Morgan Stanley

INSTITUTE FOR SUSTAINABLE INVESTING

Only Human

Solutions to global challenges — population growth, pandemics, climate change and increasing inequality, to name just a few — will only succeed if capital is mobilized at the scale necessary to fuel sustainable enterprises. By articulating the value of sustainable investing and addressing potential barriers, the Morgan Stanley Institute for Sustainable Investing aims to *accelerate* its mainstream adoption.

Since launching the Institute in 2013, the priority has been on *listening* — not to the noise, but to critical market trends and investors' questions and concerns. In response, the Institute has published a series throughout 2015 articulating the opportunities and challenges facing investors today and into the future.

• **Sustainable Investing: Imperative and Opportunity** provided investors a primer to understand not only the drivers of mounting global challenges, but also the opportunities for sustainable investment. The value of sustainable business opportunities is estimated at up to $10 trillion annually by 2050.[1] It highlights sustainable investing trends, including the increasing diversity of market approaches and products, and issues a call to action to mainstream sustainable investment through education and innovation across the financial industry value chain.[2]

• **Sustainable Signals** reported findings from a survey of 800 active individual investors, demonstrating that sustainable investing has a bright future, but *only if* investors see proof that pursuing positive impact and maintaining a profitable portfolio are complementary goals. Today's individual investors have a positive, but conflicted, view of sustainable investing. 71% of individual investors are interested in sustainable investing; 72% believe that companies with good environmental, social and governance (ESG) practices can achieve higher profitability; and a majority, 58%, of individual investors see their responsibility as more than just profit maximization. However, despite the positive view, 54% expressed concern that choosing between sustainability and financial gains is a trade-off. Looking ahead, almost two-thirds (65%) of individual investors anticipate sustainable investing to become more prevalent in the next five years.[3]

• **Sustainable Reality** investigated investor concerns regarding "haircuts." In response to investors' questions, the Institute reviewed longitudinal data and discovered that, in fact, investing in sustainability has usually met, and often *exceeded*, the performance of comparable traditional investments on both an absolute and a risk-adjusted basis over time. Sustainable equity mutual funds had equal or higher median returns and equal or lower volatility than traditional funds for 64% of the periods examined. There exists a positive relationship between corporate investment in sustainability, stock price and operational performance. Lastly, long-term annual returns of one index comprising firms scoring highly on ESG criteria exceeded the S&P 500.[4]

This report explores the gap between investor intent and action facing even experienced decision-makers. It presents insights into the very challenges that are roadblocks to sustainable investment decisions. Savvy investors increasingly recognize that sustainable investing is smart investing, supported by best-in-class analysis, guidance, products and services. So why is this difficult, and what can be done? Behavioral insights can shed light on shared challenges and, ultimately, how to improve decision-making for the long run.

Behavioral Insights

Today, it is seemingly impossible to read the news without seeing references to "behavioral insights." Behavioral economics is an emerging field that incorporates insights from psychology, sociology, geography and other social sciences into economics. Led by the work of 20th century Nobel Laureate Herbert Simon, behavioral economics represents not a new discipline, but a necessary reunification of economics and psychology to inform real-world behavior, helping individuals and organizations both frame and make better decisions.[5]

Even when individuals know what they *ought* to do, they do not always make the best or most virtuous decisions. For example, even those committed to healthy lifestyles may push the snooze button on the alarm clock instead of waking up to hit the gym, or indulge in a piece of chocolate cake late in the afternoon after an exhausting day. The most informed regularly struggle under ordinary or routine circumstances, so it is unsurprising that complex decisions, characterized by high degrees of risk and uncertainty, are challenging. Despite the best intentions, people are only human.

Within economics, the standard model of behavior is that of a perfectly rational, self-interested utility-maximizer with consistently perfect information, unlimited cognitive resources and ample time. Such luxuries are a rarity. Nonetheless, in economic and financial modeling, the fundamental assumption is that humans are *rational*, not *irrational*. Behavioral economics provides the framework to understand the systemic departures from what standard models predict, with the ultimate goal of informing better decision-making.

Global Challenges

By 2050, nearly ten billion people will inhabit the planet.[6] The demand for food, energy and water will increase dramatically along with the global population. While government and philanthropy serve valuable roles, private capital can and must likewise address complex, global issues on the horizon.

Morgan Stanley defines **sustainability** as a commitment to economic, social and environmental well-being for both the present and the future, balancing society's needs today with the demands of tomorrow. Sustainability encompasses behaviors, processes, tools and technologies that can be perpetuated and replicated in ways that achieve economic, social and environmental benefits.

In one of the world's largest CEO studies on sustainability to date, including more than 1,000 executives spanning 27 industries and 103 countries, 93% of CEOs polled regarded sustainability as "'important' or 'very important' to the future success of their business."[7]

Sustainable Investing

At Morgan Stanley, **sustainable investing** is an investment approach that mobilizes capital in consideration of ESG factors. While many view future sustainability challenges as presenting only risks, investable opportunities in global health, education, agriculture and other sustainability-related sectors are estimated at up to $10 trillion annually by 2050.[8] Evidence demonstrates that sustainable investing presents an actionable means of tackling challenges on the horizon, while potentially improving investment returns and reducing risk.

- **Firm performance**—Companies with strong performance on material ESG metrics significantly outperform firms with poor ESG records.[9] These firms also tend to have lower costs of capital coupled with higher operational and financial performance, according to a University of Oxford metastudy.[10]

- **Stock performance**—A Harvard University study comparing high sustainability versus low sustainability companies demonstrated that a $1 investment in a high-sustainability portfolio in 1993 would have grown to $22.58 by the end of 2010, compared to $15.35 for the same $1 investment in a low-sustainability portfolio.[11]

- **Fund performance**—A recent Morgan Stanley review of over 10,000 U.S.-based equity mutual funds and nearly 3,000 U.S.-based Separately Managed Accounts (SMAs) found that sustainable funds, when compared to their traditional counterparts, had equal or higher median returns, and equal or lower median volatility for 64% of the periods examined over the last seven years.[12]

Future sustainability challenges

Population growth—In 1900, the world population was estimated at 1.7 billion.[1] By 2000, this increased to approximately 6.1 billion,[1] and by 2050 it is forecast to reach 9.7 billion.[1]

Resource scarcity—As population grows, global demand for water, food, and energy is projected to rise as much as 55%,[1] 60%,[1] and 80%,[1] respectively, by 2050.

Urbanization—In 1950, less than one-third of all people resided in an urban area; by 2050, it is estimated that two-thirds of the global population will reside in cities, straining existing housing stock.[1]

Environmental risk—According to recent findings from the Sustainability Accounting Standards Board, climate change affects 72 out of 79 industries studied, equating to 93% of the capital markets.[1] Consider, for example, technology firms concerned with the energy intensity of data centers, apparel companies sourcing climate-vulnerable cotton crops, or automakers developing alternative fuel vehicles.

Despite the proven business case, expressed interest and clear alignment with their values, some interested investors are not yet capitalizing on available opportunities. Behavioral considerations can offer insights into why investment decisions might not always be aligned with long-term values and goals, and help individuals make data-driven decisions to better support their portfolios and priorities.

Decision-Making Challenges

Thousands of decisions are made each day, and in doing so, it becomes necessary to economize on both time and effort. To that end, "heuristics," or shortcuts, emerge that allow for easier pattern recognition and faster decision making.[13] Many decisions involve familiar stimuli in known environments: deciding which shoes to wear, commuting to work, or purchasing a cup of coffee. Essentially, it is habit formation,[14] and with repetitive low-stakes decisions, the occasional mistake is almost always harmless.

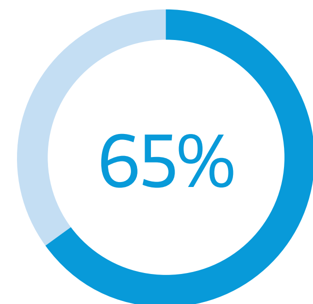
Issues arise when heuristics lead individuals astray in high-stakes decision-making. With increased interest in and study of behavioral insights, there is greater understanding of how decision-making is challenged. Investment decisions are personal and complex, with investors varying in terms of individual values, priorities, risk preferences and timelines. Behavioral research illustrates that complexity often translates into missteps in judgment, which can result in misalignments of intention and action. The table on the following page illustrates a range of known heuristics.

Even seasoned investors, committed to data-driven, long-run decision-making, can feel overwhelmed by the choices involved in financial planning. Consider, for example, the sheer volume of information available to investors today—but information is not the same as knowledge.[15] Just because an abundance of data is available, this does not guarantee its usefulness or assure the ability to think critically and carefully about what matters most. Recognizing and disregarding that which distracts is vital to informed decision-making. Concepts such as exponential growth and probabilities may be familiar, but because they are not instinctive or easy to calculate quickly, they challenge, rather than support, the ability to make complex decisions. Emotions, capabilities, contexts and social influences also regularly factor into decisions.

Take, for example, the concept of "prospect theory." According to basic economic principles, a gain, such as a portfolio increase, of $100,000 should elicit the same response as an increase of $200,000 followed by a loss of $100,000. Regardless of circumstances, the end result of both situations is a net gain of $100,000. Nevertheless, losses have greater emotional impact on people than an equivalent gain, as demonstrated by Daniel Kahneman and Amos Tversky's experiments in economic decision-making.[16] Despite identical outcomes, most people prefer a one-time gain of $100,000 to uncertainty or fluctuation.

The field of behavioral insights is rife with examples of how individuals naturally avoid uncertainty and pain, and crave simplicity, stability and security. Considering subjects ranging from cars to mainstream media, Carnegie Mellon's George Loewenstein and Duane Seppi collaborated with AstraZeneca's Niklas Karlsson to explore how people learn and make sense of relevant information.[17] In doing so, they found that people actively avoid randomness in their news and control information once they have already been exposed to negative news. This is particularly true when they may be emotionally invested. Especially striking was their consideration of financial markets. The researchers observed an "ostrich effect," as both U.S. and Swedish investors actively skirted "danger" by avoiding unpleasant financial news. In fact, their Swedish subjects looked up the value of their investments in the Swedish Premium Pension Authority 50% to 80% less often during rocky markets.[18]

Similarly, "noise trading" and reactions to volatility can skew both business and investor incentives to focus inordinately on the near term, rather than building value for the long run. Instead of reflecting the true underlying value of a company, the price of a security is obscured by "noise trading," that is, buying and selling for reasons unrelated to fundamental value, such as for diversification, liquidity, or tax purposes—a direct challenge to financial economists' assumptions of efficient markets.[19]



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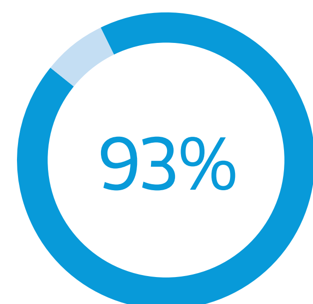

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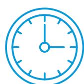
Common decision-making challenges

In practice

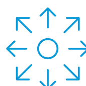


TIME

The role of time complicates the ability to make decisions, particularly ones with long-run significance.

- **Present bias** — Decision-makers significantly overvalue the present over the future.[20]
- **Availability bias** — People overestimate the likelihood of vivid events that come to mind easily, and underestimate events that are difficult to imagine. For example, people tend to think winning the lottery is more likely than it actually is, as wins are highly publicized, while losses, though much more likely, are not covered.
- **Recency** — People overweight the importance of recent information, i.e., "new news."[21]

Because people might not currently feel the burden of climate change, they delay a decision to act. In contrast, even when an investor understands the importance of long-run trends, a single-day shock to their portfolio prompts immediate concern and action.



CHOICE

The very options themselves can make it difficult to objectively weigh choices.

- **Framing bias** — The arrangement of options can affect decisions.[22]
- **Anchoring bias** — People often overweight the very first piece of information offered, even if it is irrelevant.[23]
- **Fatigue** — After making many active decisions, decision-making ability declines as people get tired.[24]
- **Satisficing** — Rather than selecting an optimal choice, a decision-maker opts for one that meets a minimally acceptable standard.[25]

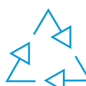
Retirement planning requires energy and effort many people avoid, such that eligible employees may not enroll in 401(k) plans at all. Research demonstrates that individuals save significantly more for retirement when the default option offered to them is to "opt out" of defined contribution retirement plans than when they must actively "opt in."[26] Similar patterns exist in other areas too, such as organ donation, voter registration, and HIV testing.[27,28]

VALUE

Preconceived ideas or opinions cloud the ability to make evidence-based assessments.

- **Prospect theory** — People perceive gains and losses differently, such that a loss feels worse than an equivalent gain.[29]
- **Endowment effect** – Individuals overvalue that which they already own, or may impart sentimental value beyond what the market will bear.[30]
- **Status quo** — Individuals often suffer from inertia and avoid change.[31]

A study of 10,000 investor accounts found that investors hold losing investments for too long, and sell winning investments too early, despite tax and other benefits to not doing so.[32] Rather than maintaining portfolios informed by long-run best practice, investors can react abruptly to market fluctuations, avoid action when called for, or have their decision-making influenced by misleading shortcuts.

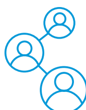


ABILITY

Decisions are often made to confirm beliefs.

- **Overconfidence** — People tend to be more confident than they should be.[33]
- **Innumeracy** — Concepts such as exponential growth and probabilities may be understood, but people rarely find them instinctive and make incorrect estimations.[34]
- **Bounded rationality** — Decision-making ability is limited by time, available information, cognitive ability, etc.[35]

People regularly overestimate their health, intelligence, driving abilities, etc. This is commonly known as the "Lake Woebegone effect," in which significantly more than half of people surveyed report that they or their children are above average — which is statistically impossible. This phenomenon similarly exists in investing, by which investors regularly expect to "beat the market" each quarter.[36] It is more helpful for long-term investors to develop an informed understanding of long-run trends across industries and asset classes.



SOCIAL

It is easy to second-guess personal actions when observing others behaving differently, particularly in large numbers.

- **Herding** — People are driven to follow the actions of groups, regardless of whether those groups are correct.[37]
- **Scarcity** — Anxiety grows with a perception of a limited supply of good opportunities, regardless of actual need.[38]
- **Confirmation** — Individuals often seek information that supports beliefs, and ignore conflicting information.[39]

Speculative bubbles — Dutch tulips, dot-com startups, U.S. housing, etc. — are heavily fueled by group behaviors. Expectations of future growth or price appreciation are easily exaggerated, particularly when people want to believe growth will be positive.

Traditional economic theory focuses on overall performance trends and value, but evidence from researchers studying decision-making demonstrates that which is—and feels—immediate intensely affects decision making. The most sophisticated investors can overweight dramatic market developments that attract media attention, or get caught up in the anxiety or "fear of missing out" felt during periods of feverish buying or selling. The reality is that making good decisions consistently is difficult, hence the value of best-in-class advice and products within investing. This is even more important considering sustainability issues, which are, by their very nature, less familiar, difficult to quantify, and sometimes invisible in daily lives.

While researchers have turned their attention to decisions affecting financial markets or sustainability issues broadly, little work has been done to study **behavioral insights specifically for sustainable investing.** Considering investment opportunities in nascent biotechnologies, resilient infrastructure, renewable water systems, educational technologies or climate-resilient agriculture—to name just a few—is understandably challenging because of their inherent newness.

Duke University behavioral economist Dan Ariely goes so far as to write that "if we tried to manufacture an exemplary problem that would inspire general indifference," climate change would be it. Despite a preponderance of scientific evidence of carbon dioxide emissions and global warming, the effects of climate change are 1) not proximate to decision-makers, 2) are unobservable, 3) relatively slow in development, and 4) are likely to introduce future, rather than immediate harm.[40]

A Pew Research Center survey, involving interviews with over 45,000 adults in 40 countries, reveals that climate change is perceived as a top global challenge.[41]

Nonetheless, even those who recognize its threat refrain from taking action when they feel their actions will be ineffective, a mere "drop in the bucket" in the face of a problem of international scale and requiring comprehensive, coordinated action.[42] It is simply not easy or intuitive to consider the environmental or economic impact of even a one-degree temperature increase.

Further, sustainability challenges are rife with "collective action" concerns.[43] For example, a concerned global citizen would feel discouraged to take a shorter shower, or ride a bicycle to work instead of driving, if the effect of those actions is unclear relative to the actions of others, or if there is reason to have doubt in anyone else acting similarly.

The 2007 Stern Report characterizes climate change as "the greatest and widest-ranging market failure ever seen." In the absence of action to curb emissions, the effects of climate change are forecast to cost the global economy at least 5% of GDP annually, for water shortages alone, with some estimates as high as 20%.[44] The United States alone is estimated to face up to $180 billion in economic losses by the year 2100.[45] Despite that the benefits of strong, early action considerably outweigh the costs—estimated at 1% of global GDP,[46] with all countries affected in some way by climate change—inertia plagues decision-makers.

Already, investing decisions can be challenging—precisely due to their *high-stakes*, *high-risk* and often *uncertain* nature. Sustainable investing, by layering on environment, social and governance considerations, can create additional complexity. This is precisely why having informed, engaged financial advisors matters. Recognizing not only megatrends facing society today, but also having access to evidence-based analysis and ready-made investment vehicles can help.

$10TR

Investable opportunities in global health, education, agriculture and other sustainability-related sectors are estimated at up to **$10 trillion** annually by 2050.

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Investing For The Future

Sustainable investing is sound investing, mobilizing capital to businesses realizing environmental benefits for today and into the future. Taking long-term sustainability trends into consideration involves facing the realities of both risks and opportunities, whether in the capital markets, across society or in the natural environment. Incorporating more information requires thorough analysis, strategic guidance, and access to quality products and services.

Shortcuts in decision-making can affect the judgment necessary to consider the long-term risks and opportunities inherent in any type of investing, but this is especially true for sustainable investing. By revealing the ways in which behaviors are motivated, such insights can help investors break bad habits and incorporate previously overlooked sustainability considerations.

The Institute for Sustainable Investing seeks to empower investors to make decisions informed by best-in-class

analysis, guidance, products and services while deploying capital to tackle the very challenges facing society today and into the future. With access to capital, sustainability-minded businesses can grow, expand, and engage equity and debt markets to fuel further innovation — thus providing investors more opportunities to achieve the positive impact they seek.

Through the work at the Institute, it has become clear that investors are comfortable with products with which they are already familiar, that can be discussed transparently using known performance metrics. For example, green bonds are traditional debt instruments with proceeds allocated to fund new and existing projects with defined environmental benefits, such as biodiversity conservation or clean water access. Green bonds were initially issued by multilateral development banks like the World Bank. Over time, they have grown to include corporate and municipal issuers capable of attracting investors to opportunities that finance sustainable initiatives with similar credit risk or financial performance potential.

Today's investors are increasingly looking for actionable solutions, capable of simultaneously building wealth and growing a family's legacy or organization's mission over the long term. By ensuring that investments are aligned across a broad spectrum of goals designed to create positive social and/or environmental impact, without sacrificing market-rate financial returns, being distracted by common biases or falling into known "decision traps," everyone can benefit.

Identify and articulate financial and sustainable investing goals. Beginning with an honest assessment, determine financial goals first. Consider what sustainability issue areas are of particular interest, and why. Where can one's portfolio make that positive impact, and how then can an investor engage accordingly? After all, capital itself is neutral; its power — positive or negative — comes from what is done with it over the long run.

Establish an investment plan. Take the time to carefully chart a course for an investment strategy alongside those articulated impact goals. Discuss next steps with trusted partners, such as family members or a financial advisor. Consider how that plan might look in 10, 20, and 30 years. Are today's choices setting the portfolio up for success over the uncertainties of the long run?

Evaluate the existing portfolio using an impact lens. In stepwise fashion, consider existing investments and exposures compared to impact goals. How well-aligned are they? What is already working, and where might there be room to improve? Is the portfolio already in investments built for the long run, and are all involved comfortable weathering short-term fluctuations?

Develop an implementation strategy. Determine a portfolio approach to integrating impact while considering risk/return priorities. Based on comfort level and preferences, consider incorporating impact across all asset classes or allocating a percentage of total assets. Identify the sustainable investing solutions that make sense to integrate into the overall investment portfolio, recognizing that this can — and should — be an iterative process.

Re-evaluate on an ongoing basis. Review the portfolio for alignment with impact goals on a regular basis, making adjustments as appropriate to ensure both financial performance and sustainability interests are being met. With increased demand for sustainable investing products, innovative investment opportunities are launched regularly. When reviewing the existing portfolio and promising new options, trust that a carefully defined, evidence-based strategy is built to serve the portfolio in 10, 20, or 30 years. Be mindful of how emotions and near-term influences can affect decision-making, and maintain focus on the long-run goals outlined.

While facing global challenges and market flux can intimidate or overwhelm, having a clear investment approach and well-defined goals can help inform decision-making along the way. Dialing down the noise or distraction can allow investors to think and act deliberately, and ultimately to realize performance and impact goals alike.

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