

Investment Costs Caveat Emptor

**Walter Steets
AAII Houston Chapter
Retirement Solutions
Special Interest Group
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Agenda

- Impact of Investment Costs
- Mutual Fund Costs
 - Share class
 - Active vs. index funds
- Mutual Fund Performance vs. Fund Fees
 - Performance of Active vs. Index funds
 - Performance of High-fee vs. Low-fee funds
- Advisor Fees
 - Differences between advisor services and fees

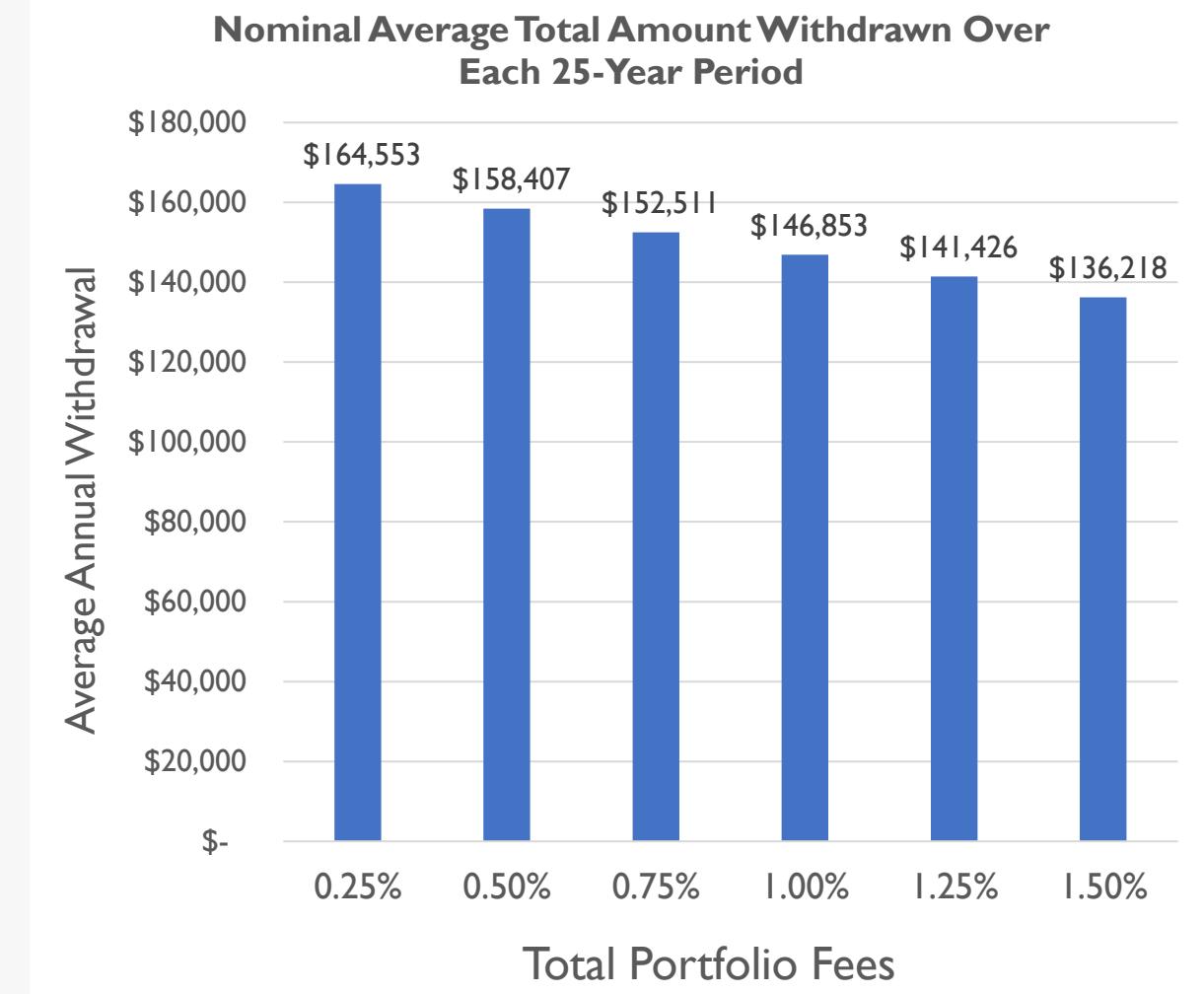
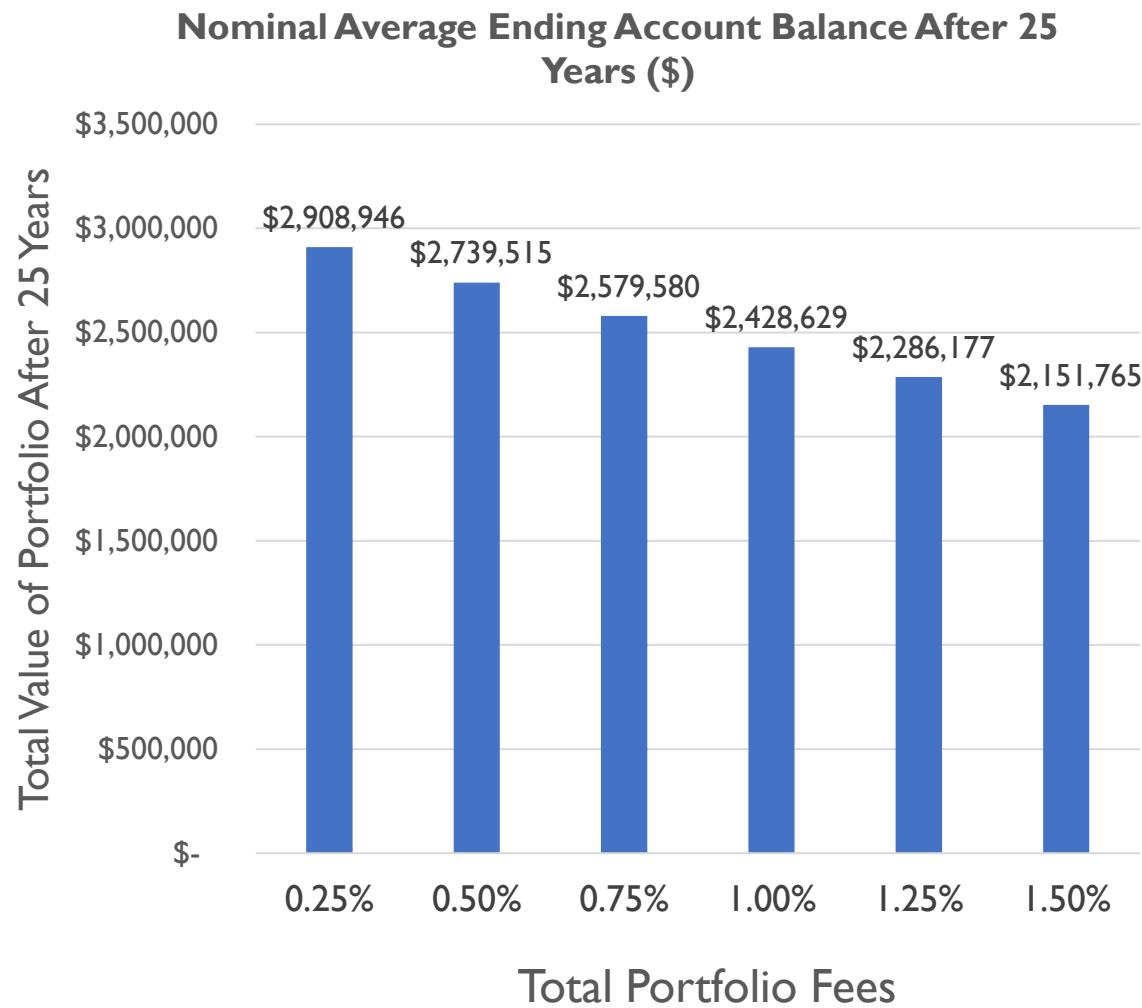
Impact of Fees on Portfolio

- “*The Impact of Expense Ratios on Retirement Income*”, Craig Israelsen, AAll Journal, Sept. 2017
 - Initial portfolio value of \$ 1,000,000
 - 23 rolling 25-yr periods between 1970 and 2016
 - Used baseline of 7 index funds
 - Portfolio withdrawal rate = RMD rate, gradually increases from 4%
 - Total portfolio fees = advisor fees + investment fund fees

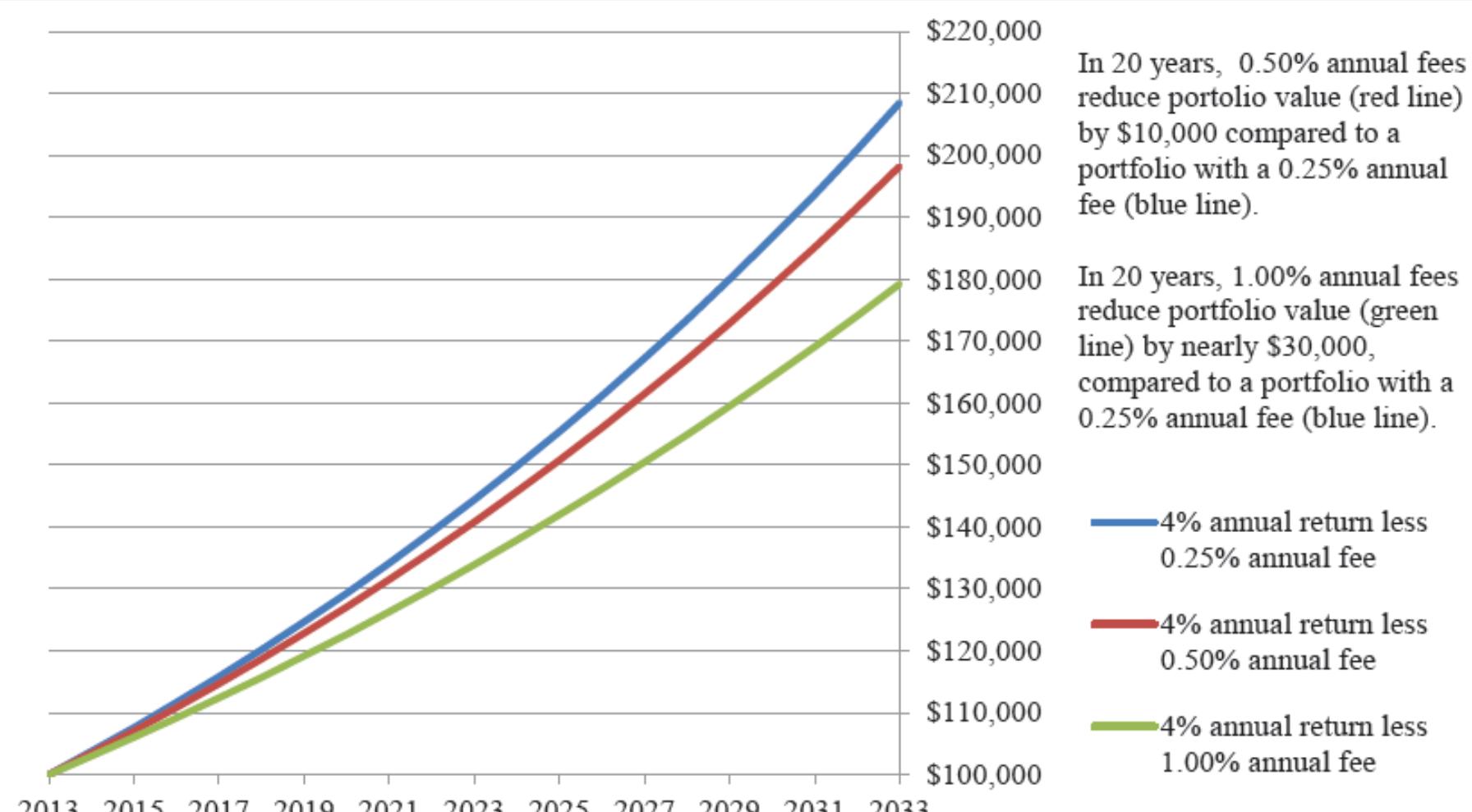
Study results:

- For each .25% increase in total portfolio fees:
 - Ending balance: - 5.9%
 - Average annual withdrawal: - 3.7%
- Increasing total portfolio fees from $\frac{1}{2}$ % to $1\frac{1}{2}$ %, decreases
 - Ending balance: - 21.4%
 - Average annual withdrawal: - 14.1%

Effect of Fees on Portfolios



The Impact of Mutual Fund Fees and Expenses on Your Investment Portfolio



"Investor Bulletin: Mutual Fund Fees and Expenses", Security and Exchange Commission Bulletin, May 12,2014

Mutual Fund Fees

- Annual Operating Expenses – “Expense Ratio”
 - Management Fees – Researching and selecting securities for fund
 - 12b-1 Fees – Marketing and selling the fund
 - Other Expenses – Distribution costs, accounting, legal, and administrative fees
- Purchase Fees – “Front-end Load”

Front-end sales charge assessed when the fund is purchased
- Redemption Fee – “Back-end Load”

Fee for selling the fund, usually with a stated time period from when the funds are purchased. Sometimes these fees are used to discourage short-term trading.
- Transaction Fees
 - Fees the mutual fund pays to a brokerage fund to execute buy and sell orders.
 - Not included in the expense ratio but are subtracted before the fund’s return is calculated.

Mutual Fund Share Classes

➤ Class A Shares

- Front-end sales charge – e.g. 5%
- Expense ratio is usually lower than other share classes

➤ Class B Shares

- No front-end sales charge
- Higher expense ratio
- Contingent Deferred Sales Charge (CDSC) if shares are sold within a certain period, often six years.

➤ Class C Shares

- No front-end sales charge
- Small charge if shares are sold in short period of time
- Highest expense ratio

Vanguard Share Classes

Share Class	Minimum Initial Investment	Expense Ratio	Comments
Investor Shares	\$3,000 for most actively managed funds	Range .09% to 1.80% Average 0.7%	Most Vanguard Index funds no longer offer Investor Shares to new investors.
Admiral Shares	\$3,000 for most index funds \$50,000 for most actively managed funds	Range .04% to .45% Average .14%	
Institutional Shares	\$5 million	Range .01% to 1.74% Average .08%	
Exchange-Traded Funds (ETF)	Cost of 1 share – typically \$50 to \$200	Average .06%	Vanguard ETF®* Shares are exchange-traded shares that represent an interest in an investment portfolio held by Vanguard funds.

Examples of Expense Ratio Vanguard Funds

Name ▾	Ticker ▾	Asset class ▾	Expense ratio ▾	Price as of 06/15/2020			As of 06/15/2020	Average annual returns as of 05/31/2020				
				Price ▾	Change	SEC yield	YTD ▾	1-yr. ▾	5-yr. ▾	10-yr. ▾	Since inception ▾	
U.S. stock funds <small>i</small>												
Large-cap												
<input type="checkbox"/> <small>s</small> 500 Index Admiral Shares	VFIAX	Stock - Large-Cap Blend	0.04%	\$284.30	\$2.36 ↑	0.84% ↑	1.84% B 30 day 5/30/2020	-4.20%	12.80%	9.83%	13.12%	6.30% (11/13/2000)
<input type="checkbox"/> Diversified Equity	VDEQX	Stock - Large-Cap Blend	0.35%	\$37.46	\$0.47 ↑	1.27% ↑	1.26% B 30 day 5/30/2020	-1.45%	14.30%	8.96%	12.78%	8.45% (06/10/2005)
<input type="checkbox"/> Dividend Appreciation Index Admiral Shares	VDADX	Stock - Large-Cap Blend	0.08%	\$31.58	\$0.19 ↑	0.61% ↑	1.86% B 30 day 5/30/2020	-6.23%	10.49%	9.97%	—	9.68% (12/19/2013)
<input type="checkbox"/> Dividend Growth	VDIGX	Stock - Large-Cap Blend	0.27%	\$28.51	\$0.15 ↑	0.53% ↑	1.88% B 30 day 5/30/2020	-6.61%	7.49%	9.80%	12.73%	8.59% (05/15/1992)

Example of Sales Charges and Expense Ratio – Share Class A

- Compare results for same funds with and without sales charge

Share Class: **A** Show Indices
 Returns: **Monthly** Quarterly with Sales Charge/CDSC at NAV

YTD Returns at NAV (%)^{1,2} **Average Annual Total Returns at NAV (%)^{2,3}** **Expense Ratio (%)⁴**

As of 5/31/2020

Fund Name	YTD Returns at NAV (%) ^{1,2}		Average Annual Total Returns at NAV (%) ^{2,3}						Max Sales Charge (%)	Expense Ratio (%) ⁴	
	Daily As of 7/01/2020	Month-End As of 5/31/2020	1 yr.	3 yr.	5 yr.	10 yr.	15 yr.	Fund Lifetime			
Growth											
<input type="checkbox"/> AMCAP Fund[®] AMCPX	2.98	-0.77	15.26	11.37	9.28	12.99	9.05	11.46 5/01/1967	-	0.69	0.69
<input type="checkbox"/> American Funds Global Insight FundSM AGVFX	-3.37	-6.03	10.08	7.87	6.65	--	--	7.75 4/01/2011	-	0.99	0.99
<input type="checkbox"/> American Funds International Vantage FundSM AIVBX	-3.18	-7.05	8.02	4.87	3.71	--	--	4.66 4/01/2011	-	1.08	1.08

Share Class: **A** Show Indices
 Returns: **Monthly** Quarterly with Sales Charge/CDSC at NAV

YTD Returns with Sales Charge (%)¹ **Average Annual Total Returns with Sales Charge (%)^{1,2,3}** **Expense Ratio (%)⁴**

As of 5/31/2020

Fund Name	YTD Returns with Sales Charge (%) ¹		Average Annual Total Returns with Sales Charge (%) ^{1,2,3}						Max Sales Charge (%)	Expense Ratio (%) ⁴	
	Month-End As of 5/31/2020	1 yr.	3 yr.	5 yr.	10 yr.	15 yr.	Fund Lifetime	Gross			
Growth											
<input type="checkbox"/> AMCAP Fund[®] AMCPX	-6.49	8.64	9.20	7.99	12.32	8.62	11.33 5/01/1967	5.75%	0.69	0.69	
<input type="checkbox"/> American Funds Global Insight FundSM AGVFX	-11.43	3.75	5.76	5.39	--	--	7.05 4/01/2011	5.75%	0.99	0.99	
<input type="checkbox"/> American Funds International Vantage FundSM AIVBX	-12.40	1.81	2.82	2.49	--	--	3.99 4/01/2011	5.75%	1.08	1.08	

Example of Sales Charges and Expense Ratio – Share Classes A and C

- Compare results for same funds with sales charges for different Share Classes
- Share Class C is better for up to 5 years
- Share Class A is better for longer holding periods

Share Class: **A** Show Indices
 Returns: **i** Monthly Quarterly with Sales Charge/CDSC at NAV

+ ADD TO TRACKER

Fund Name	YTD Returns with Sales Charge (%) ¹ Month-End As of 5/31/2020	Average Annual Total Returns with Sales Charge (%) ^{1,2,3} As of 5/31/2020							Max Sales Charge (%)	Expense Ratio (%) ⁴	
		1 yr.	3 yr.	5 yr.	10 yr.	15 yr.	Fund Lifetime	Gross		Net	
Growth											
<input type="checkbox"/> AMCAP Fund® AMPCX	-6.49	8.64	9.20	7.99	12.32	8.62	11.33 5/01/1967	5.75%	0.69	0.69	
<input type="checkbox"/> American Funds Global Insight FundSM AGVFX	-11.43	3.75	5.76	5.39	--	--	7.05 4/01/2011	5.75%	0.99	0.99	
<input type="checkbox"/> American Funds International Vantage FundSM AIVBX	-12.40	1.81	2.82	2.49	--	--	3.99 4/01/2011	5.75%	1.08	1.08	

Share Class: **C** Show Indices
 Returns: **i** Monthly Quarterly with Sales Charge/CDSC at NAV

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Fund Name	YTD Returns with CDSC (%) ¹ Month-End As of 5/31/2020	Average Annual Total Returns with CDSC (%) ^{1,2} As of 5/31/2020							Max Sales Charge (%)	Expense Ratio (%) ³	
		1 yr.	3 yr.	5 yr.	10 yr.	15 yr.	Fund Lifetime	Gross		Net	
Growth											
<input type="checkbox"/> AMCAP Fund® AMPCX	-2.06	13.36	10.50	8.42	12.10	8.44	11.24 5/01/1967	--	1.44	1.44	
<input type="checkbox"/> American Funds Global Insight FundSM AGVDX	-7.20	8.47	7.17	5.94	--	--	7.01 4/01/2011	--	1.69	1.69	
<input type="checkbox"/> American Funds International Vantage FundSM AIVCX	-8.19	6.37	4.18	3.02	--	--	3.96 4/01/2011	--	1.77	1.77	
							9.86				

Investment Costs: Active vs. Index

Consider using Index Funds

Average 2018 fund fees

All asset classes

- Index funds: .15%
- Active funds: .67%

US equity funds

- Index funds: .10%
- Active funds: .70%

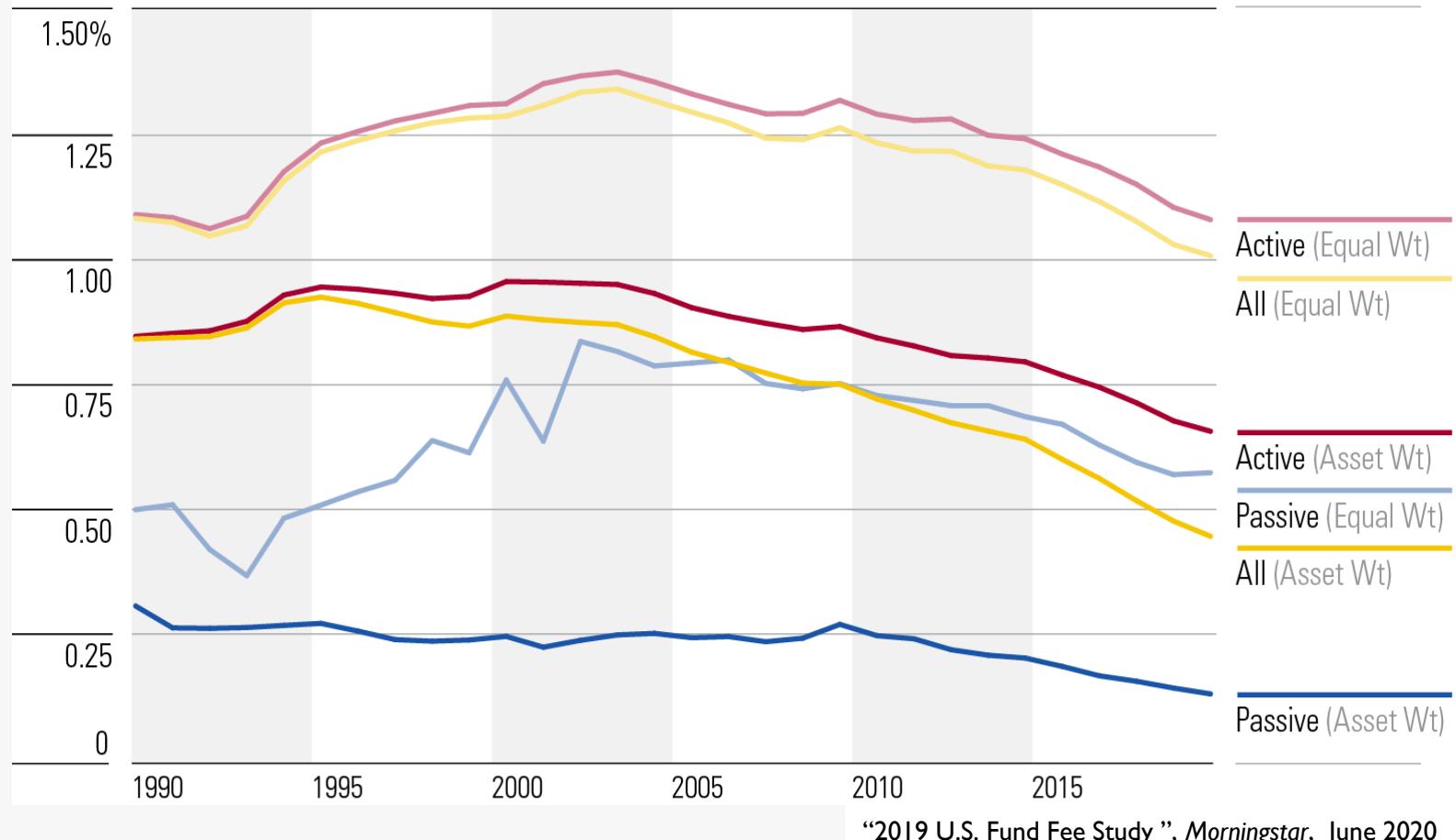
Int'l Equity Fund

- Index funds: .22%
- Active funds: .82%

Taxable Bond Fund

- Index funds: .12%
- Active funds: .53%

Two Decades of Falling Fund Fees



"2019 U.S. Fund Fee Study", Morningstar, June 2020

Index Funds Outperform Active Funds

“When costs are taken into account, most actively managed funds significantly lag the benchmark indexes”

Jeremy Siegel, “Stocks for the Long Run”, 3rd ed. 2002

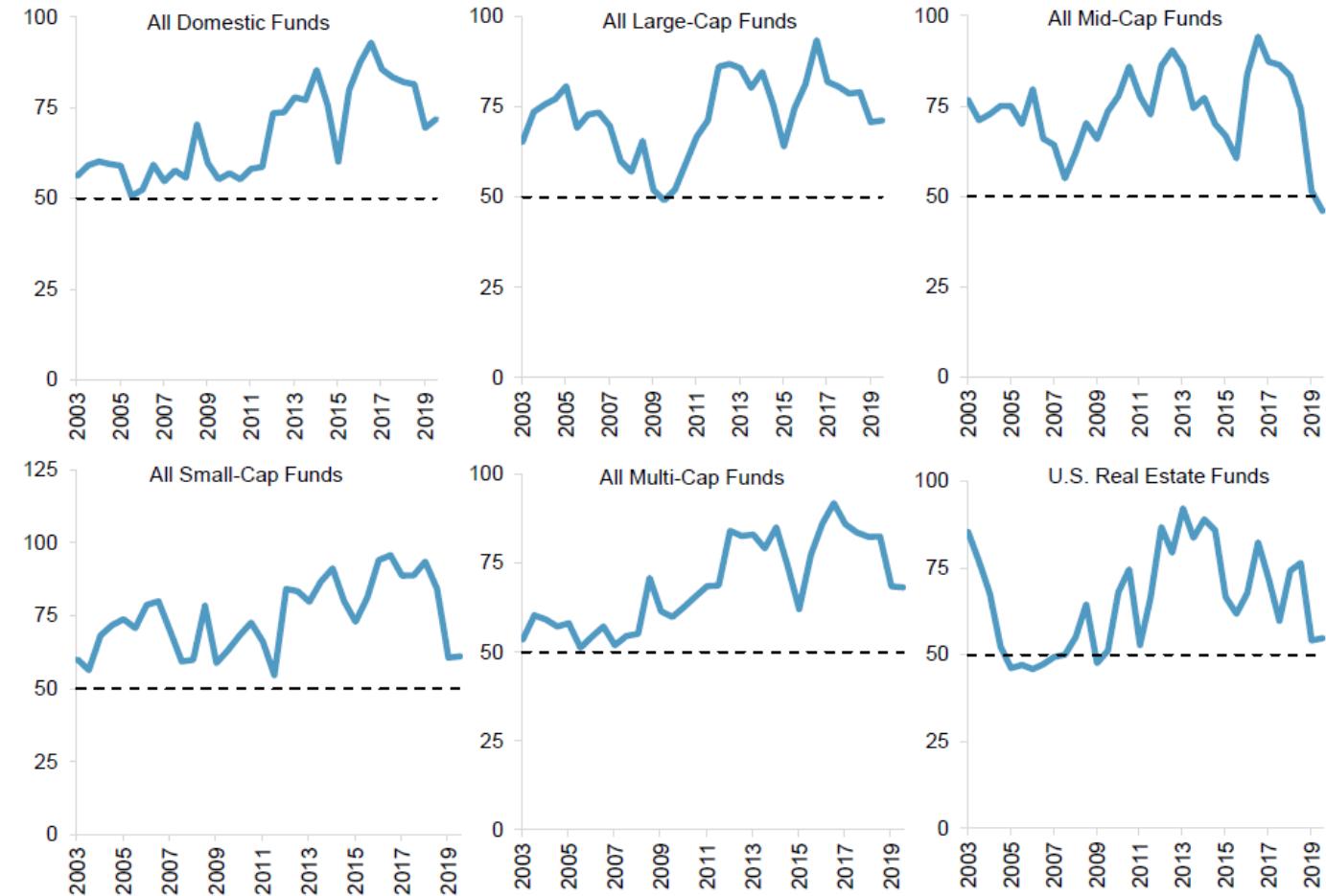
“The stark reality is that most active managers and their clients have not been winning the money game. They have been losing.”

Charles D. Ellis, “Winning the Loser’s Game”, 7th ed. 2017

“The bottom line is that while active management might provide excitement and have entertainment value, the winner’s game is to use passively managed investment”

Larry Swedroe, “Guide to a Successful & Secure Retirement”, 2019

Exhibit 3: Percentage of U.S. Equity Funds Underperforming Benchmarks (Rolling Three-Year Returns)



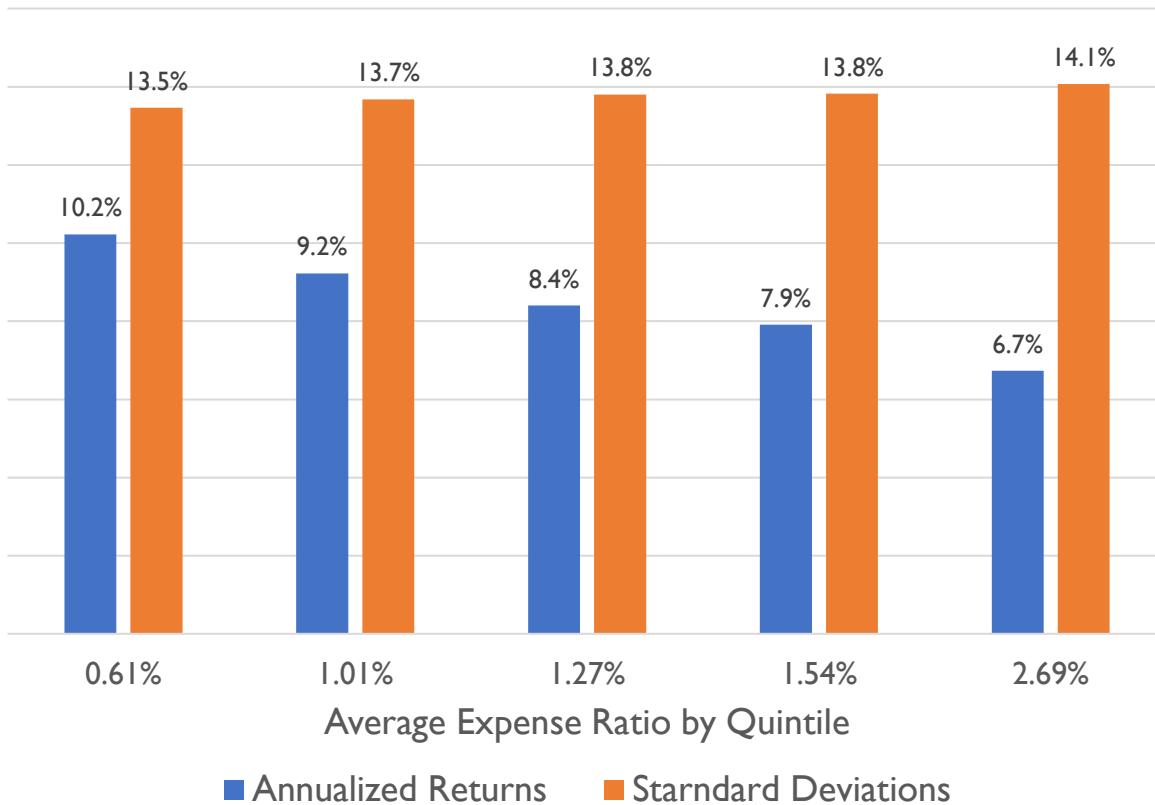
Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2019. Past performance is no guarantee of future results. Charts are provided for illustrative purposes.

Low-Cost Funds Outperform High-Cost Funds

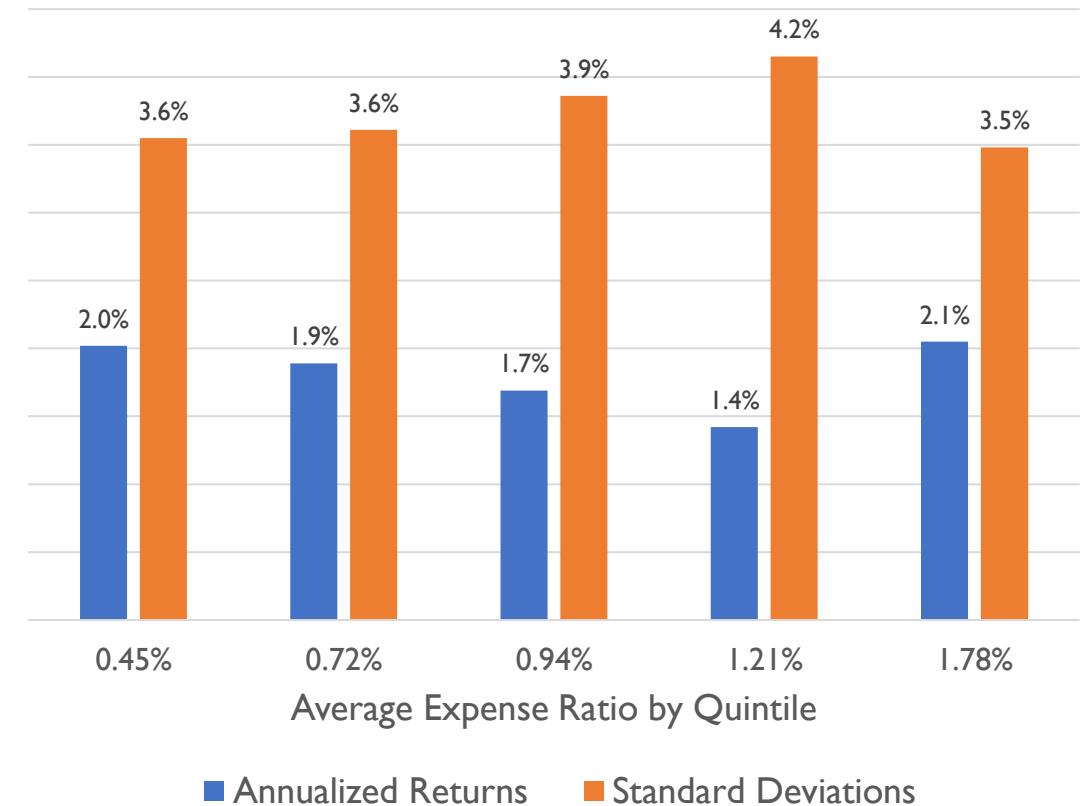
“The expense ratio is the most proven predictor of future fund returns.”

Morningstar, May 2016

US Equity Funds 2011 - 2015



Taxable Bond Funds 2011 - 2015



“Predictive Power of Fees: Why Mutual Fees Are So Important”, Morningstar, May 2016

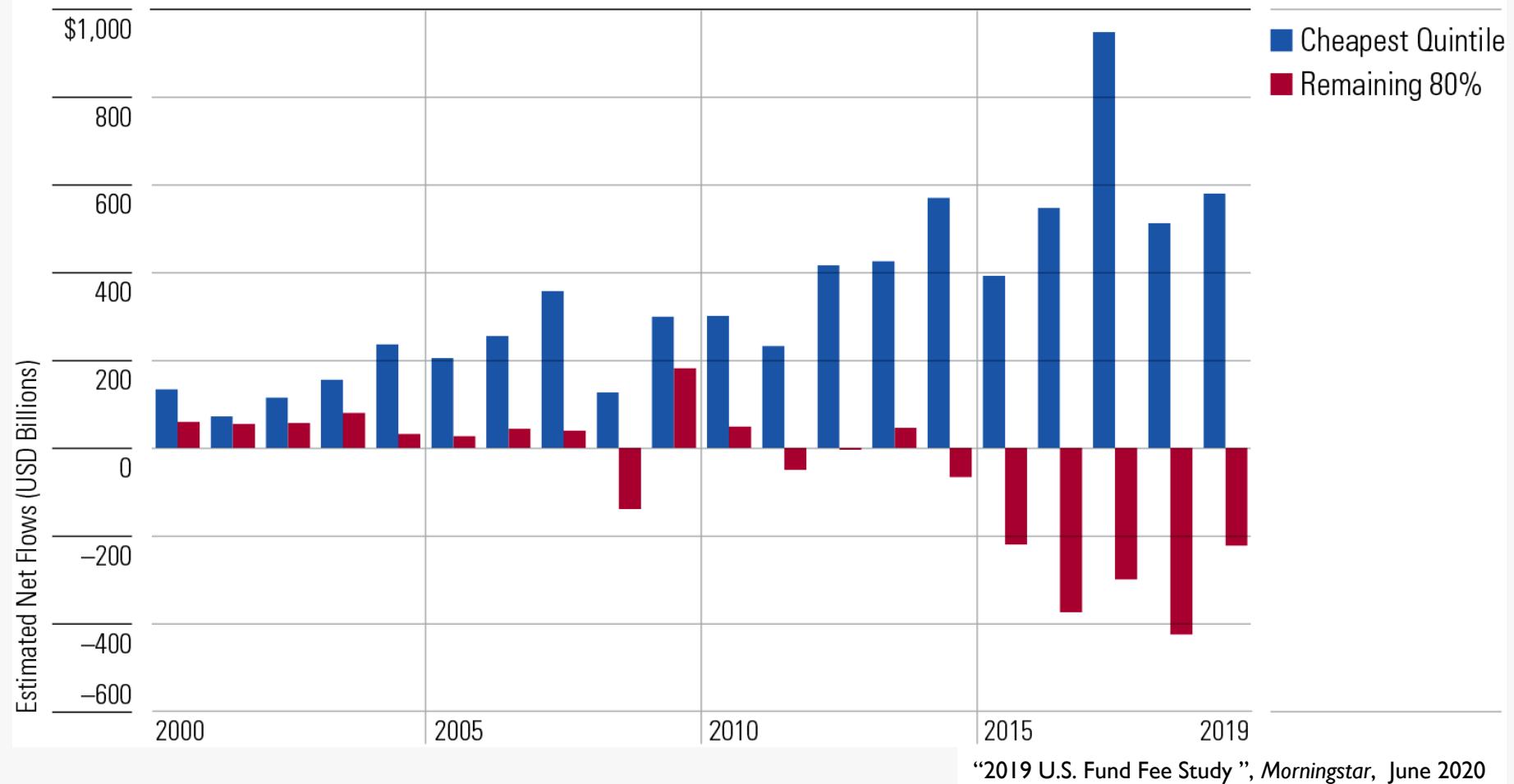
Does Past Performance Matter

- **Few fund managers consistently outperformed their peers.**
- • For funds categorized as top performers in September 2017,
 - 47% maintained their top-quartile performance the subsequent year. However, there was a dramatic fall in persistence afterward—
 - **Just 8% of domestic equity funds remained in the top quartile in the three-year period ending September 2019.**
 - This result (8%) is consistent with the notion that historical performance is only randomly associated with future performance

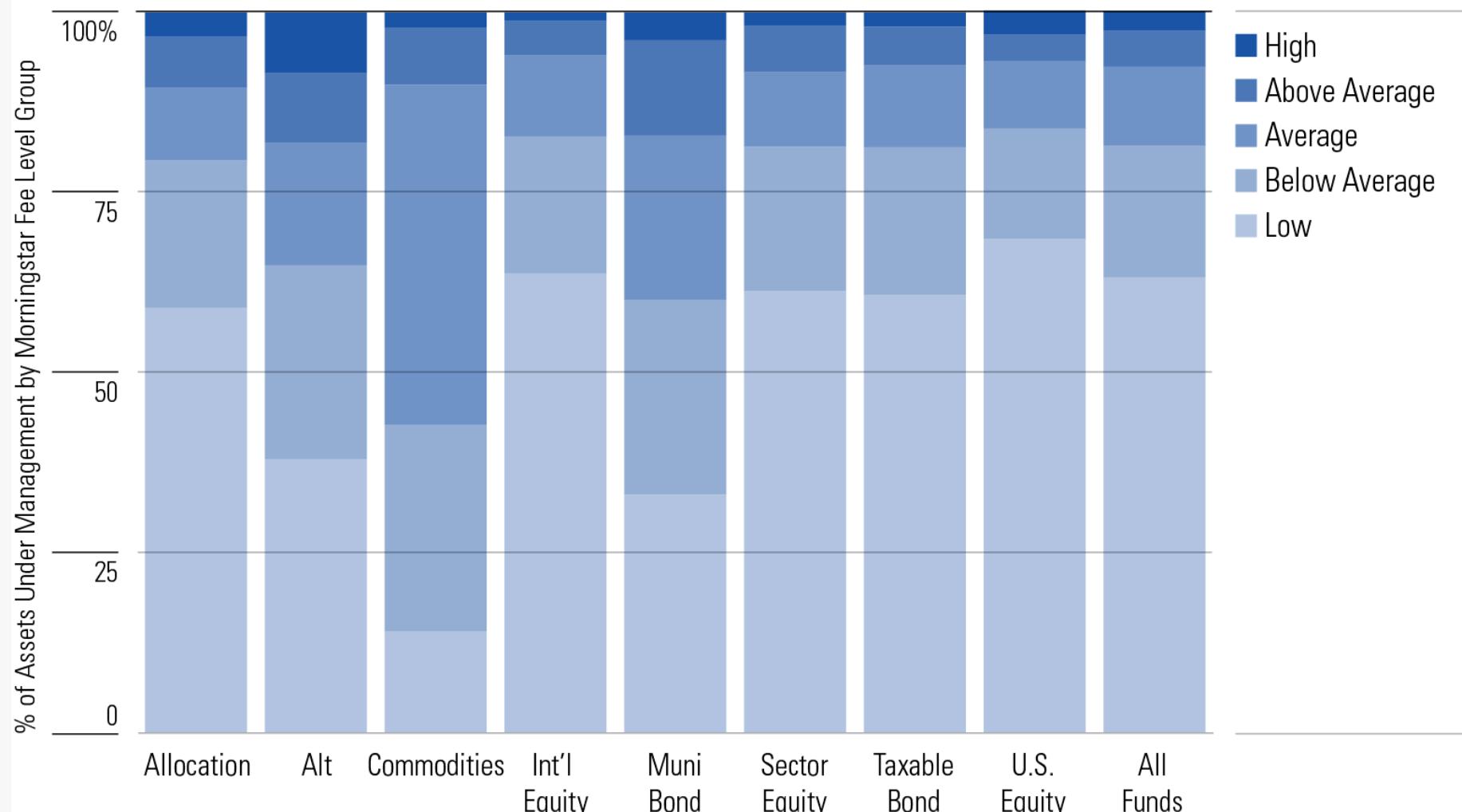
“Does Past Performance Matter? The Persistence Scorecard” – S&P Dow Jones Indices, December 2019

Investors Have Long Favored Low-Cost Funds

Recently Have Begun to Reject More Costly Ones



Most of Investors' Money Is in the Least Expensive Funds



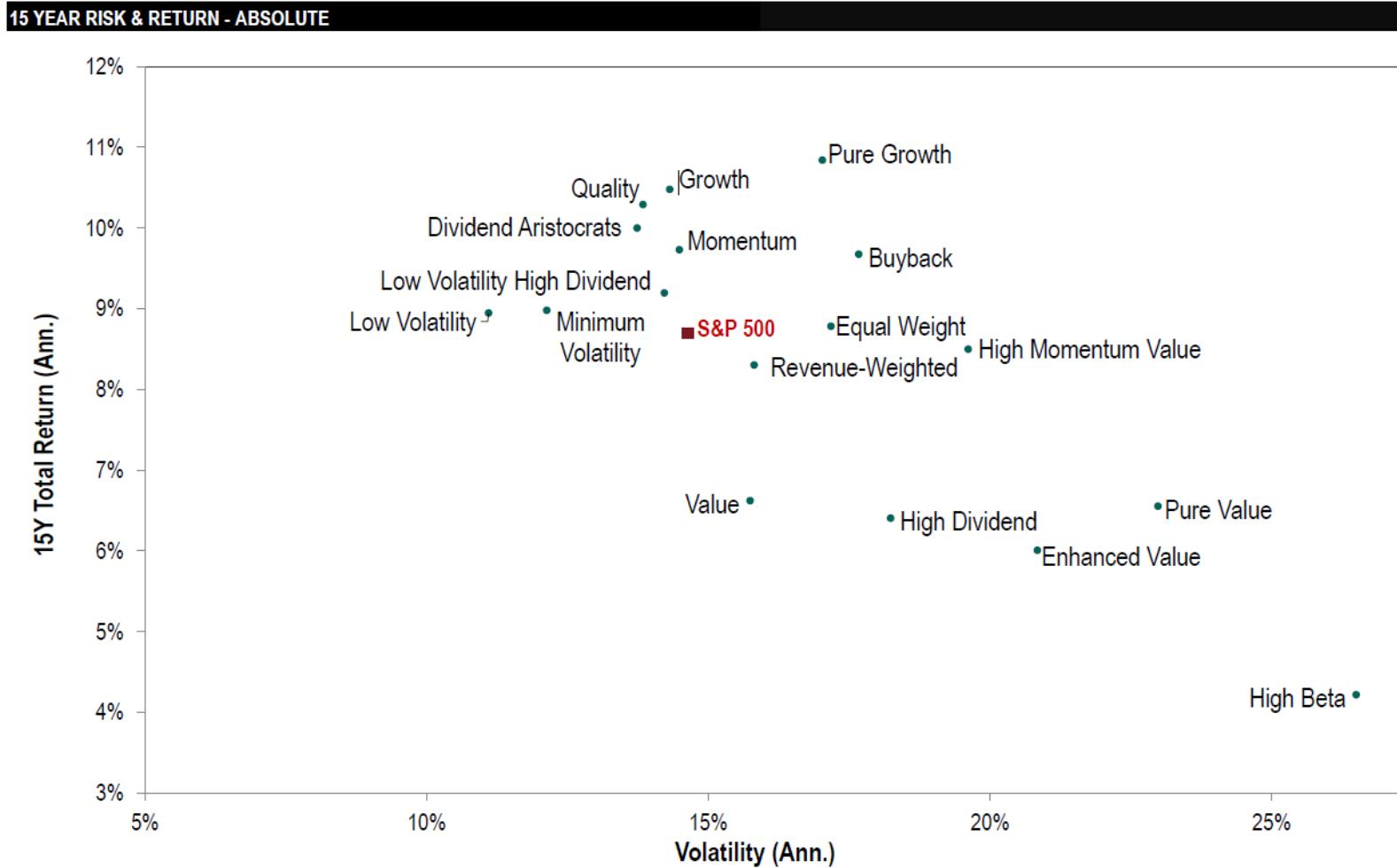
"2019 U.S. Fund Fee Study", Morningstar, June 2020

Index Funds ≠ S&P 500

- Index funds includes funds based on many different types of investable assets
 - Type of asset (e.g. stocks, bonds, commodities)
 - Country characteristics (e.g. developed countries, emerging countries)
 - Industry sector (e.g. energy, information technology)
 - Factors based on company characteristics (e.g. size - company market value, value – company book value/stock price)
- Financial advisors now use index funds as asset classes
 - Advisors develop an asset allocation plan (e.g. 40% intermediate-term bonds, 30% large stocks, 10% growth stocks)
 - Implement by buying corresponding index funds rather than more costly actively managed fund
 - Allows advisor to maintain his fee but lower the cost to the client

Performance of Factor Indexes

S&P Dow Jones Index Dashboard: S&P 500 Factor Indices – May 2020



Advisor Investment Costs

- Investment Advisor Fee Structures
 - Percentage of assets under management (AUM)
 - Hourly charge
 - Fixed fees for a service
 - Commissions
 - Combination of above
- Percentage of AUM is probably the most common 2018 Survey of RIA firms.

The RIA study includes both advisory fees and the total fees includes underlying investment product or management fees

2018 Survey of 1,500 Registered Investment Advisor firms (RIA)

Fee Charged



2018 Survey by RIA in a Box which provides investment services and technology to RIA's

Advisor Fee Examples

Low-fee Service: Vanguard Personal Advisor Services

Fees and compensation

Advisory fee

The annual advisory service fee paid to VAI for clients enrolled in the ongoing advised service will be as follows:

0.30% on Portfolios below \$5 million

0.20% on Portfolios from \$5 million to below \$10 million

0.10% on Portfolios from \$10 million to below \$25 million

0.05% on Portfolios of \$25 million and above

Investment Fund Expenses

The advisor fees include only developing a financial plan and administering the investments. They exclude various fees incurred by the funds themselves and represented by their expense ratios.

Higher-fee Service: Edward Jones Guided Solutions Account

Program Fee Schedule

The Program Fee is based on the market value of all assets held in my Account, including any cash balances swept into the Edward Jones Money Market Fund. The Program Fee is assessed beginning at an annual fee rate of 1.35%, payable monthly in arrears.

VALUE OF ASSETS IN ACCOUNT	ANNUAL FEE RATE
First	1.35%
Next	1.30%
Next	1.25%
Next	1.00%
Next	0.80%
Next	0.60%
Over	0.50%

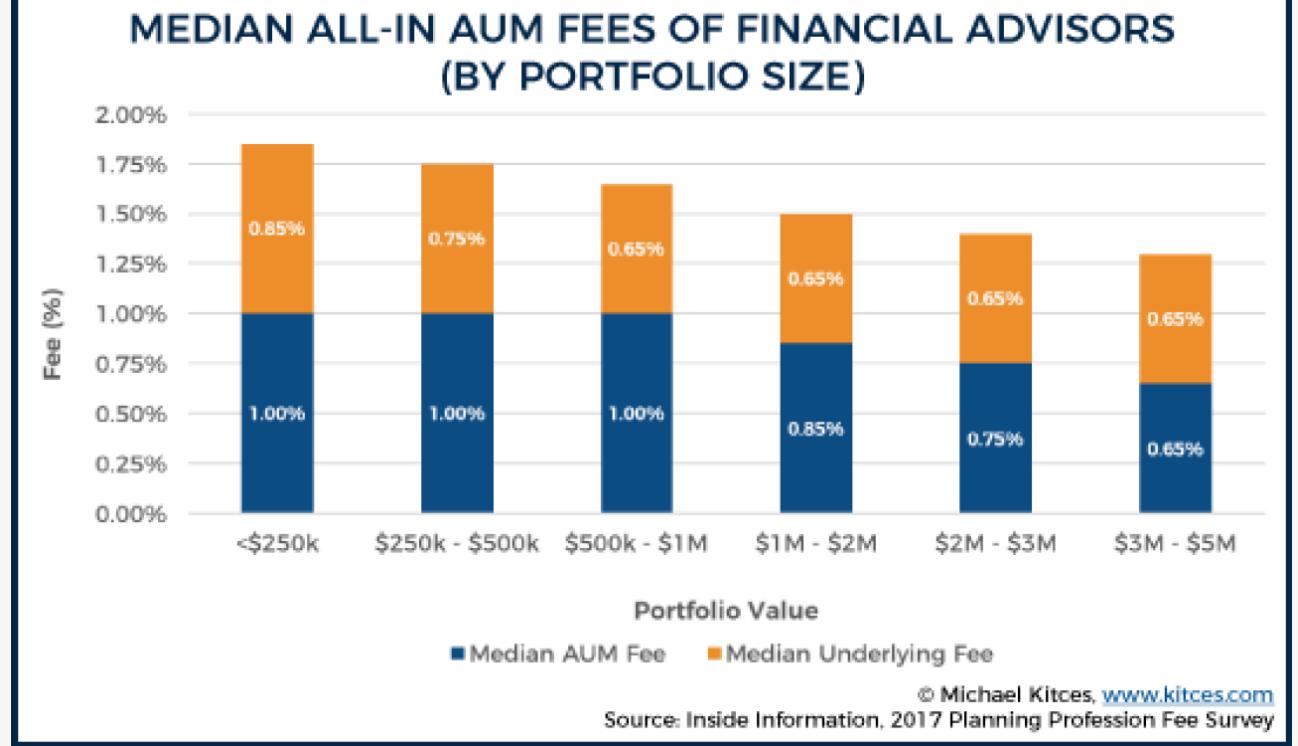
Equivalently - 1.28% on \$1,000,000
1.14% on \$2,000,000

Advisor Investment Costs

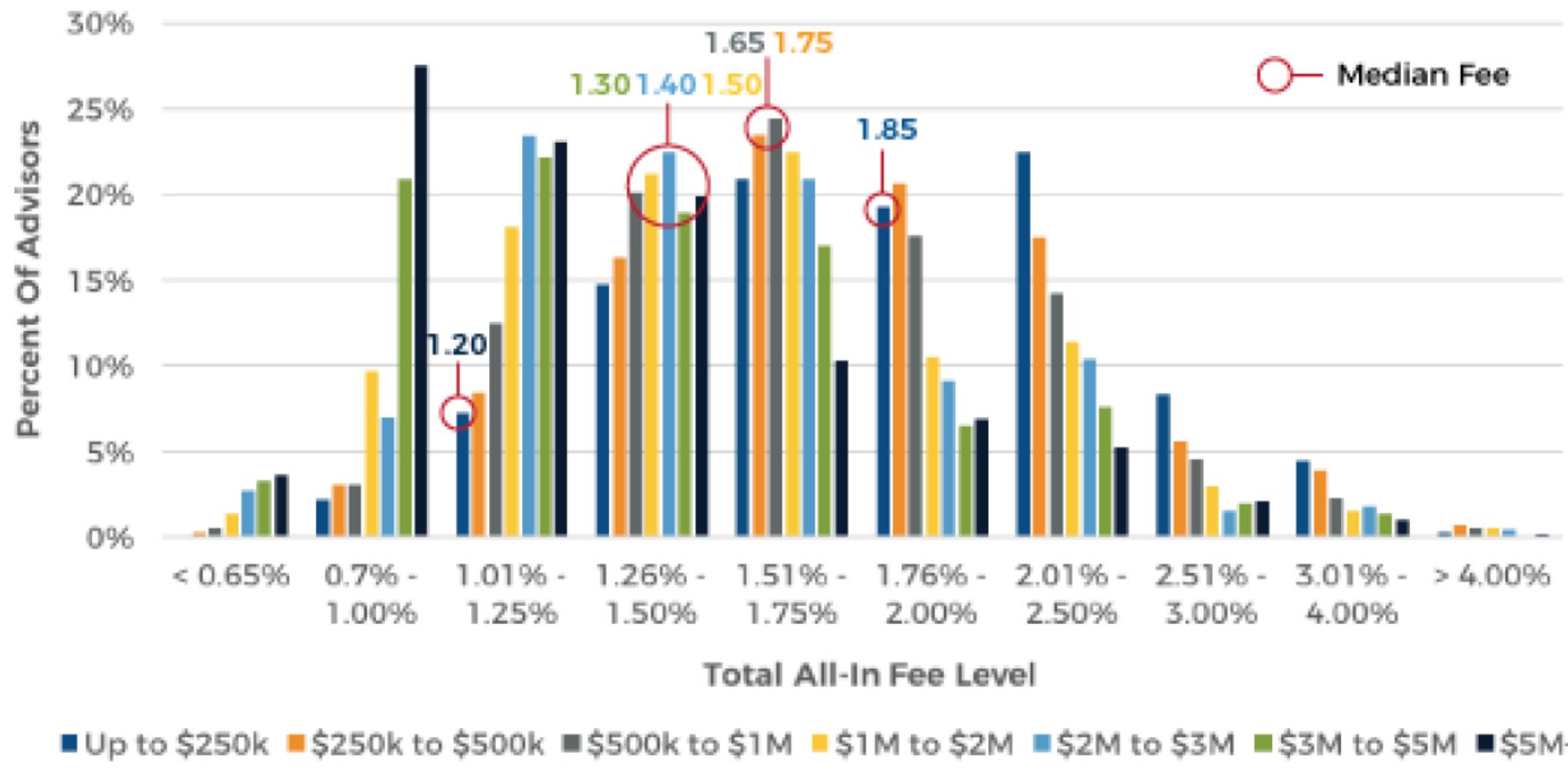
- Investment Advisor Fee Structures
 - Percentage of assets under management (AUM) – *Most common*
 - Hourly charge
 - Fixed fees for a service
 - Commissions
 - Combination of above
- Median Total Fees by Portfolio Size

AUM	Total Fee
\$250k - \$500k	1.75%
\$500k - \$1M	1.65%
\$1M - \$2M	1.50%
\$2M - \$3M	1.40%
\$3M - \$5M	1.30%

2018 Survey of 1,000 Investment Advisors



DISTRIBUTION OF FINANCIAL ADVISOR ALL-IN FEES (BY PORTFOLIO SIZE)



Summary

➤ Investment Fees Matter

- Wealth: Higher fees can reduce your total wealth by more than 20% compared to lower fees
- Income: Higher fees can consume up to 15% of your annual investment income

➤ Fund Fees

- Index funds fees are much less than active funds fees
- Index funds perform better than active funds over multi-year time periods
- Among active funds, funds with lower costs outperform funds with higher costs
- Compare fund performance against the relevant index – e.g. if Morningstar classifies it as a large growth fund then compare the fund against a large growth index, not the S&P 500.

➤ Advisor Costs

- Advisor fees are charged in different ways but most still bill by assets under management (AUM)
- Advisor fees vary over a wide range
- Understand what services you are receiving from an advisor, how it is billed, and what the costs are

Comments Questions