December 2016
PACIFIC FUNDS
Manager Insight Series

Below is the latest informational commentary from Rothschild Asset Management Inc., the subadvisor to Pacific Funds℠ U.S. Equity Funds.

Under Control: How a Disciplined Approach Can Keep Investors Focused

Investing for the long term is not a new concept, yet an increasingly large body of research suggests that investors are prone to short-term thinking. Although behavioral finance has identified the importance of taking emotion out of investing, for many this is easier said than done. While behavioral modifications can help, we believe that a risk-controlled investment approach can help limit rash decisions, while keeping investors focused on the long term.

Key Takeaways

- Left unchecked, behavioral tendencies in investing have been shown to have severe consequences for investors' portfolios.
- Studies by DALBAR and Morningstar® have pushed many in the investment industry to develop techniques to help investors stay disciplined when investing.
- While behavioral modifications can help, we believe a disciplined, risk-controlled approach to investing may help investors overcome traditional behavioral decisions that often lead to underperformance.

Coming Up Short

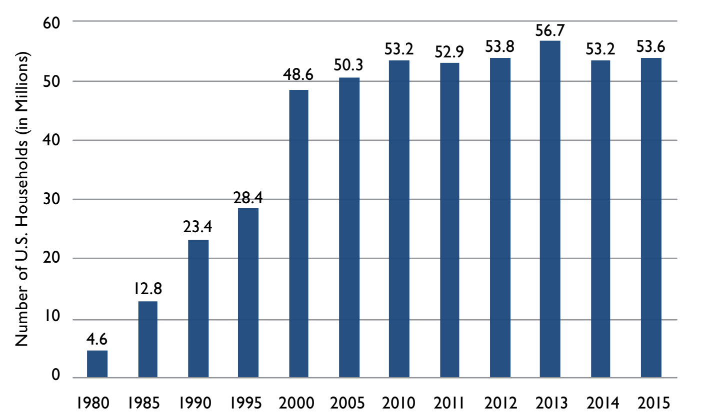
'Buy low and sell high' represents some of the most time-tested investment advice, yet many investors tend to do the opposite. When performance is good, investors may be overcome with greed and believe that even better returns will follow. When performance is bad and asset prices are low, investors may stay away in the belief that prices are headed even lower.

Such tendencies have severe consequences for investors' portfolios. For instance, research firm Morningstar has suggested that poor timing led investors' results to underperform published diversified returns for U.S. stock funds by 1.8% per year during the past decade.[1] A similar survey produced by financial research firm DALBAR suggests that poor timing was a key factor that caused returns for stock mutual fund investors to lag the market by almost 4% during the past two decades.[2] These studies and other academic research have spurred the industry to develop techniques to help investors stay disciplined when investing.

Experts differ on opinions as to why investors struggle to stay focused. One theory is that poor timing is a consequence of the information age. In the mid-1990s, the dawn of the internet age made daily valuation a reality, and more recently, smart phones and tablets have put the ability to trade at investors' fingertips. During the same time period, strong markets and the growth of real-time television programs focused on financial markets may have helped create a myopic culture that encourages investors to try to time the market.

Even as sophisticated industry publications occasionally tout investing for the long run, they simultaneously run "league tables"[3] by highlighting top-performing investments for periods as short as three months. In the same time period when household ownership of mutual funds has skyrocketed (Exhibit 1), information overload may be compelling investors to trade needlessly.

Exhibit 1: Household Mutual Fund Ownership Over Time



Source: *2016 Investment Company Fact Book: A Review of Trends and Activities in the U.S. Investment Company Industry.* Investment Company Institute.

Behavioral Finance: the Psychological Explanation

Another explanation for poor investor timing comes from a field of study called "behavioral finance." Behavioral finance attempts to combine psychology with traditional economics to better understand the ways investors make decisions. For example, researchers have identified the endowment effect as the tendency of investors to value any assets already held more highly than similar assets not currently owned. Such a bias might result in ignoring the fundamentals (price, growth rates, etc.) of the asset not held.

Loss aversion describes an investor bias in which investors prefer not losing money over an equivalent gain (i.e., they would prefer to avoid losing $10 more than they would like to gain $10). This behavior could make investors reluctant to sell a security that has declined in value, since doing so would result in a recognized loss.

Confirmation bias suggests that investors have a tendency to focus only on evidence that confirms their existing beliefs, while disregarding any information that contradicts their investment theses.

Exhibit 2: Behavioral Finance – Common Investor Biases

Endowment	
The tendency of investors to value assets already held more highly than similar assets not currently owned	Holding assets too long; potentially undervaluing other assets not currently held
Loss Aversion	
Preference for not losing money over an equivalent gain	Potentially being too conservative; holding depressed assets in the belief that unrecognized losses are superior to recognized losses
Confirmation	
The tendency to focus only on evidence that confirms existing beliefs	False comfort in prior convictions; inability to adapt to change; failure to recognize new opportunities

Source: Rothschild Asset Management Inc., December 2016.

To limit the effects of these biases, advisors and the financial industry as a whole have made a tremendous effort to educate investors, yet old habits die hard. When investors' portfolios perform well, investors may feel like winners which can lead to overconfidence. Conversely, when portfolios decline, investors can remain in denial, convinced that the factors which previously made the investments fundamentally sound to them still persist, even when they do not.

Notably, behavioral finance has shown that these biases are driven by more than just feelings. For example, research on traders has shown that successful trades can produce reactions in the brain that release endorphins in the body that actually make us more confident and willing to take additional risk. At a more basic level, sticking with a disciplined investment program may be at odds with basic "fight-or-flight" instincts: the instinct to run from predators has been directly beneficial to survival of the species. To some degree, then, well-intended educational efforts on the benefits of staying invested during market volatility may be in direct conflict with instincts that are hard-coded in our DNA.

Lessons from the Retirement World

Dollar Cost Averaging

Behavioralists argue that a subset of decision-making called emotional biases are not easily corrected, especially since emotions can be impulsive and the bias is thus immediate. Not surprisingly, some of the more effective techniques for combating investor biases are those that take a structural approach rather than attempting to "brainwash" away our natural instincts. Two such examples are dollar cost averaging and target-date funds.

Dollar cost averaging is a longstanding investment technique aimed at using volatility to an investor's advantage. Whereas the return on a lump-sum investment may be highly dependent on the timing of the purchase, dollar cost averaging spreads the entry points over time. In addition, a common feature of dollar cost averaging is to make these investments in set dollar amounts, such as $100 per month.

For example, the Exhibit 3 below illustrates a scenario in which the price of a hypothetical security oscillates from a high of $13.00 per share to a low of $5.00 per share. By investing a lump sum of $1,200 at the start of the 12-month period, an investor would realize a 15.0% loss, corresponding with the price decline of $1.50 from January to December. However, by making $100 periodic investments each month instead of a lump sum, the investor's decline would be reduced to only 1.6%. Simply put: discipline, rather than insight regarding market direction, may help investors realize some returns in volatile periods.

Exhibit 3: Dollar Cost Averaging

Hypothetical example is for illustrative purposes only.

Time	Periodic Investment	Stock Price	Shares Purchased	Portfolio Value
January	$100.00	$10.00	10.00	$100.00
February	$100.00	$9.00	11.11	$190.00
March	$100.00	$8.50	11.76	$194.44
April	$100.00	$9.50	10.53	$211.76
May	$100.00	$11.00	9.09	$215.79
June	$100.00	$13.00	7.69	$218.18
July	$100.00	$7.00	4.29	$153.85
August	$100.00	$5.00	20.00	$171.43
September	$100.00	$8.00	12.50	$260.00
October	$100.00	$11.00	9.09	$237.50
November	$100.00	$9.00	11.11	$181.82
December	$100.00	$8.50	11.76	$194.44

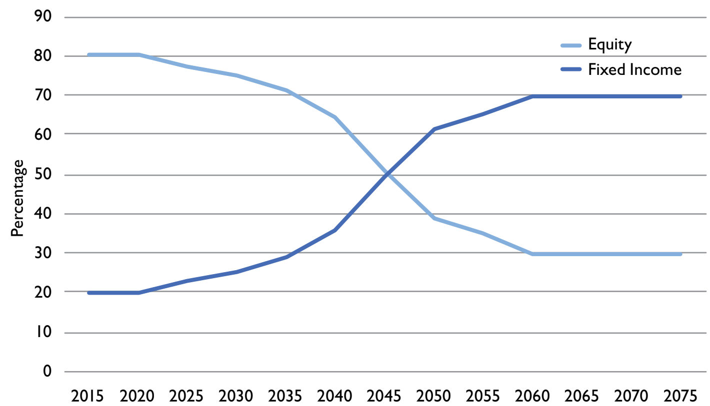
Source: Rothschild Asset Management, Inc., December 2016.

Investors in 401(k) plans and other defined contribution offerings may be unaware that they are already taking advantage of dollar cost averaging. Regular payroll deductions in set dollar amounts should allow employees to purchase more shares of an investment as the price declines, and purchase fewer shares when the price increases. This methodology could result in an investor paying a below-average price, thus earning a higher rate of return.

Target-Date Funds

Another solution that has shown effectiveness at moderating investor biases is the target-date fund. Target-date funds typically are multi-asset products, which build in diversification and automatically decrease the allocation to more risky assets as an investor ages. In essence, target-date funds are a "set it and forget it" portfolio, allowing investors to simply determine their target retirement ages and invest in the appropriately dated portfolio.

Exhibit 4: The Target Date Glidepath: Hypothetical 25-Year-Old Individual Retiring in 40 Years at Age 65



Source: Rothschild Asset Management Inc., December 2016.

Beyond Retirement Solutions: A Risk-Controlled Approach

While these solutions have been useful in the retirement channel, they have limited application for investors' other pools of assets. For example, dollar cost averaging may work well for salaried employees with regular income because they would have the financial ability to continue to invest even when prices are low, but may be less applicable to those dependent on commissions or transactional income, as these investors may find it harder to maintain a steady investment regimen.

Similarly, target-date funds work well for predetermined time periods (retirement date can be approximated with some certainty), but may be less appropriate for indefinite periods of time. A 30-year-old investor saving for a house, for example, might not want to invest in a target-date fund with a 35-year horizon (corresponding to age 65).

One option to consider is investing in funds with an emphasis on risk controls. Risk controls could include any conscientious effort to help reduce risk in the portfolios. "Risk" might not just speak to minimizing day-to-day market volatility, but could also mean preparing for the unexpected.

From Checklists to Prudence

Risk controls come in many forms, including sector limits, position limits, and valuation considerations. Particular investment strategies may have unique considerations, such as those shown in Exhibit 5.

Exhibit 5: Common Risk Controls

Discipline	Consideration
Sector Limits	Avoid letting one sector dominate the portfolio; limit the impact of non-repeatable investment decisions (sector calls)
Position Limits	Avoid letting a single stock dominate the portfolio; limit the impact of a single bad stock pick sinking the entire portfolio
Valuation Screen	Consider whether or not optimism is already built into the current stock price
Liquidity Screen	Consider whether thinly traded stocks might be problematic to buy or sell without significant impact to the stock price ("moving the market")

Source: Rothschild Asset Management Inc., December 2016.

Importantly, taking a disciplined approach goes beyond following a list of constraints: it also has a philosophical component. By always asking, "What could go wrong here?", a manager can avoid emotional and cognitive pitfalls that might fail to distinguish between a good company and a good stock.

Choosing a Manager with a Disciplined Approach

Investors and their financial advisors seeking disciplined portfolios should think twice before hiring a manager who attempts to control risk through the use of cash. Although cash can cushion the impact of declines, it amounts to a one-way view on the market. Almost by definition, investments in cash will struggle to keep pace with inflation. Moreover, over the long term, stocks have tended to rise more often than they fall. There's also an economic argument to be made against holding cash: if a fund manager is charging active management fees to sit in cash, then arguably the manager should return the capital and let investors decide how to allocate their cash.

To be deemed adept at controlling risk, the proof is in the outcome: a manager should have a demonstrated track record that details his/her performance in both up and down markets. Financial advisors with sophisticated software can look at metrics such as Sharpe ratio[4] (a measure of risk-adjusted return) and upside/downside capture.[5] In the absence of these tools, investors can examine calendar performance with an eye towards the manager's relative performance to benchmarks in down markets. Fund managers known for aggressive investing who are suddenly looking to launch a more disciplined approach could be a red flag, since this strategy represents a philosophical shift. Finally, investors should consider a manager's approach to decision-making, with a preference to managers combining a collaborative, team-based approach with a single point of accountability.

Building for the Long Term

There is no guarantee that risk controls will, in fact, limit risk—they could constrain upside performance. But we also know the opposite to be true: aggressive funds that make dramatic sector bets, ignore valuation, or heavily concentrate their assets in a small number of stocks could be playing with fire. Equally important, highly volatile aggressive funds might create precisely the kind of user experience that can discourage long-term investing.

Financial advisors can and should use established techniques to help their clients develop an investment plan, set milestones, and learn to control their emotions. Education and taking a risk-controlled approach are not mutually exclusive. Just as modern automotive technology can alert us to blind spots, prevent us from drifting out of our lanes, or brake for road hazards, structuring a portfolio with so-called guardrails may greatly improve the investor experience.

References

[1]Coumarianos, John. "The Big Mistake Investors Still Make." *Journal Reports: Funds & ETFs.* The Wall Street Journal, April 3, 2016.

[2]Wasik, John F. "How Regular Investing Smooths the Market's Ups and Downs." *Mutual Funds.* New York Times, October 14, 2016.

[3]A "league table" is a ranking of companies based on a set of criteria such as revenue, earnings, deals, or any other relevant metrics that can be used for investment-research purposes or as promotional material for the companies on the list.

[4]Generally, the higher the Sharpe ratio, the better the fund's historical risk-adjusted performance.

[5]Ratio that shows investors whether a fund has outperformed a broad market benchmark during periods of market strength and weakness, and if so, by how much.

About Rothschild Asset Management Inc.

Headquartered in New York, Rothschild Asset Management Inc., and its affiliates, manage investments covering a range of alternative investments, multi-strategy fund of hedge funds, and U.S. securities including large-cap, small/mid-cap, small-cap, and growth and value strategies. The firm believes in investing with a goal of consistency and risk control. Every step in its process is a means toward achieving that goal. Its asset management business provides investment management and advisory services to institutional clients, financial intermediaries, and private clients around the world.

W30879-16A

Mailing address:
P.O. Box 9768, Providence, RI 02940-9768
(800) 722-2333, Option 2 • www.PacificFunds.com

PACIFIC FUNDS