

Pursuing a Better Investment Experience

1. Embrace Market Pricing

World Equity Trading in 2016 (daily average)

Number
of Trades

82.7
MILLION

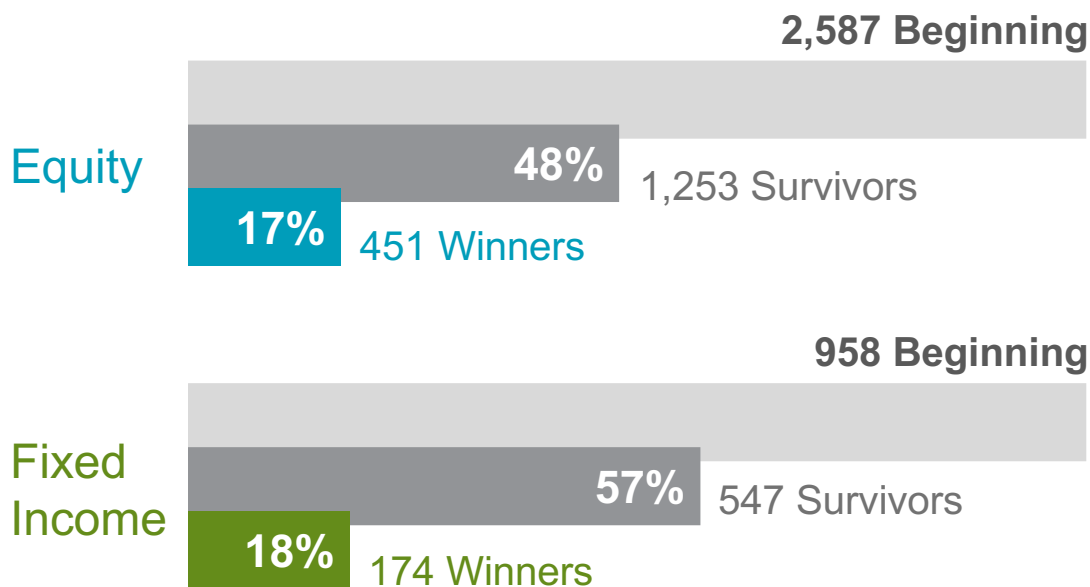
Dollar
Volume

\$346.4
BILLION

The market is an effective information-processing machine. Millions of participants buy and sell securities in the world markets every day, and the real-time information they bring helps set prices.

2. Don't Try to Outguess the Market

US-Based Mutual Fund Performance, 2002–2016

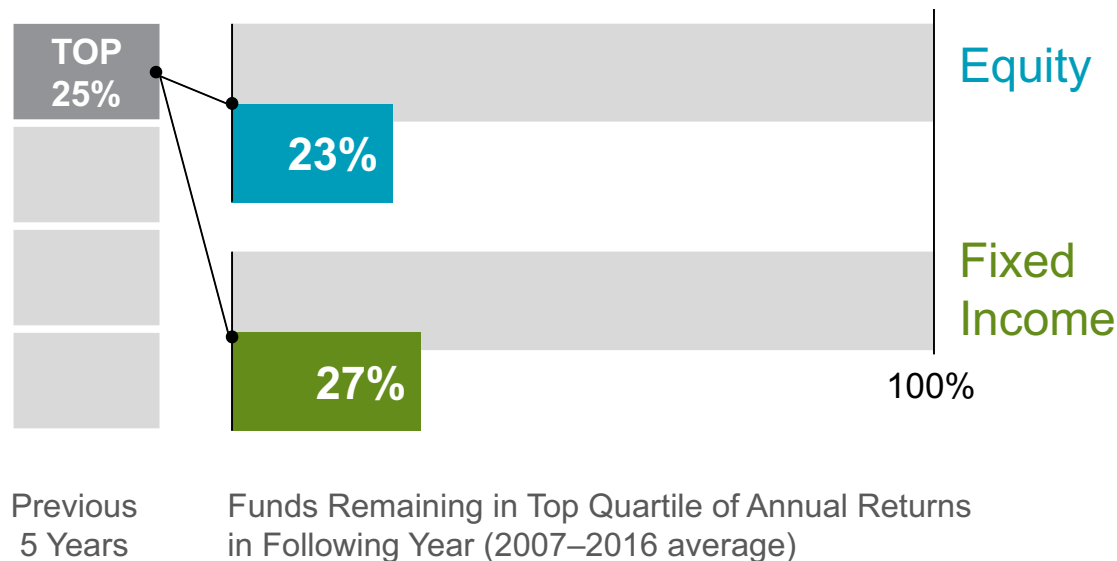


The market's pricing power works against mutual fund managers who try to outperform through stock picking or market timing. As evidence, only 17% of US equity mutual funds and 18% of fixed income funds have survived and outperformed their benchmarks over the past 15 years.

The sample includes funds at the beginning of the 15-year period ending December 31, 2016. Each fund is evaluated relative to the Morningstar benchmark assigned to the fund's category at the start of the evaluation period. Surviving funds are those with return observations for every month of the sample period. Winner funds are those that survived and whose cumulative net return over the period exceeded that of their respective Morningstar category benchmark. US-domiciled open-end mutual fund data is from Morningstar and Center for Research in Security Prices (CRSP) from the University of Chicago. Index funds and fund-of-funds are excluded from the sample. Equity fund sample includes the Morningstar historical categories: Diversified Emerging Markets, Europe Stock, Foreign Large Blend, Foreign Large Growth, Foreign Large Value, Foreign Small/Mid Blend, Foreign Small/Mid Growth, Foreign Small/Mid Value, Japan Stock, Large Blend, Large Growth, Large Value, Mid-Cap Blend, Mid-Cap Value, Miscellaneous Region, Pacific/Asia ex-Japan Stock, Small Blend, Small Growth, Small Value, and World Stock. Fixed income fund sample includes the Morningstar historical categories: Corporate Bond, Inflation-Protected Bond, Intermediate Government, Intermediate-Term Bond, Muni California Intermediate, Muni National Intermediate, Muni National Short, Muni New York Intermediate, Muni Single State Short, Short Government, Short-Term Bond, Ultrashort Bond, and World Bond. See Dimensional's "Mutual Fund Landscape 2017" for more detail. Benchmark data provided by Bloomberg Barclays, MSCI, Russell, FTSE Fixed Income LLC, and S&P. Bloomberg Barclays data provided by Bloomberg. MSCI data © MSCI 2018, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. FTSE fixed income indices © 2018 FTSE Fixed Income LLC. All rights reserved. S&P data copyright 2018 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. **Benchmark indices are not available for direct investment. Their performance does not reflect the expenses associated with management of an actual portfolio. There is no guarantee investment strategies will be successful. Past performance is no guarantee of future results.**

3. Resist Chasing Past Performance

Percentage of Top-Ranked Funds That Stayed on Top

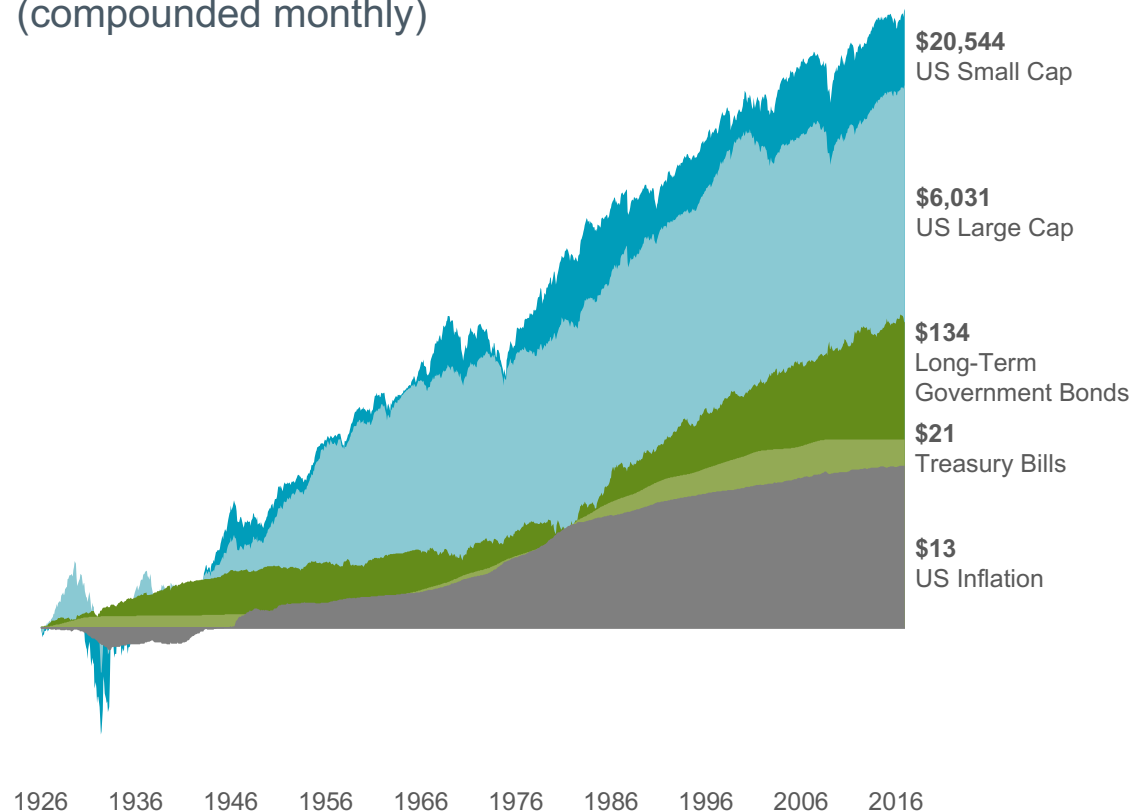


Some investors select mutual funds based on past returns. However, research shows that most funds in the top quartile (25%) of previous five-year returns did not maintain a top-quartile ranking for one-year returns in the following year. Past performance offers little insight into a fund’s future returns.

At the end of each year, funds are sorted within their category based on their five-year total return. Funds in the top quartile (25%) of returns are evaluated again in the following year based on one-year performance in order to determine the percentage of funds that maintained a top-quartile ranking. The analysis is repeated each year from 2007–2016. The chart shows average persistence of top-quartile funds during the 10-year period. US-domiciled open-end mutual fund data is from Morningstar and Center for Research in Security Prices (CRSP) from the University of Chicago. Index funds and fund-of-funds are excluded from the sample. Equity fund sample includes the Morningstar historical categories: Diversified Emerging Markets, Europe Stock, Foreign Large Blend, Foreign Large Growth, Foreign Large Value, Foreign Small/Mid Blend, Foreign Small/Mid Growth, Foreign Small/Mid Value, Japan Stock, Large Blend, Large Growth, Large Value, Mid-Cap Blend, Mid-Cap Value, Miscellaneous Region, Pacific/Asia ex-Japan Stock, Small Blend, Small Growth, Small Value, and World Stock. Fixed income fund sample includes the Morningstar historical categories: Corporate Bond, Inflation-Protected Bond, Intermediate Government, Intermediate-Term Bond, Muni California Intermediate, Muni National Intermediate, Muni National Short, Muni New York Intermediate, Muni Single State Short, Short Government, Short-Term Bond, Ultrashort Bond, and World Bond. See Dimensional’s “Mutual Fund Landscape 2017” for more detail. Benchmark data provided by Bloomberg Barclays, MSCI, Russell, FTSE Fixed Income LLC, and S&P. Bloomberg Barclays data provided by Bloomberg. MSCI data © MSCI 2018, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. FTSE fixed income indices © 2018 FTSE Fixed Income LLC. All rights reserved. S&P data copyright 2018 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. **Benchmark indices are not available for direct investment. Their performance does not reflect the expenses associated with management of an actual portfolio. There is no guarantee investment strategies will be successful. Past performance is no guarantee of future results.**

4. Let Markets Work for You

Growth of a Dollar, 1926–2016
(compounded monthly)



The financial markets have rewarded long-term investors. People expect a positive return on the capital they supply, and historically, the equity and bond markets have provided growth of wealth that has more than offset inflation.

In US dollars. US Small Cap is the CRSP 6–10 Index. US Large Cap is the S&P 500 Index. Long-Term Government Bonds is the IA SBBI US LT Govt TR USD. Treasury Bills is the IA SBBI US 30 Day TBill TR USD. US Inflation is measured as changes in the US Consumer Price Index. CRSP data is provided by the Center for Research in Security Prices, University of Chicago. S&P data copyright 2018 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. Long-term government bonds and Treasury bills data provided by Ibbotson Associates via Morningstar Direct. US Consumer Price Index data is provided by the US Department of Labor Bureau of Labor Statistics. **Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is no guarantee of future results.**

5. Consider the Drivers of Returns

Dimensions of Expected Returns

EQUITIES

Market (Equity premium—stocks vs. bonds)

Company Size (Small cap premium—small vs. large companies)

Relative Price (Value premium—value vs. growth companies)

Profitability (Profitability premium—high vs. low profitability companies)

FIXED INCOME

Term (Term premium—longer vs. shorter maturity bonds)

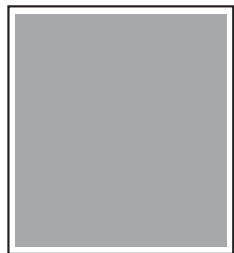
Credit (Credit premium—lower vs. higher credit quality bonds)

Academic research has identified these equity and fixed income dimensions, which point to differences in expected returns.

Investors can pursue higher expected returns by structuring their portfolio around these dimensions.

6. Practice Smart Diversification

Home Market Index Portfolio



S&P 500 Index
1 country,
500 stocks

Global Market Index Portfolio

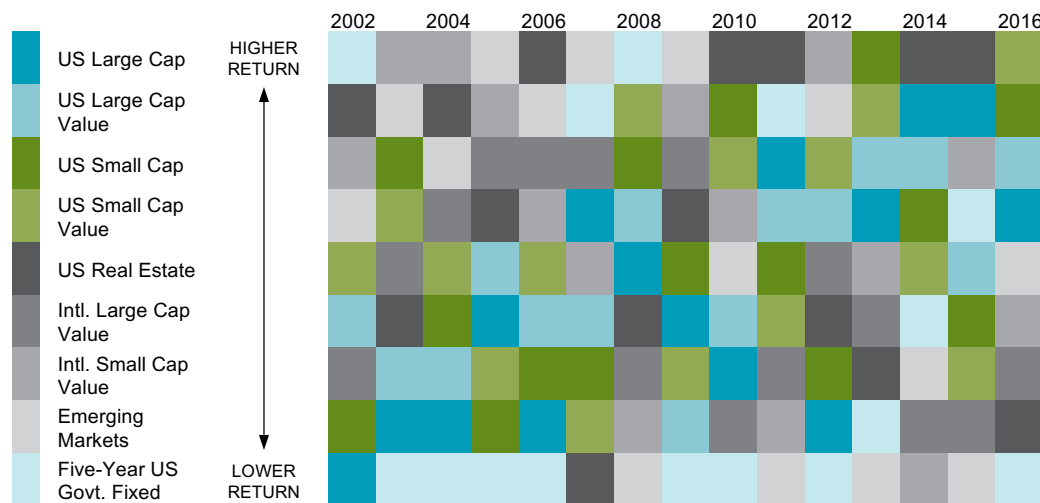


MSCI ACWI Investable Market Index (IMI)
46 countries,
8,628 stocks

Diversification helps reduce risks that have no expected return, but diversifying within your home market is not enough. Global diversification can broaden your investment universe.

7. Avoid Market Timing

Annual Returns by Market Index

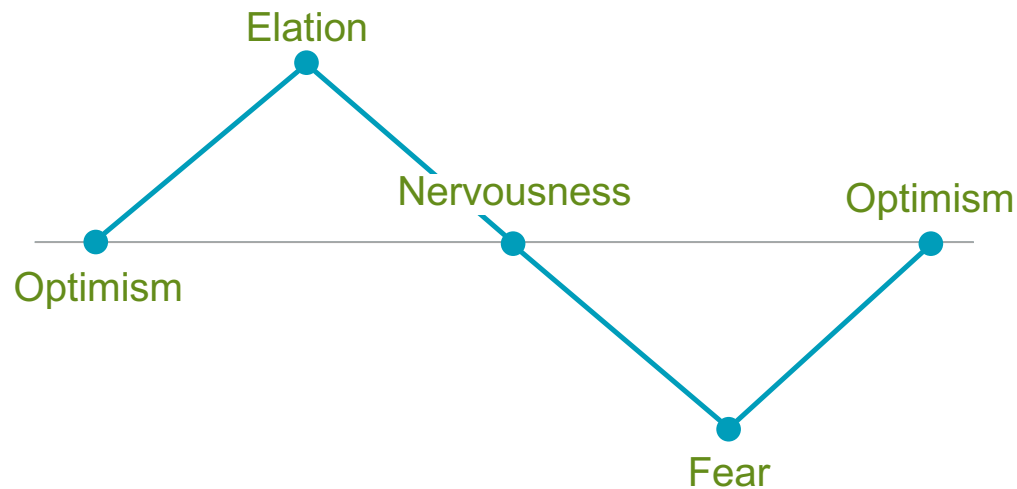


You never know which market segments will outperform from year to year. By holding a globally diversified portfolio, investors are well positioned to seek returns wherever they occur.

In US dollars. US Large Cap is the S&P 500 Index. US Large Cap Value is the Russell 1000 Value Index. US Small Cap is the Russell 2000 Index. US Small Cap Value is the Russell 2000 Value Index. US Real Estate is the Dow Jones US Select REIT Index. International Large Cap Value is the MSCI World ex USA Value Index (net dividends). International Small Cap Value is the MSCI World ex USA Small Cap Value Index (net dividends). Emerging Markets is the MSCI Emerging Markets Index (net dividends). Five-Year US Government Fixed is the Bloomberg Barclays US TIPS Index 1-5 Years. S&P and Dow Jones data copyright 2018 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. MSCI data © MSCI 2018, all rights reserved. Bloomberg Barclays data provided by Bloomberg. **Chart is for illustrative purposes only. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is not a guarantee of future results. Diversification does not eliminate the risk of market loss.**

8. Manage Your Emotions

Avoid Reactive Investing



Many people struggle to separate their emotions from investing. Markets go up and down. Reacting to current market conditions may lead to making poor investment decisions.

9. Look beyond the Headlines

RETIRE RICH

SELL STOCKS NOW!

THE LOOMING RECESSION

THE TOP 10 FUNDS TO OWN

MARKET HITS RECORD HIGH!

HOUSING MARKET BOOM!

Daily market news and commentary can challenge your investment discipline. Some messages stir anxiety about the future while others tempt you to chase the latest investment fad.

When headlines unsettle you, consider the source and maintain a long-term perspective.

10. Focus on What You Can Control

- Create an investment plan to fit your needs and risk tolerance
- Structure a portfolio along the dimensions of expected returns
- Diversify globally
- Manage expenses, turnover, and taxes
- Stay disciplined through market dips and swings

A financial advisor can offer expertise and guidance to help you focus on actions that add value. This can lead to a better investment experience.