HOW INVESTORS CAN TAKE CONTROL OF MARKET VOLATILITY

CUNA MUTUAL GROUP

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Executive Summary

This analysis explores market volatility, including terminology and historical context, as well as its impact on retirement portfolios and investor psychology. It presents the concept of sequence of returns risk and provides examples of how severe downside volatility in the initial phase of retirement can impact outcomes. It concludes with a discussion of alternatives, such as risk control annuities, that can provide investors with a measure of control in unpredictable markets and help them roll with the volatility punches.

Introduction

"Volatility." It's one of those words that in a strict technical sense is neutral, but nonetheless gets a bad rap.

Car fired right up this morning? That's because the stuff in the tank is volatile. The 401(k) account doubled over the last decade? That, too, was volatility in action.

Volatility can be good or bad, but for most people, the connotations of volatility are negative—especially when it comes to financial markets. The term suggests flashing red numbers, downward sloping charts, or 1929 black-and-white pictures of Wall Streeters who have lost everything.

Above all, volatility invokes the feeling of not being in control, and that's not a feeling most investors particularly enjoy.

But volatility cannot be avoided. And with the current bull market celebrating its 10th birthday last month, some experts are predicting a period of increased volatility ahead. To make matters worse, with the long bull run in equities—a mostly slow and steady bull market notable for its low volatility—many investors may have forgotten what volatility feels like.

Now may be a good time for advisors and individual investors alike to get ready for the possibility of greater volatility in the following ways:

I. **Brushing up on the language of volatility;**

II. **Gaining some historical perspective;**

III. **Reflecting upon why investors often respond to volatility in counterproductive ways; and**

IV. **Learning about some of the tools that are available to control volatility's impact on retirement savings.**

No amount of preparation can completely eliminate the anxiety that comes with market gyrations, but with a little knowledge and advance planning, market participants will be better equipped to stay on course through any storms that may come their way.

I. The Vocabulary of Volatility

In the summer of 2018—August 22, to be precise—much of the financial media collectively declared the current bull market to be the longest on record. Some purists, however, pushed back. According to one Forbes Magazine columnist, who cites FINRA's definition of a bull market and refuses to round up the 19.9% stock market drop in the third quarter of 1990 to 20%, "The longest run belongs to the 12.5 year period running from October 1987 through March 2000. The current bull market, which started in 2009, will need to run through 2021 to break that record."[1]

Clearly the definitions of many market terms are the subject of intense debate, but it is nonetheless useful for advisors and investors to brush up on their volatility vocabulary. In that spirit, following are some of the common volatility-related terms and their broad definitions:

BEAR MARKET – A decline of 20% or more in a stock index over at least a two-month period.

BULL MARKET – A period during which stocks keep going up without falling more than 20%.

DEPRESSION – A severe and prolonged downturn in economic activity commonly defined as an extreme recession that lasts two or more years.

DRAWDOWN – A peak-to-trough decline during a specific period for a security or market index. A drawdown is typically quoted as the percentage between the peak and the subsequent trough.

RALLY – A sustained upward trend in prices, which can occur in either a bull or bear market.

RECESSION – A period of temporary economic decline during which trade and industrial activity are reduced, generally identified by a fall in GDP in two successive quarters.

VIX – Also known as "The Fear Index," the CBOE Volatility Index is a popular measure of the stock market's expectation of volatility implied by S&P 500 index options.

VOLATILITY – The rate at which the price of a security or market index increases or decreases for a given set of returns. Volatility is measured by calculating the standard deviation of the annualized returns over a given period.

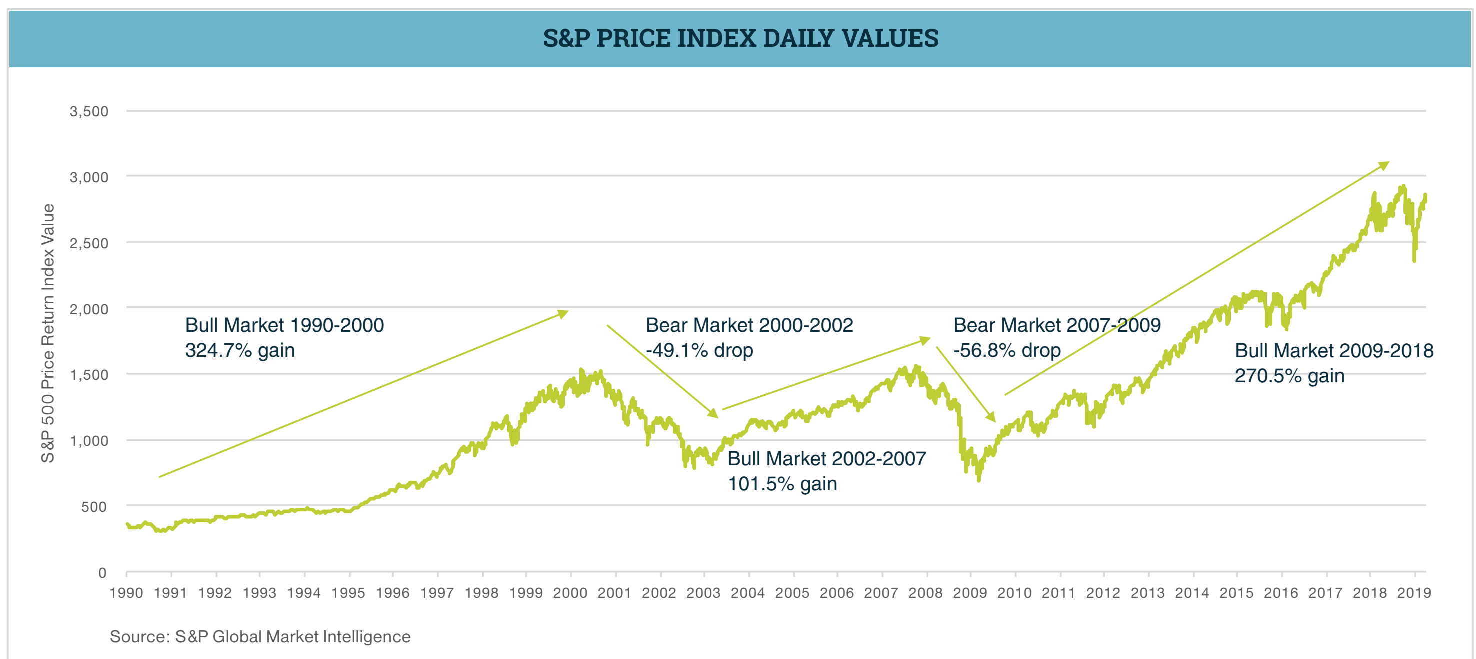
WHIPSAW – The sudden movement of a security in the opposite direction. Whipsaw patterns notably occur most often in volatile markets and can be a source of pain for fearful investors who may rush to sell in a fast-declining market only to watch it "whipsaw" back.

Wall Street certainly has its share of superstitions, including never bringing a red pen onto the trading floor and selling if an AFC team wins the Super Bowl. But there is no taboo against talking about volatility, and perhaps, as the old saying goes, being unafraid to say the name of something can give one some measure of power over it.

II. A Brief History of Market Volatility

A little informed historical perspective also can help take the edge off volatility. It was big news in early 2018 when the Dow Jones Industrial Average suffered its largest one-day point loss ever. "Dow plunges 1,175 points in wild trading session" was the breathless headline on CNBC.[2] However, market veterans knew that because the market had grown so large, the February 5, 2018 selloff, in percentage terms, didn't even register in the top 20.[3] For some perspective, the entire Dow peaked at 382 points shortly before the market crash of October 1929, so purely on a points basis, the February 2018 selloff would have wiped out virtually the entire U.S. stock market of the day three times over![4]

Obviously, point declines don't tell the whole story. In apples-to-apples terms, the crash of 1929 still represents the most apocalyptic stock market event in modern financial history. But the much more recent Great Recession and bursting of the dot.com bubble in 2000 were no cakewalk. The most recent Great Recession was a bear market that began in 2008 and saw a -56.8% total drop in stocks in less than 1.5 years. Equally notable, the bursting of the dot.com bubble in 2000 led to a -49.1% drop in stocks in a little over 2.5 years. Chart 1 shows the values of the S&P 500 Price Index since 1990 with bull and bear markets highlighted along with the cumulative gains or losses during those periods.



U.S. bull markets since 1990 have included the late '90s dot.com bubble and the current expansion, which followed the Great Recession and has been characterized—and some say driven—by massive central bank liquidity injections and more recently, expansionary government fiscal policy.

IN HISTORICAL TERMS, THIS CURRENT BULL IS REMARKABLY DOCILE

Not all bull markets are volatile. If the current one had a name, it might appropriately be dubbed "Ferdinand." Like the flower-loving bull in the children's book, the current rally has been remarkably calm, especially in the latter stages.

From 1990 to 2011, the Standard & Poor's 500 posted an average annual gain of 7.6%, while the average daily close of the VIX Volatility Index during the same period was 20.6%. On the other hand, in the following seven years, from 2011 to 2018, the average annual gain for the S&P 500 was 10.9%, while the daily VIX average was just 15.2%.[5,6]

With the longevity and relative calm of the current bull market, it would be understandable if **investors have grown accustomed to slow steady gains and perhaps forgotten what market anxiety feels like. But they would do well to remember that the current environment is not the norm**.

LOOKING AT THE BIG PICTURE

One important takeaway that is obvious from looking at the chart of **bull and bear markets is that bull markets tend to be both longer and more powerful than bears**. The average bull market since 1990 lasted 8.3 years with an average cumulative total return of 232%. The average bear market, on the other hand, lasted only 2.0 years with an average cumulative loss of 53%.[7]

For years, investors have been coached to take a long view and encouraged to invest a healthy portion of their nest eggs in equities because of their relative outperformance versus bonds over long periods of time. The fundamental wisdom of that advice is borne out by the chart, which shows nearly every bear market being followed by a relatively more powerful rally.

A CLOSER LOOK AT THE BIG PICTURE AND SEQUENCE OF RETURNS RISK

The chart, however, also illustrates the potential risk to individual savers whose retirement windows fall at a discrete and totally random period on the timeline—sometimes when the market is marching higher—and sometimes when it is falling. **While the impact of the sequence of annual returns on an investment makes no difference over time if the assets are not touched, it can have a big effect if the investor is taking distributions** along the way.

UNHAPPY RETURNS

Beginning Balance		$100,000
Annual Withdrawal		$5,000
	Trish's Annual Return	Roberto's Annual Return
Year 1	12%	7%
Year 2	11%	2%
Year 3	8%	-3%
Year 4	9%	-11%
Year 5	8%	-12%
Year 6	7%	2%
Year 7	5%	4%
Year 8	4%	4%
Year 9	4%	5%
Year 10	2%	7%
Year 11	-12%	8%
Year 12	-11%	9%
Year 13	-3%	8%
Year 14	2%	11%
Year 15	7%	12%
Ending Balance	**$83,955**	**$46,395**

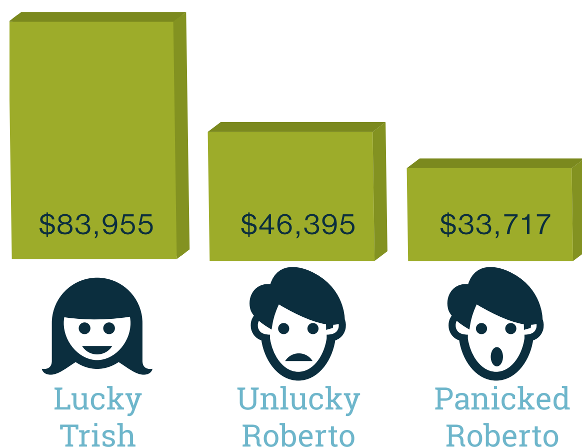
The table starkly illustrates this sequence of returns risk—the risk that the market is on a downswing when an investor transitions from wealth accumulation to wealth distribution—and how it can impact retirement outcomes. It shows the beginning and ending balance for two hypothetical retirees, Trish and Roberto. Both start out with $100,000 in their nest eggs allocated to stocks and bonds. Both make annual

withdrawals of $5,000. Trish, however, begins making withdrawals while the market is rising. Despite a bear market after Year 10, she has nearly $84,000 left in her account after 15 years.

Roberto's 15 years of returns are exactly the same as Trish's, and if neither of them were drawing money out of their savings, their ending balances would be identical. But they are making withdrawals, and Roberto's annual returns occur in the opposite order of Trish's. That means he encounters the same downturn that Trish experienced in Year 11 just three years into his retirement window. As a result, the impact of his annual withdrawals on the size of his principal in the early years is relatively more severe, and despite the subsequent bull market, Roberto's portfolio never fully recovers. After 15 years, he has $46,000 left in his account, a little more than half of what Trish has.

III. The Psychic Toll of Volatility

For poor Roberto in the sequence of returns example, perhaps the only thing worse than beginning to tap his retirement account just when the market was about to take a leg down would have been to panic after it did so.

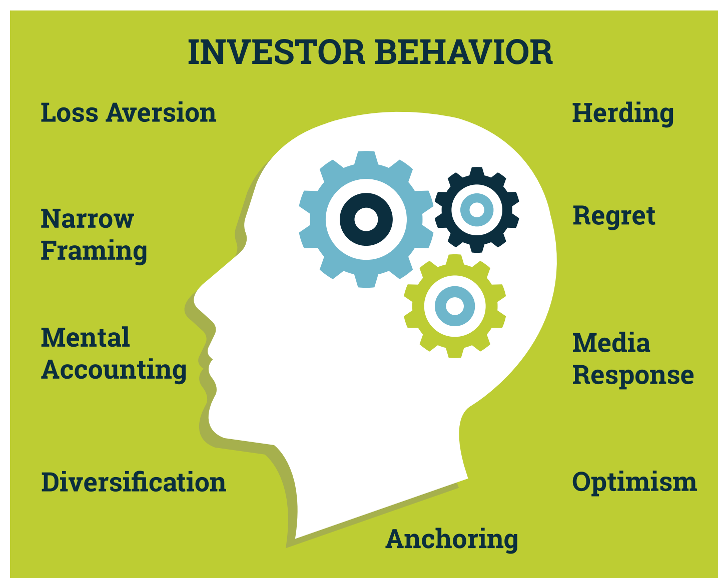


Suppose that after Year 4, the first year of double-digit losses, Roberto had cried uncle and rotated into cash investments yielding 2%. By doing so, he would have dodged the second year of steep losses, but he also would have missed out on the subsequent bull market.

His balance after 15 years? A scant $34,000 versus $46,000 if he had ridden out the bear market and stayed invested.

It happens all the time. Well-advised **investors with well-constructed, long-term financial plans get cold feet when markets drop and sell at precisely the worst time** (see "whipsaw" definition, page 3).

Though investors largely stayed put in 2018 as markets were mostly up, research firm Dalbar has documented[8] instances in the past where investors exited as markets fell, a combination of what Dalbar calls "loss aversion" and "herding" in "the 9 distinct behaviors that tend to plague investors."



LOSS AVERSION AND THE ASYMMETRY OF PAIN

Loss aversion is particularly key as it is a foundational tenet of behavioral economics. First articulated in 1979 by Amos Tversky and Daniel Kahneman,[9] two psychologists who won the Nobel Prize in economics for their insight, loss aversion holds that **for most people, the psychological pain from losing is about twice as powerful as the pleasure of gaining**.

One outcome of loss aversion is that investors are usually much more willing to take risk in order to avoid pain than they are to take risk that might produce pleasurable gains. A perfect example of this is that people are more willing to risk missing out on a potential rebound by taking their chips off the table when markets drop than risk further market declines.

It's no wonder, then, that investors sometimes make poor decisions and abandon their assiduously crafted investment programs in times of stress. As heavyweight champ Mike Tyson (who has seen his share of volatility!) famously once put it, "Everybody has a plan until they get punched in the mouth."[10]

IV. Tools for Controlling Effects of Volatility

What can advisors help investors do about the entirely rational fear of sequence of returns risk, not to mention the equally rational and admirably self-aware fear that in times of extreme volatility-induced stress, they may respond irrationally despite their best intentions?

They could "de-risk" their investment portfolio in the traditional manner by, say, increasing their allocation to fixed-income assets and reducing exposure to equities. Of course, such an approach discounts the long-term historical outperformance of stocks over bonds and could leave value on the table if the equity markets keep going up.

Boosting fixed income and trimming stocks also didn't hold up as well in the most recent bear market when the two asset classes showed above-average correlation. A recent research paper from S&P Global examined the 2008 downturn along with the stock market crash of 2000-2002 and compared traditional equity- /fixed-income allocations to an alternative de-risking option: risk control, index-linked annuities that provide limited exposure to upside index gains but protect against market losses with features that place a strict limit on downside market losses.[11]

A TALE OF TWO BEAR MARKETS

The authors observed that while a conservative allocation to stocks and bonds performed relatively well in the 2000 stock-centric crash, it was less effective at protecting against the sharp drawdowns that cut across asset classes in 2008.

They found that during the 2000 bear market, a 60/40 stock/bonds allocation outperformed (with a -9% total return for the period) various allocations to risk control annuity products, including a moderate risk control portfolio, which was down 14.8%. Maximum drawdown was -17.7% for the risk control portfolio versus -15.9% for the traditional 60/40 stock/bonds allocation. The researchers attribute the relatively strong performance of the straight stock/bond portfolio to a flight to quality that occurred during the crash where investors fled stocks and purchased bonds.

That flight to fixed income was much less pronounced in the credit market-inspired global financial crisis of 2008, and the risk control portfolios provided generally superior results. Total return for the moderate risk control portfolio was -17.1% during the period of the financial crisis versus -23.5% for the traditional 60/40 stock/bonds allocation. Their maximum drawdowns were -22% and -30.6%, respectively.

The paper's findings suggest that **risk control annuities can provide a useful hedge against downturns, particularly the sharp drawdowns that cut across asset classes and can cause serious lasting damage if they strike at the wrong time** for an investor transitioning from wealth accumulation to distribution.

THE ANXIETY REDUCTION FACTOR

Just as important as their empirical impact on returns, risk control annuities can also reduce the psychic toll volatility takes on investors. Knowing that market losses for any given period are limited reduces anxiety considerably for many investors. That, in turn, may help them roll with the inevitable volatility punches and stick to their plans.

Learn more by visiting cmannuities.com, contacting your wholesaler, or calling the CUNA Mutual Annuity Solutions Desk at 877.345.GROW (4769).

SOURCES

[1]Forbes, "No, This Is Not The Longest Bull Market Ever," 2018.

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[4]FRED, "Dow-Jones Industrial Stock Price Index for United States," 2019.

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[6]MacroTrends, "VIX Volatility Index - Historical Chart," 2019.

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[8]DALBAR's Quantitative Analysis of Investor Behavior, 2018

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[11]S&P Dow Jones Indices, "A Performance Analysis of Variable Annuities With Risk Control," 2018.

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