NATIONAL BANK
FINANCIAL GROUP

Economics & Strategy
SPECIAL REPORT

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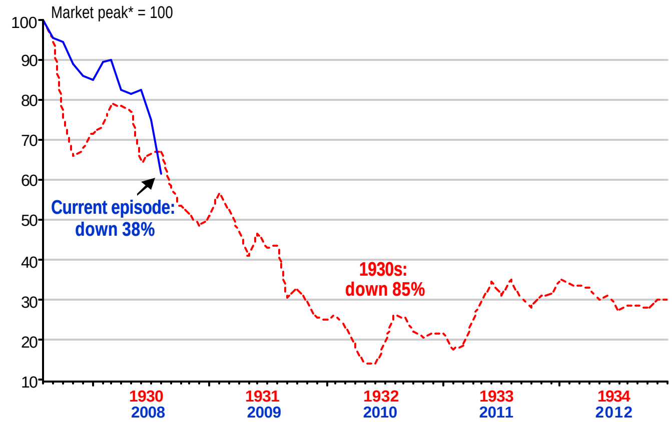
Parallels with the 1930s?

The S&P 500 at this writing has slid 38% from its peak of just over a year ago and remains on a very slippery slope. Rarely has an aggressive Fed easing campaign been so ineffective in propping up equities. Credit markets have fared no better – the current spread between investment-grade credit and the 10-year note is wider than at any time since the early 1930s. These developments against a backdrop of acute stress in global banking have raised the spectre of depression. The International Herald Tribune reports that "a news database search turned up 16,095 articles that included the phrase 'Great Depression' in the past three months, nearly triple the number of times it appeared in the previous three months."[1] A CNN poll last month found that nearly 60% of Americans thought another depression was likely.[2]

Equities on a very slippery slope …

S&P 500 decline from peak: 1930s and today



** August 1929, October 2007*

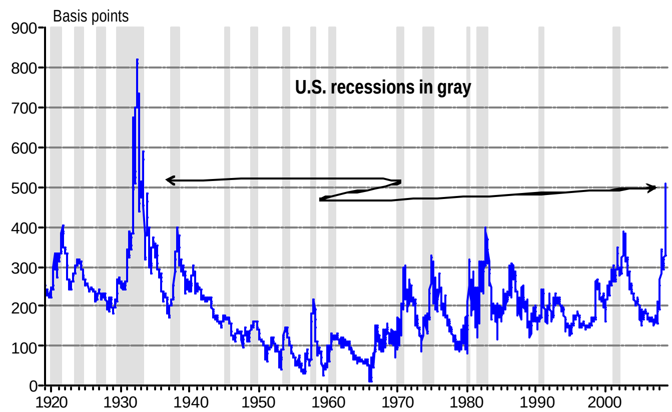
NBF Economy & Strategy (data via Bloomberg and Global Insight)

While there are indeed striking similarities between the problems at the root of the current credit crisis and those preceding and continuing during the 1930s (leverage, burst bubble, lax lending practices, bank failures, holes in the regulatory framework), we believe that comparisons to the dark days of 1929-1933 are overwrought.

In our view, the failure of the central bank and the government to promptly recognize the impact of financial markets on the real economy played a significant role in the worst economic slump in U.S. history. Fed chairman Ben Bernanke, in contrast to his predecessors Roy Young (1927-1930) and Eugene Meyer (1930-1933), has a large arsenal of unconventional tools at his disposal to combat the credit crisis. Most encouragingly, Mr. Bernanke, a scholar of the Depression, has been adept at wielding countermeasures in timely fashion. Though the U.S. is very likely to fall into a recession as severe as, say, those of 1973 or the early 1980s, the resolve of the

… and credit spreads almost through the roof

Yield of Moody's Baa corporate bonds minus yield of 10-year U.S. Treasury



NBF Economy & Strategy (data via Federal Reserve and NBER)

[1] "An economic slowdown, yes, but a depression?", *International Herald Tribune*, November 2, 2008.

[2] "Poll: 60% say depression is likely," *CNN*, October 6, 2008.

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Clément Gignac, Chief Economist and Strategist

monetary and fiscal authorities argues against a full-fledged depression.

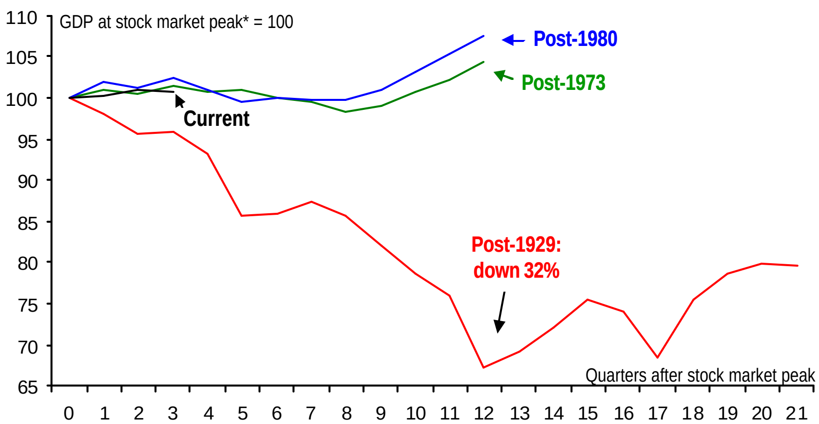
With the D-word now heard more and more, we thought it was time to provide our clients with some perspective. How do today's economic circumstances compare with the Depression? Using a rich historical data set from the National Bureau of Economic Research (NBER), we compare past episodes of decline and contraction following a stock market peak.

Let's start with output

Despite strong similarities in the behaviour of financial markets then and now (equity and credit), U.S. GDP and industrial production have fallen nowhere near as steeply since October 2007 as they did in the 12 months following the market peak of August 1929. As our charts show, the current declines of 0.2% in GDP and 4% in industrial output are similar to those of the severe recessions beginning in 1973 and 1980. By August 1930, in contrast, GDP had contracted 4% and industrial output 13%. By March 1933, real GDP had declined a cumulative 32% and industrial production 55%.

What does a depression look like anyway?

Real GDP following stock market peaks preceding economic contrac tion

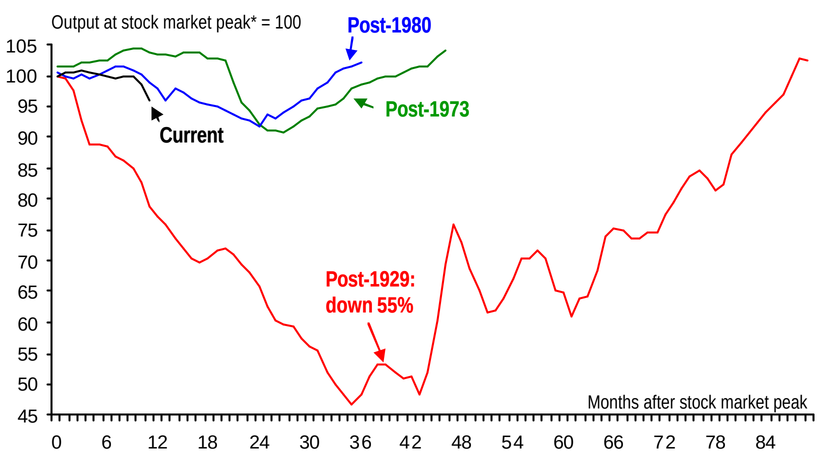


** 1929Q3, 1973Q1, 1980Q4, 2007Q4*

NBF Economy & Strategy, NBER

Industrial production

Industrial output following stock market peaks preceding contractions



** August 1929, January 1973, November 1980, October 2007*

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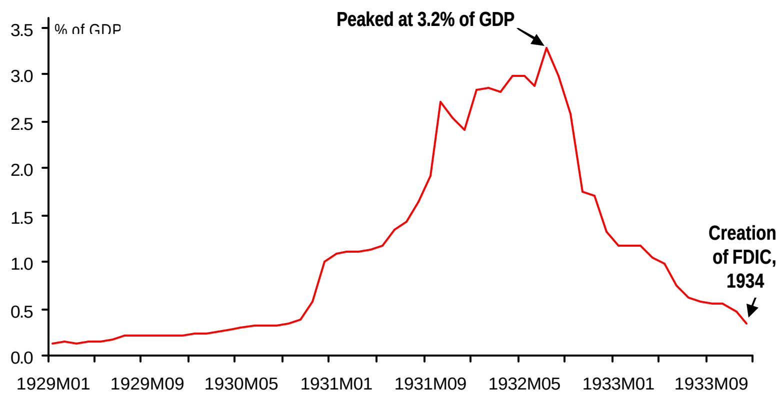
Why was it so bad?

The contraction of the early 1930s was propagated by bank failures resulting from a banking panic. The deposits of failed institutions peaked in 1932 at 3.2% of GDP. Not until 1934 did government create the Federal Deposit Insurance Corporation to insure deposits. Since the FDIC began operations on January 1 of that year, no depositor has lost a penny of insured funds as a result of a failure. To promote public confidence in the financial system, U.S. authorities recently raised the ceiling for deposit insurance to $250,000. We see very little scope for a run on bank deposits in the current credit crisis.

1930s: Bank failures wreaked havoc on the economy
Deposits of suspended banks as share of GDP

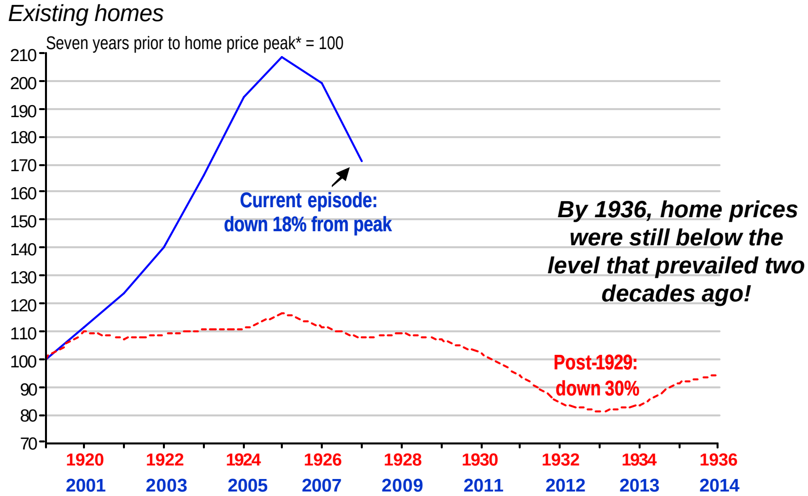


NBER

Home prices

The housing sector played a pivotal role in exacerbating the stress on the banking sector in the 1930s (as is the case now). The S&P Case-Shiller index shows home prices down 18% from the 2006 peak. In the 1920s, home prices also peaked well before the equity summit (1925). As the chart shows, U.S. home prices have fallen more sharply since 2006 than they did in the early 1930s but that also reflects the fact that prices had increased much faster in the years preceding the peak. During the Depression, prices dropped a cumulative 30% from 1925 to 1933, at which point Washington created the Home Owner's Loan Corporation (HOLC) to support the housing market. By 1936, home prices were still below the level that prevailed in 1919. This time around, even if prices were also to drop a cumulative 30% by the end of 2009 (as suggested by the futures market), home prices would still be hovering near their 2004 level. We **do not think that we are about to wipe out a generation of buyers.**

Home prices
Existing homes



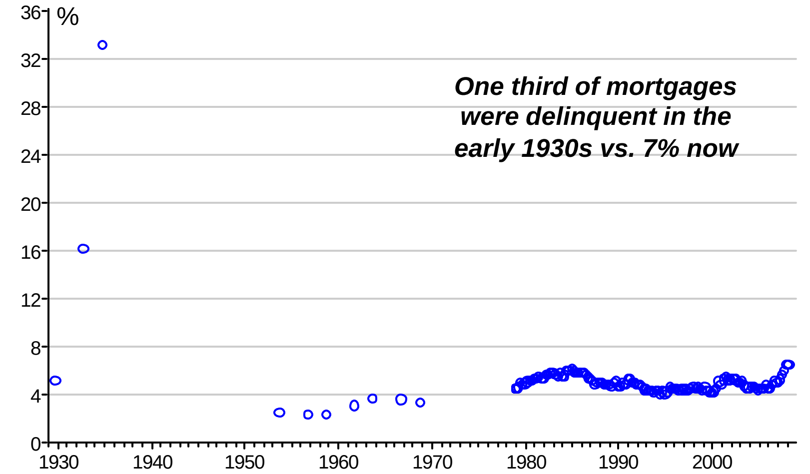
** 1925, 2006*
Robert Shiller "Irrational Exuberance", Princeton University Press for the years 1919 to 1936
Standard and Poors for the years 1999 to 2008

True, mortgage delinquency rates, at around 7% are currently at the highest in a generation and they could rise a little more given as is normally the case during recessions. Back in the early 1930s, economic hardship was such that one-third of outstanding mortgages were delinquent, a situation that exacerbated the decline in home price (chart).

In our view, the U.S. government's recent decision to put Fannie Mae and Freddie Mac in conservatorship could give the next administration a key tool to stabilize prices. We doubt that conditions are in place for multi-year home-price deflation and believe that most of the price decline could very well be behind us, especially if government and Fed succeed in engineering a drop in mortgage rates.

Mortgage delinquencies

Percentage of outstanding mortgages delinquent 30 days or more



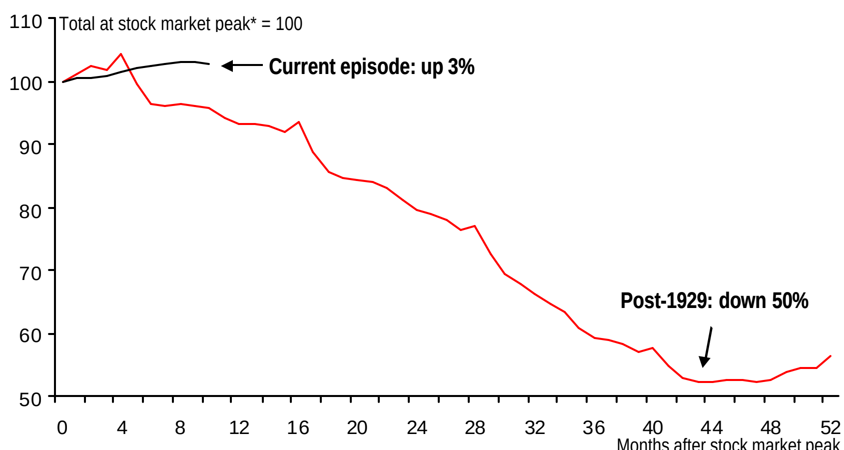
R.J. Saulnier, "Urban Mortage lending by Life Insurance Companies", NBER, p. 80
J.P. Herzog and J.S. Early "Home Mortgage Delinquency and Foreclosures", NBER, p.30
Mortgage Banker's Association

Disappearance of credit

The loss of deposits in the early 1930s choked off lending. Consumer credit contracted 5% in the year following the stock market peak and a cumulative 50% in the years that followed. Today, total consumer credit outstanding is up 3% from a year ago and the Fed has moved very forcefully in recent weeks to intervene directly in the money and commercial-paper markets.

Consumer credit

Total consumer credit outstanding



** August 1929, October 2007*

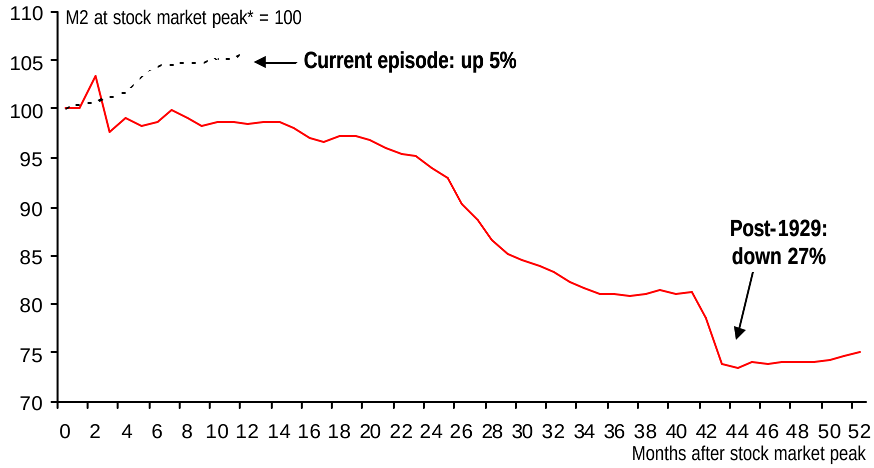
NBF Economy & Strategy (data via NBER and Federal Reserve)

Money supply

The contraction of deposits and credit in the 1930s was not offset by an injection of liquidity by the Federal Reserve, leading to a rapid contraction of the money supply. By a year after the stock market peak, M2 had begun to shrink. In the quarters that followed it contracted a cumulative 27%. At this writing, money supply is up 5% from a year ago and the Fed is moving aggressively to keep credit markets from freezing up.

Money supply

M2



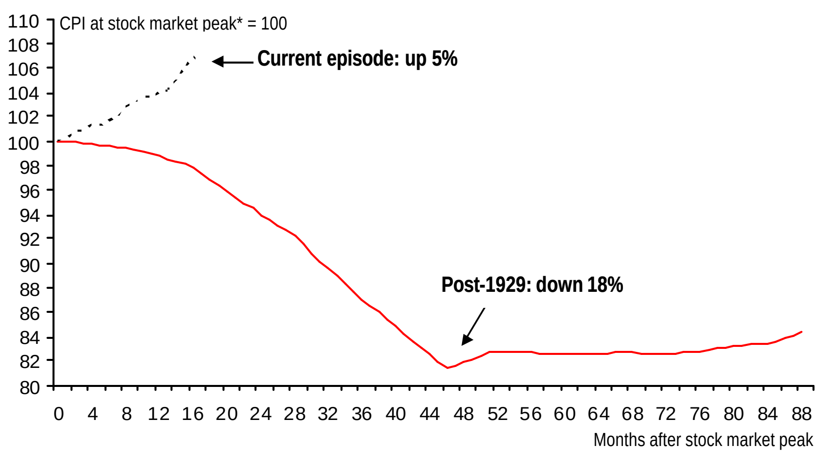
** August 1929, October 2007*

NBF Economy & Strategy (data via NBER and Federal Reserve)

Deflation

In the Depression, deflation was rampant. A year after the stock market peak of August 1929, prices were down 3% and heading for a cumulative drop of 18%. Today, the consumer price index is 5% higher than at the stock market peak a year ago. The recent correction of commodity prices means that a decline of the CPI cannot be excluded next year, but we do not think conditions are in place for multi-year deflation in the all-important service component of the CPI.

Consumer prices



** August 1929, October 2007*

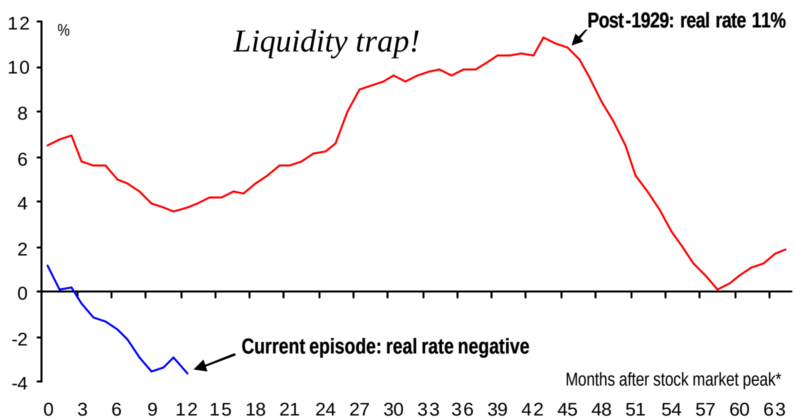
NBF Economy & Strategy (data via NBER and Federal Reserve)

Monetary policy

In the 1930s the burden of debt service for households and corporations was made worse by very high interest rates. The failure of the central bank to react rapidly to the unfolding credit crisis put the economy in a liquidity trap, in which eventual rate cuts were offset by deflation. The Fed never obtained a negative real policy rate during the 1930s. In the current episode, the Fed has reacted much faster and its real policy rate is now deeply negative.

Real policy rate

Discount rate (New York Fed) and target fed funds rate minus CPI inflation



** August 1929, October 2007*

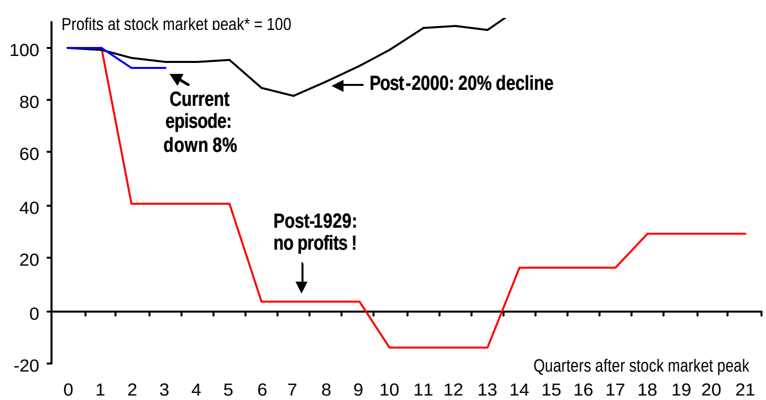
NBF Economy & Strategy (data via NBER and Federal Reserve)

Profits, investment and jobs

In the 1930s, high interest rates coupled with lack of credit and economic contraction wreaked havoc on corporate profits. They shrank 60% in the year after the stock market peak, and then disappeared. With profitability gone, capital spending fell 85% and employment 35%. At this writing, corporate profits are down 8% from a year ago. Early in this decade, when a severe profit recession hit the U.S. economy, before-tax earnings fell a cumulative 20%. Though we expect a fairly severe economic recession in 2009, we doubt that profits will fall much more than 30%, much less disappear as in the 1930s. We see the unemployment rate peaking at about 8%, far from the 25% of the Depression.

Before-tax profits

National-accounts basis

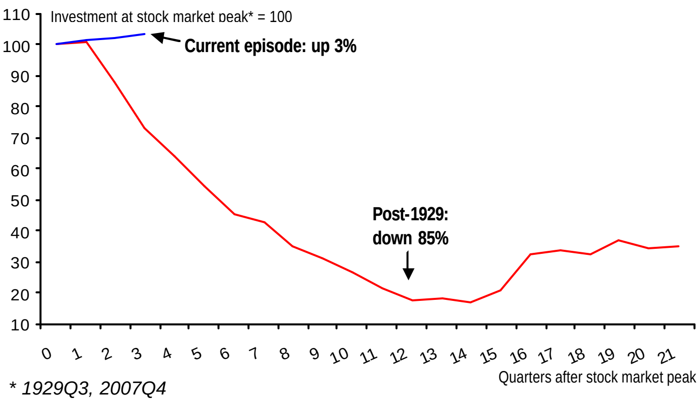


** 1929Q3, 2000Q1, 2007Q4*

NBF Economic & Strategy, NBER

Business investment

Business spending on plant & equipment



** 1929Q3, 2007Q4*

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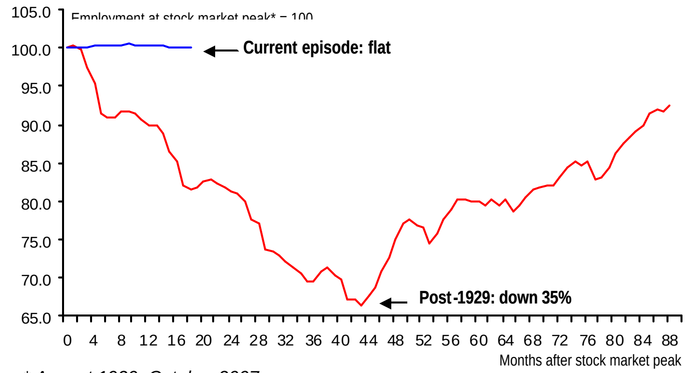
Employment

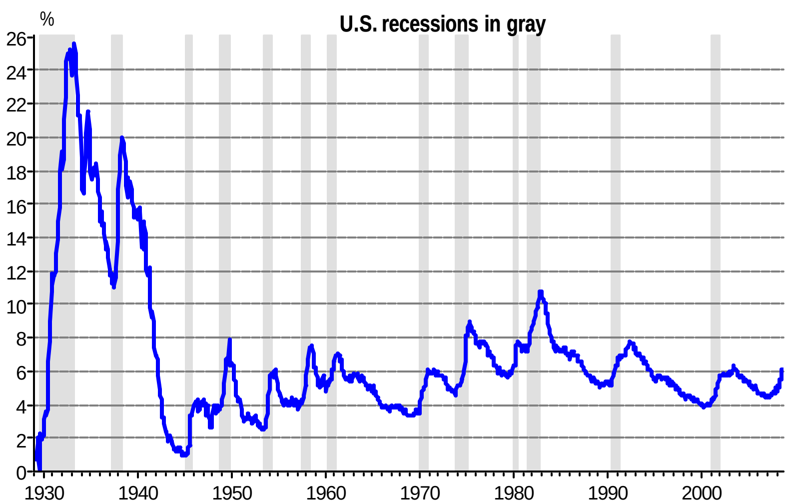
Payrolls



** August 1929, October 2007*

NBF Economic & Strategy, NBER

Unemployment rate



NBF Economy & Strategy, NBER, BLS

If not a depression, then what?

Despite one of the sharpest corrections of the equity and credit markets in 70 years, we think the appropriate comparison is not with the Great Depression but with episodes closer to us. The IMF recently published a study analysing episodes of financial stress around the world over the past three decades.[3] For closer comparison with the current credit crisis, the IMF focused on six episodes of banking-related financial stress that led to economic contractions in Finland, Norway, Sweden, the U.K. and the U.S. in the early 1990s and in Japan through the 1990s. "Given the importance of banking distress in the current financial turmoil, these episodes can serve as a useful benchmark for analyzing the current conjuncture and for gauging its potential macroeconomic impact," the IMF study said. We were more interested in the impact on financial markets. Using the same method, our colleague Pierre Lapointe found that in comparable past periods of severe financial stress, equities declined an average 43% over an average 19 months from peak to trough.[4] The S&P 500 has declined about that much since July 2007. Importantly, we find that after drops of this magnitude, the rebound is usually quite steep. As the table below shows, in six

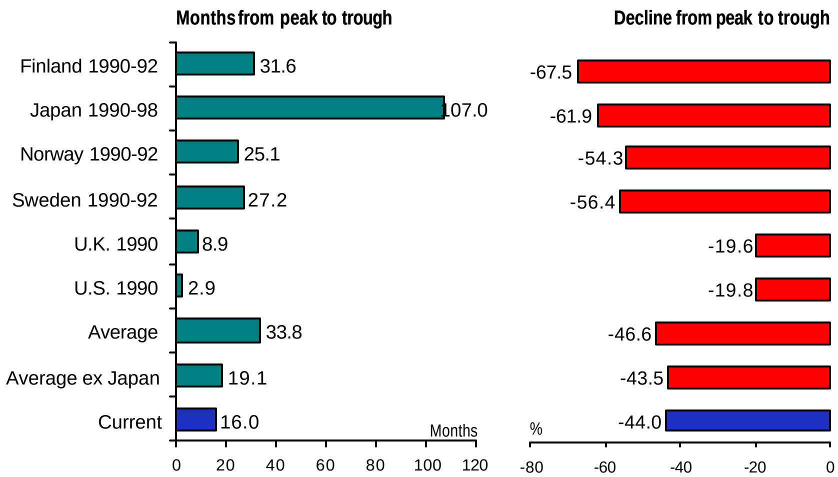
[3] Chapter 4, IMF *Financial Stability Report*, October 2008.

[4] NBF *Monthly Equity Monitor*, November 2008.

comparable periods of major financial stress, equities gained an average 48% within six months of their bottom and a whopping 86% within a year. Although the U.S. economy will remain lacklustre over the next few quarters – as in all of the episodes sampled here – a strong rebound in equities would not be historically unusual.

Financial stress: A similarity to past episodes

Periods of major financial stress and economic contraction



NBF Economy & Strategy, IMF (data via Datastream)

	Six major periods of financial stress				
	Peak to trough, %	Peak to trough, months	3m after trough, %	6m after trough, %	12m after trough, %
Finland 1990-92	-67.5	31.6	66.4	94.4	176.9
Japan 1990-98	-61.9	107.0	9.5	38.2	60.5
Norway 1990-92	-54.3	25.1	10.4	30.3	79.6
Sweden 1990-92	-56.4	27.2	48.0	70.0	131.6
U.K. 1990	-19.6	8.9	8.0	24.8	31.9
U.S. 1990	-19.8	2.9	7.7	29.7	34.1
Average	-46.6	33.8	25.0	47.9	85.8
Average ex Japan	-43.5	19.1	28.1	49.8	90.8

Bottom line

Despite some eerie similarity with the 12 months following the stock market crash of 1929, we think comparisons of the present episode with the dark days of 1929-1933 are overwrought.

While it is too soon to say that financial-market stress is over, U.S. equity and credit markets have now absorbed most of the decline typical of past periods of financial stress, severe recession and lacklustre recovery. Although the coming quarters will remain difficult for the economy, we think the aggressive actions of authorities in the U.S. and other industrial nations aimed at normalizing credit markets will gain traction and set the stage for a bottoming out of the market.

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