Volatility and the Long-Term Investor

Market volatility has long been a source of anxiety for equity investors. Over the past several years in particular, significant fluctuations in market value caused many investors to rethink—and sometimes entirely restructure—their investment portfolios, substantially reducing (or even eliminating) their equity allocations. While past performance is not indicative of future results, a brief examination of long-term trends in investment performance may help put short-term market volatility in perspective. Understanding the truth behind some common misconceptions about volatility can be an important step in the prudent management of your overall portfolio.

There’s no question that staying invested and doing nothing can be hard when the value of your equity portfolio has fallen by 10% or more. This may seem too risky compared to supposedly “safe” investments such as long-term government bonds or money market funds. But successful investors avoid the temptation to adjust their portfolios in response to every short-term dip in the market.

Investors should also understand that many widely accepted “facts” about market volatility are actually dead wrong. Here’s a look at a few of these myths and the realities behind them.

**MYTH:** Market volatility is getting worse all the time. Owning stocks today is a lot more risky than it was 20 or 30 years ago.

**REALITY:** It’s true that the past few years saw an upswing in volatility, as measured by daily price movements. There were 134 days in 2008—at the peak of the financial crisis—when the S&P 500 Index moved up or down by 1% or more. That’s up...
from 29 days in 2006—just two years earlier. However, this cyclicality is part of a long-term pattern. As the chart on this page shows, daily volatility has risen and fallen repeatedly in cycles over the past 30 years.

In any case, sharp daily moves, while unsettling, don’t tell the whole story. Investment analysts typically measure volatility by looking at standard deviation: the degree to which market returns in any given quarter diverge from their long-term trend. By this measure, market risk has not increased appreciably over the past 40 years. During the ten years ending in 2010, which included both the internet bubble and the Great Recession, the standard deviation of returns for large US stocks was 18.7%—only slightly higher than the 17.3% seen in the decade ending in 1990 and 17.4% in the decade ending in 1980.1


REALITY: It’s true that market returns in the late 1990s and mid-2000s were high by historical standards, but there is no “law” that requires returns to be below average in the future because they’ve been higher than average in the past.

Using the S&P 500 Index as a proxy, investors would have earned an annualized return of about 9.9% on large-capitalization stocks from 1926 through 2010—and this despite the market turmoil of the past four years.2 Whether returns are better or worse in coming years will depend on economic factors such as inflation, interest rates, earnings and global events—not the laws of probability.

MYTH: WHEN THE MARKET STARTS TO RISE, SMART INVESTORS CAN ALWAYS JUMP BACK IN AND RIDE THE NEXT LEG UP. MEANWHILE, THE SAFEST THING TO DO IS TO STAY IN CASH.

REALITY: Timing the market is something that even many professional investors cannot do consistently. And the costs of being out of the market for even a short time can be enormous. As the chart on the left illustrates, from 1980 to 2010—a period containing more than 7,500 trading days—an investor who missed the 50 biggest “up” days would also have missed approximately 98% of the increase in stock prices during that period, converting an 8.4% annualized return into an annualized gain of only 0.2%. 

---

**Daily Moves in the S&P 500 Index of More Than 1% (1980-2010)**

Source: Consulting Group, Polaris

Investors cannot invest directly in an index. Past performance is no guarantee of future results.

---


Source: Consulting Group, Polaris

Investors cannot invest directly in an index. The performance of the index reflects no deductions for fees, expenses or taxes which would lower the performance of managed assets. Past performance is no guarantee of future results.
MYTH: WHILE STOCKS HAVE PAID HIGHER RETURNS THAN BONDS OR TREASURY BILLS OVER THE LONG RUN, THE DIFFERENCE HASN’T BEEN ALL THAT GREAT.

REALITY: Over the past 85 years, returns on stocks have beaten cash and bonds not by a narrow margin, but by huge margins. For an example, an investor who put $1 in large capitalization US stocks at the beginning of 1926 could have seen that dollar grow to almost $3,000 by the end of 2010. By comparison, that same dollar invested in long-term government debt would have grown to just $92, while $1 invested in Treasury bills would have been worth only $20.

MYTH: BUYING NEAR THE TOP OF A BULL MARKET IS AN EASY WAY TO LOSE MONEY OVER THE LONG RUN.

REALITY: Historically, investors who put money in the stock market near a short-term peak have done well over the long run—particularly when compared to Treasury bills and other supposedly “safe” investments. An investor who put $10,000 in large capitalization US stocks at the month-end following the tops of the last eight bull markets could have had a portfolio worth more than $1.7 million by the end of 2010. By comparison, someone who invested the same amounts in Treasury bills at the same times would have had slightly less than $394,000.3

MYTH: EVEN IF LONG-TERM RETURNS ARE HIGHER FOR STOCKS, THEY STILL AIN’T HIGH ENOUGH TO JUSTIFY THE RISK OF SHORT-TERM LOSSES.

REALITY: It’s true that stocks have historically been more volatile than bonds or Treasury bills but stocks have also provided greater rewards than bonds and Treasury bills over the long term. Total returns on the S&P 500 have been positive in 61 of the past 85 years—or approximately 72% of the time. There have only been 11 years in which the market lost more than 10%, and only six years when it lost more than 20%.

On the other hand, returns have been greater than 10% in 49 of the past 85 years, and greater than 20% in 32 of those years.

MYTH: STOCKS MAY HAVE BEATEN BONDS AND TREASURY BILLS OVER THE LONG RUN, BUT THAT’S ONLY BECAUSE THE STOCK MARKET HAS HAD A FEW GREAT YEARS. THERE HAVE BEEN MANY PERIODS OF TIME WHEN STOCKS HAVE UNDERPERFORMED BONDS AND TREASURY BILLS.

REALITY: In 38 of the past 65 years—or about 58% of the time—the

Cumulative Return of $1 (1926-2010)

Source: Consulting Group, Polaris, Morningstar
Investors cannot invest directly in an index. The performance of the index reflects no deductions for fees, expenses or taxes which would lower the performance of managed assets. Please see the disclosures at the end of this document for a list of indexes associated with the above asset classes. Past performance is no guarantee of future results.
S&P 500 has produced higher returns than Treasury bills or long-term government debt. Over longer periods, the results have been even more lop-sided: from 1945 through 2010, stocks outperformed Treasury bills and long-term government debt in 42 of 61 rolling five-year periods—almost 69% of the time. Over rolling 10-year periods, stocks outperformed more than 80% of the time, and stocks have outperformed Treasury bills and long-term government debt in all but two rolling 20-year periods since 1945.

**CONCLUSION**

Of course, we all know that past performance is no guarantee of future results. There have been lengthy periods—such as the late 1970s—when US stocks delivered relatively poor risk-adjusted performance. Investors may be able to improve long-term results, and reduce volatility, by including fixed income, foreign equities and other asset classes in a diversified portfolio.

Still, the moral of the story should be clear: investors who act in haste—fleeing the stock market when the going gets rough—are likely to repent at leisure. The real risk investors face isn’t just the possibility of further market volatility, but also the damage that could result from making sudden or rash changes in their long-term investment strategies—changes they may regret later.

---

1. Source: Consulting Group, Polaris.
2. Source: Consulting Group, Polaris.
3. Source: Consulting Group, Polaris.

The large capitalization stock performance cited in this report is for the S&P 500 Index. The S&P 500 is widely regarded as the best single gauge of the U.S. equities market, this world-renowned index includes a representative sample of 500 leading companies in leading industries of the U.S. economy. Although the S&P 500 focuses on the large-cap segment of the market, with over 80% coverage of U.S. equities, it is also an ideal proxy for the total market.

The Treasury bill performance cited in this report is for 90-day Treasury Bills. Equal dollar amounts of three-month Treasury bills are purchased at the beginning of each of three consecutive months. As each bill matures, all proceeds are rolled over or reinvested in a new three-month bill. The income used to calculate the monthly return is derived by subtracting the original amount invested from the maturity value. The yield curve average is the basis for calculating the return on the index. The index is rebalanced monthly by market capitalization.

Inflation is measured in this report using the Consumer Price Index (CPI). The Consumer Price Index for all urban consumers is a measure of change in price of goods and services purchased by all urban consumers. Approximately 400 items make up the basket of goods and services measured. Returns prior to 1947 are not seasonally adjusted. Returns from 1947 forward are seasonally adjusted. By using seasonally adjusted data, economic analysts and the media find it easier to see the underlying trend in short-term price change. It is often difficult to tell from raw (unadjusted) statistics whether developments between and 2 months reflect changing economic conditions or only normal seasonal patterns. Therefore, many economic series, including the CPI, are seasonally adjusted to remove the effect of seasonal influences. Seasonal influences are those that occur at the same time and in about the same magnitude every year. They include price movements resulting from changing climatic conditions, production cycles, model changeovers and holidays.

The Long-Term Government Bond performance used is this report sources the Ibbotson Long Term Government Bonds Index. The total returns from 1957-present are constructed with data from The Wall Street Journal. The data from 1926-1976 are obtained from the Government Bond File at the Center for Research in Security Prices (CRSP) at the University of Chicago Graduate School of Business. To the greatest extent possible, a one bond portfolio with a term of approximately 20 years and a reasonably current coupon—whose returns did not reflect potential tax benefits, impaired negotiability, or special redemption or call privileges—was used each year. Where “flower” bonds (tenderable to the Treasury at par in payment of estate taxes) had to be used, the term of the bond was assumed to be a simple average of the maturity and the first call dates minus the current date. The bond was “held” for the calendar year and returns were computed.

The Small Cap performance used in this report sources the Ibbotson Small Company Stocks Index. The Small Company Stock return series is the total return achieved by the Dimensional Fund Advisors (DFA) Small Company 9/10 (for ninth and tenth deciles) Fund. The Fund invests in a broadly diversified cross section of small companies. Portfolios are fully invested: Dimensional keeps cash levels below 5%, and generally under 2%. Portfolio turnover averages 20-25% annually.

Ibbotson index performance is calculated by Consulting Group and Morgan Stanley Smith Barney using data provided by Morningstar. ©2011 Morningstar, Inc. All rights reserved. Used with permission. This information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information.

The illustrations in this report are hypothetical and do not reflect the results of any actual investment. The data do not reflect the material differences between stocks, bonds, bills and inflation, such as fees (including sales and management fees), expenses or tax consequences. Common stocks generally provide an opportunity for more capital appreciation than fixed income investments but are also subject to greater market fluctuations. Corporate bonds, US Treasury bills and US government bonds fluctuate in value but, if held to maturity, offer a fixed rate of return and a fixed principal value. Government securities are guaranteed as to the timely payment of interest and provide a guaranteed return of principal. The principal value and interest on treasury securities are guaranteed by the US government if held to maturity.

Past performance is not a guarantee of future results.

Statements of fact and data in this report have been obtained from, and are based upon, sources that the Firm believes to be reliable, we do not guarantee their accuracy, and any such information may be incomplete or condensed. All opinions included in this report constitute the Firm’s judgment as of the date of this report and are subject to change without notice. This report is for informational purposes only and is not intended as an offer or solicitation with respect to the purchase or sale of any security.

Diversification does not assure a profit or protect against loss.

Investing in the markets entails the risk of market volatility. The value of all types of investments may increase or decrease over varying time periods. Small capitalization companies may lack the financial resources, product diversification and competitive strengths of larger companies. In addition, the securities of small capitalization companies may not trade as readily as, and be subject to higher volatility than, those of larger, more established companies.

With respect to fixed income securities, please note that, in general, as prevailing interest rates rise, fixed income securities prices will fall.

© 2011 Morgan Stanley Smith Barney LLC, member SIPC. Consulting Group is a business of Morgan Stanley Smith Barney LLC.