Two Trends in Tension:
Does Consolidation Reduce Innovation?

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In a short three decades, several hundred investor-owned electric utilities have become 50 utility holding companies. The 1984 breakup of AT&T has led not to atomistic competition among numerous telecommunications providers, but to horizontal consolidation in the local, long distance, wireline and cable sectors; and to the vertical integration of content and carriage, exemplified by the 2011 merger of NBC Universal and Comcast.

At the same time, our public utility industries need to fix, rebuild or replace a half century of water pipes, gas lines, electric generators and transmission; bring broadband to an ever-growing population—a necessary but insufficient step toward restoring the equality of opportunity essential to democracy; and empower energy customers to find ways to reduce consumption at no cost to comfort. These challenges are technologically demanding, politically complex and expensive. The solutions require innovation.

So we need to know: How does consolidation affect innovation? Insights from antitrust scholars should give pause to utility regulators who process, and nearly always approve, these transactions.

The Academic Efforts

A merger of competitors reduces competition. If the merged company can raise prices without losing profit to its remaining competitors, the regulators impose conditions to mitigate these effects. But looking only at price ignores innovation.

Innovation takes many forms: new products, improvements to existing products, and alternatives to existing products; and production breakthroughs that make market entry easier for new competitors. The antitrust field is grappling with how competition—and the reduction in competition from mergers—affects innovation. Here are two opposing theories:

Mergers assist innovation: Having increased its market share, the merged company can put more resources into experimenting while facing less competitive risk if experiments fail. And according to the economist Joseph Schumpeter, even an incumbent monopolist can be dethroned by an aspiring monopolist. That risk induces the incumbent to innovate. And joining complementary assets, skills or products through ownership produces innovation more surely than linking them through arms'-length contracts.

Mergers reduce innovation: All competitors aspire to be monopolies. (As economist John Hicks declared, the "best of all monopoly profits is a quiet life." "Annual Survey of Economic Theory: The Theory of Monopoly," 3 *Econometrica* 1, 8 (1955)). Competitors strive to innovate: By distinguishing a company from its competitors, innovation can pave the path to

monopoly. Mergers reduce the number of competitors, therefore reducing the imperative to innovate.

And two seemingly opposing theories could both be correct, depending on market facts. In an already concentrated market with high entry barriers, mergers might reduce innovation; while in a highly competitive market with no entry barriers, mergers might increase innovation. Given these possibilities, utility regulators will have to weigh priorities: short-term vs. long-term, market predictability vs. market disruption. (Dealing with these tradeoffs is not a new problem; the patent system rewards inventions with multi-year monopolies, during which time the patent-holder can charge supra-competitive prices.)

Further, innovation's effects on competition can be positive or negative. Some innovations create substitutes for traditional products and/or reduce barriers to entry; smart grid, for example, can allow customers to install in-home devices that reduce their dependence on the incumbent utility. In contrast, Microsoft designed Windows to deter entry by competing operating systems. And effects can vary over time. A merger might cause concentration initially, risking high prices; but subsequent innovations by other market players could reverse that concentration, thus making the merger less harmful. Or, the merged company's new dominant market position could cause prospective innovators to leave the market, leaving the merged company to enjoy its "quiet life."

These competing theories and outcomes make merger analysis complex. If, for example, mergers encourage innovation, merger policy faces a tension between the short-term goal of preventing merger-induced price increases, and the long-term goal of promoting innovation—innovation that can benefit consumers.

Yet another debate is over whether the goal of merger policy is to increase the welfare of only the customers buying in the merged company's market, or of society as a whole. What if the merged company uses its market power to raise prices and increase profit, but then uses the profit to reduce malaria in Africa, as Bill Gates does with his Microsoft wealth? (For an excellent commentary on these debates, see Michael L. Katz & Howard A. Shelanski, "Mergers and Innovation," 74 *Antitrust L.J.* 1 (2007), an article to which this essay owes much.)

The immediate need is not to decide which theory predicts reality; indeed, each theory might work under different market conditions. The immediate need is for regulators to inject this learning into their decisionmaking: by studying mergers already approved, and by projecting possibilities in mergers newly proposed. Some commissions have some distance to go. Consider the contrast between FERC and the FCC.

The Regulatory Efforts

When examining a proposed merger's competitive effects, FERC focuses on the applicants' combined control of generation and transmission. If that control sets off alarms, FERC will require partial divestiture (physical or contract), rate caps, new transmission construction, and/or special tariff provisions. The focus is on existing assets and traditional

products; the merger's effects on innovation in new products (such as storage, smart grid, renewable energy, energy conservation and demand management) receive no attention. (Try this Lexis search among FERC cases: "mergers and innovation". It produces no cases.)

In contrast to FERC, the FCC does consider innovation, from several perspectives. In the proposed-then-withdrawn merger of AT&T and TMobile, the FCC staff worried that the market would lose a "disruptive competitor." TMobile had engaged in "pricing and technical innovation"—subscriptions for unlimited Wi-Fi calling, prepaid plans with no deposit, postpaid plans cancellable monthly without penalty (instead of the typical two-year contracts), and family plans that shared voice, text and data limits. In approving the NBC Universal-Comcast merger, the FCC saw two opposite effects. On the positive side, the transaction could assist the merging companies' innovation efforts, by "reducing some of the barriers and friction that exist when unaffiliated content providers and distributors negotiate to reach agreements." (The benefits were not quantifiable, the FCC acknowledged, because they were "hard to specify in advance.") On the negative side, the combined company "will have the incentive and ability to ... thwart the development of" online video distributors, (who can "provide and promote more programming choices, viewing flexibility, technological innovation and lower prices"), and otherwise "slow down or skew competition and innovation." The FCC has expressed similar concerns in other merger cases, including SBC-Ameritech (1999), GTE-Bell Atlantic (2000), AT&T Wireless-Cingular Wireless (2004), and AT&T-BellSouth (2007). (This paragraph is not intended to endorse the FCC's approval of any of these transactions. For a critical review of the FCC's merger policies, particularly the NBCU-Comcast transaction, see Susan Crawford, *Captive Audience: The Telecom Industry and Monopoly Power in the New Gilded Age* (2013).)

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No one predicts a slowdown in utility merger proposals, while everyone wants innovation. The insights from antitrust scholars, and the FERC-FCC differences (along with differences among dozens of decisions by state commissions, most of which have concurrent jurisdiction over mergers) deserve more attention. Next month, I will offer ways to make innovation inquiry a necessary part of merger proceedings.