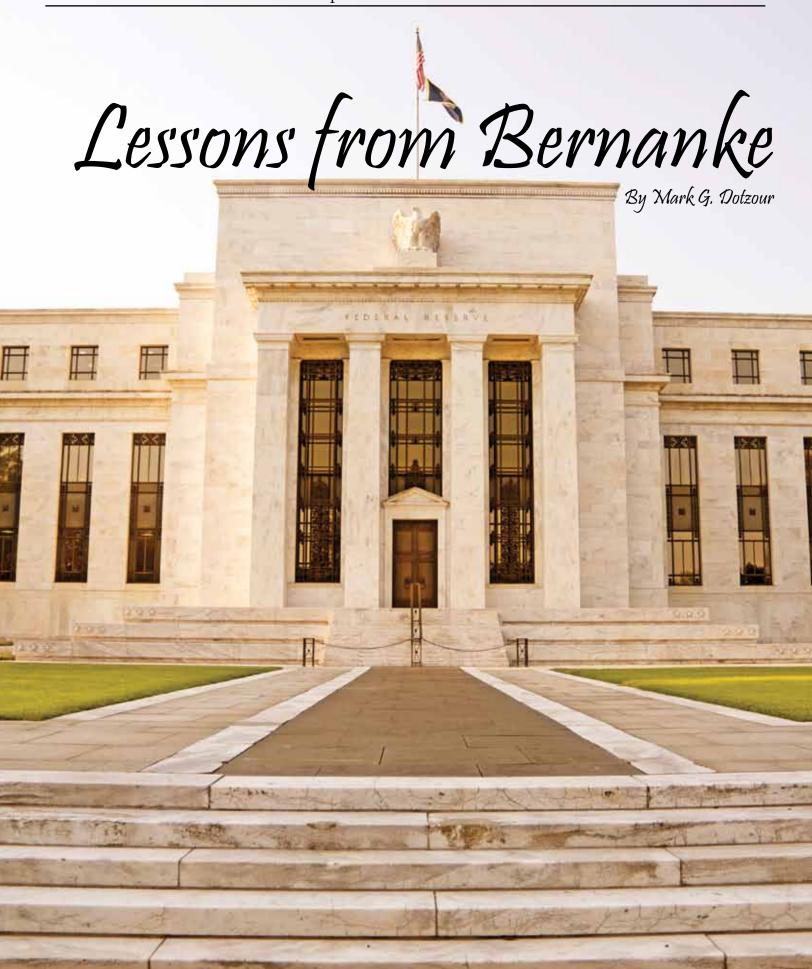
A Reprint from Tierra Grande



Most contemporary Americans have not experienced extended periods of deflation. Instead they are accustomed to the persistent inflation that the United States has experienced since the 1960s.

en Bernanke, current chairman of the Federal Reserve System, is widely acknowledged as a scholar of the Great Depression's impact on the United States and countries around the world. In his recent book, Essays on the Depression, Bernanke explores the causes of the Great Depression and examines how some countries recovered faster than others.

Bernanke also posits the question of why the Great Depression lingered for an extended period compared with previous U.S. depressions. Some hints about how the Fed will respond to the severe economic contraction facing much of the globe may be gleaned from his written perspectives.

U.S. monetary policy for the past 30 years has been to tolerate modest inflation each year, in the range of 2 percent. When

inflation gets higher than this, the Fed raises interest rates so that increased borrowing costs slow business expansion and consumer spending.

But what about deflation? Broadly defined, deflation occurs when there is a widespread fall in prices that causes producers to reduce output. It is the mirror-image of inflation. What happens when prices fall for an extended period?

History shows that deflation is a rare occurrence in the United States. The consumer price index (CPI) has declined for more than four consecutive months only five times since 1913. The most significant and lingering deflationary event began in December 1929, when prices began falling after the stock market crash in October (see figure). The CPI fell for 40 months, hitting bottom in March 1933, the same month President Roosevelt closed all U.S. banks

for the "bank holiday" and devalued the U.S. dollar (in terms of gold) by over 40 percent.

Prices fell for 12 months from July 1920 to June 1921 after the huge price increases that followed the end of World War I. Prices fell for four months beginning in the summer of 1926 and for four months from November 1937 through February 1938 as the Depression lingered. A decade passed. Then prices fell for five consecutive months from October 1948 to February 1949 in the wake of staggering price hikes after World War II.

Americans did not see deflation again for 60 years, until August 2008, when prices fell for five consecutive months. Alarm bells rang at the Fed.

Most contemporary Americans have not experienced extended periods of deflation. Instead they are accustomed to the persistent inflation that the United States has experienced since the 1960s. Why can deflation be so destructive?

Economist Irving Fisher coined the phrase "debt deflation" in 1933 to explain the economic climate at the peak of the Depression. Debt deflation occurs when a sustained fall in prices occurs, and at the same time businesses and households have a high level of debt.

If the price of a house falls below the amount the owner

owes on the mortgage, the owner may be unable to sell the home and pay off the note. If the price of products for sale falls too far, a business owner may not be able to make the payment on the bonds sold to fund the business. So when prices fall, it makes it much harder for homeowners and businesses to repay their loans.

If the price of products being sold falls faster than the wages paid to employees, businesses are forced to lay off workers. If wages start to fall as well, it becomes even harder for households to make the monthly payments on their debt.

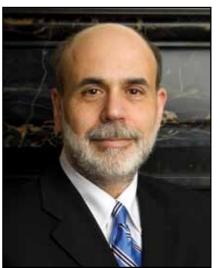
If deflation lasts too long, many households and businesses are unable to make the payments on their debt, forcing them

to sell their houses and businesses. This forced selling in an already depressed economy causes prices to fall even further, and even more households and businesses become insolvent. Financially distressed households or busi-

BEN BERNANKE. Federal Reserve

nesses may not be able to refinance or get funding at any price. eflation punishes borrowers. It erodes the net worth of all households and investors. When a borrower loses the equity in an asset, the bank becomes the owner of that asset. As the value falls below the loan amount, banks start to accumulate losses as well. If asset prices fall far enough, the losses overwhelm the bank, and the bank fails.

This is why the Fed is determined to prevent extended deflation from occurring again. Bernanke's book gives readers



Chairman

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insight into how he views deflation and what steps he might be willing to take to prevent it.

art of the reason the Depression lasted so long is that the United States stayed on the gold standard. According to Bernanke, "... some governments responded to the crises of the early 1930s by quickly abandoning the gold standard, while others chose to remain on gold despite adverse conditions. Countries that left gold were able to reflate their money supplies and price levels, and did so after some delay; countries remaining on gold were forced into further defla-

tion. . . No country exhibited significant economic recovery while remaining on the gold standard."

He goes on to state "... the troughs in both the United States and Canada corresponded almost exactly to the Roosevelt devaluation and bank holiday of March 1933, which were followed in turn by rapid monetary expansions in both countries."

These comments reveal that printing enough money to devalue the dollar is one of the strongest tools at the Fed's disposal to counter deflation.

Bernanke also writes that deflation leads to the firing of workers. When the price of a product falls by 20 percent, business revenues fall by 20 percent. Business owners then try to cut costs to regain profitability.

However, economists have noted that "wages are sticky" on the downside. This means that for many reasons wage concessions are hard to negotiate and achieve. Because of this, businesses are likely to lay off workers in a deflationary environment.

Bernanke maintains that "... the adjustment of nominal wages in response to declines in aggregate demand during the 1930s was surprisingly slow and incomplete. Instead of cutting wages, employers adjusted on other margins, including the length of the workweek and the intensity of labor utilization. Legislatures resisted wage (and price) cuts..."

He goes on to say "... during the worldwide deflation of 1930 and 1931, nominal wages worldwide fell much less slowly than (wholesale) prices, leading to significant increases in the ratio of nominal wages to prices... Associated with this

sharp increase in real wages were declines in employment and output."

He also mentions that government intervention in the labor markets slowed the recovery in hiring. In a market of falling prices, if wage rates cannot be reduced, businesses have no choice but to fire workers. Current policies of extending unemployment benefits have obvious short-term benefits to those who receive them, but such policies can also retard the fall in wage rates needed to restore growth in hiring.

Bernanke notes that the U.S. banking crisis did not happen

until several years after the stock market crash. The first wave of the crisis occurred in 1931, after almost two years of deflation. But it did not reach its crescendo until March 1933, fully $3\frac{1}{2}$ years after the stock market crashed.

At this point, President Roosevelt closed the banks and declared the bank holiday. The effects of 40 months of deflation finally caused businesses and households to be unable to repay their loans. By the end of 1933, the number of operating banks had declined almost 50 percent from 1929.

Says Bernanke, "The disruptions of 1930–33 reduced the effectiveness of the financial sector as a whole in performing these services. As the real costs of intermediation increased, some borrowers (especially households, farmers, and small firms) found credit to be expensive and difficult to obtain. The effects of this credit squeeze on aggregate demand helped convert the severe but not unprecedented downturn of 1929–30 into a

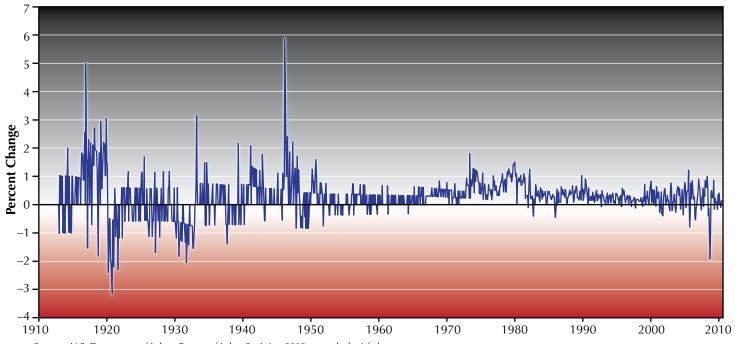
protracted depression."

e also details the pervasive level of debt across the country. Fifty percent of all properties had a mortgage in 1929, and by the beginning of 1933, 45 percent of farm owners were delinquent. In cities across America, the homeowner mortgage delinquency rate was between 21 and 60 percent. By March 1934, 37 cities with populations over 30,000 had defaulted on their municipal obligations.

Credit contracted slightly immediately after the stock market crash, but a sharp drop in bank lending began in November



Consumer Price Index for All Urban Consumers: All Items (CPIAUCNS)



Sources: U.S. Department of Labor; Bureau of Labor Statistics; 2010 researchstlouisfed.org

1930 with the first banking crisis. Banks switched out of loans into more liquid assets.

The shrinkage of commercial loans at that time illustrated that banks were pressuring customers for repayment of loans and refusing to grant new loans. The people hardest hit by credit reductions were households, farmers, unincorporated businesses and small corporations.

his was certainly the pattern in the 1930s," Bernanke says. "The extraordinary rate of default on residential mortgages forced banks and life insurance companies to 'practically stop making mortgage loans, except for renewals."

Interest rates fell, but credit was not easily available.

"The idea that the low yields on Treasury or blue-chip corporation liabilities during this time signaled a general state of 'easy money' is mistaken," says Bernanke. "Money was easy for a few safe borrowers, but difficult for everyone else."

This quote sounds eerily similar to what is heard today. Bernanke discusses why it takes time to revive or establish new channels of credit flow after a period of deflation. It also takes time, he says, to "rehabilitate" insolvent debtors.

As pressure on the bank's capital grows . . . it may have to call in loans or refuse new ones. . . . The final result is usually a government takeover of the intermediation process. . . . Thus, effectively, government agencies became part of the intermediation chain. . . .

The banking crisis associated with the Depression also severely limited the amount of mortgage lending in the 1930s. Bernanke notes that "... real estate defaults and foreclosures continued high through 1945.... Some traditional mortgage lenders nearly left the market; life insurance companies, which made \$525 million in mortgage loans in 1929, made \$10 million in new loans in 1933 and \$16 million in 1934."

He also sheds light on government attempts to revitalize the mortgage market in the years immediately following the bank holiday.

To the extent that the home mortgage market did function in the years immediately following 1933, it was largely due to the direct involvement of the federal government. . . The government "readjusted" existing debts, made investments in the shares of thrift institutions, and substituted for recalcitrant private institutions in the provision of direct credit. In 1934, the government-sponsored Home Owners' Loan Corporation made 71 percent of all mortgage loans extended.

hairman Bernanke offers insight into the challenges facing the United States in today's economic environment. Deflation can destroy an economy. If buyers perceive that prices will fall in the future, they postpone purchasing today. This leads to less demand and even more pressure for prices to fall, which ultimately leads to a collapse of the banking system.

This aversion to deflation explains why current monetary and fiscal policy seems so excessive. The amount of reserves pumped into the banking system and deficit spending by the U.S. government is almost too high to comprehend. The goal appears to be to avoid deflation at all costs.

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THE TAKEAWAY

Fed Chairman Ben Bernanke's book entitled *Essays on the Great Depression* holds insights relevant to today's economic environment. In particular, the lessons of the Great Depression point to why the Fed is doing whatever it can to avoid deflation, no matter the cost.



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