The Investor Success Project

The True Faces of Sustainable Investing

Busting Industry Myths Around ESG

Ray Sin, Ph.D.
Senior Behavioral Scientist
Morningstar

Ryan O. Murphy, Ph.D.
Head of Decision Sciences
Morningstar
Investment Management

Samantha Lamas
Behavioral Researcher
Morningstar

Who's Interested in Sustainability?

The popularity of sustainable investing—the use of environmental, social, and governance factors to assess investing alternatives—has grown tremendously over the past few years. And while much of this growth has been fueled by institutional investors,[1] interest in sustainable investing has also expanded among retail investors.[2] Many financial advisors, however, say it's difficult to broach the topic and to choose the clients with whom to discuss sustainable investing.[3] As a result, many financial professionals rely on common stereotypes and see sustainable investing as a fringe concern that may only interest millennials and women.[4]

Our research found that the surveys the industry uses to identify sustainability-minded investors might be the source of these stereotypes, and that relying on them may ignore a large, untapped market for sustainable strategies among retail investors. It's time to update the narrative that ESG is not mainstream—our research finds that most investors, across ages and genders, have clear preferences for ESG investment products.

1 US SIF. 2018. Report on US Sustainable, Responsible and Impact Investing Trends. https://www.ussif.org/files/Trends/Trends%202018%20executive%20summary%20FINAL.pdf

2 Morgan Stanley, Institute for Sustainable Investing. 2017. Sustainable Signals, New Data from the Individual Investor. https://www.morganstanley.com/pub/content/dam/msdotcom/ideas/sustainable-signals/pdf/Sustainable_Signals_Whitepaper.pdf

3 Allianz Global Investors. 2017. ESG Clarity. https://us.allianzgi.com/en-us/advisors/resources/esg-clarity/what-we-found.

4 Ernst & Young LLP. 2017. "Sustainable Investing: The Millennial Investor"; Schroders. 2017. "US Global Investor Study." https://www.schroders.com/en/us/private-investor/insights/global-investor-study/us-global-investor-study-results---sustainability/; Investment News Research and Calvert Research and Management. 2018. "From Upstream to Mainstream: ESG at a Tipping Point." HYPERLINK "https://www.investmentnews.com/article/20181115/FEATURE/181109948/from-upstream-to-mainstream-esg-at-a-tipping-point;%20Morgan%20Stanley.%202017.%20\"Sustainable%20Signals,%20new%20data%20from%20the%20individual%20investor."https://www.investmentnews.com/article/20181115/FEATURE/181109948/from-upstream-to-mainstream-esg-at-a-tipping-point; Morgan Stanley. 2017. "Sustainable Signals, new data from the individual investor." Institute for Sustainable Investing.

Methods Matters

Interest in sustainable investing is sometimes measured with survey questions that go something like, "On a scale of one to five, how interested are you in sustainable investing?" This kind of question has a well-documented limitation, because it can create social desirability bias — the tendency for people to respond in a manner in which they think will be viewed favorably by others.[5] For example, people may not be interested in sustainable investing, but to avoid being judged negatively by others they will respond that they are. This bias may have distorted the results of previous survey-based studies and led to some of the misconceptions around ESG that we address here.

One method advisors might use to sidestep the potential for survey bias is to just wait for clients to bring up sustainable investing themselves, but this strategy also has potential flaws. Behavioral science research shows that people can sometimes be "strangers to themselves" and have a poor understanding of their own preferences, like not knowing what actually makes them happy.[6] So there's a mental standoff: between advisors and clients, while each awaits the other to mention sustainability first. As a result, many investors — beyond millennials and women — might not be getting the information they need to make better investing decisions.

A New Tool for Measuring Preferences

To prevent potential biases that emerge from traditional survey design that can cause an incomplete and stereotyped view of ESG investors, Morningstar developed a new tool, called My Sustainability Profile. The tool is designed to reveal a person's sustainability preferences by asking them to make choices between investment options with carefully constructed trade-offs. Experimental economics uses this trade-off, or *revealed preference*, approach to help mitigate biases like social desirability and to identify people's underlying preferences based on the pattern of choices.[7] Drawing from a body of research on revealed preferences, we used this approach to produce what we believe to be an individual's preferences for sustainable investing.[8]

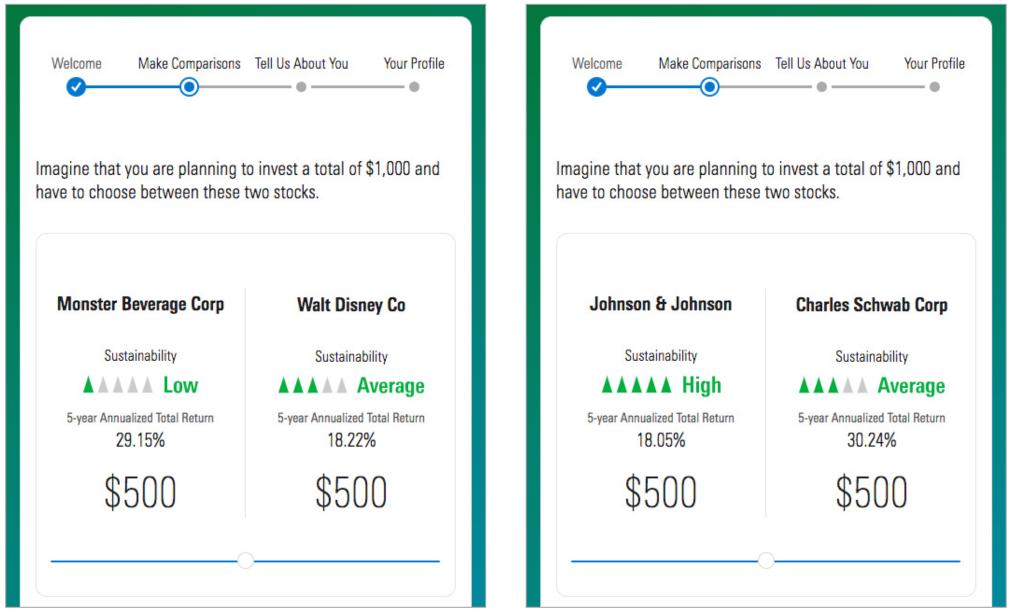
5 Krumpal, I. 2013. "Determinants of social desirability bias in sensitive surveys: A literature review." *Quality & Quantity* Vol. 47, No. 4, P. 2025

6 Wilson, T.D. 2004. *Strangers to Ourselves* (Cambridge: Harvard University Press); Gilbert D.T. 2006. *Stumbling on happiness* (New York: Knopf).

7 Barreda-Tarrazona et al. (2011) conducted a similar study but only looked at socially responsible funds. We expanded that conceptualization to think about sustainability in terms of ESG.

8 Samuelson, P. A. 1948. "Consumption theory in terms of revealed preference." *Economica* Vol. 15, No. 60, P. 243; Chambers, C.P. & Echenique. F. 2016. *Revealed Preference Theory* (Cambridge: Cambridge University Press); Crawford, I & De Rock, B. 2001. "Empirical Revealed Preference." *Annual Review of Economics* Vol. 6, P. 503.

Exhibit 1: Example Trade-Off Questions from My Sustainability Profile



Source: Morningstar.

The tool asks people to make repeated investing choices, each between two companies with different levels of sustainability and different levels of past returns.[9] For example, one choice asks users to allocate a hypothetical $1,000 between Monster Beverage and Disney: Monster has higher returns but a lower sustainability rating, while Disney has lower returns but a higher sustainability rating. Another question asks users to allocate money between Johnson & Johnson and Charles Schwab, with comparatively different levels of sustainability and past returns, and the other questions present similar scenarios.

Once the allocation decisions are made, the tool converts the results into a sustainability preference score ranging from zero to 100, with zero indicating that the investor has no interest in sustainability, and 100 indicating that the person is guided entirely by sustainability. Then, each user is slotted into one of five different profiles based on their score:

i) Returns-driven (score of 0–19): low interest in sustainability
ii) Returns-minded (score of 20–39): medium-low interest in sustainability
iii) Balanced (score of 40–59): medium interest in both sustainability and returns
iv) Sustainability-minded (score of 60–79): medium-high interest in sustainability
v) Sustainability-driven (score of 80–100): high interest in sustainability

9 The securities in My Sustainability Profile uses real data and information drawn from Morningstar Direct.

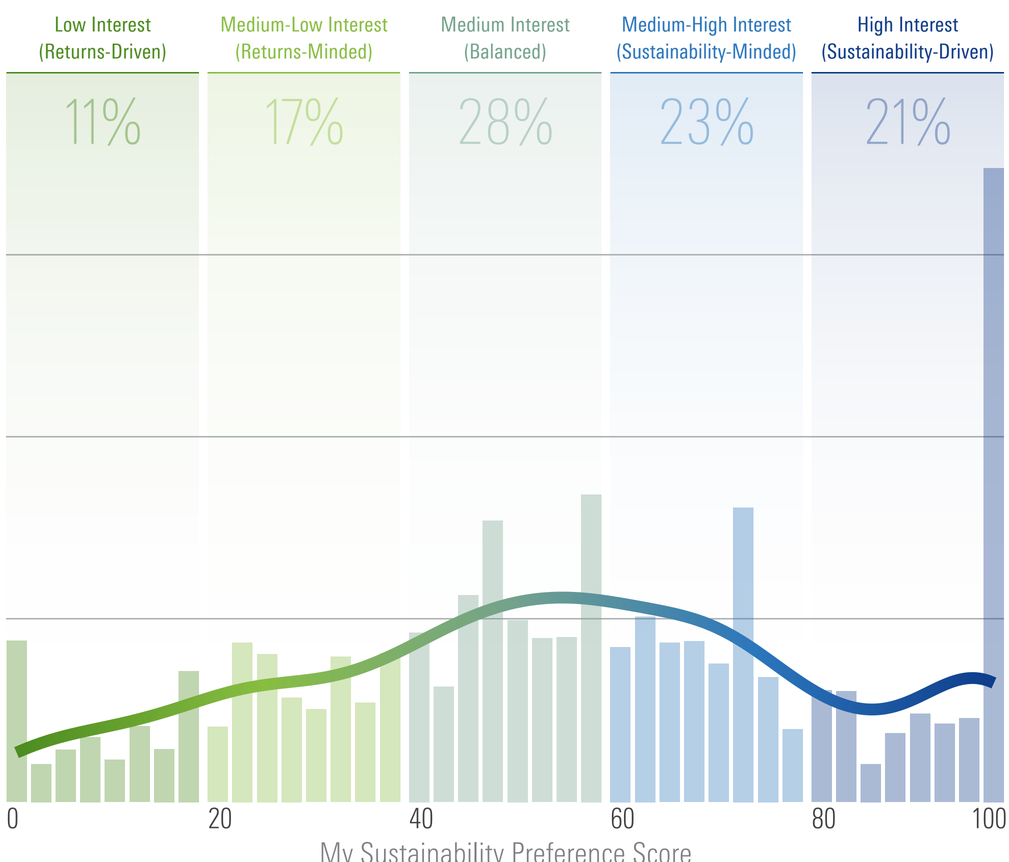
We conducted a test-retest analysis to determine the degree of consistency of the tool's results over time, suggesting that it is a reliable and useful measure of an investor's interest in sustainable investing. The tool was used by 158 people drawn from Amazon Mechanical Turk Service—a crowdsourcing Internet marketplace commonly used for research purposes—and they were asked to use it again two weeks later. The test-retest score was 0.71, which crosses the recommended threshold of 0.70 suggested by Nunnally and Bernstein (1994).[10] From a scientific perspective, this test-retest reliability indicates that the methodology behind My Sustainability Profile is reliable.

Who's Really Interested in ESG?

We then used My Sustainability Profile to measure the sustainability preference score of a nationally representative sample of 948 respondents.

Overall, we found that 72% of the United States population expressed at least a moderate interest in sustainable investing. In other words, most people are potentially receptive to investing in sustainable options, falling into the "balanced," "sustainability-minded," or "sustainability-driven" categories.

Exhibit 2: Distribution of My Sustainability Profile Preference Score (weighted)



Source: Morningstar.

10 Nunnally J.C, Bernstein, I.H. 1994. *Psychometric Theory*. 3rd Ed. (New York: McGraw-Hill).

Exhibit 2 presents the distribution of sustainability preference scores, weighted to be representative of the U.S. population. The bar charts represent the number of people at each sustainability preference score (from zero to 100), and the line graph is a smoothed density plot that illustrates the shape of the distribution. Consistent with the tool, we divided the distribution of preference scores into five profiles: returns-driven, returns-minded, balanced, sustainability-minded, and sustainability-driven. Each profile represents a preference for sustainable investing. There is a relatively even distribution of preferences overall, only a small group of 82 people was extraordinarily interested in sustainable investing, and scored 100 out of 100 on our scale.

Gender Isn't Really a Factor

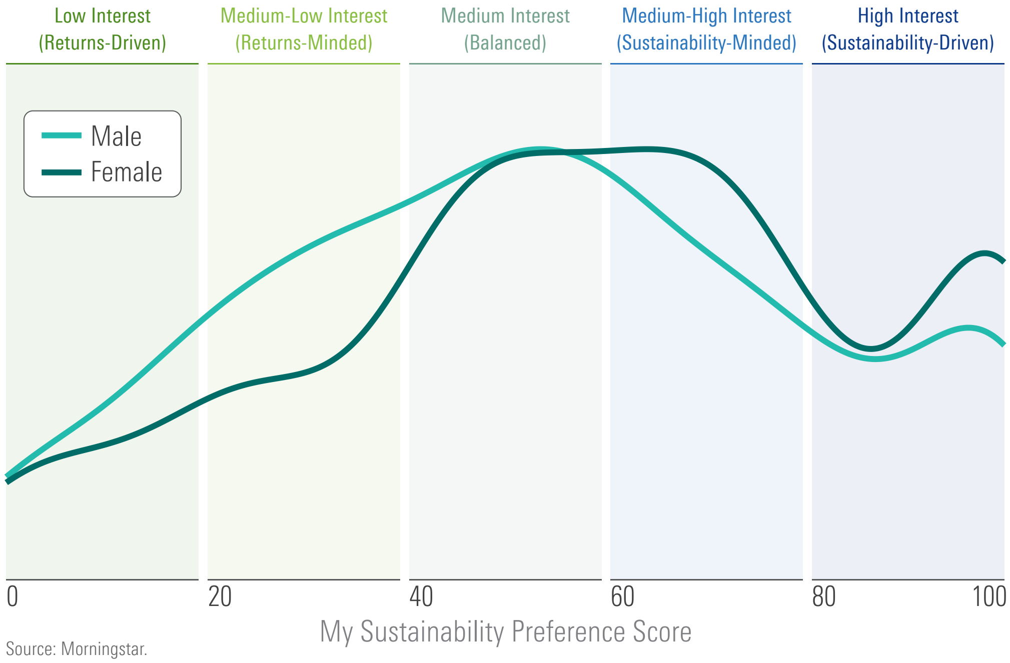
Our results indicate that gender isn't a useful gauge for determining interest in sustainable investing. We found that while women have a slightly stronger preference for sustainable investing than men—which was mainly driven by more women being especially passionate for sustainable investing—the difference between the weighted averages was small [mean for men = 53.53; mean for women = 59.08].[11] Furthermore, this small difference disappeared after controlling for income, age, political ideology, religiosity, risk tolerance, financial literacy, and other sociodemographic variables.[12]

Exhibit 3 presents a smoothed density plot that illustrates the shape of the distribution of sustainable investing preferences separated by gender. The distribution suggests that men and women are very similar when it comes to sustainable investing preference, with the notable exception for those who are returns-minded. For that profile, there are slightly more men than women who are more motivated by returns than sustainability. But when it comes to people who prefer sustainable investing (those with a medium interest and higher), a slightly larger proportion of women reflect stronger preference, though statistically equivalent to men.

11 [$t = 2.3718$, $p < 0.01$], but effect size is very small (η^2 of 0.01)

12 Regression table available upon request.

Exhibit 3: Distribution of My Sustainability Profile Preference Score by Gender (weighted)



Source: Morningstar.

Pay no Mind to Generation Gaps

Our results also throw cold water on the idea that different generations have substantially different preferences for sustainable investing. We compared the average sustainability preference scores of three generations:[13] millennials, generation X, and baby boomers.[14] The average preference score for millennials and gen X were statistically equivalent, and while millennials, on average, showed a slightly stronger preference for sustainable investing when compared to baby boomers (mean of millennials = 60.21; mean of gen X = 57.26; and mean of baby boomers = 51.96),[15] the statistical significance between baby boomers and millennials didn't exist after including sociodemographic variables.[16]

Exhibit 4 plots a smoothed density plot that illustrates the shape of the distribution of sustainability preference scores by generation. The shape of the distribution hints at a lack of substantial differences across generations, except for the boomer generation which is shifted slightly to the left.

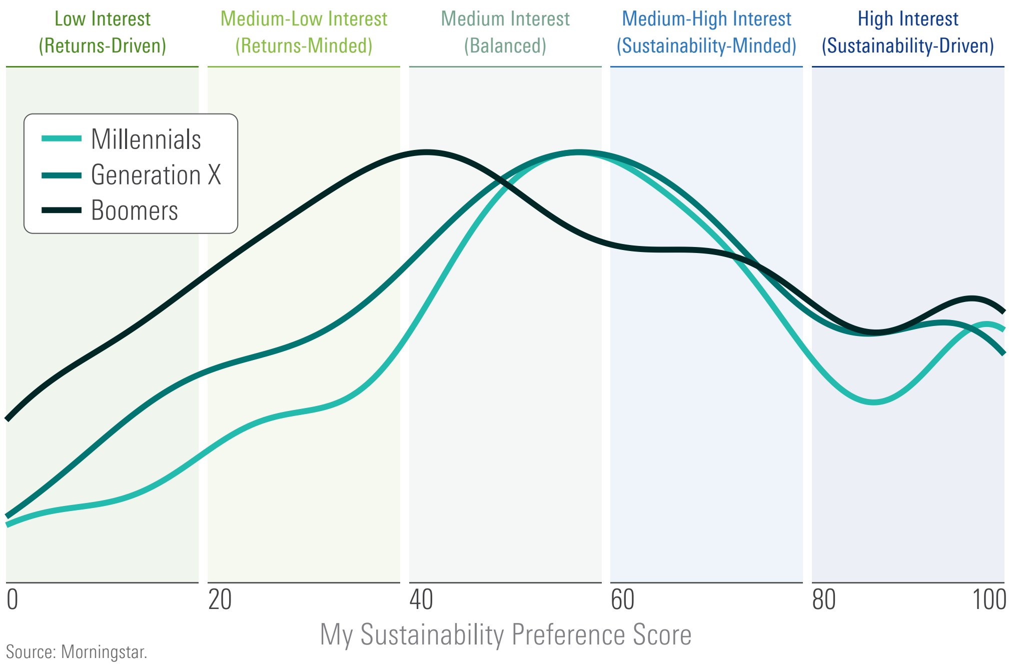
13 We conducted an ANOVA and post hoc comparisons using the Tukey HSD test for the unweighted means. The results remained the same when we conducted a generalized linear model with the weighted means.

14 ·Generations are defined as follows: millennials = ages 23–28, generation X = ages 39–54, boomers = ages 55–73. Dimock, Michael. "Defining Generations: Where Millennials End and Generation Z Begins." Pew Research Center. January 17, 2019. https://www.pewresearch.org/fact tank/2019/01/17/where-millennials-end-and-generation-z-begins/.

15 The effect size of the statistical difference between millennials and generation x is small ($\eta 2 = 0.01$)

16 Regression table available upon request.

Exhibit 4: Distribution of My Sustainability Profile Preference Score by Generations (weighted)



Source: Morningstar.

Conclusion

The dominant industry narrative says that interest in sustainable investing among retail investors is confined to a niche market of mostly millennials and women. Our results suggest that there may be a broader appetite for sustainable investing. In fact, much of the U.S. population (about 72%) is interested in ESG investing. There's an untapped market for sustainable investing that advisors may be able to reach (and retain) by offering sustainable investing options, and if advisors are relying on their clients to broach the topic of sustainable investing first, they may be losing out. M

About Ray Sin, Ph.D.

Ray Sin is a senior behavioral scientist at Morningstar. His research draws from psychology, economics, and sociology to better understand investor behavior. His goal is to leverage data, guided by social science theories, to generate and experimentally test interventions that help improve investors' success by avoiding common behavioral obstacles. To that end, he has developed subject-matter expertise in two areas: (a) sustainability, aiming to learn how investors think about environmental, social, and governance factors when they invest; and (b) the relationship between financial and non-financial goals, understanding if the pursuit of non-financial goals may lead to positive financial outcomes. Recently, he, together with others, completed an experiment with a nationally representative sample on fee sensitivity and perception of fees.

Ray holds a bachelor's degree in sociology from National University of Singapore, and received his Ph.D., also in sociology, from the University of Illinois at Chicago.

About Ryan O. Murphy, Ph.D.

Ryan O. Murphy, Ph.D., is head of decision sciences for Morningstar Investment Management and part of the behavioral insights team. Murphy's research is interdisciplinary, bringing together methods from experimental economics, cognitive psychology, and mathematical modeling to understand how people make decisions and develop ways to improve decision-making.

Before joining Morningstar in 2016, he was the chair of decision theory and behavioral game theory at the Federal Institute of Technology in Zurich, Switzerland, and a visiting professor in the University of Zurich economics department. Previously, he served as associate director of the Center for the Decision Sciences at Columbia University in New York. Murphy has written extensively about human decision-making and has been published in *Management Science*; *Experimental Economics*; *Decision; Judgment and Decision Making*; *Personality and Social Psychology Review;* and the *Journal of Behavioral and Experimental Finance*. He's taught university courses in decision theory, behavioral economics, negotiation analysis, experimental game theory, and statistics.

About Samantha Lamas

Samantha Lamas is a behavioral researcher at Morningstar. She focuses on developing content and conducting research to better understand who investors are and how we can help them reach their financial goals. She began her career at Morningstar as a product consultant working directly with the individual investor and advisor audience segments. Samantha holds a bachelor's degree in business with a concentration in finance from Dominican University.

The Investor Success Project

Beginning in 2018, Morningstar started rolling out new research on investors—who they are, what their goals are, and how the advisors and asset managers that serve them can make the most impact in helping them reach those goals.

We don't know what we'll find, but we'll share everything we learn. We believe every bit of data that's uncovered can move the industry toward a future that emphasizes investors' front-and-center role in the markets and helps them succeed.

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