

ACTIVITY 17.1

UNDERSTANDING MARKET CRASHES

Directions for the teacher: Make copies of this activity (for a class of 30, three copies; more copies for a larger class). Cut each copy into 12 sections as indicated by the dotted lines.



The Crash of 1929: What Happened?

The stock market crash of October 1929 is often seen as the end of the prosperous 1920s. However, there were many signs that the economy was already on the way down before the crash. The two worst days were October 24, 1929 (“Black Thursday”), and October 29, 1929 (“Black Tuesday”). What happened?

Stock prices increased dramatically in 1928, with the Dow Jones Industrial Average reaching a peak of 381.2 on September 3. Stock prices fell by about 10 percent following this peak, but then rose again by about 8 percent by mid-October. Panic selling appears to have set in on October 23, and on October 24 a record-breaking 13 million shares were traded, compared to an average of 4 million shares per day in September. The technology of the day (telephone and telegraph lines) was not able to keep up with the trading, and the ticker tape ran an hour and a half late. Many sellers did not learn of the prices they received for their trades until later that night. Several of the nation’s largest bankers were alerted to the crisis and announced that they were willing to buy stocks above the going prices. The intent of the bankers was to give people confidence in the market and thus prevent panic selling. On October 25, President Hoover also tried to halt panic selling by reassuring people that the “fundamental business of the country—that is, the production and distribution of goods and services—is on a sound and prosperous basis.”

Although prices steadied for a few days, panic selling started again on October 28. Nearly 16.5 million shares were traded on October 29, and the downward trend in stock prices continued. Two weeks after the crash, average prices of leading stocks were about half of what they had been in September.



The Crash of 1929: What Followed?

After the stock market crash of 1929, things only got worse. By the end of 1929 the market recovered somewhat, but in general stock prices continued in a downward spiral until 1932. By 1932 average stock prices had fallen more than 75 percent, people had lost an estimated \$45 billion in wealth, and the market did not climb back to its 1929 peak level for another 25 years.

Economists do not view the crash of 1929 as a cause of the Great Depression, but they agree that the fall in stock prices made the situation worse. The optimism and hope of the 1920s gave way to feelings of skepticism and uncertainty. Consumers and businesses were less willing and less able to spend money, given their losses and their lack of confidence in the economy. Banks lost vast amounts in the crash also, and they did not have the liquidity they needed to make loans to tide people over until the market recovered. Many banks subsequently failed. The resulting decrease in consumption and investment spending, and an increased desire to hold cash balances outside the banking system, led to a downward spiral of declining production, increased unemployment, and falling prices. The crash on Wall Street also led to stock market crashes around the world: first in London, then in Paris, Berlin, and Tokyo.

Several reforms were implemented after the crash. They were intended to prevent further stock market crashes. The Glass-Steagall Act of 1933 prohibited banks that are members of the Federal Reserve from affiliating with companies whose major purpose is to sell stocks. The Securities Exchange Act of 1934 established the Securities and Exchange Commission (SEC) to protect the public against misconduct in the securities and financial markets. This act also required the Federal Reserve to regulate margin requirements in order to reduce speculation.



The Crash of 1929: What Caused It?

Economists disagree about the causes of the stock market crash of 1929. They agree, however, that there was no single, dominant cause, and that many factors worked together to bring the market down. Here are some opinions:

1. **Margin buying.** People could buy stock by paying as little as 10 percent down on the purchase price, borrowing the other 90 percent. When stock prices fell, stocks soon weren't worth enough to enable people to pay back the loans. People scrambled to sell their stocks before prices fell even further.
2. **Stocks were overvalued.** The rise in stock prices late in the 1920s was caused by speculation and investors trying to find a way to get rich quickly. In October 1929, stock prices were far too high compared to their earnings and dividends, so prices were bound to fall at some point.
3. **Federal Reserve policies.** The tight monetary policy of the Federal Reserve prior to the crash may have led to the crash. The Fed caused interest rates to rise because it wanted to curb speculation in the stock market late in the 1920s. This may have led to a decrease in demand for stocks and falling prices.
4. **The Smoot-Hawley Tariff Act.** This act, meant to stimulate U.S. production, imposed high tariffs on imports. Investors were concerned that if the act passed (it did pass in 1930), the profits of exporting companies would fall and other countries would retaliate by refusing to buy U.S. goods. This expectation of lower profits in the exporting sector may have caused people to sell their stocks.
5. **The general state of the economy.** Signs of a recession were evident in 1929 prior to the crash. Production was falling, prices were falling, and personal income was falling. Several prominent public figures stated openly that they thought bad times were ahead. These signs may have spurred stock sell-offs.
6. **Psychological reasons.** When panic sets in, people may react irrationally. When people saw others selling, they worried that they should sell too, before things got worse. This panic selling caused prices to fall—just what people were hoping to avoid.



The Crash of 1929: What Role Did the Fed Play?

Many economists believe that Federal Reserve policies led to the stock market crash of 1929 and were a main cause of the Great Depression that followed. Prior to the stock market crash, in 1928, the Fed decreased the money supply in the economy, in part to try to discourage stock market speculation. This tight monetary policy probably contributed to falling stock prices in 1929, because it made it more difficult for people to borrow money to buy stocks.

The U.S. banking system was in trouble immediately after the crash of 1929. People who lost money in the stock market could not pay back their bank loans, and banks thus did not have money to give to depositors who wanted to make withdrawals from their accounts. The Fed did little to help the banking system out of this crisis. If the Fed had increased the money supply to provide money to banks after the stock market crash, this might have prevented the banking-system collapse that followed. In fact, the Federal Reserve Bank of New York attempted to do this immediately after the crash, but its action was only a temporary measure, and the rest of the Federal Reserve System did not go along.

The money supply continued to fall and interest rates continued to rise in 1930. By not providing money to increase bank reserves, the Fed probably contributed to further declines in stock prices, which continued until 1932. By not providing money to help the banks through the crisis, Fed policies may also have contributed to the collapse of the banking system. Fed policies are therefore one of the main causes of the Great Depression.



The Crash of 1987: What Happened?

The stock market crash of October 1987 occurred during a period of relative prosperity. Real GDP was increasing at an annual rate of 3.4 percent, and the inflation of the early 1980s had been largely contained. The last previous recession ended in 1982, and the next one was years off. Yet the stock market crashed on Monday, October 19, 1987 (“Black Monday”). What happened?

Stock prices had risen dramatically in the first half of 1987, with the Dow Jones Industrial Average reaching a peak of 2,722.44 on August 25. During the next five weeks prices fell by about 8 percent, but then rose again by about 6 percent. Prices fell steadily the following week. But on October 19, stock prices fell more than on any other single day in the twentieth century. The Dow Jones Industrial Average fell a record 508.32 points, closing at 1,738. This represented a one-day drop of 22.6 percent in the value of stocks—nearly double the one-day loss record set during the crash of 1929. Over 604 million shares were traded on the New York Stock Exchange alone, shattering previous volume records. Some of the volume was caused by panic selling, as investors tried to sell before prices fell further. Some of the selling was done automatically by computers programmed to sell if prices fell below certain levels. Phone networks and computers were jammed for hours because of the unprecedented volume of trades, and many people who tried to trade were unable to do so.

Investors lost an estimated \$500 billion in share values in that one day. In many ways, this crash amounted to the nation’s worst financial crisis since the Great Depression. Losses immediately affected markets around the world, thanks to electronic links and global communication networks.



The Crash of 1987: What Followed?

The crash of 1987 is not thought to have caused serious damage to the economy, and its effects were not as bad as had been expected. Despite the dramatic events of October 19, 1987, by the end of 1987 stock prices reached the same level they had held the year before. The market recovered to its 1987 peak levels again in 1989, two years after the crash. Of course, many people who sold stock when the prices were low lost money. The crash of 1987 made it clear that the finances of countries were tied together and economies were becoming more global. All major world markets declined in October 1987.

The crash was not followed by a depression or even a recession. Although it produced the largest one-day drop in stock prices in the twentieth century, several newspapers and officials did not call it a crash, preferring terms such as “market interruption.” In the decade that followed, after a brief recession in 1990-1991 following the Gulf War, the U.S. economy entered into a 10-year expansion period, the longest in the twentieth century. Stock prices continued to climb.

Several reforms were implemented after the crash to try to prevent further stock market crashes. Stock exchanges and brokerage firms upgraded their computer systems and added more phone lines to deal with emergencies. Regulators from different securities markets agreed to meet and communicate regularly to coordinate their activities. The main reform was the introduction of circuit breakers in 1988. Circuit breakers automatically halt trading on major exchanges for a time if stock prices fall more than certain amounts. Circuit breakers are designed to stop panic selling by giving investors time to think over their choices when stock prices are falling dramatically.



The Crash of 1987: What Caused It?

Economists disagree about the causes of the stock market crash of 1987. They agree, however, that there was no single, dominant cause, and that many factors worked together to bring the market down.

Here are some opinions:

1. **Inflationary fears.** Many investors were concerned that the inflation of the 1970s and early 1980s would return, and inflationary fears cause interest rates to rise. The long-term rate on some bonds reached a peak of 10.5 percent on the morning of October 19. This may have caused people to sell stock so that they could invest in bonds and other interest-earning assets instead.
2. **Stocks were overvalued.** The rise in stock prices in the 1980s was caused by speculation and investors trying to find a way to get rich quickly. In October 1987, stock prices were far too high compared to their earnings and dividends, so prices were bound to fall at some point.
3. **Federal Reserve policies.** The Federal Reserve's announcement of an increase in the discount rate from 5.5 percent to 6 percent on September 4, 1987, was unnecessary. It may have signaled to people that the Fed thought high inflation was going to return. Investors may have decided to sell their stock because of the Fed's announcement.
4. **Programmed and computer trading.** Large institutional investing companies programmed their computers to order large stock trades automatically when stock prices reached certain levels. As prices fell on October 19, sell orders came in automatically, jamming the system and causing more panic among investors.
5. **A debt-ridden economy.** Both the trade deficit and government budget deficits were increasing rapidly. Investors may have feared that the prices of U.S. stocks would fall relative to foreign stocks. Anxiety over these growing debts in the third quarter of 1987 may have led to the stock sell-off.
6. **Psychological reasons.** Fear and panic played a part in the crash of 1987. When investors saw stock prices falling, they rushed to try to sell their stocks for whatever they could get before prices fell further.



The Crash of 1987: What Role Did the Fed Play?

The stock market crash of 1987 was relatively painless, largely because the Federal Reserve moved quickly to ease monetary policy and reassure banks. These policies probably prevented big declines in consumption and investment spending that might otherwise have been triggered by the loss of wealth from the crash. The fact that no recession followed the crash of 1987 is often attributed to the competent actions of the Fed immediately following the crash.

Because of the large volume of sell orders on October 19, many stock specialists and brokerage firms needed loans, and many investors needed loans to meet margin calls. One of the first things the Fed did was to reassure banks and the public that it would provide enough money to the economy to prevent a crisis in the banking system. On October 20, the day after the crash, the Fed announced that “The Federal Reserve System, consistent with its responsibilities as the nation’s central bank, affirmed today its readiness to serve as a source of liquidity to support the financial and economic system.” This announcement was intended to reverse the panic that broke out the day before, and it seems to have worked.

The Fed backed up its promises by using open-market operations to cut a key interest rate by 1 percent and by providing money to increase bank reserves. These moves enabled banks to make loans to the businesses and individuals who needed money because of losses they suffered from the decline in value of their stocks. The Fed also kept lines of communication open with financial institutions, and it tried to persuade banks to make loans to their customers to tide them over through the crisis. Once stock prices recovered, people had money to pay back their loans.



The Crash of 2007: What Happened?

The Dow Jones Industrial Average (DJIA), a stock index made up of 30 large U.S. companies, reached a peak on October 9, 2007. Its peak closing value was 14,164.53. Then the sell-off began. By September 29, 2008, the DJIA had a record-breaking drop with a close at 10,365.45. But the worst was not over.

Another stock index called the Standard & Poor’s 500 (S&P 500) told a similar story. The S&P 500 tracks the prices of 500 large companies traded on the New York Stock Exchange and the NASDAQ Stock Market. Between October 2007 and March 2009, the S&P 500 lost 55 percent of its value. The S&P 500 did not begin to reverse itself until March 9, 2009.

Like the crash of 1987, the 2007 crash again showed that the finances of many countries were tied together and economies were becoming more global. All major world markets declined during this period.



The Crash of 2007: What Followed?

The collapse of the stock markets eroded the wealth and endangered the long-term plans of many Americans. At the time, people wondered: Was another Great Depression getting started? The answer, it turned out, was “no.” But the losses many people sustained were substantial, and recovery would take years.

The downward slide of the economy in 2008-2009 was steep. Unemployment rose to 10 percent, peaking in October 2009. The stock market lost more than half of its value, with the DJIA bottoming out at 6,443.27. The market again proved the wisdom of “buy and hold” and avoiding panic in troubled times. One year after its March 2009 low, the DJIA had recovered to more than 10,000. Two years later, the DJIA had gone beyond 12,000, and on the third anniversary of the market bottom, the DJIA was closing in on 13,000. Someone who panicked and sold in March 2009, on the other hand, would have locked in a 54 percent loss from the October 2007 peak.

Although the stock market recovered from the 2007 crash relatively well, economic activity and unemployment were more stubborn. From its October 2009 peak of 10.0 percent, unemployment had declined only to 8.9 percent in October 2011—two years after peak unemployment and four years after the stock market’s highest point before the recession. At its pre-recession best, unemployment had been under 5 percent.



The Crash of 2007: What Caused It?

Most economists agree that the downturn in the stock markets beginning in 2007 had its origins in the housing industry. Beginning in the late 1990s, housing prices started increasing at historically high rates. Housing prices continued to increase at a fast pace until 2006. Then interest rates on home loans increased. The result was that a large number of home owners defaulted on their home mortgages. The defaults led to increasing home foreclosures, in which owners were removed because of their inability to pay. This was all made worse by the fact that there was an oversupply of new homes and condominiums on the market, especially in rapidly growing communities such as Phoenix, Las Vegas, and South Florida. While these areas were particularly hard hit by the collapse, few parts of the nation escaped without damage. The housing bubble had popped, and many families and businesses lost nearly everything.

1. **Changing lending standards:** A primary cause of the recession of 2007-2009 was a change in lending standards. Home ownership was widely regarded as a way to bring people of low and moderate income into the middle class. Beginning in the mid-1990s, the federal government encouraged borrowers to take out high-risk loans and purchase homes with little or no down payment. The assumption was that home prices would continue to increase. When the housing price bubble popped, these households quickly learned that they now owed more on their home mortgages than their homes were worth.
2. **Fannie Mae and Freddie Mac:** Two Government Sponsored Enterprises (GSEs) were tied directly to the changing of lending standards. (A GSE is a business that is privately owned and operated but backed by the federal government.) The GSEs involved were the Federal National Mortgage Association (“Fannie Mae”) and the Federal Home Loan Mortgage Corporation (“Freddie Mac”). Since the mid-1990s, these two businesses had become dominant players in the home mortgage market. In 1995, they were ordered by the U.S. Department of Housing and Urban Development (HUD) to increase the number of loans they held from low- and moderate-income family households. HUD also required Fannie and Freddie to accept smaller down payments and to offer large loans relative to the amount of income earned by the home buyers. Many of these loans were “subprime” loans, meaning that borrowers had a poor credit history. Fannie Mae and Freddie Mac took on more than \$6 trillion of single-family loans from 1992 to 2008. At first, the new loans offered by Fannie and Freddie helped fuel increased demand for housing—driving prices higher. However, when home prices began to decline and interest rates began to rise, these households were unprepared to absorb the losses.
3. **Low interest rate policy of the Federal Reserve:** The nation had faced a recession early in 2001. One result was that the Federal Reserve kept interest rates at historic lows from 2002 until 2004. Some economists argue that the Fed kept rates too low for too long. These low rates further encouraged home owners to take out home mortgages. Many took out home loans called “adjustable rate mortgages,” or ARMs. The low interest rates on ARMs made it possible for people to buy more and larger homes. Beginning in 2005-2006, the Fed changed direction and began to increase interest rates. Many home owners—especially those with ARMs—were caught off guard. Their mortgage payments

increased, while their income remained the same. They could no longer afford to make their home payments. Then when housing prices fell, they were left with homes that were “underwater.” That is, the total value of what they owed on their homes was greater than the market value of their homes.

4. **International complications and undetected risk:** Financial institutions in other parts of the world wished to benefit from the U.S. boom in housing prices. This made sense if you consider that U.S. home mortgages were historically regarded as among of safest of all investments. Large investment banks such as Goldman Sachs, Lehman Brothers, and Bear Sterns became involved in financial instruments known as “mortgage-backed securities.” Mortgage-backed securities were purchased by institutions around the world, but especially in Europe. At first, these new financial instruments were highly profitable. However, what had gone unnoticed was that many of the home mortgages now in the mix were of substantially higher risk of default due to the decline in lending standards. When housing prices tanked and default rates increased, it became apparent that the new mortgage-backed securities were far more risky than had been imagined. Given their high exposure to this sort of debt, financial institutions began to collapse. The fourth largest investment bank, Lehman Brothers, quickly went out of business. Merrill Lynch, on the verge of failure, was acquired by Bank of America. The problem spread, and Washington Mutual Bank’s collapse became the largest bank failure in U.S. history.
5. **High levels of household debt:** Even as incomes were increasing during these years, people were saving less. Personal savings rates were low and sometimes even negative. Rather than saving more, families were taking on greater and greater amounts of debt relative to their ability to pay. Favorable interest rates and declining lending standards provided incentives that encouraged families to take on debt. So did the tax advantages that came with home mortgages and home equity loans. These incentives encouraged families to place more of their debt into housing loans. Those families then were in a weak financial position when the housing price bubble popped.



The Crash of 2007: What Role Did the Fed Play?*

Unlike the stock market crash of 1987, the decline of stocks in 2007 was followed by a deep and painful recession. The recession officially ended in 2009; however, economic growth continued to be sluggish.

The U.S. government moved aggressively in response to the financial crisis. Beginning in February 2007, the Federal Reserve took action to reduce interest rates. The primary interest rate controlled by the Fed is called the federal funds rate. It is the interest rate banks charge one another for loans. In 10 steps, the federal funds rate was taken from 5.25 percent to 0 to 0.25 percent as of December 2008. Practically speaking, the rate could go no lower.

The nation was facing a liquidity crisis. Liquidity is the ability to quickly convert something of value into cash. For example, a savings account has a great deal of liquidity for an individual bank depositor. The depositor can get cash with a quick visit to the bank.

Banks in 2007 and other financial institutions needed liquidity. Why? Many were holding large amounts of mortgage-backed securities and similar assets. Overnight, these assets went from being regarded as safe to being regarded as high risk. They became known as “toxic assets.” What made them toxic was that their value was unknown. Within bundles of mortgages, some of the loans were based on traditional lending practices and were likely to be repaid. However, others were based on reduced lending standards, and these were in danger of default. But banks and other financial institutions had immediate financial obligations to meet. They had no time to sort out good mortgages from bad mortgages.

The Federal Reserve took action to restore liquidity. Beginning in the summer of 2007, the Fed initiated a number of temporary measures aimed at restoring confidence in the credit markets. It encouraged banks to borrow money from the Fed. It extended the amount of lending from the Fed beyond the usual overnight basis to up to 30 days, with possible renewal.

As the financial crisis worsened, the Fed implemented new tools of monetary policy aimed at restoring liquidity.

- The Term Auction Facility (TAF) was announced in late 2007. It provided one- and three-month loans to banks.
- The Term Securities Lending Facility (TSLF) was initiated in 2008. It allowed banks and some other financial institutions to swap less liquid assets for U.S. Treasury securities owned by the Federal Reserve.
- The Term Asset-Backed Securities Loan Facility (TALF) was announced in November of 2008. It was aimed at easing the negative effects of the “toxic assets” held by many financial institutions. It provided loans to U.S. banks and investment funds to purchase high-quality asset-backed securities.

While some of these actions by the Fed will be debated for years to come, it appears that these actions slowed the panic and prevented a complete collapse of the financial system.

*Sources:

Andrew T. Hill and William C. Wood, "It's Not Your Mother and Father's Money Policy Any-more: The Federal Reserve and Financial Crisis Relief," *Social Education* 75 (2), March/April 2011, pp. 76-81.

James D. Gwartney and Joseph Connors, "The Crash of 2008: Causes and Lessons to Be Learned," *Social Education* 73 (2), March/April 2009, pp. 63-67.