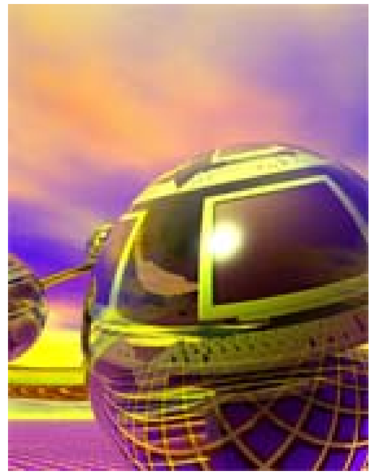
The Tech Boom: Valuation Inflation, A Flood of Day Traders and Other Excesses

Published: November 07, 2001 in Knowledge@Wharton



Everyone now agrees that the 1990s technology boom was a bubble. But two years ago, that would have been unusually hard to predict, according to participants at the Wharton Finance Conference held last month.

"It’s very difficult in real time to identify an asset bubble," said Laurence Meyer, an economist and member of the Board of Governors of the Federal Reserve System. This bubble, he said, was particularly difficult to see because it came with a genuine rise in productivity that led many investors to conclude they had entered a new kind of economy.

Economic history is marked by boom and bust cycles, added Meyer. When a typical cycle edges into excess, countervailing forces are usually triggered. The boom creates increasing demand which fuels inflation. Inflation leads to a rise in real interest rates, which chokes back investment. That cools the economy before it gets too far out of line.

"But when the excess is powered by productivity gains, there is a powerful disinflationary force," he said. "When that happens, the economic environment seems completely different and the notion that the old rules no longer apply begins to take hold, fueling additional excess."

According to Meyer, U.S. economic history going back to 1899 can be separated into six periods in which a burst of high productivity coincided with strong economic growth. The most dramatic was from 1917 to 1927 when productivity grew 3.8%, followed by a gain of just 1.5% from 1927 to 1945.

Within those periods, Meyer said, there were equity bubbles in innovating industries. After World War I, General Motors’ stock soared, but then crashed when hundreds of competitors sprang up. Airlines bubbled after Charles Lindbergh’s 1927 cross-Atlantic flight.

Chris Hastings, a managing director in Bear Stearns & Co. Inc.’s private equity placement group, said the 1990 technology market was so hot that he was drafted into working on Internet companies at Prudential Securities in the late 1990s. "I had no background in technology. There was such a demand that we were taking bankers from other groups and shoving them into technology." He recalled meeting with companies that had revenues of only $50,000 a month and suggesting that if they could raise that to $200,000 they could go public. "Everybody was guilty of it."

Retail investors had a big impact on the technology sector with the growth of online investing and the advent of day-traders, Hastings added. Wall Street firms took companies public and gave much of the IPO to institutional clients who then flipped their stock to retail investors who held as much as 80-90% of some technology IPOs in the boom. "The market couldn’t price IPOs because you didn’t know what the retail customer would do," he said.

As more and more IPOs came to market, a steady valuation inflation took hold as each new IPO was valued by the most recent. "The second wave was valued off the first wave and it fed off itself," he added.

According to Hastings, investment bankers knew the end would come. "We knew the capital markets would be open for a short time so that's why there was a mad rush to the door. We knew the music was going to stop." When the music did stop, the player without a chair was the "unsuspecting public."

The unraveling, he said, began with the collapse of business-to-consumer companies, followed soon by the demise of Internet companies with a business-to-business model. The last to fall were the Internet infrastructure companies that were supposed to be immune to the bust because they were supplying tangible "pipes" for the New Economy companies. Now Hastings is working in private placement, where many public technology companies have been forced to turn for new financing since the public markets have dried up.

Davis Terry, joint head of the global telecommunications group at UBS Warburg, pointed out that telecom has not fallen as far as Internet companies, but the industry is feeling deep pain. "If the technology industry has terminal pneumonia, then we've got the worst hangover ever."

In the boom years, he said, clients were demanding technology investments. So he and thousands of other bankers went out to find them. "When the monkeys want bananas, you give them bananas." The psychological underpinnings of the bubble were optimism, but also "a fear of being left behind," Terry added, noting that venture capitalists and research analysts genuinely believed in the technology.

The link between telecom and technology stocks became broadband and its potential to bring the Internet within reach of millions of consumers, Terry said. From that grew the notion that other gadgets, including wireless devices, would become ubiquitous. Investment poured into the companies that seemed poised to build the necessary infrastructure.

"The problem is this stuff is very hard to do. You don't just snap your fingers and create the infrastructure that many of these Internet companies needed." The promise is still bogged down in the "last mile" of high-speed Internet delivery into homes. Even when it is available, Terry added, it is offered by only one or two companies and remains expensive. "This is not the kind of environment most tech companies were counting on."

He also said that while the equity markets have shrunk, investors in high-yield tech debt have been hit hard. Those investments lost solid cash, not paper gains. And when an Internet company goes bust, there is not much to salvage. There's no steel mill and no real estate to liquidate, just some desks and obsolete computer equipment.

Michael Parekh, managing director, Internet research and strategy at Goldman, Sachs & Co., traced broad interest in the Internet to when the public first began to use a browser or send email. "People had a collective Eureka! moment," and they wanted a piece of the industry.

According to Parekh, there are 250 million personal computers in homes and offices, and the prospect of connecting them all seemed like it would bring unlimited opportunity. Investment in technology will be weak for the next five years, he predicted, but it will return. During this period, incumbent companies will have the advantage and innovators will struggle or be snuffed out.

Parekh recalled a personal-computer industry crash in the early 1980s that wiped out 60-70% of the manufacturers at the time. "This disaster was a lot bigger," he said of the current debacle. "The future is still there, it's just going to take a lot longer."

This boom and bust was different, he added, because so much of it played out in the public markets. Normally, companies go through many years of ups and downs known only to their private venture backers. But with the 'democratiziation' of Wall Street that encouraged day-traders, this bubble was created and destroyed in plain sight and reported in depth on CNBC. As Parekh noted: "We were forced to do in a public context what normally we have done in a private one."