

Game plan for managing investment market volatility

Gyrating markets can unnerve investors and shake the foundation of their long-term investment strategies. While volatility is an inevitable element of investing, markets have tended to reward those investors who don't get rattled during market declines and stick to a long-term investment strategy.

As we approach eight years of significant stock market gains, market volatility has begun to increase as a result of investor concerns about a fast-growing economy sparked by fiscal stimulus touching off inflation, which has been absent for the nine years of the post-crisis recovery. That could force the Federal Reserve to raise interest rates faster than planned. So what is a retirement investor to do?

1. Keep calm and carry on!

Don't let headlines drive your investment strategy. Resist the knee-jerk reaction to sell investments or time this market. Back in March 2009, the Standard & Poor's 500° Index (S&P 500°) was down 54%, but the market rebounded

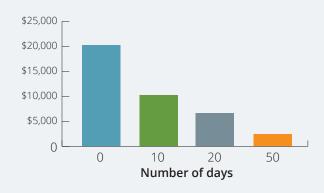
and delivered a historic bull rally. Retirement plans are inherently long-term investments. Short-term market volatility shouldn't change long-term saving or investing strategies. Retirement strategies should be based on an investor's personal situation, goals, risk tolerance and time horizon until retirement. It is natural to have swings in market pricing, both up and down. And keep in mind that volatility works in both directions, and it

keep in mind that volatility works in both directions, and it is upside volatility that generates strong returns. This is why investors can ill afford to exit the markets after a decline.

The largest upward movements in stock prices often occur off the bottom of market declines. The following chart illustrates the danger of missing the market's best days.

Missing the market's best days

(Initial investment of \$10,000)



A difference that matters

Staying invested over the past 10 years would have earned you **\$10,020** more than if you had missed the market's 10 best days.

BEST DAYS MISSED	VALUE OF \$10K INVESTMENT
> 0	\$20,242
> 10	\$10,222
> 20	\$6,674
> 50	\$2,484

Source: Bloomberg

This chart illustrates the value of a 10,000 investment in the S&P 500° made on December 31, 2006 assuming the investment remained invested the whole time (first bar) and then assuming the investor missed the market's 10, 20 and 50 best days, respectively.

FOR ILLUSTRATIVE PURPOSES ONLY. Past performance is not a guarantee or prediction of future results.

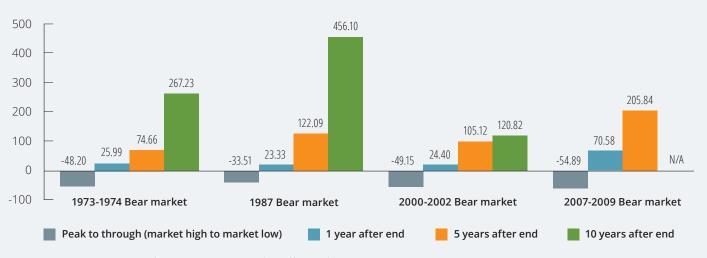






The following chart illustrates stock market recoveries from the trough of each of the last four bear markets

Cumulative total returns of the S&P 500° (%)



FOR ILLUSTRATIVE PURPOSES ONLY. Past performance is not a guarantee or prediction of future results.

Source: Standard & Poor's, a division of the McGraw-Hill Companies, Inc., GPW (Legg Mason international system) and Morningstar Direct™ as of 12/31/2016.

2. Control what you can control

Your actions, not the markets, have the greatest impact on whether or not you reach your retirement goals.

Maximize your contributions — that has the largest single effect on your retirement outcome. Now that the market has sold off, your periodic contributions buy more shares for the same dollar amount invested. Another thing you can control is your career. In the earlier stages of your retirement life cycle, human capital — the amount you earn and can thus contribute — is the primary driver of retirement success. Continue to hone your job skills, maximize your earnings potential and increase your contributions whenever possible. Lastly, control your emotions. **Avoid behavior that is hazardous to your wealth.** Selling investments after they have experienced significant declines can be the worst mistake most investors make next to not contributing enough to their retirement plans.

3. Consider utilizing professional management

Professionally managed retirement asset allocation solutions can help you navigate the turbulence and keep you from making poor decisions during times of market volatility.

Asset allocation funds

Target date and risk-based asset allocation funds provide a well-diversified solution that is focused on the longer-term goal of retirement.

A managed account may:

- · Help you better reach your retirement goals.
- Allow for the inclusion of non-core assets, such as real estate, commodities and alternative investments, which can perform well when other core assets are declining.
- Provide a more tailored and holistic approach to the attainment of your retirement goals by taking into consideration outside accounts and helping you optimize your overall investment mix given your specific goals.

Finally, the following retirement investing adage can help put market volatility into perspective whenever it occurs. Share prices were printed, as a courtesy, for investors who sold shares yesterday in order to buy a home, make a major purchase in retirement, etc. *Your* share price won't be printed for many years from now — when you reach your retirement goal.









S&P 500° Index is a registered trademark of Standard & Poor's Financial Services LLC, and is an unmanaged index considered indicative of the domestic Large-Cap equity market.

This material has been prepared for informational and educational purposes only. It is not intended to provide, and should not be relied upon for, investment, accounting, legal or tax advice. It is important to remember investing involves risk, including possible loss of principal and there is no guarantee by any party that participation in a managed account service will result in a profit or that the related account will outperform a self-managed portfolio invested without assistance.

The opinions expressed in this material represent the current, good-faith views of Great-West Capital Management, LLC and its portfolio managers, analysts, traders and other investment personnel at the time of publication and are provided for limited purposes, are not definitive investment advice and should not be relied on as such. The information presented in this report was developed internally and/ or obtained from sources believed to be reliable; however, GWCM does not guarantee the accuracy, adequacy or completeness of such information. Predictions, opinions and other information contained in this report are subject to change continually and without notice of any kind and may no longer be true after the date indicated.

Past performance, where discussed in this report, is not a guarantee of future results. As with any investment, there is a potential for profit as well as the possibility of loss. This material is neither an endorsement of any index or sector nor a solicitation to offer investment advice or sell products or services offered by GWCM or its affiliates.

A benchmark index is not actively managed, does not have a defined investment objective, and does not incur fees or expenses. Therefore, performance of a fund will generally be less than its benchmark index. You cannot invest directly in a benchmark index.

Great-West Financial®, Empower Retirement and Great-West Investments™ are the marketing names of Great-West Life & Annuity Insurance Company, Corporate Headquarters: Greenwood Village, CO; Great-West Life & Annuity Insurance Company of New York, Home Office: New York, NY, and their subsidiaries and affiliates, including registered investment advisers Advised Assets Group, LLC and Great-West Capital Management, LLC. ©2018 Great-West Life & Annuity Insurance Company. All rights reserved. ERMKT-FLY-8324-1802 AM420945-0218



