BLOWING BUBBLES

The Dot-com Era

Depression was not just a historical event. It was an economic and social apocalypse that, simply by having occurred once, could, ipso facto, recur at any time. It played on their minds like a psychic bogeyman. Anytime things "got too good," that could only mean a crash was around the corner. In many ways, the dot-com bubble and its subsequent bursting are a similar bogeyman, at least to Silicon Valley. Any time a new technology leads to the proliferation of startups, any time venture capital investments increase year over year, any time company valuations pass stratospheric levels and high-profile IPOs hit the market, people inside and outside of tech fall all over themselves to declare that a new bubble is here, and everyone should head for the hills. But the fact is, the dot-com bubble was a truly singular event, brought on by a unique mixture of causes, and we are unlikely to see its kind again in our lifetimes.

FRIDAY, AUGUST 13, 1982, might not sound like an important day in history, but in the annals of finance, it is one of the more momentous. That afternoon, the Dow Jones Industrial Average closed at 788.05, up 11.13 points, or 1.4% from the previous day's close of 776.92. The Dow would never again close as low as 776. By the end of 1982, it would cross 1,000, and in a few years, Friday the 13th of August 1982 would come be recognized as the beginning of the greatest bull

market in American history. By the time the dot-com bubble burst in March 2000, the Dow and the S&P 500 Index would have risen tenfold, and the technology-heavy Nasdaq index nearly thirtyfold.¹

There were some quite notable hiccups along the way, but from 1982 until the turn of the century, the market closed up, year-on-year, almost every single year. Even after the Black Monday crash in 1987, when the Dow lost 22% in a single day, investors who held on through the crash had more money on December 31, 1987, than they had on January 1, 1987. An entire generation of investors came of age believing that markets only moved in one direction: upward. If history tells us anything, it's that when people come to believe only good news can ever happen, a speculative financial bubble is probably inevitable. The dot-com era was really the culmination—the euphoric end-stage—of this protracted bull market.

It was all that much more impactful because it happened to the baby boomers, the megageneration. Between 1946 and 1964, 76 million Americans were born, and by the 1990s, this cohort was entering its forties, the time that most people begin saving for retirement. If the baby boomers were now interested in investing, that meant America was now interested in investing. The sheer weight of their numbers, backed by the accumulated wealth from their prime earning years, meant that there was suddenly a mountain of money looking for a place to go.

Boomers were managing their own retirement savings in much larger numbers than the generation before them, who relied on pensions rather than 401(k)s. And they hadn't grown up with the fear of the stock market crashing and causing an economic crisis. The economist John Kenneth Galbraith described just this sort of generational turnover in investing philosophy in his book *A Short History of Financial Euphoria*. "For practical purposes," Galbraith wrote, "the financial memory should be assumed to last, at a maximum, no more than 20 years. This is normally the time it takes for the recollection of one disaster to be erased and for some variant on previous dementia to come forward to capture the financial mind. It is also the time generally required for a new generation to enter the scene, impressed, as had been its predecessors, with its own innovative genius."²

The dot-com bubble is called the dot-com bubble because of the hundreds of new technology stocks that debuted in the late 1990s, but the fact is, the party had been going for quite a while already. From the 1987 Black Monday crash to the inauguration of President Bill Clinton, the stock market had nearly doubled. In 1995, the S&P 500 Index returned 37.20% in a single year. When the dot-com

companies announced their arrival with Netscape's spectacular IPO in August of 1995, Wall Street was already in an ebullient mood. "The dot-com stocks were the froth in the cappuccino," former *Barron*'s financial journalist Maggie Mahar says.³

Even though companies like Yahoo, Amazon, eBay and others were formed largely in the two years between 1994 and 1996 (and generally went public in the two years after that), it wasn't until 1998 that the stock prices of dot-com companies began to demand attention. It took a while for dot-com stocks to stand out because, again, at the time, seemingly all of Wall Street was doing well. Everything was already inflated. A traditional old-economy stock like General Electric was trading at forty times earnings. During the time period from Netscape's IPO in August of 1995 to the beginning of 1999, shares of traditional blue-chip companies like, say, Procter & Gamble, doubled. Not a bad return in only forty months. So, at first, Internet stocks didn't seem all that exceptional.

But if you weren't content with merely doubling your money on a solid, staid stock like Procter & Gamble, then, by 1998, you might start to look enviously at the returns tech stocks were ringing up. Everything changed over the course of 1998. If you bought \$1,000 worth of Yahoo and Amazon each at the time of their IPOs, over the course of 1998—merely twelve more calendar months—you would ring in the new year of 1999 to discover that your original \$1,000 investment in Amazon was now worth \$31,000 and your \$1,000 worth of Yahoo stock had ballooned to \$46,000. Turning a \$2,000 investment into \$77,000 is phenomenal on any time scale, but to do so in less than thirty months is unheard of. And the funny thing was, getting this sort of return wasn't exactly rocket science. In the twelve months of 1998, Yahoo stock returned 584%, AOL 593% and Amazon 970%. These were three of the best-known, most talked-about stocks of the mid-nineties, widely heralded as the vanguard of the new economy that the Internet was supposedly bringing into existence. They were hardly needles in the haystack.

In the last two years of the nineties, seemingly any random Internet stock pick began to feel like a sure-thing lottery ticket, and that is why we remember this period as the dot-com bubble. Internet stocks proved to be particularly susceptible to speculation for a couple of reasons. Dot-com companies were young. They were going public sometimes only months after their creation. When they showed any sign of growth, their stock prices took off because it seemed to validate the notion that there was only more growth ahead. And it was that limitless promise that led to the second unique feature of Internet stocks: the

profits didn't seem to matter. Valuations weren't tied to things like, you know, income. They were tied to potential fortunes to be made, somewhere in the future. New metrics like counting "eyeballs" and "mind share" were used to show companies were growing, even if that growth couldn't be measured in dollars and cents. Heck, sometimes a dot-com stock would increase in value even after it announced *losses*! Investors might take that as a sign the company was "wisely" plowing its money into strategies for growing at all cost.

Americans believed all this, because all the so-called experts were telling them it was true. This Time It's DifferentTM was a rallying cry of the time period. Magazines like *Wired* were promoting a glittering future where technology would soon be a panacea for all of mankind's ills. Books like Ray Kurzweil's *The Age of Spiritual Machines* promised that technology might help us transcend death itself. Bestsellers like *The Long Boom* and *Dow 36,000* made the argument that technological advances were enabling a structural shift that would kick the global economy into a new, higher gear, almost unfathomable to contemporary minds.

These arguments—that technology was changing the game and that investment markets overall were being transformed—fused until they were almost one and the same, a self-reinforcing battle cry. All of this whipping up of idealistic hysteria found a willing accomplice in the financial press. On television especially, the gyrations and permutations of the boom were given literal play-by-play treatment by the channel that made its reputation during the late nineties. Early in the decade, CNBC had been an unprofitable, poorly watched channel on deep cable, the dorky, boring relation to CNN. But in late 1993, Roger Ailes took over the channel and transformed it. Taking his cue from the way that ESPN covered sports, especially with its *SportsCenter* franchise, Ailes began populating CNBC with winning personalities who covered the stock market the way a sports anchor might cover a bowl game. All through the day, a parade of talking heads from Wall Street came on to analyze fluctuations in the market. Today, we're used to cable news being a daylong parade of talking heads debating topics in *Brady Bunch*—style boxes. But before Ailes took this format to Fox News and it became standard operating procedure on cable news everywhere, the free-for-all gabfest format found its first success on CNBC.

By the turn of the century, CNBC had become the background noise for a particular American moment, the default channel of the bubble era. It was "an authentic cultural phenomenon," as *Fast Company* magazine described it, "broadcast to nursing homes, yuppie gyms, dorm rooms, hotel lobbies, pilot ready rooms, and restaurants" so that Americans could get a quick update on

their favorite stock or the hot new IPO that was hitting the market. People at the time felt that CNBC was the most visible aspect of an overall democratization of investing that was taking place. "Why can't Joe Smith who works at a deli have the same information as Joe Smith who works at an investment bank?" said CNBC's Maria Bartiromo when asked to define her role to everyday investors. "That's why it's a bull market. It's not a professional's game anymore." Years later, Maggie Mahar would concur. "It was in the last five years of the 90s that you saw the individual investor really take over," says Mahar. "They were really leading the market. They were doing a lot of the buying." Indeed, the numbers bear this out. In a 2002 study, 40% of investors with financial assets of \$25,000 to \$99,000 reported making their first-ever stock purchase after January 1996. They were doing a lot of the buying because of the new online trading platforms that had proliferated, like E*TRADE, Ameritrade, Firstrade, Schwab, and more. By late 1999, the number of online brokerage firms was nearing 150, and normal Americans were making half-a-million online trades every day.⁸ By 1999, nearly 40% of retail security trades were being done online.⁹

If Joe Smith saw a stock like Lycos profiled on CNBC, he could jump online and place an order for Lycos stock within minutes. There was no longer any middleman to talk him out of it. And if Mr. Smith wanted to spend his days discussing the relative merits and future prospects of Lycos, he could do so on message boards at sites like Yahoo Finance that had many thousands of forums devoted to discussing individual stocks. Often, the readership of these boards would break down between bulls and bears, or longs and shorts. Today, we are all familiar with the Roman Colosseum—like combat that goes on in the comments section of an average blog post, or the pages of a site like Reddit, but it was in the late nineties that average Americans became familiar with Internet conventions—such as flame wars and trolls—thanks to the bull versus bear debates on stock market—focused pages of a site like the Motley Fool.

IN DECEMBER 1998, a thirty-three-year-old stock market analyst by the name of Henry Blodget was working for the investment bank CIBC Oppenheimer. ¹⁰ Oppenheimer was not a particularly prominent player on Wall Street, and Blodget was not a particularly important analyst; he had basically lucked into the job less than three years previously, because banks were desperate to find someone "young" who understood this new Internet thing. Two months earlier, Blodget had published his first analyst report on Amazon.com. He had recommended buying the stock, setting a one-year price target of \$150 a share. It

was a good call. At the time of Blodget's first recommendation, Amazon was trading at \$80 a share; it had subsequently exploded to \$240. The Oppenheimer sales team wanted a fresh recommendation to take to their clients for the new year. At their behest, Blodget dutifully calculated that a 70% rise over the course of the next year might make sense, based on Amazon's recent sales growth. He put a new price target on the stock: \$400 a share, writing, "Amazon's valuation is clearly more art than science, and we believe that the stock will continue to be driven higher in large part by the company's astounding revenue momentum." 11

A far more experienced analyst covering Amazon at the time was Jonathan Cohen. Cohen worked at a more prominent firm, Merrill Lynch, and unlike Blodget, Cohen's analysis was widely followed. A few months previously, Cohen had actually downgraded his recommendation of Amazon to "reduce," saying the stock was too expensive. More precisely, Cohen would later, famously, call Amazon "probably the single most expensive piece of equity ever, not just for Internet stocks but for any stock in the history of modern equity markets." Cohen's price target for Amazon was \$50. So, Henry Blodget was going out on a limb by making such a wildly divergent call from the more experienced Cohen's. When Blodget circulated his numbers internally, "One of my bosses stopped by my office and sort of raised his eyebrows—'\$400 a share?'" Blodget would remember later. The next day, when the call went public, "My phone lit up like a Christmas tree. I thought, 'Oh, no, I blew it.'" 13

Far from blowing it, the Amazon call made Blodget's career. Blodget made his famous forecast of Amazon's \$400 a share on December 16, 1998. The stock closed up 20% that day alone, in no small part thanks to news of Blodget's recommendation. By January 6, not even a month later, Amazon's stock blew past Blodget's \$400 target. Almost overnight, Blodget became a regular on CNBC. He began to be routinely quoted and profiled in almost every newspaper and financial magazine in the country. A month later, when Jonathan Cohen left Merrill Lynch, Blodget took over Cohen's analyst chair at the more prestigious firm. By 2001, Blodget would be paid a rumored \$12 million a year for his stock analysis. ¹⁴

The experience of Jonathan Cohen was not unique on Wall Street. Hedge fund managers, mutual fund managers, stock analysts, even financial reporters learned and internalized a sharp lesson in the late nineties: People didn't want to hear negativity. For everyone involved, it was far more helpful to your career if you joined the hosanna chorus talking up the prospects of the soaring market. Fund managers who did not fill their holdings with technology stocks saw their returns trail those of their peers and even the market indexes. "You either

participate in this mania, or you go out of business," Roger McNamee, one of the most famous technology investors of the era, told *Fortune* in June of 1999. "It's a matter of self-preservation." One by one, bearish stock market analysts who for years had been saying the bull market was too good to last threw in the towel and got with the program. Now one of the most famous technology stock boosters, Blodget joined a pantheon of Wall Street soothsayers who were almost ubiquitous in the late 1990s, analysts like Ralph Acampora, Jack Grubman, and especially Mary Meeker and Abby Joseph Cohen. Their slightest utterance could move markets, and they were all fully committed bulls, staking their reputations on the growth prospects of Internet companies.

Economists of all stripes were looking for a justification, a rationale, anything that could explain the boom times that they felt certain they were living in. Most just instinctively credited information technology. After all, everything was getting connected! The world was shrinking! Computers were everywhere! Surely that meant that things were functioning better, more efficiently, more profitably. The only problem was, none of this seemed to show up in any of the official numbers. Economic output is easy to measure when you can count widgets coming off an assembly line. But when your "economic revolution" is built around thoughts and ideas, and the speedy new ways you're connecting them all together, how do you quantify the value of those innovations? ATMs might mean fewer bank tellers had jobs; but think of the time saved by millions of consumers! How did one measure that? "More and more, value is produced not by real assets like factories and capital, but rather by people thinking and working together," Fortune opined in 1999. And yet, "while it seems obvious that computers have to have boosted productivity, proving that they have has been impossible."17

Many people came to believe that the proof might just *be* the soaring stock market. According to this line of thinking, stocks (and tech stocks especially) were rising because investors were rationally pricing in the vast improvements and profits that technology was making possible. Stock markets are a forward-leaning indicator of economic trends, and so perhaps the market itself was revealing the profits and efficiencies that would show up in official figures sometime down the road.

This rationale went all the way to the top. When Chairman of the Federal Reserve Alan Greenspan couldn't find the increases in productivity that he felt must be behind the run-up in stock prices, he commissioned Fed researchers to dig deeper into their statistical data in order to prove that productivity was, in fact, growing faster than government numbers showed. "Greenspan condoned

the bubble—and then concocted a theory as for why it was rational," quips Maggie Mahar. ¹⁸

Greenspan had begun the dot-com era skeptical of the stock market's euphoria. In December 1996, the Fed chairman gave a speech to a conservative think tank where a throwaway line ("But how do we know when irrational exuberance has unduly escalated asset values?") briefly caused markets to seize up. 19 "Irrational exuberance" would, somewhat ironically, become a cultural slogan of the dot-com era. But as the nineties wore on, Greenspan—if he did not exactly repudiate the phrase—gave every indication to the markets that he was no longer much worried about speculative excess. In January 1999, a senator asked Greenspan how much of the run-up in stocks was "based on fundamentals, and how much is based on hype?" The chairman answered: "You wouldn't get 'hype' working if there weren't something fundamentally, potentially sound under it." In the nearly two years after the "irrational exuberance" speech, the Federal Reserve raised interest rates only once, and, in fact, cut rates several times in response to the various mid-nineties "crises" few now remember, like the so-called Asian Flu of July 1997.²⁰ So, from late 1996 until late 1998—just the time when the dot-com bubble was inflating—the Fed was, to borrow from Wall Street lingo, extremely "accommodating" to the stock market.

Many people, then and now, feel that Greenspan, at the very least, enabled the dot-com speculative stock market bubble. At the time, American investors came to believe very strongly that Greenspan wanted them to be rich, and if anything went wrong, Uncle Alan would put his finger on the scales and make things right. During the run-up to the 2000 election, presidential candidate John McCain vowed: "And by the way, I would not only reappoint Alan Greenspan—if he would happen to die, God forbid—I would do like they did in the movie *Weekend at Bernie's*. I would prop him up and put a pair of dark glasses on him."²¹

IN THE WORDS of James Grant, editor of *Grant's Interest Rate Observer*, writing in 1996, "The stock market is not the kind of game in which one party loses what another party wins. It is the kind of game in which, over certain periods of time, nearly everyone may win, or nearly everyone may lose." By the late '90s, everyone involved in the stock market seemed to be winning. And the coming of the dot-com stocks only seemed to extend this winning streak. Nobody had any vested interest in questioning the madness, least of all the media. As early as 1997, an estimated 30% of national newspaper ad revenues came from the

financial services industry.²³ By 1999, ad rates on cable television were up 21% year-over-year and 16% on network television, thanks to an estimated \$1.9 billion that young dot-com companies would spend to promote themselves.²⁴

Most important, all those baby boomers, all those CNBC addicts, all those everyday Americans who were invested in the stock market—they were making money too. If they were invested in the right Internet stocks, they were making a *lot* of money. *Fortune* estimated that Internet fever was adding \$301 billion to the U.S. economy by 1998, and another study estimated that 37% of all new jobs being created were thanks to the Internet.²⁵

All told, approximately 50,000 companies would be founded between 1996 and 2000 aiming to commercialize the Internet, backed by more than \$256 billion in venture capital. But if the dot-com bubble is remembered mainly for the initial public offerings of stock that made all the headlines, it's important to remember that the actual dot-com mania, as measured by high-profile Internet IPOs coming to market, happened in a relatively brief window of time. In 1995, 7 stocks IPOed that could be termed "Internet companies." In 1996, there were 27. In 1997, the first of the real "dot-coms" came to market, totaling 19. In 1998, there were 29. But in 1999, there were 249 Internet IPOs. And those were just the Internet companies that debuted on the stock market. There were untold others that got acquired or went nowhere.

It was perhaps inevitable that, toward the tail end of the bubble, there were a lot of young Internet companies being founded that had questionable business plans at best. Some of the companies were so flimsy as to be just short of outright fraud. Investors (both venture capitalists and the public at large) no longer had any interest in discerning true value; any company with a .com at the end of its name might be the next billion-dollar winner. "You've got stocks selling at absolutely unbelievable multiples of earnings and revenues," the eternally skeptical old-school money manager Barton Biggs said as early as 1996. "You've got companies going public that don't even have earnings. You've got people setting up Internet pages to reinforce each other's convictions in these wildly speculative stocks."²⁷ By the end of the decade, such Chicken Little cries seemed quaint. If Americans—especially the everyday Americans who were in no way financial professionals, but were suddenly driving the market—were demanding to invest in Internet companies, Silicon Valley and Wall Street were more than happy to supply the demand. And with every new company that enjoyed a 100% first day "pop" on the markets, the increasingly isolated voices that were urging caution seemed all the more discredited. A wellrespected, longtime stock market insider weighed in at the tail end of 1998, saying, "It defies my imagination that so many people with so little sophistication are speculating on these stocks."

The man speaking these words was Bernie Madoff.²⁸