Challenging the Conventional Wisdom on Active Management

A Review of the Past 20 Years of Academic Literature on Actively Managed Mutual Funds

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http://activeshare.nd.edu (research), http://activeshare.info (US mutual fund info)

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Our Goals Today

- Discuss the new ‘conventional wisdom’ on active management
  - Do the common beliefs hold up to academic scrutiny?
- Identify the characteristics of successful active managers
  - What are the predictors of performance?
- Show where and when active management is most valuable
  - In what markets and at what times are profitable opportunities available?

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Building the 'Conventional Wisdom'

- Key study behind the 'conventional wisdom': Carhart (1997)
  - *"The results do not support the existence of skilled or informed mutual fund portfolio managers"*
  - 20,355 citations (Google Scholar)
  - Ranked as the fourth most influential paper in Finance (CFR)

- His analysis, along with other studies, has formed the foundation of the commonly held belief that active management does not create value for investors

THE MORNINGSTAR MIRAGE

Investors everywhere think a 5-star rating from Morningstar means a mutual fund will be a top performer—it doesn't

By Kirsten Grind, Tom McGinty and Sarah Krouse

Source: Wall Street Journal October 25, 2017

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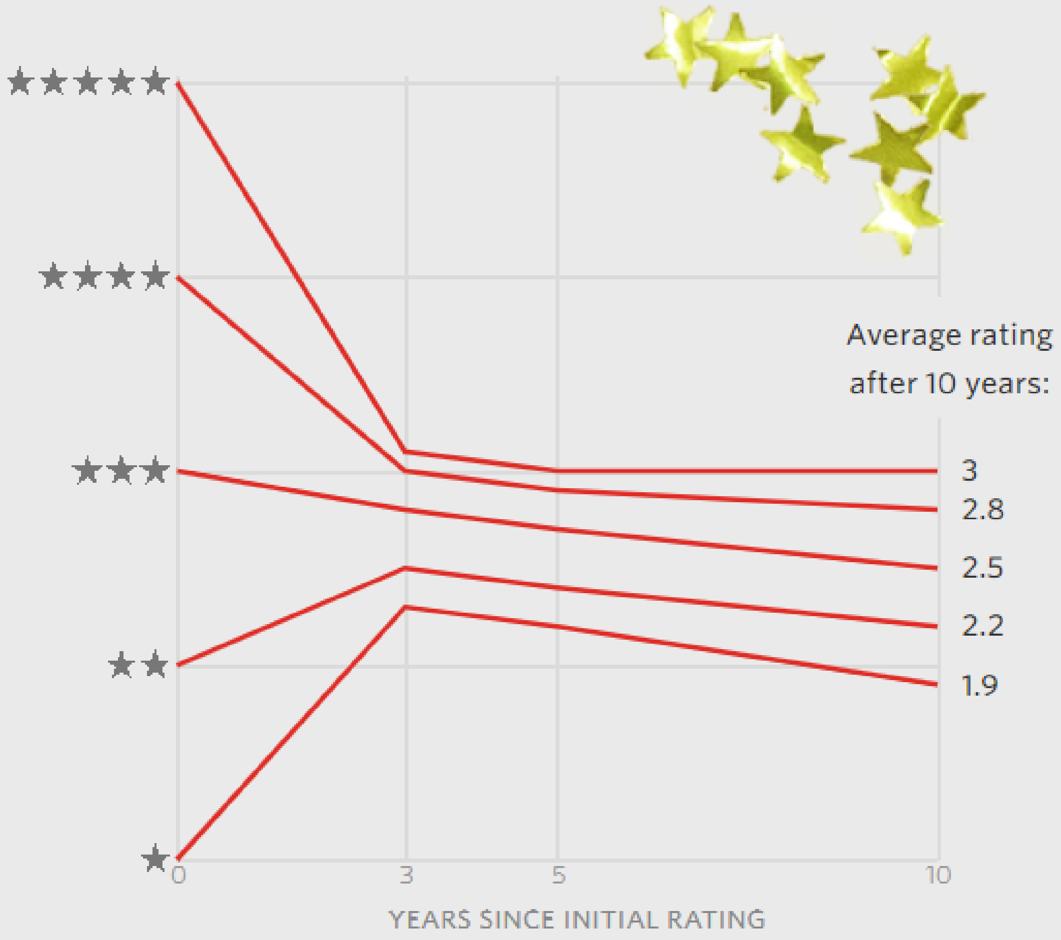
How Funds With Different Ratings Compare

Morningstar gives funds one to five stars for past performance, **with five the best.**

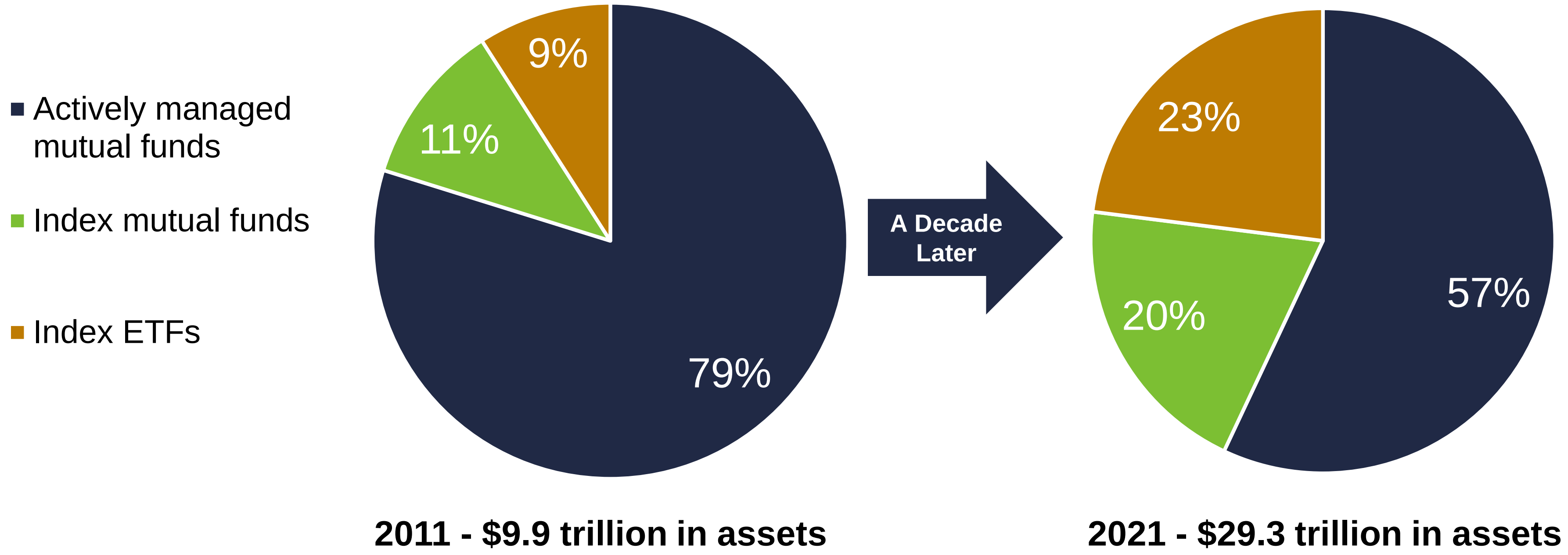
Many investors treat the stars as a guide to future performance.

But over time, the performance of funds with different initial star ratings **converges.**



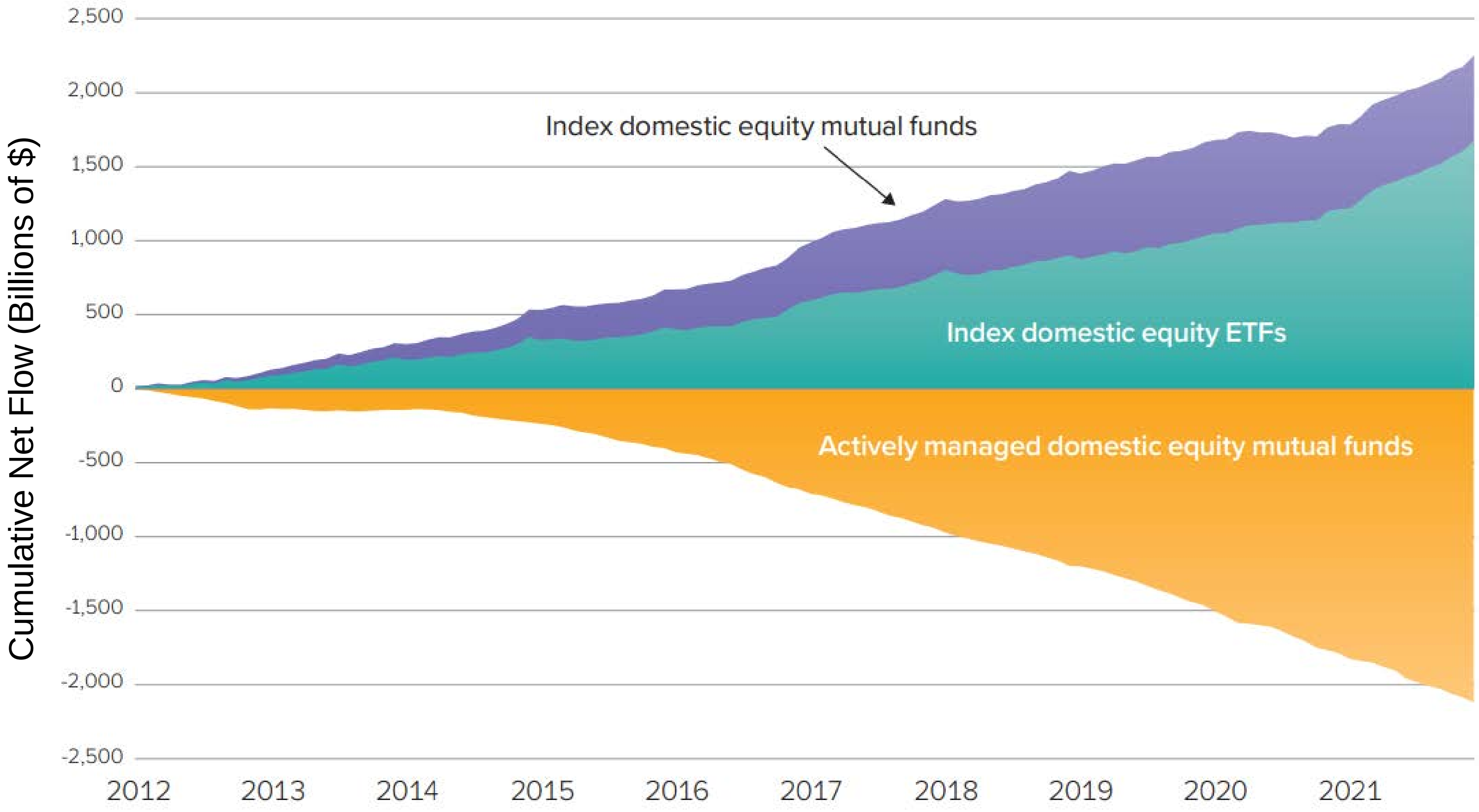
Source: Wall Street Journal October 25, 2017

The Impact of the 'Conventional Wisdom'



Source: 2022 ICI Factbook

The Impact of the 'Conventional Wisdom'



Source: 2022 ICI Factbook

Components of the ‘Conventional Wisdom’

1. The average fund underperforms after fees

Sharpe (1991)

Mathematically, active management is a zero sum game gross of fees and a negative sum game net of fees, so *“after costs, the return on the average actively managed dollar will be less than the return on the average passively managed dollar”*

2. The performance of the best funds does not persist

Carhart (1997)

“The mundane explanations of strategy and investment costs account for almost all of the important predictability in mutual fund returns”

3. Some fund managers are skilled, but few have skill in excess of costs

Fama and French (2010)

“Simulations suggest that few funds produce benchmark-adjusted expected returns sufficient to cover their costs”

Challenging the 'Conventional Wisdom'

The average fund underperforms after fees

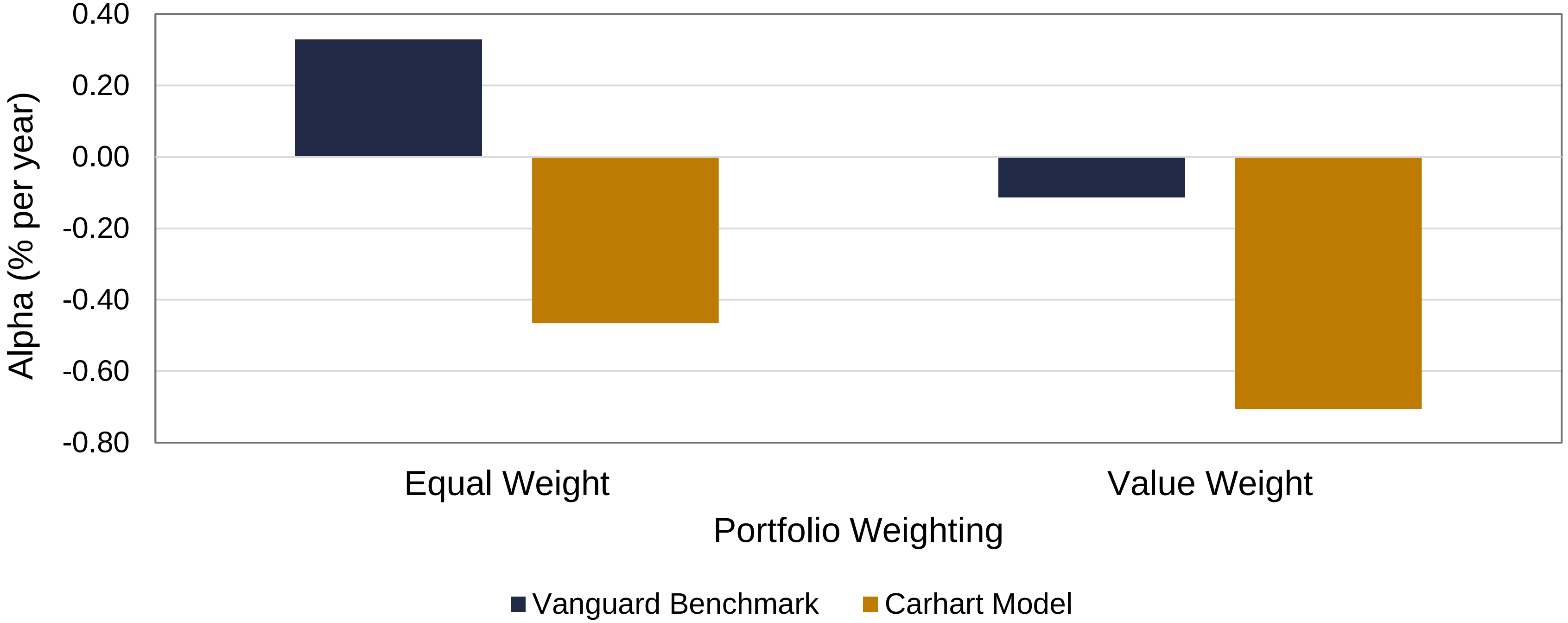
Pedersen (2018)

"Active managers can be worth positive fees in aggregate"

Berk and van Binsbergen (2015)

"Once we evaluate funds against a tradable benchmark, we no longer find evidence of the under-performance previously shown in the literature"

Comparing Performance Evaluation Methods

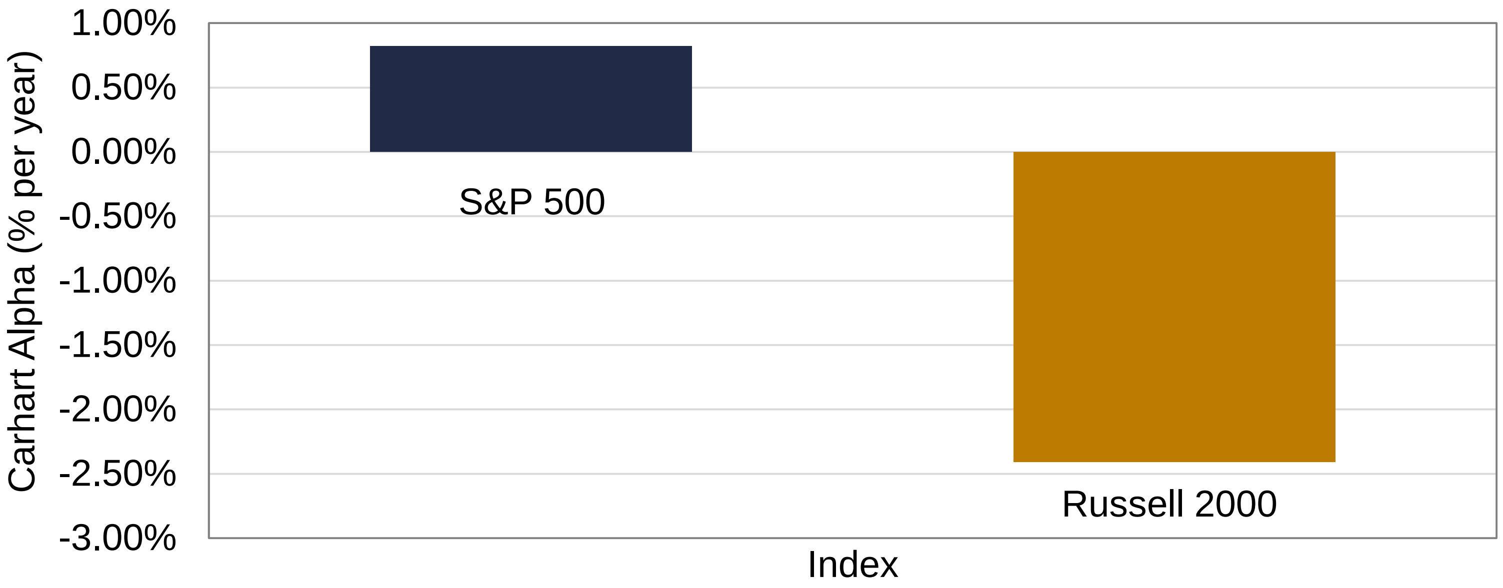


Source: Berk and van Binsbergen (2015)

Alpha is the portion of a portfolio's total return that is unique to that portfolio and is independent of movements in its benchmark.

Bias in the Carhart Model

"The S&P 500 and Russell 2000 together cover about 85% of the U.S. equity market value and are the two most common benchmark indices for fund managers"



Source: Cremers, Petajisto, and Zitzewitz (2012)

Challenging the 'Conventional Wisdom'

The performance of the best funds does not persist

Bollen and Busse (2005)

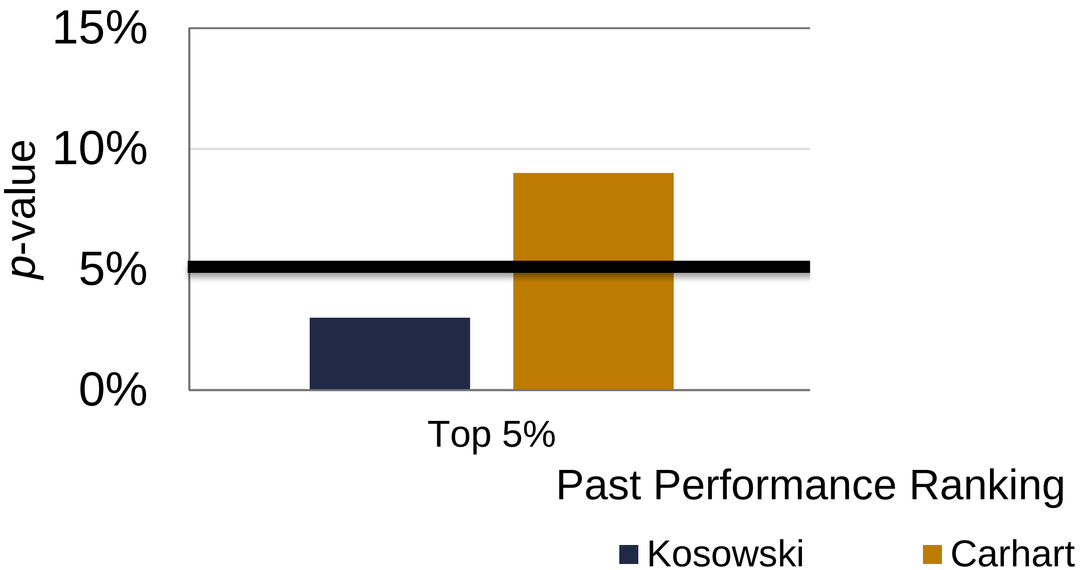
"The top decile of funds generates, on average, a statistically significant abnormal return of 25–39 basis points per quarter"

Kosowski, Timmermann, Wermers, and White (2006)

"Our findings overturn some important and widely cited results from Carhart's paper"

Comparing Statistical Methods

- ► The top 5% over the past three years → Alpha of 1.4% over the subsequent year
- ► The top 10% over the past three years → Alpha of 1.0% over the subsequent year



Source: Kosowski, Timmermann, Wermers, and White (2006)
p-value is the probability of obtaining results as extreme as the observed results of a statistical hypothesis test, assuming that the null hypothesis is correct.

Challenging the 'Conventional Wisdom'

Some fund managers are skilled, but few have skill in excess of costs

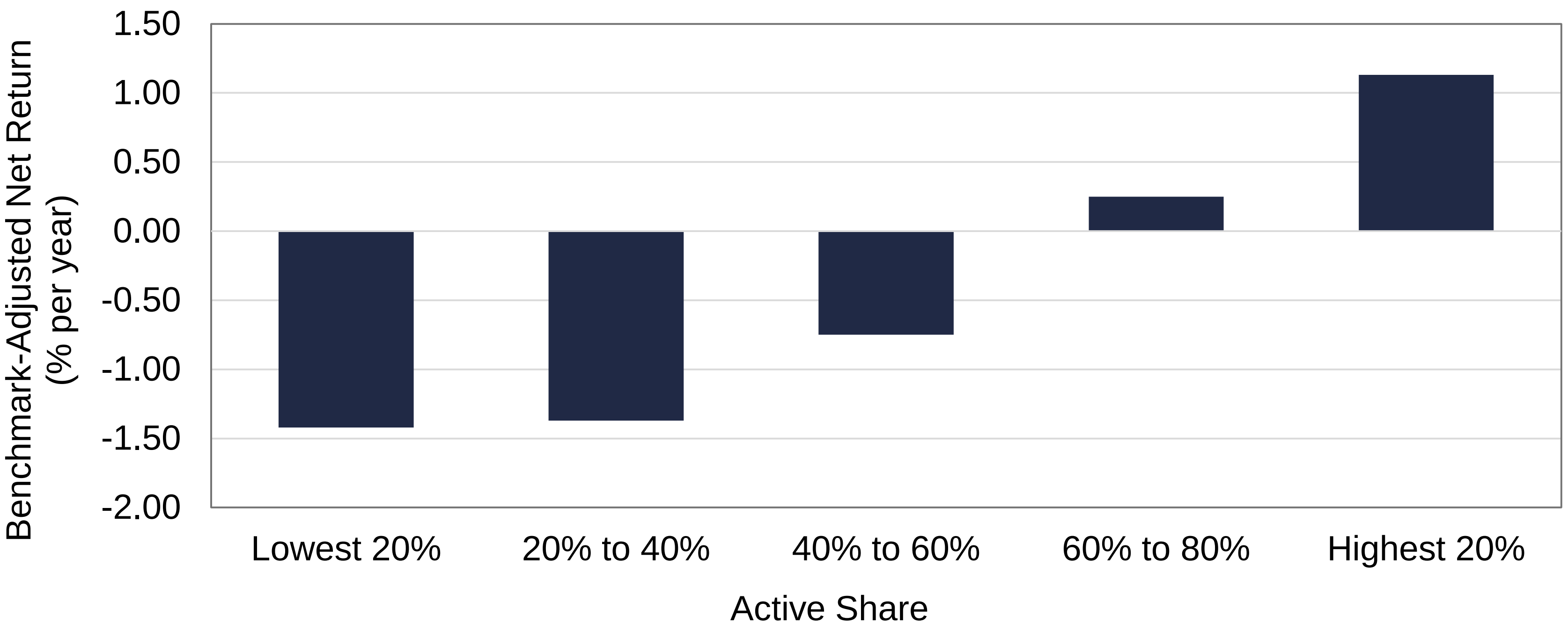
Kosowski, Timmermann, Wermers, and White (2006)

"We find that a sizable minority of managers pick stocks well enough to more than cover their costs"

Cremers and Petajisto (2009)

"Funds with the highest Active Share significantly outperform their benchmarks, both before and after expenses"

Comparing Groups Based on Active Share



Source: Cremers and Petajisto (2009)

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Successful Active Management

- To outperform the market, an active manager must have **skill**, **conviction**, and **opportunity** (Cremers, 2017)

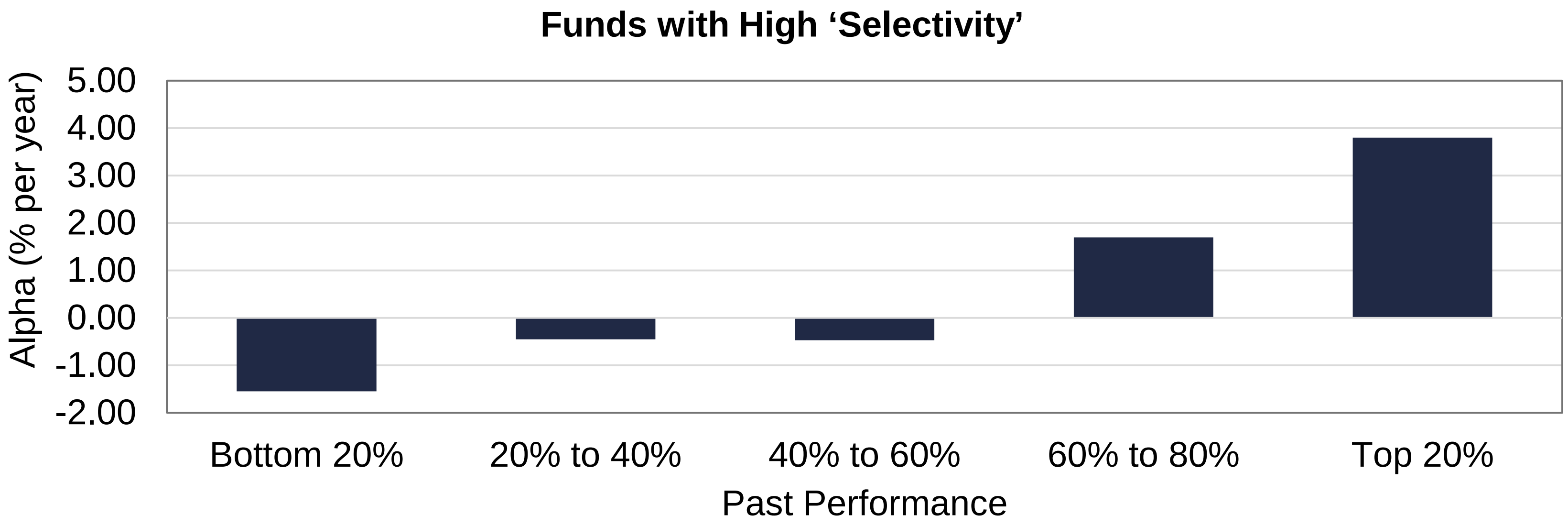
- The true **skill** and **conviction** of a manager is difficult (or impossible) to observe

- But! Indicators of those traits are available in the data, and those indicators *predict future performance*

(What about **opportunity**? More in a moment!)

Predicting Alpha – Activeness

Are you willing to be truly active?

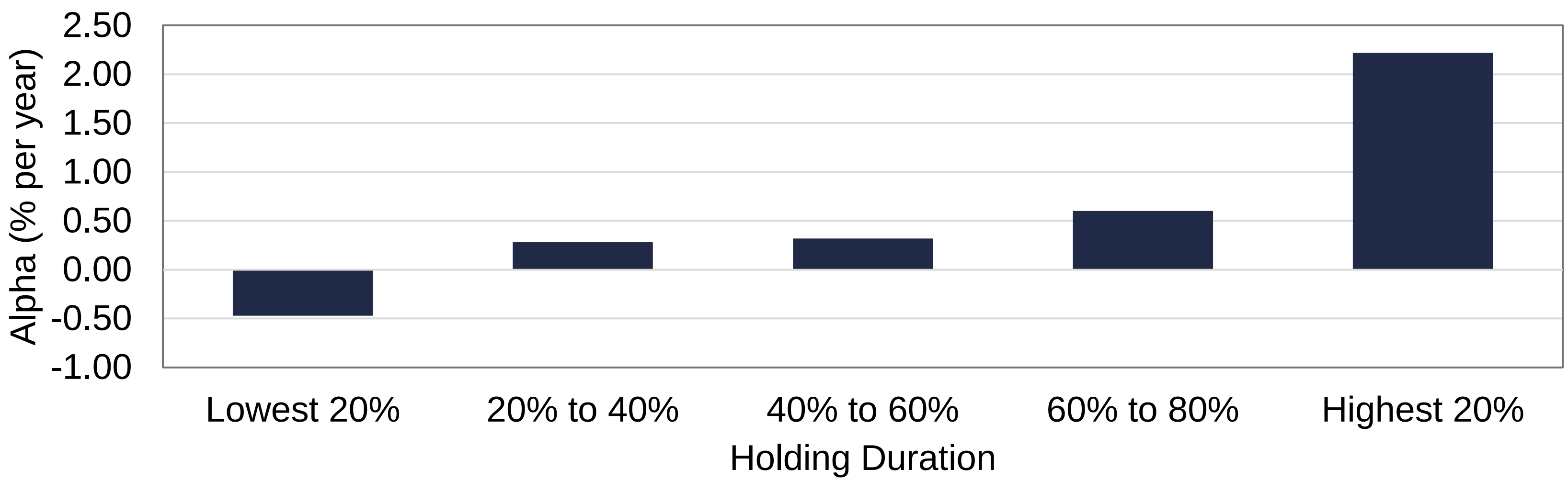


Source: Amihud and Goyenko (2013)

Predicting Alpha – Patience

Are you willing to stick with your investments?

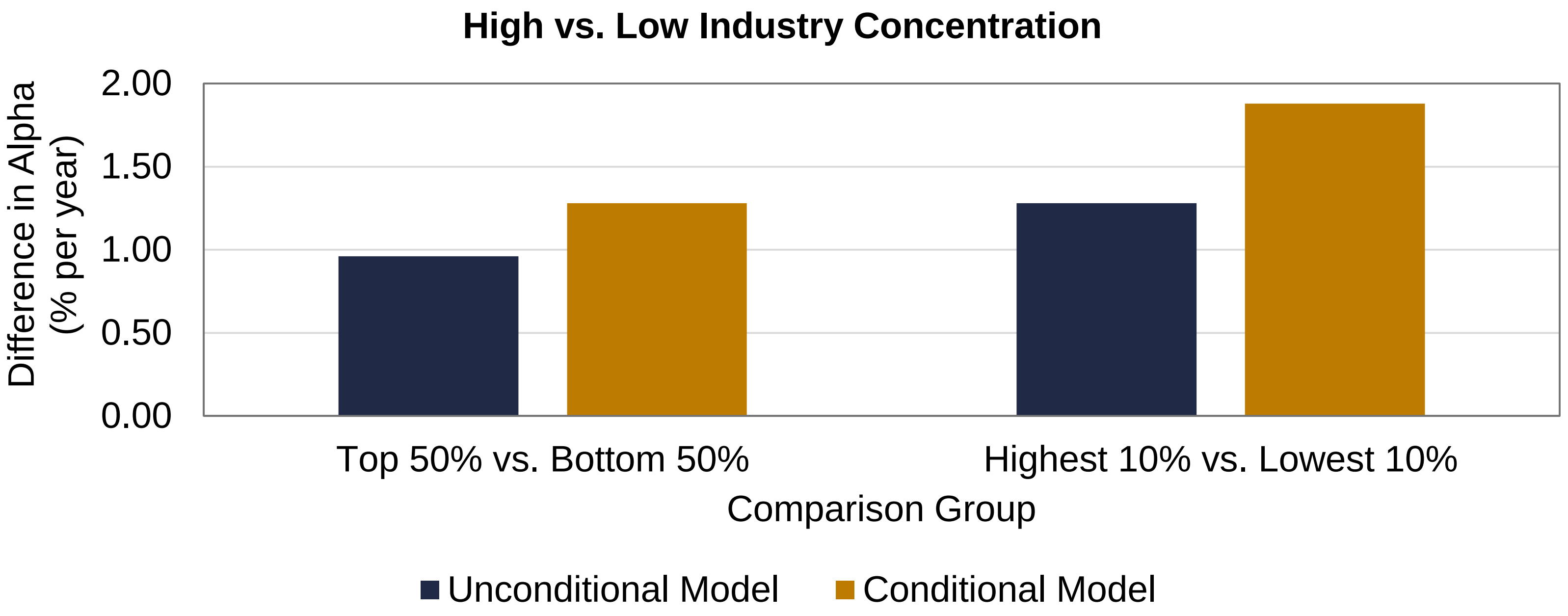
Funds with High 'Active Share'



Source: Cremers and Pareek (2016)

Predicting Alpha – Concentration

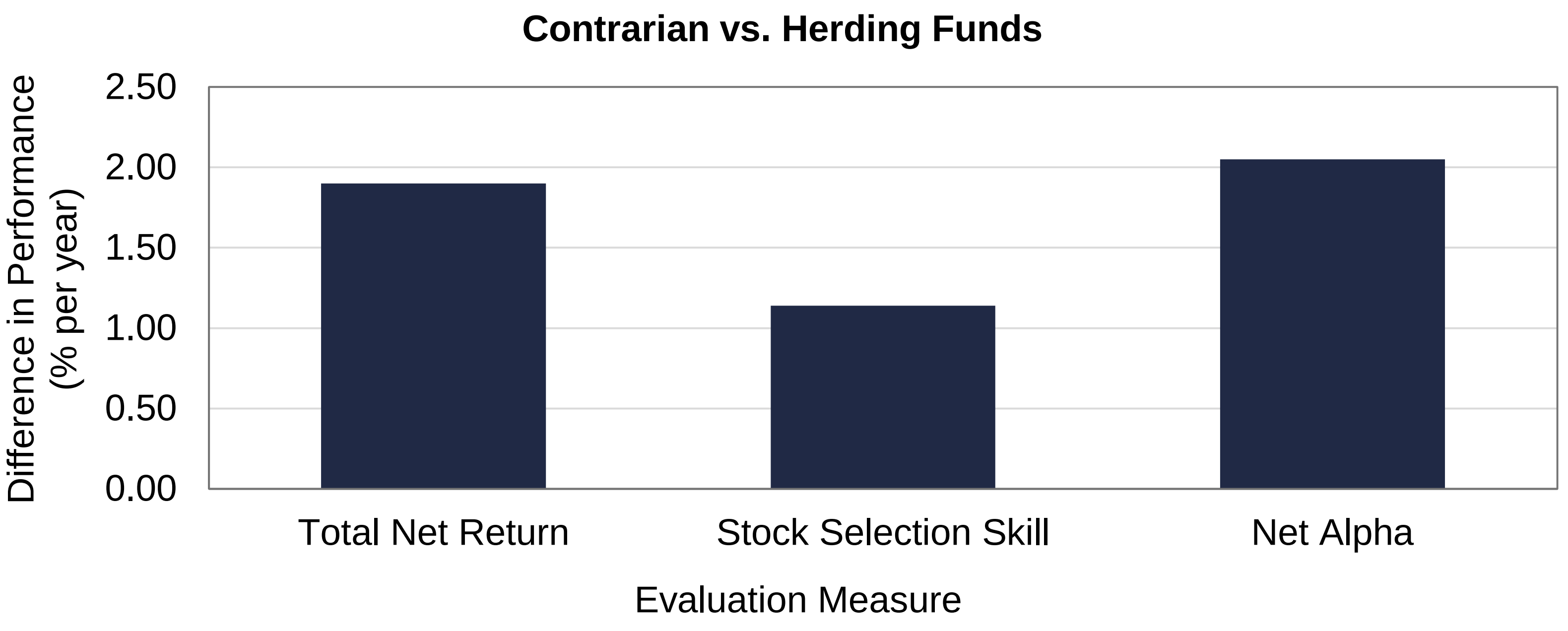
Are you willing to invest heavily in your ‘best ideas’?



Source: Kacperczyk, Sialm, and Zheng (2005)

Predicting Alpha – Contrarian

Are you willing to go against the grain?



Source: Wei, Wermers, and Yao (2015)

The Problem with Predictors

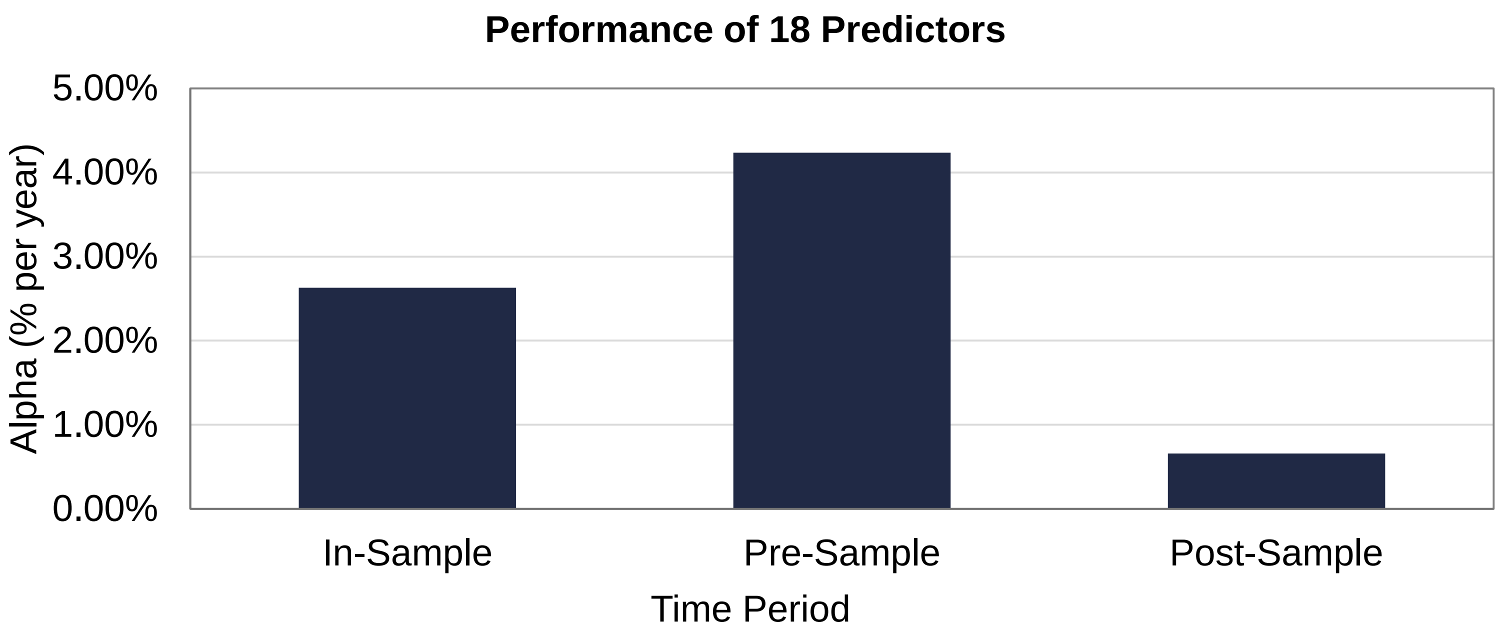
The academic publication process privileges <u>statistically significant</u> results that provide <u>new insights</u>

- As a rule, journals are not interested in papers confirming that the conventional wisdom is correct

In the extreme, this bias means that journals will be "*filled with the 5% of the studies that show <u>false positives</u>*" (Rosenthal, 1979)

Therefore, it is essential to consider the validity of the many performance predictors

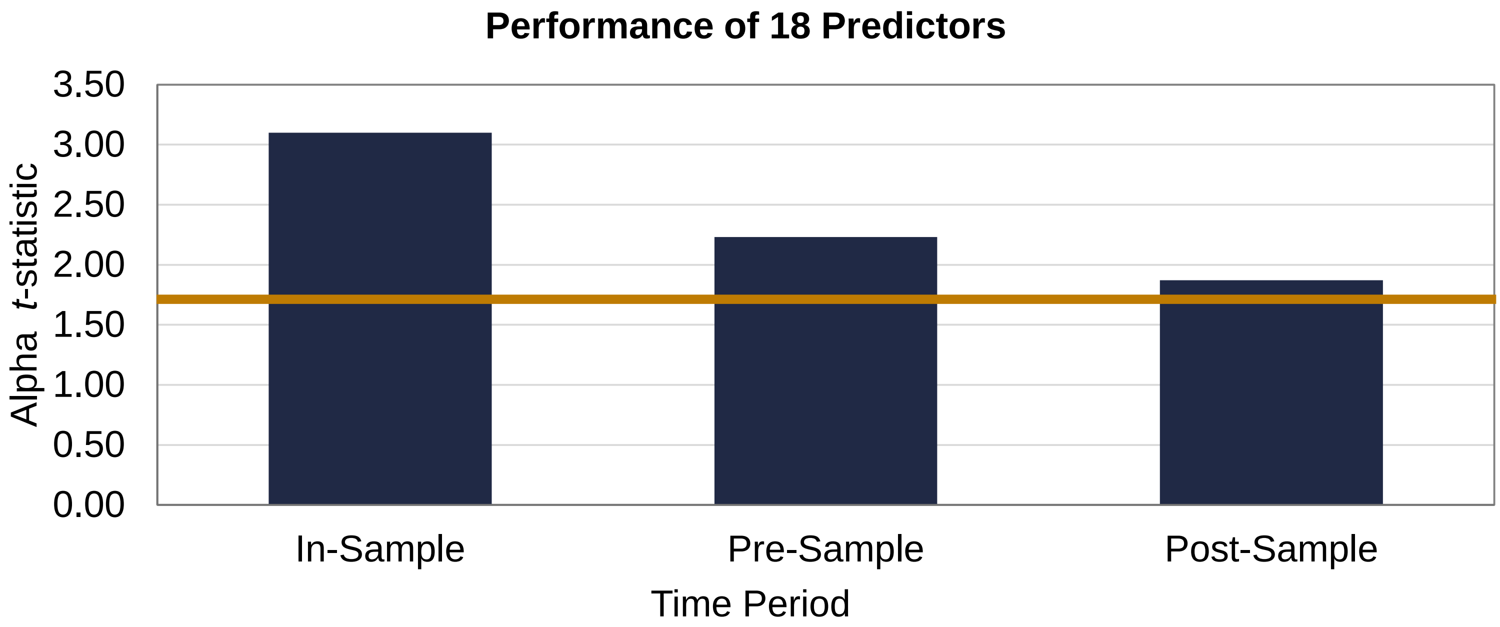
Out-of-Sample Tests



"The degree of predictability... falls by at least half post-sample"

Source: Jones and Mo (2020)

Out-of-Sample Tests



"We find no evidence that the declines are the result of data snooping"

Source: Jones and Mo (2020)

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The Importance of Opportunity

As mentioned before, managers also need **opportunity**

- Opportunities vary over time and across markets
  - Therefore, the value created by an active manager's **skill** and **conviction** will vary depending on *when* and *where* those traits are deployed
- Luckily, research has found indicators of both the 'right place' and the 'right time' to rely most heavily on active management

The Right Place

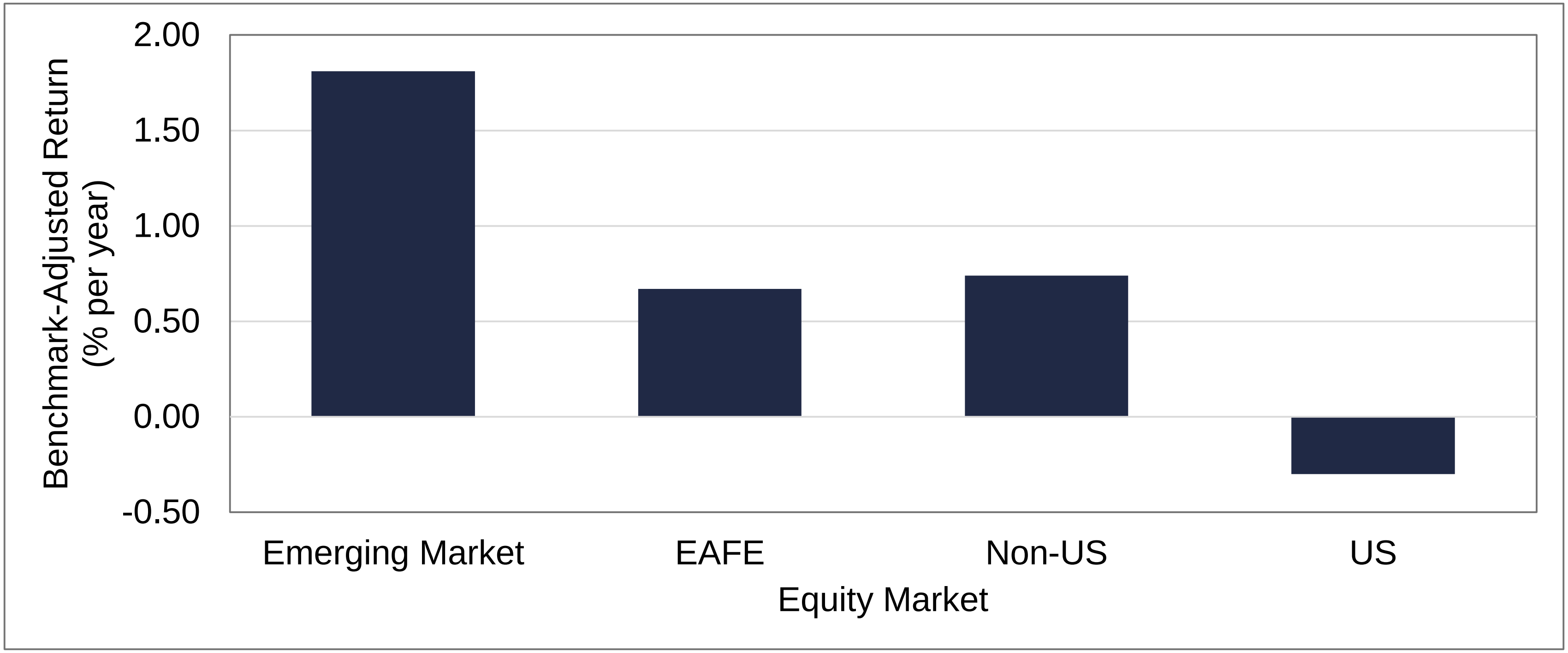
Hoberg, Kumar, and Prabhala (2018)

“When competition is high in a given style market, funds are less likely to generate sustained alpha”

Dyck, Lins, and Pomorski (2013)

“The benefits from active management are the highest … where potential deviations from fundamental values are likely to be the largest, and where potential competition from other sophisticated investors is likely to be the lowest”

Variation Across Equity Markets



Source: Dyck, Lins, and Pomorski (2013)
EAFE (developed markets of Europe, Australasia, and Far East)

Competition and the U.S. Equity Market

Barras, Scaillet, and Wermers (2010)

"We observe that the proportion of skilled funds decreases from 14.4% in early 1990 to 0.6% in late 2006"

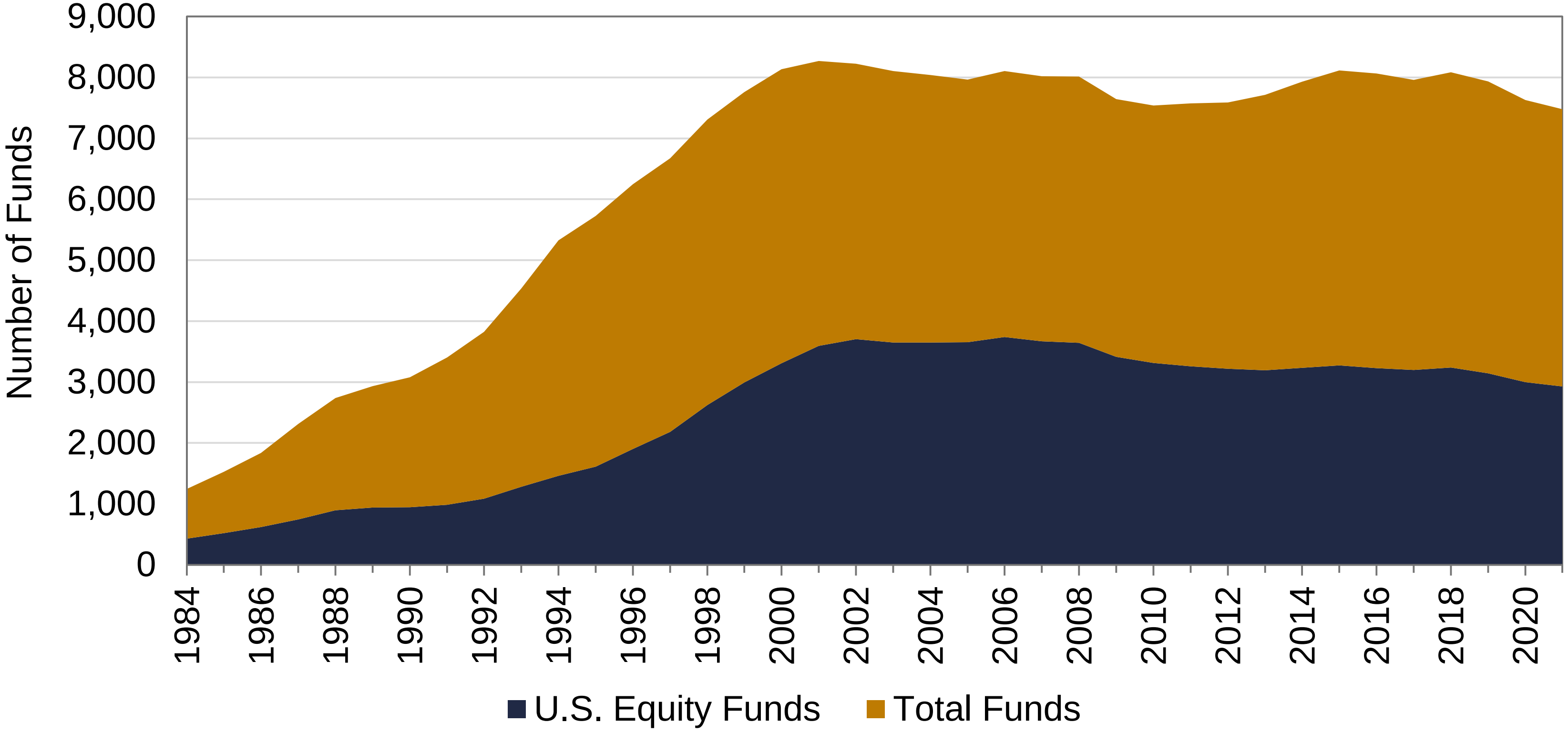
Kosowski, Timmermann, Wermers, and White (2006)

"Either markets have become more efficient, or competition among the large number of new funds has reduced the gains from trading"

Pastor, Stambaugh, and Taylor (2015)

"We also find that the active management industry has become more skilled over time. This upward trend in skill coincides with industry growth, which precludes the skill improvement from boosting fund performance"

Increase in Mutual Fund Competition



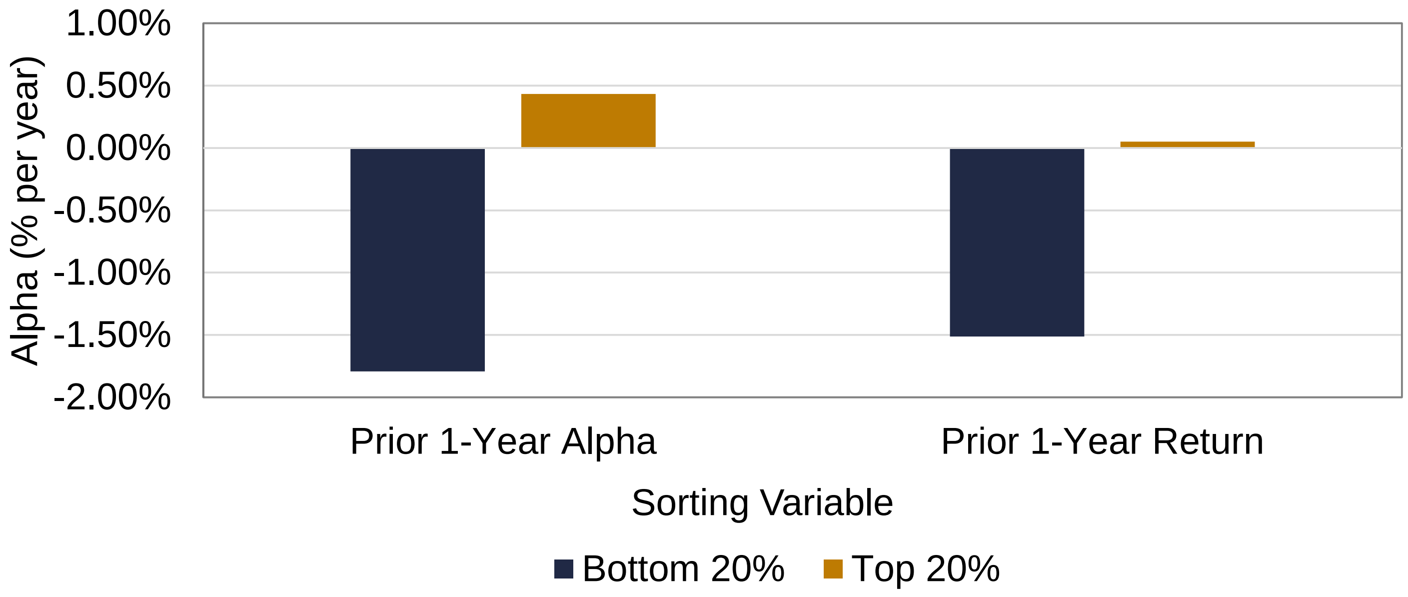
Source: ICI Factbook 2022

Are Bond Markets the Right Place?

- Bond markets are generally considered less efficient than equity markets
  - Accordingly, we would expect active management to have more value in bond markets than in equity markets
- Unfortunately, research on bond mutual funds is relatively limited and the available tools for analysis are underdeveloped
- We are not, however, completely without evidence…

Predicting Corporate Bond Fund Performance

"We find strong evidence that most alpha predictors are also effective for corporate bond funds over our entire sample period."



Source: Jones and Mo (2020)

Ongoing Research

- Despite the relatively low efficiency of bond markets, the passive management of bond funds is growing in popularity
  - From 2016 to 2021, the amount of assets invested in passive bond funds increased by 107%
  - Over the same time, passive bond fund assets as a proportion of all bond fund assets increased from 13% to 17%
- The passive management of bond funds, however, remains less popular than among other styles
- One explanation for this trend comes from my joint work with Yuekun Liu, in which we have found that:
  - The number of skilled bond fund managers is <u>increasing over time</u> and skilled bond managers can be <u>readily identified in advance</u>
- Another explanation comes from my joint work with Jaewon Choi and Martijn Cremers, in which we have found that:
  - Bond funds are <u>highly active</u> and the most active bond funds <u>persistently outperform</u>

Source: ICI Factbook 2022

The Right Time

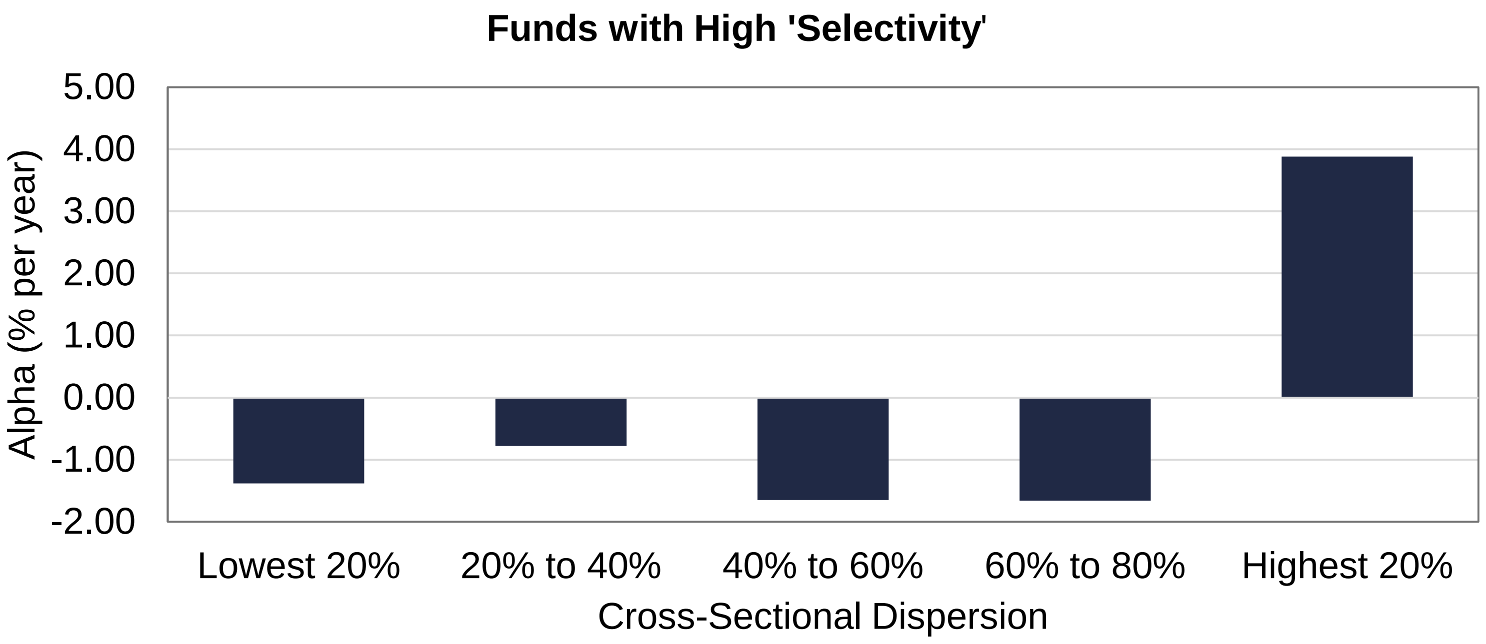
Pastor, Stambaugh, and Taylor (2017)

“Our results indicate that funds' profit opportunities vary over time, and that funds have the ability to identify and exploit these opportunities”

von Reibnitz (2017)

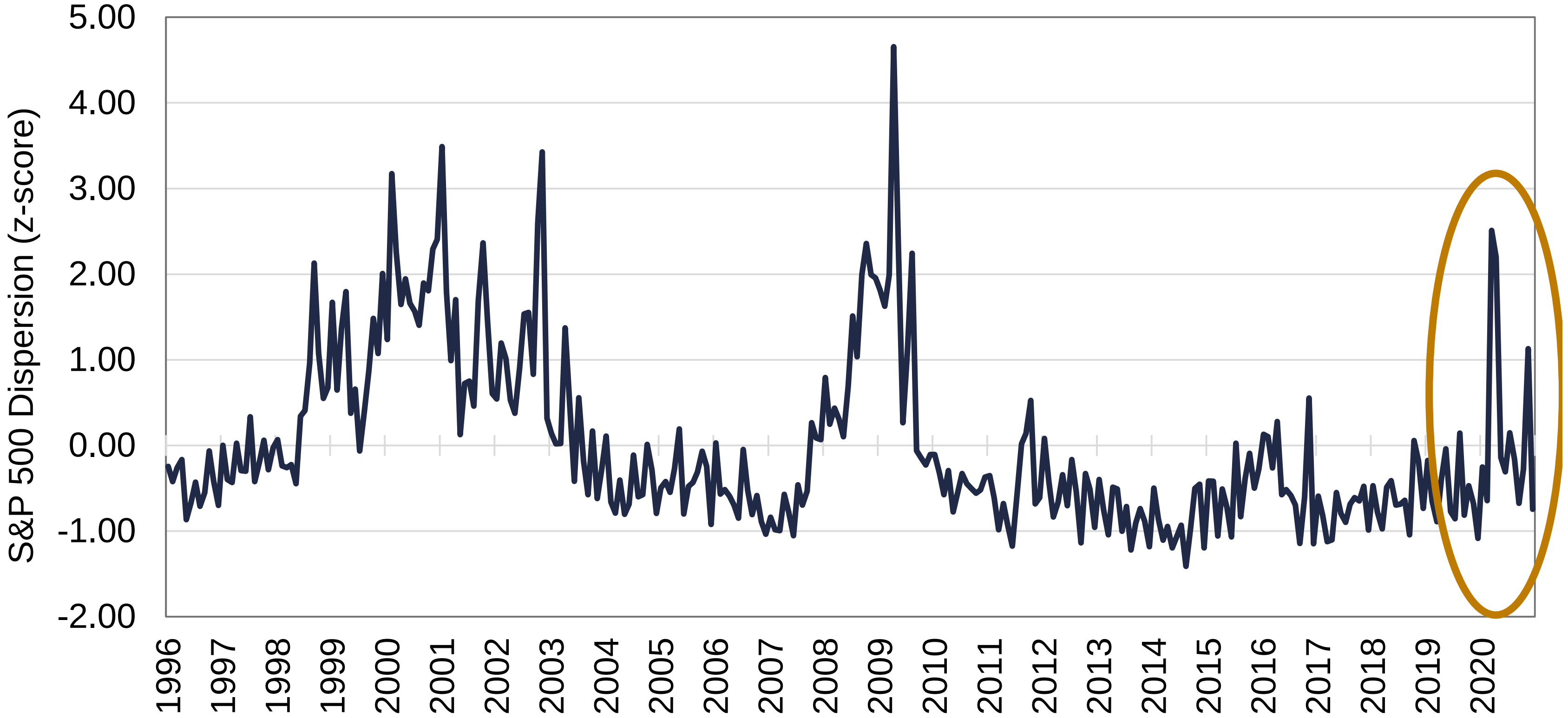
“Active opportunity in the market… significantly influences fund performance. Active strategies have the greatest impact on returns during periods of high dispersion”

Cross-Sectional Dispersion of Stock Returns



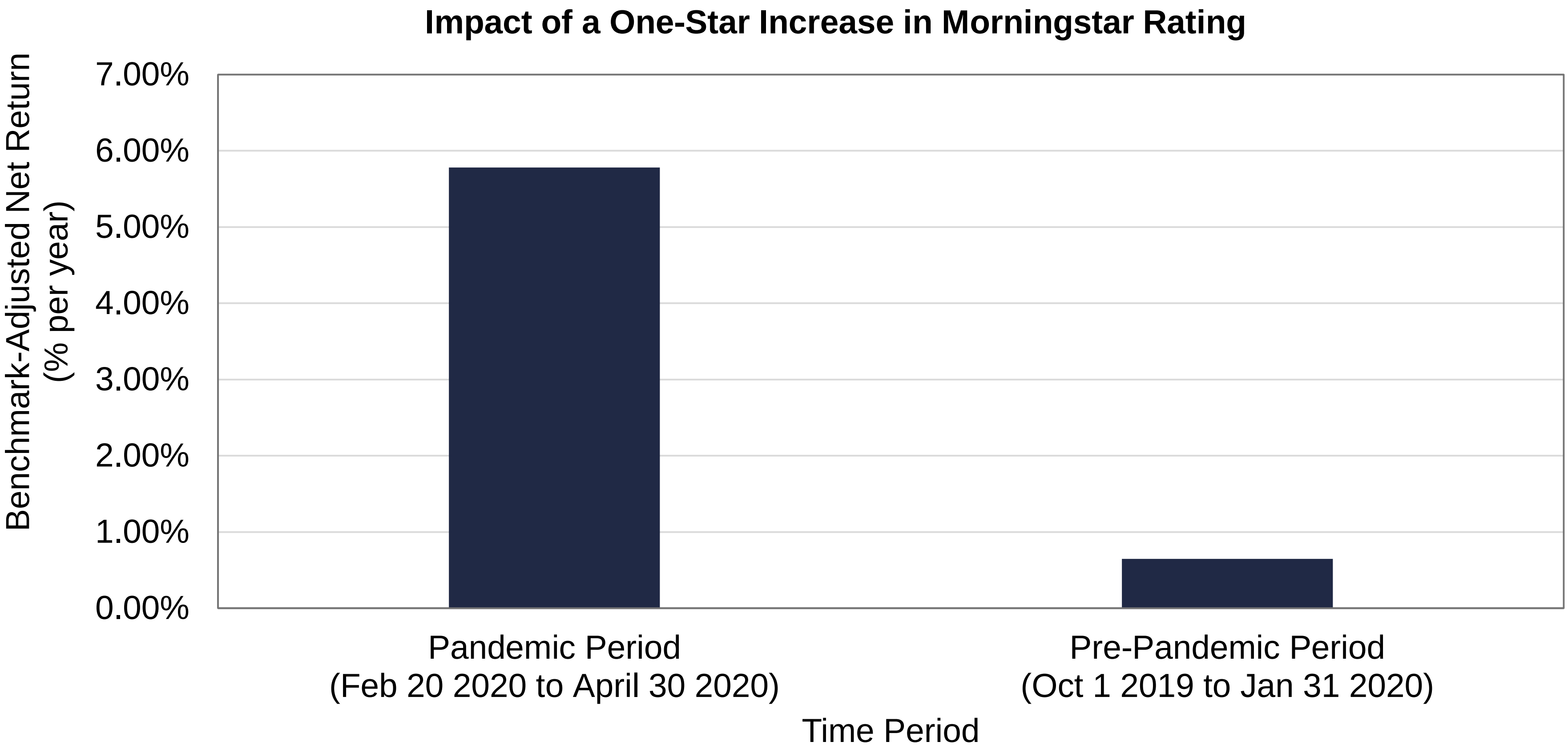
Source: von Reibnitz (2017)

When is Dispersion High?



Source: Self-Calculated – Following von Reibnitz (2017)

Pandemic Performance



Source: Pastor and Vorsatz (2020)

“But What About…”

- There is a lot we don’t have time to cover!

  - Hybrid, REIT, sector, ESG, and target date funds
  - Separately managed accounts, pension funds, and hedge funds
  - Regulation, fund companies, investor behavior, and manager behavior
  - Research methodology, including survivorship bias and reverse survivorship bias

If you want to know more about these topics, see our complete literature review:

http://bit.ly/ActiveManagementPaper

Key Takeaways from the Academic Research

1. Active management is more promising for investors than the ‘conventional wisdom’ claims

   There is less consensus among researchers than reports suggest

2. A successful active manager must have skill and conviction

   Look for managers that are ***truly active***, ***patient***, ***concentrated***, and ***unique***

3. A successful active manager must have opportunities in their market

   Look for markets with ***low competition***, ***low efficiency***, and ***high dispersion***

Questions & Answers

Touchstone Securities, Inc., has partnered with Professor Martijn Cremers to provide consulting services. Touchstone and Martijn Cremers, Jon Fulkerson, and Tim Riley are independent of each other.

Active Share measures the percentage of the Fund's holdings that differ from those of the benchmark. It is calculated by taking the sum of the absolute difference between all of the holdings and weights in the portfolio and those of the benchmark holdings and weights and dividing the result by two. Index performance is not indicative of fund performance. Investing in an index is not possible. Active Share is not a performance measurement. There are no assurances that any strategy or investment approach will meet its objectives. This information should not be considered as investment advice or a recommendation of any particular security, strategy or investment product. Past performance is not indicative of future results.

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