Navigating a Crisis without Anxiety

When a relatively calm market turns rough, it can spark fear or greed which motivates us to do something. And that something is often the exact opposite of what we should do during times of market turmoil.

We are hard-wired to protect ourselves. Different parts of our brains react to different situations. The limbic system, which is the oldest, most primitive and very emotional part of the brain, drives us to react, often irrationally, to fear or greed. Within the limbic system, the anterior insula is primarily concerned with avoiding risk, and, for example, tells us to run from danger. Meanwhile, the nucleus accumbens (NAcc), also located within the limbic system, motivates us to seek reward. The prefrontal cortex, the more sophisticated, "human" part of the brain, controls conscious, thoughtful and methodical behavior. Since fear and greed are strongly associated with financial decisions, the prefrontal cortex tends to be overruled in anxious situations.

When the market drops, fear may tempt investors to make irrational moves. Some feel the urge to sell their positions, effectively locking in a loss. They sell at a low point and then buy back at higher levels "when things look better" only to have missed a rally and some of the best market days in history.

When the market is climbing, greed similarly motivates investors to take riskier positions. Investors buy in aggressively, hoping for a big payoff and ignoring the fact that higher risk means greater variability in returns and the potential for bigger losses.

Either of these response harms portfolio returns in the long run. In both cases, the investor is selling at a relative low point or buying at a relative high point. Timing the market is difficult to do effectively as one must be right on both the exit and the return.

"Perhaps the most important lesson I've learned is that no one – not even the most sophisticated investors analyzing the best data – can reliably predict how the market will perform over the next day, week, or year…

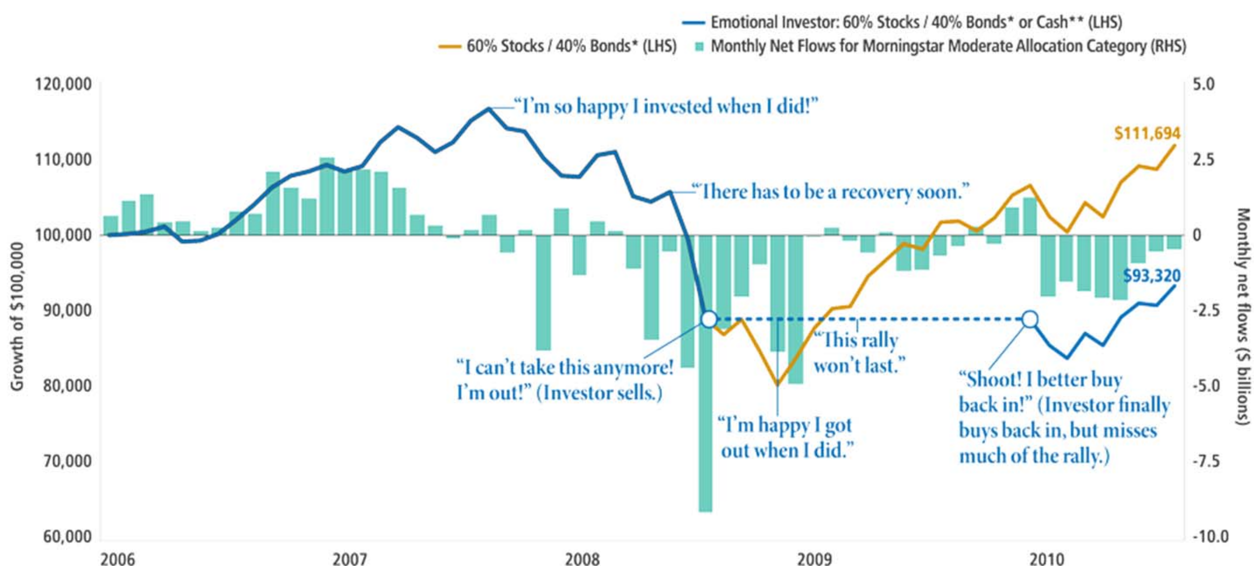
The most successful investors don't try to predict when the markets will rise or fall. Instead, they save and invest regularly, through both good and bad times, to take advantage of the tendency of stocks to rise over extended periods."

- Charles Schwab, founder of Charles Schwab & Company [1]

The following chart shows an example of the pattern of emotions many investors felt through the 2008 bear market and recovery. The lines represent the performance of a single 60% stock - 40% bond portfolio. Following the blue line, the investor enjoys the ride until he feels the drop is too much, when he departs from his long-term plan, cashing out at a low point.

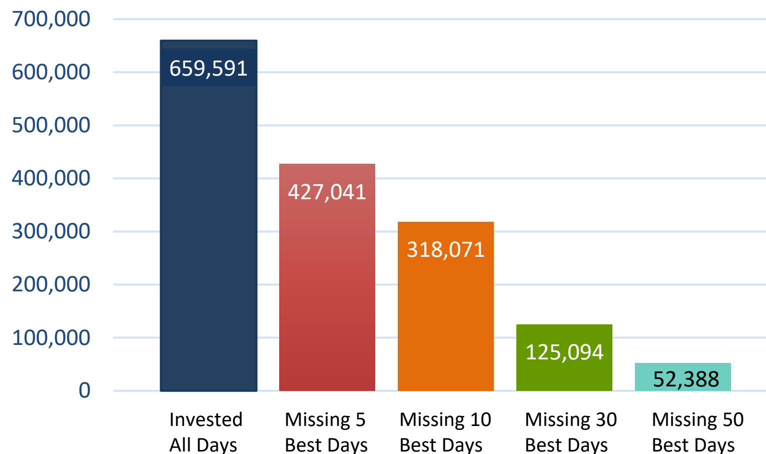
The gold line shows the performance if he had stayed the course. The fear-based investor continues to justify his moves; he is happy when the market drops further and pessimistic as it begins to rise again. But as the rise continues, he feels pressure to get back in. As a result, he misses the rally and his final account value is much lower than it would have been had he not let emotions control his investment decisions.

Hypothetical Performance of a 60% Stock 40% Bond Portfolio [2]



Time in the market is important. Missing out on a single day where stocks have big gains can have a large effect. As shown on the following page, using S&P 500 Index data, an investor would have earned significantly less return by sitting out on the "best" days. Missing out on 10 of the best days over this 30-year period resulted in a difference of $341,520 in return on an original investment of $10,000.

Hypothetical Growth of $10,000 invested January 1, 1980 – December 31, 2018 [3]



Many of these big positive days come during bear markets and their recoveries. In fact, 15 of the 20 best days since 1950 occurred during bear markets. The remaining 5 best days came immediately after the bear market concluded.[4]

Sometimes, investors are motivated by a belief they have an advantage to exploit. This emboldens them to assume more risk than they should. These moves are inspired by various ideas such as a new method for stock picking, a theory about the future, or a stock tip from a relative, friend or co-worker.

Although there may be a pattern of data to support an idea, data alone does not prove a theory or method. For any factor to be reliable, it must be measurable, pervasive around the world and persistent over time. Most of academia recognizes only five factors which when put together explain over 90% of a company's stock return: company size, price-to-earnings (P/E ratio), profitability, price momentum and how a stock moves relative to the rest of the market (beta).[5]

Additionally, the media can trigger investors' fear or greed by sharing "new information" or "expert" advice that piques investor hopes. First, it is important to remember that media information is public. There is no asymmetry of knowledge to exploit. Second, the media must be dynamic and entertaining to capture our attention and increase viewership. Most of the best answers in finance are boring: stick to a long-term strategy, diversify, keep costs low and taxes efficient, etc. Third, much of media's target audience are day-traders and heavy transactioners, drawn to the markets by the appeal of easy money, rather than by a long-term, fundamental strategy.

> ***"Jim Cramer is a charlatan. He turns the serious issue of personal financial security into a joke. There is nothing that comes out of James Cramer's mouth that allows people to make intelligent investment decisions."***
>
> \- David Swensen, Chief Investment Officer of Yale University's $27 billion Endowment [6]

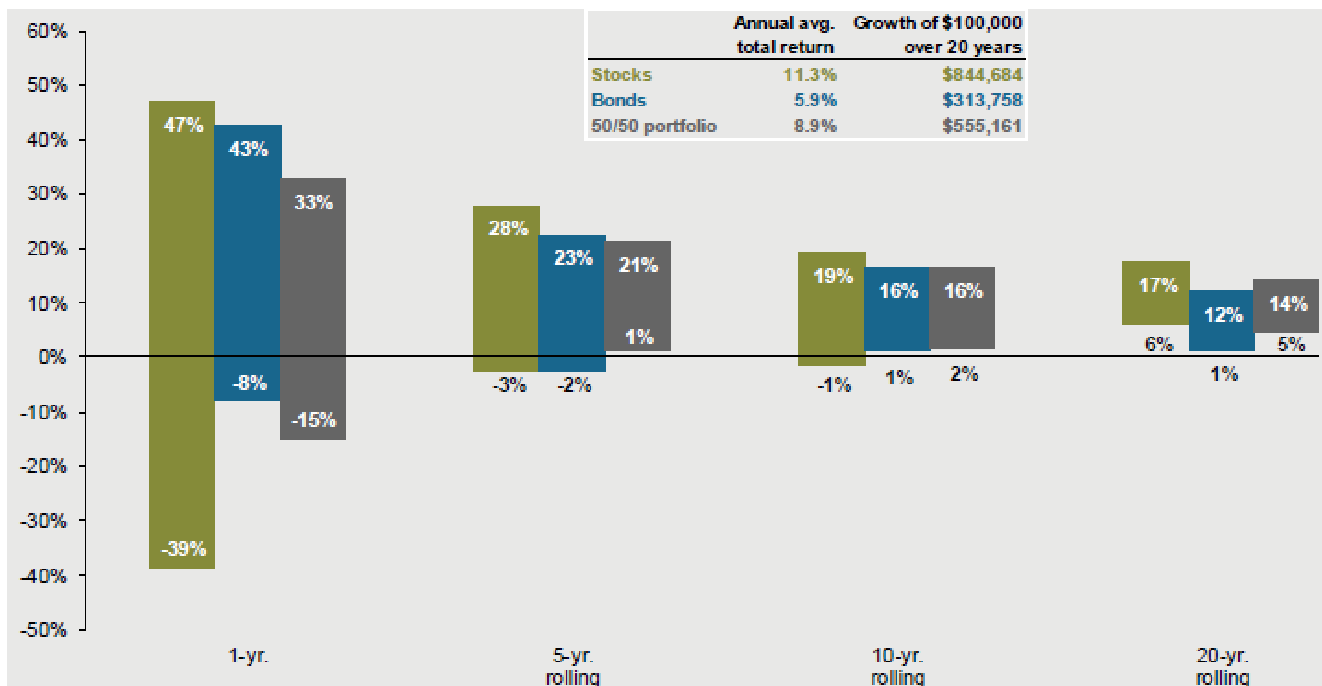
During times of market distress, it is important to override emotions with rationality as much as possible. A few things to keep in mind:

Volatility is normal. The volatility of the market demonstrates that it is working well. As new information becomes available, the market is absorbing it and repricing assets immediately. The market is currently pricing expected future earnings based on quickly changing data and an expectation of low consumer spending for multiple quarters. Despite quickly fluctuating prices, buyers and sellers can find each other and transact sales as evident in low bid-ask spreads. During times of uncertainty, volatility is proportionally higher.

Investors are compensated with returns for risk and volatility. It is part of investing. Uncertainty regarding future events is what allows one to earn a return greater than the risk-free rate. Investors are better prepared to be disciplined during crisis when their investment risk aligns with their personal risk tolerance.

Staying invested for the long run delivers more consistent returns. The longer an investor stays invested, the less variability she will see in the range of returns, and the more likely her returns will be positive. Over the past 70 years, a model portfolio of 50% stocks - 50% bonds returned 8.9% per year. Over any 1-year time frame, returns range widely and can be steeply negative. But over 5- 10- and 20-year periods average stock return ranges tighten up considerably. See the chart below for the range of stock, bond and blended portfolio returns.

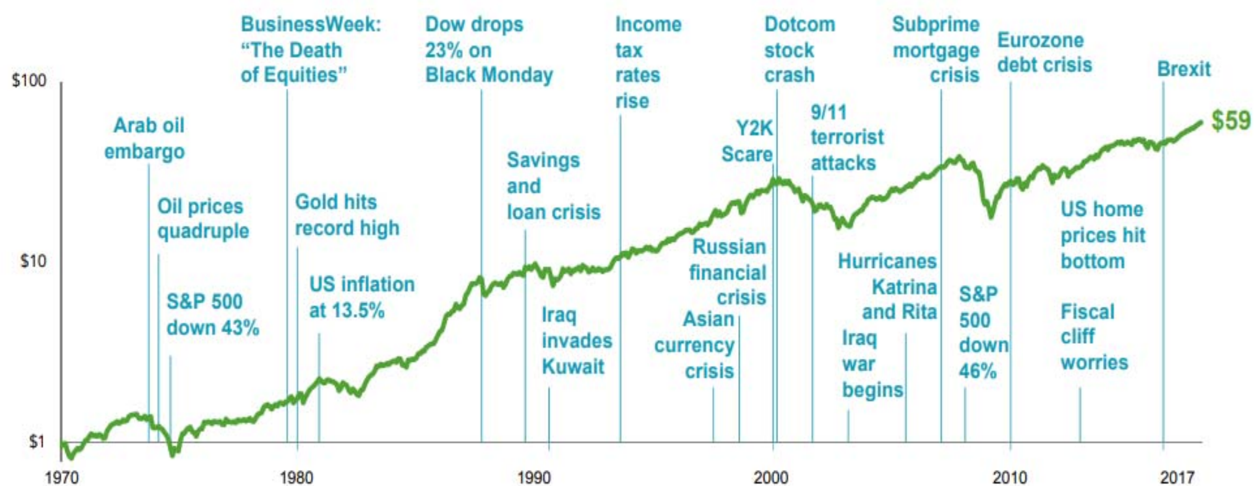
Return Comparison of Stock, Bond and 50% Stock 50% Bond Portfolio [7]



Asset allocation, diversification and rebalancing are the only "free lunches." These three key actions stabilize portfolios and help them weather rough times. Specific asset classes, including fixed income, can help minimize the overall volatility and price impact on a total portfolio. Diversifying across different companies, industries, and geographies also reduces portfolio risk. And rebalancing — that is, maintaining your target allocation by adding to underperforming asset classes and trimming outperforming ones — combats the emotions of fear and greed that often drive investment decision making. Rebalancing enables us to buy low and sell high. Having a coherent strategy that accounts for market declines helps us look past daily news and focus on our long-term goals.

Be patient; the markets reward discipline. Even though it is hard to resist the urge to do something, the market rewards those who stay the course. As shown below, through the calamities, disasters and misfortunes of the past, the market has recovered every time to eventually reach a new high.

Growth of $1 US, MSCI World Index (net dividends), 1970-2017 [8]



Finally, if your diversified portfolio matches your time horizon and risk tolerance when the market is smooth, then the inevitable rough ride should not prompt you to do something that hurts you later. Stick to your plan. Talk with your advisor who can help you navigate challenging markets. And in tough times remember, "Markets don't settle down, markets settle up."

Notes and Acknowledgements:

1. Charles Schwab, founder of Charles Schwab & Company, *On investing*, Spring 2009
2. "The Benefits of Staying Invested," PIMCO, Morningstar, Bloomberg data
3. Fidelity, Bloomberg and S&P 500 Index data, December 31, 2018
4. Bull and bear markets classified using rounded +/-20% changes in S&P 500. Note: March 2000-October 2002 and October 2007-March 2009 are considered bear markets. Charles Schwab, Bloomberg, as of March 9, 2020.
5. "Profiting from Investment Theories, Fama and French", Sharper Granite, Spring 2017
6. David Swensen, Chief Investment Officer of the Yale Endowment, interview in "Yale Man," *Worth*, January 2009
7. Guide to the Markets, JP Morgan, US data as of February 29, 2020.
8. "Markets Reward Discipline," Third Quarter 2018, Dimensional Fund Advisors

All forms of securities investing involve risk of loss for which clients should be prepared. There are no guarantees or insurances of principal preservation and market fluctuations of any level may occur and impact portfolio value. Past performance is not a good predictor of future performance. [Spring 2020]