Introduction

The Enduring Lessons of the Breakup of AT&T: A Twenty-Five Year Retrospective

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On April 18–19, 2008, the University of Pennsylvania Law School hosted a landmark conference entitled "The Enduring Lessons of the

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Breakup of AT&T: A Twenty-Five Year Retrospective."[1] This Conference was the first major event for Penn's newly established Center for Technology, Innovation, and Competition (CTIC), a research institute committed to promoting basic research into foundational frameworks that will shape the way policymakers think about technology-related issues in the future.

The breakup of AT&T represents an ideal starting point for examining the major threads of telecommunications policy that have emerged over the past quarter century. Although the Federal Communications Commission (FCC) had already begun implementing many of the measures eventually incorporated into the consent decree that settled the case, commonly known as the Modification of Final Judgment (MFJ),[2] the divestiture of AT&T's local operating companies and the accompanying mandate to provide equal access to all long-distance and information service providers (ISPs) nonetheless represents the major milestone in the attempt to promote greater competition in the telecommunications industry.

The Conference brought together what one attendee called "the most distinguished group of telecommunications scholars ever assembled in one room." The final conference lineup included two former FCC Commissioners, six former FCC Chief Economists, and four former Heads of Economic Analysis of either the Justice Department's Antitrust Division or the Federal Trade Commission (FTC). Many of the panelists and moderators played key roles in shaping the policy either as members of the Justice Department staff that litigated the case or of the FCC staff charged with implementing the decree and integrating it into the regulatory regime governing telecommunications. The conference was attended by distinguished scholars as well as staff from the FCC and the FTC interested in telecommunications and antitrust policy. This unique combination of subject matter, presentations, and audience made for a very memorable event.

I. LOOKING BACK AT DIVESTITURE: WHAT WORKED? WHAT DIDN'T?

The initial panel brought together a distinguished group of people who played key roles in the AT&T litigation. Their presentations offered differing opinions about whether the breakup of AT&T represented a

1. The conference program and webcasts of the panels are available at http://www.law.upenn.edu/academics/institutes/ctic/conferences/att/index.html.

2. United States v. AT&T Co. (Modification of Final Judgment), 552 F. Supp. 131 (D.D.C. 1982), *aff'd mem. sub nom.* Maryland v. United States, 460 U.S. 1001 (1983).

policy success or a policy failure, as well as which aspects of the breakup played out as expected and which aspects emerged as surprises.

Roger Noll, who helped develop the government's case against AT&T, noted how that case sharpened the debate between, and improved the quality of research into, the optimistic and pessimistic visions of the perfectibility of regulation and whether antitrust can compensate for regulation's shortcomings. In addition, the experience implementing the breakup of AT&T revealed that antitrust courts were no better at dealing with anticompetitive behavior than were regulators. Noll nonetheless suggested that the emergence of a competitive Internet and wireless industry would have been delayed if the court had not mandated equal access to and interconnection with the local telephone network.

Paul MacAvoy, who was one of the defense experts in the government's case against AT&T, focuses on an anomaly of divestiture: the price of long-distance service relative to marginal cost (also known as the Lerner Index) surprisingly increased after divestiture and increased still further following the enactment of the Telecommunications Act of 1996 (1996 Act). This fact suggests that these measures may not have been as successful in promoting meaningful competition in the telephone industry as generally thought.

Alfred Kahn, who served on AT&T's National Advisory Board during the early stages of the case, observed that the vision of promoting competition through vertical disintegration underlying the breakup of AT&T was not realized until after the enactment of the 1996 Act. He believes this has been unfairly maligned. Kahn found the same issues are being replayed in the debates over network neutrality, which he called a "terrifying abomination." The better solution, in Kahn's opinion, is to promote the emergence of a third independent Internet access provider, most likely in the form of wireless.

Joseph Weber was the Director of Network Architecture Planning for AT&T. He helped craft the MFJ's technical appendix, oversaw much of the actual implementation of the divestiture, and provided an overview of the regulatory and historical background for the case. He speculated that the real impetus for competition was technological change, which in turn suggested that competition would have emerged even if divestiture had never occurred.

II. EQUAL ACCESS AS THE NEW REGULATORY PARADIGM: THE TRANSITION FROM RATE REGULATION TO ACCESS REGULATION

The breakup of AT&T was a landmark in the shift away from rate regulation, which grants customers access to the entire network, toward access regulation, which grants competitors access to portions of the

network. Another panel explored the successes and the new challenges posed by this new regulatory paradigm, examining its workability, its impact on static and dynamic efficiency, and the extent to which it now serves as a model for other countries and industries.

Glen Robinson, an FCC Commissioner during the early stages of the government's suit against AT&T, noted that both the MFJ and the 1996 Act reflected the belief that new entrants would use access to the incumbent's network as a stepping stone to full-fledged, facilities-based competition. The mounting empirical evidence indicates that this dynamic has failed to materialize. He further observed that the reduction in regulation that many thought would accompany the shift to a new regulatory paradigm based on access regulation has also failed to materialize.

Tim Wu offered a distinction between two types of access mandates. On the one hand are zero-price rules, which include the rules governing customer premises equipment (CPE), the regime established by *Computer II*,[3] and the network neutrality conditions imposed on the AT&T/BellSouth merger. On the other hand are access fee rules, which include long-distance access charges and unbundled network element (UNE) access under the 1996 Act. Wu argues that zero-price rules are more effective in creating markets that operate without requiring any cooperation from the incumbent.

As a presenter, I pointed out that the current approach to access regulation fails to take into account the different ways particular networks are configured or to take into account the interactions among network components that allow networks to compensate for unexpected changes in demand by rerouting traffic through different portions of the network. Presenting this joint work with Daniel Spulber, I offered a model of network regulation based on the branch of mathematics known as "graph theory" that captures the way in which networks constitute complex systems. This approach holds the promise of unifying the different types of access to local telephone networks into a single, overarching framework that can provide insights into optimal network configuration, cost, capacity, and reliability, as well as a basis for determining the likely impact of different types of access mandates.

Former FCC Chief Economist Gerald Faulhaber observed that access regulation requires the continued imposition of rate regulation for an extended period of time. He also offered a theory of successful access regulation that depends on one of two conditions being met. Either the

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3. Amendment of Sections 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry), *Report and Order*, 104 F.C.C.2d 958 (1986).

access interface must be simple and easy to monitor or the incumbent must not compete directly with new entrants in downstream markets.

III. KEYNOTE ADDRESS BY THE HONORABLE RICHARD A. POSNER

In his keynote address, Judge Richard Posner described the role he played both as General Counsel of President Johnson's Task Force on Communications Policy—which, as Roger Noll noted, initiated the analysis that established the groundwork for the government's case against AT&T—and as a consultant to AT&T during the early stages of the case. His witty observations and reflections yield the type of insights into how AT&T's internal culture and decision making shaped its response to the case that only a person who was actually there can provide.

IV. STRUCTURAL SEPARATION IN DYNAMIC MARKETS: LESSONS FOR THE INTERNET, LESSONS FOR EUROPE

Recent developments, most notably the *Microsoft* litigation, the Verizon/MCI and SBC/AT&T mergers, and the European Commission's review of its e-communications regulatory framework have given new emphasis to debates over the effectiveness of structural separation as a remedy. This panel explored the insights that the breakup of AT&T provides into the relative merits of structural separation and vertical integration, as well as the unique problems that structural separation poses.

Joseph Farrell, who served as FCC Chief Economist during the implementation of the 1996 Act and as Deputy Assistant Attorney General for Economic Analysis for the Justice Department's Antitrust Division, suggested that the complexity of the economics of vertical integration may make it hard for business executives to discern the true incentives. He further suggested that modern competition policy may have become a bit too doctrinaire in focusing on incentives, and in so doing, has overlooked the potential value of openness, diversity, and imagination.

Eli Noam offered insight into the current debate over structural separation taking place in Europe by presenting data comparing the performance of the U.S. telecommunications industry to Canada's, which achieved similar results without undergoing a breakup of the incumbent. The similarity of outcomes raises serious questions about the necessity and efficacy of structural separation as a remedy.

Former FCC Chief Economist Michael Riordan discussed the current proposal to implement universal service through reverse auctions, particularly the concern that the auction winner might need access to the incumbent's network should the incumbent lose the auction. The model he proposed showed how structural separation can facilitate nondiscriminatory

access to the incumbent's network and can blunt the distorting effects of stranded costs. In addition, the model indicates that a provision of advanced services can reduce the need for universal service subsidies.

Michael Salinger, who recently served as Director of the FTC's Bureau of Economics, offered a broad survey of previous efforts to impose structural separation, identifying a handful of success stories and a larger number of failures. In his opinion, the success of structural separation depended not on regulators' ability to promote entry into the portions of the industry in which competition had newly become possible, but rather on their ability to exercise continuing oversight over the portion of the industry that was likely to remain noncompetitive. Salinger applied this analysis to the network neutrality debate, opining that the difficulty of regulating an industry as new and complex as broadband made regulatory intervention inadvisable.

V. FROM THE MFJ TO *TRINKO*: THE ESSENTIAL FACILITIES DOCTRINE AND THE PROPER PROVINCES OF ANTITRUST AND REGULATION

The Supreme Court's 2004 decision in *Trinko*[4] called into question two of the MFJ's central premises: first, the propriety of invoking Section 2 of the Sherman Act[5] to mandate access to telecommunications networks, and second, that antitrust courts can play a constructive role in overseeing the telecommunications industry. The participants in this panel offered a range of views regarding how much room is left for antitrust courts after *Trinko*.

Daniel Spulber, presenting another aspect of the research project that we are pursuing together, laid out a five-part system for classifying different types of access based on the graph-theory-inspired approach discussed above. In addition, he analyzed access mandates through the Coasian theory of the firm, showing how access mandates compel the externalization of functions that would more efficiently be provided within the boundaries of the firm. He then employed this framework to analyze recent efforts to use the antitrust laws to mandate access to telecommunications networks, showing how different types of access have implications for network design, operating costs, and transaction costs.

Michael Katz, former FCC Chief Economist and former Deputy Assistant Attorney General for Economic Analysis for the Justice Department's Antitrust Division, argued that antitrust authorities still have a role in telecommunications policy after *Trinko*, particularly in the areas of

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4. *See* Verizon Comm. Inc. v. Trinko, 540 U.S. 398 (2004).

5. Sherman Anti-Trust Act, ch. 647, sec. 2, 26 Stat. 209 (1890) (current version at 15 U.S.C. § 1-7 (2000)).

policing price fixing and reviewing mergers. He then asked what would be a sensible division of labor between the FCC and the antitrust enforcement authorities. Katz argued in favor of centralizing merger review authority in the antitrust enforcement agencies to the exclusion of the FCC, pointing to the antitrust authorities' greater emphasis on the analysis provided by economists, their greater ability to develop more extensive factual records, their greater insulation from political pressures, as well as the greater clarity of the legal standard being applied, the stronger degree of judicial oversight, the presence of more rigid time constraints, and the limits on remedial discretion.

Timothy Brennan, who worked on the government's case against AT&T, argued that *Trinko* signals a shift away from viewing antitrust and regulatory enforcement as complements in favor of viewing them as substitutes, in which one operates to the exclusion of the other. Indeed, he speculates that the MFJ would not have been allowed to proceed had *Trinko* been the law at the time. Despite his sympathies for the continued regard of antitrust and regulation as complementary, Brennan questioned whether the clash of institutional cultures between the antitrust authorities and the FCC would permit a coherent complementary enforcement policy to emerge.

Former FCC Chief Economist Howard Shelanski examined the range of possible readings of *Trinko*, concluding that it creates a presumption against antitrust enforcement in regulated industries where a statute provides for continuing oversight and enforcement by a regulatory agency. The *Trinko* opinion is less clear about how to determine when an industry is sufficiently regulated to trigger the presumption against antitrust enforcement. This ambiguity raises the danger that the presence of a nominal regulatory regime might insulate carriers from meaningful scrutiny under either antitrust or regulation.

VI. REGULATION BY CONSENT DECREE: LESSONS FOR MICROSOFT AND BEYOND

Commentators have long debated the efficacy of consent decrees. Some have focused on the relative merits of structural and behavioral relief. Others have suggested that consent decrees represent a way for defendants to evade liability even when they have violated the antitrust laws. Still others suggest that consent decrees allow the government to impose liability even when no antitrust violation has occurred. This panel employed the consent decrees settling the cases against AT&T and Microsoft[6] as lenses to explore the various sides of these debates.

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6. United States v. Microsoft Corp., Civ. A. No. 98-1232(CKK), 2002 WL 31654530 (D.D.C., 2002), *as modified by* U.S. v. Microsoft Corp., 2006 WL 2882808 (D.D.C., 2006).

Richard Epstein contended that the distinction between conduct and structural remedies is somewhat overdrawn, illustrated by the extensiveness of the conduct requirements needed to implement the supposedly structural remedy imposed by the MFJ. A better way to evaluate the choice of remedies is through examining the fit between the competitive harm proven and the remedy imposed. Thus, the fact that the core problem raised by the case was AT&T's refusal to interconnect with emerging long-distance carriers like MCI suggests that the same results could have been accomplished without divestiture simply by imposing an interconnection requirement.

Robert Crandall observed that his comprehensive survey of structural remedies had turned up only one instance in which structural remedies had apparently yielded welfare benefits: the breakup of AT&T. Even in that case, the fact that Canada and the EU achieved reductions in long-distance prices similar to those that occurred in the United States simply by imposing equal access without mandating divestiture suggests that the same benefits might have been achieved without imposing a structural remedy. Crandall also presented data proposing that the consent decree imposed in the *Microsoft* case had very little impact on the financial performance of Microsoft or its competitors, which raised questions about the benefits of antitrust intervention in that case as well.

Daniel Rubinfeld, who served as Deputy Assistant Attorney General for Economic Analysis for the Justice Department's Antitrust Division during the *Microsoft* case, noted that the Department strongly favors structural remedies over conduct remedies. Indeed, he found his skepticism of conduct remedies borne out by the difficulties that the current Administration was facing in monitoring Microsoft's compliance with the conduct remedies in the consent decree. Given the lack of bite in the conduct remedies imposed, Rubinfeld expressed scant surprise that the *Microsoft* consent decree had little effect. He would have preferred imposing a structural remedy, arguing that it would have yielded substantial benefits in increased innovation.

Philip Weiser noted that platform industries suffer from a commitment problem, with network owners' reluctance to incur sunk costs being matched by complementary service providers' fear of retroactive opportunism. He suggested that such problems are best addressed through disclosure, standard setting, and nondiscrimination norms, but argued that the case for restricting vertical integration was weak. He also presented a case for reforming the process for reviewing telecommunications mergers in a way that makes antitrust and regulatory oversight more

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The complete anti-trust case filings can be found on the Department of Justice webpage at http://www.usdoj.gov/atr/cases/ms_index.htm.

complementary. Under this approach, the regulatory agencies would defer to the competition policy analysis of the antitrust enforcement authorities, while the antirust authorities would consult with the FCC before imposing any conduct remedies.

VII. THE FUTURE OF INTERCARRIER COMPENSATION

The breakup of AT&T gave newfound importance to debates over intercarrier compensation that now encompass new services, such as voice over Internet protocol (VoIP) as well as traditional telecommunications. This panel discussed how these compensation regimes will be shaped in the future and how reform of the current system of intercarrier compensation is being constrained by the political support for universal service.

Gerald Brock, who served both as a consultant to the Justice Department during the government's case and as Chief of the Common Carrier Bureau during the implementation of the MFJ, reviewed the controversies over intercarrier compensation spawned by divestiture, with a particular emphasis on how political constraints prevented the implementation of a more economically rational system. Although he was once optimistic about major intercarrier compensation reform, he is now less so. Given the political infeasibility of abolishing access charges altogether, Brock suggested that policymakers should focus on the more limited goal of eliminating the opportunities for opportunistic behavior by rural carriers created by the current access charge regime.

Former FCC Chief Economist Simon Wilkie offered a concrete proposal for eliminating the incentives for arbitrage by small rural carriers caused by the current access charge regime. Under his proposal, the reverse auction currently contemplated for distributing the direct universal service subsidy for high-cost areas would be expanded to include the implicit subsidy represented by the above-cost portion of long-distance access charges. Carriers participating in the reverse auction would have to agree to interconnect with other carriers through bill-and-keep arrangements, which would eliminate the incentive for opportunistic behavior. Carriers not participating in the reverse auction would no longer benefit from mandatory interconnection.

James Speta explored a series of paths through which telecommunications reform might occur. He viewed the unintentionalist paths—such as allowing the system to collapse from its own weight or relying on the combination of greed and unintended consequences—as unlikely to yield significant results. He also expressed skepticism that a heroic regulator or legislator could accomplish reform directly and found that the downsides of a bargain, in which the biggest loser is compensated

for its losses, outweighed the upsides. The best hope lay, in Speta's opinion, in a sneaky regulator or legislator pursuing incremental change.

Kevin Werbach challenged the premise of the panel, speculating that future debates may focus neither on intercarrier relationships nor on compensation. With digital convergence placing less emphasis on calls, the focus will shift towards relationships among providers of all types of network services rather than simply carriers, which in turn will encompass a much broader array of companies. Furthermore, these relationships may not involve compensation should the terms of interconnection become dominated by bill-and-keep arrangements.

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All in all, the panels and discussions made for a very memorable weekend. CTIC and all of the conference participants are grateful to the *Federal Communications Law Journal* for agreeing to publish all of the presentations that developed into formal papers, along with an additional paper authored by Jerry Hausman, J. Gregory Sidak, and Timothy Tardiff that was originally scheduled to be part of the conference, but was not presented due to a last-minute conflict. We believe that the presentations at the conference and the resulting articles published here represent an important contribution that will provide insights for both scholars and policymakers for years to come.