

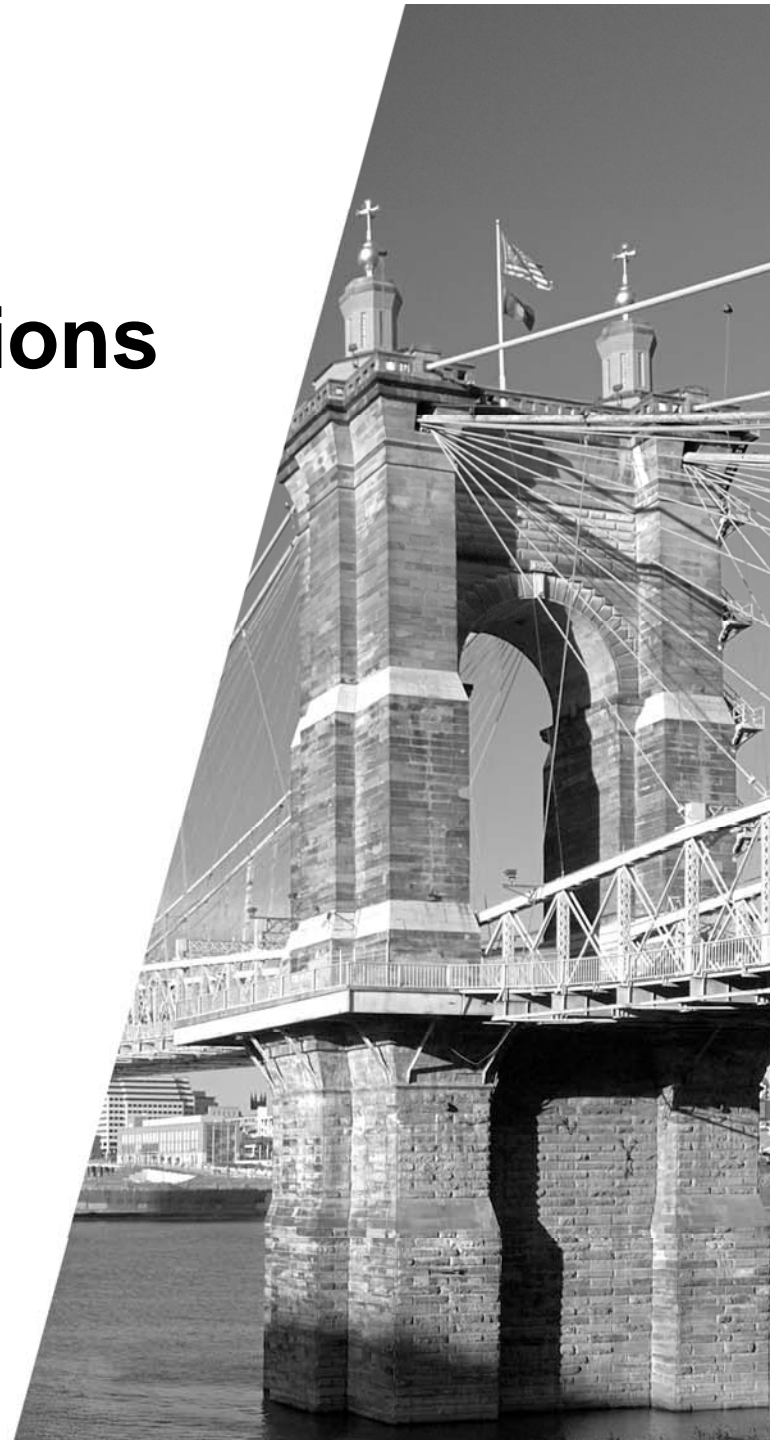
Review of Past 14 Recessions

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“Official” Definition of Recession



- According to the National Bureau of Economic Research (NBER), the “official” definition of a recession is “a significant decline in activity spread across the economy, lasting more than a few months, visible in industrial production, employment, real income, and wholesale-retail trade. A recession begins just after the economy reaches a peak of activity and ends as the economy reaches a trough. Between trough and peak, the economy is in an expansion.”
- The Business Cycle Dating Committee at NBER typically declares a recession anywhere from 6 to 18 months after it has begun. The Committee waits long enough so that the existence of a recession is not at all in doubt and seeks to find the date of the peak in economic activity. The Committee is acutely aware of revisions in data and waits until they can assign an accurate date to the peak.
- The more common definition of a recession and one frequently used in the media is a decrease in real Gross Domestic Product (GDP) that lasts for at least two quarters.

Recessions – 1925 to 2001



Last 14 Recessions and Cumulative Returns for Cash, Bonds, and Stocks

	Time (in Months)	Cash Proxy 90-Day T-Bill* Cumulative Return	Bond Proxy LBAG** Cumulative Return	Equity Proxy S&P 500 Cumulative Return
October 1926 to November 1927	13	3.8%	6.1%	37.1%
August 1929 to March 1933	43	6.6%	19.4%	-74.5%
May 1937 to June 1938	13	0.3%	7.8%	-24.2%
February 1945 to October 1945	8	0.3%	1.4%	27.7%
November 1948 to October 1949	11	1.0%	2.7%	4.1%
July 1953 to May 1954	10	1.2%	5.7%	27.6%
August 1957 to April 1958	8	1.9%	10.9%	-6.5%
April 1960 to February 1961	10	2.3%	6.5%	18.4%
December 1969 to November 1970	11	6.8%	14.0%	-3.5%
November 1973 to March 1975	16	11.1%	8.3%	-17.9%
January 1980 to July 1980	6	6.6%	0.9%	16.1%
July 1981 to November 1982	16	18.0%	37.9%	14.7%
July 1990 to March 1991	8	5.2%	8.9%	7.6%
March 2001 to November 2001	8	2.5%	6.4%	-7.2%
Average # of Months	13			
Annualized Returns		4.1%	8.4%	-3.9%
Annualized Returns (w/o Great Depression 8/29 to 3/33)		4.7%	9.5%	5.9%

* Pre-1960 Returns from 30-Day U.S. T-Bill (Ibbotson)

** Pre-1976 Returns from U.S. Intermediate Treasury Bond (Ibbotson)

Recessions – 1925 to 2001



- **Return comparisons:**
 - **Bonds outperformed stocks and cash in 7 of last 14 recessions**
 - **Stocks outperformed cash and bonds in 6 of last 14 recessions**
 - **Cash outperformed stocks and bonds in 1 of last 14 recessions**
- **On an annualized return basis including the Great Depression:**
 - **Bonds returned 8.4%, outperforming cash and stocks**
 - **Cash returned 4.1%, outperforming stocks**
 - **Stocks declined by 3.9%**
- **On an annualized return basis excluding the Great Depression:**
 - **Bonds returned 9.5%, outperforming cash and stocks**
 - **Stocks returned 5.9%, outperforming cash**
 - **Cash returned 4.7%**

Performance One Year After Recessions



Returns for Cash, Bonds, and Stocks One Year Following Recession

	Cash Proxy 90-Day T-Bill* One Year After	Bond Proxy LBAG** One Year After	Equity Proxy S&P 500 One Year After
October 1926 to November 1927	3.7%	1.4%	46.9%
August 1929 to March 1933	0.4%	4.8%	92.0%
May 1937 to June 1938	0.0%	4.9%	-1.9%
February 1945 to October 1945	0.4%	1.1%	-7.3%
November 1948 to October 1949	1.2%	0.6%	31.5%
July 1953 to May 1954	1.0%	0.5%	35.9%
August 1957 to April 1958	1.8%	-4.0%	37.3%
April 1960 to February 1961	2.5%	2.7%	13.6%
December 1969 to November 1970	4.5%	8.1%	11.2%
November 1973 to March 1975	5.7%	8.6%	28.3%
January 1980 to July 1980	14.4%	-5.0%	12.9%
July 1981 to November 1982	8.8%	10.3%	25.4%
July 1990 to March 1991	5.0%	11.4%	11.1%
March 2001 to November 2001	1.6%	7.3%	-16.5%

Annualized Returns	3.6%	3.8%	20.4%
Annualized Returns (w/o Great Depression 8/29 to 3/33)	3.9%	3.7%	15.5%

* Pre-1960 Returns from 30-Day U.S. T-Bill (Ibbotson)

** Pre-1976 Returns from U.S. Intermediate Treasury Bond (Ibbotson)

- **One Year After Recessions - Stocks outperformed bonds and cash in 9 of the 14 periods, with double-digit gains in 11 of the 14 periods**
- **Average stock outperformance vs. bonds one year after the recession is larger than the average underperformance during the recession**

Average Duration of Recessions



- According to NBER, the last 14 recessions averaged just more than one year (12.9 months)
- The duration of the great depression from August 1929 to March 1933 (43 months) skews the average duration of the typical recession (few would argue that the great depression was a typical recession)
- The median recession of 10.5 months provides a more accurate assessment of the duration for a typical recession

	Contraction Peak to Trough # of Months
October 1926 to November 1927	13
August 1929 to March 1933	43
May 1937 to June 1938	13
February 1945 to October 1945	8
November 1948 to October 1949	11
July 1953 to May 1954	10
August 1957 to April 1958	8
April 1960 to February 1961	10
December 1969 to November 1970	11
November 1973 to March 1975	16
January 1980 to July 1980	6
July 1981 to November 1982	16
July 1990 to March 1991	8
March 2001 to November 2001	8
Average # of Months	12.9
Median # of Months	10.5

Average Duration of Expansions



- Using the same data from the NBER, the typical expansion averaged more than four years (53.4 months) in duration
- The median duration of expansions during this time period was three and one half years (42 months), as 4 of the 14 expansions were exceptionally long in duration (more than 80 months) which increased the average

	Expansion Previous Trough to This Peak # of Months
October 1926 to November 1927	27
August 1929 to March 1933	21
May 1937 to June 1938	50
February 1945 to October 1945	80
November 1948 to October 1949	37
July 1953 to May 1954	45
August 1957 to April 1958	39
April 1960 to February 1961	24
December 1969 to November 1970	106
November 1973 to March 1975	36
January 1980 to July 1980	58
July 1981 to November 1982	12
July 1990 to March 1991	92
March 2001 to November 2001	120
Average # of Months	53.4
Median # of Months	42.0

Key Takeaways



- From October 1926 to November 2001, the U.S. economy was in an expansionary environment 80% of the time and in contraction 20% of the time, with the average expansion averaging more than four years and the average recession lasting one year
- The current expansion began in December 2001 and is at 73 months (6 years and 1 month) in duration, suggesting that from a historical perspective, a recession may be overdue; although four expansionary periods have persisted longer than 73 months
- Of the 14 recessions studied, on an annualized average return basis, bonds outperformed cash and stocks
- If an investor could accurately predict the beginning and end of a recessionary period, however, and tactically move from stocks to bonds, this would not necessarily give the investor an advantage as stocks outperformed bonds and cash in 6 of the 14 periods, nearly half the time

Current State of the Economy/Markets

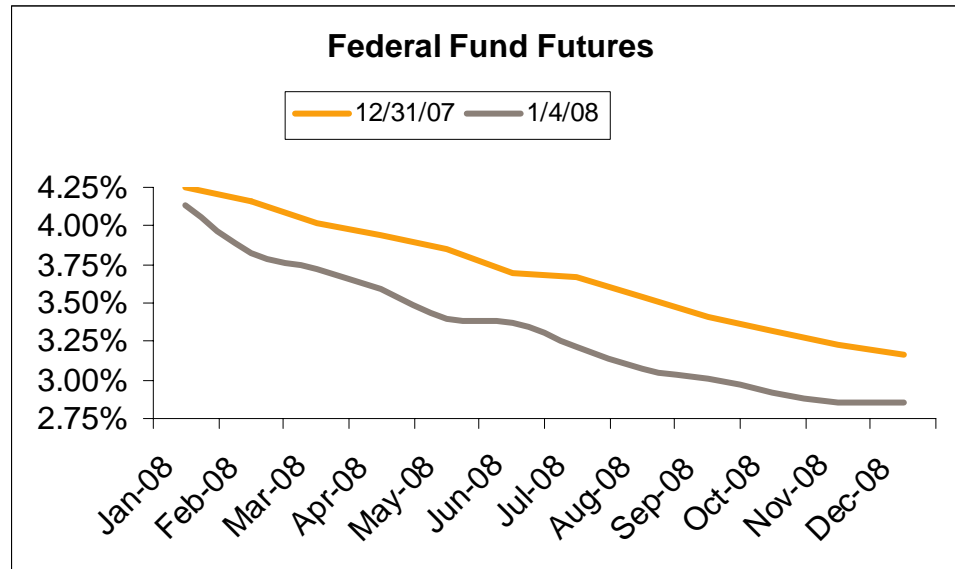


- Third quarter 2007 GDP was 4.9% following second quarter GDP of 3.8%. Fourth quarter GDP is anticipated to be weaker upon review of the components of GDP [C+I+G+(X-M)]:
 - **(Consumption, C):** Higher fuel and food costs coupled with higher unemployment could lead to weaker consumption moving forward, as consumers feel worse off financially than they were earlier in the expansion
 - **(Investment, I):** Corporate earnings are expected to slow, which could lead to a decline in business spending; this could be offset by lower borrowing costs for businesses
 - **(Government Expenditures, G):** War time government expenditures are likely to remain robust; however, the 2008 elections could dramatically alter government spending expectations depending on who is elected, the outlook on the war, other government spending, and taxes
 - **(Exports – Imports, X-M):** A weak U.S. dollar drove export growth in the third quarter leading to a robust third quarter GDP report; continued weakness in the U.S. could lead to moderate export growth and a reduction in imports
- Broad credit market weakness began due to issues in the subprime mortgage industry, and ultimately spread to other areas of the capital markets. This led to a “flight-to-quality” rally in which U.S. Treasuries gained markedly versus risky bonds and equities since July 2007, returning nearly 8% through December 2007
- Treasury Inflation-Protected Securities (TIPS) outperformed U.S. Treasuries since July, gaining 9.3% through December 2007, amid heightened investor expectations of future inflation and a lack of supply of TIPS

Current State of the Economy/Markets



- Unemployment rose from 4.7% in November to 5.0% in December, shocking the markets and the Federal Reserve, which had anticipated 4.8% to 4.9% unemployment during December
- Following the December unemployment report, Federal Funds futures contracts immediately priced in further Federal Reserve rate cuts as the market began to factor in the need for further monetary stimulus to encourage growth in the economy
- The FOMC meets on January 29 and 30, with futures anticipating strong potential for a 50 basis point cut in its target Federal Funds rate (see below)



Conclusion



- The study of the last 14 recessions suggested that stocks outperformed in 6 of the 14 contractions, suggesting that at some point during the recession, investors anticipated the next expansion and stocks rallied
- On average, stocks significantly outperformed bonds one year after the recession and this outperformance was larger than the underperformance of stocks vs. bonds during the recession
- Investors may be inclined to overweight bonds versus stocks in anticipation of further stock declines, but bond yields are relatively low (10-year Treasury Yield less than 4%) and much of the fear of a potential recession may already be priced into bond and stock prices
- To the extent that investors have actively managed portfolios, these portfolio managers are expected to position their portfolios to best take advantage of the current market environment
- FEG recommends clients remain broadly diversified, favoring asset categories that are not highly correlated to stocks and bonds, such as hedge funds, with distressed investments likely to provide particularly attractive return potential in coming years

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