



Broward Health

Identifying Risk in the Active/Passive Debate

May 2021 / Rosemary Guillette, Vice President

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 **Segal Marco Advisors**

| Agenda

Definition of Passive Investing

Risk 1: Money Flow Risk

Risk 2: Influence Risk

Risk 3: Volatility Risk

Risk 4: Behavioral Risk

Take-Aways

Appendix

Definition: Passive Investing

- A **passive replication strategy** attempts to provide the returns of a market index to investors
 - Identify the index to be replicated (e.g. S&P 500)
 - Create a portfolio of securities that match the key characteristics of the index
 - Full replication
 - Sampling
- An index has **no fundamental opinion** on the market or the securities in that market
 - Therefore, neither does a strategy replicating that index

Index Methodology

- **Capitalization Weighted** (Russell, MSCI, Barclays, S&P)
 - The larger the position, the larger the weight in the index
 - Momentum tilt
 - Is cap weighting the most accurate way to measure market views?
- **Price Weighted** (Dow Jones Industrial Average)
 - The larger the price, the larger the weight
- **Fundamental Factor Weighted** (RAFI, Wisdom Tree)
 - Value Tilt
- **Universe Representation** (HFRI, NCREIF, Venture Economics)
 - Alternative asset classes
 - Often not investible – a true benchmark?

Why Does Indexing Work?

- Low Cost
- Provides Market Exposure (Beta)
- It leads into a fundamental math discussion

Example: Investment Opportunity

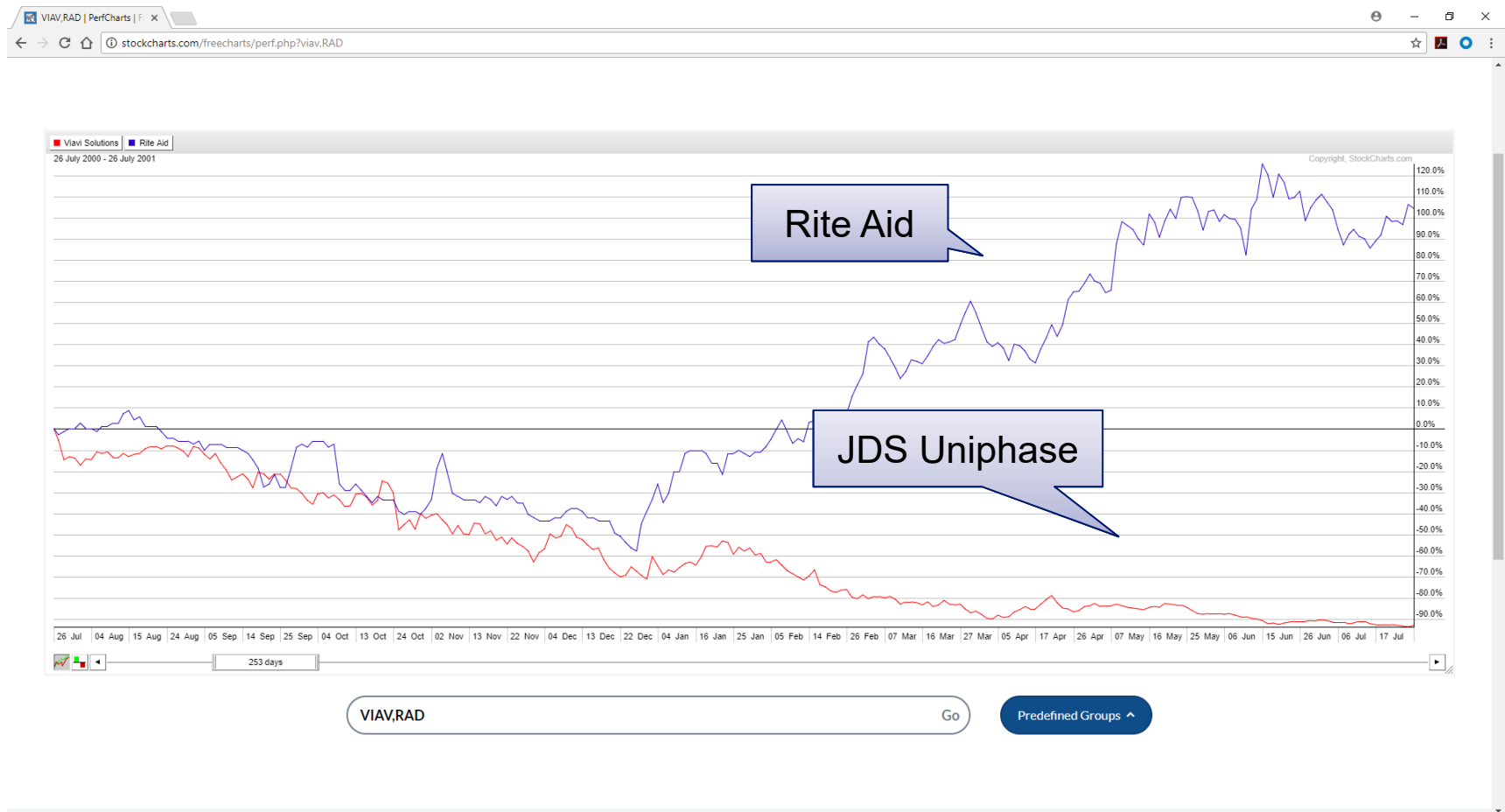
- Construction
 - 7-person Committee
 - Names of Committee members are not revealed
 - Monthly “confidential” meetings
 - 16 strategies run by the Committee
 - Changes to the models “are made as needed, with no annual or semi-annual reconstitution”
 - 60-year track record

Example: Investment Opportunity

- Rules
 - \$6.1 billion or higher market cap
 - 50% or more public float (changed in 2005)
 - Adequate liquidity and reasonable price
 - 250,000 shares traded prior six months
 - Annual dollar value traded must be equal to or greater than float adjusted market cap
 - Company of US domicile
 - Primary listing on US exchanges
 - Still a US company if it is in “a domicile of convenience” for tax reasons only
 - Committee can subjectively determine domicile
 - Financially viable
 - GAAP earnings positive the most recent quarter
 - Traded at least 12 months post IPO

Example: Investment Opportunity

- July 2000 - added “new age” JDS Uniphase and removed “old industry” Rite Aid



Example: Investment Opportunity

- December 2000, tech stocks were crashing and financials seemed the way to go
 - WR Grace in the “dead” publishing business was removed at \$1.25
 - Ambac Financial in the world of collateralized debt obligations was added at \$58
 - Ambac was removed in June 2008 at \$2
 - bankrupt in 2010
 - WR Grace is now worth \$70 a share

Performance Chart

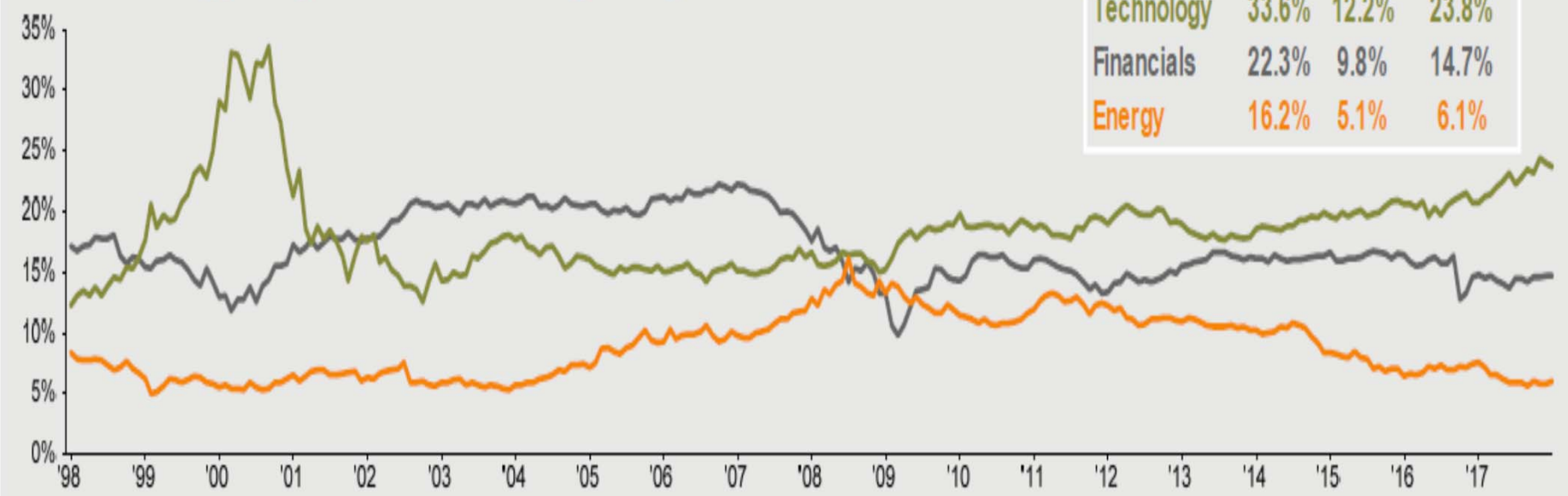


Indexing and Sectors

- Do they get sectors right?

Sector weights over time

S&P 500 technology, energy and financial sector weights, 20 years



source: JP Morgan Guide to the Markets, 1st Quarter 2018

Example: Investment Opportunity

- Performance through March 31, 2021

	1-year	3-year	5-year	7-year	10-year
Strategy	56.4%	16.8%	16.3%	13.6%	13.9%
Large Cap Core Median	56.2%	15.9%	15.7%	13.0%	13.6%
Excess Return	0.2%	0.9%	0.6%	0.6%	0.3%
Model Ranking in LCC*	49%	35%	35%	31%	35%

The S&P 500

- What the S&P 500 is NOT
 - NOT the largest 500 stocks in the market
 - NOT rules based selection
 - NOT meant to be the market
- What the S&P 500 IS
 - IS committee managed
 - IS secretive in its selections and timing
 - IS at the discretion of 7 employees of S&P Global
 - IS market cap weighted

Is Active Management Dead?

Percent (%) of active managers in domestic asset classes that have outperformed their stylized index

1 year as of 3/31/21

	Value	Core	Growth
Large	58%	49%	42%
Mid	54%	45%	61%
Small	42%	38%	57%

3 year as of 3/31/21

	Value	Core	Growth
Large	60%	35%	35%
Mid	54%	48%	60%
Small	44%	45%	82%

5 year as of 3/31/21

	Value	Core	Growth
Large	71%	35%	40%
Mid	62%	54%	67%
Small	42%	36%	75%

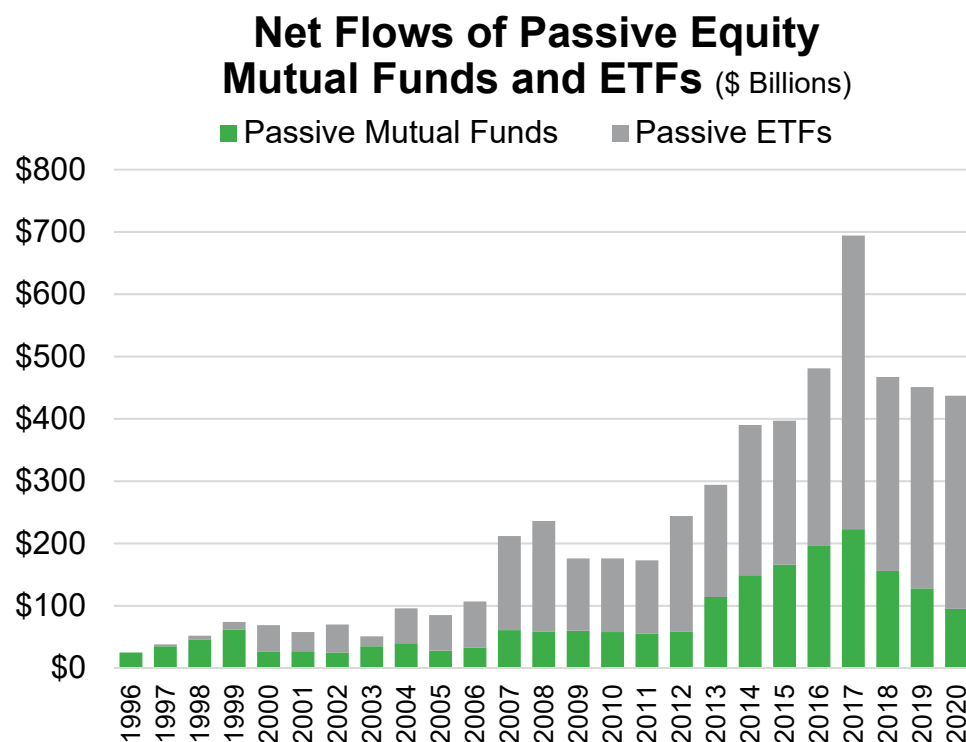
10 year as of 3/31/21

	Value	Core	Growth
Large	68%	35%	30%
Mid	55%	61%	56%
Small	77%	68%	85%

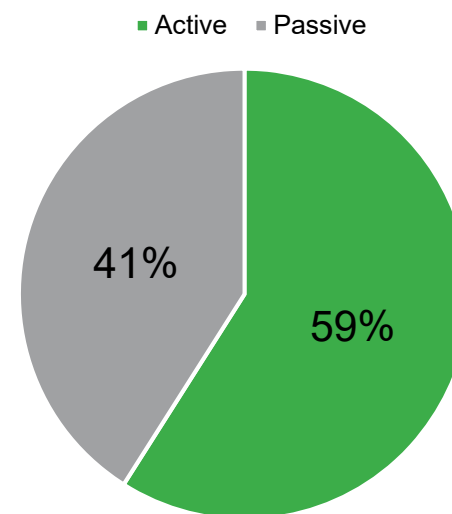
In the recent past, active has struggled

Money Flow Risk: The Growth of Passive Indexing

- Passive Market Cash Flows
- Impact of Quantitative Easing and Central Bank Activity



U.S. Mutual Fund and ETF Industry Assets

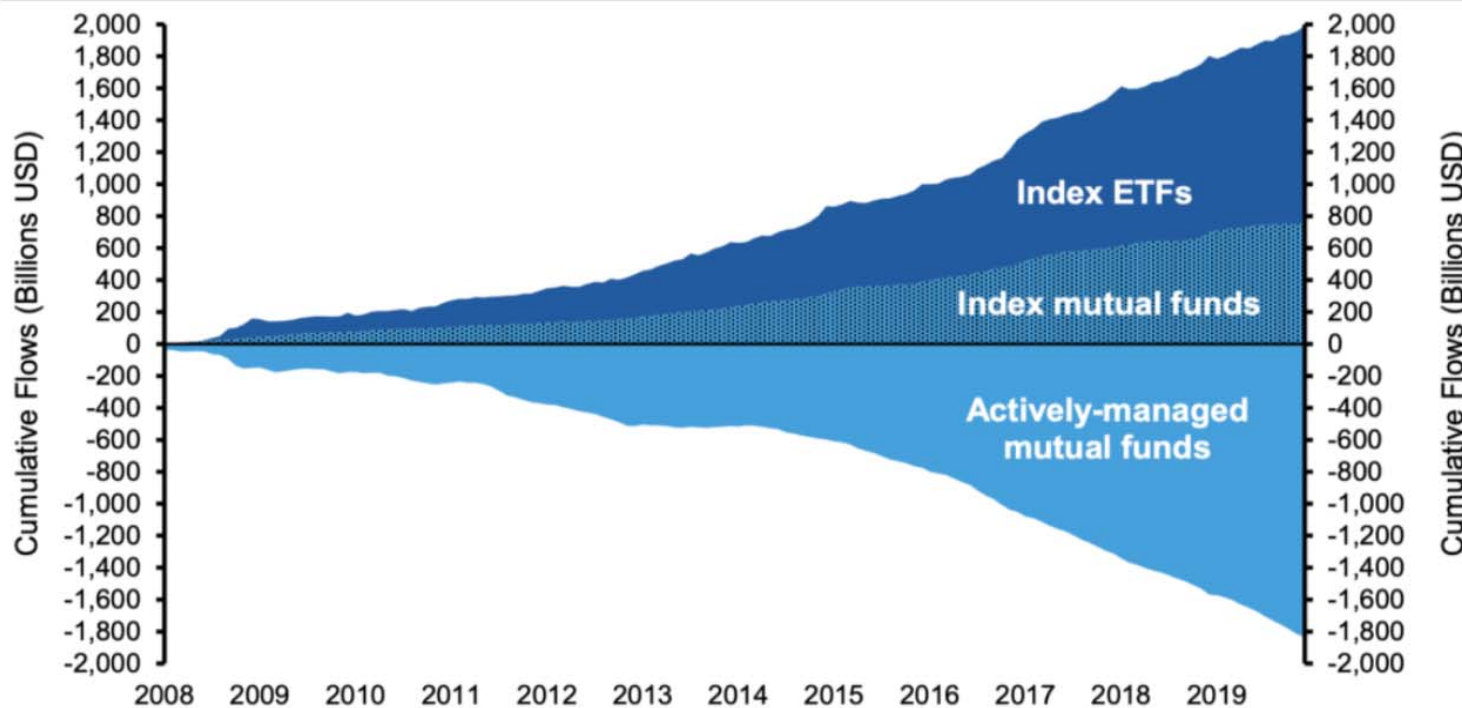


Sources: Investment Company Institute 2020 Fact Book and Federal Reserve Bank of Boston, working paper SRA 18-04

Why Has Indexing “Worked”?

- Assets continue to flow into passively managed funds

Exhibit 2: Cumulative Flows from U.S. Active to Passive Funds, 2008-2019

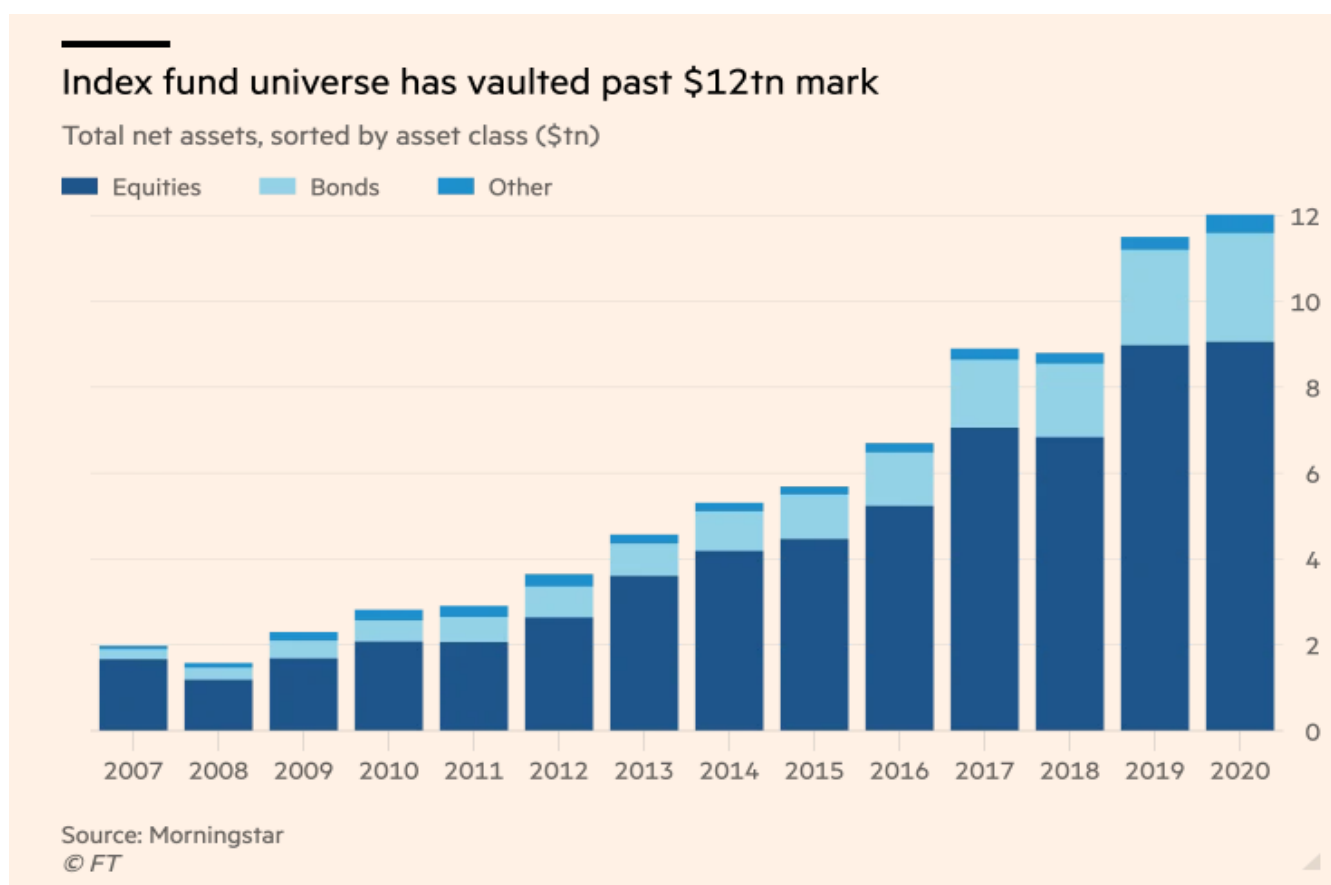


Source: Investment Company Institute.

Note: U.S. domestic equity funds; Mutual fund data is net new cash flow plus reinvested dividends; ETF data is net share issuance and includes reinvested dividends.

Active Problems ... or Solutions?

- ETFs have never had a decline in numbers
- Passive continues to take market share



Money Flow Risk: The Growth of Passive Investing

- Moody's Investors Service, Inc. states that by 2024 passive funds are forecasted to hold more than half of the investment management assets

WSJ, 10/11/17: Vanguard took in nearly \$300B in the first nine months of 2017, nearly matching its inflows for all of 2016

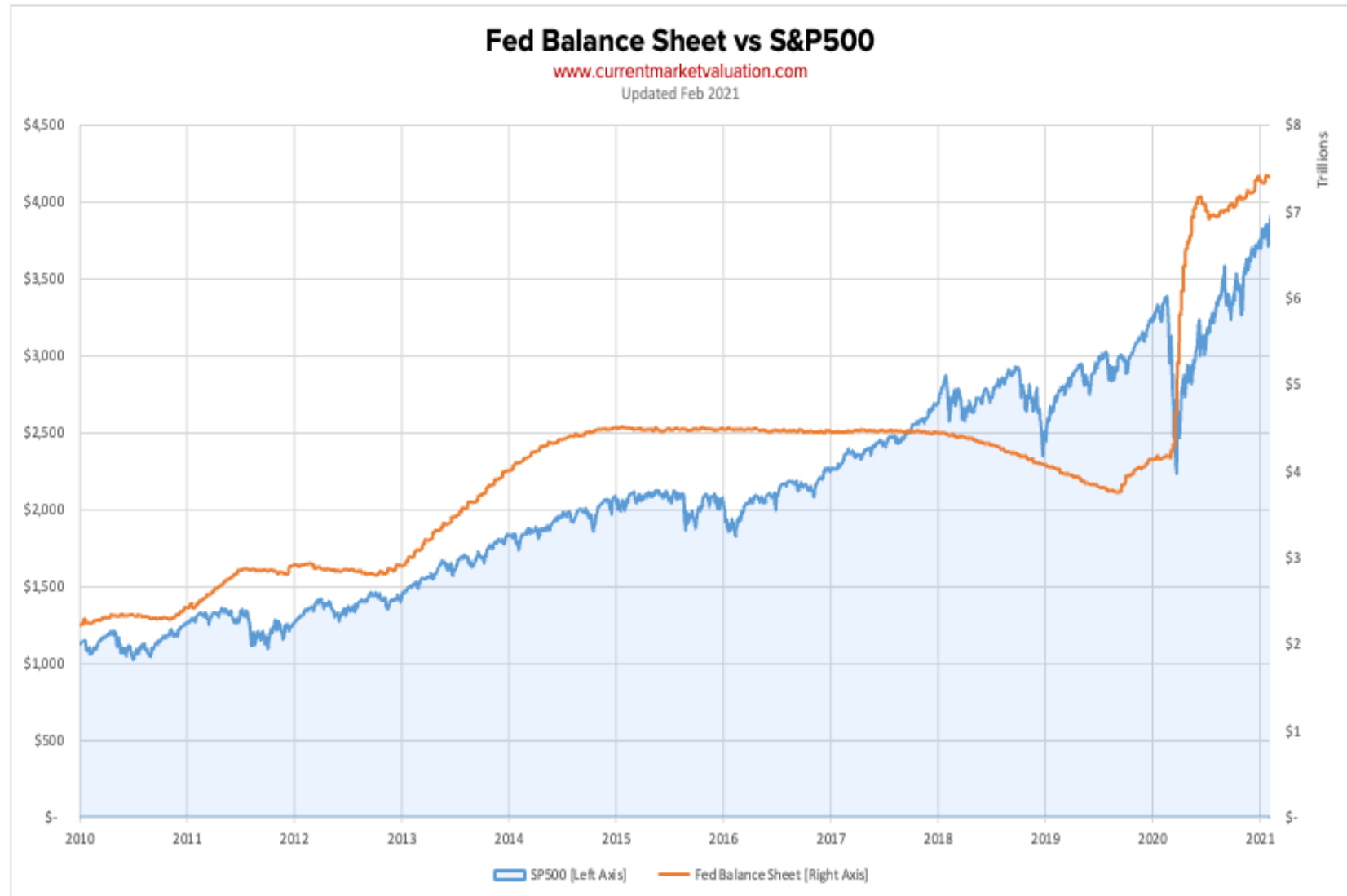
- Money has been **directed**, not invested, to companies
 - Passive strategies are price takers while active managers uncover mispriced securities and, in contrast, are price makers



Money Flow Risk: Quantitative Easing Effect

- What happens when money start to flow out of the index fund (i.e. a downturn in the market)?
- The lower the interest rate, the cheaper it is to borrow money and the more attractive it is to spend that money
 - Money has to go somewhere
 - Regardless of fundamentals of the company, stock prices can increase
 - Dividend stocks as a proxy for bonds
- Increased “pairwise” correlations among stocks

Money Flow Risk: Quantitative Easing Effect



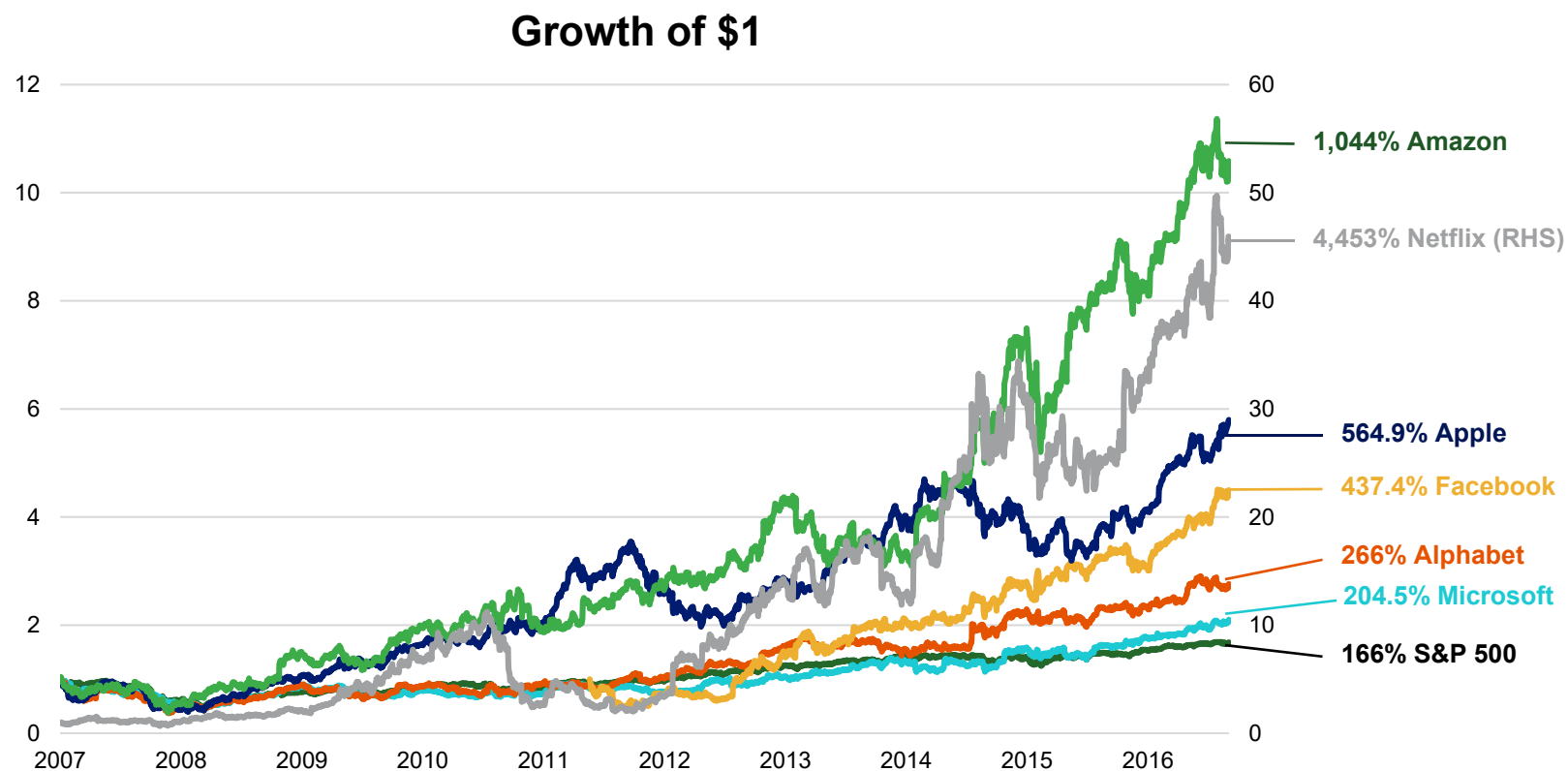
Influence Risk: Network Effect

- “Eyeballs” have become more important than revenue/profitability
- Competitive advantages have been established (and are tough to overcome)

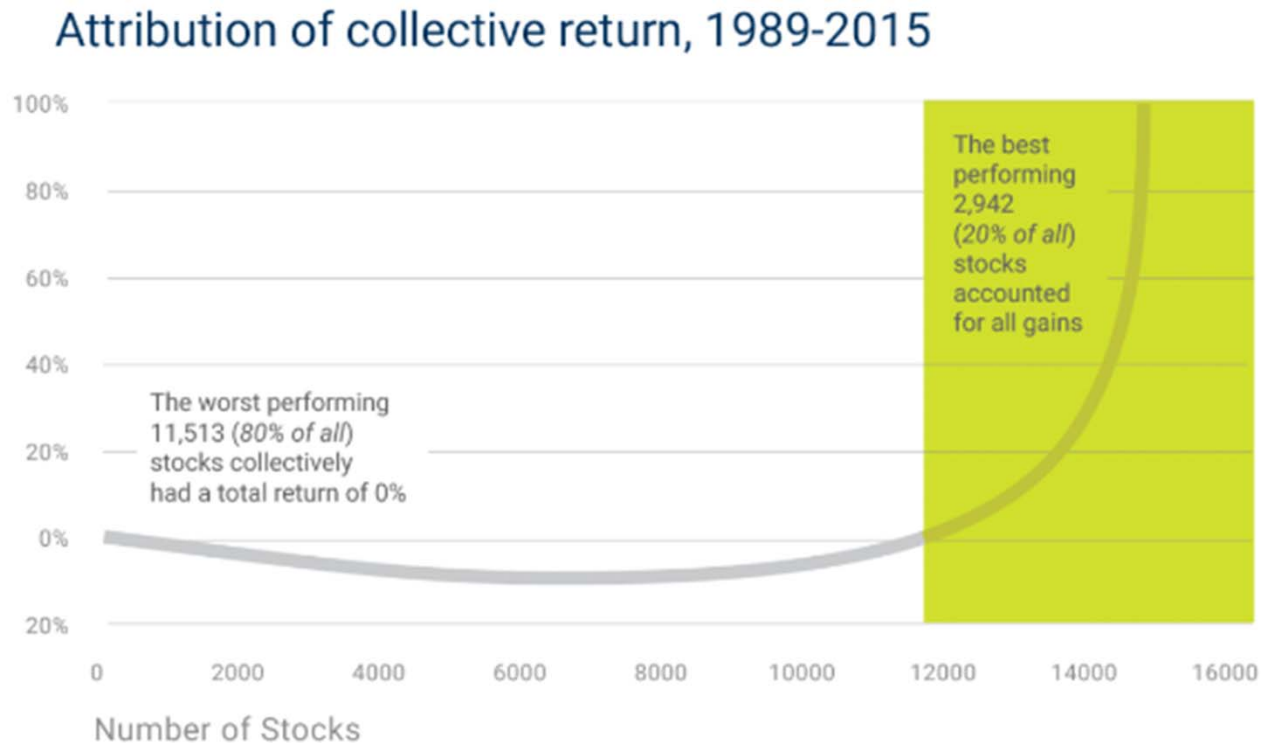


- This has allowed winners to continue to win (i.e. momentum affect)
 - Small number of stocks have garnered much of the gains

Influence Risk: Network Effect – Momentum



Influence Risk: Network Effect – Momentum



Source: Bessembinder 2018

Influence Risk: Network Effect – Momentum

- Capitalization weighted indices are agnostic as to how big a position gets
 - Recently, every dollar that goes into the index goes disproportionately to the larger names
 - The index exhibits no behavioral tendencies
- Active management exhibits behavior
 - Language in policy
 - Pairing back on winning stocks in the effort to look for undiscovered, quality stocks
 - Input of Human Nature

Influence Risk: Why Does Indexing Work?

The Math

- Consider a portfolio that has 5 stocks (i.e. this is the market).
 - 4 stocks return 10%
 - 1 stock returns 50%
- Active portfolio management, in theory, would consist of a portfolio of 1 or 2 stocks
 - 15 possible combinations for an active portfolio



Influence Risk: Why Does Indexing Work?

Broad Portfolio (A)	
A	10%
B	10%
C	10%
D	10%
E	50%
Average Return	18.0%

Single Portfolio (B)		
1	A	10%
2	B	10%
3	C	10%
4	D	10%
5	E	50%
6	AB	10%
7	AC	10%
8	AD	10%
9	AE	30%
10	BC	10%
11	BD	10%
12	BE	30%
13	CD	10%
14	CE	30%
15	DE	30%
Average Return		18.0%

- Both portfolios calculate to an 18.0% average return in this “hypothetical” up market
- In B, only 5, out of the 15 portfolios (or 33.3%), outperforms the 18% average return in portfolio A
- RESULT: the average index returns depends heavily on a relatively small set of winners

Impact of Active Management

- Market efficiency, in its true form, requires active management to ensure that any inefficiency is bid away
 - Passive indexing, therefore, leverages the work of active management to maintain an efficient market
- Compare this to voting
 - Passive investing is like showing up at the polling booth and marking the ballot “abstain” with the hope that those who actively choose will consistently deliver the best electoral outcome



Volatility Risk: Why Active?

Market has the potential for correction due to certain factors that have recently been “different” than the norm

$$C \sim v^2 / v^2 + d^2$$

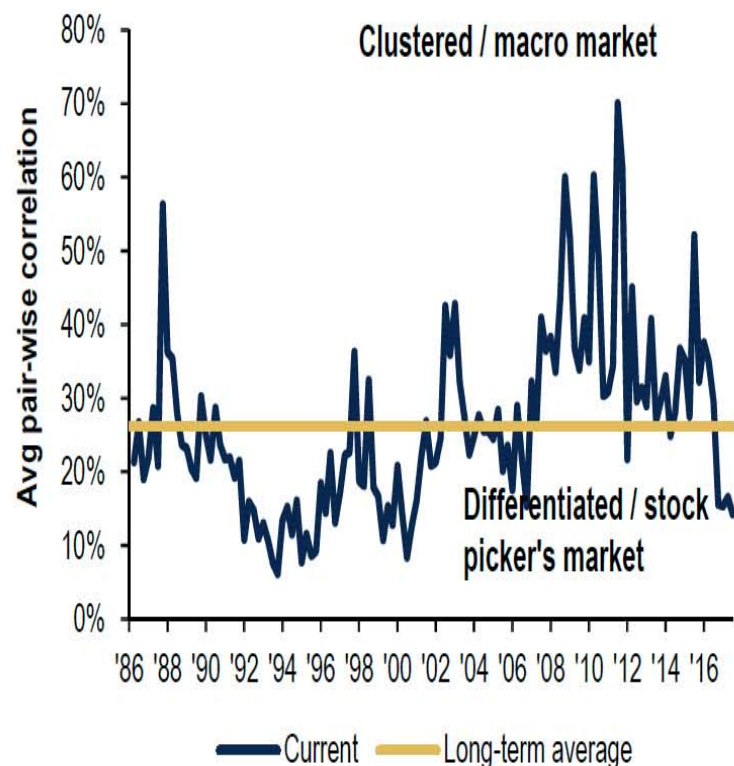


- Correlation (c) : How 2 securities move together
- Dispersion (d): The magnitude of how securities move
- Volatility (v): The speed and amount of price change

Volatility Risk: Correlations

Chart 2: Pair-wise correlation of stocks in the S&P 500

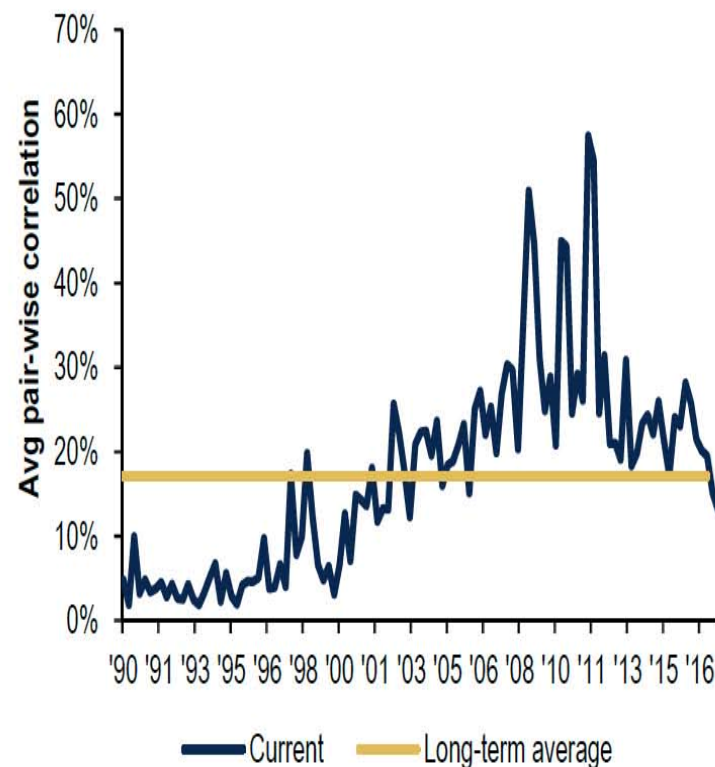
Average pair-wise stock correlations based on 90-day periods, daily frequency



Source: BofA Merrill Lynch US Equity & Quantitative Strategy
Based on the S&P 500 universe

Chart 3: Pair-wise correlation of stocks in the Russell 2000

Average pair-wise stock correlations based on 90-day periods, daily frequency



Source: BofA Merrill Lynch US Equity & Quantitative Strategy
Based on the Russell 2000 Universe

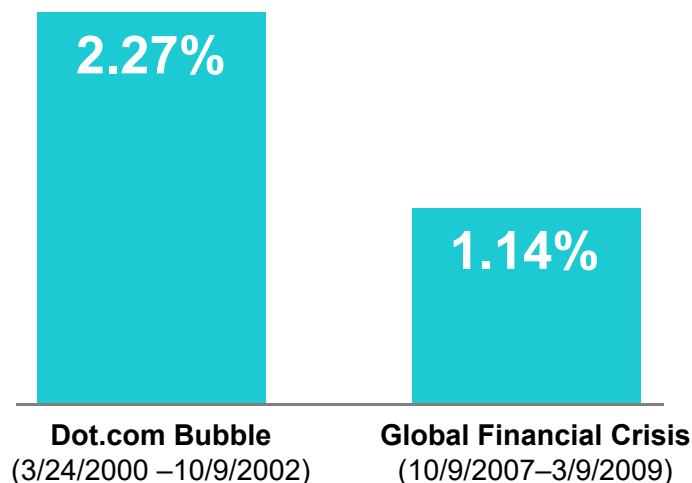
“Good” managers perform better when dispersion is high
Active managers perform better
during heightened volatility

Does Active Management Work?

Excess Annualized Return: Median Active Funds vs. Median Passive Funds

(U.S. Large Cap)

During the two most recent significant down markets



- Median U.S. large cap active fund performance provided excess return in the two most recent market crises
- Active managers have the potential to avoid overvalued securities, sectors, and markets
- Downside protection may help preserve capital and contribute to long-term growth
- U.S. large cap is regarded as an efficient asset class

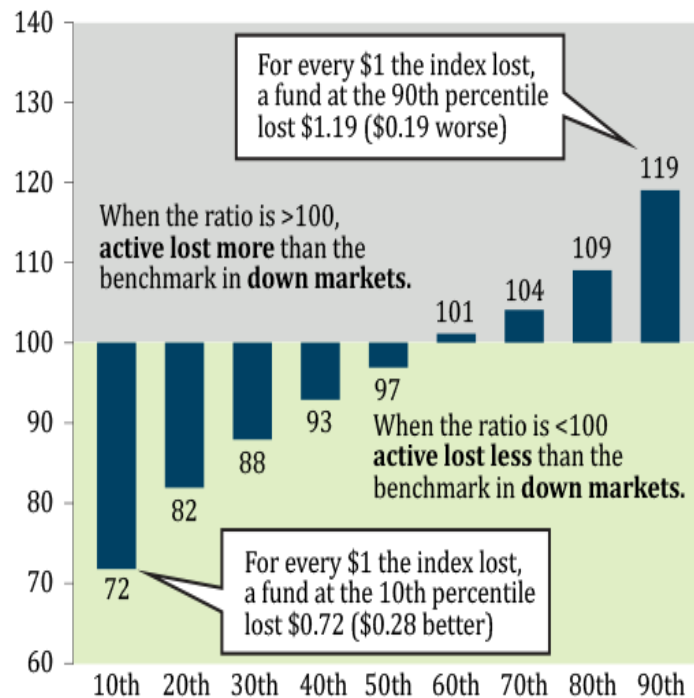
Source: Morningstar Direct.

Annualized returns calculated based on actively and passively managed true no-load mutual funds and ETFs (excluding strategic beta) in Morningstar's Large Growth, Large Blend, and Large Value categories that denote the S&P 500 as their primary prospectus benchmark. Please see important disclosures for additional methodology information.

When Does Active Management Work?

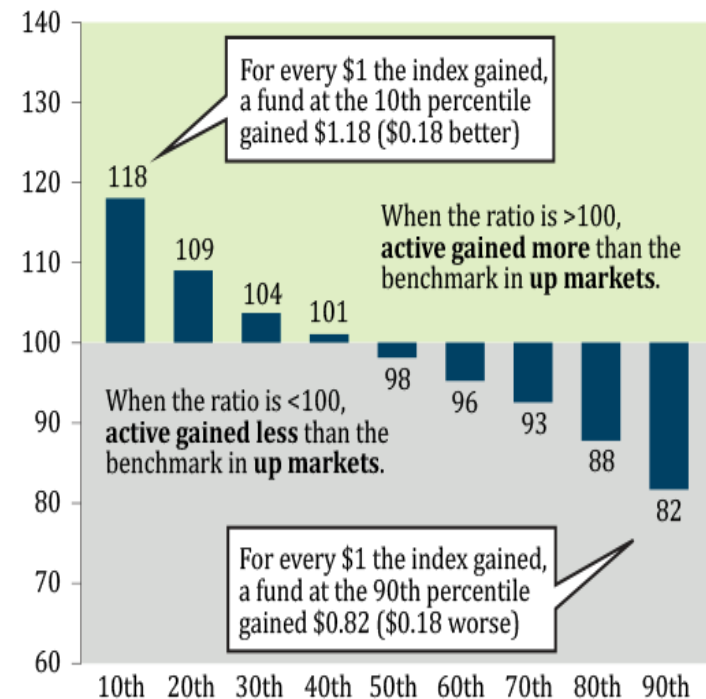
Down Market Capture: Active U.S. Large Cap Mutual Funds vs. the S&P 500

(Median 3-Year Down Market Capture Ratios,
1/1/1996 – 12/31/2016)



Up Market Capture: Active U.S. Large Cap Mutual Funds vs. the S&P 500

(Median 3-Year Up Market Capture Ratios,
1/1/1996 – 12/31/2016)

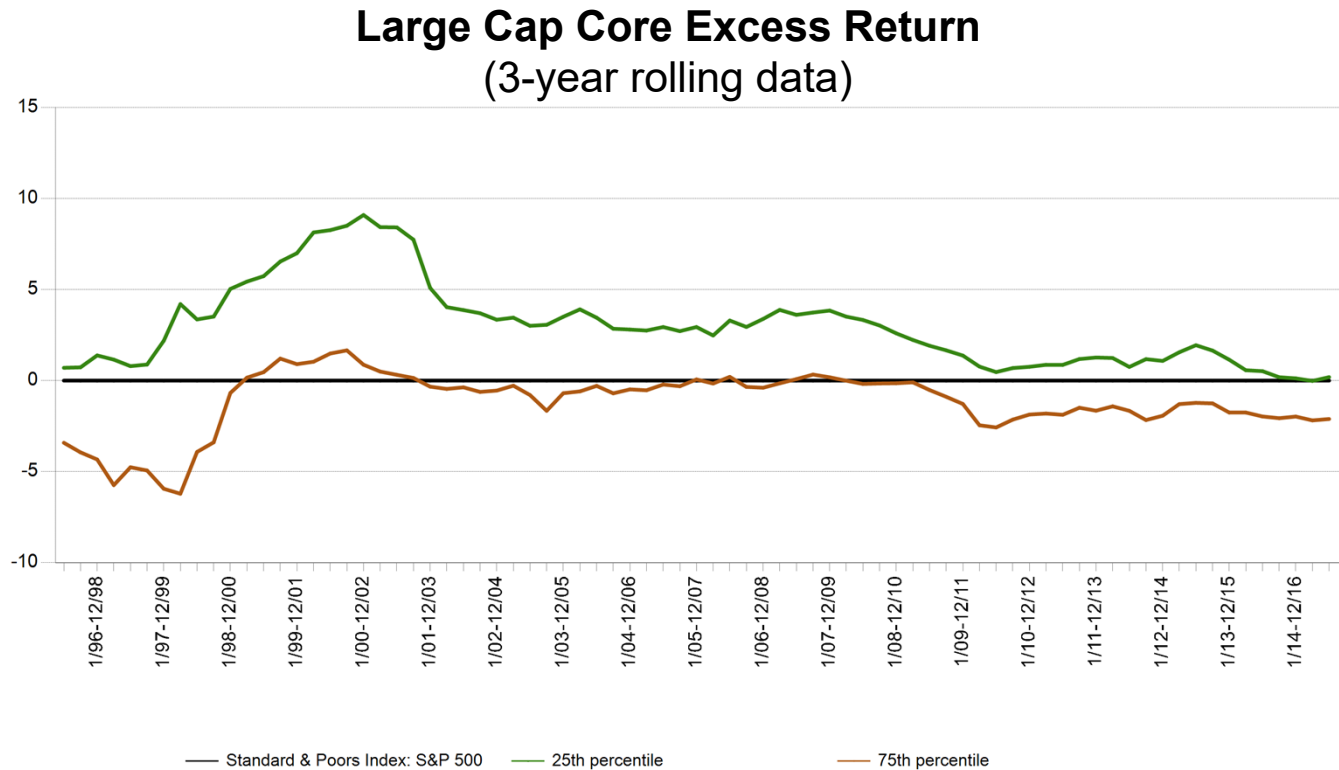


More Funds Chasing Fewer Opportunities

	1996	2017
Publicly Traded Stocks	9,000	4,000
Mutual Funds	8,000	15,000
ETFs	<100	2,500
Hedge Funds	500	10,000

(source: Institutional Investor, October 18, 2017 - [link](#))

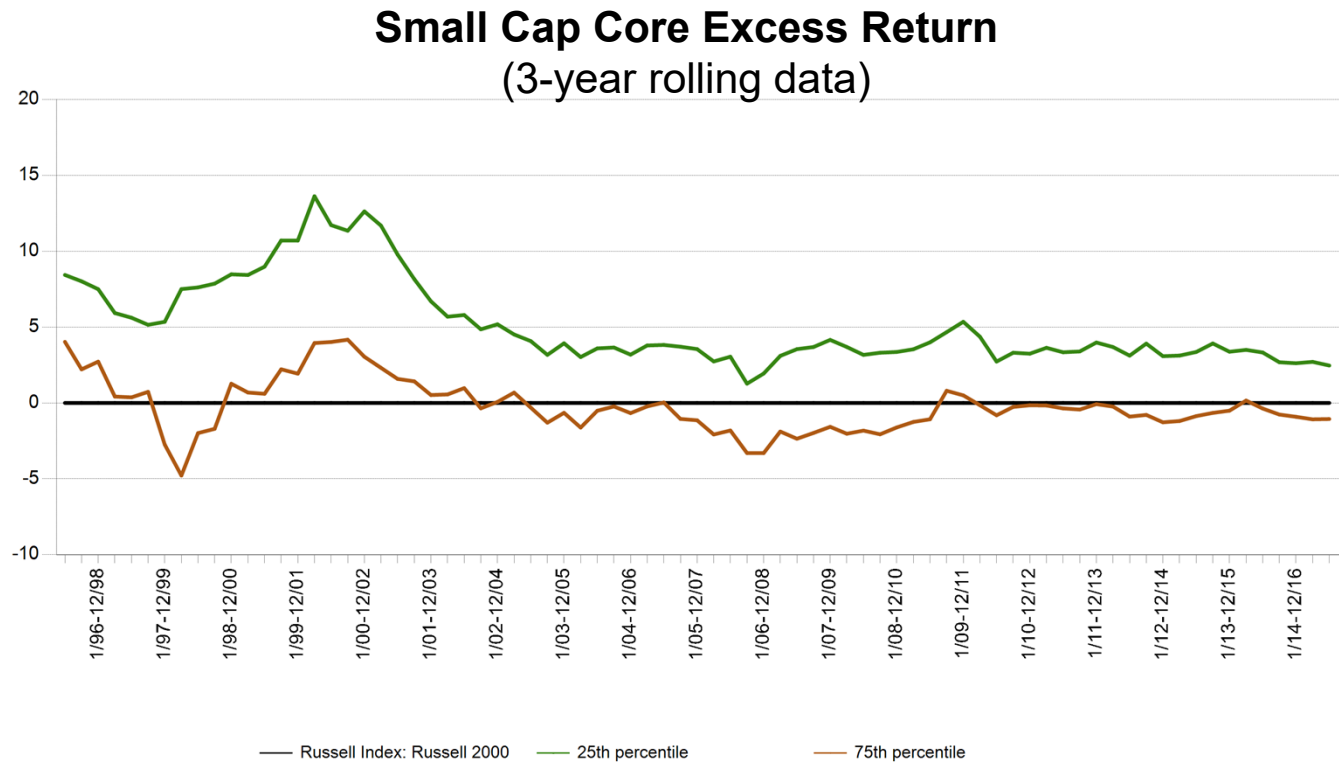
Does Active Management Work?



Results displayed in US Dollar (USD)

S&P 500

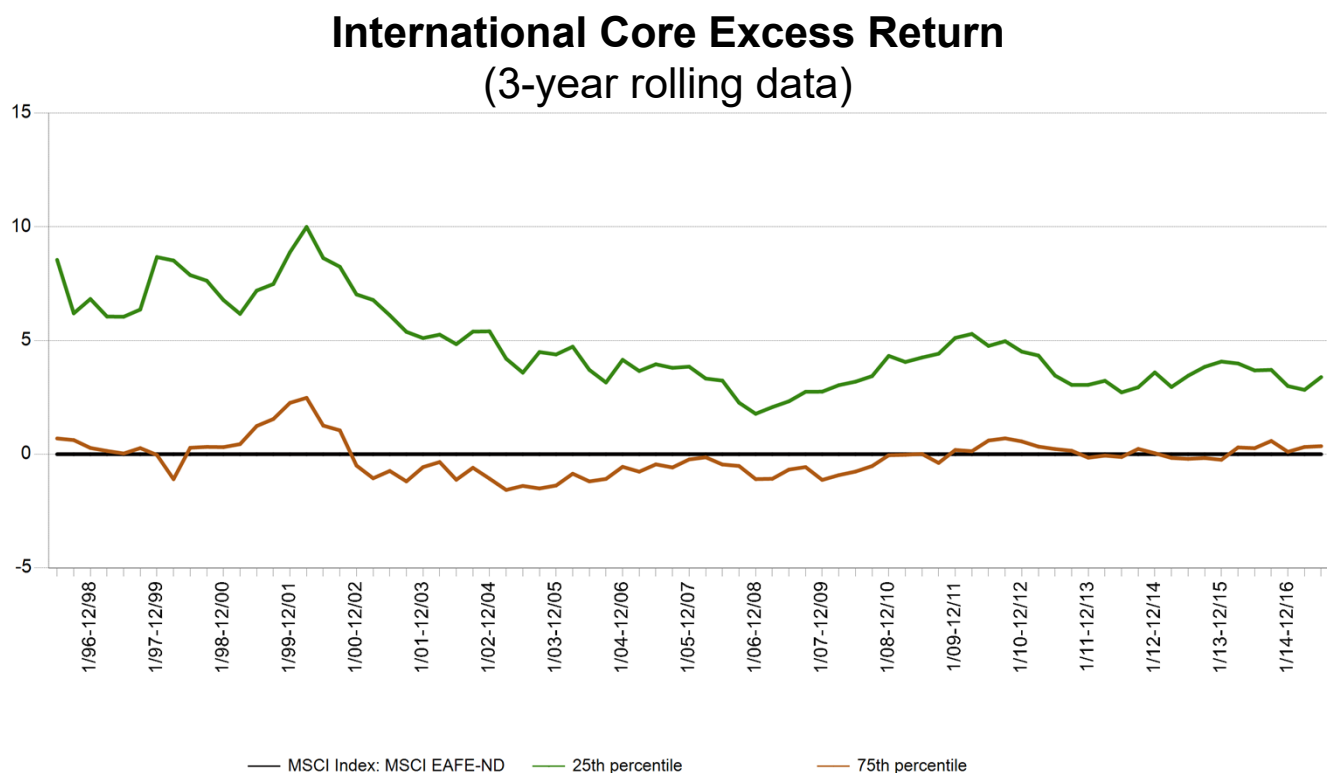
Does Active Management Work?



Results displayed in US Dollar (USD)

Russell 2000

Does Active Management Work?



Results displayed in US Dollar (USD)

MSCI EAFE-ND

Behavioral Factor: Representativeness

You are the coach of a basketball team that is down by 1 point with 5 seconds to go. Who do you give the ball to?

Regular player that has made his last 10 shots in a row with a 10-year career average of 40% shots made.

Star player that is 2 for 10 tonight with a 10-year career average of 80% shots made.



More weight is given to recent events, regardless if they are representative of long-term trends

In Perspective: Asset Allocation is More Important

	Range of Outperformance		Additional Gain ²
Active Portfolio ¹	0.21%	1.00%	\$6M – \$28M

		Return (10 years annualized)	Risk (10 years annualized)
Index	80% S&P500/20% BC Agg	7.28%	12.17%
Active Equity ³	80% Active S&P 500/20% BC Agg	8.25%	11.91%
		0.97%	-0.26%
Index	20% S&P500/80% BC Agg	5.29%	4.07%
Active Equity ³	20% Active S&P500/80% BC Agg	5.52%	3.96%
		0.23%	-0.11%

¹ Traditional portfolio with 50% in equities, 25% in bonds, 10% in real estate, 5% in PE, 10% in alternatives

² Based on a \$250,000,000 portfolio

³ Represents top quartile investment manager

What Type of Investor are You?

- Do you recognize that effective asset management requires risk relative to benchmarks and that risk is not always rewarded?
- Do you need excess return to achieve goals and have few options?
- Are you are highly sensitive to fees or costs
- Do you have a governance or decision-making structure that can help with
 - Differentiating between manager skill and luck
 - Deciding when to “sell” an asset manager

Status quo vs. Opportunity

Key Takeaways

Active and Passive styles of investment management are both appropriate for most institutional investors

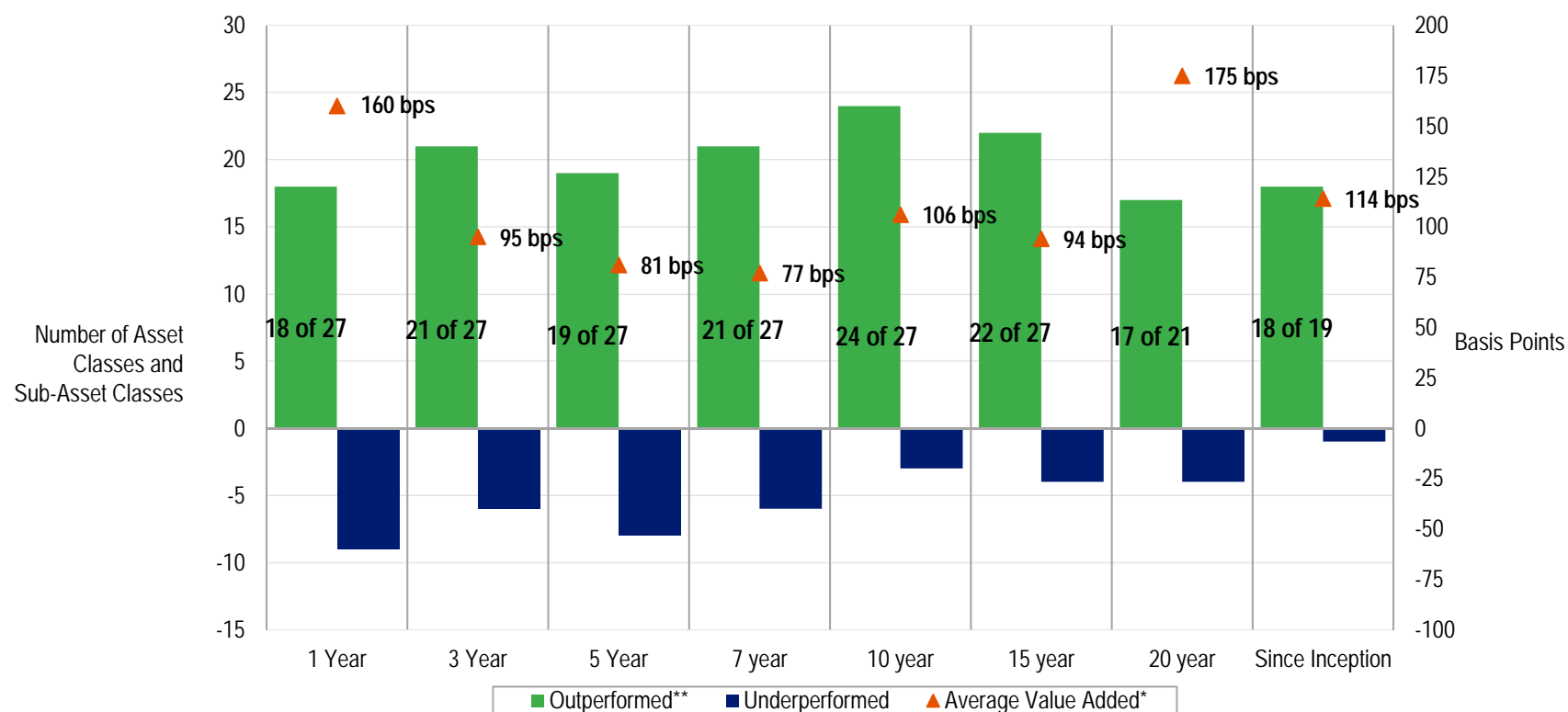
- This is a complementary discussion not a competing one
- 1. Optimal mix can be determined with some internal decisions
 - Risk tolerance
 - Ability to tolerate underperformance/outperformance
 - Fee sensitivities
- 2. Behaviorally speaking, choosing active asset managers is one of the most challenging thing plan sponsors do
 - Profound pressure to buy high and sell low
 - Importance of Asset Allocation versus the Active/Passive Debate
- 3. The ability to identify top-tier managers combined with effective governance can be a powerful advantage in today's difficult markets

| Appendix

Benefits From Our Research

Segal Marco Advisors has a documented track record of identifying investment managers that went on to outperform their benchmarks.

Recommended Equity and Fixed Income Managers Over/Under Performance (as of 12/31/20)



* The average value added represents results calculated as geometrically-linked average returns of Recommended-rated managers less the performance of representative passive benchmarks. Returns are presented gross of fees. Past performance does not guarantee future results.

** Represents number of asset classes and sub-asset classes with positive outperformance for that period.

*** Inception January 2000