

1 Introduction

Ten years ago, most of the world's telecommunications companies were state-owned monopolies, performing much like the post offices from which they had sprouted in the early decades of the twentieth century. Those in the United States were different: they had never been government-owned, and the *private* national operator, AT&T, was broken up in 1984 to ensure greater competition in long-distance and equipment markets. Twelve years after the breakup of AT&T, Congress passed the 1996 Telecommunications Act, opening all telecommunications to competition and launching a new era in the sector.¹ No one could have guessed how this era would unfold.

As I describe in this book, “competition and chaos” have enveloped the sector as it gropes toward a new order. This is not to say that the U.S. experience is unique, for similar tumult has descended on most of the world's telecom sector over the past six to eight years. It differs, however, in that U.S. regulators were the first to venture into this brave new world of heavily regulated competition.² Furthermore, many of the regulators apparently thought that they could steer a steady course in this direction, with limited disruption.³ As I demonstrate, they not only failed to achieve this objective, but they contributed—and continue to contribute—to the chaos.⁴ Congress invited them to manage competition, and they did so with a vengeance. As this book goes to press, there is little indication that regulators have learned any lessons from the past nine years.⁵

Regulation, Deregulation, and Competition

For decades, the Federal Communications Commission (FCC) and state public utility commissions had regulated telecommunications through an uneasy division of responsibilities.⁶ The state commissions oversaw intrastate services—local connections and messages that traveled wholly within a state’s borders—and the FCC interstate services. It was not until the late 1970s that the courts clarified the role of the FCC in regulating (or deregulating) the terminal equipment used by businesses and households to connect to the network. Subsequently, the FCC grudgingly admitted competitors into interstate long-distance services, but most states steadfastly continued to refuse to allow competition for most intrastate services. Although regulation might be designed to control monopoly pricing, in telecommunications it was used primarily to redistribute income from businesses to residences and from urban areas to rural areas.⁷ This redistribution, which has been defended as “universal service” policy but in fact contributes little to the universality of telephone subscription, continues more than twenty-five years after the FCC began allowing competition, twenty years after AT&T was broken up, and nine years after the 1996 act was passed.⁸ Moreover, the implicit subsidies built into the regulated rate structure can continue only if regulators *prevent* competition.

Many discussions of recent U.S. and other telecom policies begin with the notion that the sector is in turmoil because of “deregulation.” On the contrary, U.S. policy since 1996 has been far from deregulatory. Local retail telephone rates, intrastate long-distance rates, carrier connection rates, and even high-speed business rates are still highly regulated in most states. More important, the “deregulation” introduced by the 1996 act ushered in a complex new set of regulations involving the provision of wholesale services by incumbent local carriers to their new competitors. Since that time, a large number of other countries have followed the United States in erecting similar wholesale-access regulations to promote competition.

In a later chapter, I analyze the effect of the new regulatory regime on competition and prices in local telecommunications in the United States, but for now it is worth noting that telecom liberalization has diverged from earlier policies in the transportation and energy industries. In the 1970s and 1980s, the United States opened the airline, air cargo, trucking, and railroad industries to competition without increasing regulation. Indeed, the commissions regulating these industries were soon abolished, along with most rate regulation. Congress did not find it necessary or prudent to

require carriers in these industries to sell their services or lease their facilities to rivals at regulated rates. By contrast, legislators viewed a large part of the distribution network in telecommunications, and later in electricity, as a natural monopoly. As a result, the 1996 act instructed regulators to determine which incumbent-carrier facilities should be made available to entrants and to establish the cost basis for wholesale rates for such facilities, two issues that have tied up the regulators and the courts for most of the past nine years.

The U.S. experiment in regulated competition has had a large impact because most other countries of the Organization for Economic Cooperation and Development (OECD) subsequently followed it.⁹ The Europeans, in particular, have adopted a more modest version of mandated network sharing, as have the Japanese and the Canadians. Given its earlier successes in the deregulation of transportation, energy, and financial markets, the United States now serves as an example to most of the world in the “deregulation” of important network industries. This deference to U.S. policy may change in view of the chaos resulting from U.S. telecom and electricity regulation.¹⁰

The Financial Market “Bubble”

The first four years after the passage of the 1996 act were exhilarating for many participants in the telecommunications sector. Investment soared as stock market valuations rose at remarkable rates. U.S. long-distance companies, wireless companies, and the new local carriers ushered in by the act saw their stock prices rise by 500 percent or more in 1998–2000 as the Internet boom captured the imagination of investors. Capital spending rose to historic levels, fueled by expectations that the Internet would require enormous increases in telecom capacity. New local companies raced to take advantage of the stock market euphoria, and wireless companies bid aggressively for new spectrum auctioned by the FCC. A number of major companies were started in the late 1990s or formed from a series of mergers, including WorldCom, Qwest, and Global Crossing.

By the middle of 2000, it was apparent that the very large rise in stock market values in Internet-related companies, including telecommunications carriers, could not be sustained. The U.S. NASDAQ average, dominated by technology stocks, began to fall as dramatically as it had risen, declining from more than 5,000 in March 2000 to about 1,114 in October 2002, roughly equal to its level in February 1996.¹¹ The new local

telecommunications start-ups fell by much more, and most were forced into bankruptcy. The long-distance companies met a similar fate, exacerbated by various accounting scandals arising from their desperate attempt to maintain the illusion of growth. Because many of these telecommunications carriers had expanded with loans from their equipment suppliers, the latter, such as Lucent and Nortel, were also devastated.

The United States was not alone in experiencing this boom-bust cycle. The value of telecommunications equities soared throughout the developed world, propelled by excessive enthusiasm for the Internet and the new technologies.¹² The prices paid for spectrum in European auctions to accommodate the “third generation” (3G) of wireless services reached historic levels in 2000.¹³ Newly privatized carriers, such as British Telecom and France Telecom, expanded aggressively beyond their national borders through acquisitions and new capital spending.¹⁴ When the equities market soured on these and other Internet-related stocks, many of the major telecom companies scrambled to scale back their operations, while large numbers of new entrants collapsed. As capital spending plummeted, the world’s telecom sector sank into a three-year depression, from which it is only now slowly recovering.

Chaos, Regulation, and Market Structure

No regulator faced with the new requirements of the 1996 Telecom Act could have foreseen this turmoil. Looking at the sharp rise in equity prices in 1998–2000, regulators must have thought they were on the right track at first. After all, the skyrocketing value of the new entrants’ stocks was attracting large amounts of capital, and the prices of the local incumbents’ stocks had not fallen measurably below overall market averages. Surely, these were signals that the burgeoning competition was going to provide a bonanza of benefits.

Once the Internet and telecom stocks went into a dive, everything changed, including faith in the new regulatory regime. On the way down, new local entrants complained bitterly that the regulated wholesale rates were too onerous to let them use the incumbents’ networks, and that the regulatory rules were not always enforced. The resulting accounting scandals left two of the four largest long-distance companies in a state of collapse and forced a third to dismiss its senior officers.¹⁵

In 2000–02 a new set of issues appeared. The Internet was creating a demand for high-speed, “broadband” connections in residences and

small businesses that the incumbent local telecoms were unable to satisfy without substantial new investment in network facilities. But would these companies invest in such facilities if the entrants, now under enormous duress, could immediately lease them at low, regulated rates? For their part, the struggling entrants were asking for even more favorable terms for access to the incumbents' facilities. How was a regulator to respond to these pressures? In past decades, a regulator's only worry was to allow the monopolist a sufficient return on capital to stay in business and to maintain service quality. Now the issue was how new technologies could be deployed to provide innovative services when promoting investment in these technologies was likely to conflict with keeping the new entrants alive.

By 2001 it was also clear that telecom revenues were no longer increasing, particularly among the traditional wire-based carriers. As the prices for using the network dropped in response to competition, total revenues fell because the Internet was not increasing network use fast enough to offset the effects of declining prices. Wireless or "cellular" carriers were rapidly diverting traffic from the wire-based carriers just as the new local entrants were beginning to lure large numbers of subscribers away from the incumbent local companies. Ebb tide was not the best time to launch more boats.

Yet another issue concerned the incumbent Bell carriers, which had been kept out of long-distance services since being divested from AT&T in 1984. The 1996 act would allow them back once they proved that they were cooperating with regulators in providing entrants with access to their networks. For the first four years, regulators were reluctant to approve Bell entry into long distance. As the entrants raced ahead to enroll 10 percent or more of the country's subscriber lines in 2001–02, the regulators could no longer deny the Bell companies the right to offer long-distance services. In one state after another, these companies added to the downward pressure on long-distance rates initiated by the wireless carriers in 1999. The troubled long-distance companies—WorldCom, Qwest, Global Crossing, and even AT&T—now operated under a new set of competitive pressures. As this book is being written, it is far from clear that any of the independent long-distance companies can survive.

The Future?

As 2005 dawns, few observers, regulators, or industry participants can be sure how the U.S. or world telecom sector will evolve. Past exercises in true

U.S. deregulation have often been followed by years of turmoil.¹⁶ The airline industry, for example, is going through another series of bankruptcies and near bankruptcies twenty-seven years after deregulation began because newer U.S. carriers, such as Southwest, AirTran, Jet Blue, and Frontier, are now wreaking havoc on the older industry titans. Similarly, the U.S. railroads have passed through a long period of consolidation and turmoil in the twenty-five years since they were more or less deregulated. Clouds of uncertainty also surround recent attempts to open the U.S. electricity sector to competition. Deregulation or market liberalization in these sectors, however, does not face the same profound technological revolution that is occurring in telecommunications. Hence the 1996 act simply exacerbated a turmoil that seemed bound to occur in any event.

In this book, I attempt to look past the regulatory debates of today to the likely evolution of the telecom sector in the next few years. This is a hazardous enterprise under any circumstances, but it is particularly risky in the unsettled regulatory and market conditions of 2005. I try to distinguish the survivors from those who will likely fail, while providing a policy analysis along the way. My conclusion is that “deregulation” requires *deregulation*: that is to say, the telecommunications sector has been overregulated in the past nine years. Despite having the best of intentions, regulators have not facilitated competition but have likely delayed it. Furthermore, they have failed in their attempt to allow new or established companies to survive without their own connections to customers. Forcing the incumbent local companies to offer their facilities at regulated, wholesale prices to entrants is not only a mistake; it is an exercise in futility.