

Same Answers, Different Responses

Written by Krisna Patel, CFA, and edited by Hanna Jackson

Let's play a little game of "Would You Rather":

- 1) Would you rather buy concert tickets for \$500 with no additional fees or for \$400 with \$100 in fees?
- 2) Would you rather be told that you have a 90% chance of no complications after a surgery or that you have a 10% chance of dealing with complications?
- 3) Would you rather hear that tomorrow's weather forecast indicates a 50% chance of rain or that it indicates a 50% chance of no rain?

Each of those questions presents a scenario with two options, one of those options likely sounding more comfortable to you than the other. Objectively speaking, though, both options in every scenario are identical—the tickets will be \$500 out of your pocket, there's a 90/10 chance that you won't suffer surgery complications, and it's equally possible that it will or will not rain tomorrow. Why does the phrasing of an option make such a difference in the answer?

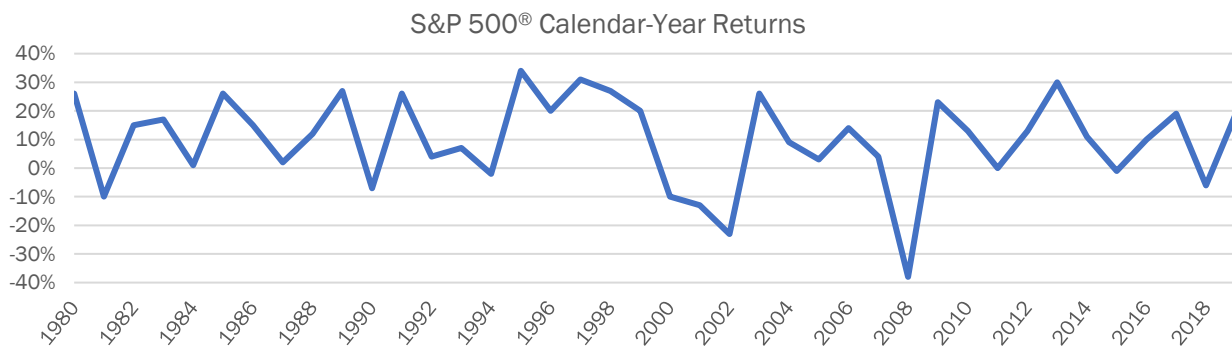
Psychologists Amos Tversky and Daniel Kahneman are well-known for their research on this particular behavioral bias, known as the framing effect. In one of their studies, they presented a risky, high-stakes scenario to two groups of respondents with a different set of solutions for each group.ⁱ The respondents were asked to imagine that a previously unknown disease hit the United States with an expected death toll of 600. Two programs were created as solutions to combat the disease, and, for the sake of ease, there was the assumption that these solutions were precise in their predictions. Each respondent had to select the program they believed was the best solution.

Group One was given the choice of the following two programs: 1) 200 people will be saved, or 2) there is a $\frac{1}{3}$ probability that all 600 people will be saved and $\frac{2}{3}$ probability that no one will be saved. This group's responses were predominantly risk-averse: 72% chose the first program, and 28% chose the latter.

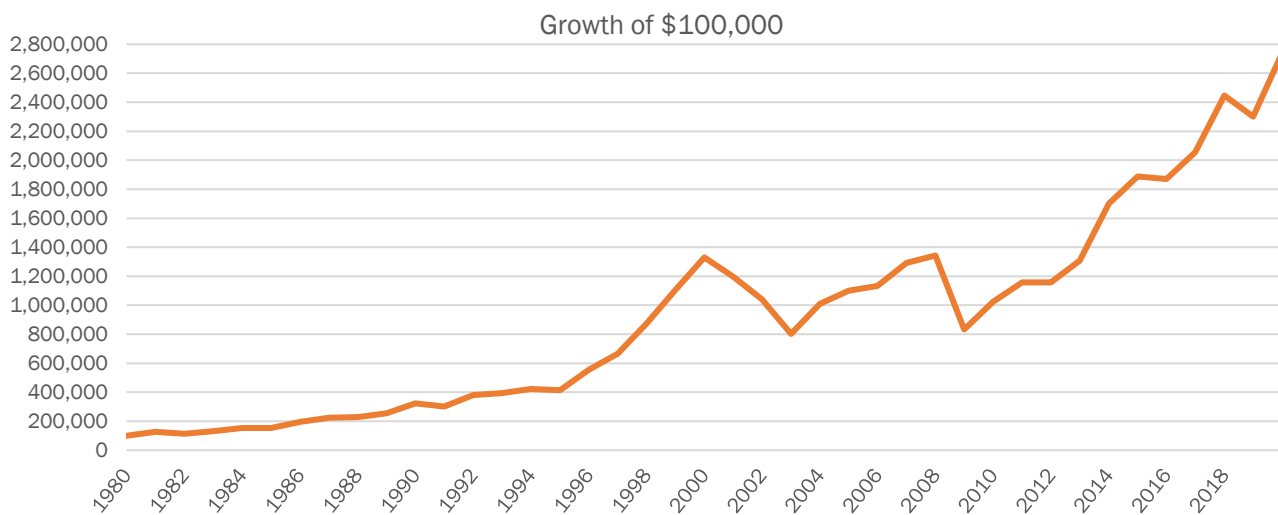
Group Two was presented the following two program options: 1) 400 people will die, or 2) there is a $\frac{1}{3}$ probability that no one will die and $\frac{2}{3}$ probability that all 600 people will die. 78% of the respondents chose to take the gamble of the second solution.

Looking carefully at the two sets of options, the numbers between both Options One and both Options Two were identical: each Option One stated that 200 people live and 400 people die, and each Option Two gave a $\frac{1}{3}$ chance that everyone lives and a $\frac{2}{3}$ chance that everyone dies. The difference is that the first group was given their options within the framework of who can be saved, and the second group was given their options within the framework of who dies. Because of these framing differences, the first group chose the "positive" guarantee of saved lives, and the second group chose the other option of hoping to limit the "negative" loss of life. Same scenario, same outcome choices, but different answers.

Looking beyond hypothetical scenarios, the framing effect is an important factor to consider when it comes to decisions in the realm of financial planning and investment management. If potential investors saw a chart of the calendar-year returns of the S&P 500® since 1980, it's likely many of them would be uncomfortable with investing in an index tracker.ⁱⁱ



If, however, they were shown a chart with the growth of \$100,000 in an S&P 500® tracker using identical data from the first chart, it'd be unsurprising for a bulk of those investors to think that the tracker would be a fantastic investment.



Long-term investment goals warrant the use of performance measures like price returns over longer periods (five or ten years versus one year), and, while many investors look at long-term performance when making initial allocations, they may also tend to look at short-term performance for reallocation decisions. They can run into troubles with framing, though, with this type of decision-making.

For example, let's consider two hypothetical investments, A and B. Investment A's annual returns range from 47% to -37%, and B's returns range from 43% to -8%. It's only natural for most investors to choose B with its peak return being so close to A's while its negative returns are significantly different. If we change the performance period to a rolling 20 years, the annualized returns for A range from 17% to 6%, and B's range from 12% to 1%. Investment A's returns now look more tempting. Investment A is representative of S&P 500® stocks and Investment B representative of a bond aggregate, and this highlights the need for continually appropriate allocations.ⁱⁱ Reallocation decisions should not be biased by the susceptibility of framing, and yet they are all too often.

We've all been asked the silly question of whether the glass is half-empty or half-full, and we all know it's the same glass with the same water. Yet, we don't all offer the same, single answer. Our perception and inherent biases, like the framing effect, have the power to dictate our answer every time.

Edited by Hanna Jackson, registered assistant to Krisna Patel

Past performance is not a guarantee of future results. Information presented herein is for discussion and illustrative purposes only and is not a recommendation or an offer or solicitation to buy or sell any securities. Views expressed are as of 11/14/2019, based on the information available at that time, and may change based on market and other conditions. Although certain information has been obtained from sources believed to be reliable, we do not guarantee its accuracy, completeness or fairness. We have relied upon and assumed without independent verification, the accuracy and completeness of all information available from public sources.

Krisna Patel is an Investment Advisor Representative of Woodbury Financial Services, Inc., at Engage Financial Group—11622 North Michigan Road, Zionsville, IN 46077.

Krisna may be reached by phone at (317)489-3505 or by email at KPatel@EngageFinGroup.com.

Securities and investment advisory services offered through Woodbury Financial Services, Inc. (WFS), member FINRA/SIPC. WFS is separately owned and other entities and/or marketing names, products or services referenced here are independent of WFS.

ⁱ Amos Tversky and Daniel Kahneman, “The Framing of Decisions and the Psychology of Choice.” Published in *Science* magazine 01/30/1981.

ⁱⁱ J.P. Morgan Asset Management Guide to the Markets®, U.S, as of 09/30/219. Published on <https://am.jpmorgan.com/us/en/asset-management/gim/adv/home>.