How rebalancing can help reduce volatility in your portfolio



Rebalancing Can Help You Weather Stormy Markets

If you are like many investors, headline-making market events like the Tech Bubble of 2000 and the Financial Crisis of 2008 may still be fresh in your mind and may even have an impact on the investment decisions you make today.

It's no surprise that dramatic occurrences such as these often lead investors to either stop investing altogether or jump in only when things "feel safe." However, having a properly diversified portfolio that can not only better weather both up and down markets, but help you stay invested in the most appropriate mix of investments, can be important when seeking long-term financial success.

One of the most important components of a disciplined investing plan is a strategy known as portfolio rebalancing. This practice can help you maintain a diversified portfolio that can better handle market volatility (up and down moves) while seeking to not compromise returns. Rebalancing a portfolio can also help make extreme downturns less painful which can, in turn, help you stay invested and ultimately meet your financial goals.

Diversification and/or asset allocation do not ensure a profit or protect against loss.

What is Rebalancing and Why is it Important?

Rebalancing is the practice of shifting, or reallocating, a portfolio's investments in an effort to maintain an appropriate mix of stocks, bonds, and cash that aligns with your long-term investment strategy.

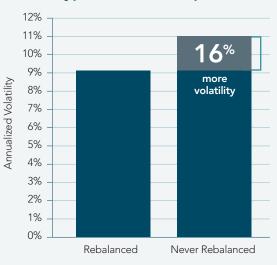
Rebalancing can often feel like the wrong thing to do because it can entail selling investments that have appreciated in value (often ones an investor would prefer to hold on to), and buying investments that are declining in value.

This practice can be difficult for many investors to do because they often have emotional attachments to their investments and may not want to sell them even when it is most appropriate to do so. But, by not rebalancing, a portfolio's investment mix typically veers out of line and becomes stock heavy, which may significantly increase risk.

On the other hand, a consistently rebalanced portfolio may have less risk than a nonrebalanced portfolio because it can help keep its exposure to riskier stocks in check. Based on our research, a nonrebalanced portfolio has 16% more volatility (or risk) than a rebalanced portfolio, even though it delivers the same performance.

Rebalancing Helps Reduce Volatility

Over the past 30 years, a portfolio that was bought and never rebalanced had 16% more annualized volatility and no additional return benefits than a rebalanced portfolio.



Hypothetical Example

For illustrative purposes only.

The 16% increase in volatility was determined using the following calculation:

(Never rebalanced – rebalanced)/rebalanced.

See Appendix A on page 6 for more information.

Source: FMRCo and Strategic Advisers, Inc., as of December 31, 2016.

Rebalancing in Action During the 2008 Market Downturn

Let's take a closer look at one extreme example of two hypothetical investors—one who rebalanced over time and one who never rebalanced. Each made an initial \$100,000 investment in a portfolio made up of 60% stocks and 40% bonds in January 1987. By November 2007, both hypothetical portfolios would have grown to approximately \$670,000. It's important to note that this particular outcome may not be repeated during future market downturns and, during certain market upswings, rebalancing has the potential to negatively affect a portfolio's returns.

Joe: The never rebalanced investorSarah: The rebalanced investorJoe bought and held his investments overSarah bought her portfolio at exactly the

30 years (he never rebalanced). Over time, his investment mix and risk level significantly changed along with markets.

During the bull market of March 2000, Joe's stock allocation rose well above its intended 60% stock allocation, reducing his bond allocation and making his portfolio more vulnerable to losses when the Financial Crisis of 2008 occurred.

Sarah bought her portfolio at exactly the same time as Joe, but with a key difference. She rebalanced it back to an asset allocation of 60% stocks and 40% bonds every quarter.

	Joe Never Rebalanced Portfolio	Sarah Rebalanced Portfolio	
Peak Equity Percentage	80%	64%	
Value Before the Crisis (Nov. 30, 2007)	Portfolio worth \$667,800	Portfolio worth \$672,900	
Value After the Crisis (Feb. 28, 2009)	Portfolio worth \$421,700	Portfolio worth \$456,100	
Value			

Difference

Sarah's rebalanced portfolio had a \$29,200 smaller drop.

Past performance is no guarantee of future results.

Methodology: Hypothetical monthly returns were created for a portfolio using a weighted average of the following indices and weights: Dow Jones U.S. Total Market Stock Index (42%), MSCI ACWI ex USA Index (Net MA Tax) (18%), Barclays U.S. Aggregate Bond Index (32%), and Barclays U.S. 3-Month Treasury Bellwethers Index (8%). For the never rebalanced portfolio, a hypothetical investment of \$100,000 was invested on January 1, 1987, at the initial weights of 42/18/32/8 percent (as above) with no withdrawals or contributions for a 30-year period through December 2016 and compounded monthly. Asset class mix was left untouched. For the rebalanced portfolio, a hypothetical investment of \$100,000 was invested on January 1, 1987, at the initial weights of 42/18/32/8 percent with no withdrawals or contributions for a 30-year period through December 2016 and compounded monthly. Asset class mix was rebalanced quarterly to 42/18/32/8 percent (as above) at the beginning of the months of January, April, July, and October from 1987–2016.

Dollar values stated in the example compare hypothetical value of each portfolio at the month-end of the dates specified.



Did you know?

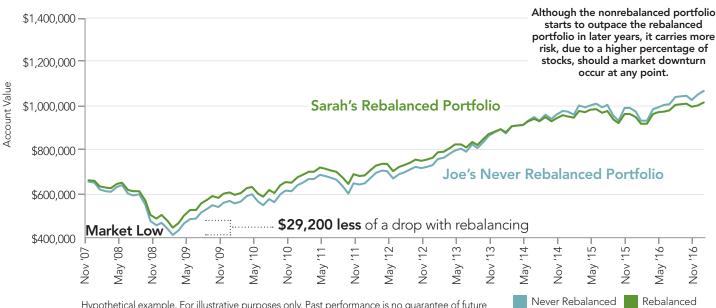
Investors withdrew \$234 billion from stock mutual funds during 2008* as the stock market declined following the Financial Crisis that began in 2007. Many of those investors missed out on the subsequent market recovery in 2009.

*Investment Company Fact Book, Investment Company Institute, 2010, pg. 26, http://www.ici.org/pdf/2010_factbook.pdf.

A Rebalanced Portfolio May Offer Less Risk During Extreme Market Drops

Even though Sarah's rebalanced portfolio lost money during the 2008 downturn, her drop in value was less severe than Joe's. In fact, she would have experienced \$29,200 less of a drop than Joe at the market's lowest point because her stock allocations (and risk) remained relatively in check. Sarah also experienced a higher overall balance than Joe over a majority of the eight-year time period.

Joe took on more risk in his portfolio and, had he exited the market at the bottom, he would have hampered his chances of reaching his financial goals. This chart shows one extreme example of the financial difference between a rebalanced and a nonrebalanced portfolio during a significant market downturn when stocks were especially hard hit. The difference in value may not always be as great during other market downturns. In addition, a rebalanced portfolio may not continue to deliver the same positive results as the markets start to recover and experience an upturn. A rebalanced portfolio's positive effects are typically most notable during an extreme market downturn.



Sarah's Rebalanced Portfolio Weathered the 2008 Financial Crisis Better

Hypothetical example. For illustrative purposes only. Past performance is no guarantee of future Never Rebalanced results. See Endnotes for additional information.

Actual performance results may vary, perhaps significantly, from the performance returns shown. Differences in account size, timing of transactions, and market conditions prevailing at the time of investment may lead to different results. Chart data is valid through December 31, 2016.

We Can Help:

At Fidelity, we believe regular rebalancing is a critical component of a successful long-term investment strategy because it can help you maintain a properly diversified portfolio, manage risk, and help you stay consistently invested through both up and down markets.

Consistently rebalancing a portfolio on your own, however, can be challenging and time consuming. That's why we offer a number of active money management strategies—such as professionally managed accounts¹ and target date investment solutions—that can help ensure your investment strategy remains disciplined and properly diversified.

For more information, please contact your Fidelity Representative at 800-544-9371.

Volatility and Return Comparisons

	Rebalance	Rebalanced Portfolio Never Rebalanced Portfolio		Volatility Increase (Never Rebalanced vs. Rebalanced)	Return Difference (Never Rebalanced minus Rebalanced)	
	Volatility	Return	Volatility	Return		
Last 20 Years	9.31%	6.53%	11.11%	6.76%	19.4%	0.23%
Last 30 Years	9.07%	8.09%	10.50%	8.27%	15.8%	0.18%

Source: FMRCo and Strategic Advisers, as of December 31, 2016.

The volatility and return calculations in this appendix—as well as in the hypothetical example of portfolio value through the 2008 financial crisis—were estimated using a hypothetical portfolio consisting of a 60% allocation to stocks and a 40% allocation to bonds and short-term investments, represented by the following market indexes and weightings:

Primary Asset Class	Market Index Name	Initial Index Weightings for 60% Stocks/40% bonds
Domestic Stocks	Dow Jones U.S. Total Market Index	42%
Foreign Stocks	MSCI ACWI ex USA Index (Net MA Tax)	18%
Bonds	Barclays U.S. Aggregate Bond Index	32%
Short Term	Barclays U.S. 3-Month Treasury Bellwethers Index	8%

The holdings of the Rebalanced portfolio were rebalanced on a quarterly basis back to the Initial Index Weightings for each Primary Asset Class. The holdings of the Never Rebalanced portfolio were never rebalanced. Volatility was calculated using the standard deviation, or historical measure of volatility, of the monthly returns for the respective portfolios over the time frame specified.

30-year annualized returns were calculated for each portfolio and the return difference was determined. 30-year annualized standard deviation was calculated for each portfolio and the return difference was calculated. Percent volatility increase is calculated by the difference between annualized standard deviations of each portfolio's returns and dividing by rebalanced portfolio's volatility.

Endnotes and Index Definitions

Past performance is no guarantee of future results.

Keep in mind that investing involves risk. The value of your investment will fluctuate over time and you may gain or lose money.

Diversification and/or asset allocation do not ensure a profit or protect against a loss.

All indexes are unmanaged and performance of the indexes includes reinvestment of dividends and interest income. Securities indexes are not subject to fees and expenses typically associated with managed accounts or investment funds. An investment cannot be made in an index.

Barclays U.S. Aggregate Bond Index: A broad-based, market value–weighted benchmark that measures the performance of the U.S. dollar–denominated, investment-grade, fixed-rate, taxable bond market. Sectors in the index include Treasuries, government-related and corporate securities, mortgage-backed securities (MBS) (agency fixed-rate and hybrid ARM pass-throughs), asset-backed securities (ABS), and commercial mortgage-backed securities (CMBS).

Barclays U.S. 3-Month Treasury Bellwether Index: A market value-weighted index of investment-grade fixed-rate public obligations of the U.S. Treasury, with maturities of three months, excluding zero coupon strips.

Dow Jones U.S. Total Stock Market Index: A float-adjusted market capitalization-weighted index of all equity securities of U.S.-headquartered companies with readily available price data.

The Morgan Stanley Capital International All-Country World Index (MSCI ACWI ex USA Index (Net MA Tax)) is a market capitalization–weighted index designed to measure the investable equity market performance for global investors of large- and mid-cap stocks in developed and emerging markets, excluding the U.S. Index returns are adjusted for tax-withholding rates applicable to U.S.-based mutual funds organized as Massachusetts business trusts.

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