

DIRECTIONS

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Investor Behavior Biases: Why They Matter and How to Overcome Them

In this quarter's "Directions," CLS's Portfolio Managers, Case Eichenberger, CIMA® and Paula Wieck, CFA focus on investors' emotions and behaviors. Mr. Eichenberger and Ms. Wieck begin by explaining common mistakes investors tend to make due to emotions. They then dive into different behavioral biases and how to overcome them to help investors achieve long-term financial goals without being overly emotional.



Case Eichenberger, CIMA®, has been with CLS since 2007. Mr. Eichenberger has held various roles while at the company, including Relationship Representative and Internal Wholesaler. In 2015, he accepted the role of Client Portfolio Manager. In his current role, Mr. Eichenberger co-manages CLS's American Funds strategies, works closely with CLS's separate account strategies (Master Manager), and communicates very closely with advisors and their clients both remotely and in-person.



Paula Wieck, CFA, joined CLS in 2006 and is currently the Manager of Investment Research/Portfolio Manager. In these roles, she is responsible for overseeing a team of investment research and performance analysts who provide in-depth research and data for CLS's investment decision making process. She also co-manages four AdvisorOne Funds, which range from aggressive to protection strategies, as well as multiple variable annuity and mutual fund strategies at CLS.



2016 was certainly an interesting year for the markets. It began with a historically poor start in domestic stocks, continued with the U.K.'s decision to exit the European Union, and ended with a U.S. presidential election that took the world by surprise. In such tumultuous times, it's difficult not to get emotional since the markets represent our retirements. But, if investors tuned out the noise and stayed invested, their patience would have been rewarded as markets approached all-time highs at year end.

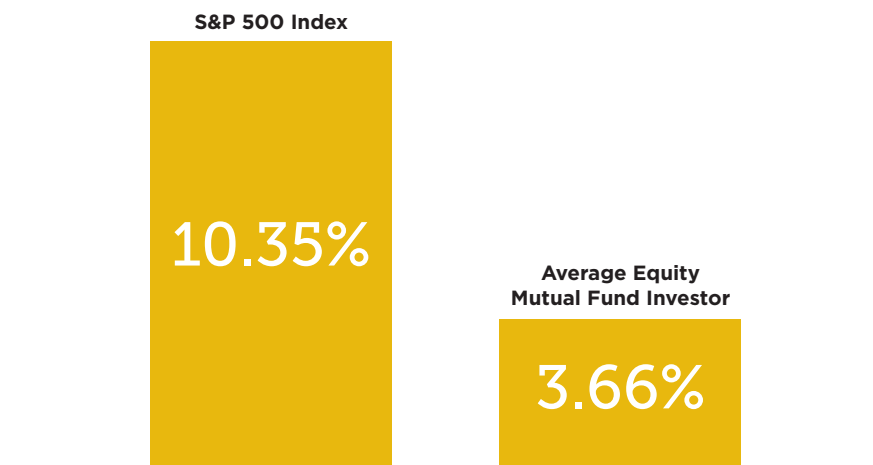
In this edition of "Directions," we focus on investors' emotions and behaviors. Emotions and investing mix together like oil and water. By allowing our emotions get the best of us, we often make mistakes that can continue to compound over time. But through the study and understanding of these behaviors and emotions, we can overcome them.

Behavioral Biases and Why They Matter

The market is a living organism. Trying to predict its movement with complete certainty is like trying to predict the mood of a teenager on any given day. The stock market will always ebb and flow. It's the one thing we can say with certainty. When investors try to predict where the market is going to go, they exhibit biases in their decision making. The more we let our emotions and biases get the better of us, the bigger the consequences are to our retirement goals.

The graphics on this page illustrate those consequences and

Average Annual Returns 1985 - 2015



The Cycle of Investor Emotions



Source: "Quantitative Analysis of Investor Behavior, 2016," DALBAR, Inc. www.dalbar.com Equity performance is represented by the Standard & Poor's 500 Composite Index, an unmanaged index of 500 common stocks generally representative of the U.S. stock market. The average investor refers to the universe of all mutual fund investors whose actions and financial results are restated to represent a single investor. This approach allows the entire universe of mutual fund investors to be used as the statistical sample, ensuring ultimate reliability. QAIB calculates investor return as the change in assets, after excluding sales, redemptions and exchanges. This method of calculation captures realized and unrealized capital gains, dividends, interest, trading costs, sales charges, fees, expenses and any other costs. You cannot invest directly in an index. Past Performance is not necessarily indicative of future results.

what is known as the behavior gap within investing. The top chart shows the S&P 500 Index's annual returns over the last 30 years compared to an average equity fund investor's returns over the same period. Investors captured only 35% of the total gains. Why? Because of human nature biases. Consider the illustration on the

bottom, which shows a cycle of investor behaviors. Investors exhibit extreme greed, fear, and all the emotions in between about an infinite array of outcomes

For example, in early 2016, the S&P 500 fell 10.5%, its worst start to a year ever. Many investors wanted to sell at that point and

buy back when the news turned around, likely at a higher market point. That is buying high and selling low – the opposite of what the old adage recommends.

What is the fix? The first step is to understand that we are all emotional and can make irrational decisions based on those emotions. Once we can admit this, we can work to identify certain biases common to every investor and develop ways to overcome them.

Common Investor Biases: Understanding and Squashing Them

By identifying common investor biases, investors can work to eliminate them and stick to the well-constructed financial plans they and their advisors have worked hard to implement.

Two of those biases have become more prevalent in the past few years: **home country bias** and **recency bias**. These tend to go hand in hand. **Home country bias** refers to an investor's preference to invest in companies located within the country he or she resides. But, this bias can cause investors to lose out on gains. For example, if a U.S. investor only invests in the S&P 500, he or she ignores the other 45% of investable companies based internationally, leaving his or her portfolio under-diversified.

This effect can be compounded, which is occurring more frequently as of late, by **recency bias**. This bias refers to the idea that what has recently happened in the markets will continue into the future. For example, it's the notion that U.S.

stocks will always have higher performance than international stocks because that is what the last seven years have told us. However, that's far from the truth. In the early 2000s, emerging market stocks (i.e., China) outperformed U.S. stocks handily.

So, what are investors to do? At CLS, we recommend globally diversified portfolios that are invested in stocks around the world. When investors diversify into international stocks, they have the opportunity to lower volatility and find stocks that perform at a higher level.

Another important behavioral trait common among investors is **loss aversion**. This refers to a negative emotional response to losses that outweighs a positive response to an equivalent gain. In other words, investors prefer to avoid losses than acquire gains. This can affect decision making when it comes to retirement. Over the long term, we know markets generally move higher, but on a day-to-day basis the chance of a market loss or gain is a coin flip. The more often investors see losses, the higher the chances are that they will pull their money out of the market or chase performance within another area of the market. So, the best idea is for investors to view their account value and performance quarterly, at most, or annually. This will lower the chances of seeing a negative return and improve the chances of staying true to their investment plans.

These are only a few behavioral biases that average investors exhibit, hiring a professional

money manager can help to limit emotional biases and close the behavior gap, but professional money managers, even those backed by teams of investment professionals, have their own biases to cope with and need to employ their own methods to manage them.

Financial Professionals and Investor Emotions

As famous value investor, Ben Graham, once said, "Individuals who cannot master their emotions are ill-suited to profit from the investment process." As an investor, understanding behavioral biases is helpful, but simply being aware of them isn't a foolproof guard from emotional reactions that could wreak havoc on financial outcomes. The help of a financial advisor can drastically improve the probability of success.

An advisor not only helps investors identify their emotional biases, but the advisor also reviews investors' goals and portfolios through an objective lens. For instance, if an investor has a **home country bias**, his or her financial advisor will likely educate him or her on the value that international investing brings to a balanced and diversified portfolio. If investors allow their advisors discretion, they will likely incorporate international investments to smooth out the overall volatility of the portfolio over time.

Another way advisors can help is by profiting from the irrational actions of others. For instance, as mentioned in the previous section, a **recency bias** is the belief

that the market will continue to behave in the future as it has in the recent past. What tends to follow is a herding mentality — investors jump on the bandwagon and buy “hot” securities at the same time. The problem is that investors end up paying higher prices than the fair value of those investments, decreasing the likelihood of profitability. However, financial advisors can take advantage of this herding mentality and buy securities that have performed poorly because they have the financial knowledge to understand that the fair value should be much higher.

Despite the value financial advisors can bring, it's important to recognize that even financial professionals are subject to behavioral biases. We are human after all! Some common biases we fall subject to are overconfidence, confirmation, and conservatism.

Overconfidence bias occurs when individuals overestimate their ability and knowledge,

often trading their portfolios excessively, underestimating risk, and overestimating expected returns. **Confirmation bias** exists when investors look only for evidence that supports their beliefs and ignore contradictory data. This can lead to under-diversified portfolios with higher risk attributes. **Conservatism bias** occurs when investors latch onto their initial beliefs about an investment. For instance, an investor may decide utility stocks look attractive, but fail to update his or her beliefs as new information becomes available that contradicts his or her initial research. The investor may hold onto the security for invalid reasons, leading to future losses.

Luckily, as professional money managers, we are trained in the area of behavioral finance, and we can help mitigate our own behavioral biases by having a sound and disciplined investment process in place that includes pre-determined rules for situations when emotions run high. For

example, CLS has a disciplined investment philosophy called Risk Budgeting that keeps risk constant and consistent, yet customized to the level of risk each investor is willing to take on. Other disciplines include regular reviews of trades and subsequent performance and comparisons of initial investment rationales with actual results. Seeking research that contradicts current beliefs is important to ensure we continue to consider the whole investment picture, process new information, and update forecasts accordingly.

Summary

In conclusion, investors who seek the help of financial advisors can drastically improve the probability of success. Choosing a financial advisor who can articulate a sound and disciplined investment process is recommended, as disciplined professionals will likely have rules in place to avoid their own emotional biases and improve the outcome for both the advisor and the client.

2017 Investment Themes

from CLS Chief Investment Officer, Rusty Vanneman, CFA



GLOBAL VALUE

This theme refers to an emphasis on value stocks around the globe that have lower valuations than the overall market. In other words, they might have a lower stock price to some fundamental unit of value ratio, such as sales or earnings. Not only do relative valuations support increasing positions in value stocks, but an improving economy also supports this theme. We are currently overweight value stocks, and will likely to increase that positioning even more in 2017.

Value stocks sectors CLS will be emphasizing: financials, natural resources, and emerging markets.



SMART BETA

This theme is essentially a re-branding of our previous theme, X-Factor. Smart Beta ETFs are rules-based ETFs whose holdings aim to intentionally diverge from a broad, market-cap-weighted index. At CLS, we emphasize five equity factors and two fixed income factors when we analyze portfolios and select ETFs. Over the past year, this investment theme has positively contributed to our performance. Moving forward, while recognizing that all investment styles are cyclical, we believe this theme will provide a durable edge over the long haul.

Equity Factors: Value, Quality, Size, Minimum Volatility, and Momentum

Fixed Income Factors: Credit and Duration



CREATIVE DIVERSIFICATION

This theme remains the same as last year. With interest rates at low levels compared to historical averages, this theme refers to the need to continue diversifying equity volatility to manage overall portfolio risk. CLS achieves this by being creative in the ways we actively manage our fixed income exposures, our continued use of alternative asset class segments and strategies, and through buying commodity-based ETFs.

Smart Beta: Back to Basics

Portfolio Manager, Grant Engelbart, CFA, CAIA



As we kick off 2017, we can definitively say that smart beta is here to stay — in CLS portfolios and the industry as a whole. At CLS, our Smart Beta theme (previously X-Factor), which is based on our use of smart beta ETFs, has been extensively covered in direct commentary from CLS and through various media outlets, such as ETFTrends.com's ETF Strategist Channel. That being said, it's worth heading back to square one to take a look at the investment trend taking the industry by storm.

First, let's dissect the term *smart beta*. Not to be confusing, but we'll start with *beta*. Beta is technically a statistical measure showing the degree of co-movement with the market. For instance, a beta of 1.5 implies a security should capture 1.5 times the return of a benchmark and 1.5 times the risk. It works similarly to our Risk Budget Score (in fact, it's a key component).

With beta comes *alpha*, which is the amount of excess performance when adjusting for beta. Stay with me here! For example, let's say a mutual fund has a beta of 1.5, and it returns 20% in a given year. The index it's measured against returns only 10%. Given a beta of 1.5, we would expect the fund to return 15% (1.5 times 10% return of the index), but in fact it returned 20%. That extra 5% is alpha. Index-based ETFs capture beta. The beta of

the SPDR S&P 500 ETF Trust (SPY) versus the S&P 500 should be right around 1. No alpha gained, just beta exposure.

Now we'll get to *smart*. Below is a fake ETF based on a made up 10-stock index. Pretty simple: the weights are the same as the index. It's delivering pure beta exposure.

It's not *stupid*, but for our purposes here, it's not *smart* either.

So, what if we used some other information to change way the ETF is weighted? How about a factor, such as value? In that case, we drop the five stocks with the highest price-to-earnings (P/E) ratios and only hold the names

Name	Ticker	Index Weight	Index ETF Weight
Apple Inc	AAPL	14%	14%
Microsoft Corp	MSFT	12%	12%
Exxon Mobil Corp	XOM	12%	12%
Amazon.com Inc	AMZN	11%	11%
Johnson & Johnson	JNJ	10%	10%
Facebook Inc A	FB	10%	10%
Berkshire Hathaway Inc A	BRK.A	9%	9%
General Electric Co	GE	8%	8%
JPMorgan Chase & Co	JPM	7%	7%
AT&T Inc	T	7%	7%
		100%	100%

with the lowest P/E ratios (most attractively valued).

Now we are starting to get *smart*. Our new smart beta ETF holds five stocks weighted by valuation.

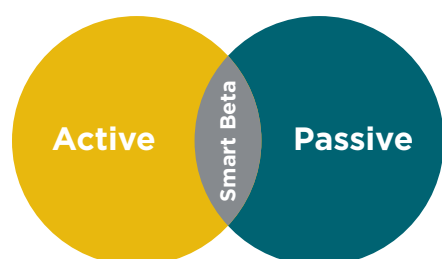
Our beta may be close to the market index (1), but since value is proven to work over time, we should add some alpha as well. Additional factors could be added – such as quality or momentum

– and we would have ourselves a multi-factor smart beta ETF.

The end result is an ETF that doesn't track a *traditional* index, since we cut off the high value names and sorted it by the most attractively valued companies, but it also doesn't rely on a portfolio manager picking individual stocks. So it's neither fully *passive* nor fully *active*. Many of the factors that are used to create smart beta

ETFs (such as value) have proven over time to outperform not only traditional indices, but also a lot of active managers. And, of course, in the ETF wrapper, investors get the benefit of much lower expenses and potential tax benefits.

The graphs and charts contained in this work are for informational purposes only. No graph or chart should be regarded as a guide to investing.



Name	Ticker	Index Weight	Value ETF Weight	P/E Ratio
JPMorgan Chase & Co	JPM	7%	27%	11.29
Apple Inc	AAPL	14%	22%	13.16
Berkshire Hathaway Inc A	BRK.A	9%	22%	13.94
AT&T Inc	T	7%	17%	17.50
Johnson & Johnson	INJ	10%	12%	22.00
Microsoft Corp	MSFT	12%		27.43
Exxon Mobil Corp	XOM	12%		34.63
Amazon.com Inc	AMZN	11%		208.29
Facebook Inc A	FB	10%		61.37
General Electric Co	GE	8%		35.26
		100%	100%	

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An ETF is a type of investment company whose investment objective is to achieve the same return as a particular index, sector, or basket. To achieve this, an ETF will primarily invest in all of the securities, or a representative sample of the securities, that are included in the selected index, sector, or basket. ETFs are subject to the same risks as an individual stock, as well as additional risks based on the sector the ETF invests in.

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