benefits
MAGAZINE

When Fear of Re
Becomes Market
What Every Trustee Needs

A disciplined rebalancing policy can help employee benefit fund trustees effectively maximize the growth of a fund's investment portfolio and avoid costly investment mistakes resulting from investor emotion.

balancing Timing—
to Know

by | **Jennifer Mink**

"**B**uy low, sell high" is the most common piece of investment advice given to investors and, while the concept seems simple, the execution can be complicated. The strategy of *buying low* assumes that an investor knows when the price of a security has reached its bottom, while *selling high* presumes that a security has reached its peak price.

Both strategies inherently rely on market timing. Considering that security prices constantly fluctuate because of economic conditions, interest rates, business cycles, headlines, investor sentiment and any number of other factors, it is impossible for an investor to know when prices have peaked or bottomed until *after* it occurs, thus making this strategy impossible to execute with precision. Adding to the complexity, human nature can cause emotion to impede judgment, which can result in investors making the wrong decision at the wrong time for the wrong reason. If markets are trending higher, it can be easy to think (or hope) that an asset class or security price will continue to appreciate, thus increasing investment returns. In contrast, if markets are declining, it is natural for an investor to fear that circumstances will get far worse, thus magnifying losses.

The power of emotion and investor bias is well-documented in the study of behavioral finance, which argues that when making investment decisions, people are not nearly as rational as traditional finance theory predicts.[1] Emotion, including irrational fear, can lead investors astray from the proven approach of buying low and selling high, causing them to panic when markets decline and consequently sell low, only to watch markets eventually go up until they decide to buy back in, subsequently buying high. Furthermore, foolish hope or stubborn pride can sometimes compel investors not to sell their positions on the upside (*selling high*), causing more harm than good if markets reverse and subsequently decline.

A more practical approach to the buy low, sell high methodology is the implementation of a disciplined rebalancing policy. *Rebalancing,* which is the process of realigning the weightings of a portfolio of assets, involves periodically buying or selling assets in a portfolio to maintain an original or desired level of asset allocation or risk.[2] Rebalancing is crucial for the long-term success of an investment program; however, human nature can turn even the most prudent trustees into market timers, especially when markets dislocate.

Asset Allocation

Asset allocation is the process of strategically assigning capital to different asset classes to balance investment portfolio risk and return in pursuit of an investor's or employee benefit fund's goals and objectives.[3] Goals may include targeting a specific investment return (i.e., 7.25%), maintaining a certain liquidity profile and/or protecting principal. A clearly defined asset allocation strategy is critical to a fund's investment success. Studies have shown that asset allocation is responsible for as much as 90% of the total investment return of a portfolio—*not* stock picking or timing the market.[4]

An employee benefit fund's asset allocation strategy is typically included in the *investment policy statement,* which is a written document that provides the framework for the entire investment program. The policy should define the roles of the trustees, investment consultant and investment managers; outline permissible asset classes; and identify the target asset allocation and permitted ranges of the investment portfolio to reach the desired goal. Because markets fluctuate, the asset allocation of an investment portfolio does not remain static. In fact, the percentage allocation to each asset class increases or decreases daily as markets are traded around the world. To account for these market movements, the policy should establish a flexible process for rebalancing the asset allocation.

Rebalancing Policy

A clearly defined rebalancing policy should classify how the asset allocation will be monitored, identify specific triggers to initiate rebalancing and address the frequency for rebalancing.

Ranges

Once the target asset allocation has been determined, the policy should establish high and low ranges for each asset class—essentially creating a ceiling and floor around the target allocation. Ranges help ensure that the investment portfolio maintains consistency with long-term goals while allowing flexibility due to market movements. This allows allocations to asset classes that are appreciating in value to increase in size while preventing asset classes that may be depreciating in value and size from being eliminated from the portfolio.

Ranges of plus and minus 5-10% for an asset class are practical for funds that use *3(21) investment consulting services,*[5] wherein an investment consultant does not have discretion over the assets and periodically (typically quarterly) makes recommendations to the board of trustees. Wider ranges may dramatically alter the allocation from the target over time, increasing risk and potentially affecting investment returns, especially during significant market events.

If a fund uses *3(38) consulting services,*[6] which grant the investment consultant discretion over the assets, allocation ranges tend to be wider to allow the consultant flexibility to strategically over- or underweight allocations. Regardless of the type of consulting services utilized, or if a fund chooses not to retain an investment consultant, the ranges should be reasonable relative to the fund's investment goal.

Establishing allocation ranges also helps eliminate the emotional bias that can often influence investment decisions by creating a framework to implement the buy low, sell high methodology. Ranges permit a fund the flexibility to increase its allocations to asset classes that are appreciating, but they ultimately force an investor to sell high once the upper end of the range is approached or reached. Similarly, by constituting a floor to an allocation range, investors have an opportunity to buy low by allocating additional money to an asset class that has not appreciated as much as others.

Since the concept of reducing the asset or asset class that is making money and buying what is not in favor can be contrarian to many investors, instituting an allocation range helps provide an investor increased flexibility with rebalancing decisions. Whether increasing (buying) or trimming (selling) an allocation, investors can opt to rebalance all the way back to target or anywhere within the policy range. A strategic overweight or underweight may depend on market conditions, liquidity of the asset class, or the fund's cash flow needs and risk tolerance. Ranges also provide the opportunity for a fund to

takeaways

- Investor emotion, including irrational fear, can lead investors astray from the proven approach of buying low and selling high.

- The same way that fears of market losses can prevent employee benefit fund trustees from buying into a down market, euphoria from making money can inhibit them from selling in an up market.

- A rebalancing policy can help employee benefit funds avoid emotional biases and irrational decision making and should specify how the asset allocation will be monitored, identify specific triggers to initiate rebalancing and address the frequency for rebalancing.

- Rebalancing plays a critical role in the short- and long-term success of an investment portfolio.

- Most experts believe that market timing with precision is impossible.

dollar-cost average[7] to reduce the emotional component when rebalancing in extreme market conditions, such as during the early stages of the 2020 COVID-19 pandemic.

Monitoring

There is no industry standard for the frequency of monitoring asset allocation, but allocations are generally evaluated quarterly or sometimes monthly. While frequent rebalancing can limit growth opportunities in an up market, it also provides a manageable approach to limiting risk in a down market. In contrast, although infrequent rebalancing can result in outsized returns in an up market, it can also result in skewed asset allocation, increased portfolio risk and potential opportunity cost for a fund.

As a rule of thumb, monitoring allocations and rebalancing more often than monthly is too frequent (and can increase trading costs)[8] while waiting longer than semiannually to monitor and rebalance is not frequent enough. In addition, if a fund utilizes alternative investments, it may not be possible to immediately rebalance back to target or within allowable ranges due to the less liquid nature and valuation polices of most alternatives; therefore, flexibility is needed.

Depending on the fund, the rebalancing policy can either be broad or well-defined.

- A broad statement might say: "Allocations will be monitored on an ongoing basis in accordance with the asset allocation targets and ranges and rebalanced as needed."

TABLE I

Impact of Rebalancing for a Hypothetical $100 Million Fund Following the 2020 Market Decline
(From date of rebalancing through December 31, 2020)

	Rebalancing Date						
	March 23, 2020	April 1, 2020	May 1, 2020	June 1, 2020	July 1, 2020	August 1, 2020	September 1, 2020
Global Equity: MSCI ACWI Index Return	68%	52%	35%	26%	23%	17%	10%
U.S. Bonds: Bloomberg Barclays Aggregate Index Return	6%	4%	3%	2%	1%	0%	0%
Return on Rebalancing Action Taken*	**62%**	**48%**	**33%**	**24%**	**21%**	**17%**	**9%**
Impact of Reallocating 2.5% ($2.5 Million) From U.S. Bonds to Global Equity	$1,540,000	$1,200,000	$812,500	$592,500	$532,500	$432,500	$235,000
Impact on Total Fund Performance	1.54%	1.20%	0.81%	0.59%	0.53%	0.43%	0.24%

**Return on rebalancing action taken* calculates the return generated on actual dollars rebalanced over the specified time period.

- A more detailed statement might include frequency and triggers: "Allocations will be monitored on a quarterly basis in accordance with the asset allocation targets and ranges. Rebalancing will be initiated when policy range thresholds are reached."
- A statement that seeks to eliminate emotional bias might say: "If the asset allocation exceeds the high or low end of the policy range by 2.5% or more, monthly rebalancing will be initiated until the allocation reaches target."

Monitoring asset allocation is typically the responsibility of the investment consultant, but initiating the rebalancing within 3(21) consulting services is the responsibility of the trustees. While the consultant makes recommendations regarding rebalancing, the trustees can choose to accept, reject or modify those actions.

Rebalancing Strategies

The impact of a prudent rebalancing strategy versus emotional market timing can be exemplified by when and how a fund rebalances.

Consider the impact of the COVID-19 pandemic in the first quarter of 2020. The S&P 500 index peaked in mid-February before beginning a 34% descent over the next 23 trading days. By March 31, 2020, the index was "only" down 19.6%.

Although dislocations like this cause investor uncertainty, that uncertainty creates security mispricing and potential investment opportunities. Asset class allocations with +/- 5% policy ranges may not have breached the upper or lower ranges by the end of the first quarter of 2020, but equity investments were certainly below target, offering ample opportunity for funds to rebalance fixed income allocations (sell high) in favor of equities (buy low).

By simplifying the rebalancing action to just two liquid asset classes (stocks and bonds), it is easy to see how delays in the timing of a rebalancing strategy may create significant opportunity cost[9] for investors.

Table I assumes that a $100 million fund elects to rebalance $2.5 million from bonds to stocks. If the rebalancing occurred at the bottom of the market on March 23, 2020 (perfect market timing!), based on index returns through year-end, the fund would have earned an additional 1.54% in return and $1.5 million by December 31, 2020 because of that single rebalancing action. The return on the rebalancing action ($2.5 million earns $1.5 million) represents a 62% gain in less than ten months.

If the fund took the same action of rebalancing $2.5 million from bonds to stocks one week later, on April 1, 2020 (the beginning of the second quarter), it would have earned an

TABLE II

Impact of 2008-09 Global Financial Crisis on Hypothetical $100 Million Benefit Fund

Asset Allocation	As of January, 2008			As of March 30, 2009			
	Policy (%)	Policy ($)	Ranges	Allocation (%)	Allocation ($)	Difference (%)	Difference ($)
U.S. Large Cap Equity (S&P 500 Index)	35%	$35,000,000	30-40%	28.81%	$19,622,591	-6.2%	($4,217,416)
US Small/Mid Cap Equity (Russell 2500 Index)	15%	$15,000,000	10-20%	12.33%	$8,397,825	-2.7%	($1,819,321)
International Equity (MSCI-EAFE Index)	10%	$10,000,000	5-15%	7.15%	$4,873,043	-2.8%	($1,938,388)
Investment Grade Bonds (Bloomberg Barclays—U.S. Gov't/Credit Intermediate Index)	15%	$15,000,000	10-20%	23.13%	$15,753,381	8.1%	$5,536,235
High Yield Bonds (Bloomberg Barclays—U.S. High Yield Index)	10%	$10,000,000	5-15%	11.49%	$7,826,132	1.5%	$1,014,701
Real Estate (NCREIF-NFI-ODCE Index)	15%	$15,000,000	10-20%	17.09%	$11,641,334	2.1%	$1,424,188
	100%	$100,000,000		100%	$68,114,306		

*Return on rebalancing action taken calculates the return generated on actual dollars rebalanced over the specified time period.

additional 1.2% in total return and $1.2 million in assets by year-end, representing a 48% return (in nine months!) on the rebalancing action alone. The longer the fund waited to rebalance, the less impact the rebalancing action would have in terms of total return and dollars made, both of which are crucial to achieving assumption rates and paying benefits promised. If the board of trustees waited six months, the opportunity to capitalize from rebalancing would have significantly eroded. Table I also illustrates the value of a dollar-cost averaging rebalancing strategy. A fund that elected to rebalance the $2.5 million from bonds to stocks in smaller amounts consistently each month for six months beginning in April 2020 would have benefited far more than a fund that took no rebalancing action for six months due to fear and uncertainty.

Considering that the U.S. stock market bottomed on March 23, 2020, calendar year 2020 is a good example of how the stock market tends to be a forward-looking indicator of future economic conditions. As economies started to close in mid-March, followed by shelter-in-place mandates immediately thereafter, the stock market had already begun its rebound at the same time as many investors began to panic. Funds that were proactive, stayed on course and initiated rebalancing at the end of March/beginning of April were certainly rewarded. By April 30, 2020, the S&P returned 12.82% for the month and was up 20.54% for the quarter ending June 30, 2020.

Buying Low

Consider a hypothetical investment portfolio with $100 million on January 1, 2008 with the asset allocation policy illustrated in Table II.

Table II shows the impact of the 2008-09 global financial crisis and the resulting stock market declines on the hypothetical fund's asset allocation.

As of March 31, 2009, the hypothetical fund lost more than $30 million in asset value in five quarters. The difference (%) column illustrates how severe stock declines caused the equity allocations to fall below target and breach the low end of the large cap range. Conversely, investment grade bonds—the only asset class to produce a positive return in 2008—exceeded the high end of the policy range.

Dislocation events, such as severe market downturns, often present ideal opportunities to buy low and sell high if investors are disciplined enough to adhere to their rebalancing policy and prevent emotion-based bias to influence their decision making.

The difference ($) column highlights the actual dollar amounts needed

to rebalance the allocations back to policy. Rebalancing for this example includes selling $6.5 million of bonds ($5.5 million investment grade and $1 million high yield) and investing in equities with $4.0 million to U.S. large cap, $1.25 million to small/mid cap and $1.25 million to international on April 1, 2009.

Figure 1 illustrates the long-term disparity in market value of the rebalanced portfolio versus the portfolio with no rebalancing action.

Based on actual market returns, the trustees' decision to rebalance $6.5 million resulted in an additional $2.5 million in value after 12 months compared with taking no rebalancing action. This equates to a nearly 40% return on that rebalancing action. Carrying that analysis forward five years, the total fund market value differential between the rebalanced portfolio versus the portfolio with no rebalancing action taken is $9.2 million, based on actual market returns over that period. Astonishingly, ten years after rebalancing, the fund has an additional $25.0 million in assets resulting in a 398% cumulative return on the $6.5 million rebalanced a decade earlier.

Selling High

The same way that fears of market losses can prevent trustees from buying into a down market, investor euphoria from making money can inhibit them from selling in an up market.

Although equity markets constantly move up and down, statistically, since its inception in 1926, the S&P 500 index has had positive returns for 70 calendar years and negative returns for 25 years.[10] With a 74% winning percentage, it's easy to see

FIGURE 1

Impact of Portfolio Rebalancing on Total Value of Hypothetical Benefit Fund
(in millions)
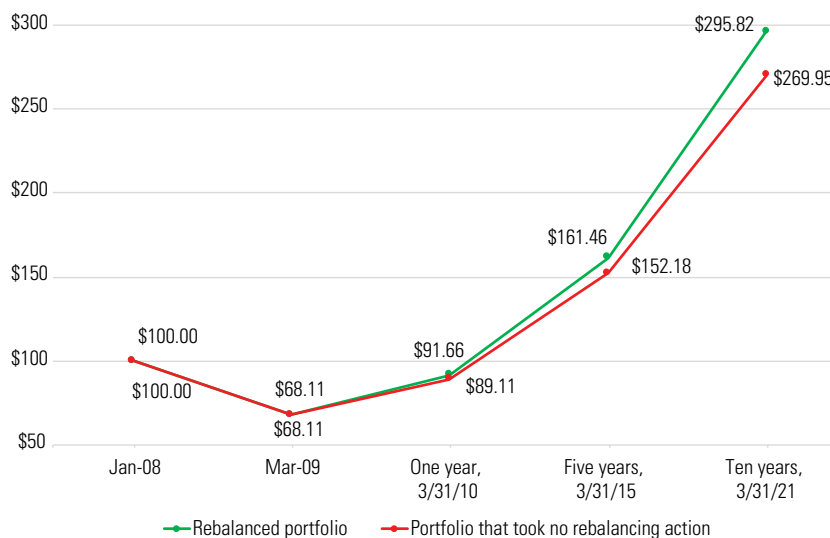
why investors hold onto their winners longer.

Consider a hypothetical $100 million investment portfolio with the asset allocation policy illustrated in Table III as of July 1, 2010. Analyzing the one-year period beginning July 1, 2010, global markets were moving higher as the S&P 500 index and the MSCI EAFE index both posted positive returns for each of the four quarters during that 12-month period. The total market value of the fund increased substantially, resulting in the equity allocations breaching the high end of the target range as of June 30, 2011, as illustrated by the difference (%) in Table III. A fund strictly adhering to a rebalancing policy may fully rebalance allocations at the end of the quarter, while a fund hesitant to sell equities in such a hot market may elect to rebalance halfway to target and maintain an equity over-

weight. In both instances, equities are sold, and the fixed income and real estate allocations are rebalanced closer to policy.

To illustrate how unpredictable markets can be in the short term, the equity market experienced a double-digit correction in the quarter ending September 30, 2011 immediately following the rebalancing action.

Table IV illustrates the impact of prudent rebalancing by selling high and rebalancing gains before the market does it for you. While the total fund return was negative for the quarter and the total market value of assets declined from $122.2 million as of the end of June 2011 for all scenarios, the losses incurred in the rebalanced portfolios were significantly less than if the trustees had elected not to rebalance at all. Both rebalancing scenarios helped ensure that the fund lost less money, which means it

TABLE III

Rebalancing Action Taken Following 2010-2011 Market Run for Hypothetical $100 Million Benefit Fund

Asset Allocation	As of July 1, 2010			As of June 30, 2011				Potential Action Taken July 1, 2011	
	Policy (%)	Policy ($)	Ranges	Allocation (%)	Allocation ($)	Difference (%)	Difference ($)	Full rebalance	Rebalance halfway
U.S. Large Cap Equity	25%	$25,000,000	20-30%	32.09%	$39,207,497	7.1%	$8,665,574	($8,665,574)	($5,500,000)
U.S. Small/ Mid Cap Equity	10%	$10,000,000	5-10%	17.10%	$20,891,986	7.1%	$8,675,217	($8,675,217)	($5,500,000)
International Equity	10%	$10,000,000	5-10%	10.67%	$13,035,749	0.7%	$818,980	($818,980)	$0
Investment Grade Bonds	30%	$30,000,000	25-35%	25.48%	$31,131,957	-4.5%	($5,518,350)	$5,518,350	$4,000,000
Real Estate	25%	$25,000,000	20-30%	14.65%	$17,900,502	-10.3%	($12,641,421)	$12,641,421	$7,000,000
	100%	$100,000,000		100%	$122,167,691				

had more money available to compound and grow when markets recovered.

Why Market Timing Is Difficult

While it may be easier to understand or relate to emotional biases such as overconfidence or loss aversion[11] as they relate to rebalancing impediments, perhaps the most extreme emotional behavior for trustees is that of *self-control bias,* which is a lack self-discipline that can impede long-term goals. Unfortunately, behavior such as this can, and does, occur, resulting in serious implications on the long-term investment success of a fund.

When extreme market conditions occur, such as the 2008-09 global financial crisis, trustees may become irrational and attempt to time the market and/or suddenly change the investment policy rather than adhere to the fund's rebalancing policy.

Figure 2 easily illustrates the commonly held view that market timing

does not work. Each square depicts a different asset class and a corresponding index return in a calendar year. The best performing asset class each year is listed at the top of the column, and all other asset classes are listed beneath in descending order of return for that year. The worst performing asset class each year is at the bottom. The chart, also referred to as a *performance quilt,* has no discernible pattern as the colors change from top to bottom and bottom to top from year to year. There is

no way to predict (other than sheer luck) which asset class will be the best and which will be the worst. While the "quilt" illustrates how difficult it is for an investor to market time, it also reinforces the importance of rebalancing investment portfolios. By selling the asset classes that continue to appreciate (upper rows) and investing in the asset classes that have depreciated in value (bottom rows), investors better position their portfolios to protect capital on the downside as the top row asset

TABLE IV

Total Fund Impact of Rebalancing Actions Following Third-Quarter 2011 Market Correction
(As of October 1, 2011)

	Full Rebalancing	Halfway to Policy	No Rebalancing
Total fund value after downturn	$114,896,075	$113,406,244	$111,151,067
Total fund third-quarter 2011 return	-5.95%	-7.17%	-9.02%
Losses avoided as a result of rebalancing action	$3,745,007	$2,255,176	$0

FIGURE 2

Asset Allocation Performance Quilt

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Fx Inc 5.2%	EM Equity 78.5%	Small Cap 26.9%	RE 15.0%	EM Equity 18.2%	Small Cap 38.8%	Large Cap 13.7%	RE 14.2%	Small Cap 21.3%	EM 37.3%	RE 7.3%	Large Cap 31.5%	Small Cap 20.0%
RE -11.1%	HY 57.5%	Mid Cap 25.5%	Fx Inc 7.8%	Int'l 17.3%	Mid Cap 34.8%	Mid Cap 13.2%	Large Cap 1.4%	HY 17.5%	Int'l 25.0%	SD HY 1.4%	Mid Cap 30.5%	Large Cap 18.4%
SD HY -14.0%	Mid Cap 40.5%	EM Equity 18.9%	HY 4.4%	Mid Cap 17.3%	Large Cap 32.4%	RE 11.4%	SD HY 1.2%	Mid Cap 13.8%	Large Cap 21.8%	Fx Inc 0.0%	Small Cap 25.5%	EM 18.3%
HFoF -21.4%	SD HY 36.1%	HY 15.2%	SD HY 4.4%	Small Cap 16.3%	Int'l 22.8%	Fx Inc 6.0%	Fx Inc 0.6%	Large Cap 12.0%	Mid Cap 18.5%	HY -2.3%	Int'l 22.0%	Mid Cap 17.1%
GTAA -25.4%	Int'l 31.8%	RE 15.1%	Large Cap 2.1%	Large Cap 16.1%	GTAA 15.3%	Small Cap 4.9%	HFoF -0.3%	EM 11.2%	GTAA 17.0%	HFoF -4.0%	GTAA 19.8%	GTAA 15.2%
HY -26.4%	Small Cap 27.2%	Large Cap 15.1%	GTAA -0.9%	HY 15.6%	RE 12.4%	HFoF 3.4%	Int'l -0.8%	SD HY 8.5%	Small Cap 14.7%	Large Cap -4.4%	EM 18.4%	HFoF 10.3%
Small Cap -33.8%	Large Cap 26.5%	SD HY 11.7%	Mid Cap -1.6%	GTAA 10.9%	HFoF 9.0%	GTAA 3.0%	GTAA -1.6%	RE 8.4%	HFoF 7.8%	GTAA -5.7%	HY 14.4%	Int'l 7.8%
Large Cap -37.0%	GTAA 20.1%	GTAA 9.8%	Small Cap -4.2%	SD HY 10.2%	HY 7.4%	HY 2.5%	Mid Cap -2.4%	GTAA 5.6%	HY 7.5%	Mid Cap -9.1%	Fx Inc 8.7%	Fx Inc 7.5%
Mid Cap -41.5%	HFoF 11.5%	Int'l 7.8%	HFoF -5.7%	RE 9.9%	SD HY 5.6%	SD HY 1.9%	Small Cap -4.4%	Fx Inc 2.7%	RE 6.9%	Small Cap -11.0%	SD HY 8.7%	HY 6.2%
Int'l -43.4%	Fx Inc 5.9%	Fx Inc 6.5%	Int'l -12.1%	HFoF 4.8%	Fx Inc -2.0%	EM Equity -2.2%	HY -4.6%	Int'l 1.0%	SD HY 3.6%	Int'l -13.8%	HFoF 8.4%	SD HY 5.4%
EM Equity -53.3%	RE -31.3%	HFoF 5.7%	EM Equity -18.4%	Fx Inc 4.2%	EM Equity -2.6%	Int'l -4.9%	EM Equity -14.9%	HFoF 0.5%	Fx Inc 3.5%	EM -14.6%	RE 5.2%	RE 0.8%

Emerging Markets = MSCI EM Index

Fixed Income = Barclays Aggregate Index

Global Tactical Asset Allocation = 65% MSCI World Equity/ 35% Citi World Government Bond Index

Hedge Fund of Funds = HFRI ROF Index

High Yield = Merrill Lynch High Yield Master II Index

International Equity = MSCI EAFE Index

Large Cap Equity = S&P 500 Index

Mid Cap Equity = Russell Midcap Index

Real Estate = NCREIF ODCE Index

Short Duration High Yield = ML High Yield Cash Pay 1-3 Year BB Index. Index inception date was January 1, 2005.

Small Cap Equity = Russell 2000 Index

classes from one year drop to the bottom row the next. Reinvesting in the bottom row asset classes helps one year's "losers" have more money available to compound as they appreciate in value and move up and become top row "winners" the next.

In Summary

Rebalancing plays a critical role in the short- and long-term investment success of a fund. Trustees should carefully consider their asset allocation strategy and discuss the appropriate rebalancing policy that suits their fund's needs.

Markets will continue to fluctuate and, if history tells us anything, there will be periods of extreme market volatility in the years ahead. Having a policy and process that includes asset allocation targets and ranges can help trustees effectively execute rebalancing free of emotional bias and help prevent active market timing, especially in extreme market highs and lows. Getting out of the market is easy, but trying to decide when to get back in—That is the difficult part. A disciplined rebalancing policy provides a path for trustees to systematically buy low and sell high, thus decreasing investor emotion and increasing the likelihood of long-term investment success. 🅑

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Endnotes

1. "What Is Behavioral Finance?" www.investopedia.com/terms/b/behavioralfinance.asp.
2. "Rebalancing," www.investopedia.com/terms/r/rebalancing.asp.
3. "Asset Allocation," www.investopedia.com/terms/a/assetallocation.asp.
4. "The Only Thing That Matters in Investing: Asset Allocation," www.thecollegeinvestor.com.
5. See www.nipa.org (National Institute of Pension Administration) Employee Retirement Income Security Act (ERISA). A Section 3(21) investment fiduciary is a paid professional who provides investment recommendations to the plan sponsor/trustee. The plan sponsor/trustee retains the ultimate decision-making authority for the investments and may accept or reject the recommendations.
6. See www.nipa.org. ERISA Section 3(38) investment manager has full fiduciary responsibility to its investment decisions, subject to the terms of the plan documents and its investment policy statement.
7. See www.investopedia.com/terms/d/dollarcostaveraging.asp. *Dollar-cost averaging* is an investment strategy in which an investor splits the total amount to be invested across periodic purchases of a target asset class to reduce the impact of volatility in trying to time the market to make the purchase at the best prices.
8. See www.nasdaq.com/glossary/t/trading-costs. Trading costs include all commissions and other expenses related to trading securities.
9. See www.investopedia.com/terms/o/opportunitycost.asp. *Opportunity cost* represents the potential benefits an investor misses out on when choosing one alternative over another.
10. Steve Vernon, "S&P 500's Impressive Rate of Return Score: 70-25," *Forbes,* January 14, 2021. https://www.forbes.com/sites/stevevernon/2021/01/14/sp-500s-impressive-rate-of-return-score-70-25.
11. See www.investopedia.com/terms/l/loss-psychology.asp. *Loss aversion* refers to an individual's tendency to prefer avoiding losses to acquiring gains.

bio

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