Crossed Lines

Why the AT&T-Time Warner Merger Demands a New Approach to Antitrust

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Executive Summary

Vertical integration has enabled a growing number of large corporations to amass enough market power to block competition (Economist 2016a). The proposed \$85.4 billion purchase of Time Warner by AT&T, announced in October 2016, is the latest example of this trend and has focused renewed attention on the problem of market power in telecommunications and in the economy overall. Between 1997 and 2012, two-thirds of the approximately 900 industries in the U.S. became more concentrated. Additionally, revenues in concentrated sectors have risen and business lobbying expenses have doubled over the same period (Economist 2016a). As noted by Rahman and Khan (2016):

[T]his growing concentration threatens economic equality and dynamism and has a range of effects that include raising costs for consumers, lowering wages for workers, stunting investment, retarding innovation, and handing a few corporations and individuals in each sector outsized power over our economy and our democracy.

In line with the aforementioned trends, the telecommunications sector in the United States, where network effects confer market power on dominant incumbents, has become increasingly uncompetitive. If the AT&T–Time Warner merger is approved, AT&T's ability to preferentially distribute proprietary Time Warner content would foreclose competition throughout the entire media content supply chain, allowing the company to extract greater licensing fees for Time Warner content from AT&T's (few) distribution competitors (see Baker 2011, 40; Mclaughlin and Shields 2016). The economic value of this proposed merger includes new opportunities to avoid the Open Internet Rules designed to prevent this conduct between content providers and distributors. Circumventing those rules would stifle innovation, limit consumer choice both in content and in means of content consumption, and prevent new content providers from coming to market without paying a hefty toll. Moreover, the strengthening of dominant market positions for internet access providers like AT&T would hinder efforts to ensure equitable high-speed internet access in underserved communities (see Robinson 2013).

The proposed merger, however, is only the latest example of consolidation across increasingly concentrated sectors. Taking advantage of the lax industry regulatory environment and lenient merger review standard, whereby antitrust regulators scrutinize transactions based solely on the metric of "consumer welfare" as measured by downstream impact on consumer pricing, quality, and variety, telecommunications firms have used horizontal and vertical mergers to foreclose third-party competition and enhance their control over captive consumer markets. Taking mobile wireless service as an example, a 2016 report issued by the Federal Communications Commission notes that by 2015, the four nationwide service providers, AT&T, Verizon Wireless, Sprint, and T-Mobile, "accounted for approximately 98 percent" of total U.S. mobile wireless service revenue, an increase of five percent from 2012 (14).

This trajectory, in which consolidation serves to circumvent legitimate regulatory goals, is due to cascading policy failures resulting from the Telecommunications Act of 1996 (the 1996 Telecom Act), which embodied the deregulatory approach. Should the AT&T–Time Warner merger be consummated, the resulting entity would be a fully integrated content producer and distributor, wielding market power and influence unseen in the telecommunications industry since the 1982 breakup of Bell Systems (also known as "Ma Bell"), the antecedent to the modern-day AT&T.



As large firms like AT&T continue to explore methods of cementing their hold on their respective industries through greater control over the prices of inputs from their suppliers, including which suppliers are even permitted to come to market, and the ability to dictate the market price of their products or services, regulators must proactively identify opportunities for anticompetitive abuses of market power in the 21st century economy. To this end, it is imperative that the Antitrust Division of the Department of Justice (DOJ) and the Federal Trade Commission (FTC) abandon the outdated dogma espoused by scholars and jurists of the "Chicago School," which holds consumer welfare as the sole metric by which proposed mergers should be evaluated (see Hesse 2016, 1). Instead, regulators should adopt a more holistic view of market power, specifically incorporating analysis of upstream impact of anticompetitive behaviors, especially those enabled by mergers (see Salop 2015, 22-23). This would entail closer scrutiny of vertical mergers, positive price discrimination, and non-price-based schemes to profit excessively by withholding access to consumers.

By assessing the anticompetitive impact of the AT&T–Time Warner merger, this policy brief highlights the implications of the changing landscape of the telecommunications industry for antitrust and competition policy more generally. This brief will explore the following issues:

- How efforts to deregulate the telecommunications industry through the 1996 Telecom Act and the stark change in antitrust enforcement dogma resulting from the rise of the Chicago School have brought the telecommunications industry to its current anticompetitive state
- How recent studies have demonstrated the flaws of the Chicago School, in particular its failure to accurately represent the anticompetitive effects of vertical integration
- The consequences of increasing levels of vertical integration and other exclusionary behavior among telecommunications and media content creation firms
- The broader policy impacts of the proposed AT&T-Time Warner merger

The DOJ and FTC already have the necessary weapons in their arsenal to counteract the latest threats. The key is how such regulatory tools can be used to full effectiveness. This brief recommends the following:

- Firstly, antitrust regulators will need to develop a better understanding and acceptance of how market power can be exerted throughout the supply chain and pursue an enforcement strategy that is consistent with policies like the Open Internet rules, which have been adopted under standards more stringent than those currently prescribed by antitrust jurisprudence. This should serve to prevent firms from circumventing such policies and regulations through mergers and acquisitions approved on the basis of limited and lax antitrust review.
- Secondly, internal review guidelines like the DOJ Vertical Merger Guidelines should be revamped to reflect this new understanding.
- In applying these review frameworks, federal agencies should continue to explore policy alternatives to promote competition pursuant to Executive Order No. 13725 of April 15, 2016.
- Regulators should utilize Section 2 of the Sherman Act to a greater degree by taking enforcement actions against antitrust violators, up to and including undoing previous mergers that have proven anti-competitive after the fact.
- The FTC could similarly leverage the Section 5 authority of the Federal Trade Commission Act.
- Pursuant to Section 706(a) of the 1996 Telecommunications Act, the FCC and local state commissions should explore means of promoting municipal broadband in order to encourage competition in local telecommunications markets.



I. Historical Overview: Industry-wide Deregulation and Softening of Antitrust Enforcement Standards

To understand how the telecommunications sector and regulatory environment have brought the likes of AT&T and Time Warner close to forming a vertically integrated media giant, it is necessary to understand how a broad legislative effort to deregulate telecommunications in the 1990s laid the groundwork for subsequent consolidation. Combined with the lenient merger standards espoused by antitrust regulators, the sector underwent rapid consolidation through a series of mergers and acquisitions (Fu, Atkin, and Mou 2012, 124).

A. Industry Deregulation Through the Telecommunications Act of 1996

For much of the 20th century, Ma Bell enjoyed a monopoly over the U.S. telecommunications industry. However, mounting antitrust concerns finally came to a head in 1982, when the DOJ and AT&T entered into a settlement whereby the latter ceded control of local telephone operations to "Baby Bells" and focused on long-distance services (Disis and Isidore 2016). Following the formal AT&T divestiture in 1984, the Baby Bells lobbied for deregulation of local telephone services to allow them to offer long-distance services (Common Cause 2005, 16). Their efforts bore fruit a little over a decade later in the form of the 1996 Telecom Act.

Touted at the time as "the most deregulatory telecommunications legislation in history" (U.S. Congress House of Representatives 1996a, H1146), the aim of the 1996 Telecom Act was to "[open] all telecommunications market to competition" (U.S. Congress House of Representatives 1996b). Private sector competition, it was believed, would be the most effective means to "accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans" (U.S. Congress House of Representatives 1996b). The 1996 Telecom Act was passed a little over a decade after the initial efforts of the Cable Communications Policy Act of 1984 to deregulate the cable industry, which was tempered by subsequent regulations under the Cable Television Consumer Protection and Competition Act of 1992 (Holt 2011, 73; Crandall 2008, 482-83).

With the goal of enabling intermodal competition, or competition among various forms of telecommunications services like wireline, wireless, and cable, Congress sought to eliminate the legal restrictions that had previously contained the various forms of telecommunications to localized markets. Among other things, under the 1996 Telecom Act, Baby Bells and other local telephone companies gained the ability to offer long-distance telephone services in exchange for a mandate to provide fair access to their local networks to their competitors (National Telecommunications and Information Administration 1999; Common Cause 2005, 16). Cable rates were deregulated based on Congress's belief in effective cross-industry competition between telephone and cable companies (National Telecommunications and Information Administration 1999). Congress also removed the legal barrier preventing telephone companies from offering cable television services (National Telecommunications and Information Administration 1999; 1996 Telecom Act, §§202, 302, and 652). Lastly, by mandating agency review of broadcast ownership rules every two years, the 1996 Telecom Act also paved the way for the subsequent lifting of FCC regulatory restrictions on vertical integration between telecommunication service providers and broadcast services (Morse 2004, 355; 1996 Telecom Act, §402). The D.C. Circuit Court of



Appeals in Fox Television Stations, Inc. v. FCC pointed to this mandate and the broader deregulatory goals of the 1996 Telecom Act as the basis for invalidating FCC actions to limit cable/broadcast cross-ownership (Yoo 2014, 9-10; Morse 2004, 358).

The impetus for the sector-wide deregulation under the 1996 Telecom Act stemmed from key theoretical assumptions concerning the industry as well as the economy more broadly. First, legislators ignored the substantial potential harm to competition from both horizontal and vertical consolidation, instead assuming that cross-sector competition would yield benefits that could be passed on to consumers (U.S. Congress Senate 1996, 130). Secondly, the general consensus was that the emergence and proliferation of new telecommunication technology would allow market entrants to challenge incumbents, which in turn justified a lenient approach to regulating those incumbents (Bednarski 2003, 281). As we will discuss in this brief, both assumptions proved to be false.

In fact, the 1996 Telecom Act was undermined almost immediately after it was passed—by the same weak antitrust enforcement that is undermining it today. In 1997, the DoJ Antitrust Division declined to challenge the merger of NYNEX, the Baby Bell that operated in New York and New England, and Bell Atlantic, the one that operated in the neighboring mid-Atlantic states. The whole premise of the act was that allowing the different companies to provide service in one another's jurisdiction would enhance competition and thereby serve customers. But incumbents used mergers to stifle that competition and put the deregulatory provisions of the act to use in their own interest. As the Wall Street Journal wrote at the time the DoJ approved the merger, "The deal, at least for now, foils the hopes of lawmakers who thought that by enacting last year's sweeping industry deregulation, they could entice monopolies to compete. Instead they are merging." (Cauley et al 1996, Wilke and Cauley 1997)

B. The Rise of the "Chicago School" and Resulting Realignment of Antitrust Enforcement Standards

The primacy of the economic assumptions underlying the 1996 Telecom Act reflected the decades-long revolution in competition scholarship and policy that began in the 1970s. Championed by academics of the Chicago School, including jurists such as Robert Bork, Richard Posner, and Frank Easterbrook and economists such as George Stigler, Harold Demsetz, and Ronald Coase, this movement was in large part a reaction against the antitrust laws and regulatory framework established during the Progressive Era and the New Deal (Rahman and Khan 2016, 19). Eschewing the progressive goal of reining in previously unchecked concentration of private corporate power to ensure innovation, the provision of critical goods and services, and access to the market on reasonable terms (Rahman and Khan 2016, 19), the Chicago School argued instead that under unregulated conditions, the best firms would come to dominate by beating the competition fair and square, leading to efficient outcomes that maximize consumer welfare (see Piraino 2007, 346; Rahman and Khan 2016, 19). Underlying this argument is the faith that market efficiency can be attained through unfettered competition among rational, profit-maximizing firms (Khan 2017, 719).

Starting in the late 1970s, but particularly during the Reagan administration, the Chicago School approach to antitrust was adopted by policymakers and regulators. What resulted was the wholesale dismantling of the federal economic regulatory scheme and realignment of enforcement standards. Prior to the 1996 Telecom Act, there had already been similarly extensive undertakings by Congress to deregulate the airline, railroad, trucking, electricity, and natural gas sectors (Pitofsky 1997, 1; Rahman and Khan 2016, 19).

Mirroring the legislative activities above, the DOJ and FTC also took a much more lenient approach to the



enforcement of antitrust laws, notwithstanding the breakup of AT&T—which was itself motivated by a deregulatory impulse to step away from a direct government hand in operating natural monopolies. One of the clearest indications of the new thinking in antitrust was the adoption of the 1984 Department of Justice Merger Guidelines (hereafter "the Guidelines"). The Guidelines governed regulatory review of both horizontal and vertical mergers, but took a more lenient approach to the latter.

The Guidelines, including subsequent revisions (the latest in 2010), reflect the substantial impact of Chicago School principles on antitrust regulators. It should be further noted that the provisions under the Guidelines applicable to vertical mergers have remained unchanged since they were first penned in 1984 (U.S. Department of Justice 1984).

As issues concerning vertical mergers are of particular relevance to the telecommunications industry and the AT&T–Time Warner merger, this paper will primarily focus on the corresponding provisions under the Guidelines. The 1984 revision walked back from a more vigilant stance on vertical merger review; previously, regulators would "presume" harm to competition from any proposed vertical merger due to "foreclosure"—meaning that horizontal competitors of the downstream firm would find it difficult or impossible to gain access to the upstream party's products, or that another upstream supplier would be prevented from gaining access to consumers, or both (Chen 2001, 667). However, the revised Guidelines walked back that "presumption." While they recognize that vertical mergers may result in barriers to entry, thereby foreclosing competition, resulting barriers are only deemed actionable by regulators when (1) entry into both markets of the acquired and the acquirer is necessary in order to compete in just one of the two, and (2) the vertical merger has made the "simultaneous entry [into both markets] substantially more difficult" (Rosch 2007, 11). The more stringent conditions for enforcement action under the Guidelines effectively shift the burden of demonstrating anticompetitive harm from vertical mergers onto those who wish to challenge them.

II. Industry Consolidation Following Deregulation and Adoption of Relaxed Merger Review Standards

The passage of the 1996 Telecom Act, aided by the permissive merger review standards, did in fact usher in an era of mega-mergers, but the result was far from what lawmakers and economists anticipated. Through a series of such mergers, two Baby Bells, Verizon (as the combined Bell Atlantic and NYNEX were eventually called) and Southwestern Bell Company (which would later acquire and assume the name of AT&T), controlled 60 percent of U.S. households' telephone services just 10 years following the passage of the 1996 Telecom Act. By 2011, the same two companies collectively held 53.9 percent of broadband industry revenue (Fu, Atkin, and Mou 2015, 124). Meanwhile, in the cable industry, between 1995 and 2013 the average monthly price of expanded basic service, the most popular cable package, increased at an average annual rate of 6.1 percent, compared to a 2.4 percent annual increase in CPI (Federal Communications Commission 2014, 3). Finally, among upstream content providers, six corporations control 90% of the industry (Sustainability Accounting Standards Board 2014, 13).

Recent studies have also demonstrated that, compared to peers in other developed countries, U.S. consumers are paying more for telecommunications services while being offered fewer choices. In its coverage of the AT&T–Time Warner merger, the Economist (2016b) estimates that U.S. consumers pay "at least 50% more" for wireless and fixed broadband than consumers in other developed countries. Four companies control nearly the entire U.S. mobile market, and revenue per unique customer is over twice as high in the U.S. as it is in Germany and Denmark (Faccio and Zingales, 2017). A report by the Center for

Public Integrity comparing internet prices between five comparable U.S. and French cities noted that prices in the U.S. can be as much as three and a half times higher than those in France (Holmes and Zubak-Skees 2015). A 2014 policy paper from New America's Open Technology Institute also reported similar findings (Russo et al. 2014). Additionally, the authors found that French consumers have, on average, seven providers to choose from, compared to two or fewer in the U.S. (Holmes and Zubak-Skees 2015). The Economist (2016b) further estimates that "for each dollar invested in infrastructure and spectrum, American operators make 28 cents of operating profits a year, compared with 18 cents for European firms." The stark difference in pricing of services, the number of providers, and operating profits relative to infrastructure investment between U.S. and European firms all point to a lack of competition in the U.S. telecommunications sector, since otherwise, the quality and variety of products is, if anything, higher in Europe.

The general lack of competition in telecommunications has contributed to the "digital divide"—a gap between those who enjoy access to information technology and the ability to "use it to economic and cultural advantage" and those who lack that access and ability (Himma and Bottis 2013). As outlined in the July 2015 Issue Brief by the Council of Economic Advisers, the digital divide is "concentrated among older, less educated and less affluent populations, as well as in the rural parts of [the U.S.]." While recent adoption of mobile broadband has helped to bridge the divide, gaps in overall broadband usage still remain for minorities (Prieger 2013). Broadband infrastructure deployment has largely been spearheaded by the private sector, and as a result has been focused in more densely populated, high-income areas (Kruger and Gilroy 2016). A lack of effective market competition would amplify this trend by creating a further disincentive for firms to make infrastructure investments in areas with lower returns (see Wu 2012, 319).

In the 20 years since the enactment of the 1996 Telecom Act, its underlying suppositions and the corresponding economic assumptions that underpinned lax antitrust regulatory review have not been substantiated. The economies of scale supposedly generated by the slew of mega-mergers never translated into consumer benefits. Moreover, given the costliness of mergers, attributable not just to the purchase price but also to subsequent costs associated with restructuring and integration, and given difficulties in reversing the process (The Economist 2009), it is difficult to confirm whether cost-saving synergies were in fact realized as a result. A 2016 study by Blonigen and Pierce indicates that there is actually little evidence for such synergies, and if there were any, even less evidence they were transmitted to consumers in the form of lower prices or increased service quality. Separately, technological progress never paved the way for new entrants to the extent originally envisioned by policymakers; instead, incumbents bought up their challengers and spread their dominance to new products and technologies that would otherwise have risked undermining their advantages of incumbency, thus cementing the rent-seeking power of gatekeepers while benefiting neither content producers nor consumers (see e.g. Doraszelski et al. 2016, 42). The upshot has been the entrenchment of the incumbent players and the redrawing of territories such that the telecommunications industry resembles the time of Ma Bell.

The problem here is that as the deregulatory regime was being implemented in the telecoms sector, companies therein were increasingly operating to the benefit of shareholders. Thus, even when mergers realized economies of scale and new technologies unlocked value in the market, the returns did not accrue to customers in the form of lower costs or better service. Instead, they were captured by shareholders as higher profits and thus higher corporate payouts in the form of dividends and stock buybacks.

The failure of the Telecommunications Act of 1996 is thus emblematic of the broader failure of the Chicago School. Recent studies have begun to yield evidence that calls into question the Chicago School's overly simplistic focus on consumer welfare and assumption that markets are efficient, as well as its willful blindness toward anticompetitive motivations and effects. The Council of Economic Advisers (2016b)

issued a report noting the decline in competition and concentration of market power across multiple indicators. As mentioned above, The Economist (2016a) has released findings that reach similar conclusions. Numerous studies have also shown a post-transaction price increase resulting from mergers in sectors such as health care and air transportation (Kwoka 2013, 621; Moss and Mitchell 2012,12-13; Gaynor and Town 2012, 2; Cooper et al. 2015, 28-29). More importantly in the context of the 21st century economy and the rise of digital technology and platform power, the Chicago School has not been capable of addressing anticompetitive concerns in sectors that are predicated on network effects, which conditions the market for a single or select few incumbents that can then wield their market power upstream and downstream (see Council of Economic Advisers 2016b and Khan 2017). With network monopolies and oligopolies, trusting in the market or "technological change" to discipline the behavior of incumbents has failed time and again.

During the Obama administration, especially its second half, antitrust enforcement in telecommunications did begin to depart somewhat from Chicago School principles. The challenges to the Comcast-Time Warner Cable merger and the AT&T-T-Mobile merger are evidence of that. But those actions, especially the former, were controversial as departures from Chicago School principles at the time, and the current administration is likely to move decisively in the opposite direction.

Given the lessons learned from the past 20 years and the economic evidence that has emerged, the full economic impact of the AT&T–Time Warner merger should be assessed not through the flawed and confined scope of the Chicago School, but rather using a more comprehensive set of criteria that takes account of market power wherever it is exercised in the supply chain. It is only through a more holistic and deliberate regulatory review that the full spectrum of anticompetitive harm can be adequately addressed.

III. Recent Cases of Vertical Integration of Telecommunication Firms and Media Content Creators

Recent consummated and attempted mergers in the telecommunications sector demonstrate that the Chicago School framework has failed to anticipate and adequately address anticompetitive harm posed by such transactions. By focusing on the impact that mergers have on consumers, such analysis often fails to capture abuses of market power that emerge in the context of 21st century technology, such as content providers' access to consumers via distribution networks and those networks' user data collection, which potentially enables price discrimination. The rest of this section discusses two mergers proposed prior to the current AT&T–Time Warner merger and how their review by regulators highlights increasing anticompetitive concerns.

Comcast-Time Warner Cable

In February 2014, Comcast announced its plans to acquire Time Warner Cable ("TWC") (not to be confused with Time Warner, from which it had separated in 2009) for \$45.2 billion (Neate and Rushe 2014). However, the two parties ultimately called off the deal on April 24, 2015, after receiving news of pending challenges from the DOJ and the Federal Communications Commission (FCC) (Steel 2015; Federal Communications Commission 2015). The latter must approve the transfer of its licenses during a merger or acquisition, thereby giving it the power to review and halt mergers in the sector (Brodkin 2014).



The FCC and DOJ's primary concern related to the possibility that post-merger, Comcast would have gained the ability to foreclose competition from "over-the-top" (OTT) services like Netflix (Steel 2015). As noted by FCC Chairman Tom Wheeler in his statement following Comcast's decision to scrap the deal, "[t]he proposed transaction would have created a company with the most broadband and video subscribers in the nation alongside the ownership of significant programming interests" (Federal Communications Commission 2015). This combination "would have posed an unacceptable risk to competition and innovation especially given the growing importance of high-speed broadband to online video and innovative new services" (Federal Communications Commission 2015).

The Comcast–TWC merger was both horizontal, in the sense that both companies provided cable and broadband internet service, as well as vertical, since Comcast owns NBCUniversal (NBCU), a media content creator. Analyzed on traditional Chicago School grounds, some horizontal aspects of the merger would likely have passed muster (at least under recent, lax standards for problematic horizontal market concentration), since the two cable networks were deemed geographically non-overlapping, and hence relatively few consumers would directly face fewer options in the market for cable and broadband internet service.

On the other hand, the regulators found that such a nationally dominant network would have acted to prevent third-party competition by OTT "edge providers" that provide services via broadband internet. While OTTs do not compete with Comcast and TWC's broadband services, they do compete with their "multichannel video program distribution" (MVPD) services. As such, underlying the FCC's objection was the merged entity's ability to (1) leverage the expanded broadband user base as bargaining power to increase fees charged for OTTs' use of broadband services and (2) deny OTT access to third-party programming content as well as NBCU's own, given the increased bargaining power of a larger MVPD user base (Rogerson 2015).

Comcast-NBCUniversal

As noted above, NBCUniversal is owned by Comcast. This came about as the result of an earlier merger announced in December 2009 and fully consummated in March 2013 (Comcast 2009; Comcast 2013). This is a more clear-cut case of vertical merger, with Comcast engaging in MVPD and broadband and NBCU in media content creation prior to the merger.

The anticompetitive concerns, also voiced by the FCC and DOJ, were similar to those outlined above for the proposed Comcast–TWC transaction, namely foreclosure of competition by OTTs. However, in this earlier instance, the regulators were reassured by a number of conduct-based conditions imposed upon Comcast that they trusted would rein in possible anticompetitive behavior in exchange for their sign-off on the merger (Consumers Union 2014, 47).

The conditions that Comcast agreed to required it, among other things, to make NBCU content available on market terms to OTTs that have secured comparable distribution deals with peer content creators, and to not discriminate against content distributed by OTTs over its broadband network—in other words, to abide by Open Internet rules (Consumers Union 2014, 47; Federal Communications Commission 2011; U.S. Department of Justice 2011). However, Comcast already had existing ways to leverage its transmission power, which the FCC had failed to address through regulation for years. Thus, it found a loophole to the conditions imposed by the consent decree: While it promised to treat equally all content that was already on its network, the conditions failed to cover actions Comcast can take to prevent or otherwise discriminate among new content being uploaded onto its network. As such, Comcast could still very well exert its expanded market power to deny OTTs access to its interconnection points, leaving the



conditions unable to prevent all forms of harmful discrimination (Consumers Union 2014, 47).

Unless antitrust enforcement is closely aligned with other essential competitive safeguards like Open Internet rules, it is impossible to prevent abuse of market power in these industries. Below the level of these mega-mergers, it is still the case that powerful gatekeepers regularly act to deny access to the market or discriminate among content to the degree that doing so favors those gatekeepers (see Caves Holt, and Singer 2013; Crawford et al. 2015; U.S. Department of Justice 2016). If competition policy follows only the tenets of the Chicago School, upstream competitive concerns relating to OTTs will be overlooked.

IV. The Anticompetitive and Broader Policty Impact of the AT&T-Time Warner Merger

One of the key differences between the AT&T–Time Warner merger and the earlier Comcast–NBCU and Comcast–TWC transactions is that the former was announced after the adoption of the Open Internet rules by the FCC in 2015 (and upheld by the D.C. Circuit in 2016). Unlike the consent decree conditions for the Comcast–NBCU merger, the Open Internet rules apply to all internet access providers (IAPs), prohibiting them from blocking and throttling internet traffic or establishing paid "fast lanes" to favor certain kinds of internet traffic over others.

It should be noted that besides safeguarding net neutrality, which rests on the belief that digital innovation is derived from unfettered competition on a neutral platform—namely, the internet (Wu 2003, 146)—the rules also have profound significance for addressing the digital divide mentioned above. Those belonging to the "digital have-nots" (e.g., minorities, rural, and low-income populations) will likely be most susceptible to the harms generated by the activities proscribed by the Open Internet rules. Those harms amount to erecting a tollbooth on access to the internet, and through the internet, to the whole economy.

Under the Open Internet rules, as likely to be interpreted by the Trump Administration, the value proposition of the AT&T merger is somewhat different from prior transactions and could actually result in more significant anticompetitive harms. In many ways, the potential anticompetitive harm that could result from the merger has already been laid out in AT&T's plan for its latest offering, the proprietary OTT service DirecTV Now. Announced just days after the AT&T–Time Warner merger agreement was signed, DirecTV Now will be priced at \$35 per month and will provide live-streaming of 100 TV channels (Reardon 2016). The key proposition, however, is that data associated with use of DirecTV Now will be exempted from the monthly data limit of AT&T customers (Maxham 2016), a practice known as "zero-rating."

Functionally speaking, zero-rating constitutes a form of "positive discrimination" of services and content offered over an IAP's network, in violation of the spirit of net neutrality (Brustein 2015). It is not difficult to see how, through the preferential treatment of its proprietary OTT, AT&T is disadvantaging third-party OTT and edge providers. However, as the Open Internet rules currently stand, they only explicitly prohibit IAPs from blocking, impairing, or creating paid "fast lanes," while indicating that forms of positive discrimination like zero-rating will be reviewed on a case-by-case basis without laying out a bright-line rule.

To be fair, AT&T is not the first telecommunications firm to engage in zero-rating. From T-Mobile's "Binge On" to Verizon's "Go90" and Comcast's "Stream TV," telecommunications firms have increasingly turned to zero-rated OTT services as a way of attempting to circumvent Open Internet rules. However,



what perhaps sets DirecTV Now apart is the combination of AT&T's broad national user base for residential as well as wireless internet and Time Warner's popular premium content from subsidiaries like Warner Bros., HBO, TNT, and TBS. Given AT&T's unique zero-rating of what would be proprietary content post-merger, both upstream and downstream anticompetitive impacts of DirecTV Now will be greatly magnified. As highlighted by the FCC Wireless Telecommunications Bureau's policy review of existing zero-rated offerings issued on January 11, 2017, DirecTV Now raises particular anticompetitive concerns since AT&T is subjecting competitor OTT services to significant fees in order to be zero-rated despite the incremental cost for data transmission being close to zero. Meanwhile, no net expenditure is incurred at the holding company level to zero-rate DirecTV Now.

It should be abundantly clear from the cases outlined above that AT&T's user base could be leveraged to deny access to newly-emerging third-party OTTs. However, such foreclosure is not the sole source of anticompetitive risk. Should zero-rating be able to draw a sufficiently large number of active users, AT&T could in turn erect barriers to entry at the very top of the supply chain against third-party content creators who are not able to partner with distributors with the reach of AT&T (see Public Knowledge 2016, 7). One step below on the supply chain, other content distributors would also be disadvantaged since AT&T has little incentive to pay other distributors to zero-rate Time Warner content. This would ensure only AT&T itself would benefit from the appeal of popular zero-rated proprietary content, thereby potentially drawing internet end users away from direct competitors. Finally, at the bottom of the supply chain, DirecTV Now serves to impede consumers, in this case AT&T customers, from freely switching to competing IAPs.

It should be noted that the foregoing discussion surrounding zero-rating presupposes the continuing viability of the Open Internet rules. However, this assumption may become increasingly unrealistic given the likely policy initiatives of the Trump administration and the elevation of FCC Commissioner Ajit Pai, a vocal critic of FCC's regulatory actions taken during former Chairman Wheeler's tenure and firm believer in Chicago School arguments surrounding unregulated market competition, to the role of Chairman on January 23 (Coldewey 2017). Needless to say, should the Open Internet rules be repealed in the future, AT&T, together with other IAPs, will also have available means to not only negatively discriminate against third-party OTTs, but also "to pick and choose the content available to everyday Americans" (Franken 2017).

Another significant but less predictable issue relating to AT&T's post-merger plans is commercial uses of consumer data. In October 2016, media reports made public the scope and mission of Project Hemisphere, a "[surveillance] product AT&T developed, marketed and sold at a cost of millions of dollars per year to [U.S.] taxpayers" (Lipp 2016). As AT&T owns "more than three-quarters of U.S. landline switches and the second largest share of the nation's wireless infrastructure and cellphone towers," it is in a unique position to capture and store metadata, which it does for periods significantly longer than its competitors (Lipp 2016). AT&T then analyzes the retained metadata and offers tracking services to state and federal law enforcement agencies (Lipp 2016). It is unclear what AT&T's plans are with Project Hemisphere following the merger, but it would not be unreasonable to assume that the project would benefit from a larger user base drawn from the zero-rated DirecTV Now and from the richer data it could harvest from its existing users should a larger proportion of their online activities take place in AT&T's walled garden. A report issued by the Council of Economic Advisers (2015a) discusses the implications of such comprehensive data collection for price discrimination, an issue that has otherwise been largely neglected during the Chicago School era, and one which is especially salient for telecommunications. While the Internet Service Provider privacy rules adopted by the FCC in October 2016 would help mitigate AT&T's ability to abuse customer data, it is likely that the privacy rules will, like the Open Internet rules, be significantly curtailed, if not abolished, under the Trump administration (Breland 2017).



With the integration of one of the largest telecommunications firms with one of the largest content creation firms, a zero-rated OTT would be the most effective way to make use of proprietary content and a far-reaching distribution channel to aggressively capture a sizeable user base. Furthermore, using data collected from this user base, AT&T could then refine the content created by Time Warner entities to ensure retention of its customers, and it would have an advantaged position in negotiations with third-party distributors seeking to gain access to Time Warner content, since it would be hard to find a better distribution channel than AT&T's own. The continuous feedback generated by AT&T's siloed distribution channel would further allow AT&T to refine the various barriers to competition that it has set up at all stages of the supply chain. If left unchallenged, the self-reinforcing nature of AT&T's scheme would allow it to further entrench its market power. Through a series of mergers and acquisitions following the Bell System divesture and deregulation under the 1996 Telecom Act, AT&T is on the verge of restoring the monopoly power once held by Ma Bell, albeit through a fully integrated vertical structure similar to but quite as horizontally dominant as the old Bell System.

In the particular case of the AT&T–Time Warner merger, the FCC may be in a position to block the merger by blocking the transfer of FCC-issued licenses from Time Warner to AT&T, effectively denying the ability of AT&T to operate assets acquired from Time Warner. Unlike the DOJ, the FCC in this context functions as an adjudicator, and the burden is on the applicants to show there are sufficient public interest benefits derived from the transfer to offset public interest harms (Brodkin 2014).

Based on the latest reports, however, Time Warner is attempting to transfer or sell such licenses in order to circumvent FCC review (Shields and Fineman 2017). Time Warner only has one FCC-regulated broadcast station, located in Atlanta, and a handful of "earth station licenses" that allow CNN and HBO to transmit content to satellites. While the earth station licenses are likely integral to the operations of the likes of CNN and HBO, and it is unlikely that AT&T would want to get rid of such assets, AT&T could sidestep this issue by simply leasing the discarded licenses following the merger. Commenting upon this maneuvering by AT&T and Time Warner, Senator Al Franken and 12 other senators note in a letter issued to the companies' CEOs that the two companies:

no longer have the legal burden of proving that the proposal would serve the public interest, and the public is left largely in the dark about how the deal would impact the affordability and quality of their phone, internet, and video services (2017).

Nevertheless, FCC approval could still be needed for such divestiture, as Time Warner would still effectively need to transfer such licenses to a third party before it is acquired (Brodkin 2016b; Shields and Fineman 2017). But such intervention is becoming increasingly unlikely given FCC Chairman Pai's appointment.

In fact, Pai has already signaled his agency will green-light zero rating, a major circumvention of the Open Internet rules and one likely to spur a cascading series of telecoms mergers that will go much further in the direction of total integration of content and distribution (Kang 2017). Should that transpire, disentangling existing companies through aggressive use of the prohibition on monopolization contained in the Sherman Act must become a high priority of an entirely new competition policy regime.



V. Policy Prescriptions

The starting point for telecommunications policy going forward must be a recognition that the economic assumptions underlying the Telecommunications Act of 1996 are unsound. It is not true that allowing consolidation within and across product lines and markets ultimately serves consumers' interests, and it is not true that "technological innovation" magically calls into existence new entrants that serve to discipline the abusive behavior of incumbents. Furthermore, by focusing narrowly on downstream consumer price effects as the basis for consumer welfare determination, the existing guidelines for antitrust enforcement in this and every other sector are woefully outdated (and even recognized as such by the DOJ). As such, not only have the guidelines largely failed to serve consumers' interests, they also leave out critical questions of equal market access and fair competition throughout the supply chain.

Beyond issues related to the review of the AT&T–Time Warner merger, the recent trend of consolidations and restraints of trade in the telecommunication sector shows that anticompetitive use of market power has become increasingly difficult to contain. Moreover, there is a growing overlap between antitrust and policy goals like net neutrality. It should not be possible to evade equal access rules like net neutrality with a vertical merger evaluated under weak enforcement standards. After all, net neutrality does not treat consumer welfare as the only relevant factor, so neither should the review of a merger explicitly designed to circumvent it. Additionally, each relevant agency's enforcement policies, like the Guidelines, should be revised to accommodate for broader coordinated enforcement efforts.

More aggressive agency action should also be encouraged. The FTC should look to its Section 5 authority to pursue "unfair methods of competition" that lie beyond the scope of the Sherman and Clayton Acts (Rahman and Khan 2016, 22). Similarly, regulators should push for a higher level of enforcement actions against monopolization under Section 2 of the Sherman Act, since recent suits and enforcement actions make it abundantly clear that network effects make abusing dominant and strategic positions to foreclose competition a matter of course in the industry (see Rahman and Khan 2016, 22; Wu 2012, 319; McSweeny 2016, 2). To further promote competition, regulators should continue to explore policy alternatives pursuant to Executive Order No. 13,725 of April 15, 2016.

Furthermore, as articulated by President Obama in his remarks on January 14, 2015 at Cedar Falls, Iowa, federal and state policymakers should promote municipal and community broadband initiatives as a means of securing more effective competition in the telecommunications sector and addressing the digital divide that results in part from the accumulation of market power by IAPs like AT&T (Council of Economic Advisers 2016a; The White House 2015). To this end, FCC and state regulators are authorized by Section 706(a) of the 1996 Telecom Act to explore policies to promote municipal broadband to encourage greater market competition. While the FCC's efforts to overturn state-imposed limits on municipal broadband services were blocked by the Court of Appeals for the Sixth Circuit in August 2016, it should nevertheless continue to formulate policy alternatives to encourage the expansion of municipal broadband programs (Brodkin 2016a). For its part, Congress should preempt state laws against municipal broadband—and even consider legislating federal, low-cost, high-quality public internet access, akin to a "public option" for health care.

Antitrust laws grant federal authorities the power to proactively restructure industries where competition has been stifled, not simply to review mergers as they happen. It was the exercise of this power that led to the breakup of Ma Bell the first time around, and outright breakup of the telecommunications sector's dominant players should be explored again. This time, more firms and more product lines would be involved, and that reflects the fact that the sector has become even more critical to the broader economic

infrastructure as the internet has grown to dominate the economy and society. That is why we cannot continue to allow it to determine prices and access on its own terms.

Terms and Definitions

Antitrust Laws and Regulations

- Sherman Antitrust Act or Sherman Act: The foundation of the U.S. federal antitrust regulatory regime, the Sherman Antitrust Act was passed by Congress in 1890 to combat anticompetitive business practices and structures. The Act authorizes enforcement by the Department of Justice as well as by private plaintiffs. Section 1 of the Act prohibits all contracts, combinations, and conspiracies that unreasonably restrain trade. Section 2 of the Act outlaws the monopolization of any part of interstate commerce.
- **Clayton Act:** Passed in 1914, the Clayton Act sought to clarify and extend the Sherman Act by addressing specific business practices not explicitly referenced in the latter. For instance, Section 7 of the Clayton Act proscribes mergers and acquisitions where the effect of such transactions "may be substantially to lessen competition, or to tend to create a monopoly."
- **Federal Trade Commission Act:** Passed together with the Clayton Act in 1914, the Federal Trade Commission Act prohibits, among other things, "unfair methods of competition" and "unfair or deceptive acts or practices." The Supreme Court has deemed all violations of the Sherman Act as violations of the Federal Trade Commission Act. As such, the Federal Trade Commission, created by the Act, can bring cases against business practices that violate the Sherman Act as well as other anticompetitive activities not proscribed by the Sherman Act.
- **Communications Act of 1934**: This Act created the Federal Communications Commission, giving it authority to regulate telephones, radios, and telegraphs. That authority was extended over the years to include new technologies like broadcast and cable television, wireless telecommunications, and now internet service provision.
- The Telecommunications Act of 1996: a law that deregulated the telecoms sector in order to permit direct competition, but also consolidation, among the companies that had comprised Ma Bell. It also permitted companies to offer competing services over different types of networks, for instance cable companies could offer broadband internet and telephone services.
- **Executive Order No. 13725:** An executive order issued by President Obama on April 15, 2016, which directed federal agencies to adopt policies or otherwise take actions to enhance market competition.

Antitrust Regulators

- While the **Department of Justice Antitrust Division** and the **Federal Trade Commission** both enforce federal antitrust laws with seemingly overlapping jurisdictions, the two regulators have developed complementary expertise focusing on different industries over the years. The FTC is primarily engaged in investigation and enforcement in areas with high consumer spending, such as health care, pharmaceuticals, professional services, food, energy, and certain digital technology industries. The DOJ Antitrust Division, on the other hand, has jurisdiction over industries including telecommunications, banks, and airlines.
- The **Federal Communications Commission** enforces "common carriage" on communications networks, meaning that the owners of those networks must allow users access to counterparties on reasonable and non-discriminatory terms. It also manages the allocation of the wireless spectrum,



a public asset, to private users, and it issues licenses to broadcast to those users. The FCC has a role in antitrust and merger review for the telecommunications sector thanks to its authority over who is allowed to own those licenses. It exercises that authority alongside either the DoJ Antitrust Division or the FTC—primarily the DoJ, since it exercises jurisdiction over Telecoms.

Descriptive and Technical Telecommunications Terminology

Bell System / "Ma Bell": The precursor to the current iteration of AT&T, the Bell System was a collection of telephone companies that functioned as a government-regulated monopoly over both local and long-distance telephone service, until it was broken up in 1982 as a result of enforcement action by the DOJ Antitrust Division.

Broadband: a telecommunications network capable of carrying more traffic than a traditional telephone network. There are multiple technologies grouped under the heading of Broadband, including fiber optic cable. What characterizes broadband networks relative to their predecessors is that they are able to carry multiple types of traffic: cable television, high-speed internet, and landline telephone service.

Internet Access Providers (IAPs) / **Internet Service Providers (ISPs):** IAPs are companies that provide access to the internet, such as AT&T and Verizon. The term ISP is often used interchangeably with IAP, but in a more technical sense, ISP is the umbrella category that encompasses not just IAPs but also other services such as leased lines or web development.

Multichannel Video Program Distributor: This is the statutory designation for what are more commonly called subscription television services provided through cable, fiber, or satellite.

Over-the-Top (OTT) Services: Technology or services that transmit media content over the internet using a transmission pathway provided by unaffiliated third-party IAPs. Examples of OTT services are Netflix and Amazon Video.

Edge Providers: Any individual or entity that provides any content, application, or service over the internet (e.g., Netflix, Hulu, YouTube, Twitch), or any individual or entity that provides a device used for accessing any content, application, or service over the internet (e.g., Roku, Apple TV, Android TV). Edge Providers are alternatives to the legacy telecommunications services and content.

Economic Terminology

Vertical Integration: when multiple stages of a supply chain are contained within a single firm. If AT&T is permitted to acquire Time Warner, it will be a vertically-integrated content-and-distribution company. Vertical integration was historically recognized as an anti-competitive business structure under the Sherman and Clayton Acts, but the Chicago School rolled back this presumption, instead assuming that it more often benefitted than harmed other market participants.

Horizontal Merger: A combination of firms that directly compete with one another in the same market. In other words, relative to one another, the merging firms sit at the same level of the supply chain. An example is the pending acquisition of the drugstore chain Rite Aid by its rival, Walgreens Boots Alliance. The transaction is currently under FTC review.



Vertical Merger: A combination of firms that do not compete directly but are situated at different stages of production for the same product. An example of this is the 2013 acquisition of NBCUniversal, a content creator, by Comcast, a content distributor.

Chicago School: a group of affiliated scholars that came together at the University of Chicago, starting the in 1930s but rising to great prominence and influence between the 1960s and the 1980s. Both economists and lawyers, they revolutionized scholarly treatment of economic regulation in a "free market" direction, using theoretical models of well-functioning economies whose benefits would be at risk from excessive regulation. The Chicago School has been influential in many policy areas, but competition policy is the one where its approach has been almost wholly adopted by both regulatory agencies and the courts, without much if any change in the antitrust laws as written. (An exception is the Telecommunications Act of 1996, which did incorporate Chicago School regulatory principles into competition law.)

Network Effects: A positive network effect is displayed when usage of a product increases the value of said product for other or all users. Contemporary textbook examples are social media platforms such as Facebook and messaging services such as WhatsApp. The economic character of networks is that incumbents have the power to determine which users get to see which content from which content providers, and that users have no other means of receiving that content other than on the terms dictated by the gatekeeper.

Upstream/Downstream: The organization of a supply chain that refers to who sells what to whom. For example, in the legacy television market, upstream content providers typically create television shows, which they sell to cable or broadcast networks, who in turn "sell" them to consumers, generally on a subscription model.

Platform: a type of firm that sits between content providers and end-users or consumers. The distinction between and platform and a distributor is that distributors typically don't own the product they convey to end users—they are analogous to freight railroads. Whereas platforms buy from upstream suppliers and sell to downstream users. Platforms often enjoy network effects, which allow them to exercise market power in both the upstream and downstream markets where they operate. Examples include Facebook and Google, which are somewhat unique in that they don't charge or pay for the basic services offered by the platform, instead bundling them with advertising and other services from which they derive revenue.

Price Discrimination: charging different prices to different consumers or classes of consumers for the same good. In theory, price discrimination can be either pro- or anti-competitive, but in practice it requires both restraints on competition and superior market power for sellers over customers to be operable.

References

Baker, Jonathan B. 2011. "Comcast/NBCU: The FCC Provides a Roadmap for Vertical Merger Analysis". Antitrust 25(2): 36-42.

- Bednarski, Anastasia. 2003. "From Diversity to Duplication: Mega-Mergers and the Failure of the Marketplace Model Under the Telecommunications Act of 1996." Fed. Comm. L. J. Vol. 55 (2): 273-295.
- Breeland, Ali. 2017. "FCC's 5 biggest battles for Trump's first year." The Hill. January 1. http://thehill.com/policy/technology/311729-fccs-5-biggest-battles-for-trumps-first-year (January 17, 2017).
- Brodkin, Jon. 2014. "How the US could block the Comcast/Time Warner Cable merger." Ars Techinica. February 18. <u>http://arstechnica.com/tech-policy/2014/02/how-the-us-could-block-the-comcasttime-warner-cable-merger/</u> (January 6, 2017).
- Brodkin, Jon. 2016a. "FCC admits defeat in municipal broadband, won't appeal court loss." Ars Technica. August 29. <u>http://arstechnica.com/tech-policy/2016/08/fcc-admits-defeat-in-municipal-broadband-wont-appeal-court-loss/</u> (January 10, 2017).
- Brodkin, Jon. 2016b. "AT&T/Time Warner seems headed for FCC review, whether AT&T likes it or not." Ars Technica. October 26. http://arstechnica.com/tech-policy/2016/10/atttime-warner-seems-headed-for-fcc-review-whether-att-likes-it-not/ (January 18, 2017).
- Brustein, Joshua. 2015. Bloomberg. February 4. <u>https://www.bloomberg.com/news/articles/2015-02-04/the-biggest-hole-in-the-fcc-s-new-internet-rules</u> (January 6, 2017).
- Caves, Kevin W., Chris C. Holt, and Hal J. Singer. 2013. "Vertical Integration in Multichannel Television Markets: A Study of Regional Sports Networks." Rev. of Network Econ., Vol. 12 (1): 61-92.
- Cauley, Leslie, Gautam Naik, and Bryan Gruley. 1996. "Bell Atlantic, Nynex Make Merger Agreement Official." Wall Street Journal (April 22, 1996). https://www.wsj.com/articles/SB83019858082509000

Chen, Yongmin. 2001. "On Vertical Mergers and Their Competitive Effects." Rand J. of Econ., Vol. 32 (4): 667-685.

- Coldewey, Devin. 2017. "Trump's FCC Chairman pick Ajit Pai heralds a weaker, meeker Commission." TechCrunch. January 23. <u>https://techcrunch.com/2017/01/23/trumps-fcc-chairman-pick-ajit-pai-heralds-a-weaker-meeker-commission/</u> (January 31, 2017).
- Comcast Corporation. 2009. "Comcast and GE to Create Leading Entertainment Company." December 3. <u>http://corporate.comcast.com/news-information/news-feed/comcast-and-ge-to-create-leading-entertainment-company</u> (January 6, 2017).
- Comcast Corporation. 2013. "NBCUniversal Transaction". <u>http://corporate.comcast.com/news-information/nbcuniversal-transaction</u> (January 6, 2017).
- Common Cause. 2005. "The Fallout from the Telecommunications Act of 1996: Unintended Consequences and Lessons Learned." May 9. <u>http://www.commoncause.org/research-</u>reports/National_050905_Fallout_From_The_Telecommunications_Act_2.pdf (December 7, 2016).
- Consumers Union. 2014. "Opposition to Proposed Merger of Comcast Corp. and Time Warner Cable." October 2. <u>https://consumersunion.org/wp-content/uploads/2014/10/Comcast_merger_opposition_DOJ_1014.pdf</u> (January 6, 2017).
- Cooper, Zach, Stuart Craig, Martin Gaynor, and John Van Reenen. 2015. "The Price Ain't Right? Hospital Prices and Health Spending on the Privately Insured." The Health Care Pricing Project. December. http://www.healthcarepricingproject.org/sites/default/files/pricing_variation_manuscript_0.pdf (January 6, 2017).
- Council of Economic Advisers. 2015a. "Big Data and Differential Pricing." The Executive Office of the President of the United States. February. <u>https://www.whitehouse.gov/sites/default/files/whitehouse_files/docs/Big_Data_Report_Nonembargo_v2.pdf</u> (January 6, 2017).
- Council of Economic Advisers. 2015b. "Mapping the Digital Divide." The Executive Office of the President of the United States. July. <u>https://www.whitehouse.gov/sites/default/files/wh_digital_divide_issue_brief.pdf</u> (January 17, 2017).
- Council of Economic Advisers. 2016a. "The Digital Divide and Economic Benefits of Broadband Access." The Executive Office of the President of the United States. March.



- Council of Economic Advisers. 2016b. "Benefits of Competition and Indicators of Market Power." Council of Economic Advisers Issue Brief. The Executive Office of the President of the United States. April. <u>https://www.whitehouse.gov/sites/default/files/page/files/20160414_cea_competition_issue_brief.pdf</u> (January 6, 2017).
- Crandall, Robert W. 2008. "Letting Go? The Federal Communications Commission in the Era of Deregulation." Review of Network Economics., Vol. 7 (4): 481-508.
- Crawford, Gregory S., Robin S. Lee, Michael D. Whinston, Ali Yurukoglu. 2015. "The Welfare Effects of Vertical Integration in Multichannel Television Markets." NBER Working Paper No. 21832.
- Disis, Jill and Chris Isidore, "Time Warner deal is latest evolution for ever-changing AT&T." CNN Money. October 23. http://money.cnn.com/2016/10/23/media/history-of-att/ (January 6, 2017).
- Doraszelski, Ulrich, Katja Seim, Michael Sinkson, and Peichun Wang. 2016. "Ownership Concentration and Strategic Supply Reduction." Working Paper, University of Pennsylvania, Philadelphia, PA.
- Faccio, Mara and Luigi Zingales. 2017. "Political Determinants of Competition in the Mobile Telecommunication Industry." National Bureau of Economic Research Working Paper 23041.
- Federal Communications Commission. 2011. Memorandum Opinion and Order in the Matter of Applications of Comcast Corporation, General Electric Company and NBC Universal, Inc. for Consent to Assign Licenses and Transfer Control of Licenses. January 20. <u>https://apps.fcc.gov/edocs_public/attachmatch/FCC-11-4A1.pdf</u> (January 17, 2017).
- Franken, Al. 2017. "Letter to Chairman Pai Regarding Net Neutrality." Office of Senator Al Franken. January 30. https://www.franken.senate.gov/files/letter/170130LtrChairmanPaiNN.pdf (January 31, 2017).
- Franken, AI et al. 2017. "AT&T-Time Warner Letter." Office of Senator AI Franken. January 25. https://www.franken.senate.gov/files/letter/170125ATT-TimeWarnerLetter.pdf (January 31, 2017)
- Federal Communications Commission. 2014. "Statistical Report on Average Rates for Basic Service, Cable Programming Service, and Equipment." May 16. https://apps.fcc.gov/edocs_public/attachmatch/DA-14-672A1.pdf (January 6, 2017).
- Federal Communications Commission. 2015. "Statement from FCC Chairman Tom Wheeler on the Comcast-Time Warner Cable Merger." April 24. <u>https://apps.fcc.gov/edocs_public/attachmatch/DOC-333175A1.pdf</u> (January 6, 2017).
- Federal Communications Commission. 2016. "Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services." September 23. <u>https://apps.fcc.gov/edocs_public/attachmatch/DA-16-1061A1.pdf</u> (January 31, 2017).
- Federal Communications Commission Wireless Telecommunications Bureau. 2017. "Policy Review of Mobile Broadband Operators' Sponsored Data Offerings for Zero-Rated Content and Services." January 11. <u>http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0111/DOC-342987A1.pdf</u> (January 20, 2017).
- Fu, Hanlong, David J. Atkin and Yi Mou. 2012. "The Impact of the Telecommunications Act of 1996 in the Broadband Age." Advances in Communications and Media Research 8: 117-136.
- Gaynor, Martin and Robert Town. 2012. "The impact of hospital consolidation Update." Robert Wood Johnson Foundation. June. <u>http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2012/rwjf73261</u> (January 6, 2017).
- Hesse, Renata. 2016. "And Never the Twain Shall Meet? Connecting Popular and Professional Visions for Antitrust Enforcement." U.S. Department of Justice. September 20. https://www.justice.gov/opa/speech/acting-assistant-attorneygeneral-renata-hesse-antitrust-division-delivers-opening (December 7, 2016).
- Himma, Kenneth Einar and Maria Bottis. 2013. "Digital Technologies and the Obligation to Alleviate Poverty: the Digital Divide, Information Gap and Two Forms of Poverty." In Ethics and Emerging Technologies, ed. Ronald Sandler. New York: Palgrave Macmillan, 333-346.
- Holmes, Allan and Chris Zubak. 2015. "U.S. Internet users pay more and have fewer choices than Europeans." The Center for Public Integrity. April 1. <u>https://www.publicintegrity.org/2015/04/01/16998/us-internet-users-pay-more-and-have-fewer-choices-europeans</u> (January 6, 2017).
- Holt, Jennifer. 2011. Empires of Entertainment: Media Industries and the Politics of Deregulation, 1980-1996. New Brunswick: Rutgers University Press.
- Kang, Cecilia. 2017. "Trump's FCC Pick Quickly Targets Net Neutrality Rules." New York Times, February 5, 2017. https://www.nytimes.com/2017/02/05/technology/trumps-fcc-quickly-targets-net-neutrality-rules.html?_r=0



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Khan, Lina M. 2017. "Amazon's Antitrust Paradox." The Yale Law Journal. Vol. 126: 710-805.

- Kwoka, John E. Jr. 2013. "Does Merger Control Work? A Retrospective on U.S. Enforeecment Action and Merger Outcomes." Antitrust LJ., Vol. 78 (3): 619-650.
- Maxham, Alexander. 2016. "DirecTV Now Streaming Won't Count Against your Data Cap." Android Headlines. September 21. http://www.androidheadlines.com/2016/09/directv-now-streaming-wont-count-data-cap.html (January6, 2017).
- McLaughlin, David and Todd Shields. 2016. "Candidates, Lawmakers Flag AT&T-Time Warner Antitrust Concerns." Bloomberg. October 22. <u>https://www.bloomberg.com/politics/articles/2016-10-23/at-t-time-warner-faces-regulatory-cloud-</u> with-election-looming (January 10, 2017)
- McSweeny, Terrell. 2016. "Competition Law: Keeping Pace in a Digital Age." Federal Trade Commission. April 15. <u>https://www.ftc.gov/system/files/documents/public_statements/945343/mcsweeny_-</u> <u>loyola_antitrust_colloquium_keynote_4-15-16.pdf</u> (January 18, 2017).
- Lipp, Kenneth. 2016. "AT&T is Spying on Americans for Profit, New Documents Reveal." The Daily Beast. October 25. http://www.thedailybeast.com/articles/2016/10/25/at-t-is-spying-on-americans-for-profit.html (January 6, 2017).
- Moss, Diana L. and Kevin Mitchell. 2012. "The Proposed Merger of US Airways and American Airlines: The Rush to Closed Airline Systems." American Antitrust Institute. August 8.
- National Telecommunications and Information Administration. 1999. "The Telecommunications Act of 1996." February 4. https://www.ntia.doc.gov/legacy/otiahome/top/publicationmedia/newsltr/telcom_act.htm (January 6, 2017).
- Neate, Rupert and Dominic Rushe. 2014. "Comcast announces \$45.2bn takeover of Time Warner Cable." The Guardian. February 13. https://www.theguardian.com/media/2014/feb/13/comcast-takeover-time-warner (January 6, 2017).
- Piraino, Thomas A. Jr. 2007. "Reconciling the Harvard and Chicago Schools: A New Antitrust Approach for the 21st Century." Ind. L.J., Vol. 82 (2): 345-409.
- Pitofsky, Robert. 1997. "Prepared Statement of the Federal Trade Commission Before the Committee on the Judiciary of the United States House of Representatives. June 4. <u>https://www.ftc.gov/sites/default/files/documents/public_statements/prepared-statement-federal-trade-commissionderegulation-competition-electric-power-industry/electric.pdf</u> (January 6, 2017).
- Prieger, James. 2013. "The Broadband Digital Divide and the Benefits of Mobile Broadband for Minorities." Pepperdine University School of Public Policy Working Papers. Paper 45.
- Public Knowledge. 2016. "Testimony of Gene Kimmelman on Behalf of Public Knowledge and Consumer Federation of America Before the U.S. Senate Committee on the Judiciary, Subcommittee on Antitrust, Competition Policy & Consumer Rights at the Hearing on Examining the Competitive Impact of the AT&T-Time Warner Transaction." December 7. https://www.publicknowledge.org/documents/pk-and-cfa-testimony-before-senate-judiciary-re-att-time-warner-merger (January 31, 2017).
- Rahman, K. Sabeel and Lina Khan. 2016. "Restoring Competition in the U.S. Economy." In Untamed: How to Check Corporate, Financial, and Monopoly Power. New York: Roosevelt Institute, 18-25.
- Reardon, Marguerite. 2016. CNET. October 25. <u>https://www.cnet.com/news/at-t-prices-directv-now-at-35-a-month/</u> (January 6, 2017).
- Robinson, Rashad. 2013. "Government Isn't Strangling Broadband." The Root. September 3. http://www.theroot.com/government-isnt-strangling-broadband-1790895519. (January 17, 2017).
- Rogerson, William P. 2015. "Economic Theories of Harm Underlying Regulatory Concern with the Proposed Comcast/TWC Transaction." Federal Trade Commission. November 12. <u>https://www.ftc.gov/system/files/documents/public_events/633601/rogerson_keynote.pdf</u> (January 6, 2017).
- Rosch, J. Thomas. 2007. "The Challenge of Non-Horizontal Merger Enforcement." Federal Trade Commission. September 27. <u>https://www.ftc.gov/sites/default/files/documents/public_statements/challenge-non-horizontal-merger-enforcement/070927-28non-horizontalmerger_1.pdf</u> (January 6, 2017).
- Russo, Nick, Dannielle Kehl, Robert Morgus, and Sarah Morris. 2014. "The Cost of Connectivity 2014." New America Open Technology Institute. October 30. alendar.google.com/calendar/render?tab=mc#main_7 (January 18, 2017).
- Salop, Steven C. 2015. "Revising the U.S. Vertical Merger Guidelines: Policy Issues and an Interim Guide for Practitioners." Journal of Antitrust Enforcement. Vol. 4 (1): 1-41.



- Shields, Todd and Joshua Fineman. 2017. "AT&T Says It Can Take Easier Route to Time Warner Purchase." Bloomberg. January 6. <u>https://www.bloomberg.com/news/articles/2017-01-06/at-t-sees-avoiding-fcc-review-by-not-taking-time-warner-licenses</u> (January 31, 2017).
- Steel, Emily. 2015. "Under Regulators' Scrutiny, Comcast and Time Warner Cab le End Deal." The New York Times. April 24. http://www.nytimes.com/2015/04/25/business/media/comcast-time-warner-cable-deal.html?_r=0 (January 6, 2017).
- Sustainability Accounting Standards Board. 2014. "Media Production and Distribution Research Brief." December. http://www.sasb.org/wp-content/uploads/2014/12/SV0302_Media_Brief.pdf (January 6, 2017).
- The Economist. 2009. "Vertical Integration." March 30. http://www.economist.com/node/13396061 (January 6, 2017).
- The Economist. 2016a. "Too much of a good thing." March 26. <u>http://www.economist.com/news/briefing/21695385-profits-are-too-high-america-needs-giant-dose-competition-too-much-good-thing</u> (January 6, 2017).
- The Economist. 2016b. "Vertical limit: AT&T's takeover of Time Warner should be blocked." October 29. <u>http://www.economist.com/news/leaders/21709308-atts-takeover-time-warner-should-be-blocked-vertical-limit</u> (January 6, 2017).
- The Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996).
- U.S. Congress. House of Representatives. 1996a Conference Report on S. 652, Telecommunications Act of 1996. 104th Cong., 2nd sess. Congressional Record. Vol. 142, No. 14. February 1.
- U.S. Congress. House of Representatives. 1996b. H. Res. 353. 104th Cong., 2nd sess. February 1.
- U.S. Congress. Senate. Committee on the Judiciary. 1996. Mergers and Competition in the Telecommunications Industry. 104th Cong., 2nd sess. 11 September.
- U.S. Department of Justice. 1984. "Non-Horizontal Merger Guidelines." June 14. <u>https://www.justice.gov/atr/non-horizontal-merger-guidelines</u> (January 6, 2017).
- U.S. Department of Justice. 2011. "Justice Department Allows Comcast-NBCU Joint Venture to Proceed with Conditions." January 18. <u>https://www.justice.gov/opa/pr/justice-department-allows-comcast-nbcu-joint-venture-proceed-conditions</u> (January 17, 2017).
- U.S. Department of Justice. 2016. Complaint. U.S. v. DirecTV Group Holdings, LLC and AT&T, Inc. C.D.C.A. November 2, 2016).
- Wilke, John R. and Leslie Cauley. 1997. "Justice Department Approves Bell Atlantic-Nynex Merger." Wall Street Journal (April 25, 1997). https://www.wsj.com/articles/SB86190981075575000
- Wu, Tim. 2003. "Network Neutrality, Broadband Discrimination." Journal on Telecommunications & High Technology Law. Vol. 2: 141-79.
- Wu, Tim. 2012. "Taking Innovation Seriously." Antitrust Law Journal. Vol. 78 (2): 313-328.i

