

CAKE OR SALAD?

Every day we are faced with decisions—some are easier to make than others. Imagine you open the fridge for a snack and see a salad and a piece of chocolate cake. For many of us, choosing which one to eat is a challenging decision (though some might say it's easy—take the cake!). The conflicting dialogue in our heads may sound like this:



The two seemingly opposing voices come from two different parts of our brain. The **FRONTAL CORTEX** processes lots of information to help us make a logical and informed choice. This portion of the brain carefully analyzes and reflects on all available information.

But, there's also a small part of the brain known as the AMYGDALA. Among other things, the amygdala is responsible for emotions and survival instincts. It's often referred to as the reflexive brain because it processes stimuli and makes quick judgments as it seeks to avoid risks and find rewards.



SIX BARRIERS TO INVESTMENT SUCCESS

Choosing a snack is one thing, but letting our reflexive brain control our reactions when making financial decisions may lead to some undesirable outcomes. As humans, we need to be aware of how our reflexive behavior impacts our investment decision-making ability.

By uncovering the behavioral biases that might affect our financial decisions, we may have a better chance of meeting long-term goals.

The following pages discuss six common barriers to investment success:



1. AVAILABILITY BIAS



2. HERDING



3. LOSS AVERSION



4. PRESENT BIAS



5. ANCHORING



6. HOME COUNTRY BIAS

1. AVAILABILITY BIAS

Our thinking is strongly influenced by what is personally most relevant, recent or traumatic.

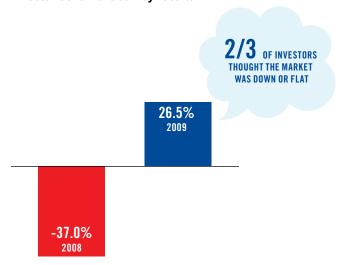


The lasting impact of a down market

For many investors, little was more traumatic than the events of the 2008 financial crisis. The S&P 500 Index was down 37%. But, the following year, in 2009, the market bounced back to 26.5%. After 2009 ended, Franklin Templeton conducted a survey asking people how they thought the market performed that year. Likely due to the traumatic events of the recent crisis, two-thirds of respondents incorrectly thought the market was down or flat in 2009.

A DISCONNECT BETWEEN PERCEPTION AND REALITY

S&P 500 Index annual returns¹ and Franklin Templeton Investor Sentiment Survey results²

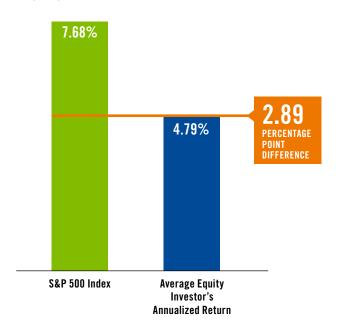


Investor returns have been lower than market returns

The danger of basing investment decisions on market perceptions, rather than facts, is that it can lead to poor investment decisions. This may help explain why the 20-year average annual return of the S&P 500 Index for the period ended December 31, 2016 was higher than the average equity investor's return.

INVESTOR RETURNS VS. MARKET RETURNS³

20-year period ended December 31, 2016



These charts are for illustrative purposes only and do not reflect the performance of any Franklin Templeton fund.

Past performance does not guarantee future results.

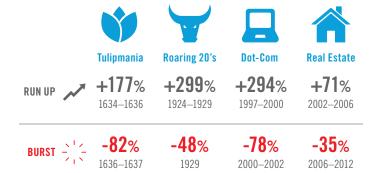
- 1. Source: Morningstar.
- 2. Source: 2010 Franklin Templeton Investor Sentiment Survey conducted in partnership with ORC International of at least 1,000 US adult respondents.
- 3. Sources: S&P 500 Index: Morningstar; Average Equity Investor's Annualized Return: "Quantitative Analysis of Investor Behavior, 2016," DALBAR, Inc. Indexes are unmanaged and one cannot invest directly in an index. Index returns do not reflect any fees, expenses or sales charges.



The wisdom of crowds?

Throughout history, investors have faced strong temptation to join the investment bandwagon based on emotions, rather than a sound financial strategy. The illustration to the right shows four well-known financial bubbles. During the run up of these bubbles, investors bid up the prices of tulip bulbs, stocks and real estate to unsustainable levels. But, even more quickly than they expanded, these markets burst and contracted leaving the herd scrambling.

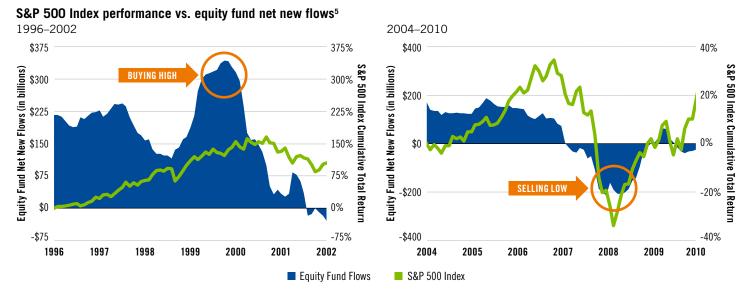
BUBBLES THROUGHOUT HISTORY⁴



The problem of going with the flow

In the charts below, the green line represents the performance of the S&P 500 Index and the blue shading represents equity fund flows. When the S&P 500 Index performed well during the Internet boom, there was an influx of money into equity funds (buying high). Conversely, when the market pulled back after the housing crash, investors withdrew their money from equities (selling low).

INVESTORS FOLLOWING THE HERD HAVE HISTORICALLY BOUGHT HIGH AND SOLD LOW



These charts are for illustrative purposes only and do not reflect the performance of any Franklin Templeton fund.

Past performance does not guarantee future results.

- 4. Sources: Tulipmania Dec. 1634 May 1637: Thompson, Earl A. "The tulipmania: Fact or Artifact?" Public Choice, 2007; Roaring '20s Dec. 1924 Nov. 1929: Dow Jones Industrial Average; Dot-Com Jan. 1997 Oct. 2002: NASDAQ Index; Real Estate Jan. 2002 Mar. 2012: Case-Shiller Housing Index.
- 5. Sources: S&P 500 Index: Morningstar; Equity Fund Flows: ICI. Flows are represented by monthly rolling 12-month net new cash flows. Indexes are unmanaged and one cannot invest directly in an index.

3. LOSS AVERSION

The pain we associate with a loss is much more intense than the reward felt from a gain.



For most investors, the primary goal is to avoid a decline in the value of their investments. When markets do take a step back, investors often react by flocking to cash or cash equivalents.

CASH INCREASES DURING MARKET PULL-BACKS⁶

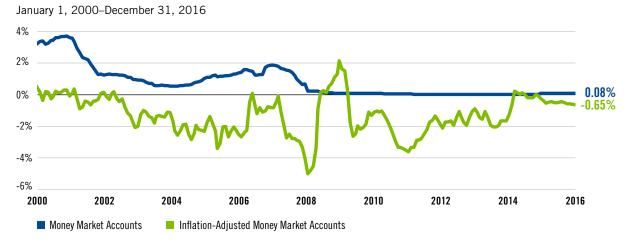




Perceived safety may come at a cost

The chart below shows the average money market account yield since 2000 along with the inflation-adjusted yield. Although some investors may consider money market accounts a more secure investment option while they wait out stock market volatility, they may not be aware of the potential erosion of their purchasing power.

MONEY MARKET ACCOUNTS' AVERAGE YIELD BEFORE AND AFTER INFLATION7



This chart is for illustrative purposes only and does not reflect the performance of any Franklin Templeton fund. It's important to note that money market accounts are insured by the Federal Deposit Insurance Corporation (FDIC) for up to \$250,000.

^{6.} Source: Federal Reserve Bank of St. Louis.

^{7.} Sources: Money Market Accounts' Average Yield: BanxQuote® and Federal Reserve Bank of St. Louis; Inflation: Bureau of Labor Statistics. Inflation is represented by year-over-year changes of the Consumer Price Index (CPI) plotted on a monthly basis.



4. PRESENT BIAS

We often overvalue immediate rewards at the expense of long-term goals.

Delaying gratification is challenging

When a short-term reward is staring us in the face, we often give in to the temptation of instant gratification. The tendency to focus on the now can be seen in our national savings rate. As shown on the right, people have recently been saving less than the long-term average.

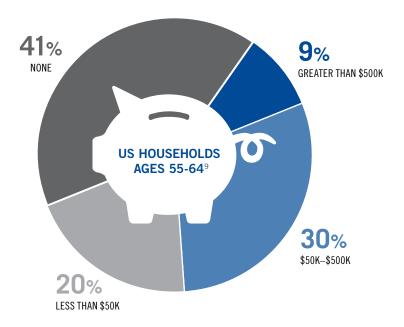
NATIONAL SAVINGS RATE HAS DECLINED

US personal savings rate, as a monthly percentage of disposable income⁸



Retirement savings are meager

The lack of long-term planning and saving is having a significant impact on those nearing retirement. As shown in the illustration below, only 9% of US households have more than \$500k in their retirement portfolios, and a shocking 41% haven't saved anything at all.



^{8.} Source: Federal Reserve Bank of St. Louis.

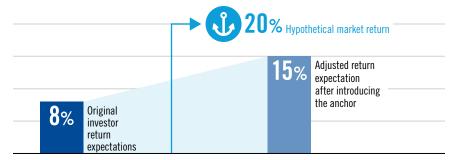
^{9.} Source: United States Government Accountability Office, 2015.



Anchors influence performance expectations

When Franklin Templeton surveyed investors about their portfolio return expectations over a five-year period, the median response was 8% annually. But, when presented with a hypothetical market that was up 20%, median return expectations increased to 15%. The hypothetical strong-performing market anchor caused investors to expect stronger returns.

FRANKLIN TEMPLETON INVESTOR SENTIMENT SURVEY RESULTS¹⁰



Upside only, please

When presented with a hypothetical market that was down 20%, investors' median portfolio return expectation was 2%.¹⁰ Surprisingly, investors expected to outperform a down market by 22%.

The full picture tells a different story

Anchors can influence how we feel about the progress of our investment plans. A hypothetical investor may say they want an 8% return over the life of their portfolio. However, as shown by the S&P 500 Index returns below, investing often involves volatility. Many investors anchor to market high points, setting unrealistic future return expectations. If the market drops, they may feel they're doing poorly despite still being largely on track to reach their long-term goals.

S&P 500 INDEX VS. AN 8% AVERAGE ANNUAL RETURN¹¹

Growth of a \$10,000 investment for the 30-year period ended December 31, 2016



This chart is for illustrative purposes only and does not reflect the performance of any Franklin Templeton fund.

Past performance does not guarantee future results.

- 10. Source: 2015 Franklin Templeton Investor Sentiment Survey conducted in partnership with ORC International of at least 500 US adult investors.
- 11. Source: Morningstar. Indexes are unmanaged and one cannot invest directly in an index.



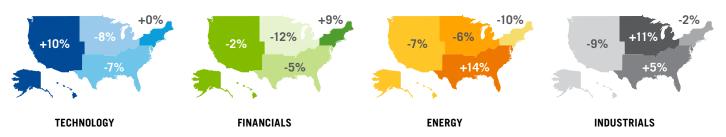
6. HOME COUNTRY BIAS

We tend to favor companies and products from our home country or region.

Home sweet home

Where we live has a big influence on our everyday lives—from the foods we like, to the sports teams we cheer for, we tend to prefer what's nearby. A recent study by Openfolio looked at US investor portfolios by geography to measure how much where we live affects our investments. It was not too surprising that investors showed a clear preference for investing in the types of companies that were more predominant in their respective regions.

HOW LIKELY AN INVESTOR IS TO OWN STOCKS IN A GIVEN INDUSTRY VS. AVERAGE¹²

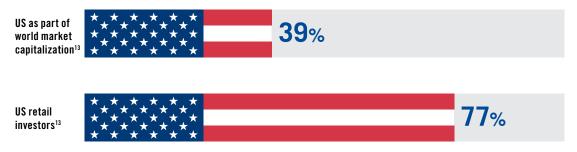


Investors may be out of step

The tendency to invest in our own backyard continues at a national, and even global level. As shown below, the United States makes up 39% of the total world market capitalization. However, the average US investor allocates three-quarters of their portfolio to US equities, demonstrating a clear preference for domestic investments. In doing so, they may be missing out on opportunities offered by foreign investments.

POTENTIAL FOR GREATER ALLOCATION TO FOREIGN INVESTMENTS BY US INVESTORS¹³

As of December 31, 2016



^{12.} Source: Openfolio.com

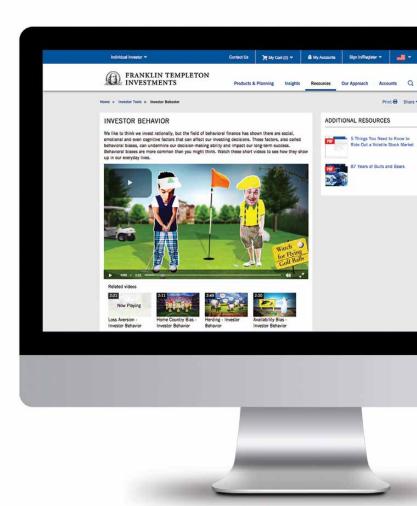
^{13.} Sources: World Market Capitalization: World Federation of Exchanges; Average US Retail Investor: ICI. Based on total net assets of equity mutual funds invested in world equity funds.

WHAT NOW?

After learning about the impact of these investor biases, you might be asking yourself, what can I do to make better financial decisions?

One of the best ways to make better financial decisions is to work with a financial advisor. A financial advisor will take the time to understand your individual needs and create an investment strategy that is tailored to your specific goals, how long you have to invest and your risk tolerance. And as you navigate the market, an advisor can help you keep your emotions and biases in check and stay on track with regular portfolio reviews and adjustments.

For videos highlighting how behavioral biases can impact our everyday lives, visit **www.franklintempleton.com/investorbehavior**



NOTES

All investments involve risk, including possible loss of principal. Stock prices fluctuate, sometimes rapidly and dramatically, due to factors affecting individual companies, particular industries or sectors, or general market conditions. Special risks are associated with foreign investing, including currency fluctuations, economic instability and political developments.

Investors should carefully consider a fund's investment goals, risks, charges and expenses before investing. To obtain a summary prospectus and/or prospectus, which contains this and other information, talk to your financial advisor, call us at (800) DIAL BEN/342-5236 or visit franklintempleton.com. Please carefully read a prospectus before you invest or send money.

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