Famous First Bubbles (Book Review)

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Do bubbles in asset prices exist? That is, is it possible for the prices of stocks and other assets to rise well above the values justified by economic fundamentals?

Those who observed, say, the great boom and bust in Tokyo commercial real estate in the 1980s - the land under the Emperor's Palace was, at one point, said to be worth more than all the real estate in California - will no doubt wonder how anyone could ask the question. Yet many financial economists who make a living studying prices of financial assets are, indeed, skeptical that bubbles are possible.

If prices are so obviously out of line with anticipated future profits, they ask, why don't people who see the truth sell short, or buy options on the asset that give them the right to sell shares at the inflated price? Then, when reality bites and the stock price inevitably falls, they make money on the short sale, or on the suddenly appreciated put option.

But even if, as sometimes happens, the lack of a viable market for such derivatives prevents the doomsayers from cleaning up on their insights, many financial economists would still be skeptical of bubbles. Why, they ask, would people knowingly pay a price for an asset that is out of line with any reasonable estimate of its value in the near future?

On the other side of the question are some financial economists, many other sorts of economists, and, of course, much of the general public who think that bubbles are as natural as human greed and stupidity. Many of them believe that there is currently a bubble in U.S. stock prices, especially in the high-tech sector. Even Alan Greenspan through there was a bubble in December 1996, when the Dow was at 6,500 - 40 percent below its level three and a half years later.

To rationalize their belief that "irrational" asset prices are consistent with rational human behavior, financial economists often point to the "greater fool" theory. As in: "I understand there is no way to justify a high asset price based on fundamentals. But if I think there are even bigger suckers than me out there, I can buy the asset and sell it to a greater fool at a higher price."

Actually, it's more fun, and perhaps more illuminating, to look at the "how" of bubbles than the "why". And in the history of speculative price bubbles, three have become the stuff of legend: the Dutch tulipmania of 1634-1637, and the Mississippi and South Sea bubbles in the early 18th century.

Virtually everyone has heard that tulip bulbs once sold for more than the price of a house and, a short while later, collapsed in value. But what really is known about those cases? And why does it matter?

In Famous First Bubbles, Peter Garber, a financial economist at Global Markets Research of Deutsche Bank, answers both questions. Garber lays out what is known, what is not known, and what is probably made up - in the process poking holes in some of the accounts offered by 20th-century economists. Garber's startling bottom line: in all three cases, the prices of the assets - whether bulbs or shares - were apparently based on economic fundamentals.

Start with the two-thirds of the book devoted to the tulip case. One amazing "fact" cited in the best known book that deals with the tulipmania, Charles Mackay's 1841 book, Extraordinary Popular Delusions and the Madness of Crowds, is that a single bulb sold for 5,500 gold guilders at the top of the bubble. At today's price of $275 per ounce of gold, that bulb would be worth over $300,000. But, points out Garber, "Mackay provided neither the sources of these gold prices nor the dates on which they were observed."

Mackay's other major "fact" is that, within days, prices of bulbs fell to less than 10 percent of their previous highs. But the actual data Mackay cited to buttress his claim were on bulb sales over 60 years later. Perhaps, writes Garber, Mackay got his 10 percent number from a February 1637 proposal by some florists who, after the collapse of bulb prices, proposed that on contracts written after November 30, 1636, buyers should be able to get out of their contracts by paying 10 percent of the agreed sale price. That proposal, incidentally, was rejected.

As an antidote to all this casual empiricizing, Garber digs up actual data on bulb prices and finds annual double-digit percentage drops. These are big numbers, but hardly what one would expect from all the hoopla. What's more, changes in value at this pace are completely with economic fundamentals. After all, economists value an asset as the discounted sum of the revenues it will yield.

Bulbs that yield tulips with beautiful patterns can themselves be propagated, so they yield many more bulbs. Hence, high prices for the original rare bulbs that fall as the supply rises should be no more surprising than high prices for champion breeding horses.

Garber's coup de grace: in 1987, a small quantity of prototype lily bulbs sold for one million guilders, or over $700,000 in today's dollars. What about the claim, made by retired MIT economist Charles Kindleberger, that the collapse in prices led to an economic slowdown in Europe? Not true, says Garber, noting that Kindleberger's data show a slowdown in the 1640s, long after bulb prices collapsed in 1637.

By the same token, Garber writes, the Mississippi Company and South Sea Company bubbles were not bubbles either. The Mississippi stock scheme, the brainchild of early 18th century economist John Law, was built on the value of a French bank run by Law that was granted by King Louis XV a monopoly on tax collection in France, and on trade along the Mississippi River. For Law's plan to justify the high prices of shares in his company, Garber notes, the money printed by his bank would have to cause an economic boom and the company would have to invest in highly profitable commercial ventures.

But neither assumption was implausible. One of the chief investors in the scheme was Louis XV himself, which meant that the man best positioned to block profitable investments would not dream of it. Moreover, Garber points out that Law's reasoning that expansions of the money supply could increase economic activity and lead to higher tax revenues amounted to seat-of-the-pants Keynesianism - an idea not beyond the wisdom of the market to fathom. It was thus not unreasonable for investors to bet that Law could pull it off.

He didn't, of course. But share prices fell only after Louis XV bailed out. Again, economic fundamentals seem to explain the price movements.

Lastly, there is the South Sea Company, a British enterprise with a monopoly on British trade with the South Seas - the Spanish colonies of America - that was worth little because the Spanish government blocked that trade. The Company persuaded the British government to let it issue shares; the proceeds would be used to buy British government debt. To get this permission, the Company paid large bribes to King George I's friends and to leading members of Parliament, and then sold shares to a majority of the members of Parliament.

So, just as in the Mississippi case, high share prices could be justified by the knowledge that all the players who could block profitable investments of the South Sea Company would have a strong incentive not to. But only a few months into the deal, prices fell to a fraction of their peak levels. In retrospect, notes Garber, investors were probably overoptimistic. But he points out that if you can know that only with hindsight, then the original price increase does not constitute a classic bubble.

As to why the bubble controversy matters, Garber is blunt: "The argument is always that the existence of tulipmania proves that markets are crazy...Thus these early episodes are the dream events for those who want to control the flow of capital."

I think Garber's right about how the pro-regulation side reasons, and I find his anti-bubble evidence wholly persuasive. But even if there were real bubbles, wouldn't that justify ending regulations on the means by which investors can bet against the price spiral? Then those who wish to invoke the hand of government when they are sure markets have gone cockeyed could instead put their money where their mouths are, buy put options, puncture bubbles, and get rich.