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The Telecommunications Crash: What To Do Now?

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In what seems an eternity ago, Congress enacted and President Clinton signed the Telecommunications Act of 1996 (Public Law 104-104). There was much fanfare at the time about how the law would usher in a golden age of competition in telecommunications and, with it, new technologies and services (video on demand delivered through new "broadband" networks), multiple ways of receiving television signals (over cable, telephone lines, and satellites), and far lower prices to consumers for the full range of telecommunications services.

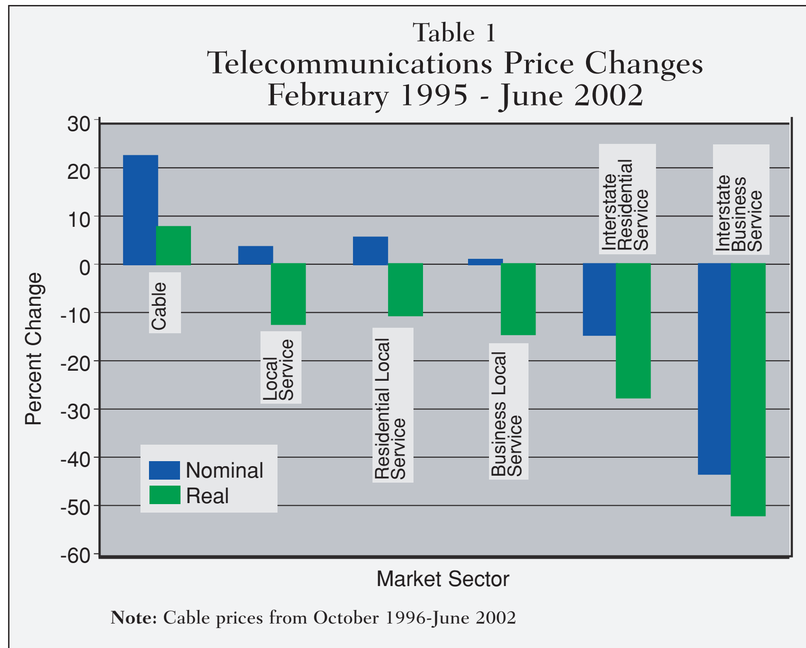
At a July 2002 hearing on Capitol Hill, executives from Qwest Communications, Global Crossing, and WorldCom faced a Senate committee investigating the companies' financial woes.

The record since has been mixed. Some of the hype indeed has become reality. As shown in table 1, except for cable (whose prices have increased modestly even in real terms), prices have indeed fallen or stayed flat in nominal terms. In real terms—that is, adjusted for economy-wide inflation—the prices of all major telecommunications services, except for cable, have dropped since the law was passed.

Other projections have been only partially realized. Many businesses and about 8 percent of all U.S. households now are hooked up to some kind of "broadband" connection—by cable, digital subscriber line (DSL), or satellite—that delivers data signals at least twenty times more rapidly than traditional copper telephone wires. Broadband satisfies consumers' quest for speed, but so far no "killer application" has emerged to make it a "must have" service. In particular, the much ballyhooed video-on-demand has yet to arrive.

The outcome that few foresaw in 1996, however, was the enormous buildup and then collapse of many of the telecommunications firms themselves. Table 2 tells the sad story: the collapse of share prices for firms in different segments of the industry since the beginning of 2002. The real picture is even worse than the table depicts since many now bankrupt

companies are not even listed. Shareholders in the industry have lost roughly $2 trillion while half a million workers in the industry have lost their jobs.



Note: Cable prices from October 1996-June 2002

Like the "who lost China debate" in foreign policy circles half a century ago, a contentious argument has broken out on who is responsible for the telecom collapse and, more importantly, what to do about it. This brief outlines why the crash has occurred and what policymakers should and should not do about it now.

WHAT HAPPENED TO TELECOM?

In one sense, explaining what happened to the telecom sector is very simple: the growth in capacity has vastly outstripped the growth in demand. In the five years since the 1996 bill became law, telecommunications companies poured more than $500 billion into laying fiber optic cable, adding new switches, and building wireless networks. So much long-distance capacity was added in North America, for example, that no more than two percent is currently being used. With the fixed costs of these new networks so high and the marginal costs of sending signals over them so low, it is not a surprise that competition has forced prices down to the point where many firms have lost the ability to service their debts. No wonder we have seen so many bankruptcies and layoffs.

How could this happen? Certainly, a combination of greed and excessive optimism, especially about the growth of data traffic fueled by the rise of the Internet, led to the buildout of new networks. So did more competition, unleashed to some degree by the 1996 law, but especially by the unusually rapid growth of wireless networks, a result directly triggered by the decision in 1995 by the Federal Communications Commission (FCC) to devote an additional portion of the electromagnetic spectrum to new wireless licenses. The new licensees enabled consumers in most markets around the country to choose between five or six wireless providers rather than just two (as had been the case since the early 1980s). The plans not only make no distinction between local and long-distance calls—a key remaining vestige of the nation's wireline telephone

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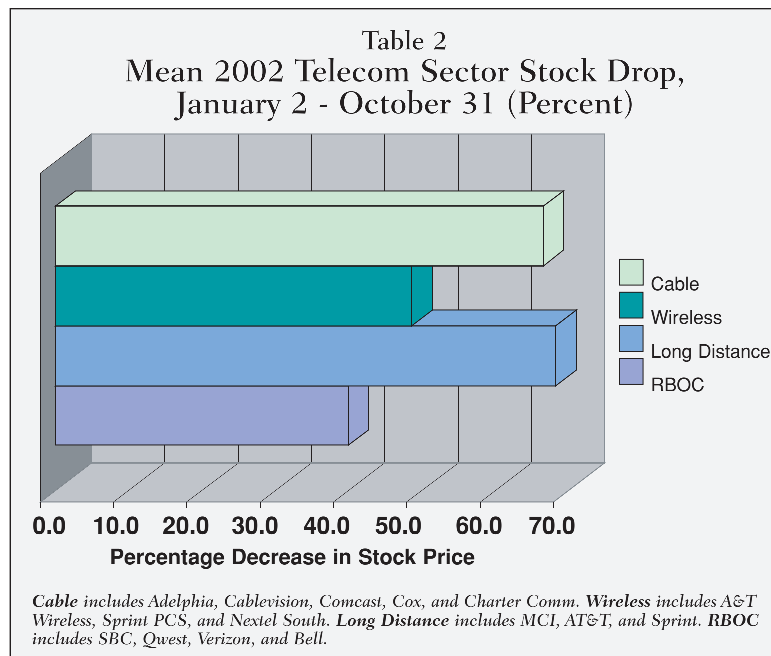
network—but as long as customers stay within their monthly minute totals, there is no marginal cost of making a call. The predictable result: both cellular and long-distance wireline rates have fallen dramatically, while even local wireline rates have fallen in real terms (table 1).

Table 2
Mean 2002 Telecom Sector Stock Drop, January 2 - October 31 (Percent)



*Cable includes Adelphia, Cablevision, Comcast, Cox, and Charter Comm. **Wireless** includes A&T Wireless, Sprint PCS, and Nextel South. **Long Distance** includes MCI, AT&T, and Sprint. **RBOC** includes SBC, Qwest, Verizon, and Bell.*

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So far, little or none of what has been described is controversial; to the contrary, it has become conventional wisdom. Where debate has emerged is whether, and to what extent, government policies have contributed to the near implosion of the telecom sector. There is an even more vigorous argument over what, if anything, federal and state governments should do now to revive the fortunes of the industry.

To oversimplify, the debate over government's contribution to the telecom debacle basically pits the remaining "Baby Bell" local phone companies, or the Regional Bell Operating Companies (RBOCs), against the long-distance companies and, to some extent, consumer organizations. Much of the debate surrounds the reasons for the demise of so many Competitive Local Exchange Carriers (CLECs).

The RBOCs assign blame for at least the overbuilding among their upstart competitors—over $60 billion between 1996 and 2001—squarely on the provisions of the 1996 law aimed at opening local telephone markets to more competition. Now that most of the CLEC industry is bankrupt or nearly so, a considerable portion of this expenditure seems wasted. The RBOCs assert that much of this would not have happened had the FCC during the Clinton administration not required the Bells to lease their facilities, in whole or in part, to competitors at rates the Bells believe to be far too low (the long-run incremental cost of replacing those facilities). By seeming to promise the CLECs such a good deal, the FCC's regulations, by the RBOCs' account, emboldened far too many CLECs, their investment bankers, shareholders, and creditors to spend far too much on trying to mount a competitive challenge in local telecommunications markets.

Consumer groups, the CLECs, and others have a different account of the reasons

Additional Reading

"Measuring the Economic Impact of the Telecommunications Act of 1996: Telecommunications Capital Expenditures (1996-2001)," New Paradigm Resources Group, Inc., prepared for Comptel (October 2002).

http://www.comptel.org/filings/capex_report_oct_2002.pdf

for the CLECs' investment boom and subsequent demise. The CLECs may or may not have been overly optimistic about the growth in overall data and voice traffic, but they surely underestimated the willingness of the RBOCs to accept the FCC's market opening pricing requirements. Instead, the RBOCs mounted a multi-year legal campaign aimed at preventing those rules from becoming effective—a campaign that largely succeeded until earlier this year, when the Supreme Court finally ruled in the *Verizon* case (*Verizon Communications, Inc. v. FCC, 122 S.Ct. 1646*) that the Commission's rules, especially the cost principles for setting the rates on the elements of the RBOCs' networks, were valid interpretations of the 1996 law. The decision in *Verizon* followed an earlier one in 1999—where the Court upheld the Commission's rules on unbundling.

"Should policymakers adopt policies explicitly aimed at assisting the telecommunications providers, or should they put consumers' interest first?"

It is not just in America's highest courts where competitors to the RBOCs have been gaining ground. Over the past year or so, regulatory commissions in such key states as California, New York, and New Jersey (among others) have been setting discounts of roughly 50 percent off retail on the lease of the entire package of RBOC facilities, perhaps allowing the few competitors that remain to compete profitably with the dominant RBOC. But the RBOCs continue trying to limit the competition; at this writing, they are attempting to persuade the FCC to cut back on the facilities they are required to lease and to preempt the states from making contrary determinations (reversing their stance of previous years, which favored states' rights).

WHAT TO DO NOW?

So what, if anything, should policymakers do now? Should they adopt policies explicitly aimed at assisting the telecommunications providers, or should they put consumers' interest first?

Many providers argue that their financial interests should be the primary objective. How, they say, can they invest, develop, and deploy new technologies if they are not financially sound?

This view mistakes the purposes of having firms in a capitalist economy: *to serve consumers,* which is best done by allowing natural competitive forces to work so that the fittest ones that deliver the best service at the lowest cost survive. To be sure, a natural consequence of competition is that some firms fail to make the grade, while others win. But policymakers only distort incentives for innovation and service if they interfere in that process by attempting to prop up some of the failures—socializing the risk and privatizing the reward. Accordingly, unless there are very good social reasons for doing so—such as the threatened failure of the entire airline industry after September 11—policymakers should not shrink from allowing private firms to fail.

Keeping this view in mind, there are four key issues in the debate over telecommunications policy. Here are some thoughts on how to deal with them.

Antitrust

Even before the recent wave of telecommunications bankruptcies, the industry was a hotbed of merger activity: marriages

among the RBOCs and different cable companies being prime examples. In virtually all of these cases, antitrust authorities have allowed the mergers to go forward, largely because they involved firms in two different service or geographic markets that were not direct competitors.

The authorities have taken a harder line, however, toward mergers of firms in the same market. The Justice Department, for example, stopped the proposed merger between Sprint and WorldCom because it threatened to concentrate too heavily the long-distance market.

Critics have attacked antitrust officials for halting these mergers, suggesting that the merged firms would have been more efficient. Similarly, given the carnage in the telecommunications sector, some now urge the officials to allow further consolidation to occur so that at least the merged firms have a chance to survive, not only because they might be more efficient but implicitly because without so much competition, they will be able to raise their prices.

This view should be rejected. The aim of antitrust never has been nor should be to preserve the economic health of individual firms. While the authorities can and do make special allowances for mergers where one of the firms is failing, they also correctly insist that any such takeovers involve the least threat to competition. There is no reason, therefore, why the government should allow mergers between direct competitors that are likely to lead to higher prices for consumers—the very definition of an anti-competitive merger—where it is possible that the failing firm could be bought by other firms in other markets.

Broadband Policies

The reason many consumers have not purchased broadband service is not that they are unable to do so—over 90 percent of the households can buy it from one or more providers—but because they apparently do not see its value. The RBOCs claim that usage would be higher—and thus revenues to broadband providers much higher—if the telephone companies were freed from their current obligations to share their networks, at cost plus a reasonable profit, with competitors. They also point to the unfairness of the current regulatory regime under which they face more regulation than their cable competitors, although this year, a federal appeals court invalidated the FCC's rules that enable DSL competitors to use the RBOCs' local lines to provide rival DSL service.

While the RBOCs appear to have a good argument on fairness grounds, it is difficult to see how freeing them from their sharing requirement will encourage any additional consumers who are not now already signed up for DSL suddenly to embrace the service. In fact, precisely the opposite may occur. If the RBOCs no longer were required to share their facilities, consumers in each market would have, at most, a choice between only two broadband providers: the local RBOC and the local cable company. In such an environment, broadband prices would likely increase, reducing the number of broadband subscribers, or at

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the very least slowing the rate of the growth of usage.

It is likely, of course, that more people would take up broadband if there were more useful content. One alleged impediment is the inability to adequately protect movies and sound recordings distributed over the Internet from unauthorized copying. Some kind of “digital rights management” system, analogous to the royalty collection for sound recordings played over the radio, should help address this problem. But even if such a system could be implemented, it may not be a panacea for those who are looking for a silver bullet solution to unlocking greater deployment of broadband. Other countries—Canada, Korea, and Sweden—where movies and sound recordings also can easily be illegally downloaded, already have much higher rates of broadband usage than the United States.

In the end, the best policymakers can and should do is not to reduce competition in the service market below where it is today by freeing the RBOCs from their current sharing obligations. The time for taking that action may yet come—when wireless-based or satellite-based broadband becomes a viable option and there are at least three broadband technologies broadly available. Until then, the status quo in regulatory policy is better than deregulation.

Unbundling Requirements and Local Competition

Perhaps the single most difficult challenge in the telecom arena is how, if at all, to ensure competition in the so-called “last mile”—service directly to the residential or business users. The 1996 law attempted to realize that goal by requiring the RBOCs that had monopolies in the last mile to lease their facilities, in whole or in part, at “cost” to competitors. To provide further incentives, the law also conditioned RBOC entry into long-distance within their service territories on compliance with a “checklist” of fourteen conditions indicating whether competitors were being well treated. Finally, many who voted for the legislation thought that cable TV companies would be entrants into local telephone service; the bill encouraged that outcome by prohibiting mergers between telephone and cable companies so that they would continue to have incentives to compete.

Local competition remains very limited, however. For a time, it looked as if the CLECs would mount a serious challenge in business markets, where local rates were propped up artificially by state regulators in order to subsidize rates for residential customers. But most of the CLECs are now dead and only a few cable companies have tried to overcome the technical and economic obstacles to offer telephone service to residential customers. As a result, the RBOCs still control about 95 percent of the local telephone lines.

To some, this sorry experience amply demonstrates that competition for the last mile, at least in landline service, is impossible and should be abandoned as a policy objective. Based on this view, the only challenge to the RBOC monopoly has and will come from cellular phones.

This is too pessimistic. For one thing, two of the major cellular providers nationwide are owned by the RBOCs: Verizon and Cingular. It is critical that the antitrust authorities not allow significant shrinkage in competition among the other wireless providers (AT&T, Sprint, WorldCom, and Nextel) through mergers. Beyond that, the FCC should make available more of the electromagnetic spectrum to additional wireless licensees, or at the very least allow licensees of some parts of the spectrum to trade them to wireless providers.

Meanwhile, it would be a mistake to give up now on wireline competition. The conditions for true competition in landline service—unbundled network elements available to RBOC competitors—have been in place in practice for only several months, not the full six years since the passage of the 1996 law. Only since the very recent decisions by the Supreme Court upholding the FCC's unbundling rules have competitors had assured access to portions of the local network at rates that would permit them to be profitable. The key aim of policy-makers now is to assure that the Verizon decision is effectively implemented and that all elements of the RBOCs' local networks remain available to competitors for some time to come so that competition can take root.

The RBOCs and others respond by claiming that the regulatory regime now simply allows competitors to engage in "arbitrage"—by leasing RBOC facilities at a low rate and then simply reselling the service—rather than true competition. Moreover, they claim that the unbundling and leasing requirements discourage investment by the RBOCs in maintaining and upgrading their facilities.

In fact, the evidence points the other way. For one thing, as FCC Chairman Michael Powell has noted, the RBOCs resisted rolling out DSL service until forced by competition to do so. This point is confirmed in a recent study by Princeton economist Robert D. Willig, who finds (with his colleagues) that, controlling for other factors, RBOCs actually invest more in the states that have had the lowest leasing rates for their unbundled facilities.

In any event, precisely because the RBOCs own the bottleneck to the consumer—the last mile of wire and local switches to route calls—there is no other way in the short run to promote competition other than to give competitors access to those facilities. But in the long run, many or all of those same competitors are unlikely to continue relying on their own main competitor—the local RBOC—for such access. At the very least, they will want to install their own switches and other value-added services (such as call waiting and voice mail) so that they will not remain at the mercy of the local telephone company. To implement this strategy, the competitors will have to convince equity investors and creditors to finance these investments. This is unlikely to happen, however, unless the competitors initially have at least some customers signed up. Leasing the RBOC facilities in the short run is about the only way to accomplish this.

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The implication for policy, therefore, should be clear: the current unbundling obligations on the RBOCs should not be curtailed. To be sure, this will bring about more competition at the local level, which will cut further into RBOC profitability. But consumers will benefit, and that is the outcome that policy-makers should pursue.

WILL THE TELECOM SECTOR RECOVER—AND WHEN?

The sad state of the telecommunications sector prompts the obvious question: when will it ever recover? It is difficult to be optimistic about the answer. Given the increasingly intense competition in long-distance and wireless service, it is likely that prices for both those services will continue to fall. Moreover, if state regulators are allowed to implement pro-consumer unbundling requirements—and are not preempted from doing so by the FCC—even local telephone service rates may fall, if not in nominal terms, then at least in real terms.

With the downward pressure on prices, the only way the firms in the sector will improve their health is to carry more traffic over existing, largely empty networks, or find ways of adding new "value-added" features to the network—data storage and manipulation, or consulting, for example—that users want and will pay for. It is unclear how rapidly or successful firms will be in pursuing either of these strategies, but I suspect that the second strategy is likely to be more successful than the first.

If this view is right, that places an even greater premium on ensuring that competition is not diminished in the sector. For it is only competition that will give firms the maximum incentives to innovate. And it is most likely through innovation that firms in the badly battered telecommunications sector eventually will recover, let alone survive.

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