstances, to predict merger effects on consumer welfare.

In FTC v. Heinz Co., the D.C. Circuit ruled that the merger of two baby food producers would be anticompetitive because of high market

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52. Deutsche Telekom, 439 F. Supp. 3d at 206.
56. Id. One example of market trends towards competition would be more competitors entering the market in recent years.
58. See id.
59. Market barriers to entry are defined as “any characteristic that impedes, discourages, or delays, for a significant period of time, entry into a market.” Horizontal mergers—Other factors—Rebuttal evidence—Entry, 1 HEALTH CARE & ANTITRUST L. § 6A:9 (2020).
concentration and minimal efficiency gains.\textsuperscript{60} The FTC easily established a prima facie case using an HHI calculation indicating that the market share exceeded the threshold for presumptive anti-competitive behavior.\textsuperscript{61} Defendants attempted to rebut this presumption by arguing that there would be no significant competitive loss from the merger.\textsuperscript{62} Specifically, defendants argued that consumers did not view the products as substitutes and that the merger would increase efficiencies.\textsuperscript{63} The court noted that the large increase in HHI (an increase of 510 points to a total of 5,286) meant that it needed to complete a “rigorous analysis” to ensure that the efficiencies were not false promises and would actually offset the negative effects of market concentration.\textsuperscript{64} Defendants argued that the merger would allow the companies to aggregate resources, use resources more efficiently, and compete aggressively against the market leader, all leading to a reduction in prices.\textsuperscript{65} However, the court concluded that this argument was speculative and that high barriers to entry in the baby food market would only increase the anticompetitive effects of the merger, as fewer companies could join the market and compete.\textsuperscript{66} After weighing the evidence, including documents from Heinz that discussed ending competition, the court ruled in favor of the FTC.\textsuperscript{67}

Similarly, in FTC v. University Health, Inc., the Eleventh Circuit ruled against the potential merger of two hospitals because of anticompetitive effects and the defendants’ inability to prove concrete efficiencies in the market.\textsuperscript{68} Defendants argued that the efficiencies of the merger would include streamlining capital and sharing software between the two hospitals.\textsuperscript{69} While they estimated a dollar value the merger would save in operational costs, the

\textsuperscript{60} 246 F.3d 708, 7116–18 (D.C. Cir. 2001).
\textsuperscript{61} Id. at 715–16.
\textsuperscript{63} Heinz Co., 246 F.3d at 718.
\textsuperscript{64} Id. at 721.
\textsuperscript{65} Id. at 722.
\textsuperscript{66} Id. at 722, 718.
\textsuperscript{67} Id at 717, 727. Other courts have also taken into consideration internal documents to establish the intent of market players when analyzing the potential effects of a merger. See United States v. Oracle Corp., 331 F. Supp. 2d 1098, 1166–68 (N.D. Cal. 2004) (reviewing documents where companies who were merging noted each other as “closest competitors”). Courts have also relied on barriers to entry; if barriers to entry are low, then the presumption of anticompetitive behavior is likely be rebutted as new players could easily enter the market. H & R Block, Inc, 833 F. Supp. 2d at 73.
\textsuperscript{68} 938 F.2d 1206, 1222–24 (11th Cir. 1991).
\textsuperscript{69} Id. at 1223.
court was unconvinced, as defendants provided no specifics on how these efficiencies would be “passed on to consumers.”70 The defendants also argued that their status as non-profit hospitals and their past procompetitive behavior should persuade the court that they would not engage in anticompetitive behavior.71 The court was not persuaded by this evidence, which it deemed not probative in value.72 It declared that no business was bound by its prior actions, and therefore, the court would not rely on past behaviors to predict future behaviors.73 The court ruled the merger to be anticompetitive.74

These two cases exemplify how courts rely on a variety of economic indicators to determine the potential short-term effects and market efficiencies of a merger. In each case, the court’s ruling was ultimately determined by its prediction of the merger’s effects on consumers and their welfare.

III. NEW YORK V. DEUTSCHE TELEKOM

In *Deutsche Telekom*, multiple states brought a lawsuit under the Clayton Act against the merger of two telecommunications providers, Sprint and T-Mobile, claiming that the merger would decrease market competition and lead to anticompetitive behavior.75 This Part first provides background on the telecommunications market and then presents an overview of the case’s facts, the court’s holding, and the evidence considered.

A. THE TELECOMMUNICATIONS MARKET

The modern telecommunications services market (namely, mobile devices) is an integral part of society. What began as a simple “method of voice communication” is now a practical tool for individuals to “manage countless facets” of their lives, including banking, transportation, social media, and audio and visual streaming.76 As of 2019, over ninety-six percent of Americans owned at least one cellphone, and this growth has facilitated a fast-paced and “on-the-go” lifestyle.77 Retail mobile wireless telecommunications services (RMWTS, or telecommunications companies), provide the products and services to consumers in this market (cell phones and data plans).78 Generally,
consumers choose their provider based on factors including price, options to bundle devices, and the speed and consistency of networks.79

Telecommunications companies provide service through spectrum, which is the range of radio waves used for the transmission of cellular data.80 Spectrum is limited in quantity, highly regulated by the federal government, and sold to companies through auction by the Federal Communications Commission (FCC).81 Both limited supply and high demand make spectrum “the most critical resource” for providers.82

The telecommunications market is constantly innovating, in part due to the ever-growing uses for spectrum (e.g., phone calls, data sharing, and artificial intelligence), making the telecommunications market dynamic.83 Dynamic markets are defined by disruptive innovations that create constant churn and can “overturn the existing order” of a market.84

Disruptive innovation in the telecommunications market comes primarily from the generations of telecommunications technology, more commonly known as “G’s.”85 G’s improve the speed, capabilities, and efficiencies of networks with each iteration, and are being developed at an increasingly rapid rate.86 For example, the first generation, developed in the 1980s, allowed for voice calls to be transmitted over spectrum.87 2G was developed a decade later and allowed for text messages, and 3G provided access to the internet in the 2000s.88 4G has enabled application development and high-speed data travel.89 5G rollout is predicted to bring even faster speeds and the advent of virtual

79. Id.
80. Id.
82. Id.
83. Id. at 192.
84. Sidak & Teece, supra note 2, at 582–83; Pedro Gonzaga, Merger Enforcement in Dynamic and Innovative Markets, 4 EUR. COMPETITION & REG. L. REV., V, 6 (2020). While no product or service market is completely static, some markets are more structurally static than others. Markets such as the milk or shoe market, for example, are structurally static; while new products might be introduced into these markets, the way in which the market operates has not changed from decade to decade. Legislators and courts have been focused on antitrust law through the lens of static competition for the last fifty years through their economic heavy framework.; Sidak & Teece, supra note 2, at 581.
85. Deutsche Telekom AG, 439 F. Supp. 3d at 192.
87. Id.
88. Id.
89. Id.
reality applications. Current projections indicate that consumers will use almost five times as much data for 5G than is currently being used, incentivizing a successful 5G rollout for providers. However, 5G will need its own exclusive and unshared spectrum, making the rollout more difficult and expensive than previous generations. Providers will have to reshape their services to meet 5G standards.

The telecommunications market is not only dynamic but also capital-intensive. To deploy spectrum and send information to mobile devices, telecommunications providers require a robust infrastructure network. This network includes physical cell towers that transmit radio waves, fiber cables connecting these structures, and a “core network” of computers to direct cell traffic. A provider’s coverage and capacity is determined by this network, referred to as Radio Access Network (RAN). Strong networks will provide coverage regardless of geographical location but face data limitations when many consumers are using the network at once.

There are currently two types of service providers in this market: Mobile Network Operators (MNOs) and Mobile Virtual Network Operators (MVNOs). MVNOs lease RAN access from MNOs. Examples of MVNOs include Altice and TracFone. The four MNOs in the United States—AT&T, Verizon, T-Mobile, and Sprint—are common household names, but they differ in size and capacity. Verizon and AT&T are the largest of the MNOs; each provider has sizable spectrum holdings, close to 100 million subscribers, upwards of four billion dollars in yearly revenue, and reputations for high quality services. T-Mobile, the third largest MNO, has grown rapidly in the past decade after an influx of cash from a previous merger proposition and a bold creative strategy from CEO John

90. *Id.* at 192–93. The 5G rollout will likely create new jobs. These jobs will include construction of the physical network infrastructure as well as development of new 5G applications and tools.
92. *Id.* at 209.
93. *Id.*
94. *Id.* at 191.
95. *Id.* at 191, 191 n.4.
96. *See id.* at 191–92.
97. *Id.* at 193.
99. *Id.*
100. *Id.* at 195. MVNOs make up less than two percent of the national market share. *Id.*
101. *Id.* at 193.
102. *See id.* at 193–95.
103. *Id.* at 193.
Legere. This strategy included successful investments in spectrum and marketing services at lower prices to contrast their products with those of AT&T and Verizon. T-Mobile now counts approximately eighty million subscribers and three billion dollars in yearly revenue. Sprint, the smallest MVO, has seen a decline in quality of service over the past ten years, due in part to unsuccessful investments in spectrum holdings. Sprint serves forty million subscribers and records two billion in yearly revenue.

B. THE DUETSCHTE TELEKOM CASE: SETTING THE STAGE

In 2018, T-Mobile and Sprint announced that they planned to merge and would retain the name T-Mobile (this Note will refer to the merged company as New T-Mobile). The companies filed the proposed merger with the DOJ and the FCC. After negotiations and concessions by Sprint and T-Mobile, both agencies approved the merger in 2019. After this approval, ten state attorneys general, including those of New York and the District of Columbia (hereinafter “Plaintiffs”), filed a lawsuit in the Southern District of New York to prevent this consolidation.

Plaintiffs claimed that the proposed merger of T-Mobile and Sprint (hereinafter “Defendants”) violated § 7 of the Clayton Act because it would reduce competition in the RMWTS market and result in increased costs to consumers, estimated at 4.5 billion dollars a year. However, after a lengthy analysis of the evidence, the court found that the merger would not lead to anticompetitive behavior in the market and allowed it to proceed.

105. Id. at 194.
106. Id. at 193.
107. Id. at 194.
108. Id.
111. Kennedy, supra note 110.
113. Deutsche Telekom, 439 F. Supp. 3d at 189.
Before discussing the case itself, Judge Marrero of the Southern District of New York provided his own thoughts on the difficulties of antitrust cases. Judge Marrero wrote that “antitrust disputes virtually turn[] the judge into a fortuneteller” because judges must predict the potential effect of mergers on competition and on consumers. Both parties spend millions of dollars on expert witnesses, economic research, and documentation, all of which speaks favorably to their position. However, in most cases the data for each side will “cancel each other out.” This cancellation leaves judges with nothing but “competing crystal balls.” Instead of juggling these competing interests, judges rely on their own “tried and tested version of peering into a crystal ball”—looking at past behavior, weighing the credibility of witnesses, and using experience to employ “behavioral measures” that numbers fail to establish.

C. THE HORIZONTAL MERGER ANALYSIS

After conducting a complete horizontal merger analysis, Judge Marrero concluded that Defendants’ evidence and witnesses successfully rebutted Plaintiffs’ presumption of anticompetitive behavior and allowed the merger to move forward.

As a threshold matter, the court established the relevant product market (products that consumers use interchangeably) to include only MVOs (larger telecommunications companies that own their own infrastructure and can set their own rates). Regarding the geographic market (where the product is marketed), the court found both a large national market and local markets, each using different marketing strategies.

1. Plaintiffs’ Prima Facie Case

As discussed supra, plaintiffs must first establish a prima facie presumption that the merger will “result in undue market concentration in an area of effective competition” in the product and geographic markets, thereby

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114. See id. at 186–90.
115. Id. at 186.
116. Id. at 187.
117. Id.
119. Id. at 189.
120. Id. at 199–202. The court did not include MVNOs because it found that MVNOs were quite restrained by the MVOs they lease from and had no price setting power; therefore, the market shares of MVNOs were attributed to the MVOs from which they leased. Id.
121. Id.
122. Id. at 203.
harming competition. In *Deutsche Telekom*, both a calculation of overall market share and the HHI index suggested the merger would significantly increase market concentration: Plaintiffs showed that New T-Mobile would have over thirty percent of the market share and that the HHI would increase by 679 points, totaling 3,186. The court found that this satisfied Plaintiffs’ burden.

2. *Defendants’ Rebuttal*

The court then analyzed Defendants’ evidence and found that it rebutted Plaintiffs’ prima facie case. Defendants brought three arguments at this stage: (1) the merger would bring efficiencies to the market through a new 5G network and lower costs, (2) Sprint was a weakened competitor, and (3) DISH Network’s entrance as a new competitor, paired with additional government remedies, would increase competition in the market.

a) *Efficiencies*

The court found that efficiencies from the merger would reduce prices and improve the quality of telecommunications services, thus increasing consumer welfare. Defendants predicted that consumers would benefit from decreased prices because New T-Mobile would operate at reduced costs due to streamlined networks and infrastructure. New T-Mobile would continue to offer aggressive rates to compete with Verizon and AT&T and siphon off those competitors’ customers. Further, New T-Mobile would run on a network consisting of only the strongest portions of both T-Mobile and Sprint’s networks, enhancing the quality of customers’ service. Finally, New T-Mobile’s increased spectrum capacity would also lead to improved product offerings and a faster 5G rollout.

The court accepted all of Defendants’ economic efficiency claims and noted that previous mergers in this market had led to greater efficiencies,

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123. *Id.* at 199.
125. *Id.*
126. *Id.* at 207.
127. *Id.*
128. *Id.* at 208. Previous courts, as well as the DOJ, have established that “evidence of efficiencies” in the market can rebut the plaintiffs’ presumption of competition. *Id.* at 208–09.
129. *Id.* at 208.
130. *Id.*
131. *Id.*
132. *Id.* at 208–09. As discussed *infra*, the merger included stipulations mandated by the DOJ and FTC, including that New T-Mobile meet strict deadlines for rolling out 5G (with associated fines if deadlines were not met). *Id.* at 225.
thereby boosting the credibility of Defendants’ arguments.133 The court found that the predicted efficiencies were merger-specific, meaning that neither company by itself could achieve these results.134 For instance, while it was theoretically possible for Sprint and T-Mobile to buy spectrum through FCC auctions, increasing their individual capacity, no auctions were scheduled for the near future.135 Plaintiffs disagreed that the efficiencies were merger-specific. They argued that a new technology, Dynamic Spectrum Sharing, would allow providers to use the same spectrum for both 4G and 5G simultaneously.136 Through Dynamic Spectrum Sharing, Sprint and T-Mobile could individually gain efficiencies in spectrum that would strengthen their 5G services, rendering the merger efficiencies unnecessary.137 However, because this technology was still experimental, the court found that it was not reliable.138

The court also went further to acknowledge additional benefits of the merger beyond efficiencies. It wrote in a footnote that the speedy development of 5G in the United States provided a broader advantage to the public interest because it would allow the United States to remain a top innovator and out-compete other technologically advanced countries such as China and Korea.139

b) Sprint was a Weakened Competitor

Defendants successfully argued that Sprint was a weakened competitor and, if it continued as an individual business, it would not “compete effectively in the future.”140 The court discussed various reasons for this weakened status, including Sprint’s neglect in network investment and its financial difficulties.141 Because Sprint’s decreasing viability in the telecommunications market meant that it could allegedly not continue as a competitive standalone firm, the court stated that Sprint’s merger with T-Mobile would not hurt competition.142

While there is specific case law and guidance on the viability of a weakened

133. Id. at 216–17.
134. Id. at 211.
135. Id.
137. Deutsche Telekom, 439 F. Supp. 3d at 212.
138. Id.
139. Id. at 209 n.12.
140. Id. at 217.
142. Id. at 189.
competitor defense, the implications of this defense are beyond the scope of this Note.\textsuperscript{143}

c) DISH and Other Market Remedies

Defendants argued that the entry of DISH as a fourth competitor in the telecommunications market would mitigate any residual anticompetitive effects of the merger. Before this litigation, both the DOJ and the FCC reviewed the merger and added stipulations to reduce anticompetitive effects, including requirements for DISH to join the market.\textsuperscript{144} These stipulations were considered part of the merger by the court.

Among other requirements, the stipulations mandated that New T-Mobile divest one of Sprint’s MVNOs, Boost, to DISH.\textsuperscript{145} DISH is currently a TV network provider, but it has a low and mid-band spectrum portfolio equivalent in size to Verizon and has previously indicated interest in entering the telecommunications market.\textsuperscript{146} This large spectrum holding made DISH a strong candidate for entering the market,\textsuperscript{147} which it would do by obtaining Boost and entering a licensing deal to use New T-Mobile’s network while DISH started building out its own MVO network.\textsuperscript{148} The court believed that DISH’s entry as an MVO “maverick” to the market would be timely, likely, and sufficient to mitigate any anticompetitive effects of the merger as it would add new competition in the market.\textsuperscript{149}

While DISH would face a capital-intensive process to build out a competitive network, the court believed that two technologies would help lower DISH’s barriers to entry. First, Dish claimed it would cut costs by building their virtualized network on top of software and cloud services, rather than building their software on hardware that it builds from scratch.\textsuperscript{150} Second, DISH planned to build an Open Radio Access Network (ORAN) that would enable use of multiple vendors’ hardware and software, thereby reducing the

\textsuperscript{143} DEPT OF JUSTICE & FED. TRADE COMM’N, supra note 11, at 32 (“Failure and Exiting Assets”).


\textsuperscript{145} Id. at 225. The court established that DISH’s attainment of Boost, with its near-ten million customers and high satisfaction rates, would help the network’s market entrance. Id. at 227.


\textsuperscript{148} Id. This lease agreement would last seven years at low wholesale rates and would have no cap on usage for the first three years.

\textsuperscript{149} Id. at 225-37.

\textsuperscript{150} Id. at 229.
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costs of relying on one vendor to build out a RAN.\textsuperscript{151} The court accepted Defendants’ argument that these two technologies, along with access to some of Sprint’s decommissioned infrastructure, would reduce market barriers to entry.\textsuperscript{152}

3. Plaintiffs’ Last Burden

Plaintiffs brought additional evidence of anticompetitive effects to invalidate Defendants’ rebuttal. First, Plaintiffs submitted evidence indicating that New T-Mobile might engage in anticompetitive behavior post-merger.\textsuperscript{153} Documents from both Sprint and T-Mobile showed that executives had “considered the prospect of anticompetitive coordination.”\textsuperscript{154} These documents also indicated that executives believed a “consolidated market would be more profitable” and that price signaling had started between the companies.\textsuperscript{155} However, the court noted that since the creation of those documents, price signaling had stopped.\textsuperscript{156} Disregarding these documents, the court instead considered the history of the market.\textsuperscript{157} It claimed that because T-Mobile had always been a “maverick” and had disrupted prices, New T-Mobile would continue to do so.\textsuperscript{158} The court highlighted that it had spent “two full weeks assessing the credibility of each witness and their claims.”\textsuperscript{159} It relied on testimony from CEOs stating that collusion would not fit with T-Mobile’s previous strategies and therefore believed that New T-Mobile would not behave in an anticompetitive manner.\textsuperscript{160}

Second, statements from executives indicated that DISH had overstated its commitment to entering the market.\textsuperscript{161} Plaintiffs entered documents showing that Defendants believed DISH’s bid to enter the market was a “stupid bluff” and the company would just “build a meaningless thin network” to avoid fines with the FCC.\textsuperscript{162} An executive stated that the network would be “something the lawyers can use, but not something customers can use.”\textsuperscript{163} Additionally, Plaintiffs brought evidence that DISH’s spectrum

\textsuperscript{151} Id.
\textsuperscript{152} Id.
\textsuperscript{154} Id.
\textsuperscript{155} Id. at 235–36.
\textsuperscript{156} Id. at 236.
\textsuperscript{157} Id. at 235–36.
\textsuperscript{158} Id. at 237.
\textsuperscript{160} Id. at 236–37.
\textsuperscript{161} Id. at 230.
\textsuperscript{162} Id. (internal quotation mark omitted).
\textsuperscript{163} Id.
portfolio was actually “speculative hoarding”: many people believed DISH was holding spectrum so it could resell it once other providers became desperate enough to pay higher prices. However, the court did not believe that these statements accurately reflected DISH’s intent. Instead, it relied on the FCC and DOJ’s commitment that DISH would enter the market. 

Lastly, Plaintiffs countered Defendants’ assertion that DISH’s use of New T-Mobile’s RAN would help it compete in the market. They argued that New T-Mobile would have strong incentives for DISH to fail at becoming a viable competitor and would hurt their chances of market entry. New T-Mobile would hold a powerful position because it would be leasing DISH the RAN needed to enter the market. New T-Mobile could manipulate prices or slow down speeds to hurt DISH. However, the court believed the appointment of an independent monitor would remedy this problem. This monitor would oversee New T-Mobile’s relationship with DISH and create fixed formulas to calculate pricing. These formulas would ensure DISH a fair chance to compete and secure the network against anticompetitive prices.

Overall, the court found that Defendants’ evidence weighed heavily in favor of the merger, and Plaintiffs’ evidence was not sufficient to prove likely anticompetitive effects. The court believed that efficiencies from the merger and the addition of a new competitor would increase quality and decrease prices for consumers.

IV. DYNAMIC MARKETS AS UNDERSTOOD THROUGH THE LENS OF NEW YORK V. DEUTSCHE TELEKOM

This Note argues that because the court in Deutsche Telekom did not properly account for the unique characteristics of dynamic markets, its analysis was incomplete and incorrect. If the court had used an analysis specific to dynamic markets, it may have found the merger to be anticompetitive. But regardless of the outcome, considering the specifics of dynamic markets would

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164. Id. at 231.
166. Id. The court also noted that the DOJ and FCC would levy fines against DISH if it did not enter the market or meet its other commitments. Id.
167. Id. at 228.
168. Id.
169. See id.
170. See id.
172. Id.
173. Id.
have ensured that the court fully assessed the true implications of the merger. Lessons learned from this case should be carried forward to ensure antitrust analysis is more accurate for future mergers in dynamic markets.

While the *Deutsche Telekom* court did not subscribe to a strict Chicago School analysis of antitrust, the issues in its holding are reflective of broader deficiencies in the framework. The court veered from the usual Chicago School analysis in two ways. First, it criticized antitrust law’s focus on competing economic measures and briefly mentioned other public benefits of the merger, neither of which would be a concern in a strict Chicago analysis. Second, the court recognized the dynamic structure and rapid innovations of the telecommunications market. Importantly, however, these acknowledgments did not result in a more expansive analysis. The court instead focused on the same traditional Chicago School metrics of innovation, quantity, quality, and low prices. Therefore, the weaknesses in this court’s analysis and lessons learned from this case are still relevant to the Chicago School at large. When applied to dynamic markets, the Chicago School’s focus on short-term consumer welfare measured through prices and quality is insufficient.

This Part proceeds in two sections. Section A critiques three specific problems in the analysis of *Deutsche Telekom* and discuss how these problems exist in analyses of all dynamic markets. Section B explores how to implement changes in antitrust law to avoid two of these problems in the future. It argues that, as currently applied, the Chicago School framework is incomplete. To accurately assess the effects of mergers in dynamic and integrated markets, the approach to promoting the current goals of the Chicago School must be altered, and the goals themselves must be expanded. This new approach must consider both short and long term effects of efficiency and the impacts of a merger on individuals outside of direct consumers, including laborers, retailers, and other global players.

A. A CRITIQUE OF DEUTSCHE TELEKOM

The court’s analysis in *Deutsche Telekom* was flawed on two grounds. The court: 1) conducted only a narrow and short-term economic efficiency analysis;
and 2) focused on the effects of the merger for consumers without considering global-scale effects.

1. Economic Efficiency Analysis

Because Deutsche Telekom’s efficiency analysis did not account for disruptive innovation in dynamic markets, the court incorrectly concluded that short-term efficiencies from the merger would benefit consumers and promote better service and quality. The court’s analysis was incomplete in two ways. First, the court should have examined the long-term effects of efficiencies, specifically effects on barriers to entry. Second, it should not have relied overwhelmingly on past firm behavior as a predictor for future behavior.

a) An Overview of Deutsche Telekom’s Incomplete Short-Term Efficiency Analysis

In Deutsche Telekom, the court accurately noted the potential short-term efficiencies resulting from the merger. These efficiencies are particularly important to study in capital-intensive markets such as the telecommunications market, where firms must invest in expensive physical infrastructure to compete. In this case, the court highlighted the positive effects that efficiencies from combined spectrum and consolidated capital investment might have on consumers, including lower prices and better service.

While the court’s efficiency analysis was appropriate under the Chicago School framework, it was incomplete in this context because it did not evaluate the long-term tension between investment and innovation in dynamic markets. More specifically, it failed to consider that efficiencies may have pronounced long-term effects in dynamic markets that ultimately undermine competition. While efficiencies such as consolidation of infrastructure can
lower prices in the short term by reducing overhead costs, such consolidation
can limit dynamic innovation in the long term by reducing incentives to entirely
disrupt the industry. As discussed in Part III, dynamic markets rely on
disruptive innovation to bring better and often transformative services and
products to the market. However, if service providers such as New T-Mobile
amass enough capital investment through merger efficiencies, they will no
longer have the incentive to promote disruptive innovation, as this disruption
would likely render many of the company’s capital investments obsolete. The
same investment efficiencies that created short-term price reductions
could therefore lead to long-term innovation stagnation in the market and
reduce the quality of services. For example, if in ten years 6G were
developed and based on an entirely new type of spectrum or transmission
infrastructure, New T-Mobile would face little incentive to embrace 6G as it
would leave the company’s current spectrum holdings useless. Even though
6G would benefit consumers, New T-Mobile and other providers, equipped
with market concentration and domination, could slow the rollout of this
hypothetical 6G.

Because the efficiency analysis is different in dynamic and static markets,
courts must more carefully protect long-run competition in dynamic markets
to incentivize firms to continually embrace disruptive technologies and
developments. Long-term efficiency consideration is rarely needed in static
markets, even if the markets are capital intensive, because firms are
incentivized to innovate within static market structures to differentiate
themselves from competitors and attract new customers. Consumers benefit
from this innovation by receiving higher-quality products. But courts must
take extra care in allowing disruptive innovation to flourish in capital intensive,
dynamic markets.

Specifically, in *Deutsche Telekom*, the court should have not just studied
short-term efficiencies, but balanced these efficiencies with the long-term
effects on innovation and competition. A more effective analysis would have

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184. *Id.* at 16–17; see also Paul Krugman, *Monopoly Capitalism Is Killing US Economy*, THE
    IRISH TIMES, (April 19, 2016, 12:00), https://www.irishtimes.com/business/economy/paul-
    krugman-monopoly-capitalism-is-killing-us-economy-1.2615956 [https://perma.cc/C2UB-
    KZMH] (explaining that it did not make sense for Verizon’s profit margin to expand its own
    high speed network even though there was strong demand from consumers).
185. See Klint Finley, *Trump Shouldn’t Plan to Tweet From a 6G Phone Anytime Soon*, WIRED
    (Feb. 21, 2019, 8:44 PM), https://www.wired.com/story/trump-shouldnt-plan-tweet-from-
    6g-phone-soon [https://perma.cc/E8B3-TL68].
carefully examined barriers to market entry and would not have relied on past behavior to predict future behavior. The next two Sections address the balancing of short- and long-term efficiencies.

b) Analysis of Barriers to Entry

To effectively analyze long-run competition in *Deutsche Telekom*, the court should have conducted a more thorough analysis of DISH Network’s potential entry as a new fourth competitor in the telecommunications market and its likelihood of mitigating the merger’s anticompetitive effects. Although the court devoted nearly ten pages to this analysis, it placed undue weight on DISH’s claims that it would build a “virtualized network” and operate an Open Radio Access Network (ORAN), and incorrectly dismissed the plaintiff’s contradicting evidence. The court misunderstood—or failed to examine—key technologies that were unproven in the market and incorrectly concluded that DISH would be a viable market entrant because it assumed with certainty that DISH could rely on these technologies. Instead, it should have looked only to currently viable technologies to assess DISH’s likelihood of entry.

The court accepted DISH’s arguments that virtual network technologies would decrease construction and network costs by reducing the need for physical infrastructure. But virtualized networks were a nascent concept at the time with the “hype around [them] exceed[ing] the reality at the moment.” These underdeveloped networks could prevent DISH from becoming a successful competitor. The theoretical cost benefits of virtual networks depended on the fact that their price would be lower than traditional RAN; however, if implementation issues arose, such as problems developing a network strong enough to support a large customer base, the price would skyrocket, causing major financial troubles for DISH. The court acknowledged that even with its current spectrum holdings, DISH would require substantial time and money to build a full MNO network and mitigate anticompetitive merger effects. Despite this, it still relied on unproven technologies to find that DISH would be a viable future competitor.

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188. See id. at 229.
189. Id.
191. See *Deutsche Telekom*, 439 F. Supp. 3d at 228.
192. See id.
In so concluding, the court ignored expert testimony rebuking these technologies. Experts testified that DISH would likely respond to problems with virtual networks by reverting to the more expensive and time-intensive RAN network, reducing the likelihood of market entry success.194 Additionally, DISH’s own CEO admitted outside of trial that a virtual network could cost billions of dollars to implement and recognized the possibility that it might fail.195 Telecommunications executives also acknowledged this possibility in documents.196

Instead of relying on unproven technologies, the court should have analyzed the potential of entry using only currently viable technology. Innovations in dynamic markets can occur so rapidly that it is imprudent to depend on the successful implementation of a specific nascent technology. In other words, in these markets, courts should “ignore innovation possibilities that are too remote to see.”197 In the case of the telecommunications market, neither ORAN nor virtualized networks had been fully endorsed by a majority of experts as viable options.198 If the court had relied on current technologies, it would have concluded that the barriers to entry—namely the capital costs of developing a RAN system in a timely period—would be impossible for DISH to successfully overcome, even with DISH’s agreement with T-Mobile. DISH’s inability to enter the market would reduce competition in the long run, inhibiting innovation and hurting consumers and producers in the market.

c) Analysis of Past Behavior

The court’s balancing of economic efficiencies with potential anticompetitive effects was also tainted by its reliance on past behavior. Throughout Deutsche Telekom, the court assumed that market players’ past competitive practices predicted strong post-merger market competition.199 But past behavior is an ineffective and inaccurate indicator of future behavior in dynamic markets, where rapid innovation can quickly render past practices obsolete.

195. Id.
198. Kapko, supra note 190.
The nature of dynamic markets—new technologies or innovations dramatically altering the market landscape—can make previous assumptions irrelevant and necessitate a shift in market strategies. As discussed above, once a firm dominates a market, its “interest in creative destruction becomes greatly diminished” because it will not want its new market position to “erode.” Accordingly, the likelihood of the firm continuing to innovate will decrease, meaning that past behavior will not predict future behavior. As antitrust scholar Professor Hovenkamp aptly stated, “the small firm seeking entry must shake up the pot” but the “dominant firms are well established and . . . tend to profit from stable growth.”

While in past years, T-Mobile was the underdog seeking market power and therefore relied heavily on innovation and creative thinking, this mindset changed as it gained market power. T-Mobile’s former position as third-largest competitor allowed it to become a maverick, and T-Mobile accordingly “built its identity and business strategy on . . . challenging AT&T and Verizon” to capture their customer base. Relying on testimony from T-Mobile CEO Legere, the court concluded that New T-Mobile would not stop these practices post-merger, but instead continue to aggressively compete. However, the merger could change the company’s priorities, making it no longer profitable to upturn the market. For example, if New T-Mobile invested in a 5G network that enabled it to build a customer base of similar size to AT&T or Verizon, it might no longer invest in continuously improving its network and shaking up the standards for telecommunications providers, but instead spend its money on protecting its customer base.

2. Consumer and Global Impacts

In addition to focusing solely on short-term efficiency at the expense of fully understanding long-run effects on competition, the court in Deutsche Telekom confined its review to individual-level effects on consumers and did not consider the effects of the merger on a global scale. The Chicago School usually defines a consumer as “a person or entity that engages in

200. Gonzaga, supra note 84, at 5.
201. Hovenkamp, supra note 197, at 6–7.
203. Hovenkamp, supra note 197, at 6. While DISH’s entry might not be small in spectrum size, it would be small in that DISH would have to build its customer base and market reputation from scratch.
204. Deutsche Telekom, 439 F. Supp. 3d at 193–94.
206. Id.
consumption.” Consumers are directly involved in the market through their purchases of goods and services. In line with this definition, the court exclusively focused on the merger’s effects on the prices and quality of services in the telecommunications market (including types of cellular networks) because those were the primary ways in which market consumers would be impacted. However, unlike static markets that can be studied in isolation—such as the milk, shoe, or grocery store markets—the telecommunications market is highly integrated in today’s global economy. Services that the market provides help fuel the gig economy, retail shopping, banking, development, and various other markets. Therefore, a merger not only affects consumers, but also other individuals and institutions throughout the economy. While studying consumer effects is essential, courts must expand their analyses to also consider global economic effects that impact all entities the market indirectly touches. In the case of the telecommunications market, these indirect markets include labor, global trade, and national security. In focusing only on direct markets, courts risk neglecting important consequences of the merger.

Deutsche Telekom’s failure to thoroughly consider the importance of building an American 5G network illustrates this concern. The race to develop the first fully functional 5G network is the single largest issue in the telecommunications market. As discussed in greater detail below, it affects the labor market, technological developments in numerous sectors, and national security. Because it is so important to the market and the global economy, the court should have considered the effects of the merger in light of this race. While the court acknowledged that the merger would allow a quicker rollout of 5G and briefly noted these impacts, they were relegated almost exclusively to a single footnote.

The U.S. economy, and almost all individuals, would greatly benefit from the development of a robust 5G network. In building out the first 5G network, the United States would hold its place as a top global innovator and

209. See id. at 189–90.
210. See id.
213. Id.
outcompete other technologically advanced countries such as China and Korea.\textsuperscript{214} The United States would also set telecommunications standards and solidify global dependence on, and sales of, American products and services.\textsuperscript{215} More importantly, a 5G network would create new economic opportunities for many industries, including those involving self-driving cars, telemedicine, automated factories, and smart appliances.\textsuperscript{216} In turn, these opportunities would have large impacts on employment and economic growth.\textsuperscript{217}

Additionally, the race to 5G has serious national security implications. The federal government has already banned U.S. companies from purchasing 5G products or technology from certain Chinese companies, including Huawei, because of fears that these products will allow the Chinese government to conduct cyber espionage on the American government.\textsuperscript{218} There are also fears that Huawei will allow Chinese officials and businesses to steal American intellectual property.\textsuperscript{219} While the impacts of national security on the economy are less direct than on job growth, they can be crucial to the safety of individuals and businesses.\textsuperscript{220}

The court should have carefully discussed each of these considerations, as the merger of Sprint and T-Mobile could significantly change the rollout of 5G. The promise of New T-Mobile developing a successful 5G network might have supported the court’s decision to let the merger proceed, as it would mitigate national security concerns and stimulate the overall economy. If New

\textsuperscript{214} Id.


\textsuperscript{217} See id.


\textsuperscript{219} See Lindsay Maizland & Andrew Chatzky, \textit{Huawei: China’s Controversial Tech Giant}, COUNCIL ON FOREIGN RELATIONS (August 6, 2020 8:00 AM EST), https://www.cfr.org/backgrounder/huawei-chinas-controversial-tech-giant [https://perma.cc/S79Z-UUM7].

\textsuperscript{220} In the fall of 2020, President Trump announced he would take actions to ban WeChat, the popular messaging app, in the United States because he believed that the Chinese app infringed on the data security and privacy of its American users. Geoffrey Gertz, \textit{Why is the Trump Administration Banning TikTok and WeChat?}, BROOKINGS (Aug. 7, 2020), https://www.brookings.edu/blog/up-front/2020/08/07/why-is-the-trump-administration-banning-tiktok-and-wechat [https://perma.cc/Q6LZ-3PS8]. While this ban did not go through, it exemplifies potential national security issues that can affect lives of ordinary citizens. See id.
T-Mobile is not able to build out this network, the United States might not see a strong 5G network at a fast timeline. However, if they successfully and rapidly build out a network, other individuals might suffer the consequences of this prioritization of a 5G network. A focus on 5G prices for consumers alone cannot capture these larger effects.

The court should have analyzed these important international and broader economic and labor considerations in its merger analysis. While overarching economic considerations are not part of a traditional Chicago School analysis, their importance demonstrates why the Chicago School must be updated.

B. **DEUTSCHE TELEKOM AND THE FUTURE OF ANTITRUST LAW**

Antitrust law must adapt to reflect the emergence of dynamic markets and to avoid the mis steps in *Deutsche Telekom*. As the court discussed in the case, the job of predicting a merger’s effects is difficult and onerous.\(^{221}\) A court faced with this inquiry must somehow make sense of conflicting facts and unclear evidence to decide what will affect competitors, consumers, and the market.\(^{222}\) It must do so without the guidance of straightforward formulas or checklists. Instead, the court must weigh competing evidence and rely on its own knowledge of market behavior.\(^{223}\) Predicting this behavior has become even more complex in dynamic markets that are constantly changing and inextricably integrated to the broader economy.\(^{224}\) Technological advancements and globalization have made it harder to isolate markets and predict their effects, as the world has become increasingly interdependent.\(^{225}\) But these difficulties should not lower antitrust standards. Instead, courts, enforcement agencies, and the legislature should review and adjust the ways in which they analyze markets to ensure that scrutiny of mergers within dynamic markets continues to promote the goals of antitrust.

American jurisprudence must make two distinct changes to correctly regulate and monitor dynamic markets. First, courts must expand their efficiency analysis to balance the tension between short-term market efficiencies and the long-term need for disruptive innovations. Second, courts must account for merger effects on both individual market consumers and the global economy, recognizing that shifts in a dynamic and integrated market

\(^{221}\) Id. at 187–88.

\(^{222}\) See id.

\(^{223}\) See id.

\(^{224}\) See generally Kwoka, *supra* note 181.

can have profound effects on numerous international markets. Courts should examine the various ways in which these changes will depart from the Chicago School as it currently exists. While the Chicago School (and antitrust generally) promotes necessary goals such as innovation, quantity, quality, and low prices for consumers, the efficiency analysis used to measure these objectives must be changed. Additionally, the goals themselves must be expanded to account for the effects of mergers on the broader economy, including long-term effects and connected markets.

These shifts align generally with the Neo-Brandeisian view of antitrust. While this Note does not discuss the intricacies of the various Neo-Brandeisian arguments, Deutsche Telekom illustrates why Neo-Brandeisians’ broader focus on political and social concerns—as well as the protection of non-consumer players in the market and the competitive process as a whole—should be applied to dynamic, integrated markets. For example, the implications of an American 5G market include labor concerns and international power relations in addition to consumer prices. These concerns are better analyzed under a Neo-Brandeisian framework.

Some might argue that it is futile to ask judges to consider broader economic impacts or longer-term efficiency analyses because these considerations might become overwhelming, unadministrable, and political. However, judges have tools to help them conduct these broader investigations. First, judges should rely on documentary evidence, especially over witness testimony, as a signal for pertinent considerations in the market, given that many of these documents come from market experts who have special knowledge about trends and technologies. Second, and as Judge Marrero himself stated, judges can use their “own skills and frontline experience[s]” to make determinations and parse out larger considerations. Unlike relying on witnesses who might have varying rationales and hopes for an outcome, a judge can use her own skills, as well as amici documents, to determine the relevance and importance of a merger. While assessing every potential downstream effect from a merger would be unadministrable and imprecise, judges can use their discretion to focus on salient areas with broader impacts. For instance, the Deutsche Telekom court recognized, though it did not deeply analyze, the global economic impact in the telecommunications industry as

226. See Sallet, supra note 37, at 368.
227. See generally Thibault Schrepel, Antitrust Without Romance, 13 N.Y.U. J.L. & LIBERTY, 326, 326 (2020) (lamenting what the author deems to be the shortcomings of the revitalization movement of antitrust law, and describing the changes proposed to make antitrust more robust as “romanticizing” antitrust).
228. See Albert Foer, Prediction and Antitrust, 56 ANTITRUST BULLETIN 505, 520 (2001).
jobs and national security. Because judges can see the evidence simultaneously, they are in the best position to recognize the unique considerations of each case.

Courts cannot update this framework alone but must partner with governing agencies and regulatory bodies to bring about cohesive and unified change. There are several ways that the judicial and government branches of government can achieve this change. First, the Department of Justice should revise its merger guidelines to explicitly consider dynamic markets and the effects of disruptive innovation. As Professors Gregory Sidak and David Teece argue, these guidelines must reflect an understanding that dynamic markets, unlike static markets, are directly driven by innovation and therefore require different analyses. Second, Congress should pass a comprehensive bill updating the 1914 Clayton Act to reflect the differences in analyzing dynamic markets, such as the importance of protecting incentives to innovate. Most recently, Senator Klobuchar proposed a bill in 2017 that would tighten the standard for acquisitions in the Clayton Act. While this bill did not pass, it illustrated the possibility of introducing these amendments in Congress. This adoption would take an adjustment period, but updating antitrust in dynamic markets will best prepare all parties to properly regulate the new dynamic markets of the twenty-first century.

Today’s antitrust climate is ideally suited to advocate for structural updates, and the lessons learned from Deutsche Telekom are a perfect vehicle to drive these changes. There has been a renewed focus on antitrust law in the last few years, most notably in the form of bi-partisan congressional hearings examining potential antitrust violations by large technology companies. In a rare move, the DOJ recently filed an antitrust suit against Google, a dominant market player in the dynamic search engine market. Further, the FTC and multiple state attorneys general recently brought separate antitrust suits against social media giant Facebook, claiming that the company “illegally squash[ed]
competition” by “buying up its rivals.” 236 They allege that Facebook’s motivation for purchasing rivals was to “eliminate[] competition that could have one day challenged the company’s dominance” 237 and that their actions “leave[] consumers with few choices for personal social networking.” 238 Notably, these regulators have recognized that integrated and dynamic markets and platforms such as Facebook can “deny consumers the benefits of competition” and that regulators must step in to preserve innovation in the market. 239

Antitrust regulators have started to make the incremental changes needed to properly protect individuals in dynamic markets, but these changes must be solidified uniformly through statutes, guidelines, and judicial opinions. The recent focus on antitrust can usher in a broader, more accurate view of the law that is built for the dynamic markets of the twenty-first century.

V. CONCLUSION

Modern technology markets are increasingly dynamic and integrated into society. Scholars and litigators must update the analytical framework of antitrust law to reflect these changes if they hope to effectively protect competition and consumers. Updates to antitrust may also incentivize different third parties, not just the federal government, to bring antitrust suits, as the state of New York did in Deutsche Telekom. While the act of predicting future market behavior will never reach perfection, this Note suggests that courts and regulatory agencies can better protect markets by studying long-term efficiencies and overall economic effects. This expands both the goals of antitrust and the means of achieving those goals.

237. Id.
239. See id.