

Unleash Broadband

By **GEORGE GILDER and BRET SWANSON**

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WorldCom's impending \$40 billion bankruptcy should galvanize Washington to this simple fact: For the last two years we have suffered not a mild recession but a technology depression. With 34 major bankruptcies so far and 24 more expected, the collapsing communications industry – 17% of the economy – is the prime source of a \$4 trillion dollar decline in the net worth of U.S. households.

President Bush did not cause the tech depression, but it is his responsibility now. Without a continuation of the productivity gains of the 1980s and 1990s, mostly propelled by technology, both the economy and the Bush presidency will topple. To get the economy back on track, he should unleash broadband, the final connection to homes and small businesses that ultimately feed the telecom infrastructure.

Expectations

The broadband telecommunications industry that emerged in the 1990s was based on three fundamental expectations. First, investors and entrepreneurs believed in the unrivaled power of microchips and fiber optics. Second, they expected the Telecommunications Act of 1996 to deregulate the sclerotic telecom industry, enabling new and existing players to replace century-old “narrow-band” telephone lines with broadband connections that can carry interactive video a thousand times faster. Third, investors judged that the financial leverage (debt) required to undertake such a massive, global infrastructure project would be sustainable given a then-stable dollar, an economy growing at some 5%, the 1997 30% capital gains tax cut, and a government telling them: Go for it – we won't get in your way.

The technology surpassed all its promises. Between 1996 and 2001, Internet traffic rose 3,000-fold. To support the Internet traffic generated in 2001 (some 891 petabytes) with the voice-based technology of 1995 would have cost at least \$39 trillion, four years worth of U.S. GDP. Clearly, the deployment of chips and optics was a huge success. The other two expectations, however, were undercut by government blunders.

Beginning in early 1997, the dollar began to appreciate and eventually rose some 40% against commodities, gold, and other currencies. Talk about restating earnings – what the Federal Reserve did was restate the value of the

standard by which all earnings are measured.

To comprehend the effect of a rapidly appreciating dollar, imagine taking out a loan with the expectation of paying back \$1 billion. Then your bank calls and says, “You know, we'd like \$1.4 billion instead.” At the same time your cash flow is plummeting because of the deflationary global recession. This was a frequent scenario in 2001, with a record \$115 billion in corporate defaults. That some 60% of the defaulted dollars were outside of telecom proves that the common link was leverage, not a telecom monopoly on bad management.

But of course, telecom companies did have an additional burden all their own. Instead of deregulating broadband, Congress and the Federal Communications Commission re-regulated it. They imposed new layers of price controls and sharing requirements on high-speed access lines. They gave new powers to ever-eager public utility commissions in the 50 states. They micromanaged contract negotiations between competitors. They perpetuated the ridiculous distinction between long distance and local service, thus jacking up costs by forcing tolls by creating three redundant tiers of providers (local, long distance, and Internet service provider).

Seeking a regulator's nirvana of perfect competition, the feds enmeshed the local loop in a serpentine maze in which no one except lawyers and lobbyists could make any money. Squeezing most of the profit out of the mobile-phone business as well, the FCC required seven wireless carriers in every region and prevented consolidation, thus ensuring that many would go broke. The commission held spectrum auctions and then devalued the spectrum that it sold, causing invited bidders to go broke.

Deflation and regulation scuttled broadband

Meanwhile, WorldCom was fighting and losing two immensely important antitrust cases that collapsed its strategy to compete with the old-guard telopolies – AT&T, British Telecom, Deutsche Telekom and Japan's NTT. U.S. and European regulators charged that by acquiring Sprint's and MCI's networks, Mississippi upstart WorldCom was going to monopolize the Internet, the most complex, decentralized network ever built. Today, WorldCom has an

8% share of the Internet “backbone” and is broke. Some monopoly! Because the regulators have prevented consolidation, there are at least 21 other backbone networks, and almost all of them are broke, too.

The bottom line is that the number and speed of last-mile broadband connections has been far below the expectations on which the Internet expansion was based. Internet traffic growth is down from 1,000% per year in the mid-1990s to 100% today; U.S. semiconductor sales fell 45% between 2000 and 2001; and the valuations of the top venture capital portfolios (not to mention my own list of favored companies in the Gilder Technology Report) are off between 90% and 99%.

Some people argue there's no demand for broadband. But look at the million businesses paying around \$1,000 a month for T-1 lines delivering 1.54 megabits a second. Or look at the success of Netflix, a company that mails DVD movies to customers for \$20 a month.

Fortunately, there is hope on both the monetary and regulatory fronts. With the dollar finally weakening and gold at \$320 (up 26% from its 20-year low of \$254), deflation is subsiding. Cutting through the clutter is FCC Chairman Michael Powell. He has made opening up the broadband floodgates his top priority, and in the face of congressional hostility has commenced several rulings to end regulatory bottlenecks.

Deregulation

Mr. Powell speaks of acting over the “next six to nine months.” In six to nine months, however, the tech depression threatens to deepen into a general economic collapse. President Bush needs to add his support, stating his emphatic endorsement of full broadband deployment, and encouraging the FCC to move vigorously toward nationwide deregulation that preempts state regulations. If the Interstate Commerce Clause doesn't apply to the Internet, it might as well be rescinded and the Internet dismantled, since the Net cannot work if it is divided into local and long-distance regimes in 50 states.

It may be too late to save WorldCom and many other telecom service providers, but it's not too late to turn around America's vast technology sector. With Congress and the courts hopelessly deadlocked, only George W. Bush and Michael Powell can lead us out of the telechasm.

Mr. Gilder is a senior fellow at the Discovery Institute. Mr. Swanson is executive editor of the Gilder Technology Report.