Swedroe: Understanding The Disposition Effect

February 08, 2019

Larry Swedroe

There is a large body of academic evidence demonstrating that individual investors are subject to the "disposition effect." It has been documented among U.S. retail stock investors, foreign retail investors, institutional investors, homeowners, corporate executives and in experimental settings.

Those suffering from this phenomenon, which was initially described by Hersh Shefrin and Meir Statman in their 1985 paper, "The Disposition to Sell Winners Too Early and Ride Losers Too Long: Theory and Evidence," tend to sell winning investments prematurely to lock in gains, and hold on to losing investments too long in the hope of breaking even.

Standard explanations for the disposition effect—such as tax considerations, portfolio rebalancing and informed trading—have been proposed and dismissed, leaving explanations that rely on investor preferences, such as prospect theory.

Handling Risky Positions

Prospect theory implies a willingness to maintain a risky position after a loss and to liquidate a risky position after a gain. It also requires that investors derive utility as a function of gains and losses rather than the absolute level of consumption.

ETF.com has an updated privacy policy. Click here to learn more. I Understand

Other behavioral explanations include: 1) mental accounting (how individuals classify personal funds differently and are therefore prone to irrational decision-making in their spending and investment behavior); 2) pride-seeking and regret aversion; and 3) lacking self-control.

As Toby Moskowitz explained in his 2010 AQR working paper "Explanations for the Momentum Premium," the disposition effect "creates an artificial head wind: When good news is announced, the price of an asset does not immediately rise to its value due to premature selling or lack of buying. Similarly, when bad news is announced, the price falls less because investors are reluctant to sell." The disposition effect therefore creates predictability in stock returns and thus provides an explanation for the momentum premium.

Additional research into the disposition effect, including a 2012 study by Itzhak Ben-David and David Hirshleifer, "Are Investors Really Reluctant to Realize Their Losses? Trading Responses to Past Returns and the Disposition Effect," found that investors sell more when they have larger gains and losses. Stocks with both larger unrealized gains and larger unrealized losses (in absolute value) will thus experience higher selling pressure.

This temporarily pushes down current prices and leads to higher subsequent returns when future prices revert to their fundamental values.

Recent Research

Joseph Engelberg, Matthew Henriksson and Jared Williams contributed to the research on the disposition effect with their March 2018 study "The Portfolio-Driven Disposition Effect." They sought to determine whether the disposition effect operates at the individual asset level or at the portfolio level. They found:

- There is no disposition effect for a stock if the remaining portfolio is up. However, if the remaining portfolio is down, a stock with a gain is more than twice as likely to be liquidated than a stock with a loss. (Note that, at least for taxable accounts, this is exactly the opposite of what efficient tax management would require, which is the harvesting of losses). The results were significant at well below the 1% level of statistical significance (t-stats were in the 20s).

ETF.com has an updated privacy policy. Click here to learn more. I Understand

- The authors reached the same results when they considered proxies for investor sophistication, such as professional jobs or high income.

Engelberg, Henriksson and Williams concluded that the most likely explanation for the effect is that “investors derive utility from both paper gains and realized gains and that they take utility by realizing gains when they have disutility from unrealized losses.” The authors add: “When their portfolio has paper losses, they compensate by realizing gains.”

They explain: “When an investor’s overall portfolio is down, the investor will receive a lot of negative utility from the paper losses, so she should be especially likely to seek a burst of positive utility from realizing a paper gain to offset some of the negative utility she has received due to the poor performance of her portfolio. This could explain why we find such a strong disposition effect when an investor’s portfolio is down.”

Another interesting finding was that, when a stock is at a gain but the portfolio is at a loss, upon realizing the gain, investors are most likely to keep the proceeds in cash—it is important to investors that the gain “stay” realized.

The bottom line is that the disposition effect entails adverse consequences for investors’ investment performance. For example, in his 1998 study “Are Investors Reluctant to Realize Their Losses?”, Terrance Odean found that the stocks investors sold too quickly as a result of the disposition effect continued to outperform over the subsequent periods, while the losing assets these investors held on to for too long remained underperformers, which raises the question, Can investors be trained to avoid this bias?

ETF.com has an updated privacy policy. Click here to learn more. I Understand