



COMMENCEMENT FINANCIAL PLANNING LLC

The US Mutual Fund Landscape

2017 Report

The Mutual Fund Landscape

2016 Report

This report documents survivorship and performance of US mutual funds, and shows the negative impact of high fees and turnover on returns.

The data reveals that few mutual funds have delivered benchmark-beating returns and quantifies an investor's challenge to identify outperforming managers in advance.

Findings

- Most mutual funds underperformed their benchmarks.
- Strong track records failed to persist.
- High costs and excessive turnover may have contributed to underperformance.

Lessons

- Markets effectively aggregate investor knowledge and expectations into prices that are reliable.
- Managers attempting to outguess market prices may incur high costs that raise the barrier to outperforming an index.
- Successful fund investing involves more than picking a top performing fund from the past.
- Consider a fund's market philosophy, investment objectives, strategy, trading costs, and other factors.

Overview:

The US Mutual Fund Industry

Assets under Management

Survivorship and Outperformance

- ❖ Equity Funds
- ❖ Fixed Income Funds

Do Winners Keep Winning?

- ❖ Equity Funds
- ❖ Fixed Income Funds

High Costs Make Outperformance Difficult

- ❖ Equity Funds
- ❖ Fixed Income Funds

High Trading Costs Make Outperformance Difficult

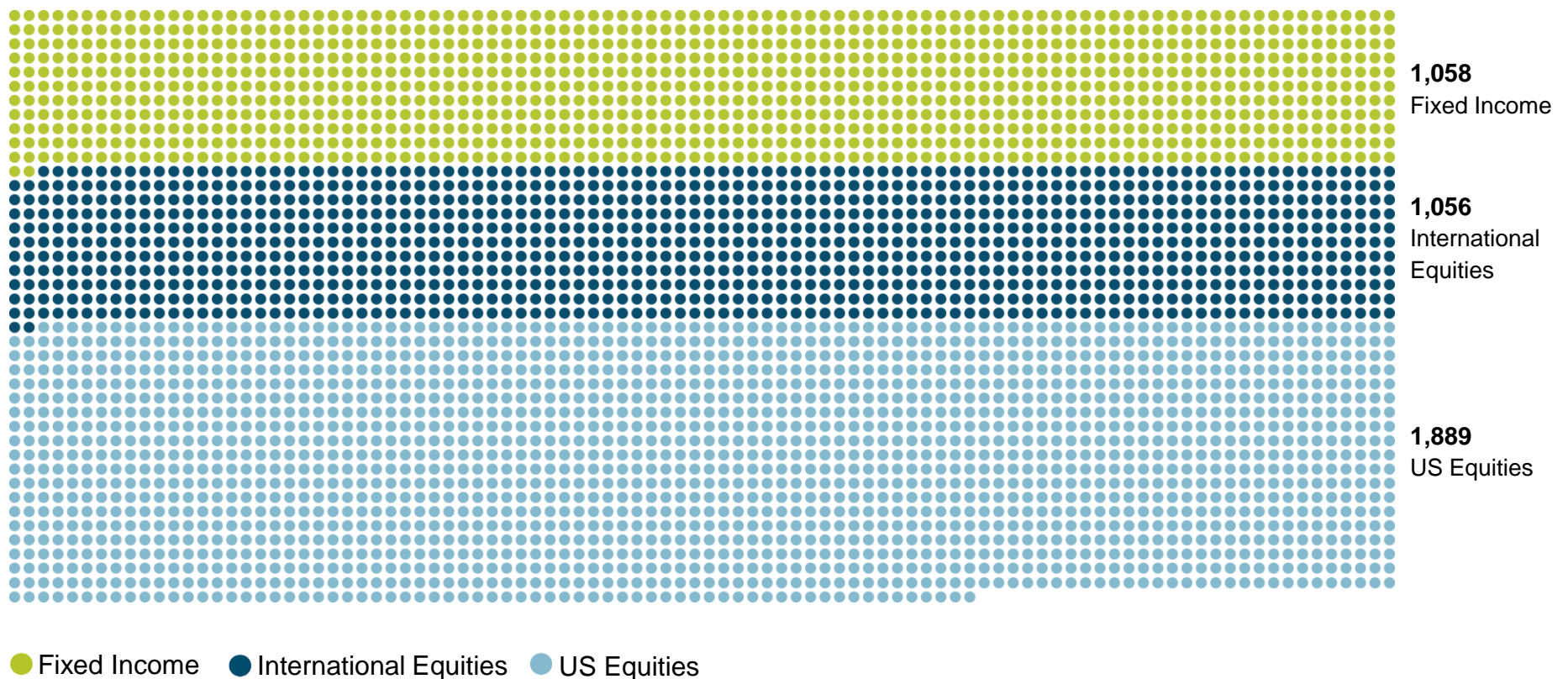
Report Summary

Data Appendix

US-Based Mutual Funds, 2016

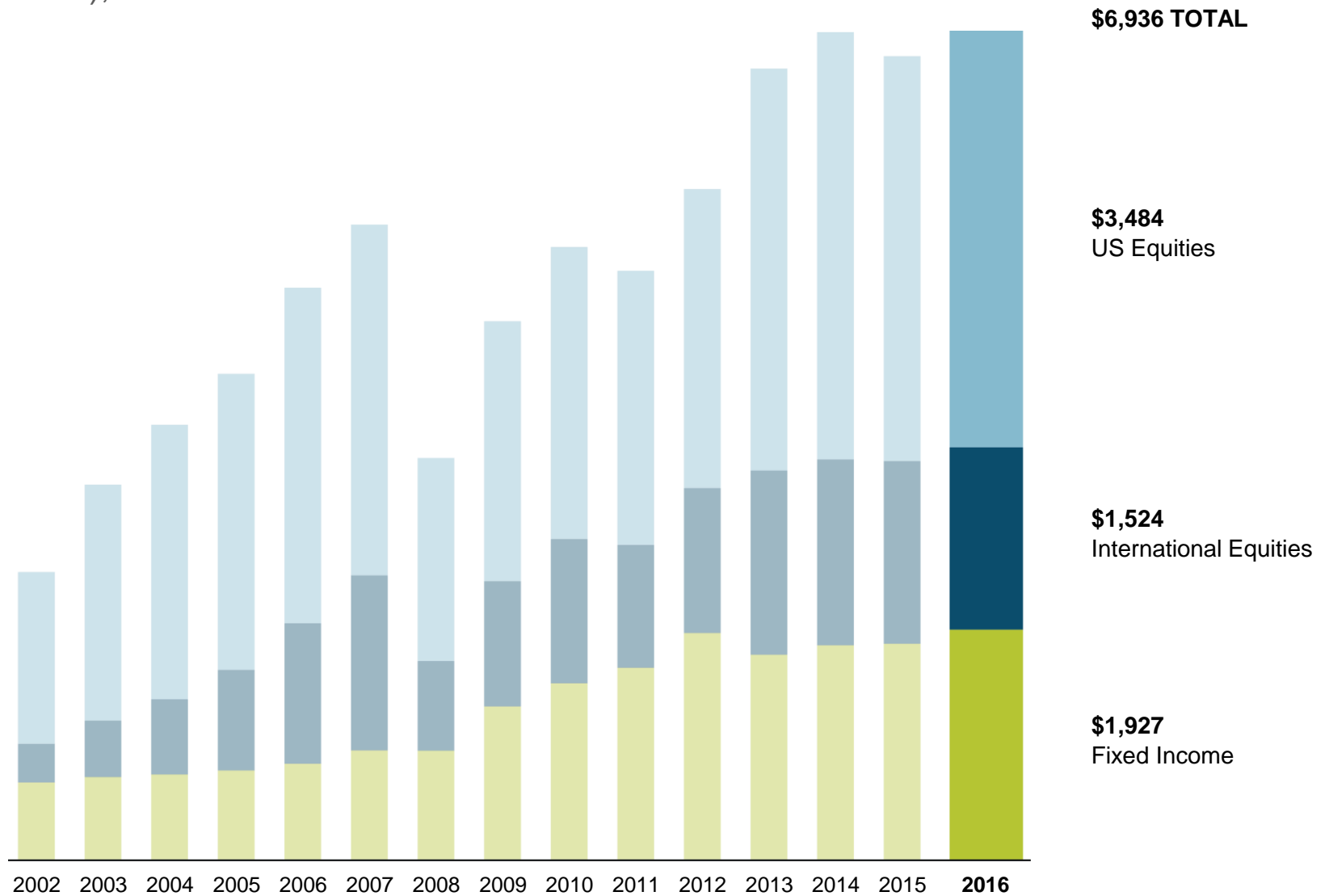
Number of equity and fixed income funds in the study

This study evaluates a sample of 4,003 US-based mutual funds through 2016.



Assets under Management

In USD (billions), 2002–2016



Total value of assets in the representative fund samples over the past 15 years. US-domiciled open-end mutual fund data is from Morningstar and Center for Research in Security Prices (CRSP) from the University of Chicago. Numbers may not sum due to rounding. See Data Appendix for more information.

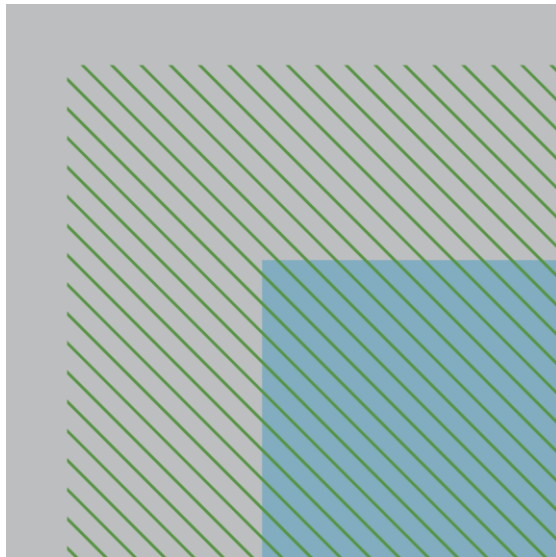
Few Equity Funds Have Survived and Outperformed

Performance periods ending December 31, 2016

Beginners
 Survivors
 Outperformers

5 YEARS

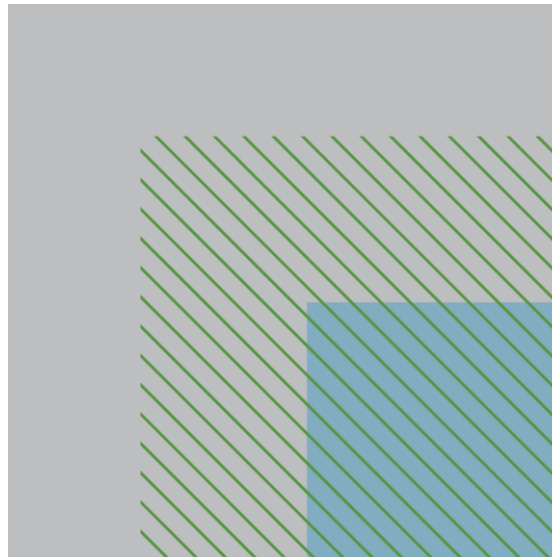
2,863 funds at beginning



79% Survive
29% Outperform

10 YEARS

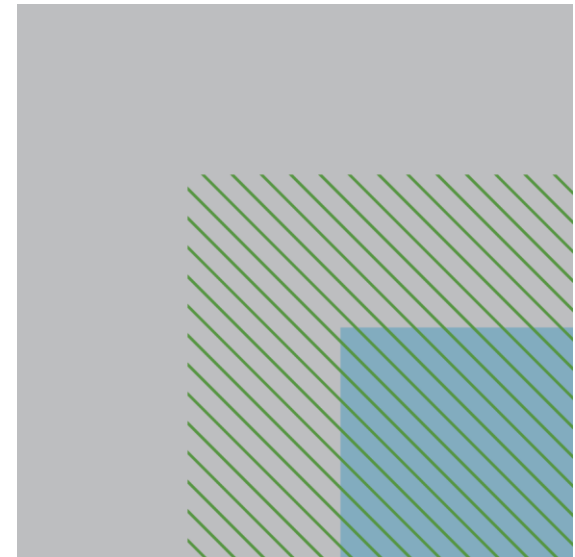
2,944 funds at beginning



58% Survive
21% Outperform

15 YEARS

2,587 funds at beginning



48% Survive
17% Outperform

The sample includes funds at the beginning of the five-, 10-, and 15-year periods ending December 31, 2016. Survivors are funds that had returns for every month in the sample period. Winners are funds that survived and outperformed their respective Morningstar category benchmark over the period. US-domiciled open-end mutual fund data is from Morningstar and Center for Research in Security Prices (CRSP) from the University of Chicago. **Past performance is no guarantee of future results. See Data Appendix for more information.**

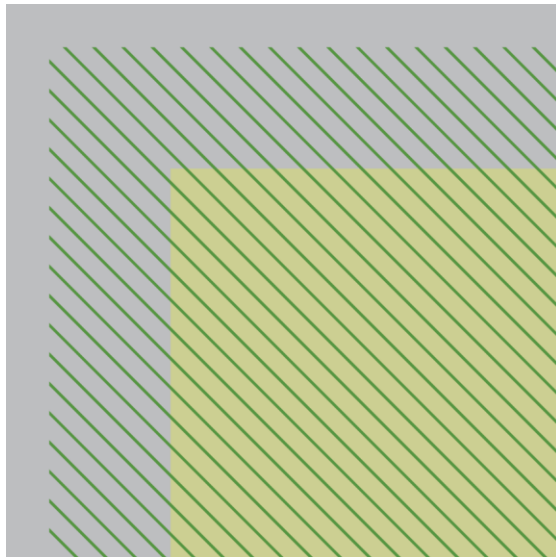
Few Fixed Income Funds Have Survived and Outperformed

Fixed income fund performance periods ending December 31, 2016

Beginners
 Survivors
 Outperformers

5 YEARS

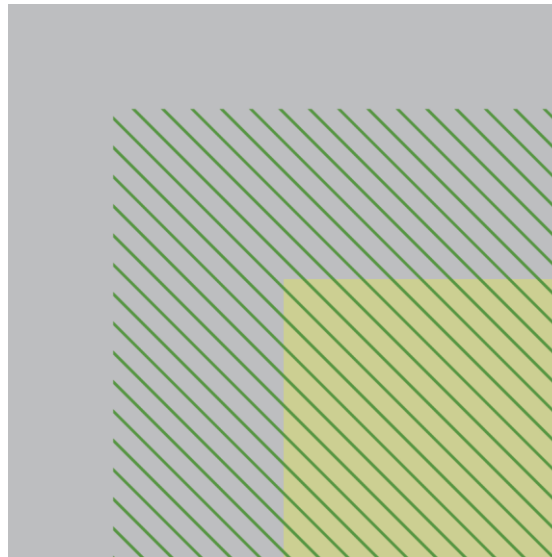
952 funds at beginning



85% Survive
50% Outperform

10 YEARS

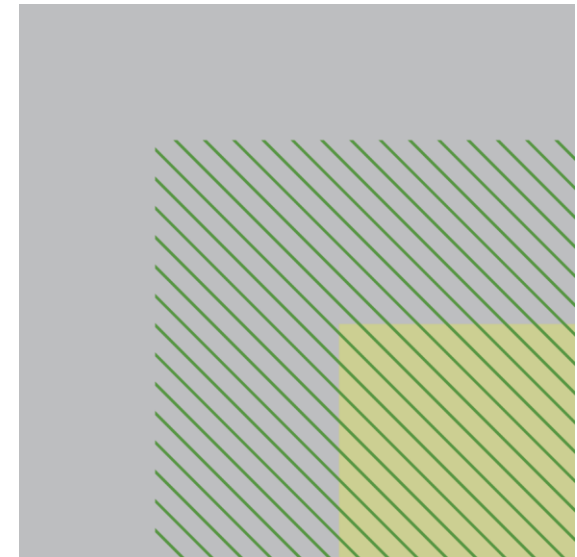
1,022 funds at beginning



66% Survive
26% Outperform

15 YEARS

958 funds at beginning



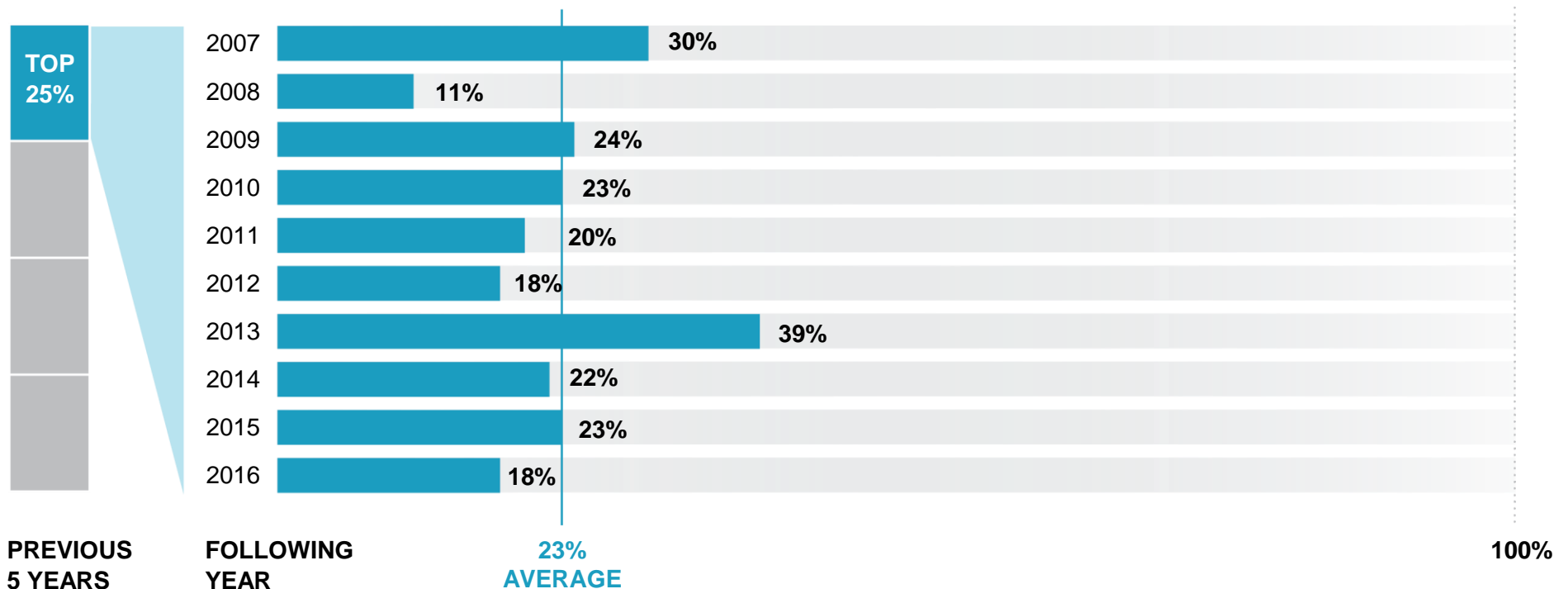
57% Survive
18% Outperform

The sample includes funds at the beginning of the five-, 10-, and 15-year periods ending December 31, 2016. Survivors are funds that had returns for every month in the sample period. Winners are funds that survived and outperformed their respective Morningstar category benchmark over the period. US-domiciled open-end mutual fund data is from Morningstar and Center for Research in Security Prices (CRSP) from the University of Chicago. **Past performance is no guarantee of future results. See Data Appendix for more information.**

Past Performance Is Not Enough to Predict Future Results

Percentage of top five-year performers that also ranked in the top quartile of annual performance in the following year

EQUITY FUNDS

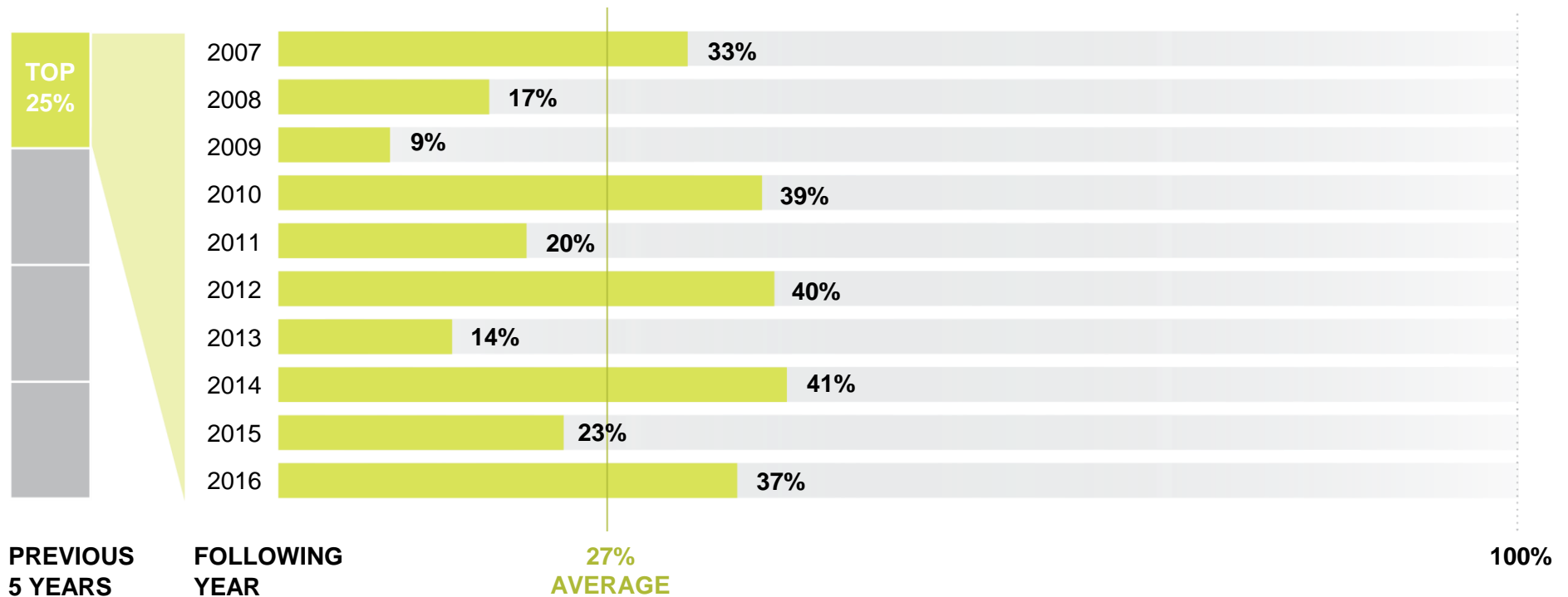


At the end of each year, funds are sorted within their category based on their five-year total return. The tables show the percentage of funds in the top quartile (25%) of five-year performance that ranked in the top quartile of one-year performance in the following year. Example: For 2007, only 30% of equity funds in the top quartile of previous five-year returns through the end of 2006 maintained a top-quartile ranking for one-year returns in 2007. US-domiciled open-end mutual fund data is from Morningstar and Center for Research in Security Prices (CRSP) from the University of Chicago. **Past performance is no guarantee of future results. See Data Appendix for more information.**

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Percentage of top five-year performers that also ranked in the top quartile of annual performance in the following year

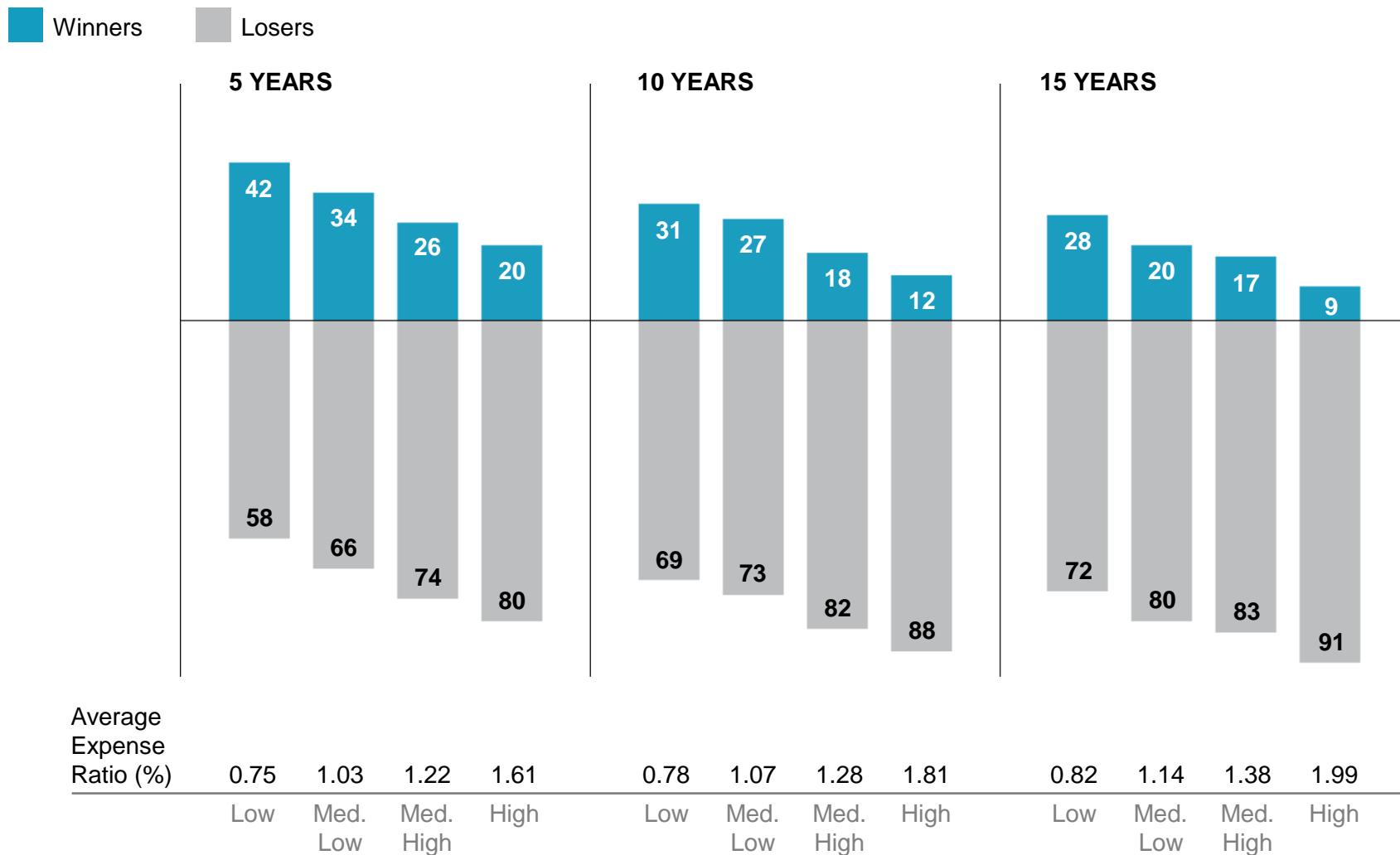
FIXED INCOME FUNDS



At the end of each year, funds are sorted within their category based on their five-year total return. The tables show the percentage of funds in the top quartile (25%) of five-year performance that ranked in the top quartile of one-year performance in the following year. Example: For 2007, only 33% of fixed income funds in the top quartile of previous five-year returns through the end of 2006 maintained a top-quartile ranking for one-year returns in 2007. US-domiciled open-end mutual fund data is from Morningstar and Center for Research in Security Prices (CRSP) from the University of Chicago. **Past performance is no guarantee of future results. See Data Appendix for more information.**

High Costs Can Reduce Performance

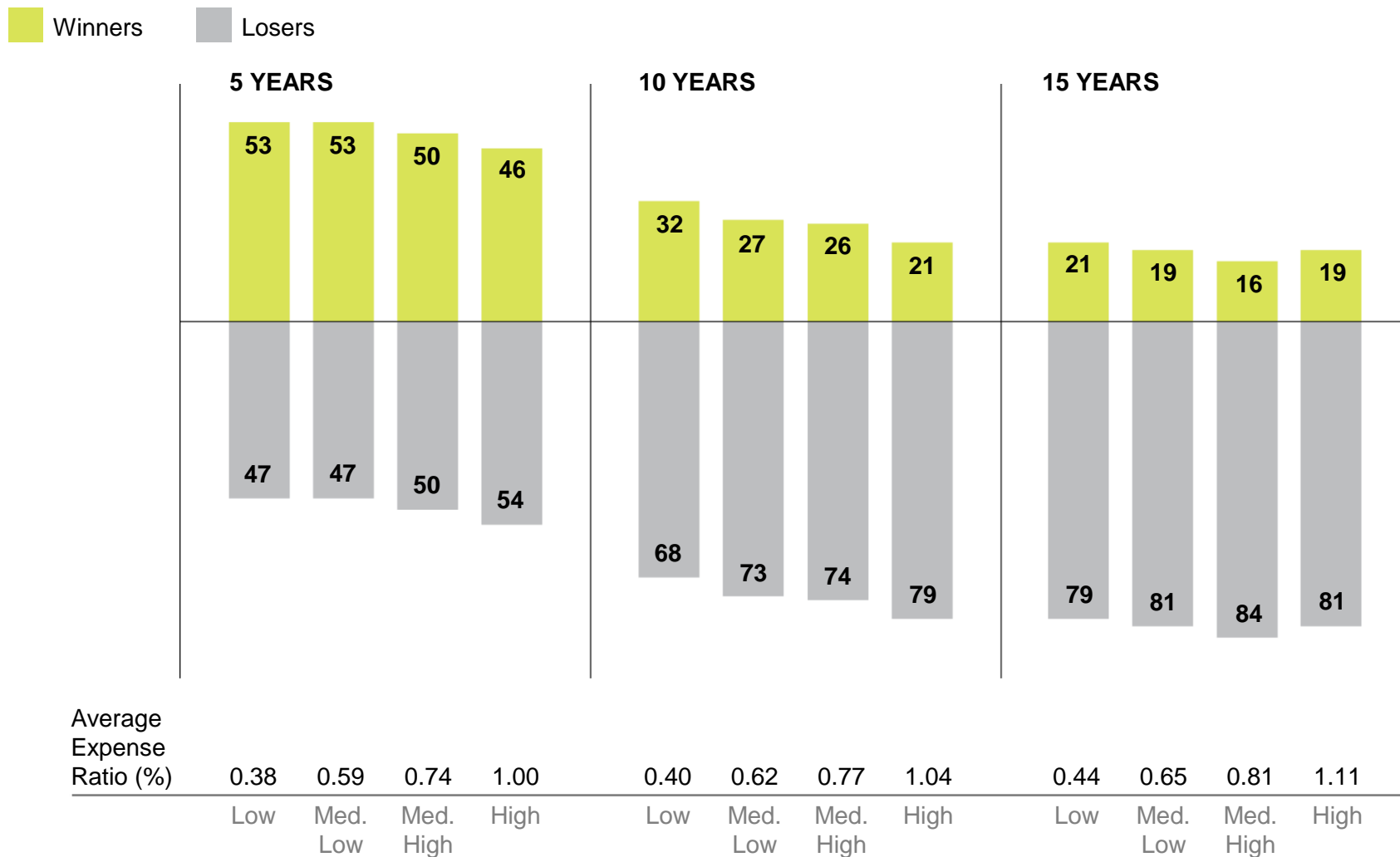
Equity fund winners and losers based on expense ratios (%)



The sample includes funds at the beginning of the five-, 10-, and 15-year periods ending December 31, 2016. Funds are sorted into quartiles within their category based on average expense ratio over the sample period. The chart shows the percentage of winner and loser funds by expense ratio quartile for each period, where winners are funds that survived and outperformed their respective Morningstar category benchmark and losers are funds that either did not survive or did not outperform 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. **Past performance is no guarantee of future results. See Data Appendix for more information.**

High Costs Can Reduce Performance

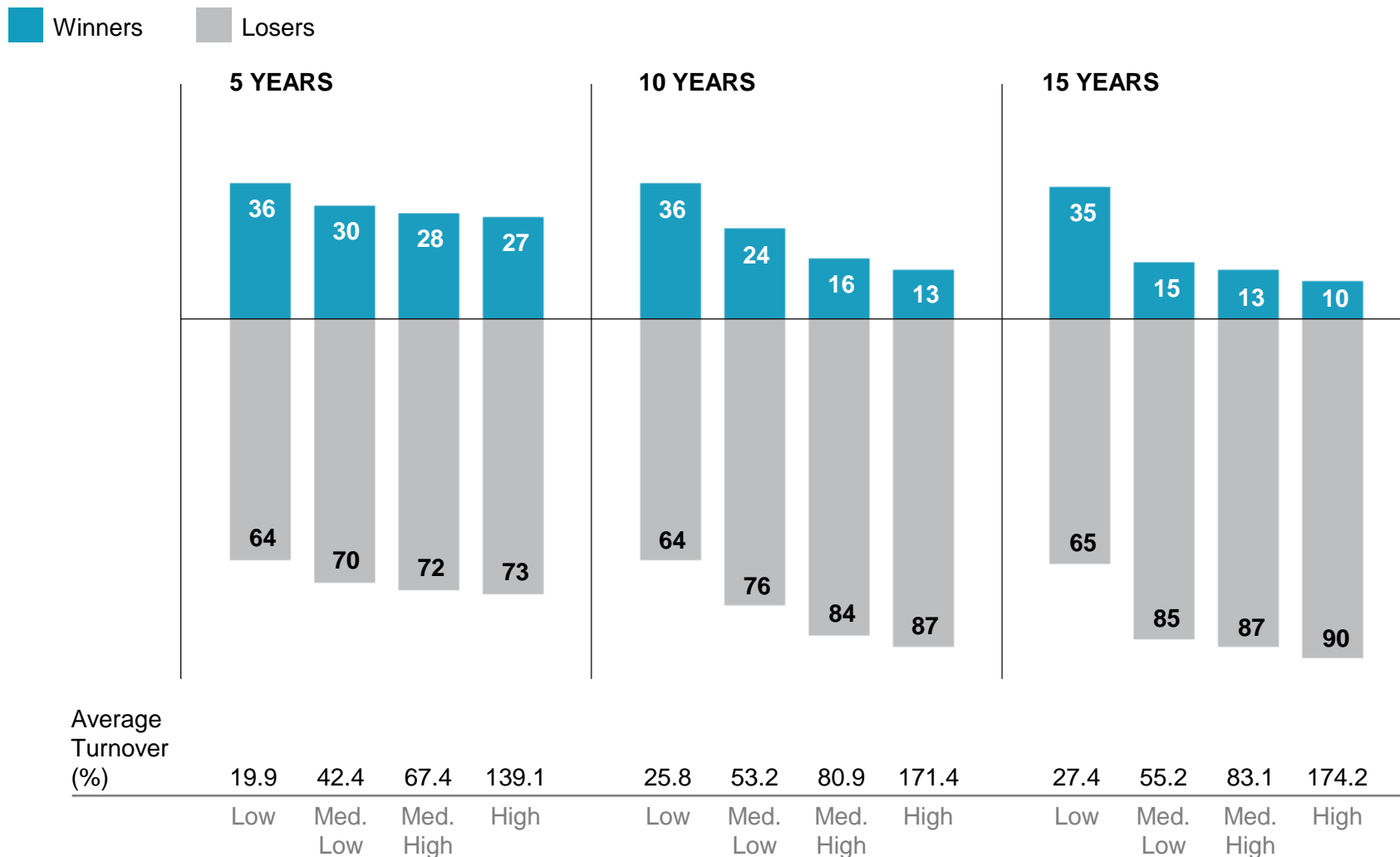
Fixed income fund winners and losers based on expense ratios (%)



The sample includes funds at the beginning of the five-, 10-, and 15-year periods ending December 31, 2016. Funds are sorted into quartiles within their category based on average expense ratio over the sample period. The chart shows the percentage of winner and loser funds by expense ratio quartile for each period, where winners are funds that survived and outperformed their respective Morningstar category benchmark and losers are funds that either did not survive or did not outperform 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. **Past performance is no guarantee of future results. See Data Appendix for more information.**

High Trading Costs Can Also Impact Returns

Equity fund winners and losers based on turnover (%)



The sample includes equity funds at the beginning of the five-, 10-, and 15-year periods ending December 31, 2016. Funds are sorted into quartiles within their category based on average turnover during the sample period. The chart shows the percentage of winner and loser funds by turnover quartile for each period, where winners are funds that survived and outperformed their respective Morningstar category benchmark and losers are funds that either did not survive or did not outperform 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. **Past performance is no guarantee of future results. See Data Appendix for more information.**

Report Summary

The mutual fund landscape

Findings

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- Strong track records failed to persist.
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Lessons

- Markets effectively aggregate investor knowledge and expectations into prices that are reliable.
- Managers attempting to outguess market prices may incur high costs that raise the barrier to outperforming an index.
- Successful fund investing involves more than picking a top performing fund from the past.
- Consider a fund's market philosophy, robustness in portfolio design, attention to costs, and other factors.

Data Appendix

US-domiciled open-end mutual fund data is from Morningstar and Center for Research in Security Prices (CRSP) from the University of Chicago.

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. For additional information regarding the Morningstar historical categories, please see “The Morningstar Category Classifications” at morningstardirect.morningstar.com/clientcomm/Morningstar_Categories_US_April_2016.pdf.

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. For additional information regarding the Morningstar historical categories, please see “The Morningstar Category Classifications” at morningstardirect.morningstar.com/clientcomm/Morningstar_Categories_US_April_2016.pdf.

Index funds and fund-of-funds are excluded from the sample. Net assets for funds with multiple share classes or feeder funds are a sum of the individual share class total net assets. The return, expense ratio, and turnover for funds with multiple share classes are taken as the asset-weighted average of the individual share class observations. Fund share classes are aggregated at the strategy level using Morningstar FundID and CRSP portfolio number.

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. Loser funds are funds that did not survive the period or whose cumulative net return did not exceed their respective Morningstar category benchmark.

Benchmark data provided by Bloomberg Barclays, MSCI, Russell, Citigroup, and S&P. Bloomberg Barclays data provided by Bloomberg. MSCI data © MSCI 2017, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. Citi fixed income indices © 2017 by Citigroup. The S&P data is provided by Standard & Poor’s Index Services Group.

Benchmark indices are not available for direct investment. Their performance does not reflect the expenses associated with management of an actual portfolio.

Dimensional Fund Advisors LP is an investment advisor registered with the Securities and Exchange Commission.

Mutual fund investment values will fluctuate, and shares, when redeemed, may be worth more or less than original cost. Diversification neither assures a profit nor guarantees against a loss in a declining market. There is no guarantee investment strategies will be successful. Past performance is no guarantee of future results.

Mutual Fund 15-Year Survivorship and Outperformance

Performance periods ending December 31, 2016

US EQUITIES				FIXED INCOME			
	# Begin	Survive (%)	Outperform (%)		# Begin	Survive (%)	Outperform (%)
US Large Cap	433	41	8	Corporate	24	96	29
US Large Cap Growth	551	42	15	Inflation Protected	12	75	17
US Large Cap Value	321	50	12	Intermediate Term	423	51	22
US Mid Cap	95	48	7	Short Term	223	55	13
US Mid Cap Value	70	67	13	World	56	63	38
US Small Cap	147	62	33	Municipal	220	65	10
US Small Cap Growth	246	46	24				
US Small Cap Value	83	64	39				

NON-US EQUITIES			
	# Begin	Survive (%)	Outperform (%)
Developed ex US Large Cap	250	44	19
Developed ex US Large Cap Growth	84	54	23
Developed ex US Large Cap Value	57	65	12
Developed ex US Small Cap	43	63	33
Emerging Markets	75	64	27
Global	132	55	26

Categorization determined by Dimensional using Morningstar data. 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. Outperforming 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. **Past performance is no guarantee of future results. See Data Appendix for more information.**