

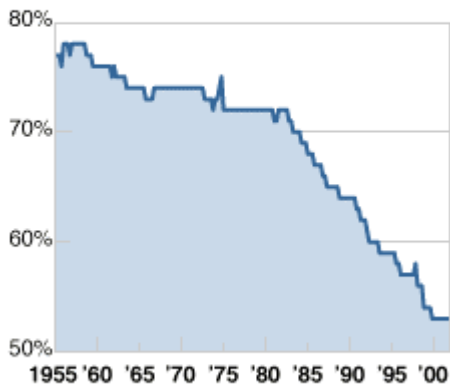
The Rise and Fall of Intangible Assets Leads to Shorter Company Life Spans

Why High-Fliers Like Telecom Winstar,
Built on Big Ideas, Tumble So Quickly

By Greg Ip
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(PFD File)

HARD TO TOUCH

Tangible assets as a percent of all assets of nonfinancial businesses



Source: Federal Reserve Board

When Winstar Communications Inc. filed for bankruptcy-court protection last April, it listed \$5 billion in assets, including a network providing local phone and Internet service in 60 cities.

A few months later, executives from Third Avenue Trusts, a New York firm that often invests in bankrupt companies, mulled bidding about \$150 million for Winstar's assets. After checking around, they worried that Winstar had a reputation for unreliable technology and customer service. And its industry was too chaotic for chief executive officer Martin Whitman to feel confident. "There's got to be great opportunity in the Winstars of this world. I just can't tell you who is a good telecom company or who's a bad telecom company," he says.

Winstar's assets later sold for \$42 million. For all the money it spent building switching stations, wiring buildings and deploying rooftop antennas, the company couldn't find enough customers. Without them, its network was a collection of rapidly depreciating equipment that couldn't support Winstar's crushing debt load.

Fundamental Change

Winstar's descent from multi-billion-dollar telecom star to near worthlessness in less than two years illustrates a fundamental change in the longevity of companies. Value today is increasingly derived from intangible assets -- intellectual property, innovative technology, financial services or reputation. As Winstar's investors and lenders found, the value of such assets can erode with shocking speed if customers find something better.

Federal Reserve Chairman Alan Greenspan noted recently that "a firm is inherently fragile if its value-added emanates more from conceptual as distinct from physical assets." An office building or auto factory can keep producing even if their management is discredited, whereas Enron Corp.'s collapse shows the vulnerability of a company whose value is based on its reputation, he said.

"Trust and reputation can vanish overnight. A factory cannot."

Winstar is among the most spectacular in a wave of corporate meltdowns that has claimed energy trader Enron, broadband pioneer Global Crossing Ltd. and storied photographic innovator Polaroid Corp., which had more than 3,000 patents when it filed for bankruptcy protection last fall. As stunning as their failure is how little they've left behind.

Consider what investors are paying for the debt of companies in bankruptcy protection, ownership of which often brings control of a company. Enron's bonds now trade for 13 cents on the dollar, Polaroid's for five cents, and Global Crossing's for two cents, proof of how little investors think they can recover. Accounting firm Arthur Andersen LLP is fighting for its life because of the erosion of its "capitalized reputation," to use Mr. Greenspan's phrase.

The recession, accounting gimmickry and bursting of the technology bubble have been factors in these collapses. But rapid technological change and the increasing importance of intellectual, as opposed to physical, property suggest that once these recent factors have faded, corporations will still be more vulnerable to swift extinction than they once were.

Fifty years ago, tangible assets such as real estate, equipment and inventories represented 78% of the assets of U.S. non-financial corporations. Today, the proportion is 53%, according to Federal Reserve data. Much of the shift is due to growth in intangible assets such as patents, copyrights and goodwill -- the difference between what a company pays to acquire another and the net worth of the acquisition as reported on its balance sheet. Leonard Nakamura, a researcher at the Federal Reserve Bank of Philadelphia, estimates that annual investment in intangible assets, which he classifies as research and development, software purchases and advertising, rose from 4% of gross domestic product in 1978 to almost 10% in 2000.

In the last decade, many companies tried to relieve themselves of hard assets. Enron's strategy was to move away from making money by delivering gas through pipelines and generating electricity. Instead, it wanted to become a trader, buying and selling gas, power and broadband capacity in markets it was pushing to deregulate.

"People like assets, they can go in the field and kick them," Enron's then-president Jeffrey Skilling said in an interview in 2000. "It gives people a certain warm feeling. What's becoming clear is that there's nothing magic about hard assets. They don't generate cash. What does is a better solution for your customer. And increasingly that's intellectual, not physical assets, driven.

"The market is sending us a very clear signal," Mr. Skilling went on. "We are in a new economy, and the market is willing to pay for market position, not necessarily assets."

Mr. Skilling poured resources into EnronOnline, an electronic marketplace that at one point handled a quarter of the over-the-counter electricity and natural-gas trades in the country. But when Enron was engulfed by a crisis of confidence over its use of off-balance-sheet partnerships to hide debt, its hard assets kept it alive for a while as its intellectual assets pulled it down. Enron used its gas pipelines as collateral to secure \$1 billion in new credit lines in early November.

As EnronOnline's customers demanded more collateral or stopped doing business with it, its trading volume melted away in what Mr. Skilling later told Congress was a "classic run on the bank." UBS Warburg later bought Enron's trading unit, including EnronOnline, in exchange for a royalty on future profits; it paid no cash.

The most valuable companies today, with a few exceptions, make most of their money from intangible assets: Microsoft Corp.'s software, Pfizer Inc.'s drug patents, and Walt Disney Co.'s film and television productions. Even the world's most valuable company, General Electric Co., though known as an industrial company, derives a quarter of its profit from financial services. These formidable franchises are unlikely to erode soon. But rapid shifts in corporate standings show nothing can be taken for granted.

Total collapses remain rare, but major reversals of fortune are not. In the 1981-82 bear market, three of the 100 largest companies in Standard & Poor's 500-stock index lost at least two-thirds of

their market value, according to Aronson & Partners, a money-management firm. In the 1990 bear market, none did.

In the latest bear market, 26 companies at some point sustained losses of that magnitude. Most are technology and telecommunications companies, including Hewlett-Packard Co. and AT&T Corp. But the losers also include broker Charles Schwab Corp. and retailer Gap Inc.

Pace of Innovation

A big factor is the pace of innovation, which rapidly outdates intangible assets. Twenty years ago, Polaroid was among the world's most admired technology companies. But its franchise in both consumer and commercial instant photo developing was eaten away first by one-hour photo labs and later by digital imaging. Many of the company's attempts to develop new products proved costly failures.

Big pharmaceutical companies earned immense profits and rich stock valuations in the 1990s from their intellectual property. Now some of them are seeing profits and values threatened as patents expire and their labs labor to produce new ones. Schering-Plough Corp.'s stock has lost nearly half its value since late 2000 as it struggles to replace the revenue it will lose when its allergy drug Claritin loses patent protection. ImClone Systems Inc.'s market value plunged by two-thirds last year when the Food and Drug Administration refused to consider its application for approval of its cancer drug.

Upstart biotechnology companies, meanwhile, helped by new drug-discovery techniques, accounted for about 18% of traditional drug approvals in the 1990s, up from 11% in the 1980s, says Joseph DiMasi, director of economic analysis at Tufts University's Center for the Study of Drug Development. Their existence is even more volatile, since their value is based not on their labs but on experimental treatments which can fail in clinical trials or be rejected by regulators. While biotech pioneer Amgen Inc., 22 years old, commands a market value bigger than century-old Schering-Plough, numerous other biotech companies have disappeared in the last decade.

The speed of technological change also played a role in eroding the value of companies in the fiber-optic communications business, exacerbating a glut generally blamed on the stampede of companies laying cable. A technology called dense wavelength division multiplexing (DWDM), developed in the 1980s and deployed during the latter half of the 1990s, vastly increased the capacity of each fiber strand. It was as if a change in the traffic signals turned a single-lane highway into a 160-lane highway, says Wynn Quon, an Ottawa, Ontario, technology consultant.

Early users got a cost and speed advantage. But almost all the startup carriers began applying the new technology as soon as they could. "We leap-frogged each other," says Jason Martin, Williams Communications Group Inc.'s director of technology. Along with other advances in transmission technology, DWDM increased the capacity of optical fibers. Carriers cut prices in hopes of gaining market share. Demand fell short of expectations, and the glut was aggravated by the increased capacity made possible by DWDM.

"If we were restricted to the old transmission technology, we would have needed all the fiber in the ground we had, plus more," says Andrew Odlyzko, director of the University of Minnesota's Digital Technology Center. Many of the upstart broadband carriers would have done quite well, he says. Instead, most are in bankruptcy protection or close to it.

Broadband has often been compared to canals, railways, and even the early telecommunications systems, which were also typically financed with debt. "This made sense because they were matching long-lived assets with long-lived liabilities," notes Michael Mauboussin, U.S. investment

strategist at Credit Suisse First Boston. But, he says, financing broadband networks with debt was a mistake. Innovation altered the economics of the business faster than the debt could be paid. Had companies financed their networks with stock instead, they would have been spared the crushing interest payments and more would likely have survived.

Red Tide

The combination of heavy debts, falling revenue, and skittish investors as well as the rapid obsolescence of yesterday's technology are producing a tide of bankruptcy filings. Forty percent of the largest filings since 1980 have occurred since the beginning of 2001, according to Edward Altman, a New York University finance professor. And recovery rates -- what lenders can expect to get back after companies are restructured or their assets sold -- were an estimated 21 cents on the dollar last year, excluding financial-services company Finova Group Inc., whose assets were subject to an unusual bidding war. That's the lowest since Prof. Altman began gathering data in 1978.

Winstar's assets, at first glance, seemed valuable. The company offered local phone service -- a business that didn't experience the capacity glut of long-haul fiber. By using wireless antennas, it evaded local Bell companies' control over wires that connect buildings. By 2000, Winstar had wired, or had the rights to wire, 5,400 buildings. It expanded its services to long-haul broadband, Web hosting and online business services. Its payroll peaked at 4,500 in early 2001.

But while Winstar claimed tens of thousands of customers, it had trouble serving them, subjecting them, among other things, to mistake-prone billing systems. Mr. Whitman's New York investment company had subscribed to Winstar's service, but it found that bad weather or construction of a new building nearby would occasionally interfere with radio signals and interrupt service. His firm went back to AT&T. "Our guess was if you had the choice, you would take cable over this because these are antennas sitting on a roof," subject to possible physical or electronic interference, says Peter Faulkner, who was then among Mr. Whitman's associates. Convinced Winstar's creditors had unrealistic expectations of the value of its assets, Third Avenue never made a formal bid for the company.

That December, IDT Corp., a Newark, N.J., firm that specializes in buying telecom assets on the cheap, bought Winstar's assets for less than a third of the price Third Avenue had considered paying. IDT Chairman Howard Jonas says Winstar's faulty billing systems have been replaced. He argues its antenna-based phone service by some measures is more reliable than fiber-optic cables, which can be damaged by underground water seepage or excavation work, and IDT plans to expand it. But IDT is also pulling Winstar out of many smaller cities that didn't have enough buildings for its network to be profitable. All but a few hundred of the company's workers have been laid off.

Mr. Whitman doesn't doubt someone will make a lot of money from telecom assets such as Winstar's. It just won't be him. He has pursued more familiar ventures such as Safelite Glass, a chain of auto-glass-repair shops whose debt he bought for 50 to 60 cents on the dollar back in 1999. Safelite has since emerged from bankruptcy protection. "How much older economy can you get than that?" he asks.