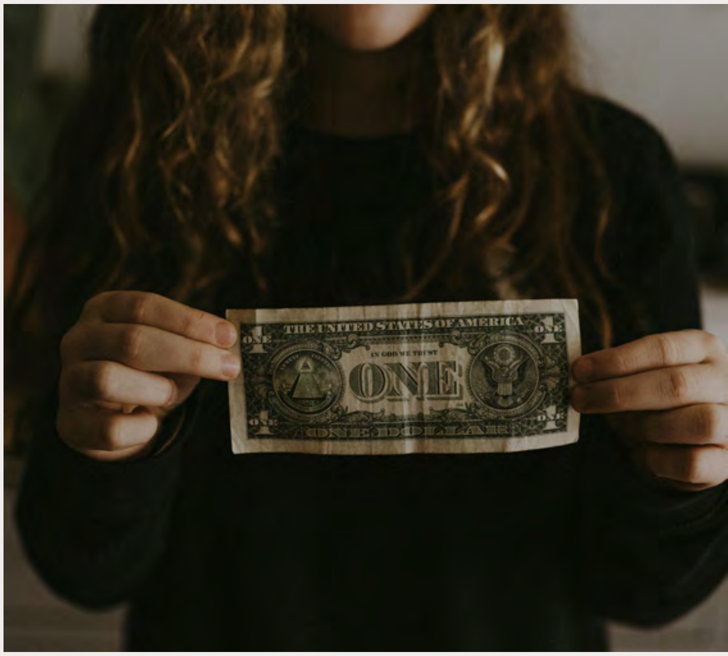
COLDSTREAM

BEHAVIORAL ECONOMICS

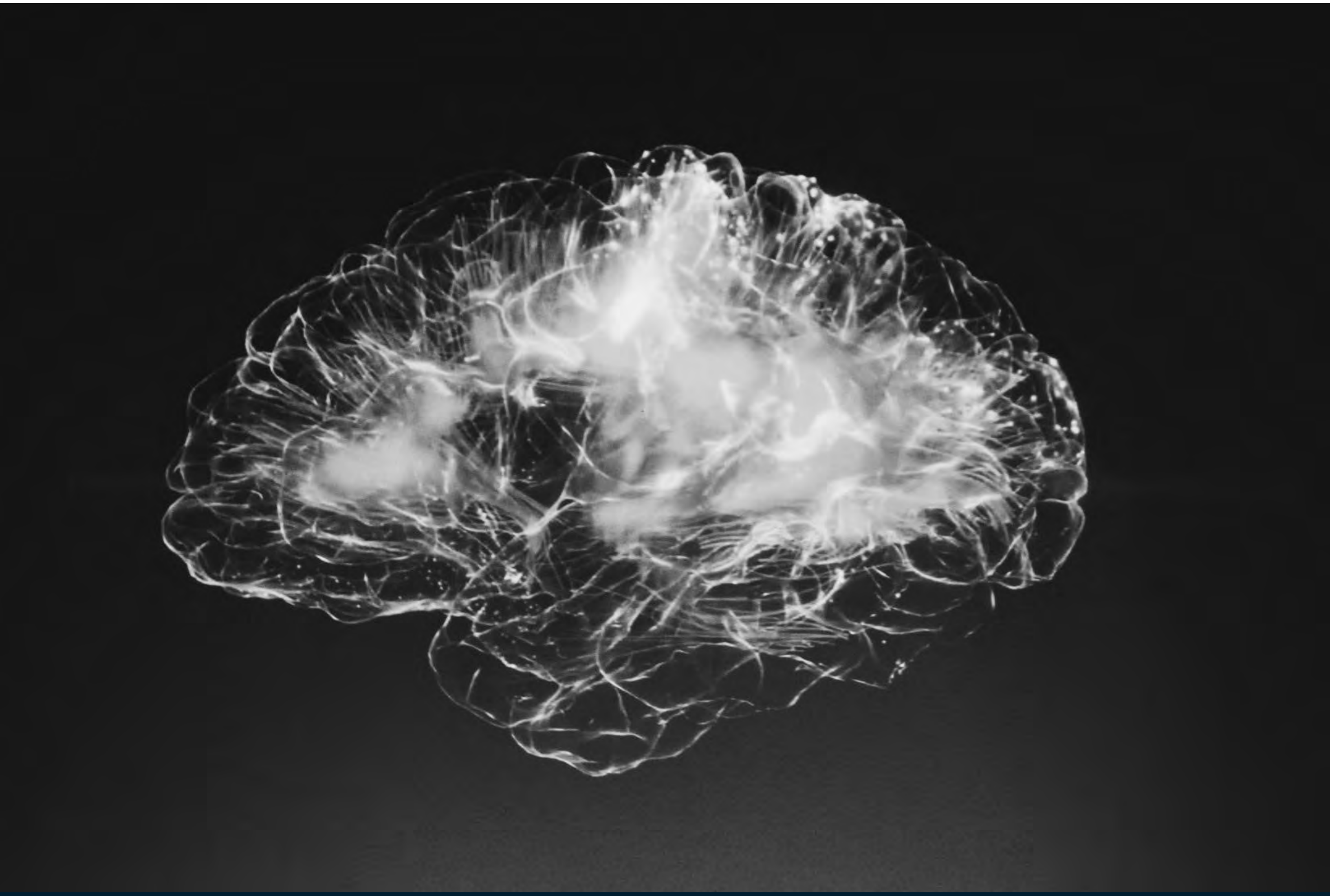
Why people make irrational financial decisions



Money is personal. How much we earn, what we have, and how we spend is often and easily tied into reflections of ourselves and, often in our culture, our identities. When it comes to something so intimate, we may know what decision logically would make the most sense, what action in concept we should be taking, the advice we would give our friend in a given situation; however, things can blur when they are that close and so entwined with so many facets of our lives, our safety, and our prosperity. The big picture can be hard to see when the details carry deep significance to us and we can't see the forest for the trees. It's not a fault; it's human nature—we are all affected by one form of bias or another. The path to overcome is to be able to recognize these patterns and pitfalls, to give them names, and to approach decisions critically and with awareness of our influences, knowing that what we know is often not what we do.

Our brains are amazingly complex, capable of processing vast amounts of information, about 11 million bits of information a second—with only about 40-120 of those being in the conscious mind. To handle this workload, we've evolved processes of subconscious thought patterns and background programs to alleviate the amount of information we must focus on. Behavioral economists have been studying human decision making to better understand the mental shortcuts—or heuristics—we use, as well as ways our emotions can warp our thinking, so they can anticipate where people often fall short of rational judgment.

Many of the greatest financial and investment mistakes occur due to investors acting from emotions or irrational thinking or by just 'trusting your gut' on something, by not looking at the situation with fresh critical eyes but relying on our imperfect and not always rational established shortcuts our brains have built. Those investors who understand behavioral economics and how to counter our human tendency toward illogic are better equipped to avoid those mistakes. The issue of irrational decision-making in behavioral economics arises when we are faced with complex decisions that are also mathematical and rational. Behavioral scientists have focused attention on "heuristics," or cognitive shortcuts, that shape the unconscious processes behind our decisions. Understanding some of the most common heuristics can move us toward balancing those tendencies with our conscious processes when making investment decisions. Knowing the bounds of our rationality can help us overcome them.

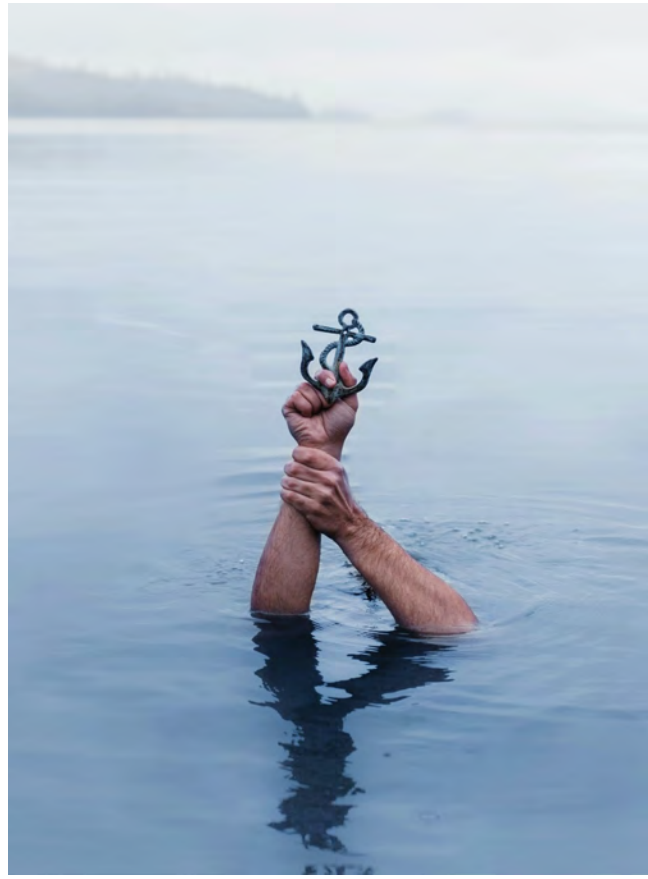


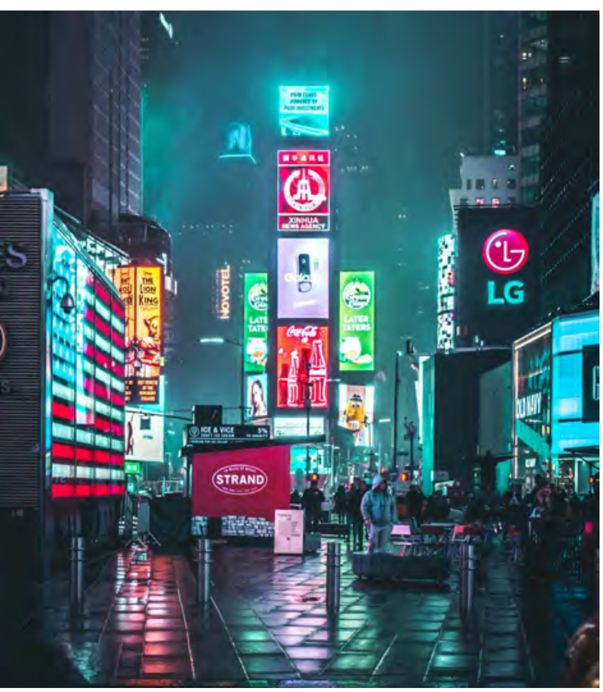
What are some of these biases?

ANCHORING

Anchoring refers to when your perception of value of something is understood or judged relative to other factors, often unrelated. Anchoring occurs when you mentally assign a value to something, be it a stock, a shirt, a bottle of wine, or a new vehicle, etc. Your mind becomes preoccupied with that particular value, and new choices are made within the context of the previous information rather than adjusting the context.

The anchoring bias can affect financial decisions in a number of ways. When considering the purchase of a stock, if you were told the current price was twice as high as it was a week ago, how likely would you be to purchase that stock? What if you were told it was half the price it was a week ago? Neither piece of information is necessarily relevant, depending on other factors, but would be highly likely to color your perception of the purchase. Every salesperson understands that beginning negotiations with a high starting price is likely to yield a higher final price, as the opening bid serves as the anchor or reference point. There is also a lot of insight to gain here on why the second cheapest bottle of wine tends to be the most popular at restaurants, regardless of the actual quality.





AVAILABILITY

Availability is also referred to as recency bias. When making a decision, we tend to rely, by default, on the information easiest to our minds to reach, which is usually the most recent information we have. Brands know the importance of staying top of mind as people are more likely to purchase products for which they've recently seen advertising for; bosses are more likely to give a good performance review to an employee who has recently had a major success (regardless of the rest of the year's performance), and jurors will weigh more heavily evidence that is shocking or graphic because it is more easily recalled. Balancing the availability heuristic requires seeking out accurate and thorough information to guide your decision. Create a deliberate fact-finding process.

AFFECT

Affect refers to the influence emotions play—or how making a choice might make you feel and positive/negative associations—when making decisions. Borne from intuition, the 'gut instinct' heuristic, can be efficient and adaptive as your mind accesses volumes of integrated information and delivers a rapid response. For example, It makes perfect sense that a person who has survived a traumatic event will overestimate the risk of similar events occurring in the future, and as a result be very cautious to avoid any similar risk. This serves us well in making quick decisions, providing a flashing warning sign to proceed with caution, but it can mislead you in moments that require more careful thought and when examining more complex problems.

This tends to weigh in heavily when it comes to investment decisions as well. Researchers found that investors who were invested during the 2008 financial crisis carried forward an elevated perception of risk that affected their later investment decisions.[1] Or, on the other side of the same coin, you see investors selecting companies to invest in that they favor or have positive feelings toward, rather than using objective criteria. Companies will go to great lengths to control investor and consumer perception and generate positive associations.

BANDWAGON – HERD MENTALITY

Humans are by nature tribal; we tend to find security in the crowd. We think if everyone else is doing it, there must be a good reason why I should too. We get pulled in the movement of the herd before taking the time to assess whether a decision is right for us, or if we're just going along with the flow.

This mentality can also manifest itself in a fear of missing out, or "FOMO," driving people to hop on the latest trend—investment or other—even if it's not the best decision or is out of alignment with their needs. The drive toward conformity has served human evolution by allowing people to survive and thrive in groups, but can threaten your ability to use individual critical thinking in decision-making. Becoming comfortable with—or even inviting—healthy conflict can inoculate you against succumbing to the bandwagon effect.

In 1956, social psychologist Solomon Asch conducted an experiment in which he asked subjects to answer a simple question with an obvious answer. The subject was placed into a group where, unbeknownst to them, the other group members were confederates in the experiment. When the other group members answered (aloud) the question incorrectly, the subject in most cases also answered the question incorrectly, conforming to the group rather than providing the clearly obvious correct answer. The experiment demonstrated that the drive toward group conformity often overrides objective reason and critical thinking. As unlikely as this seems, it bears out repeatedly in action. Human beings are social creatures, and don't like to be out of agreement with their peers.

CONFIRMATION BIAS

Everyone holds preconceptions. Confirmation bias suggests that people will work hard to mentally confirm their existing beliefs, viewing information through the lens that interprets it favorably relative to those beliefs and giving more weight to evidence that supports their beliefs while ignoring or undervaluing evidence that runs contrary to those beliefs. The more emotional weight a belief carries, the more strongly confirmation bias is likely to exert its influence. This can inhibit an individual's ability to learn or assess new information, and can even affect memory, as individuals exhibit selective recall in favor of previously held assumptions. Confirmation bias is one of the most challenging heuristics to overcome: attempts to present alternative information often backfire, as the individual simply digs in their heels, assigning low credibility and discounting anything that conflicts with their beliefs. Because investing relies upon the analysis and integration of lots of different types of data and information, it's very easy for confirmation bias to play a role as investors develop and execute their strategy.

Overcoming confirmation bias requires a willingness to become deeply self-aware, examining one's own beliefs and perspectives and being able to hold them loosely as you explore information. F. Scott Fitgerald remarks, "the truest sign of intelligence is the ability to entertain two contradictory ideas simultaneously." We must approach decisions with clear eyes, always remembering that there is more we could learn. Getting beyond confirmation bias demands a readiness to change one's mind and admit error. The scientific method is a tremendous tool for countering confirmation bias, with its focus on objective observation, seeking to falsify hypotheses, and subjecting theories to constant testing and revision.

LOSS AVERSION

One of the most well-known behavioral economics principles is that of risk aversion, which describes the phenomenon whereby people feel the pain of a loss more than the pleasure of an equivalent gain. The endowment effect is another side of this principle; people endow objects that they own with additional value simply by virtue of their ownership. In other words, the price people are willing to pay for an object is lower than the price at which they would sell that object if they already owned it.

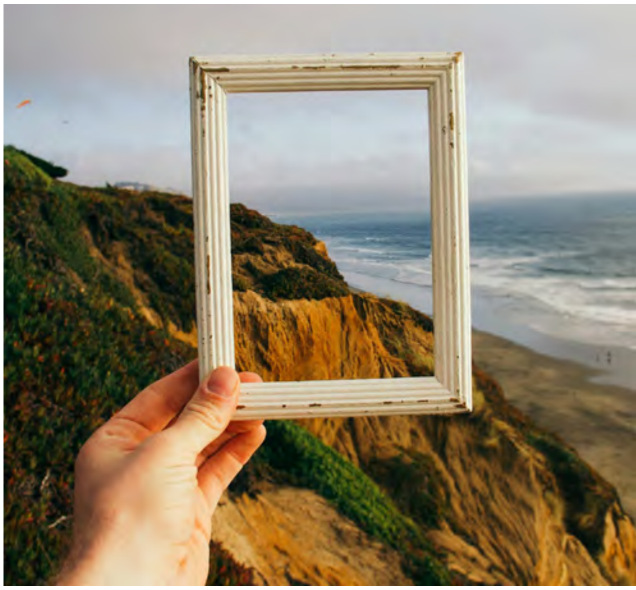
In a Cornell University experiment, student subjects were assigned to one of three groups: sellers, buyers, and choosers. The sellers were given mugs and then asked the price at which they'd be willing to sell the mugs. The buyers were asked how much they would be willing to pay for a mug, and the choosers were asked to choose, at each price level, whether they would prefer the mug or the money. At the end of the experiment, the sellers' median price to sell the mug was $7.12, the buyers' median price to buy the mug was $2.87, and the choosers selected the mug beginning at a median price of $3.12. In other words, the sellers would rather have the mug than $7, whereas the buyers and choosers would only prefer the mug to money if it was under $3.[2]

This suggests that people build an attachment to things that they own, assigning greater value to them. The phenomenon applies whether the thing is a house or a car or a stock. This can go hand-in-hand with loss aversion, in which the suffering of losing something one owns is worse than the positive feelings that come with gaining something of equal value. For example, the sellers in the above experiment wouldn't be willing to part with their item unless at a rather high price. The buyers, on the other hand, only felt the mug was worth a few dollars.

There is an additional implication that accompanies this effect, which is that people experience opportunity costs differently than they do actual out-of-pocket costs, with an actual cost being perceived as greater than the cost of a missed opportunity even when the nominal amount is the same.

For investors, the endowment effect and loss aversion can influence portfolio buying and selling decisions. Setting a clear investment policy and/or enlisting outside expertise can help to counter these biases.

FRAMING EFFECT



Mental biases come into play depending on how information is presented. Would you rather buy a detergent that "kills 95% of germs" or one that leaves 5% of germs alive? Would you prefer your bank provide a free account that charges a fee for a low balance, or charge for the account but offer a discount for keeping a minimum balance? The formulation of a question or idea greatly influences how people respond to it. Most people prefer positive framing; for instance, polls suggest that a policy described as "increasing the employment rate" will generally garner more support than one that "decreases the unemployment rate," even if the end result is the same. Research has demonstrated that people become more susceptible to the framing effect with age.

The framing effect is important for investors to know because investors face a fiercely competitive industry and landscape, with plenty of options vying for supremacy. Good sales executives and client service professionals understand this concept—if not by name, then certainly just through experience—and will make use of its influence.

Countering the framing effect is a matter of paying close attention to how things are presented and looking at prospective options from different angles before making a decision. Avoiding impulsive decision-making can help, as the more time you have to consider options, the more time you have to examine your choices from different perspectives.

GAMBLER'S FALLACY

If you flip a coin and get tails ten times in a row, what are the chances you will get tails on the next flip? The answer, of course, is 50%, though that flies in the face of our intuition, which insists that the chances must be lower since it would be the 11th time in a row. This is the gambler's fallacy, in which people believe that future probabilities are affected by past events. It is a very human attempt to apply patterns where there are none. Roulette gamblers who see the roulette ball fall on black five times in a row will feel that the spin is now "due" for a red and will be more likely to bet in that direction. But in reality, the roulette wheel has no memory, and each spin has exactly the same probability of landing on red as every other spin. That the number of reds will tend to even out over a very large number of spins does not mean that will play itself out in any given small sample size.

This fallacy is so common that nearly all investment materials are required to caution investors that "past performance is not a guarantee of future results." Research has shown that investors often make investment purchases based on the past performance of fund managers, even though "the data suggest that performance of mutual fund managers is serially uncorrelated."[3]

Historical data can be very useful to investors, offering context, building perspective, and informing choices. But it's important to keep in mind that historical data doesn't predict the future, and that investment decisions should focus on a forward-looking view.

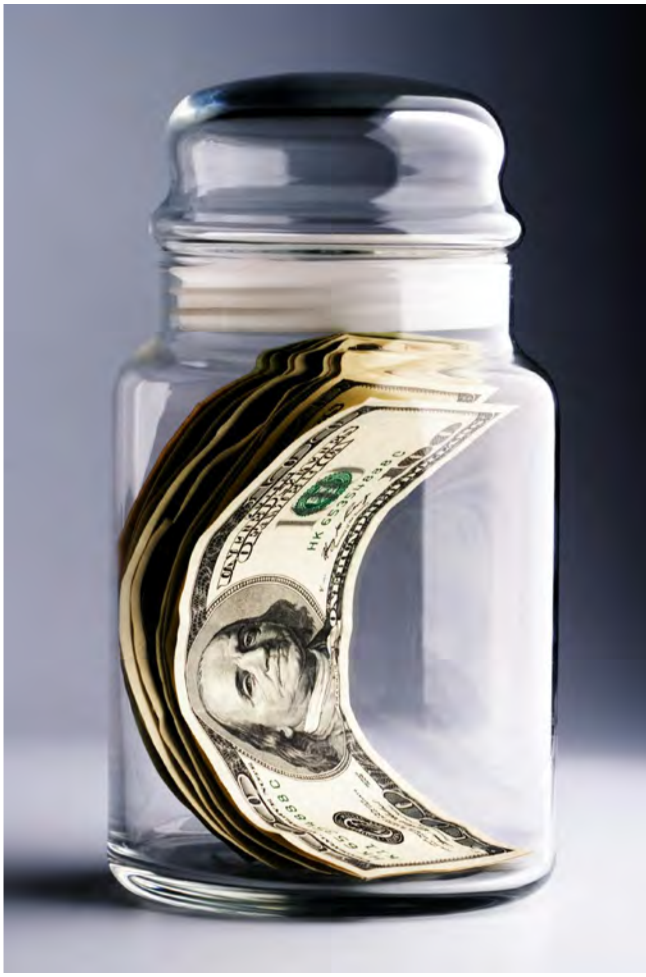
HYPERBOLIC DISCOUNTING

Would you rather have $100 today or $150 a year from now? Although the second option represents a remarkable 50% return, many people would choose the first. This is because people assign greater value to rewards in the present than to rewards in the future. Called hyperbolic discounting, in theory it's a rational concept, as future rewards bear the risk that they will not materialize or that something will happen between now and then. Discounting the future reward is your mind's way of accounting. Hyperbolic discounting can become an obstacle when planning for the future. American workers have been very poor at saving for retirement, for instance, largely as a result of hyperbolic discounting. Despite the tax advantages and potential for investment return, it can be difficult to forgo the benefit of immediate payment versus the idea of a deferred reward. Credit cards rely on hyperbolic discounting, as consumers seek instant gratification, while discounting the future payment, not realizing that the item they are adding to their credit balance will cost them significantly more than the initial price tag in the long run.

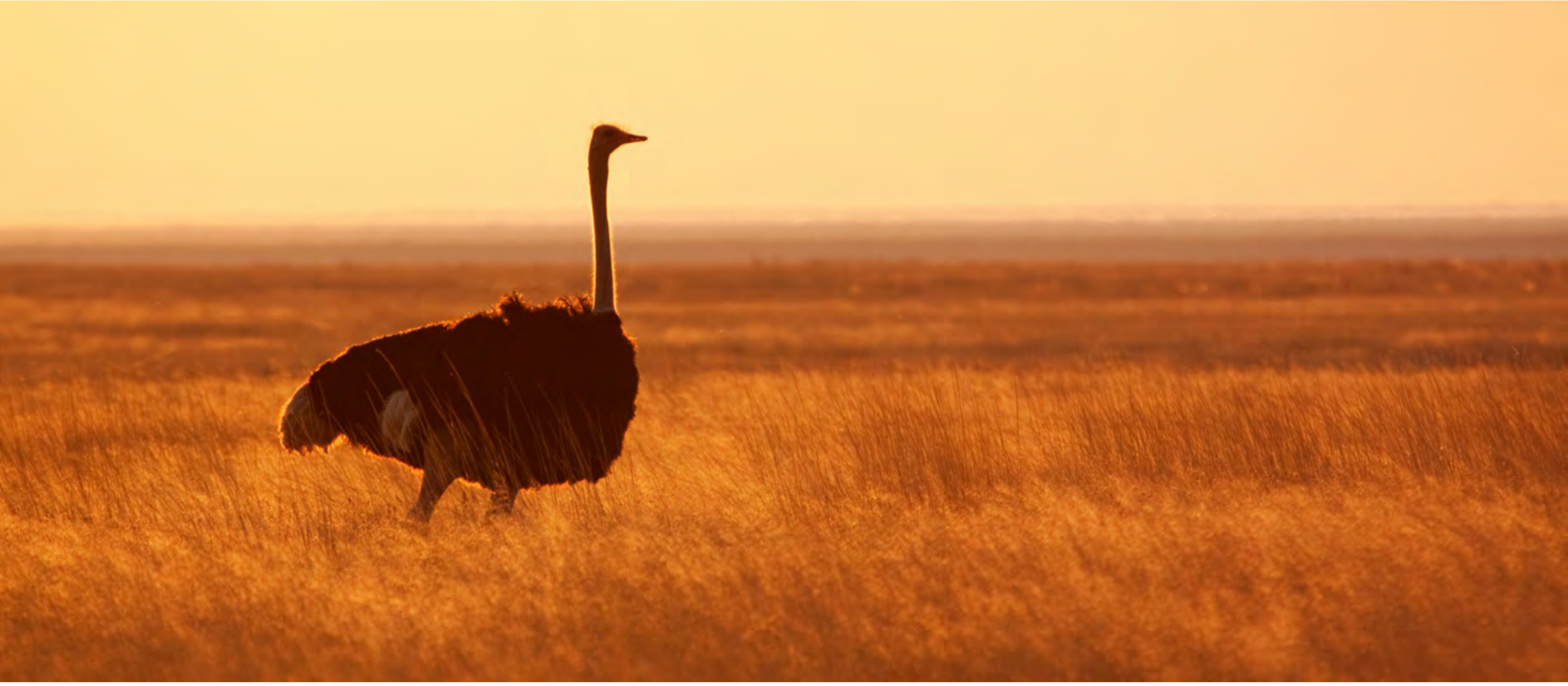
Hyperbolic discounting can contribute to faulty decision-making in investing if investors are chasing current gains at the expense of long-term returns. Since investing by its nature involves deferring reward to the future, it's helpful to understand the hyperbolic discounting impulse and focus on examining your choices rationally.

MENTAL ACCOUNTING

How do you spend your tax refund? Do you do something special with your annual bonus outside your regular budgeting/planning process? These are both examples of mental accounting, in which you place different amounts of money into different mental buckets and track your financial activity in those buckets separately. In using mental accounting, people will often assign different values to different buckets despite the fact that money is fungible—one dollar is exactly the same as the next. This sets up an irrational decision-making process, such as when an individual may justify a splurge if they receive an unexpected windfall, whether or not they can actually afford it based on their overall budget.



Some investors use mental accounting when allocating assets to risky investments. By setting aside a designated amount they feel comfortable losing, it can ease the anxiety that may accompany significant risk-taking. There's nothing wrong with setting aside amounts outside one's regular investment strategy to experiment with, but investors shouldn't let that absorb their risk tolerance. Taking some risk in an investment portfolio is critical in order to enhance the potential for long-term return, and a successful investment strategy should incorporate as much risk as the investor is willing to take on.



OSTRICH EFFECT

In times that we feel overwhelmed, when things feel uncertain, and we fear that any decision we make could be a misstep, there is a natural resistance to taking any action—to 'stick our heads in the sand' and simply ignore the events taking place around us, even when taking action may be imperative. We do this to avoid having to make the hard decision, to evade feedback, and to avoid any sort of mental discomfort. It's a reaction that delays the inevitable, intensifies the suffering we are trying to avoid, and at times can make things worse. To face this, we have to be reflective and honest with ourselves. Why am I dragging my feet on this? What is the actual problem, the root of the issue? Realize the pitfall of inaction and be mindful that, as Seneca said, "We suffer more in imagination than in reality."

OVERCONFIDENCE

Sixty-five percent of Americans believe they are above average in intelligence.[4] According to AAA, about 73% of Americans consider themselves to be a better-than-average driver.[5] By definition, both of those in reality can only equal 50%; the reason for the overestimation is overconfidence. Human beings by nature overestimate their skills, knowledge, and abilities.

It's difficult to be aware of our own limitations, and people want to think that they are good at what they are doing, often to the detriment of the outcome. Overconfidence poses a danger to investors who may take outsized risks, overestimate their tolerance for risk, or eschew professional assistance. Overconfidence may also result in being less willing to accept new information or listen to conflicting opinions.

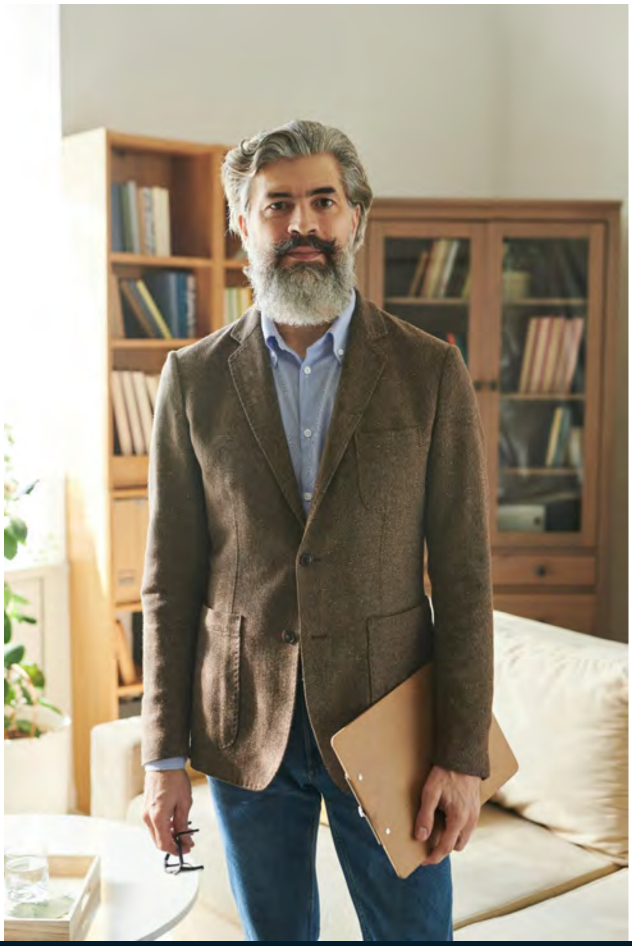
Choice supportive bias is a related heuristic, in which people tend to remember their past choices positively, even if that means distorting their memory to do so. Humans don't want to imagine that they've made a poor choice, so they will downplay any negative consequences of past choices. The failure to examine and analyze the reality of past decisions can affect future decision-making. At the same time, people generally have no trouble taking credit for the positive outcomes of choices!

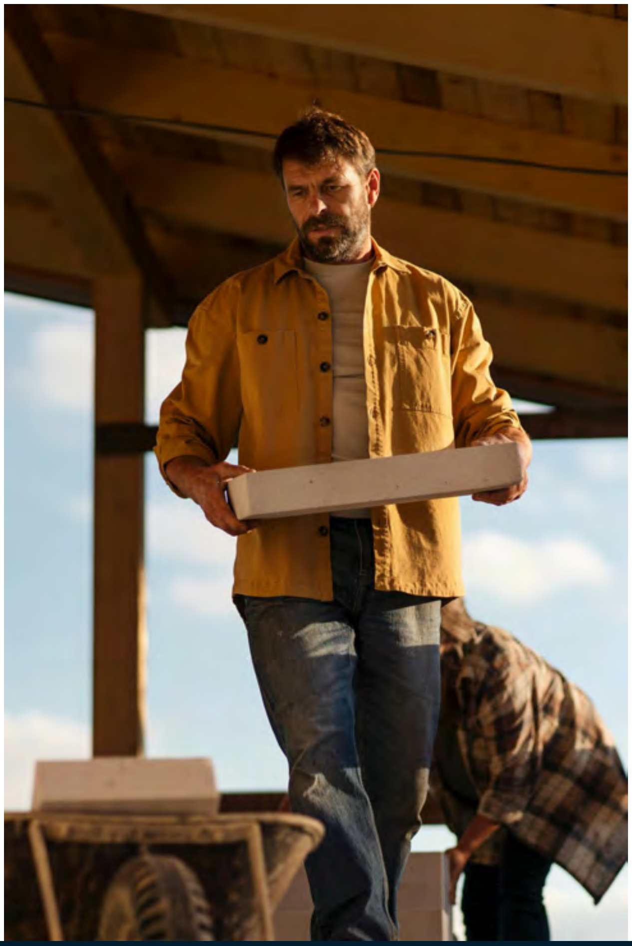
REPRESENTATIVE HEURISTIC

Imagine you are given a photo of two men; one is wearing a tweed jacket and glasses and carrying a book, while the other is dressed in rugged jeans and work clothes. You are asked to identify which is a construction worker and which is a college professor. Without any actual information about the two individuals, most people would pinpoint the first as a college professor. This is due to the representative heuristic, in which people assume that things that appear to be similar probably fit into the same category. Stereotyping is a form of the representative heuristic. Humans create mental representations to order the world and automatically match their experience to those representations.

Like other heuristics, this helps people make quick assessments and decisions by facilely categorizing events and objects and responding to them based on past experience with other things in that category. But inaccurate associations are inevitable. The criminal justice system must take steps to avoid relying on stereotypes when searching for perpetrators. Doctors can misdiagnose if they are overly focused on cases that might look similar but in fact have very different causes. The construction worker in our example may be on his way to a book club meeting while the professor is headed out to do yardwork.

Avoiding the representative bias requires paying close attention to what information you know versus what assumptions you may be making. Investors can fall into the trap of believing that a situation or investment will follow the same trajectory as a past similar situation or investment. Investment categories are based on correlations; but beware of assigning future correlations based on past events.



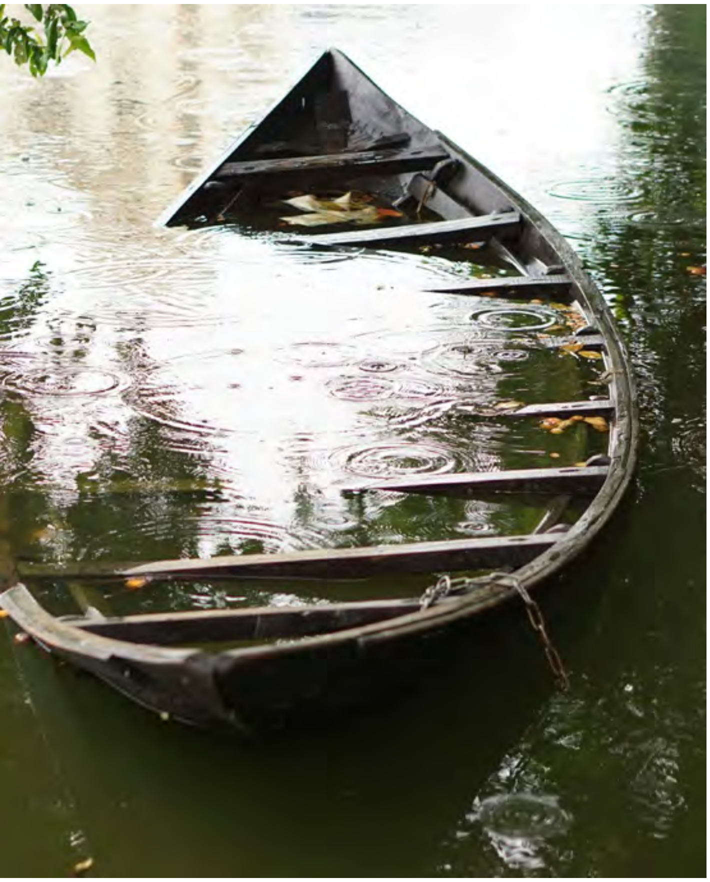


STATUS QUO BIAS

People tend to resist change. Research shows that people nearly always prefer the familiar and known, a particular form of risk aversion (some behavioral scientists suggest that the endowment effect may really be just status quo bias). Studies demonstrate that even when the current situation is unpleasant or failing, people will still choose the status quo over an unknown change.

Also known as the force of inertia, status quo bias is one of the reasons brand loyalty is so powerful. When "New Coke" came on the market in 1989, Coke drinkers' negative reaction prompted Coca Cola to continue marketing "Classic Coke." In blind taste tests, participants greatly preferred the "New Coke" formulation, but in actuality, it did so poorly on the market, it was eventually discontinued.

Samuelson and Zeckhauser identified status quo bias with a series of experiments in 1988. Extrapolating from those experiments, they quantified the power of the bias; in an election expected to be evenly divided, "the incumbent office holder would claim an election victory by a margin of 59% to 41%."[6] When faced with multiple choices, the status quo bias becomes even stronger. For investors, status quo bias presents a clear danger, as individuals have a propensity to avoid making changes or trying new ideas. Investors are often likely to hold onto investments or strategies even when they are not succeeding. It can feel less risky to continue in the status quo rather than take action and make changes, but that is not necessarily the case in reality. The status quo bias is unavoidable, but investors can recognize it and be deliberate in making choices, whether that be to take action or to not take action.



SUNK COST FALLACY

If you've ever started a book or film that you found terrible but felt as if once you started, you needed to see it through to the end, you've experienced the fallacy of sunk costs. This is the very human bias that keeps you tied to a project or idea once you've committed time, money, or effort into it. A "sunk cost" is a cost that cannot be recovered, such as money that has already been spent or committed or time that you've already put in. The fallacy is to justify continued involvement based on those sunk costs, when logically they should not factor into future decisions at all. When people say you should "cut your losses," they are suggesting you steer clear of the fallacy of sunk costs.

The sunk cost fallacy can manifest in personal relationships, business ventures, and frequently in investing. Investors may be tempted to hold on to assets for longer than makes sense, based on the hope of retrieving sunk costs. To avoid this fallacy, decisions must be forward-looking; investors should let go of past choices that cannot be changed or recovered.

Understanding ourselves helps us become better investors.

Be disciplined.

There are plenty of areas in life in which navigating with intuition and gut feeling can be very successful. The unconscious parts of the human mind are generally helpful and guide us through very complex decisions and experiences while keeping the burden on the conscious mind to a manageable level. People would do well to cultivate their intuition and learn how to use it to its best advantage, but be mindful to use your intuition as one of your tools and not the whole solution.

Investing is an area in which emotion, unconscious bias, and assumptions are more likely to be harmful and disruptive than helpful. Much of the skill involved in investing is counter-intuitive; buy when a stock's price is low, sell when a stock's price is high, don't follow the herd, etc. Successful long-term investing is far better served by setting clear objectives and parameters, using thoughtful criteria, and analyzing data consistently. Having a plan, setting rules, and sticking to them.

It's important to understand that unconscious biases are part of who we are, ingrained into our psyche. These heuristics are not typically individual actors, but work together in concert and cumulatively. Becoming aware of them and recognizing them is a good first step, but investors should be taking conscious action to apply a disciplined approach to override irrational decision-making.

Identify your risk tolerance.

Know yourself and know what you can stomach. Your investment strategy hinges on two crucial elements: your risk tolerance and your investment time horizon. If your portfolio is out of balance with your actual tolerance for risk, volatility may become an overly emotional experience and that can result in impulsive decision-making. Be clear and honest in assessing your risk tolerance and maintain the perspective appropriate to your time horizon.

Set asset allocation parameters and rebalance regularly.

Your asset allocation strategy should identify the percentage range for each asset class, so that the portfolio won't become overweighted to one or another asset category as it grows. You should select the maximum and minimum range for large categories such as stocks and bonds, but you can also get more granular, identifying parameters for narrower asset classes such as short and long-term bonds, U.S. large cap, small cap, and international equity.

Once you have set asset allocation ranges, stick to them. Unless you make a conscious, tactical choice to adjust your asset allocation strategy, rebalance your portfolio at least annually to maintain your allocation within its range bounds.

Be forward-looking.

You can use historical data to provide context and analysis to inform your outlook but keep your attention future-focused. Investing is never about the past, and focusing too much on past events can result in succumbing to the fallacy of sunk costs or the gambler's fallacy. Use your knowledge and analysis to guide you in making decisions that are forward-looking.

Maintain a long-term perspective.

Most of your investments will likely be for the long term, and it's important to keep that in mind. Much of your portfolio should be built to last decades, and should not hinge on an off week, month, or year. Keeping a long-term outlook can prevent you from making reactive short-term decisions. Long-term investors focus on certain key decisions to set their overall strategy; once set, they don't need to become consumed with short-term market movements and volatility. If you become uncomfortable and find it difficult to keep a long-term perspective, you may need to revisit your strategy and adjust it to better match your risk tolerance.

Challenge your beliefs and decisions.

Successful investing is the art of being a contrarian. Being susceptible to availability, overconfidence, status quo bias, and groupthink necessitates the deliberate action of challenging your facts, analysis, and decisions. Investors should incorporate a formal process for reviewing past decisions, questioning analysis, and looking at things from different angles.

Utilize an investment advisor —seek professional help.

Even professional athletes have personal trainers. Surrounding yourself with a knowledgeable team and taking counsel is invaluable to building strategies, staying the course, and being able to get fresh perspective when our vision may be clouded. Investing by its nature is volatile and can set off deep emotional triggers that are often largely unconscious, resulting in irrational decision-making. Having outside counsel to help set and maintain a disciplined investment strategy and process can keep you one step removed and able to retain some emotional distance. Working with an investment advisor you trust means that you have access to professional skills, knowledge, and expertise that can help give you peace of mind as you experience market swings. They can also take on the role of applying the discipline necessary to maximize your portfolio's return potential over the long term.

Coldstream can help.

We can guide you in making thoughtful and reasoned financial decisions that help you find peace of mind. Our mission is to enhance your life by delivering personalized wealth strategies tailored to your needs. Our experienced advisors are always just an email or phone call away at 452.283.1600 or info@coldstream.com.

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