LEGG MASON
GLOBAL ASSET MANAGEMENT

The secret lives of investors: LESSONS FROM BEHAVIORAL FINANCE

Designed to help you recognize and overcome making irrational decisions when investing because of emotions, misperceptions and errors of logic.

INVESTMENT PRODUCTS: NOT FDIC INSURED • NO BANK GUARANTEE • MAY LOSE VALUE

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All investments involve risk, including loss of principal amount invested. There is no guarantee that investment objectives will be achieved. Investors should carefully consider their objectives, risk tolerance and time horizon before investing.

ARE YOU A RATIONAL INVESTOR?

Traditional economic theory suggests that investors are rational decision-makers, carefully weighing all available information to make choices that result in the best possible outcome.

But the reality is that even "sensible" investors often make irrational decisions, influenced by emotions, misperceptions and errors of logic. These are the "secret lives" that most investors would rather not talk about — because it ultimately hurts investment performance, and may even prevent them from reaching their personal goals.

A recent study by DALBAR, a national research organization, clearly illustrates the cost of irrational decision-making.

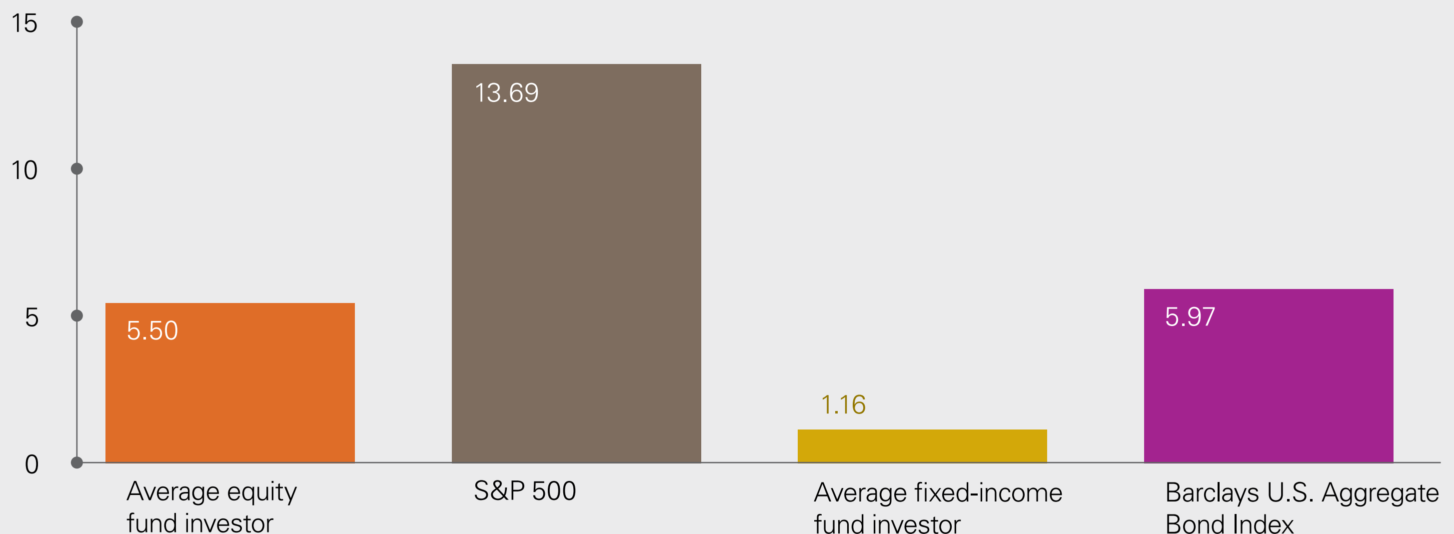
DALBAR found that over time, the average fund investor dramatically underperformed market benchmarks — largely because they tried to time the market rather than staying true to a long-term investment strategy.

The Secret Lives of Investors: Lessons from Behavioral Finance is designed to explain why people don't always make rational decisions about their investments. This overview of the unconscious biases that prevent investors from achieving their goals is based on the field of behavioral finance, which uses finance, psychology and sociology to analyze investor behaviors that impact their investment decisions.

A better understanding of behavioral finance can help you remain focused on your goals and objectives. A trusted Financial Professional can be an invaluable guide and sounding board — providing you with relevant insights and guidance and helping you carefully consider all of the decisions that impact your goals.

Average fund investor vs. market indexes performance[1] (%)

One-year returns for 2014



[1] This chart is for illustrative purposes only and does not represent actual performance, past or future, of any investment. An investor cannot invest directly in an index. Unmanaged index returns do not reflect any fees, expenses or sales charge.

Past performance is no guarantee of future results.

The S&P 500 and Barclays U.S. Aggregate Bond Index performance does not reflect the deduction of any fees or expenses. Please note that the **S&P 500 Index** is an unmanaged index of 500 stocks that is generally representative of the performance of larger companies in the U.S. The **Barclays U.S. Aggregate Bond Index** is a broad-based bond index composed of government, corporate, mortgage and asset-backed issues rated investment grade or higher and having at least one year to maturity. Please note that an investor cannot invest directly in an index.

Source: DALBAR Quantitative Analysis of Investor Behavior 2015; www.dalbarinc.com. DALBAR uses industry cash flow reports from the Investment Company Institute (ICI), www.ici.org, to calculate the figure for the "Average equity fund investor" and "Average fixed income fund investor" categories. The figures are based on the ICI's reports for the "stock fund" and "fixed income fund" categories, which represent flows and performance for U.S. mutual fund assets. "Average equity fund investor" and "Average fixed income fund investor" — as defined by DALBAR — refer to the universe of all mutual fund investors whose actions and financial results are restated to represent a single investor. This approach allows the entire universe of mutual fund investors to be used as the statistical sample, ensuring ultimate reliability. "Average equity fund investor" and "Average fund investor" returns are calculated by the DALBAR Quantitative Analysis of Investor Behavior (QAIB) Report. QAIB calculates investor returns as the change in assets after excluding sales, redemptions and changes. This method of calculation captures realized and unrealized capital gains, dividends, interest, trading costs, sales charges, fees, expenses and any other costs. After calculating investor returns in dollar terms, two percentages are calculated: total investor return rate for the period and annualized investor return rate. Total return rate is determined by calculating the investor return dollars as a percentage of the net of the sales, redemptions and exchanges for the period.

WHAT IS BEHAVIORAL FINANCE?

Behavioral finance seeks to explain the decisions of investors by combining insights from psychology, sociology and finance.

It focuses not on economic theory, but instead on how people actually behave in real-world financial situations. It assumes that investors are not always logical and can easily make irrational decisions when there are no systems in place to remind them of the priorities they've set and the plans they've established.

Behavioral finance is extremely useful to help explain certain kinds of errors that people tend to make in making investment decisions. In general, there are three kinds of mental mistakes identified by experts in behavioral finance:

Emotional

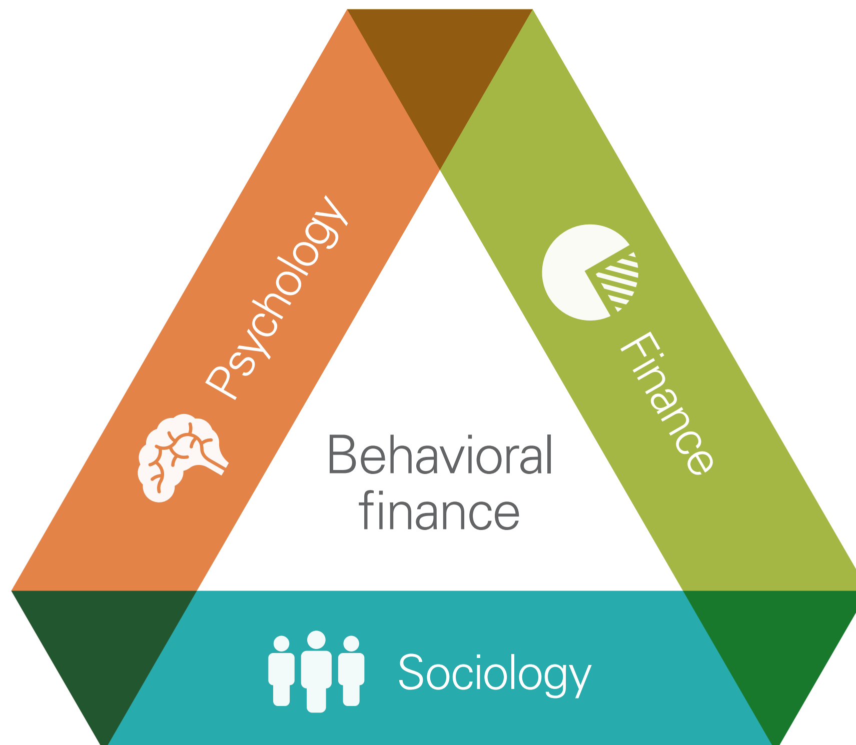
Where decisions are made based on feelings rather than logic

Perceptual

Where information is misunderstood or taken out of context

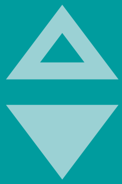
Intellectual

Where the mental process for making decisions is faulty



Source: Legg Mason, 2014.

NOISE VS. SIGNAL: THE QUEST FOR MEANING



Not so long ago, information about the markets was limited to daily newspapers, weekly financial magazines and the nightly newscast. Investors kept track of their accounts through quarterly statements delivered by mail.

Today, investors are bombarded with financial information.

The Internet provides real-time prices at the touch of a keystroke. Financial news networks provide a never-ending stream of data, opinions, graphics and commentary, positioned provocatively to keep viewers glued to the television ("The market's strong!" "The market's weak!" "The market's flat!"). Even minor gyrations in stock prices are treated with the kind of gravity that used to be reserved for major shifts in the economy. It's as if a 24-hour sports network was covering the markets.

While this rush of information does help provide greater accountability, it can take a serious toll on the decision-making of the average investor. The problem is what engineers like to call "noise versus signal": it's difficult to identify a meaningful pattern, or "signal," when surrounded by lots of extraneous data, or "noise." It's like trying to understand what is being said when six other people are speaking at the same time.

Out of the tidal wave of information about the economy and markets, only a tiny drop may actually be meaningful in any given situation.

However, screening out all the "noise" to get at what is relevant is difficult for financial professionals, let alone the average investor. It also results in a lot of short-term thinking and confusion. With so many market pundits competing to be heard over all the noise, the temptation is to declare a new "trend" based on only a few shreds of data. As a result, investors are whipsawed between many choices, unsure what to do.

Choice overload: Too much choice equals confusion

Do people act differently when they have many choices as opposed to just a few?

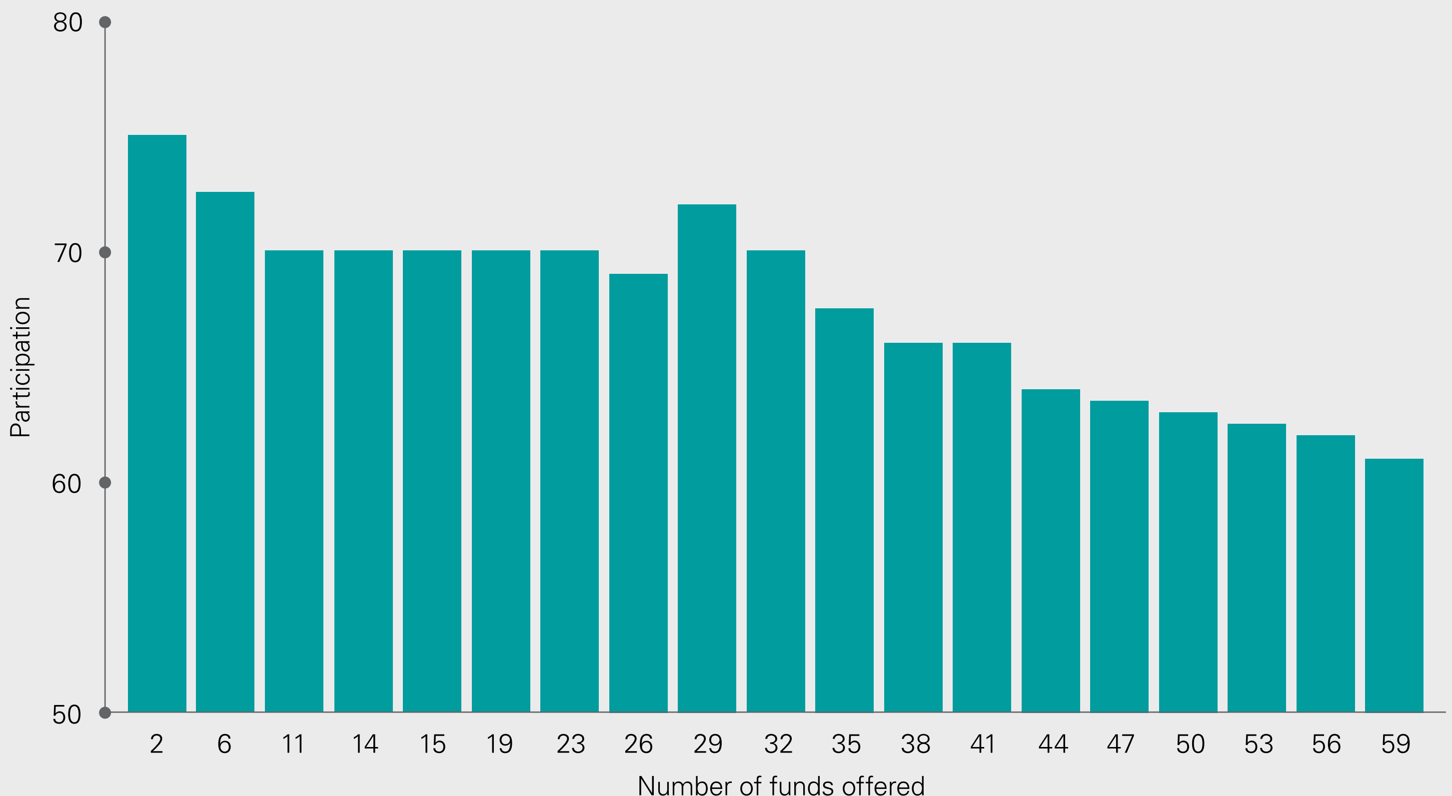
Yes, according to an academic study conducted by researchers Sheena Ivengar and Mark Lepper.

Participants in their study were asked to sample various types of jam at special tasting booths, with the option to buy. One booth had six types of jam; the other had 24.[2]

The results were surprising — participants with only six choices were 10 times more likely to make a purchase than those with 24 choices!

A follow-up study on 401(k) accounts showed similar results. Too many investment options resulted in choice overload and less participation in the 401(k) plan. When only two funds were offered, 75% of the employees participated. In contrast, when 45 funds were offered, participation dropped to less than 65%.[3]

The relation between participation and the number of funds offered[3] (%)



[2] "When Choice Is Demotivating: Can One Desire Too Much of a Good Thing?," by S.S. Ivengar and M. Lepper, *Journal of Personality and Social Psychology*, pp. 79, 995–1006, 2000.

[3] "How Much Choice Is Too Much?: Contributions to 401(k) Retirement Plans," by S.S. Ivengar, W. Jiang and G. Huberman, Pension Research Council of the Wharton School of the University of Pennsylvania, 2003. Please note that the figures cited in the above chart are estimates based on the illustrations provided in the research.

WHEN EMOTIONS TAKE OVER: DECISIONS MADE ON FEELINGS

It's impossible to underestimate the role of emotion in every aspect of human decision-making.

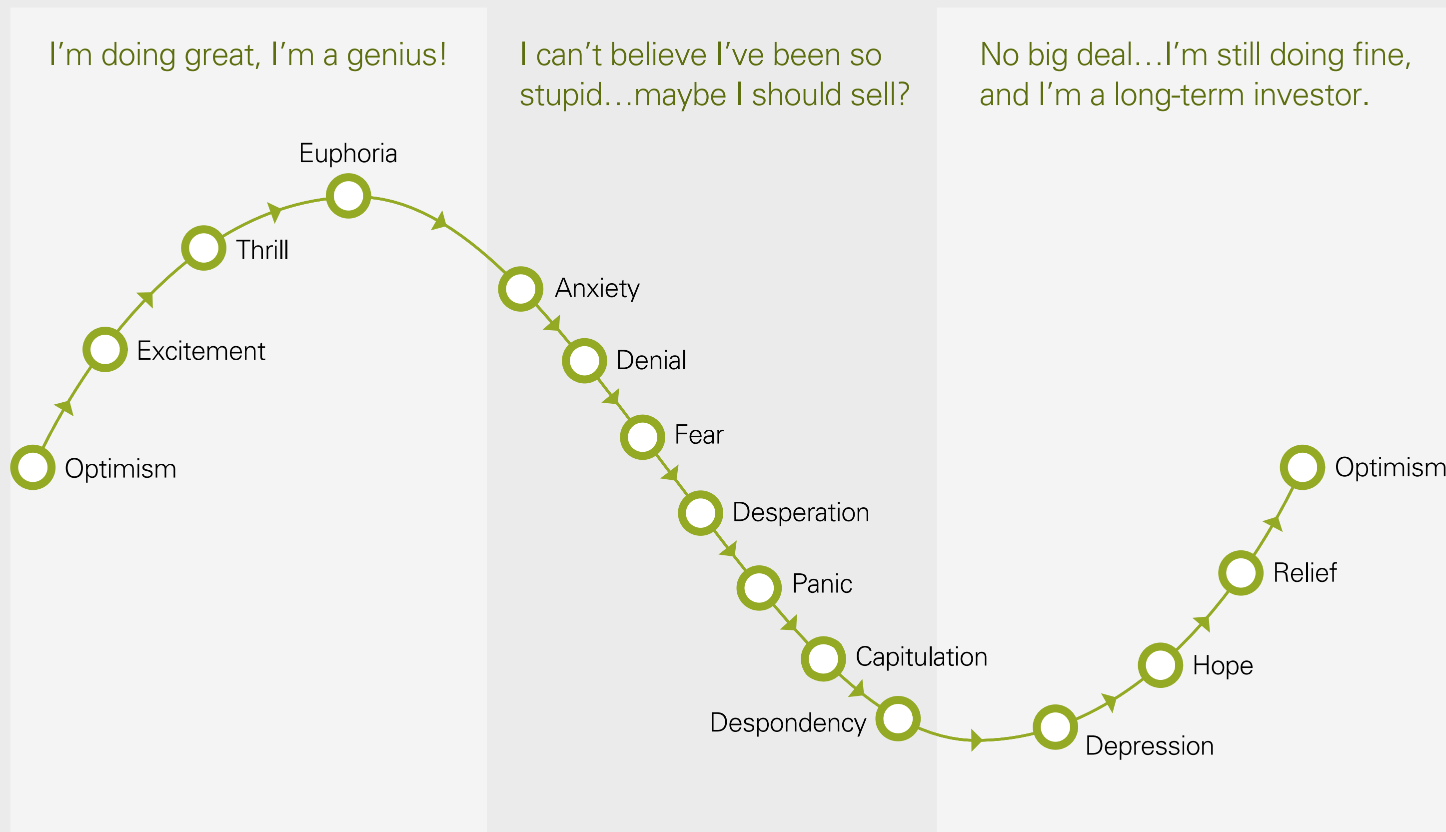
Human beings, after all, are not robots. Pride, joy, fear, greed and panic are just a few of the emotions that typically figure into the mental calculations of investors as they size up a decision.

Emotions are inescapable, and that's why it's important to recognize them, manage them and not give in to impulses that may be destructive when it comes to investments and the goals attached to those investments.

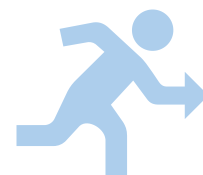
Does investing make you feel like you're on an emotional roller coaster?

For many investors, financial market fluctuations can yield a wide range of emotions, from euphoria to despondency — similar to the emotions one feels while riding a roller coaster.

The danger is that making investment decisions while under the influence of these emotions can easily compromise your investment strategy.



Source: Legg Mason, 2014. Please note that this image is for illustrative purposes only.



Overconfidence: ‘I’m on a roll’

Although confidence is an admired attribute, overconfidence can easily be an investor’s undoing

Reading financial publications and watching news networks doesn’t make anyone an investment guru — yet many individuals feel that open access to a wealth of financial information provides them with the same level of expertise as an investment professional, without any consideration of the challenges and risks associated with managing a portfolio.

For instance, investors often underestimate how much the price of a security may actually fluctuate over time. For example, an investor who purchases a stock at $22 per share may consider the possibility of the price moving up or down by $5, while in reality, the stock could drop to zero or go up to $100.

One independent research study asked interviewees to compare their driving safety and skill to other drivers. In rating their driving skills, almost nine out of 10 of the interviewees said they were above average.

The problem is, it is mathematically impossible for more than five out of 10 people to be above average. In other words, far more of the study participants felt they were above average than could ever be the case. Some of the drivers are clearly overconfident. Being overconfident about driving skills may not be a real problem for most people, but overconfidence can definitely hurt you as an investor.

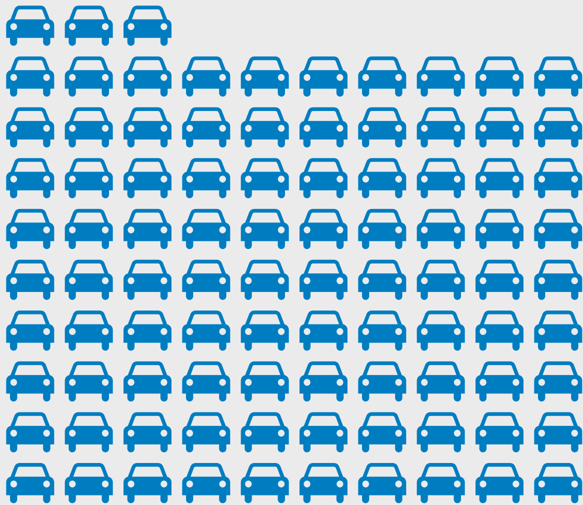
On a practical level, overconfidence can cause investors to take excessive risks and ignore the advice of investment professionals, which can compromise their investment strategy.

> …When you get overconfident, that’s when something snaps up and bites you.[4]
>
> Jim Abbott
> *Professional baseball player*

[4] Cable News Network (CNN), July 21, 2004.

Overconfidence: The behavioral view[5] (%)

93



% of interviewees who said their driving skills are above average

50

The % of all drivers who are above average

[5] "Are we all less risky and more skillful than our fellow drivers?" by Ola Swenson, *Acta Psychologica*, Volume 47, Issue 2, February 1981, pp. 143–148.

Loss aversion: 'No regrets'

Loss aversion is the tendency to avoid accepting the reality of losing money. In effect, it is refusing to admit that you made a mistake.

Suppose that two hypothetical investors purchase the same stock. Investor 1 buys it at $10 per share and Investor 2 buys it, at $20 per share. The stock price then rises to $30 before settling at $15, and analysts agree there is little chance it will ever recover its value.

For investor 2, who lost $5 per share, it makes sense to accept reality, sell the stock and move on. However, because of loss aversion, that investor may subconsciously avoid taking this action — holding it indefinitely and tying up assets that might be used more productively.

A hypothetical investor purchase ($)

Source: Legg Mason, 2014. Please note that this graphical depiction is hypothetical and for illustrative purposes only.

The tendency to hold onto a "loser" is not limited to investors. Think about a favorite sports team with popular players who are past their prime, or a car that you've owned for a number of years that is starting to need major repairs. Do you keep this player or car that has performed so well in the past or do you cut your losses and start anew? It's a very hard decision to make when emotions and feelings are taken into account, based upon past performance, perceptions and loyalty.

The problem is that this can lead to two bad behaviors: Some investors become so concerned about a loss that they do nothing and miss out on a good opportunity, and others may take on imprudent risks in an attempt to make up for a loss.

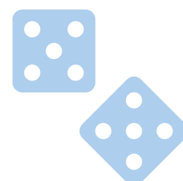
For many investors, they naturally assume that what goes down will eventually come up. This causes investors to act to avoid short-term losses, but at the expense of their long-term goals. Therefore, many investors have an irrational bias to not want to gamble with gains rather than with losses. In other words, they will quickly sell when they have gains but not sell if they're operating with losses.

Investors need to carefully weigh these choices, with their Financial Professional based upon how they're presented, to make a sound decision based on what is best for accomplishing their stated investment goals.

Origins of loss aversion

Loss aversion is part of a concept called "Prospect Theory" developed by Amos Tversky and Daniel Kahneman in 1979. Prospect Theory holds that people make decisions primarily based on what they have to gain, not what they have to lose. One of the easiest ways to illustrate this principle is to offer someone this simple bet: If a coin is tossed and comes up heads, you win $100, and if it comes out tails, you owe $100. Though this bet is "fair," in that there's an equal chance of winning or losing the same amount, few individuals find it appealing. Instead, to compensate for the possibility of losing their money, people want the potential gain to be significantly larger than the potential loss. What Tversky and Kahneman found in their research was that before making an investment, we want to feel assured that the potential gain is roughly double the potential loss.[6]

[6] "Prospect Theory: An Analysis of Decision Under Risk," by Daniel Kahneman and Amos Tversky, *Econometrica*, Vol. 47, No. 2, March 1979, pp. 263–292.



Thrill seeking: 'I want to shake things up'

Behaviorists have long identified two major types of personalities — "A-Type" individuals who are impatient, highly competitive, aggressive and incapable of relaxation.[7] They tend to be high-achieving workaholics who multi-task, drive themselves with deadlines, and are unhappy about the smallest of delays. "B-Type" individuals, in contrast, are described as patient, relaxed and easygoing.

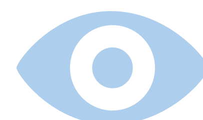
In recent years, another personality type has attracted the attention of behaviorists: the "T-Type."[8] These are individuals who are overconfident, easily bored, have a tremendous appetite for excitement, and seek out daring experiences — such as bungee jumping or speeding on a highway — simply to "shake things up."

Investors that exemplify this T-Type are aggressive day traders who chase fast-moving stocks for quick gains. These traders are prone to taking risky positions in stocks that grab their attention from the 24-hour financial news network cycle, with the goal of quickly turning over a profit.

In chasing the next big win, thrill seekers can harm themselves by making too many trades that might lead to lower returns, and making bigger and more uncertain bets with limited resources that greatly increase their risk.

7 "Type A Behavior and Your Heart," by M. Friedman and R.H. Rosenman, Knopf, 1974.

8 "What T-Type Are You," Winter X99, www.espn.go.com.



Fear: the most dangerous emotion of all

Overconfidence, loss aversion and thrill seeking can all lead to irrational decision-making, but none of them are as dangerous as fear.

That's because fear isn't just in our minds — it's also literally in our bodies. When we're afraid, our heart beats faster, our skin breaks into goosebumps and our breathing gets shallower. These are biological reactions triggered by the sympathetic nervous system, which bypasses the parts of the brain associated with rational thought.

These reactions make sense when we're confronted with a physical threat and we need to be instantly ready to fight or run away. However, when what we fear is more abstract — like a possible decline in stock prices — rational thought is what's needed, and these reactions get in the way of that.

This can lead investors to panic and sell securities after they've lost value — even if they "know" in their minds that there's a good chance they will eventually regain some or all of that value. Or it can lead to investment "paralysis"— with investors so scared of doing the wrong thing that they end up doing nothing, and missing out on potential opportunities.

What may be the best defense against fear? Setting clear guidelines about how to handle difficult situations before they ever arise, and trusting in these guidelines even when fear pushes you to make impulsive decisions.

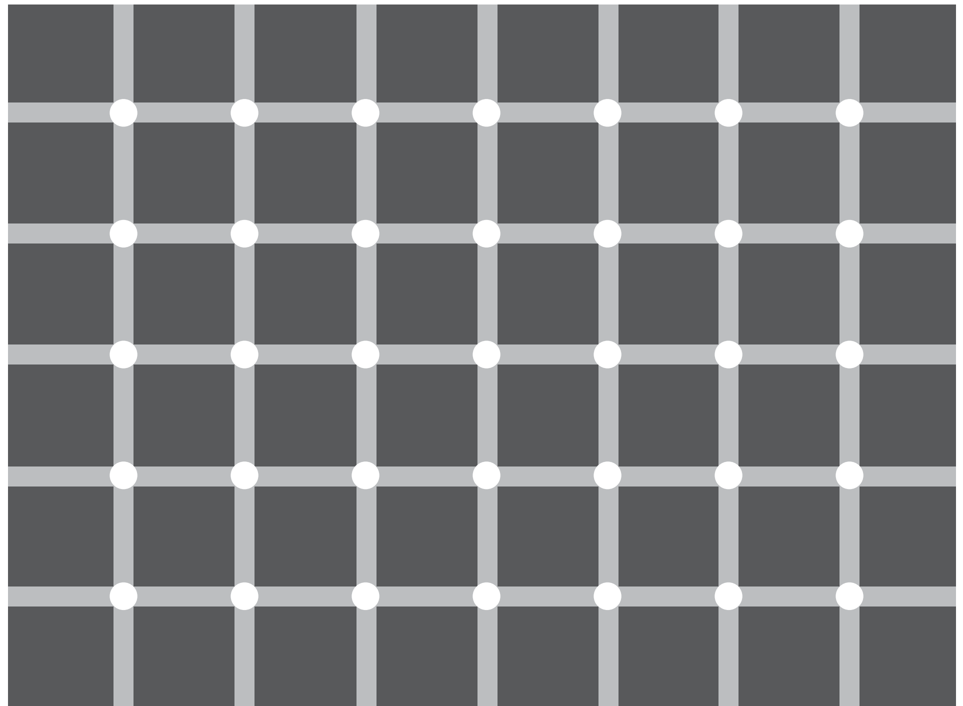
WHEN PERCEPTION IS DECEPTION: DECISIONS BASED ON MISINFORMATION

Although it's easy to recognize when an investor's emotions are getting the better of them, it is far more difficult to detect errors in perception.

Sometimes the way the human mind processes information leads people to 'see' things that don't really exist.

Consider this illustration

The grey circles that seem to flicker in the corners between the boxes are not really there — it's an optical illusion. While investors may not literally see what's not there, they may have false mental perceptions that can undermine their decision-making.



Source: Legg Mason, 2014. Please note that this image is for illustrative purposes only.

Anchoring: 'Stuck on you!'

Anchoring is the tendency to rely too heavily, or "anchor," on one trait or piece of information when making decisions.

When making a decision, individuals typically take into account a wide range of information. When individuals "anchor," they fixate on one or two facts and fail to consider other important data.

For example, a person looking to buy a television may place great importance on the brand name and fail to consider the size, sound, picture quality and other relevant characteristics. Likewise, an investor who focuses just, for example, on short-term performance and manager recognition when considering investments may not select the investment best suited to their objectives, tolerance for risk or time horizon.

Most investors may think Investment A is a better choice

15.3 % average annualized return
10 years manager tenure

11.9 % average annualized return
10 years manager tenure

However, there is danger in only relying on a couple of pieces of information — Investment A may be much riskier.

15.3 % average annualized return
10 years manager tenure
19.0 % Standard deviation[9]

Lower-ranked investment

11.9 % average annualized return
10 years manager tenure
6.0 % Standard deviation

Highly-ranked investment

Source: Legg Mason, 2014. Please note that this visual is hypothetical and for illustrative purposes only.

[9] **Standard deviation** measures the risk or volatility of an investment's return over a particular time period; the greater the number, the greater the risk.

Hindsight bias: ‘I could have predicted that!’

Hindsight bias is the inclination to see past events as more predictable than they actually were.

A great example is the “Monday morning quarterback” phenomenon in which sports fans claim they knew what was going to happen at the previous day’s game.

It’s human nature to see the past through the lens of the present and see past decisions through a “rose-colored” pair of glasses. For instance, some “do-it-yourself” investors, who reaped significant financial rewards during the run-up in technology stocks and managed to sell before the bubble burst, may have an inflated opinion on their stock-picking abilities. However, as we all know, **past performance is no guarantee of future results.**

It’s also easy to believe that you’re smart when you were only lucky, and to not learn from your mistakes, and to repeat them. It is important to remember that we’re not as perceptive as we like to think, and we tend to view past events as more predictable than they were. We should realize that our perception of previous events can easily cloud our judgment.

“Hindsight is always twenty-twenty.”

Billy Wilder

Prejudice: ‘I know what I know.’

Prejudice is a perception based upon limited experiences; in effect, it means “prejudging” a situation before knowing all the facts.

Biases such as prejudice can hinder our acceptance or denial of the truth not on the basis of the strength of the arguments, but because one’s own preconceived ideas can get in the way of drawing sound conclusions. Some examples include:

- “I once owned a small-cap value investment and it was a stinker…I’ll never buy one of those again.”
- “My father got burned in the bond market…there’s no way I’ll ever buy fixed income.”
- “I only purchase investments that are within the top quartile.”

When you feel strongly about something, ask yourself, “Do I have a good reason to think this way?” Before issuing a judgment based upon preconceptions and or past experiences, investors should carefully weigh all facts and circumstances. A Financial Professional may be able to offer you a less biased view that considers the big picture, asking “Does the investment in question support the originally established goals?”

Framing: ‘It’s not what you say but how you say it’

Framing refers to the way that a choice is presented, which can greatly influence the way it is perceived by investors.

It’s quite possible to present the same set of facts in more than one way — each technically accurate but with a very different emphasis. A classic example is a glass of water being “half empty” versus “half full”; both statements are true, but one feels negative and one feels positive.

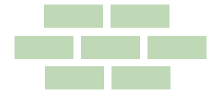
Similarly, “there’s a 50% chance of success” and “there’s a 50% chance of failure” both describe the same situation, but each has a clear bias. Another example is the common practice in consumer advertising of breaking up a large payment into small installments; “$3 a day” sounds much more appealing than “$1,095 a year.”

One way that framing affects investors is what is known as the “money illusion.” This refers to the tendency of some individuals to judge investments based on the nominal rate of return, without fully considering the impact of inflation. For them, a 12% return with 8% inflation sounds more impressive than a 5% return with 1% inflation, though they amount to the same thing.

Certainly, it’s prudent for investors confronted with a very positive or very negative scenario to carefully review the facts and figures and to ask themselves, “Is the way this is being framed influencing my judgment?”

> “How little do they see what really is, who frame their hasty judgment upon that which seems.”
>
> Daniel Webster

Pattern recognition: 'I see, therefore I think'



> To understand is to perceive patterns.
>
> Sir Isaiah Berlin

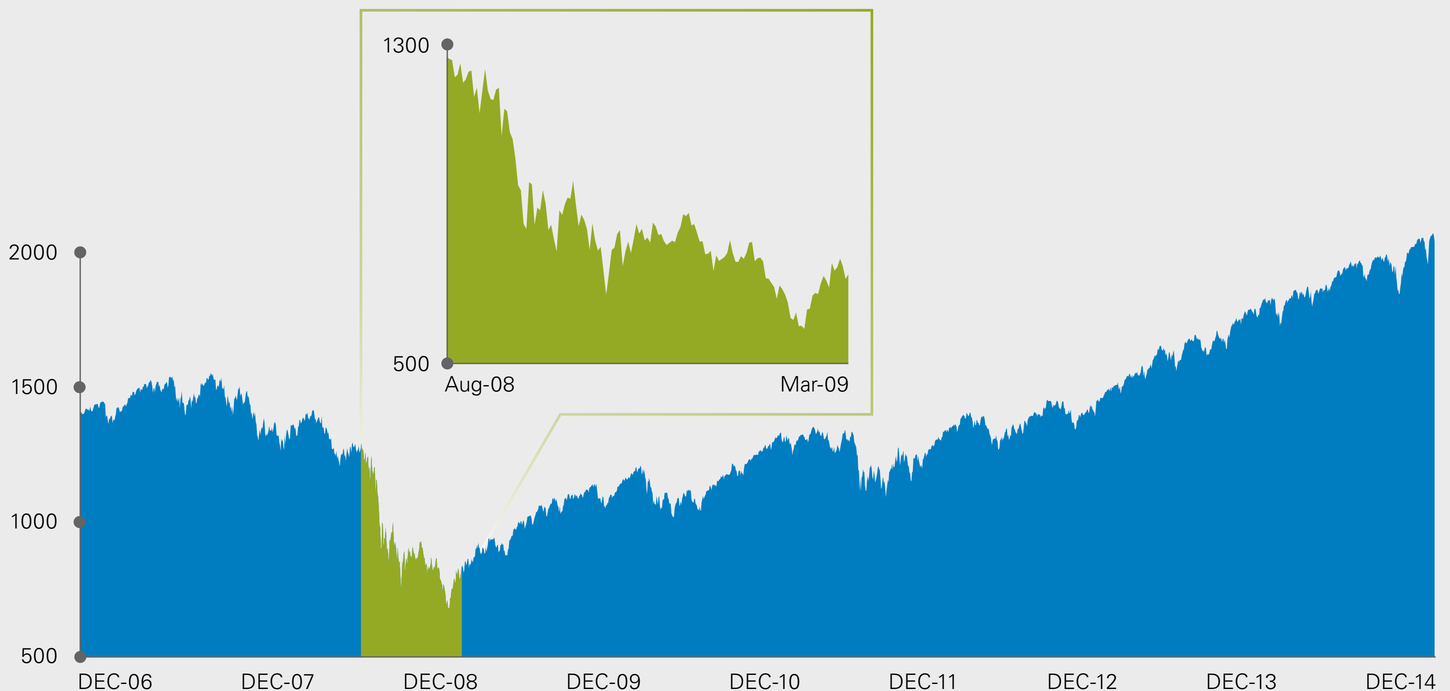
Human beings are biologically "hard wired" to identify patterns in raw data. While this enables us to learn, it can also lead to people incorrectly declaring a "trend" using only very limited information.

Certainly, there are investment professionals who have considerable experience in identifying patterns in price movements based upon specialized training and experience. However, individual investors may incorrectly feel that they are capable of identifying long-term trends based upon small samples of data.

The problem is that generalizing based on a short period of time can be deceptive — without the proper background to make informed judgments, it's easy to mistake a short-term blip for a long-term trend.

It's easy to mistake short-term events for long-term trends (recency bias)

S&P 500 performance December 31, 2006–December 31, 2014[10]



[10] Source: Bloomberg. **Past performance is no guarantee of future results.**

For illustrative purposes only and does not represent the performance of any specific investment.

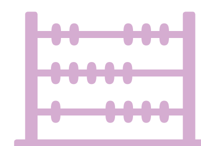
The **S&P 500** is an unmanaged index of 500 stocks that is generally representative of the performance of larger companies in the U.S. Please note that an investor cannot invest directly in an index. Unmanaged index returns do not reflect any fees, expenses or sales charge.

WHEN LOGIC ISN'T ENOUGH: DECISIONS BASED ON FAULTY JUDGMENT

Sometimes investors are perfectly rational and have a clear view of the facts, but fail to choose the right tools to analyze a potential investment. The result is the same as if you tried to use a screwdriver to hammer a nail: frustration.

This is often a case of "a little knowledge being a dangerous thing." Investors, for example, might have heard about price-to-earnings (P/E)[11] as a tool to analyze individual stocks. However, P/E ratios may have different significance depending on whether the market is in a bull or bear cycle. Without making the proper adjustment, the investor may arrive at a distorted view of the stock's potential.

[11] The **price-to-earnings (P/E) ratio** is a stock's price divided by its earnings per share.



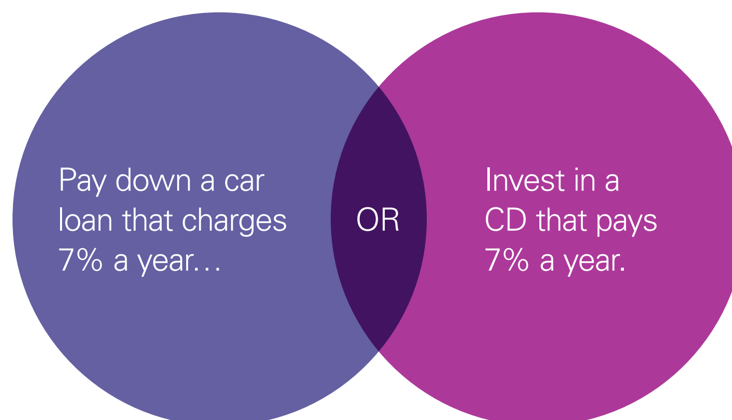
Mental accounting: 'Everything is in its place'

Mental accounting refers to the common habit of classifying different financial products in informal mental "buckets."

A simple example is thinking of the money in a checking account differently than the money in a savings account, when both represent available cash. Similarly, investors may consider one set of investments to be reserved for "serious" needs (e.g., retirement, higher education) and another set for "play" (e.g., vacations, luxury items.)[12]

While mental accounting is often harmless, problems arise when people are excessively rigid and fail to recognize the artificial nature of these distinctions.

For example, consider an investor presented with these two options:[13]



Most individuals will choose to put their money into the CD.[13] What they fail to consider is that not paying 7% is the equivalent of earning 7%, all other things being equal; paying off the loan may actually be the better option. Mental accounting may prevent them from seeing assets and liabilities as part of the same personal "balance sheet." This makes it hard to pursue a master financial strategy that ties all types of assets and liabilities to a unified set of objectives.

[12] "Toward a Positive Theory of Consumer Choice," by Richard H. Thaler, *Journal of Economic Behavior and Organization*, pp. 39–60, 1980.

[13] Source: Legg Mason, 2014. A CD is a debt instrument issued by a bank that usually pays an interest rate set by competitive forces in the marketplace. CDs are FDIC-insured up to $250,000 and offer a fixed rate of return, but they may be subject to fluctuating rates and early withdrawal penalties.

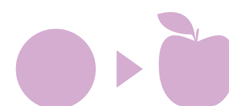
Another common setup is to categorize current investments as “winners” and “losers.” This can lead investors to miss clues that today’s loser may be tomorrow’s winner, and vice versa.

Certainly, for most people, a paper loss is less painful to face than a realized loss. As a result, investors often hesitate to sell securities that have declined in value, even when there is little chance of the price recovering.

As a consequence, when an investor needs to raise cash and has a choice between two stocks to sell — one that has gained value and one that has lost value — they will often favor selling the winner, when rational analysis favors selling the loser.

Selling a winning stock vs. a losing stock

Heuristics: 'You can't compare apples to oranges'



Heuristics are simple "rules of thumb" that people use to make decisions when facing complex problems or incomplete information.

Though such rules may work well under most circumstances, problems can arise when they're applied to the wrong situations.

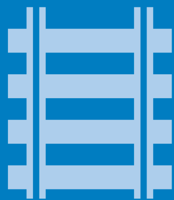
A good example of a heuristic is the "price implies quality" bias. This is the tendency for individuals to assume that more expensive beverages taste better than inexpensive ones. This holds true even when prices and brands are switched; putting the high price on the normally relatively inexpensive brand is enough to lead people to perceive it as tasting better than the beverage that is in reality more expensive.

Problems arise when investors apply a heuristic designed for one situation to another, less appropriate situation. Few people would use the same criteria to pick an accountant as a plumber. Similarly, it's probably unwise to apply the same methodology to pick a "blue-chip" stock than an emerging markets[14] investment. For example, you'd take into account the concern for currency fluctuations in evaluating the emerging markets, while this would be far less of a factor than with the blue-chips.

The point is, you can't transfer the same investment philosophy and process from one area to another without carefully checking them first. Consult your Financial Professional to make sure that you're comparing apples to apples and oranges to oranges.

[14] There are special considerations associated with investing in emerging markets, including risks related to currency fluctuations and adverse social and political developments. Furthermore, the securities markets of emerging markets countries are substantially smaller, less developed, less liquid and more volatile than securities markets of the U.S. and more developed countries.

STAYING ON TRACK: LESSONS FOR INVESTORS



Behavioral finance provides a useful framework to explain the motivations behind many common mistakes in investing.

By recognizing our unconscious biases and the potential problems that they can cause, we stand a better chance of avoiding decisions that compromise the realization of clearly established goals. However, recognizing and understanding behaviors is not enough; we have to adapt our behaviors so that we can remain focused on the "big picture."

A few lessons to consider:

1

Work with a trusted Financial Professional

A trusted Financial Professional works with you to identify your goals, needs and aspirations and to align your short- and long-term goals with your own risk tolerance. A Financial Professional also offers much-needed perspective by helping to identify the consequences of impulsive and irrational decisions. Most importantly, your Financial Professional, backed by the resources of his/her firm, helps you achieve your goals by providing valuable insight and guidance on economic issues, the markets, specific investments and strategies.

2

Identify your goals, your time horizon and your tolerance for risk

Distinguish between "real life" goals (funding an education, paying for retirement) and "performance" goals (e.g., achieving an average 5% annual return), and create a timeline showing when you may need to access funds you've invested. You should also carefully evaluate any changes and decisions, considering all of your goals — both short-term and long-term. In considering all of your goals, you should gain insight into what different types of investments are meant to accomplish, as this will help you understand your own tolerance for risk.

3

Don't let emotions drive your decisions

All too often, investors are irrational when making financial decisions. Basically, they let emotions drive their actions. These emotions can lead to irrational decision-making and impulsive decisions that often compromise the realization of stated goals. Before you react, make a list of your concerns, revisit your goals and review your strategy. If your goals or priorities have changed, or if you believe your strategy is no longer appropriate given the economic environment, contact your Financial Professional.

4

Focus on building wealth instead of reducing losses

Investors are reluctant to sell a stock at a loss, since selling amounts to an admission that purchasing the stock was a bad decision in the first place. Stay focused on the big picture — that is, the goals you have established — and carefully evaluate any changes and decisions, considering all of your goals — short-term and long-term.

5

Understand your perceptions

Gain an understanding of how you process information when making decisions, including any biases and prejudices. Ask your Financial Professional for comprehensive information on the investments and strategies he or she recommends so that you can make educated decisions. Also bring any reservations (such as a reluctance to invest in a specific sector of the market) to your Financial Professional; he or she will be able to provide you with rationales for recommended investment strategies.

6

Avoid 'mental accounting'

Avoid mental accounting by treating each dollar as a portion of your overall wealth, and not compartmentalizing your money. Your willingness to take risks should not be affected by artificial distinctions between "serious" needs (e.g., retirement, higher education) and "play" needs (e.g., vacations, luxury items).

GLOSSARY OF TERMS

Anchoring
A mental bias in which individuals "anchor," or place excessive weight on, a single piece of information in evaluating investment decisions.

Framing
Describing an investment or choice in a way designed to influence individuals by emphasizing a particular positive or negative viewpoint.

Heuristics
Simple rules that people use to make decisions when facing complex problems or incomplete information.

Hindsight bias
The tendency, after an event has occurred, to believe that one knew what was going to happen beforehand.

Loss aversion
The tendency for people to strongly prefer avoiding a loss rather than obtaining a gain.

Mental accounting
A bias whereby individuals divide their assets into separate "buckets" or categories instead of viewing all of their investments as part of the same financial framework.

Overconfidence
When individuals overestimate their ability to make successful decisions.

Prejudice
An irrational, preconceived judgment or opinion formed without sufficient knowledge or facts.

Prospect theory
This theory argues that when making decisions, people typically exhibit risk aversion; hence, when making decisions, they view whatever losses may be involved as more painful than equivalent gains are desirable. In other words, individuals have an irrational tendency to be less willing to gamble with profits than with losses.

Regret minimization
When individuals try to avoid actions that confirm that they've made mistakes.

Risk aversion
The tendency to be afraid of taking risks even when they may also carry ample potential gains.

Information compiled from a number of sources referenced throughout this document.

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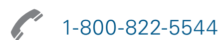 1-800-822-5544

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