

Lessons of the Bubbles

Speculative bubbles often cause widespread economic disruption, both when prices soar and when they crash.⁵ Kindleberger argues that, as speculation spreads, credit is pulled away from its normal uses of supporting investment and consumption of real goods. Thus, production may begin falling, even in the midst of the speculative mania.⁶ Expenditure may fall because of restrictive monetary policy aimed at choking off the mania. In 1929, prices of several commodities were already falling, even as stock prices soared. Residential and nonresidential construction had been falling since 1926 and continued to fall until the early 1930s.

On the other hand, when prices crash, wealth is lost, leading to a fall in spending and possibly severe monetary contraction due to bankruptcy and bank failure. The South Sea crash in 1720 caused British banks to fail, commerce to dry up, credit to disappear, and unemployment to rise. The 1929 stock market crash destroyed wealth, caused banks to fail, caused spending to fall, and increased unemployment. The silver crash in 1980 caused the Dow Jones industrial average to fall 25 points in one hour. The silver crash prompted fears that worse repercussions would follow. Paul A. Volcker, chairman of the Board of Governors of the Federal Reserve System, made the following statement on May 1, 1980, before the Subcommittee on Agricultural Research and General Legislation:

There is evidence indicating that there was an attempt to control the supply of a significant commodity; to some degree, this stimulated uncertainty and inflationary expectations more generally. As the market price declined, funding of the speculative positions required substantial amounts of credit, and certain market intermediaries had, wittingly or not, committed an excessive amount of their own capital in support of speculative activity in one commodity by a single group of people. As the market values collapsed, some of those institutions were placed in jeopardy, and their failure could in turn have triggered financial losses for others and severe financial disturbances.

Speculative bubbles tend to be fueled by expanding inflationary economies, rapid expansion of money and credit, and expectations that these conditions would continue.⁷ Bubbles also seem to spread easily from one commodity to another. The Mississippi Bubble spread to the South Sea Bubble and then to the shares of other companies. Speculation in silver and gold likewise spread to other commodities. The Wall Street crash in 1929 spread to European financial markets.

Speculative fever is often the temptation that triggers unscrupulous dealings. Swindles then arise in many imaginative forms. One of the most popular swindles—originally used by the South Sea Company directors—is the “chain letter” method. In this swindle dividends are paid to old shareholders with revenues from the sales of new shares. Like a bubble, the chain eventually breaks; the people near the end of the insolvent chain are swindled. Even today, the “chain letter” continues to be one of the favorite methods of swindlers.

Bubble Bursting

Can speculative bubbles be prevented? Although there may be no way to ensure that bubbles would not occur, perhaps some steps could be taken to make their occurrence less likely or at least to mitigate their consequences.

The U.S. Congress has promulgated a number of laws to prevent speculative bubbles. The Securities Exchange Act of 1934 delegated the authority to regulate securities credit to the Board of Governors of the Federal Reserve System. The Board sets a margin requirement that specifies the minimum down payment required for a securities transaction. The Board's Regulations T, U, G, and X specify the terms and conditions that various lending institutions

5. Compare Kindleberger, *The World in Depression 1929-1939*, chap. 3.

6. Kindleberger, *The World in Depression 1929-1939*, chap. 3, p.14.

7. Compare Kindleberger, *Manias, Panics, and Crashes*, chap. 4.

and borrowers must follow when securities credit is extended. The Board may raise the margin requirement to restrain the excessive use of credit for purchasing or carrying securities. In addition, the Securities and Exchange Commission and the Commodity Futures Trading Commission oversee the securities and commodities markets, respectively. All of these regulations represent interference in the normal day-to-day operations of markets.

These markets ordinarily perform a number of essential functions, including allowing numerous transactors to hedge risks. While the costs of maintaining these regulations during periods of “normal market behavior” have not been formally estimated, they are doubtless considerable, and reduce the efficiency of these markets. Yet, the rules presumably are maintained to safeguard against the extreme swings to which these markets seem prone. In spite of the regulations, these swings occasionally occur, and there are serious questions as to the effectiveness of the regulations in preventing speculative bubbles.

Regulating speculation is considered as more an art than a science. Consider the difficulties in any such policy. We know that speculation can lead to severe financial disruption and monetary contraction due to large financial losses suffered by many during crashes. The monetary authorities can prevent these disruptions from spreading only by intervening, by acting as insurers, or by lending and offering guarantees on loans to banks, investors, and perhaps even speculators. But, if this rescue function is taken for granted, then speculation would be “safer” and would occur more often, thereby increasing the frequency of bubbles.

On the other hand, if the regulatory authorities never intervened, some bubbles perhaps would end harmlessly, except for the losses to those speculators caught in the crash. But, repercussions of the collapse of the speculative bubbles may be far-reaching—extending beyond the effects on the participants most directly involved. In such cases, failure of the authorities to

cushion the financial and commodity markets could turn bubbles into serious contractions, similar to those that have occurred in the past. The solution would have to be a delicate intermediate role, where intervention took place when really large dangers were present; but, such intervention would not be a foregone response, thus avoiding the encouragement of even more speculation.

This was precisely the predicament faced by the U.S. government in the aftermath of the recent silver crash and the Hunt brothers' huge losses. Chairman Volcker testified on April 30, 1980, to the House Subcommittee on Commerce, Consumer, and Monetary Affairs:

Englehard (Minerals and Chemical Corporation), while itself in a strong profits and asset position, felt they might be faced with a decision on Monday to sue the Hunts for payment, forcing probable bankruptcy and possibly triggering massive liquidation of silver positions to the peril of all creditor institutions, and indirectly placing in jeopardy the customers and creditors of those institutions in a financial chain reaction. . . . In the following days, the Federal Reserve and other agencies continued efforts to develop more comprehensive information on the extent of Hunt and Hunt-related obligations and to appraise the potential vulnerability of the banks and other intermediaries.

Chairman Volcker added in his April 30 testimony, “The question is how to minimize the dangers, arising rarely, without smothering the markets in their useful, even indispensable, everyday work.” The development of policy to deal with such situations remains one of the most difficult challenges for the regulatory authorities.

The views stated herein are those of the author and not necessarily those of the Federal Reserve Bank of Cleveland or of the Board of Governors of the Federal Reserve System.

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In this issue:

After Silver and Gold: Some Sober Thoughts on Speculative Bubbles

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After Silver and Gold: Some Sober Thoughts on Speculative Bubbles

by Steven E. Plaut

I can calculate the motions of the heavenly bodies, but not the madness of people.
SIR ISAAC NEWTON
(who lost £13,000 in the South Sea Bubble)

Recent months have witnessed a seeming madness in many of the world's financial markets. Following the crises in Iran and Afghanistan, investors appeared to be moving out of dollar assets and into precious metals. The prices of silver and gold soared. Gold had been selling for less than \$200 per ounce in the beginning of 1979, yet its price climbed to over \$800 per ounce one year later.¹ On January 21, 1980, gold peaked at a closing price in London of \$850 per ounce; two mornings later, it "crashed" to \$650 per ounce (see chart 1). The downward trend continued until gold reached its 1980 low point of \$480 per ounce on March 17; the price of gold has since hovered close to \$520.

Silver prices exhibited a similar pattern, following gold prices upward and then quickly downward. Silver sold for \$2 per ounce in the early 1970s. By mid-January 1980, silver was selling briefly at more than \$50 per ounce, but plummeted to \$14 per ounce by late March, where it has remained since. In perhaps the largest financial losses ever suffered by any single family, the Hunt brothers of Texas and their Arab partners lost millions of dollars when the silver market crashed. The Hunts had been buying silver futures heavily on margin; when they received margin calls, a sudden brief panic swept the entire capital market, and many commodity markets as well. As the price sank, all those who had been speculating on higher silver prices found themselves considerably poorer.

The fact that speculative bubbles and crashes are both possible and indeed common

remains an important thorn in the side of many economic doctrines. Most economists spend a great deal of their time admiring the rational and optimally efficient characteristics that markets generally exhibit. Speculative swings are really abnormal exceptions to this rule, and are quite rare when compared with the more common pattern of efficient market behavior. However, markets in the midst of mania or panic clearly cannot be said to be operating efficiently or "rationally." This fact should be a source of considerable irritation to proponents of the "rational expectations" school of economics. Even if the effects of speculation usually are stabilizing, one must consider the possibility that wildly fluctuating prices sometimes occur because of destabilizing speculation.

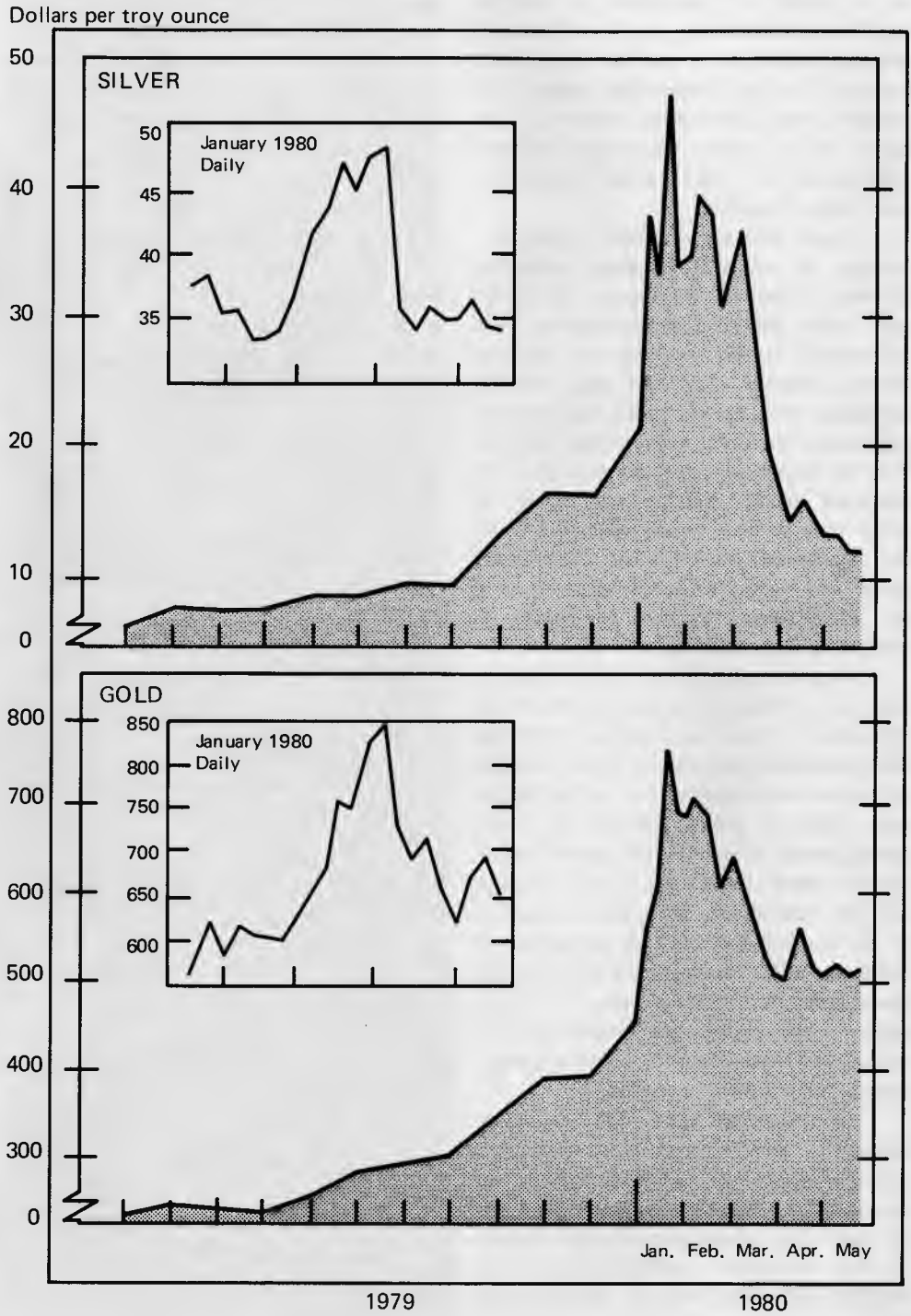
Speculative booms and busts have occurred for hundreds of years. Indeed, in the nineteenth century many observers claimed to have established a link between such market madness and sunspots. The typical pattern of a speculative bubble is as follows:

1. Speculation centers on one commodity or set of commodities;
2. As the price of the commodity rises, people begin to expect that the price will continue to rise;
3. This expectation leads to more buying and higher prices, which in turn reinforces people's expectations;
4. The price continues to soar, until suddenly expectations reverse themselves;
5. Then the price crashes, as people sell in panic, trying to get rid of the specific commodity before the price falls even further.

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1. See Gerald H. Anderson, "The Surge in Gold Prices," *Economic Commentary*, Federal Reserve Bank of Cleveland, January 28, 1980.

Chart 1 Prices of Silver and Gold
Monthly through 1979; weekly thereafter



Data are mid-week, except for the daily data shown in the insets.

Table 1 Profiles of Several Speculative Bubbles

	Gold 1979-1980	Silver 1979-1980	New York stocks 1926-1932	South Sea shares 1719-1720	Mississippi shares 1719-1720
Initial price before bubble began	\$200/ounce (early 1979)	\$6/ounce (early 1979)	100 (index) (July 1926)	£100/share (1719)	300 livre/ share (early 1719)
Peak price before crash	\$850/ounce (1/21/80)	\$48.70/ounce (1/17/80)	216 (index) (Sept. 1929)	£1000/share (July 1720)	20,000 livre/ share (early 1720)
Price after crash	\$518/ounce (4/30/80)	\$14.05/ounce (4/30/80)	34 (index) (June 1932)	£160/share (Dec. 1720)	Worthless (early 1721)

In a few cases, bubbles have developed in response to the efforts of some speculators' attempts to "corner" a market, by purchasing large amounts of the existing supply of the product.

Speculative Cycles of the Past

Speculative bubbles have been observed in such markets as tulip bulbs, stocks, bonds, foreign exchange, land, real estate, and commodities.² Stock markets have experienced many speculative cycles. Perhaps the most unforgettable was the New York stock market crash of 1929, which symbolized the onset of the Great Depression. Between January 1926 and September 1929, prices on the New York Stock Exchange more than doubled, and the boom seemed unstoppable (see table 1). As President Calvin Coolidge left office in March 1929, he claimed that the economy was sound and stocks were cheap at current prices. Between September 1929 and December 1932, stock prices fell by 80 percent on average.³

Two of the most famous speculative crises were the South Sea and the Mississippi Bubbles of the early eighteenth century.⁴ In 1716, John Law, a fugitive from Scotland, set up the *Banque Generale* in Paris; this bank became the equivalent of a central bank for France. Law used his position to expand the money supply in France in order to support speculation in shares of the *Compagnie d'Occident*, a trading company that he

controlled. This "Mississippi Company" had a monopoly on trade with the French territories in the New World. In early 1719, a speculative boom began in Mississippi shares. Between July 1719 and January 1720, share prices rose an average of 10 points per day. Over 30,000 foreigners flocked to Paris to speculate, and the word *millionaire* was first coined. Eventually, the French government forced Law to stop printing money because of the inflation that it caused; the price of Mississippi shares crashed.

At almost the same time in London, a bubble began for shares in the South Sea Company, a firm that was to expand trade with the Spanish colonies in South America. The company was controlled by John Blunt and his associates, who performed an impressive range of swindles and bribery in order to support the rapidly climbing price of shares. Speculative fever in Paris spread to London in 1720, particularly after the crash of the Mississippi stock. South Sea shares also were marketed throughout Europe. Fortunes were made but as quickly lost when the price crashed in the autumn of 1720.

2. A seminal history of these crises is found in Charles P. Kindleberger, *Manias, Panics, and Crashes* (Basic Books, Inc., 1978).
3. Charles P. Kindleberger, *The World in Depression 1929-1939* (University of California Press, 1973).
4. For a history of these speculative bubbles, see John Carswell, *The South Sea Bubble* (Cresset Press, 1960).