## Vanguard

## Human investors make human decisions

**Greg Lindsay:** More than two decades ago, a pair of psychologists ran an experiment with jam. One day, shoppers found a display with 24 flavors. Another day, it had only six. As it turned out, the larger variety invariably attracted more shoppers, but they were one-tenth as likely to make a purchase as those perusing the smaller selection. There were simply too many jams to choose from.

The psychologist Barry Schwartz famously described this dilemma as "the Paradox of Choice" — more isn't always better when it comes to making decisions. Whether the question at hand is which job to take, which pair of jeans to buy, or how best to invest for retirement, too many choices can lead to increased anxiety, regret, and paralysis.

In the first episode of this series, we examined America's expanding universe of choices, but in this installment, we will explore how it feels to traverse it. How does choice help or hurt our ability to make the right decision? Where should we look for advice? And how can we feel more confident in the choices we make — no matter how many options there are?

This is a Vanguard podcast produced by El Studios. I'm Greg Lindsay.

Starting in the early 2000s, business professors lyengar and Emir Kamenica began looking at the choices millions of Americans made around their retirement savings each year. After crunching data from thousands of different workplaces, the pair noticed that when offered more plans to choose from, participation levels began to fall. So much so that, for every ten mutual funds employees were offered, participation levels would drop 2%. So, offer them fifty funds and you'd find that participation was 10% lower than if you'd offered them only five.

- **Joy Lere:** When that menu becomes too long, it becomes overwhelming. And we kind of freeze and shut down.
- **Greg Lindsay:** That's Dr Joy Lere, a clinical psychologist and behavioral finance consultant.
- Joy Lere: People can get caught just kind of spinning in the spiral of indecision. And I think a lot of times what is behind that for people is there's a fear, a fear that I'm going to make the wrong decision. And then the more choices there are, they are over-analyzing each one. And when we say "yes" to something in our lives, financially or otherwise, we are saying "no" and closing the door to a whole host of other things. And that can be really unnerving for people.

**Greg Lindsay:** When the problem at hand is too many jams, that's one thing. But when it comes to choosing one's financial future, the stakes are much higher. A recent Economist Impact survey found that more than half of Americans doubt their ability to make good investment decisions, while three quarters say they wish their education had prepared them for managing their finances.

We might call this the Paradox of Investing — even as Americans have more access, more choices, and more control over their investments, the more they doubt their abilities to do so. Even the most seemingly rational person can feel crippled by this cognitive dissonance.

- **Ryan Barrows:** It's tough when investors have so much choice in investing. And so, you know, investing falls into that category of stuff that's important but it's not urgent.
- **Greg Lindsay:** Ryan Barrows is the head of registered investment advisors at Vanguard.
- **Ryan Barrows:** And so my experience is when people have something that's important but not urgent, they're faced with a ton of choices, they generally just say, "I'm going to do this later" and go think about something else. Like inertia wins. It's not a thing they have to do today.
- Janelle McDonald: Investing is emotional, right? It's hard to get away from that. It's hard to deny that.
- **Greg Lindsay:** That's Janelle McDonald, head of strategy and practice management for Vanguard's Personal Advisor services. In her view, paralysis isn't the only danger when it comes to investment choices. Emotion, intuition, and misunderstanding risk are all mental hazards as well.
- Janelle McDonald: And when you're an investor, and you're faced with things like market volatility, for example, that's one that comes up over and over again, and it's one that, quite frankly, is just inevitable. Some investors may find themselves making impulse decisions. Market's gone down, I'm selling out and going to cash, alright? Worst thing they could do, right, they just locked in all their losses. Or maybe folks could find themselves just paralyzed. They can't act, they can't actually rebalance their portfolio and buy the dip the way we told them to when we made the plan. So I'd say when folks are faced with a lot of choices, whether it's they're just starting out, and they're trying to figure out what account type do I need? Where do I want to invest? What's the asset allocation I need? Or they're an investor, they're active, and they're faced with a changing environment and the choices that come along with that. I think we see a number of different emotional reactions that really start to sort of hurt clients and can hurt their prospects on having long-term investment success.
- **Ryan Barrows:** Yeah, the other thing that came to mind while you were saying that is humans are generally bad at kind of like risk and prioritizing which risk is big and which risk is small and how do you think about those things. So you know, people will stress about should I buy the \$4 cup of coffee or the \$1 cup of coffee? And in the grand scheme of things, it's probably not going to matter. But should I start saving earlier, that's the Albert Einstein quote, about the eighth wonder of the world, it's compounding interest.

**Greg Lindsay:** At risk of sounding arrogant, human beings are the most cognitively advanced species on the planet. We've launched rockets into space, cracked the atom, and built thriving civilizations. So why do we find it so difficult to assess the risks surrounding our financial decisions? The answer lies in the realms of anthropology.

The human brain is millions of years in the making, and many of the tricks that allowed our ancestors to thrive are ill-suited to the modern world. Awareness of our cognitive shortcomings has surged in recent years—partly thanks to thinkers such as Daniel Kahneman and Amos Tversky—but learning to compensate for our cognitive biases has lagged behind.

With so many blanks still to be filled, how can we improve our own financial decision making? We can start by recognizing we are human, all too human, rather than a perfectly rational homo economicus.

- **Nik Sawe:** So economists like to think of people as rational actors, traditionally, where we have an infinite amount of attention and processing power to devote to the decision making that we do. Unfortunately, that's not really the way that we work in the real world.
- **Greg Lindsay:** Nik Sawe is a Research Associate at Stanford's Graduate School of Education
- **Nik Sawe:** We only have so much cognitive overhead to devote to a decision, and so that can really lead to choice paralysis in the world that we're in now, where we've got a lot of demands on our time and on our attention. And just a wealth of choices, especially when we're making consumer decisions, where there's just a myriad number of product attributes and vendors and different ways that we can slice the pie.
- **Greg Lindsay:** In his best-selling book Thinking, Fast and Slow, the Nobel Prize-winning Kahneman divided our attention spans into "System 1" and "System 2." One is emotional, impulsive, and easy enough; the second more deliberative and logical — and impossible to sustain for very long. Researchers have spent decades unpacking the shortcuts — known as "heuristics" — we develop to compensate. Here's Sawe again:
- **Nik Sawe:** Trying to be thrifty with the amount of processing power that we use leads us to these cognitive shortcuts where we're relying on heuristics, like the availability heuristic, whatever comes top of mind, vividness heuristic where, you know if it's especially salient, especially powerful and easy to conjure up in our imagination, that has an outsized effect on us and that really interacts with, you know, the media consumption.
- **Greg Lindsay:** Other cognitive biases seem expressly designed to distort otherwise rational judgements about value, prices, and risk. One example is "anchoring."
- **Isabel Macdonald:** There's been some research where you ask people to write down the last two digits of their social security numbers, so very arbitrary numbers, and then ask their valuations of different items. And people with higher digits of their social security numbers are more likely to value products, any sort of product, if they're asked directly after that, they will give a higher valuation.
- **Greg Lindsay:** Isabel Macdonald is a researcher at the Lab for Inclusive FinTech at the University of California at Berkeley.

- **Isabel Macdonald:** So they have anchored on this somewhat arbitrary number that they have written down. And this has led them to shift their valuations that they state. So we see this a lot, I think, in the financial space, particularly investments. Values that people are likely to anchor around might be the purchase price of an asset. They're using that as an indication of value rather than perhaps the fundamentals of that asset. And as a consequence, they might be holding their position longer than they should if they are expecting a price to return to that original purchase price that they're using as their anchor.
- **Greg Lindsay:** Befitting our status as social animals, another important heuristic is "herding" — our tendency to unconsciously accept others' choices as the correct one. This can be a double-edged sword, to say the least. Here's Joy Lere to explain:
- Joy Lere: People really like to follow the crowd it's how we are wired. So I think sometimes people look around and think, "Hmm, well, if everyone else is doing this, that must mean"—even if their instincts are saying "I'm not sure about this"—"well maybe everyone else knows something I don't," or "I really don't want to do the work of looking into this, so I'm going to assume that ,because enough people are doing this, that someone has figured out that this is the best possible choice." And I think one of the things that's important when considering your financial wellbeing is understanding this is very unique to you and your circumstances. So you are not playing the same financial game as everyone else. Your goals, your history, what you have right now, the demands on your need, the demands on what you have—those are very individual. So to look at what someone else is doing, or what someone else has, and think, "Well, if it's okay for them, then it should be okay for me," can be very problematic for someone in the long run.
- **Greg Lindsay:** You've probably heard this described as "herd theory" or "following-thecrowd", and Vanguard's Janelle McDonald sees it as an easy trap to fall into.
- Janelle McDonald: At any point in our history you can look at, there's always something that's a hot trend at that time, right? Whether it's real estate, whether it's a new asset, whether it's a new currency (if you would call it that), there's always something that is hot at the time. And I think that one of the things that we see clients do—and I would quite frankly, say, oftentimes, this is a trap—is they may follow the crowds because something is hot, and they see it in the news that it is the next big thing, and they may flock to it. And oftentimes, if you flock to something unknowingly and unwittingly, you can actually make decisions that are damaging to your long-term investment objectives. So you certainly see that happening today. You have seen it happen throughout our history. And one thing that we like to encourage clients to think about at Vanguard is just not to mistake the hot thing for today as what is going to deliver long term, enduring returns for you throughout your investment horizon.
- **Greg Lindsay:** "The long run" is a problematic notion in general for most of us, partly because we're alienated from our older and presumably wiser selves. And that means they're likely to be poorer for it if we're not careful.

- Hal Hershfield: One of the reasons that we so often fail to save for the long run in part is because we're, we get too focused on, we get too weighted by the present. And that issue really arises in part because we feel a sense of disconnection from our future selves, from the people we will eventually become. And so, you know, in my early research, one of the things that I tried to do is figure out, you know, in what ways can we actually help people make their future selves feel closer to them, feel more vivid and more real?
- **Greg Lindsay:** Hal Hershfield is a Professor of Marketing, Behavioral Decision Making, and Psychology at UCLA's Anderson School of Management.
- **Hal Hershfield:** And it's taken us a long time to really examine this in the field, but we recently just wrapped up and should be published, it'll be published in the next couple of months, a large field experiment in Mexico where we send out email blasts to about 50,000 customers of a bank in Mexico. And half of those customers were given the opportunity to see their aged selves and half were not, and they were all asked if they wanted to make a contribution to what's called a personal pension, which is essentially like a 401k. And the ones who, you know, got that opportunity to see their future selves were slightly more likely, significantly more so, but you know, still small number—this was a very sort of low touch intervention—but they were a little bit more likely to actually make a contribution to their retirement account. You know, we think part of what's happening here is that we helped make that future, and that future self, more real.

The point, though, is that these are sort of infrequent decisions. And when those infrequent decisions come up, it's often difficult to try to take the perspective of our future selves, to take the perspective of the person who's going to benefit from a saving now. Or, you know, put another way, the person who will suffer from us not saving that much right now. And so, in our research, part of what we were hoping to do is to really make that future self more of an active participant at the negotiation table

**Greg Lindsay:** Making sure you factor in different perspectives is essential. And as Hal points out, this may not necessarily be family members or someone else you're investing for, it is also your future self.

The other key point Hal makes is that your investment decisions are often infrequent, which makes it harder to develop a consistent approach. Once again, this is where a professional advisor can add real value. Vanguard's Ryan Barrows:

- **Ryan Barrows:** That's a huge advantage of advice, you can make one big decision of who do I think is the best person to help me do this. And then you have someone to help you along with that journey from there on out.
- **Greg Lindsay:** Here's Janelle again with the investing equivalent of the Serenity Prayer: "Grant me the serenity to accept the things I cannot change, courage to change the things I can, and wisdom to know the difference."

Janelle McDonald: Investors can oftentimes get really hyper-focused on a lot of the things that you mentioned, like what's happening in the markets right now, what's happening in the economy, what's happening politically. And some of the best advice that we can give them is to really focus on the things that you can actually control. Focus on the things you understand. And an advisor can really help you to look at your own personal situation, understand your goals, what do you actually want to accomplish, right? How do you get into develop a plan and get into a broadly diversified portfolio and manage it over time? And when you see volatility, when you see these things happening in the economy, how do you really make sure that you're revisiting your plan and you're staying the course?

So if we think about the reaction to market volatility again, for a moment, a small subset of investors are really cash panickers—during the early months of the pandemic, moving their entire portfolio to cash. Vanguard has done quite a bit of research on this and showed that 80% would have been better off by taking no action. Staying the course is not about not taking action, staying the course is about revisiting your plan and reaffirming that it is still aligned with your goals and in your best interests and sticking to it. Not overreacting to market fluctuations, like we've seen.

- **Ryan Barrows:** That's, frankly, a place where an advisor can help. That's hard sometimes as an individual. In March of 2020, when the market had dropped 40%, it's harder to stay the course, you know, and that's a place where I think advisors can really play a role for individuals.
- **Greg Lindsay:** In this case, solving the paradox of choice may require taking options out of your own hands. Others might insist their thinking hard and slow is up to the challenge. So what dictates our personal appetite for advice? Professor Shilpa Madan is a marketing professor at Virginia Tech.
- Shilpa Maden: If your preferences or desires or needs or wants are absolutely crystal clear in a particular domain, you will not seek advice. I know what I like, and I will just go for it, right? You don't need to sift through all the options. On the other hand, if your preferences aren't very clear, if you don't know exactly what you are looking for, you will be more likely to go through many more options, trying to search for that perfect one that fits your ambiguous criteria. And you will also be more willing to listen to other people-influencers, bloggers, former recommender systems—to tell you what you might like. So that's one. Two, there are also individual differences in how confident people feel in being able to do research on their own and making good choices. So some people I know are absolutely confident in the sense that, you know, we can master whatever research is required to make a good decision. And we are not outsourcing this decision to someone else because we understand our own context the best. And on the other hand, there are people who will think that these kinds of decisions are best left to experts, and I am going to go out and pay that extra money, if required, to get someone who's an expert in the topic to tell me what to do. So both context and the kind of person you are influences whether you seek advice or not.

**Greg Lindsay:** The more complex the decision facing us, the more options we have to assess and dismiss. However, the option to seek professional advice changes the equation. Instead of hundreds of complex variables, you now only need to assess whether the cost of receiving advice outweighs the potential damage incurred by a wrong decision.

In the final episode of this series we will see how people in different financial situations make these decisions, and where professional advice can help.

I'd like to thank all of our guests, Hal Hershfield, Joy Lere, Nick Sawe, Isabel Macdonald, Shilpa Madan, along with Vanguard experts Ryan Barrows and Janelle McDonald.

## **END OF PODCAST**

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