

# Behavioral finance and COVID-19

## Investment strategy insights

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- The COVID-19 pandemic has been a stressful experience, uncovering many of the behavioral biases that cause investors to struggle to stay on track for investment success.
- Successful investors do not rely on sheer force of will to overcome biases; they use systems and tools to support and guide their investment decisions.
- In this report, we look at how events like COVID-19 can affect investors' ability to make decisions. We also explore strategies that investors can use to avoid behavioral pitfalls in order to survive—and even prosper—in periods of market volatility.



Investing is about meeting financial goals: giving yourself the freedom to retire, building a future for your children and grandchildren, and making a lasting positive impact in your community. It's natural, therefore, that investing is often an emotional experience, especially during periods of heightened market volatility. After all, when your portfolio is at risk, it puts your goals—and thus the well-being of those you care about—at risk.

Unfortunately, emotions can often lead us astray, clouding our judgment and causing us to act irrationally. Behavioral biases can appear at different points of an investment journey, but they can be especially pronounced during market crises. These biases affect our ability to weigh risks, trick us into overreacting, and affect our overall ability to make decisions in our own best interest.

The COVID-19 pandemic has been a particularly stressful experience, combining significant financial uncertainty—including the fastest-ever bear market sell-off, and the sharpest bout of job losses in history—with a global public health crisis and significant social unrest.

Fig. 1: 2020 has seen brutal market volatility



Source: Bloomberg, UBS, as of 26 June

In this paper, we will investigate how stress hampers our decision-making faculties and our ability to invest

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rationally. We will also explore some strategies that investors can use to overcome behavioral biases to survive—and even prosper—in periods of market volatility.

## Understanding behavioral biases

As Nobel laureate Daniel Kahneman discusses in his book, *Thinking Fast and Slow*, there are two different systems that our brain uses to form thoughts. System 1 is instinctual, automatic, and unconscious. These are "fight or flight" reflexes that have been hardwired in our brains by millions of years of evolution. These reflexes rely on "shortcuts"—what behavioral economists call "heuristics"—to take new information and try to fit it into existing patterns or thoughts.

System 1 is good at providing quick answers, which is useful when responding to mortal danger or dealing with low-risk, routine tasks. System 1 is ideal for doing things on "autopilot," but for more complex tasks, we rely on System 2 thinking, which takes conscious effort, time, and focus.

COVID-19 is a prime example of a crisis that requires careful, deliberate analysis. The global economy is experiencing its sharpest contraction in history, and a once-in-a-generation global public health crisis, and these risks have been offset by an unprecedented level of stimulus from governments and central banks. Not only that, but these developments all took place at a blistering pace. Just days after stock markets were hitting an all-time high and unemployment rates were low across most of the globe, the global economy skidded to a virtual halt, millions of jobs ceased to exist, and economic uncertainty rose to the highest level on record.

To make matters worse, millions of us who have spent months stuck at home, often isolated from our friends and family. This created a potentially unprecedented level of anxiety; according to [a recent poll by the Kaiser Family Foundation](#), 45% of Americans stated that the worry and stress related to the coronavirus and the resulting economic downturn are affecting their mental health.

In these types of crisis situations, the factors don't fit into any existing pattern, so System 1 thinking can be counterproductive. Our "fight or flight" instincts lead us to run for safety, which can ironically lead us to turn temporary losses into permanent ones. At the same time, it takes a lot of time and effort to think through every risk and decision using System 2 thinking, and we don't always have the information that we need to make rational decisions.

With this in mind, in order to be successful we need to be able to overcome their instincts consistently. Rather than relying on sheer force of will, we can use systems and tools that help us make hard decisions easier or rarer. We need to raise the barriers to making bad decisions, while automating good investment behaviors to turn them into self-reinforcing habits.

Below, we will discuss some strategies that you can use to keep your instinctual impulses at bay. The process begins by building an investment strategy and adopting investment habits that can provide investors with the emotional comfort and confidence to stay the course during periods of volatility.

## 1. Diversify

"It may seem counterintuitive, but if you have something in your portfolio that you're complaining about, it's a good sign you've built a diversified portfolio."

—Carl Richards, *Diversification Isn't Broken, It Just Takes a While*

At its heart, diversification is about reducing the role of luck in investment success. Without diversification, an investment strategy has risk that is concentrated in one area, which means that it is fragile.

Diversification works by introducing variety to dampen different types of risk: Individual company risk can be diversified by holding a basket of stocks; industry risk can be mitigated by spreading stock investments across multiple sectors; stock market risk can be reduced by holding uncorrelated asset classes such as high-quality bonds.

Variety is helpful in dampening risk because different assets are driven by different factors (company-specific product lines, sector-specific regulations, country-specific political factors, asset-class-specific economic drivers). In the age of COVID-19, diversifying globally permits investors to reduce the risk that their home country will struggle to contain the virus or its economic consequences, and increase the chance that they will have exposure to markets that are particularly successful in doing so.

Diversifying across asset classes is particularly helpful in adding resilience. For example, high-quality bonds have demonstrated value in helping to reduce the size of portfolio drawdowns, which are usually driven by stock market losses. This helps to reduce risk when there is an economic shock, but on the other hand allocating too much to high-quality

bonds introduces another type of fragility: the risk of failing to grow the portfolio enough to meet future objectives.

A diversified portfolio is composed of assets whose prices move out of sync with each other, such that extreme returns in one asset class are tempered by modest returns in other asset classes. The net effect of this interaction is a reduction in risk per unit of return, which means that diversification is therefore a very useful tool that can help investors achieve a greater potential rate of return while enjoying a smoother path of growth, and thus a more comfortable investment experience.

## 2. Reduce the noise

It's understandable that, when a crisis happens, investors spend many hours reading or watching the news to stay informed and updated. Investors also naturally pay more attention to markets when volatility is high.

This impulse to pay closer attention can be counterproductive to making good decisions. Although we live in an age of nearly infinite access to information, meaning and context have grown more difficult to find. Watching more news doesn't give you more context; to quote an old journalism saying, "The plural of 'anecdote' is not 'trend.'" Even putting aside intentional bias, the news business naturally provides a skewed perspective:

"We are subjected to never-ending cascades of negative news from across the world: wars, famines, natural disasters, political mistakes, corruption, budget cuts, diseases, mass layoffs, acts of terror. Journalists who reported flights that didn't crash or crops that didn't fail would quickly lose their jobs. Stories about gradual improvements rarely make the front page even when they occur on a dramatic scale and impact millions of people."

—Hans Rosling, *Factfulness: Reasons We're Wrong About the World—and Why Things Are Better Than You Think*

In addition to focusing on negative aspects, the news also promotes a sense of urgency that can play into our anxieties. Because we suffer from behavioral biases like "recency bias" and "saliency bias," we tend to overreact to news that's recent, prominent, or easily accessible—and due to "confirmation bias," this can create a feedback loop where we focus on information that supports our preconceptions. In other words, watching the news too often can create

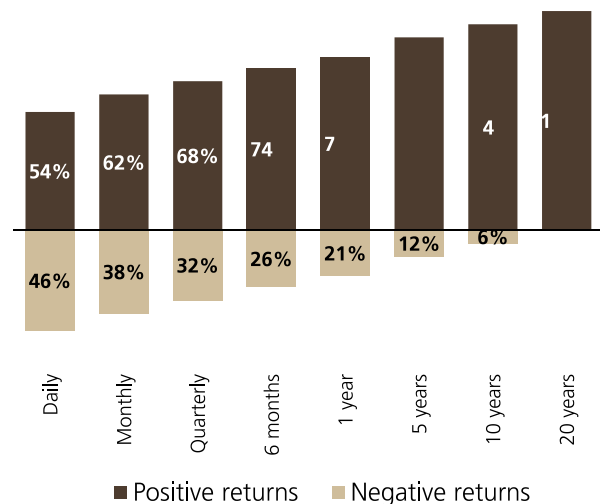
a negative feedback loop—termed "doomscrolling" in the age of COVID-19—that skews our perception of risks.

These biases are bad enough, but they are compounded by what behavioral economists call "action bias"—the temptation to make changes—which can be particularly destructive for investors. When you see your hard-earned savings falling in value, your instinctual response is to try to protect yourself by reducing risk. As Mark Yusko put it, "Investing is the only business I know that when things go on sale, people run out of the store." Our rational minds know that long-term investment returns are higher after a sell-off, but our short-term reflexes would have us going in the opposite direction.

To top it off, when you watch your investments more closely, it will actually make your portfolios appear riskier, because losses are more likely over short time horizons (Fig. 2). As a result, reading the financial news (and checking investment accounts) more frequently only accentuates the negative aspects, increases your anxiety, and shortens your emotional time horizon, which in turn can blind us to the bigger (and longer-term) picture.

Fig. 2: Losses are more common in the short-term

Frequency of losses, S&P 500 returns since 1926 by holding period



Source: MorningstarDirect, UBS, as of 18 June 2020

By contrast, looking at the news less frequently helps to reduce the noise. It's also incredibly valuable to have a financial advisor who can help to filter the information, putting it into the context of your portfolio and your financial plan. Advisors thus serve as a last line of defense

to protect against the impulse to make changes in reaction to short-term market events, helping you to focus your attention on the information and decisions that matter.

Last, but not least, it's important to reduce the number of decisions that you have to make during periods of stress.

Automation can help you in this respect. For example, [rebalancing](#) and [tax-loss harvesting](#) are commonsense strategies, but they can be emotionally difficult to implement. Rebalancing requires an investor to "buy low, and sell high," which often feels risky in the moment. Loss harvesting requires an investor to realize a loss, which can be uncomfortable for investors who—for various reasons like "the disposition effect"—tend to hold onto losing positions. By automating these strategies, or outsourcing the decisions to your financial advisor, you can pre-commit to the overall approach without needing to make a decision on each individual trade.

The "[savings waterfall](#)" is another example where automation can help; deciding where you can invest your next paycheck for maximum after-tax growth potential is relatively straightforward, but it can be a pain to have to manually move the funds between accounts. Setting up automatic deposits—and electing for your funds to be invested automatically—can help you implement and reinforce good saving and investing habits.

### 3. Understand risk, and your risk tolerance

"If you know the enemy and know yourself, you need not fear the result of a hundred battles.  
If you know yourself but not the enemy, for every victory gained you will also suffer a defeat.  
If you know neither the enemy nor yourself, you will succumb in every battle."  
—Sun Tzu, *The Art of War*

It's important for you to understand the risks of your investments. In finance, we have several statistics to measure an investment's risk—drawdown, variance, beta, etc. None of these are intuitive concepts, but they are relatively easy to learn with the help of your financial advisor. More importantly, your advisor can help you calibrate your expectations so that you're emotionally ready when extreme market movements occur.

But knowing about market risk isn't enough. You also need to understand your own tolerance for risk. After all, no investment strategy can be successful if you aren't able to stick with it consistently.

Risk tolerance is another area that isn't intuitive. No one instinctively considers themselves a "moderate" investor or an "aggressive" investor. In addition, a person's perception of risk can change; for example, investors become more fearful when markets have fallen recently, and more adventurous when markets have staged a rally (Fig. 3).

The hard way to learn about your risk tolerance is through experience. To quote Vernon Sanders Law, "Experience is a hard teacher, because she gives the test first, the lesson afterwards." Moments of extreme volatility and stress can help us find the limits of our tolerance for risk. Later, being reminded of our past reactions—with the full perspective of hindsight of how markets performed afterwards—can help us can context when the next pocket of volatility arrives.

Fig. 3: Recency bias can lead us to chase performance



Source: UBS. For illustrative purposes.

But while it's important for us to learn from our mistakes, experience often teaches lessons that come too late to be useful. To anticipate and prepare for new types of risk, we need to run a simulation.

One strategy is to walk through a "[pre-mortem](#)" with your advisor. Pre-mortems are a thought exercise where you assume an outcome and then work backwards to arrive at possible causes. One benefit of this approach is that it can uncover risks that we would normally overlook.

It is very unlikely that an investor would have anticipated COVID-19 in particular, but a pre-mortem analysis could have revealed the importance of some of its effects; for example, the risk of being suddenly unemployed at the same time as a market correction. This would, in turn, have allowed the investor to address those risks proactively.

A pre-mortem can also expose risks that aren't related to market volatility. If you assume that you will run out of funds in retirement, it could be because you will live longer than you expected, or because you are underestimating your retirement expenses, or because you will suffer a disability that forces you to end your career earlier than expected.

Another approach is to go through a "fire drill" exercise with your financial advisor. To help with this process, we developed a [Bear market calculator](#) to help you simulate a worst-case market scenario and evaluate how this would affect your financial success. Running through this simulation can also help you assess whether you will be comfortable sticking with your investment strategy in times of extreme volatility and uncertainty.

## 4. Align your portfolio with your goals

"A portfolio is not, in and of itself, a plan. And a portfolio that isn't in service to a plan is just a form of speculation; it can have no other goal than to beat most other people's portfolios."

—Nick Murray, *Simple Wealth, Inevitable Wealth*

Investing is about meeting your financial goals: giving yourself the freedom to retire, building a future for your children and grandchildren, and making a lasting positive impact in your community. This truth is at the heart of why investing can be so emotional, especially during periods of market volatility.

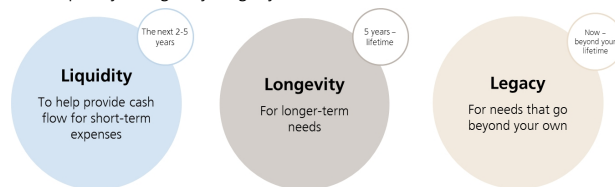
Before making any decisions about the right investment strategy for your hard-earned savings, it's always important to have a deep conversation about what matters to you and your family:

1. What do you want to accomplish in your **life**?
2. Who are the **people** that matter most to you?
3. What do you want your **legacy** to be?
4. What are your main **concerns**?
5. How do you **plan** to achieve your life's vision?

These aren't easy questions, but the answers are key to uncovering the objectives and priorities that will comprise your financial plan. The next step is to take these principles and goals and map them onto an investment strategy using the [Liquidity, Longevity, Legacy \(3L\)](#) framework.

Fig. 4: A purpose-built investment strategy can put short-term volatility into context

The Liquidity, Longevity, Legacy (3L) framework



Source: UBS. Timeframes may vary. Strategies are subject to individual client goals, objectives and suitability. This approach is not a promise or guarantee that wealth, or any financial results, can or will be achieved.

The 3L framework helps you develop a personalized investment approach by segmenting your family's total wealth into three strategies: a **Liquidity** strategy, designed to meet your family's cash flow needs for the next two to five years; a **Longevity** strategy, consisting of the resources needed for spending throughout retirement and the rest of your lifetime; and a **Legacy** strategy that is earmarked for growth to benefit future generations and philanthropic organizations.

Part of the value of segmenting your wealth by purpose and time-frame is to provide perspective during periods of uncertainty. When you view all of your investments as a single portfolio, it can be very difficult to gain perspective. Segmenting your assets can help to put market returns into context and give you a more objective lens for making decisions.

The Liquidity strategy is the best example of this. Losses occur far more often over short-term periods, and most are recovered relatively quickly—usually within months—especially for diversified portfolios. Unfortunately, because of something called "loss aversion," we feel the pain of losses about twice about as powerfully as we feel the pleasure from gains. When we consider these factors together, it is clear that short-term fear is the biggest risk to investor success, which is why the Liquidity strategy is such a powerful tool.

Once you have funded a Liquidity strategy with resources to meet the next three to five years of your expenses—and invested them in cash and high-quality fixed income—it can transform your perception of market risk. Since you have already addressed the risk of a market crash, it can give you the context and the confidence to invest the remainder of your assets for greater growth opportunities, secure in the knowledge that you will not need to "eat your seed corn" by selling growth assets during a short-term market disruption.

This is more than mere emotional support; as we've seen in recent months, being forced to sell risk assets at otherwise temporary losses can force investors to miss out on powerful gains when markets turn around. Investors that entered 2020 with a well-funded Liquidity strategy were able to remain fully invested and avoid being forced to sell out of their growth assets at "bear market prices"—even if they had short-term cash flow needs.

But the 3L framework isn't only designed to help you survive difficult markets. The Longevity strategy helps you set aside enough capital for growth so that you can retire safely, on time, and on budget. Segmenting your Longevity strategy assets can help you to feel more confident investing in growth assets, and can also give you confidence that your retirement goals are secure.

With the Liquidity and Longevity strategies fully funded with a margin of safety, the remainder of your assets can be earmarked for the Legacy strategy, which is designed to serve needs that go beyond your own. With the benefit of a much longer time horizon and fewer short-term demands, your Legacy assets can take full advantage of the opportunities offered by an equity-heavy asset allocation, alternative investments, and even portfolio leverage—which can help your hard-earned savings go even further in helping future generations and the philanthropies that you care about.

In the Longevity and Legacy strategies, investors can benefit from the perspective of a much longer time horizon by unlocking opportunities that go beyond the short-term market conditions. For example, investors can also extend their sight lines to invest in long-term themes that are driven by transformative trends such as demographics, urbanization, and technological disruption. Some of these trends have actually been accelerated by COVID-19; for example, the digitization of the healthcare sector has experienced a quantum leap due to the rise of telemedicine, and the trend toward e-commerce has accelerated due to stay-at-home restrictions (please see "[Longer-term investments: The decade ahead and COVID-19](#)" for additional details).

Investing in long-term themes not only makes sense from an investment perspective, but it can also provide emotional comfort and a sense of control that can help investors to stick with these investments through periods of short-term volatility, thus helping their investment performance.

Another reason to incorporate themes is to build a greater familiarity with the long-term vision for the portfolio. Due to

a cognitive bias lovingly called "the IKEA effect," we often attribute a greater value to things that we help to build; as a result, you might also find it easier to stay invested in themes that you believe in, and those that you help to choose.

## Conclusion

*"Yesterday I was clever, so I wanted to change the world. Today I am wise, so I am changing myself."  
—Rumi*

The biggest risk that we face is not volatility, but how we react to it. COVID-19 represents a once-in-a-generation risk, but unexpected events happen every day.

No investment strategy can be successful if you aren't able to stick with it consistently. When you understand risks and identify threats proactively, you can build systems that help you to reinforce good habits—even in difficult markets.

Diversification helps to reduce the risk that your investment success will be threatened by an unexpected events, and this resilience can be bolstered by using the 3L framework to build a portfolio that reflects your financial plan. Not only does this help you to meet your goals, but it can also give you the context and the peace of mind that your short-term financial objectives are secure even when there is a massive disruption to financial markets, thus helping you avoid the temptation to react to markets.

## Appendix

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