



NOVUS 

Bringing Transparency to Liquid Alts

Montebello Institutional Dialogue

Montebello, Quebec, 17 October 2016

Topics for Today

Secular trends

What are the trends undermining active management?

Public data

How do public data offer an opportunity to exploit such trends?

Failed attempts

What's been the experience thus far (and why did it disappoint)?

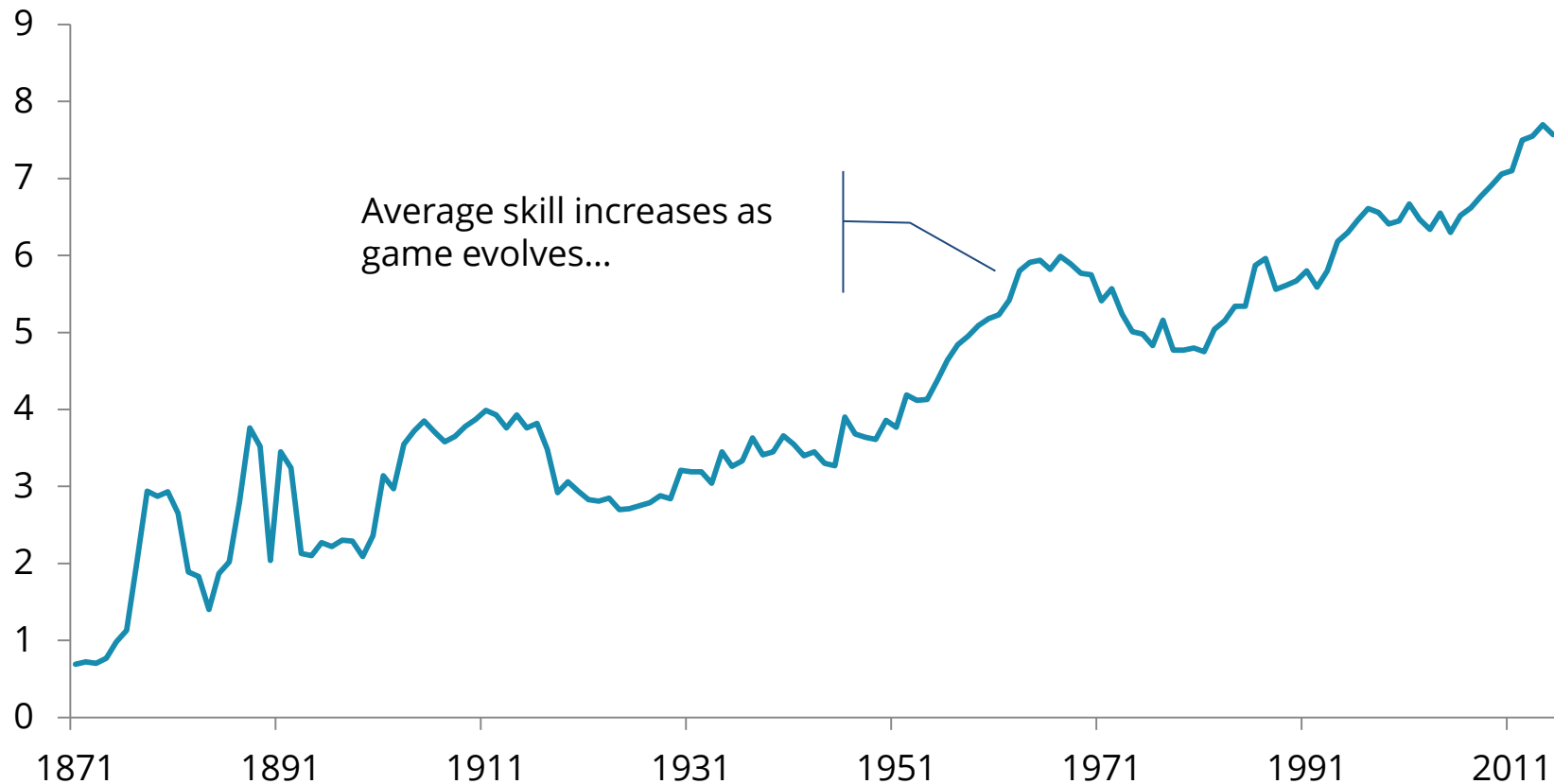
Novus approach

What's new in the approach we propose?

Zero Sum Games (1 of 2) – Baseball (Skill)

As the game gets played, the average skill of participants increases...

Strike-out per MLB game¹



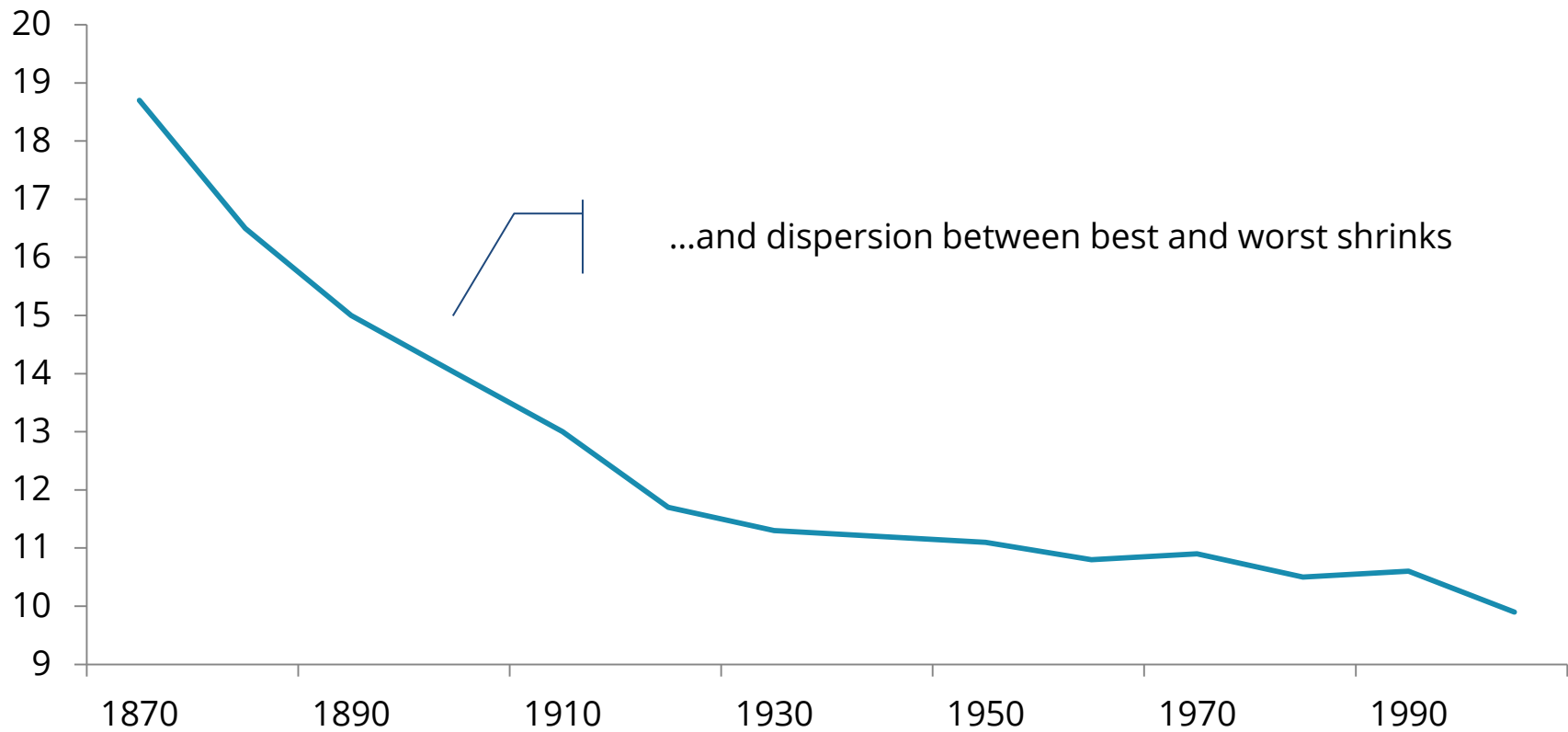
1. Average # of players eliminated because of three strikes per Major League Baseball (MLB) game, Novus analysis. Source: www.baseball-reference.com

Zero Sum Games (2 of 2) – Baseball

(Dispersion)

...and the dispersion among players decreases.

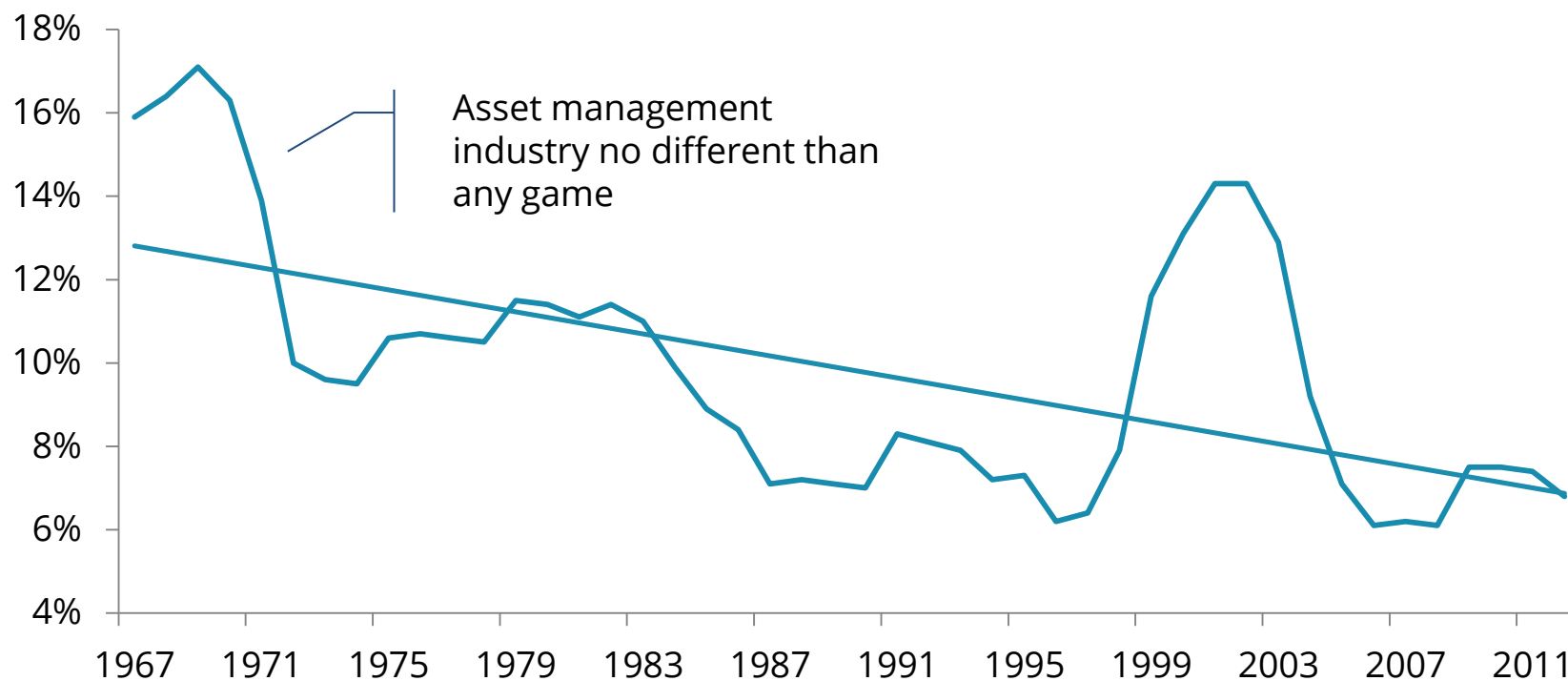
Batting average dispersion



Investing Game – Mutual Fund Alpha

Investing is no exception. Mutual fund alpha dispersion slowly decreasing.

Standard deviation of excess returns¹



"If you've been in the game 30 mins and you don't know who the Patsy is, you're the Patsy²"

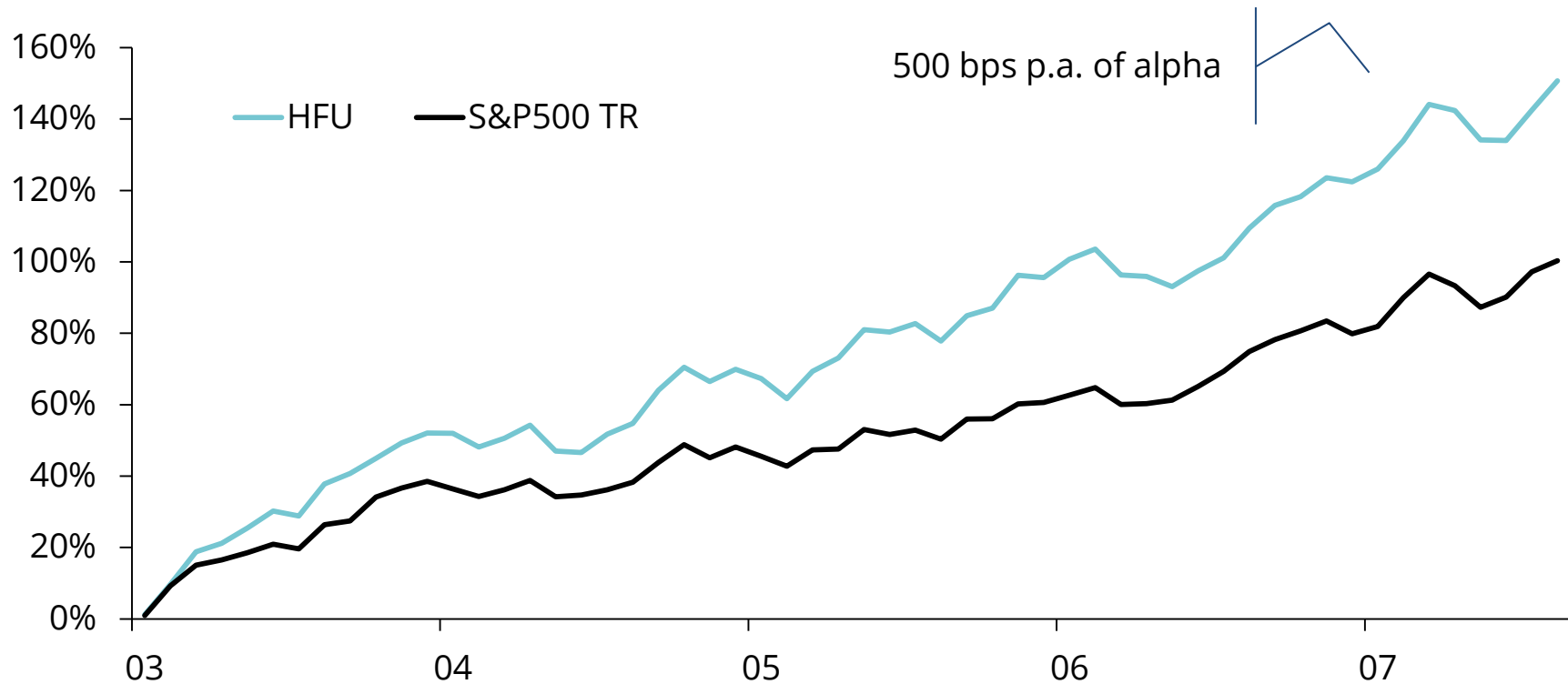
1. Calculated for US Large Cap Funds. Source: Peter L. Bernstein, "Where, Oh Where Are the .400 Hitters of Yesteryear?", *Financial Analysts Journal*, Vol. 54, No. 6, Nov / Dec 1998, 6-14.

2. Warren Buffett, Letter to Shareholders, Berkshire Hathaway, 1987.

Investing Game – Hedge Fund Alpha (1 of 2)

Up until the crisis, HFs were fairly immune...

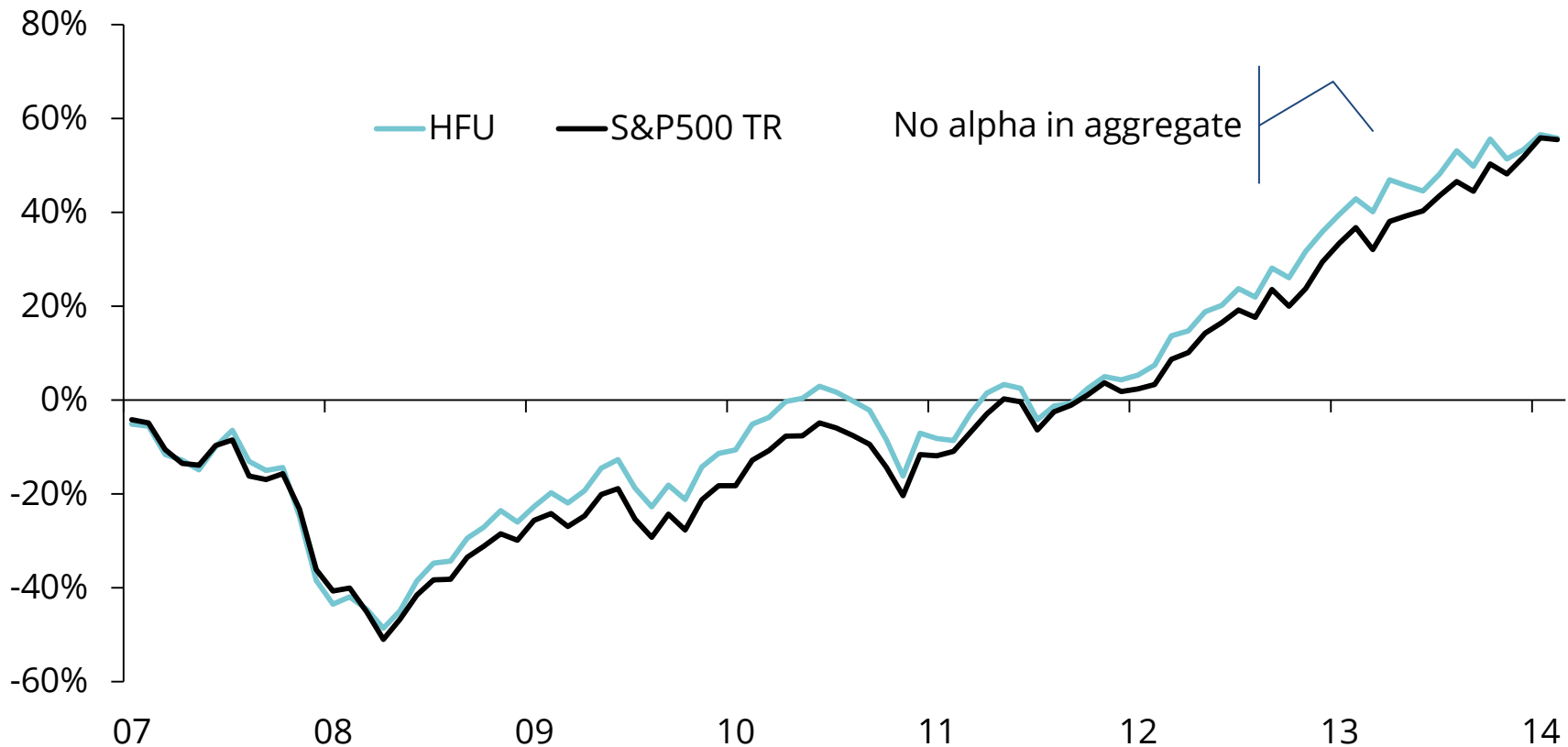
Cumulative returns (%)



Investing Game – Hedge Fund Alpha (2 of 2)

...but have mean reverted relatively quickly.

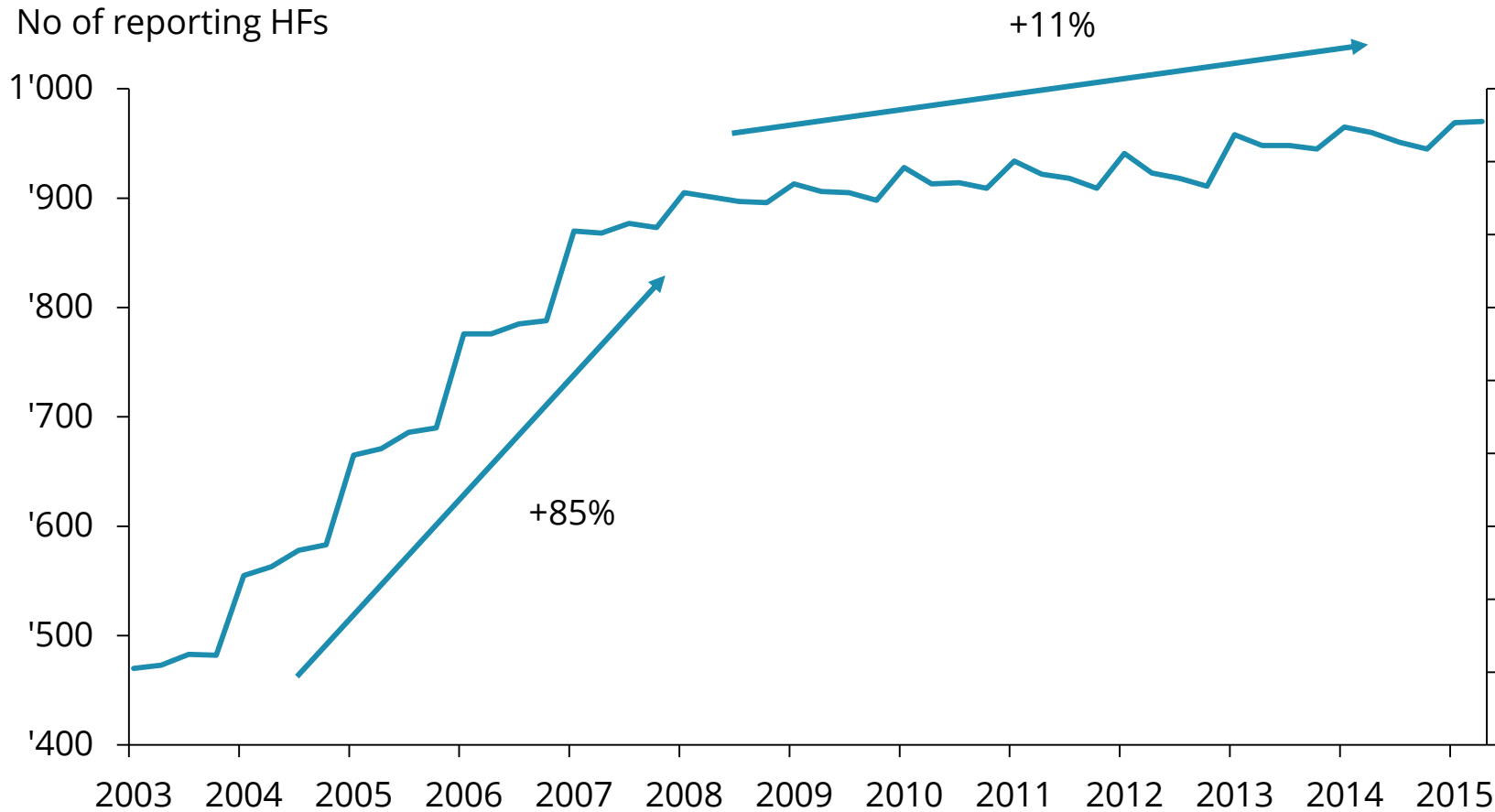
Cumulative returns (%)



More Players

Number of reporting HF's doubled over the last 13 years...

No of reporting HF's

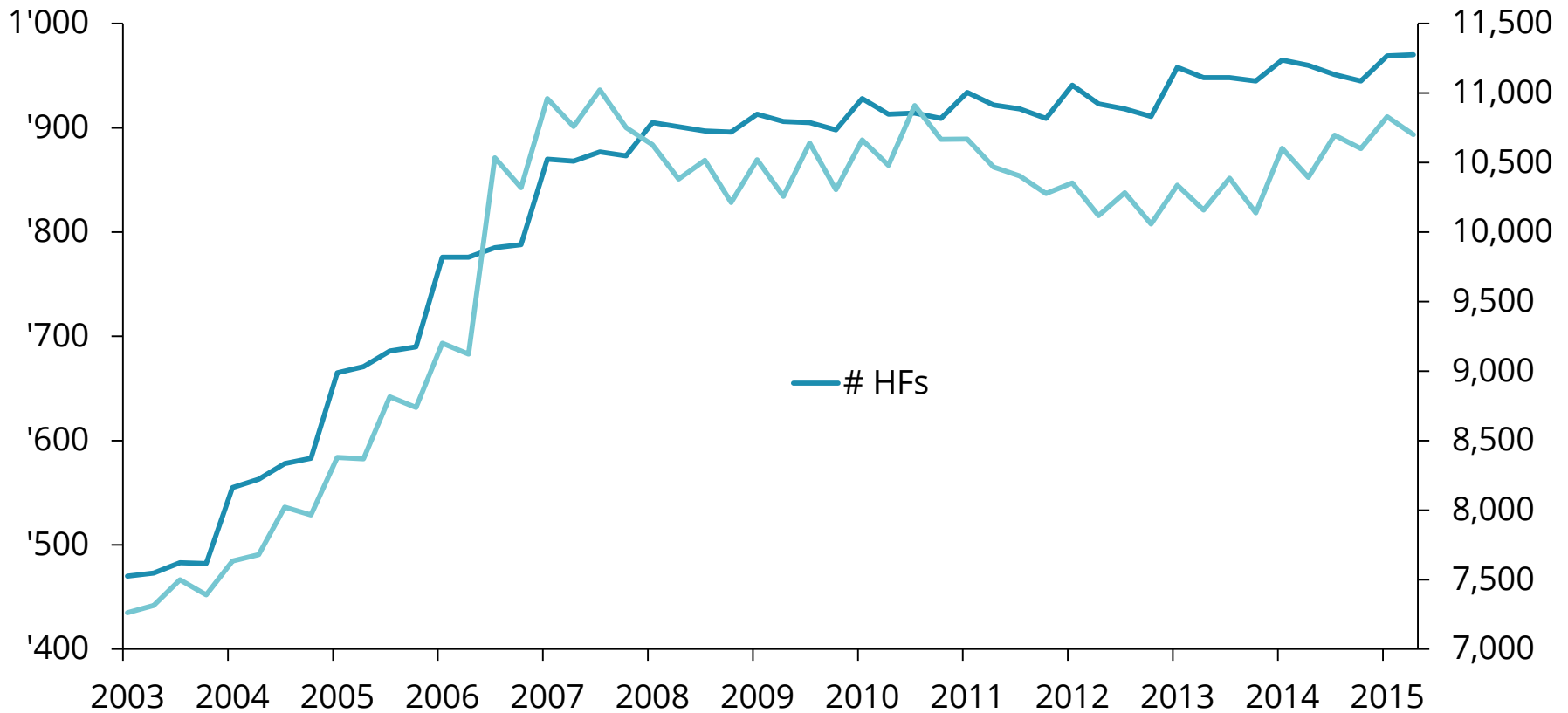


More Securities

...and although the number of securities held also increased, it did so in parallel...

No of reporting HFs

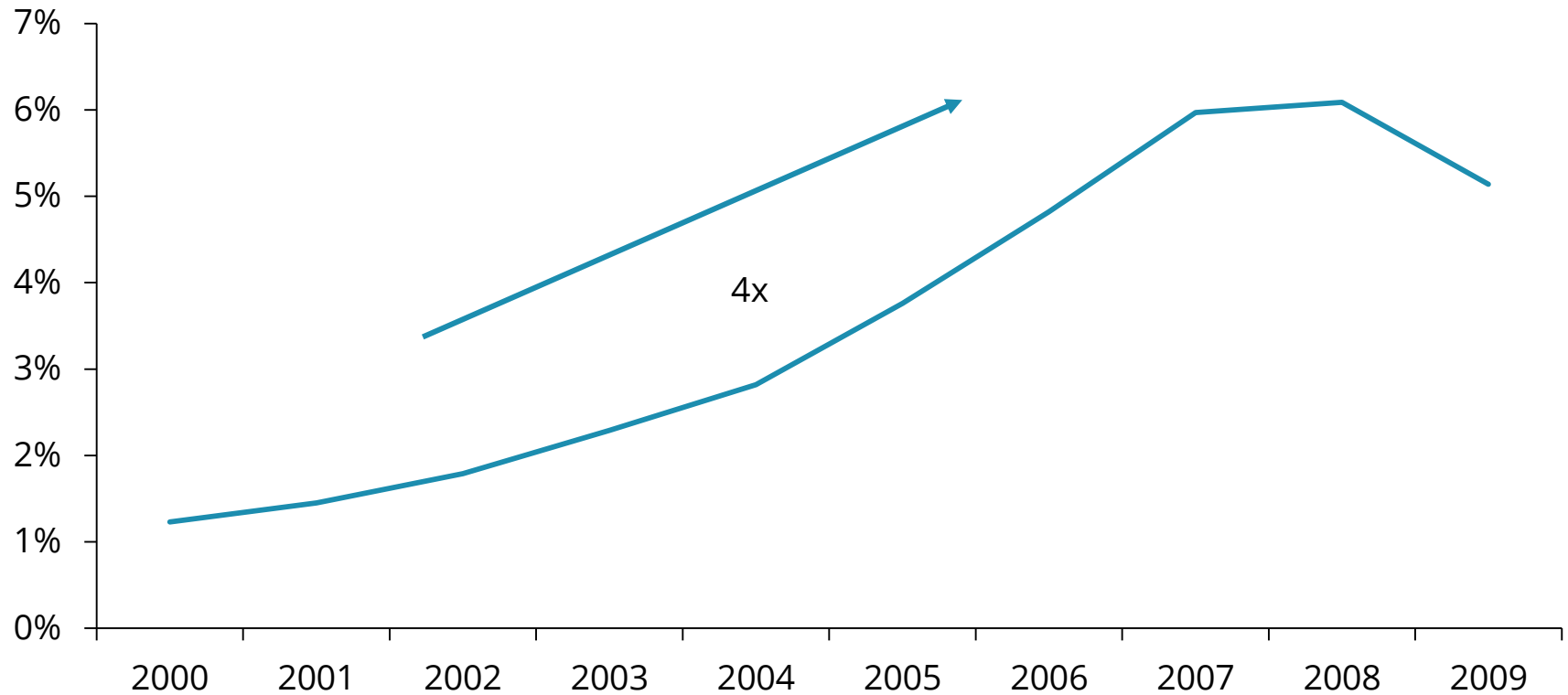
No of unique securities



More Group Ownership

...and although HFs are representing (**in aggregate**) a higher percent of the US stock market...

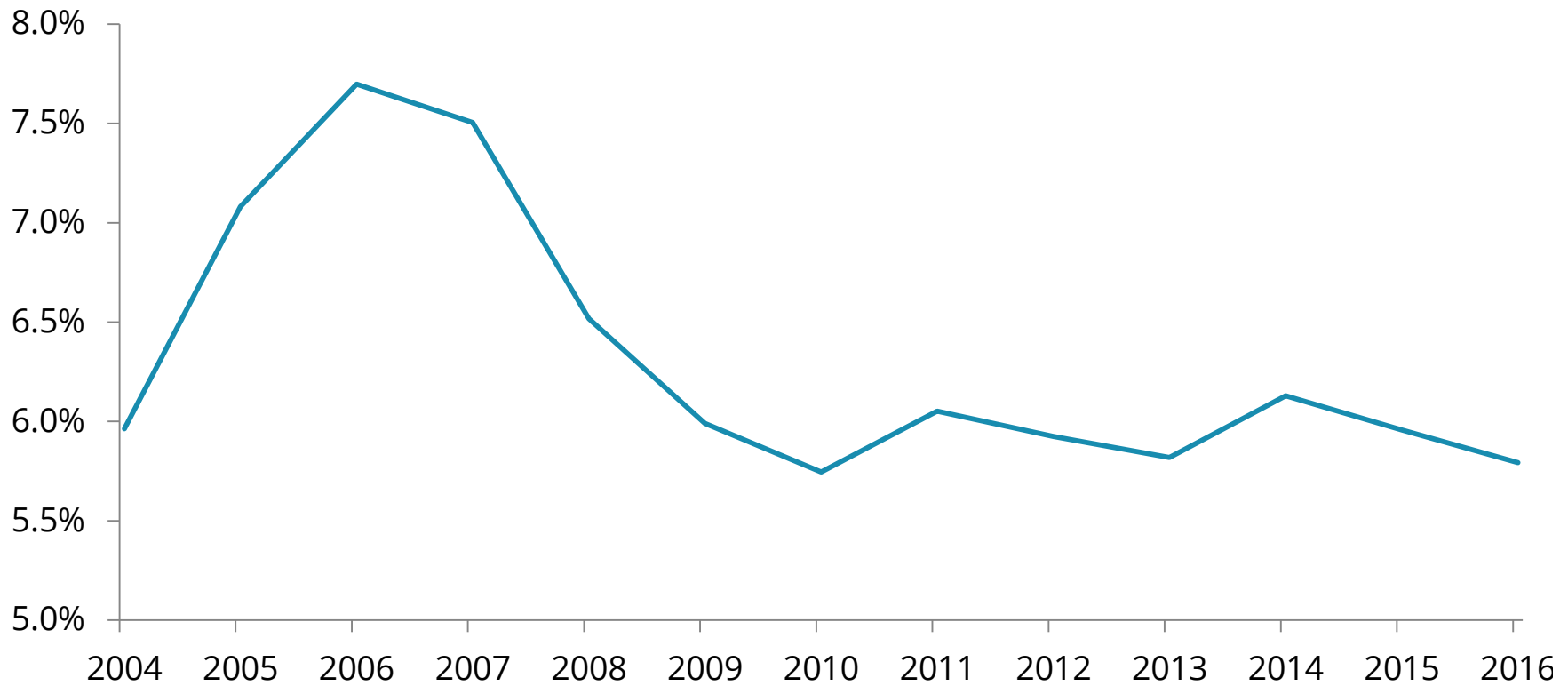
Hedge Fund Ownership of US Stock Market



Less Average Ownership

...the **median** ownership in each name has not increased compared to '05-'07 pre-crisis levels.

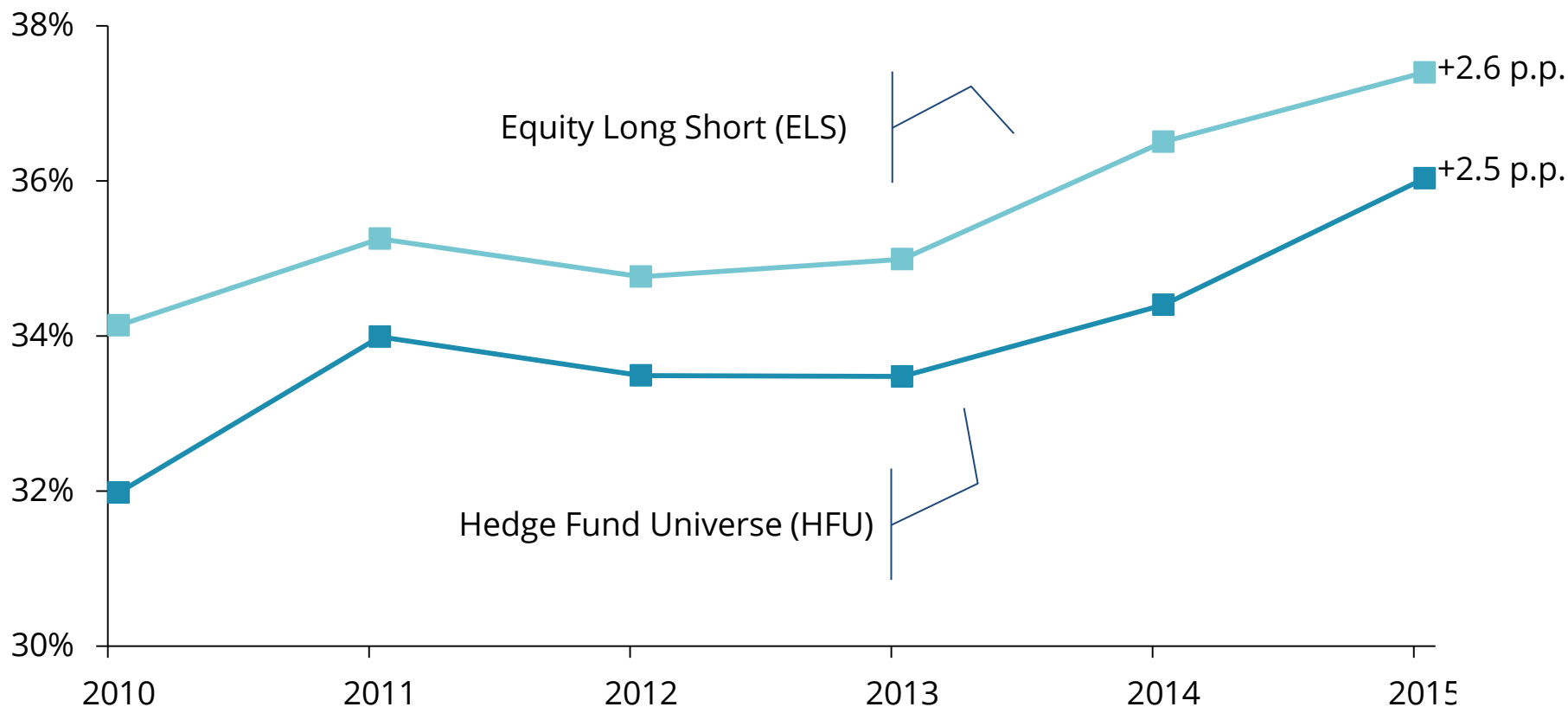
Median HF ownership (%)



Higher Concentration

Concentration is on the rise – top 5 securities matter more – especially for fundamental Equity L/S (ELS).

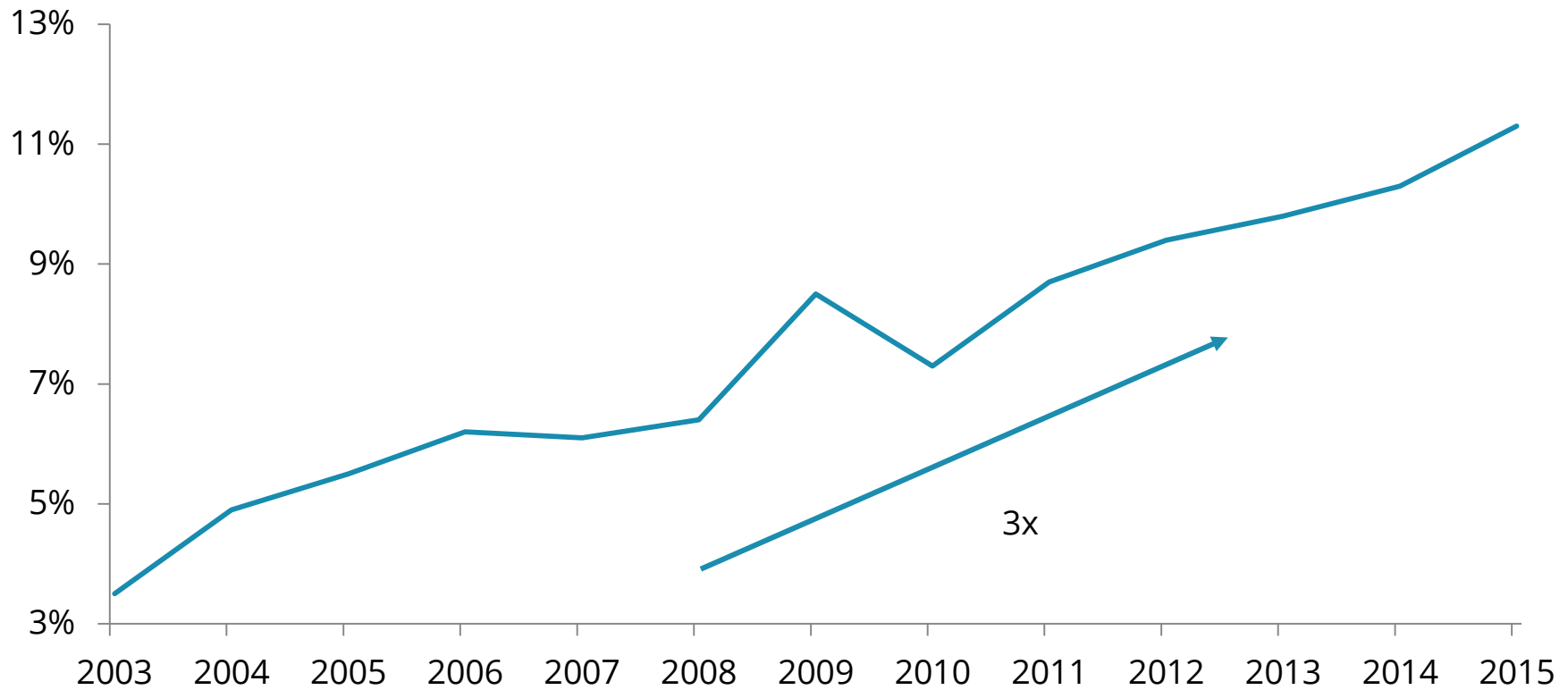
Top 5 as % of AUM



Higher Overlap

The overlap between positions across managers is increasing...

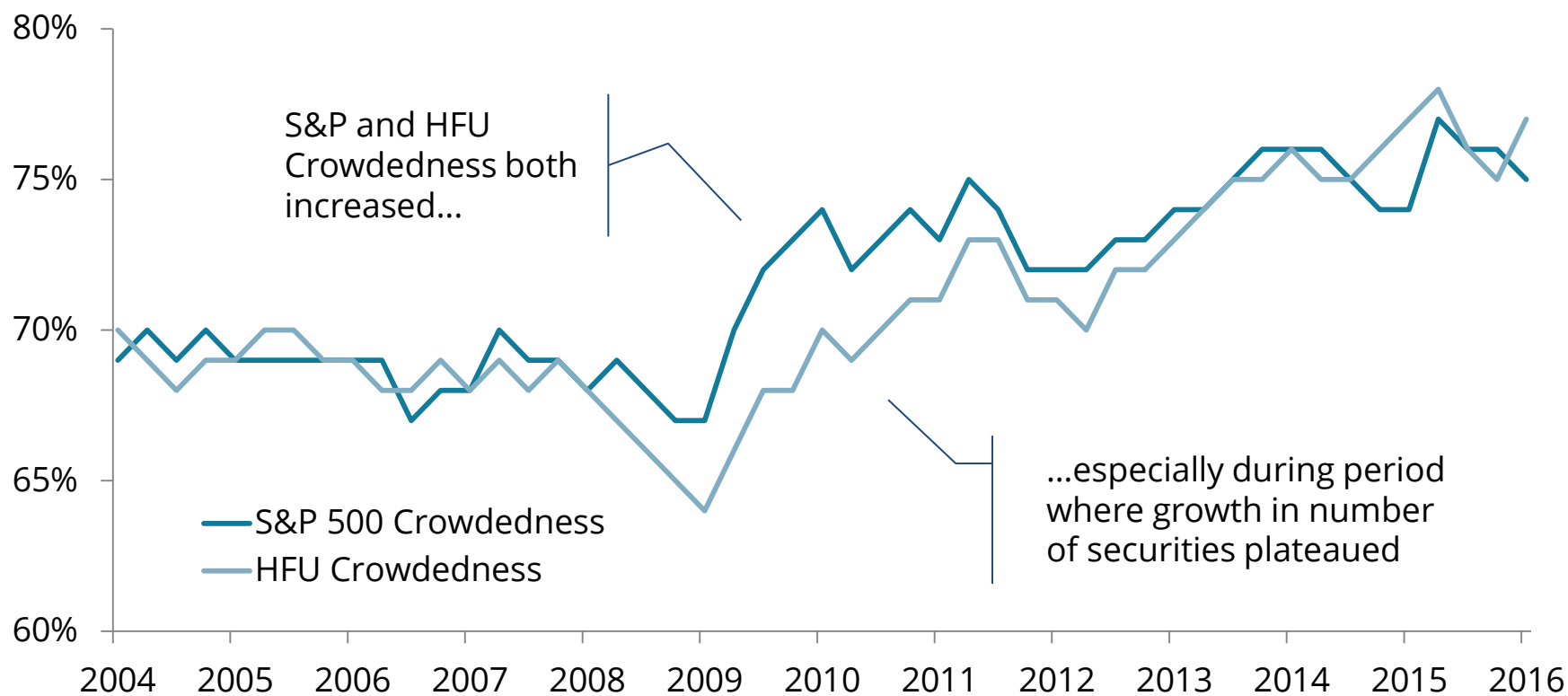
Overlap (%)



Higher Crowdedness

...so has crowdedness, especially since the beginning of the period where # of securities plateaued.

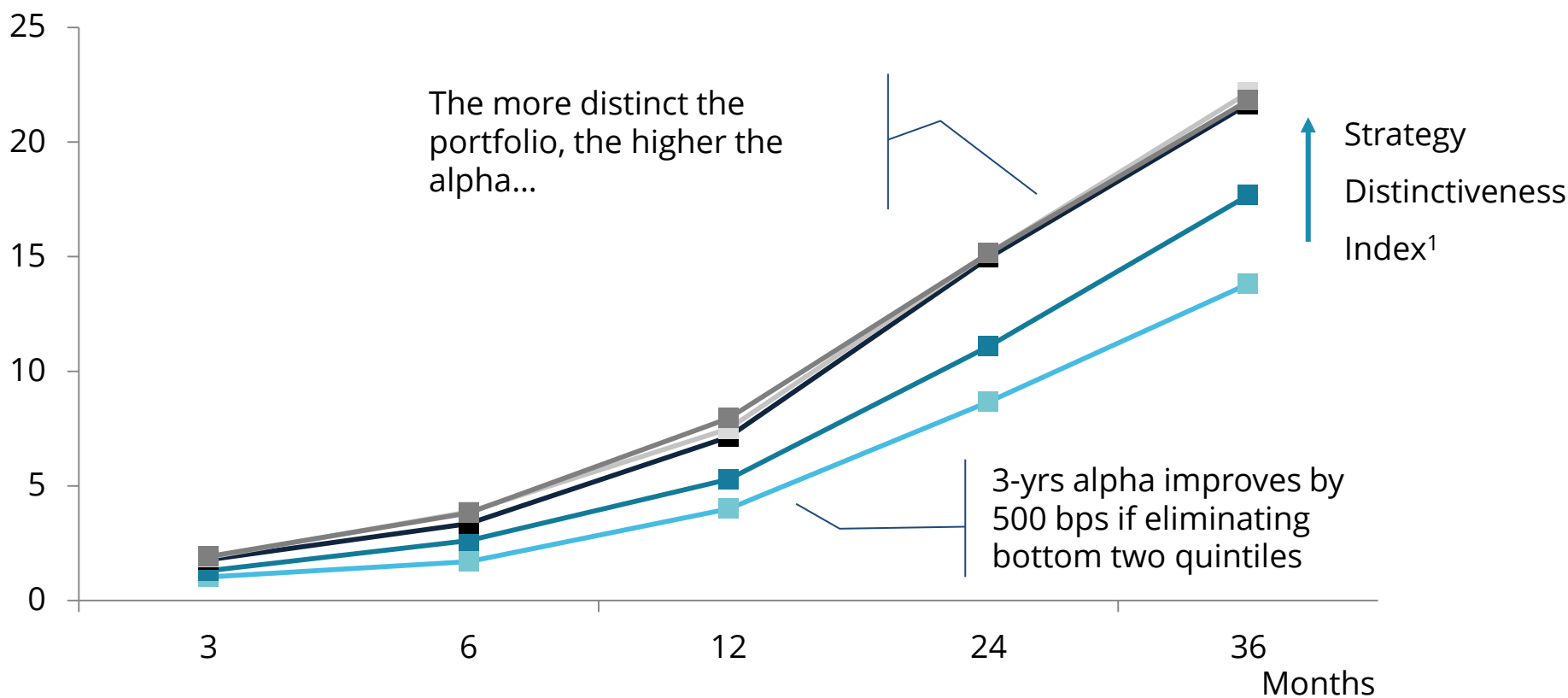
Crowdedness



Distinctiveness (1 of 2)

Few managers are opting to increase their distinctiveness to generate higher returns...

Alpha² (%)



1. Measured as $1 - \rho$ where ρ indicates the correlation between a manager returns and the returns of its peers.

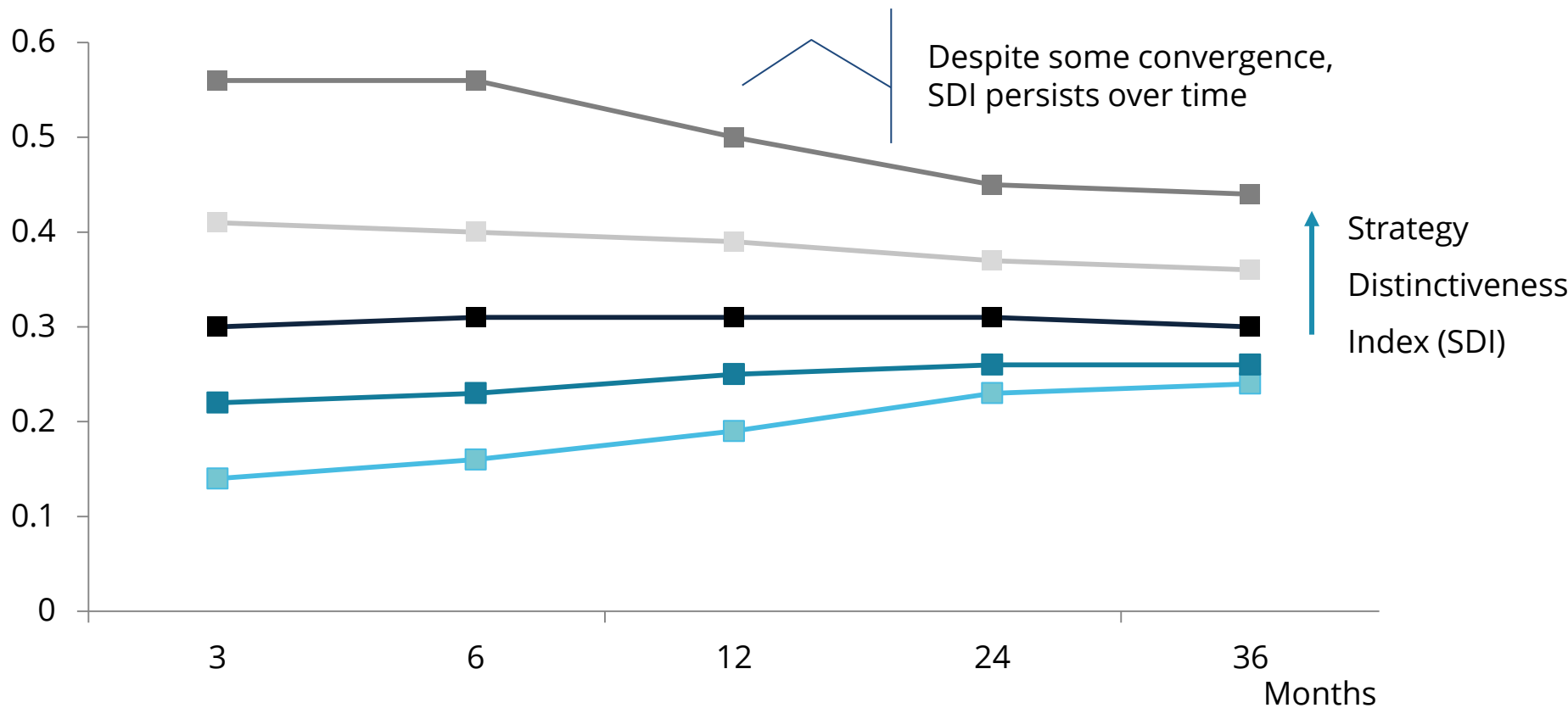
2. Measured as the FH7 factor alpha.

Source: "The Road Less Traveled: Strategy Distinctiveness and Hedge Fund Performance", Z. Sun, A. Wang, L. Zheng, September 2009 and Novus analysis.

Distinctiveness (2 of 2)

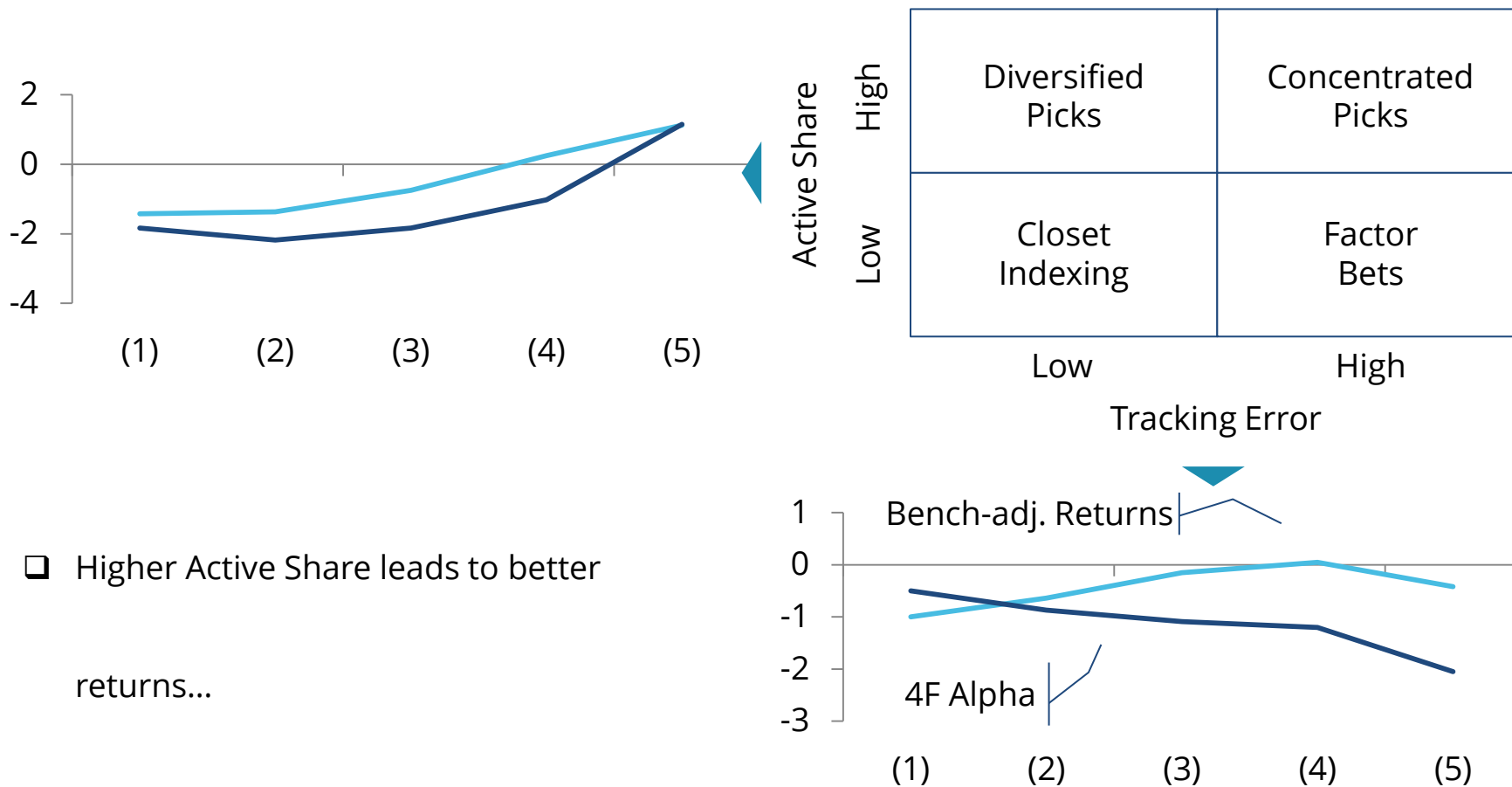
...and make it a lifetime choice

SDI quintiles over time



Active Share (More Distinctiveness)

Active Share (read: true distinctiveness) correlates with higher returns.



Higher Active Share leads to better

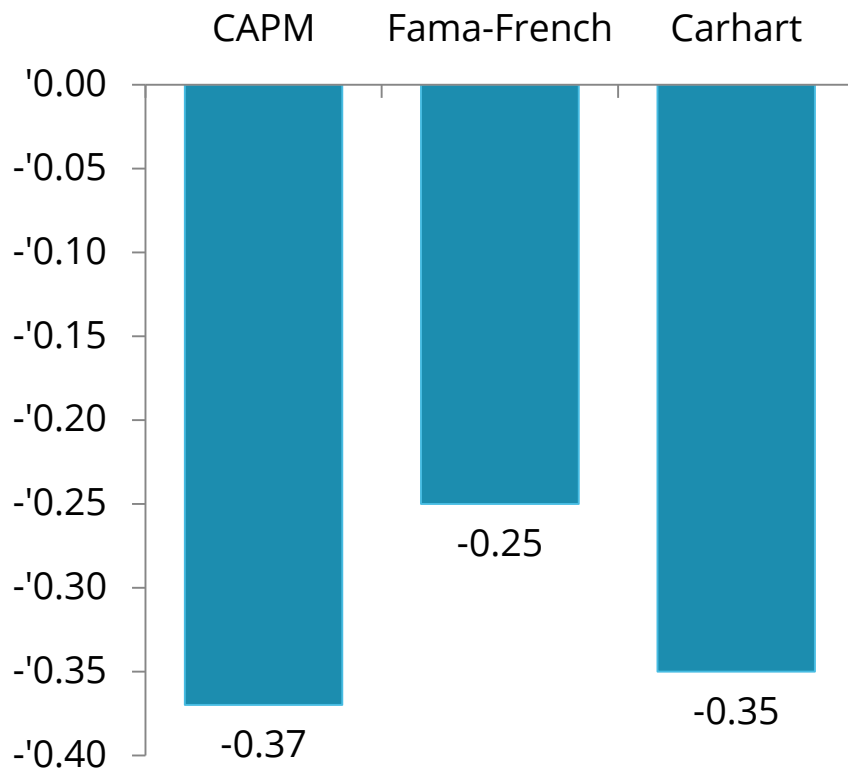
returns...

...while Tracking Error does not

Reliance on Public Information

The more you chase public opinions (as a mutual fund manager) the less you perform

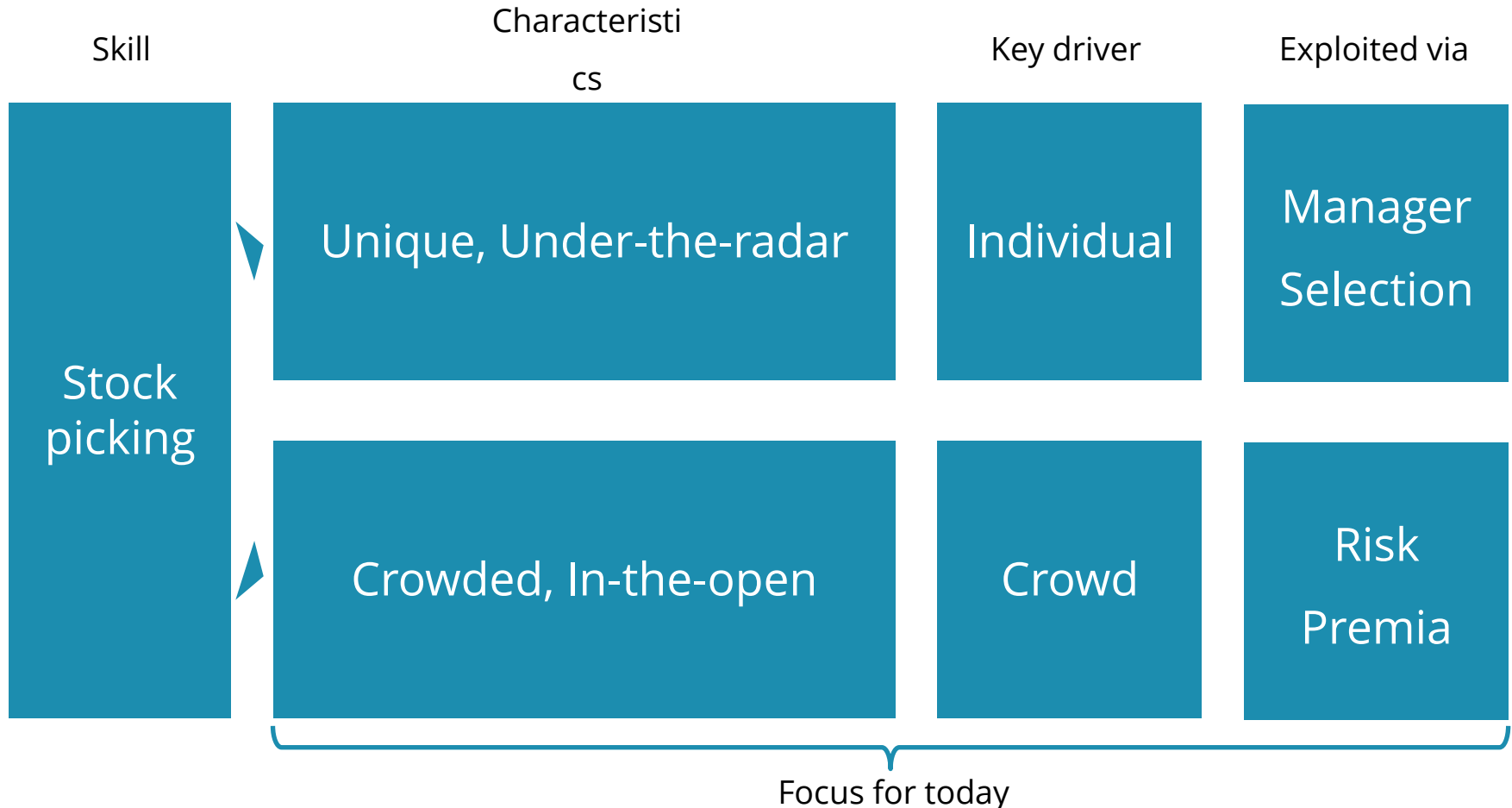
Alpha p.a. (%)



- *"we find...strong inverse relationship between RPI and... performance..."*
- *"... as well as fund flows"*

Stock Picking Bifurcation

Stock picking – as a skill – rapidly evolving in two direction – one of which can be replicated.



PUBLIC DATA

How public data offer an opportunity to exploit such trends

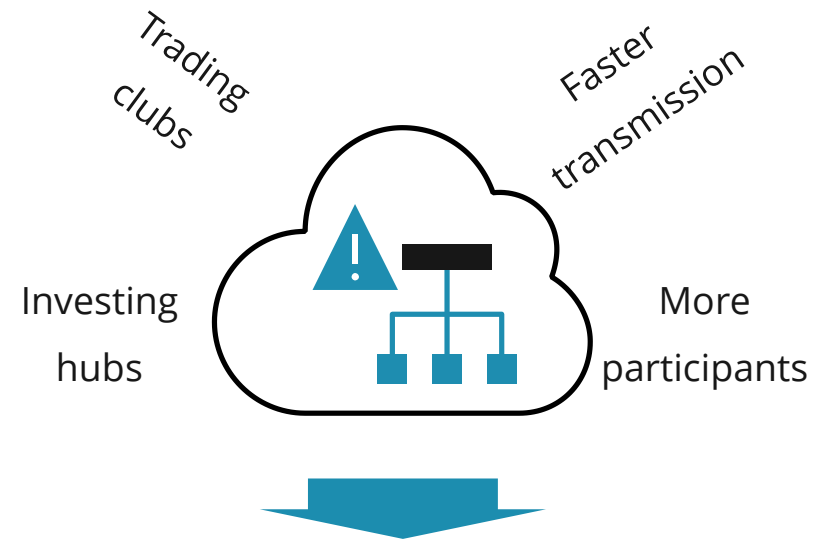
Public Alpha

More publicly available data and higher connectivity will favor strategies exploiting such trends.

More (public) data



Higher connectivity

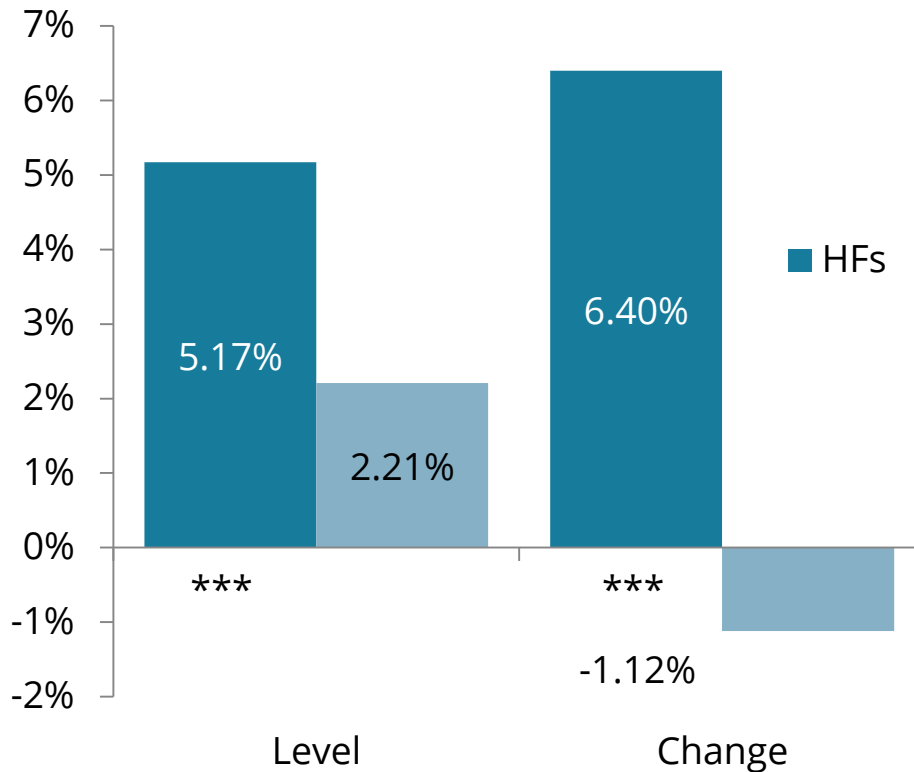


Few ideas travel faster, attract wider participation, stick for longer – *and it can be measured*

Alpha Content– The Good

Both levels and changes of HF ownership predict future stock returns...

Risk-adjusted returns (%)

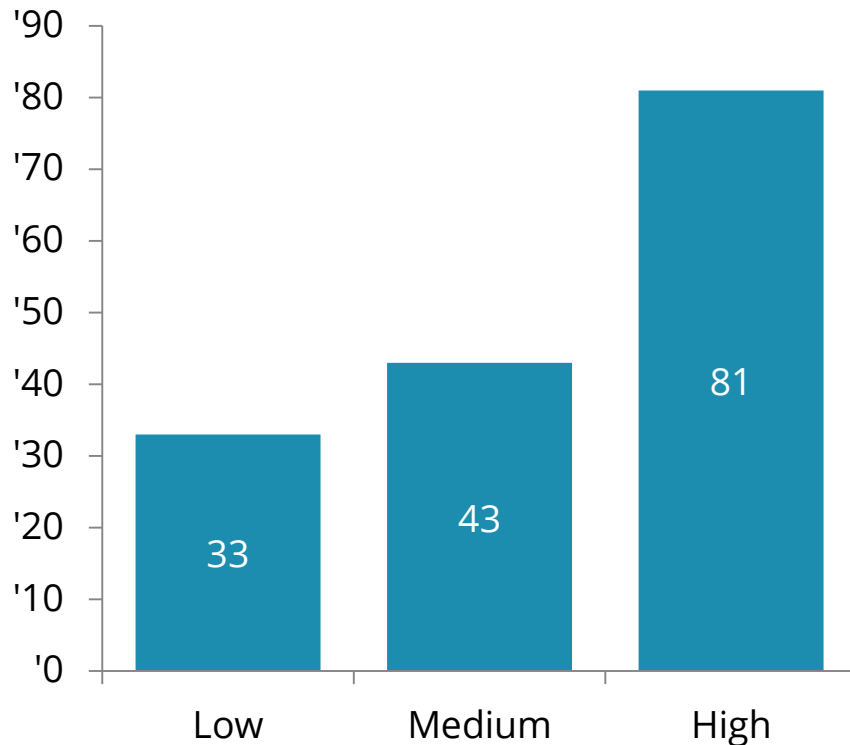


- "...both the level and change in HF stock holdings predict future return"
- "A 1- σ change in HF holdings results in 180 bps increase in stock returns p.a."

Alpha Content – The Very Good

Although the best ideas of managers generate alpha, the best ideas of highly concentrated managers generate more alpha than those of diversified managers.

Best idea alpha (bps)

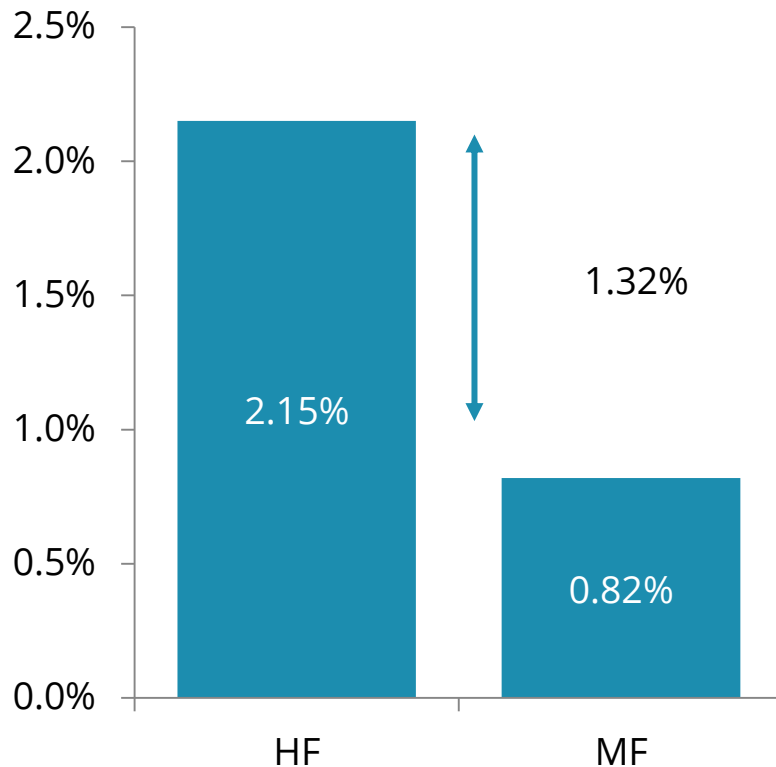


- *"...stock... with most conviction
outperforms by 1-4% per quarter...¹"*
- *"The results for top 5 are also strong"*
- *"Less liquid generate most of alpha... as
well as the least popular stocks"*

Alpha Content – The Bad

...but there is evidence that the impact is minimal....

Stock picking alpha (%)

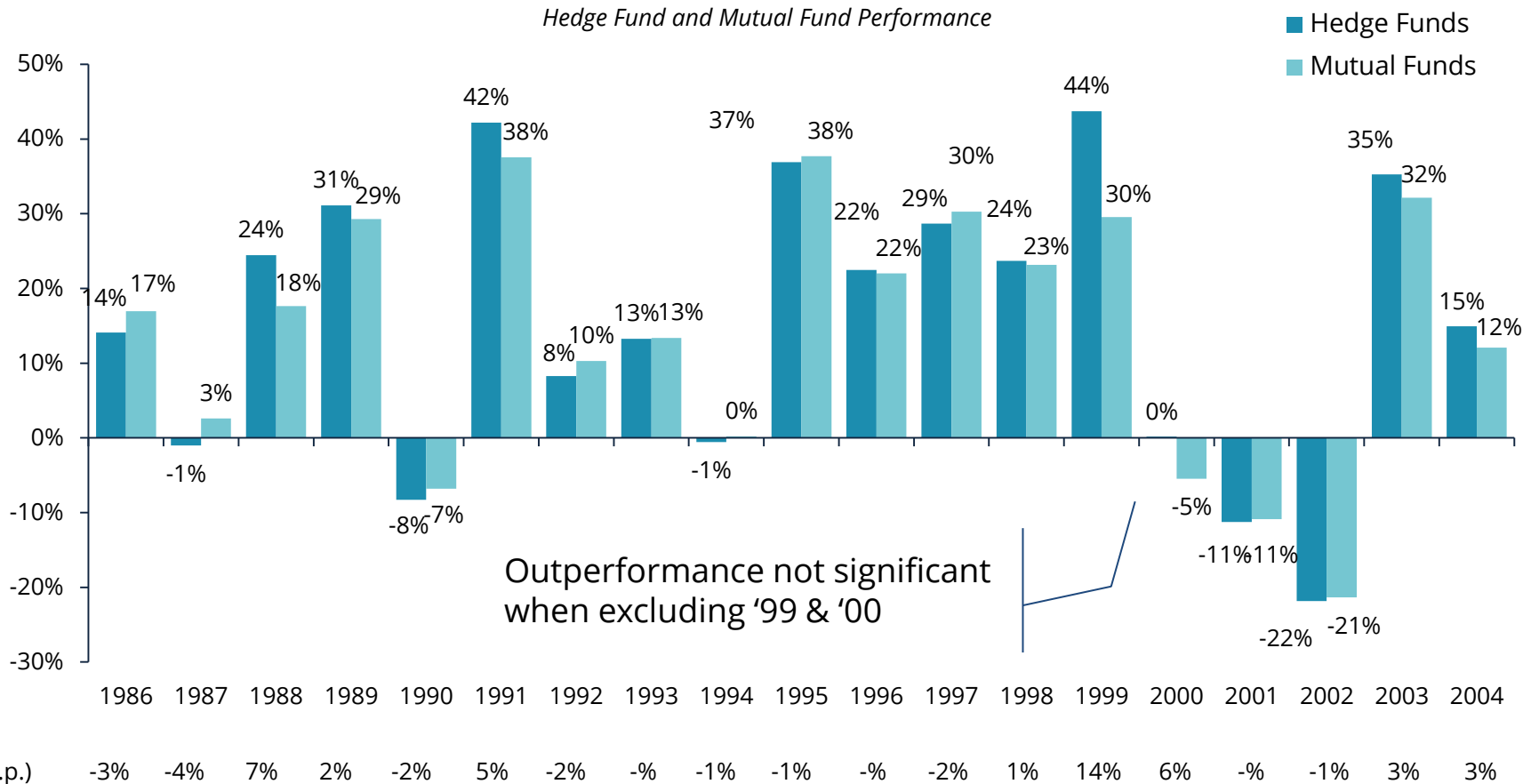


- ❑ *"...neither the change nor the level in fund holdings forecasts returns"*
- ❑ *"Most of this... is generated in '99 and '00"*
- ❑ *"...however, top funds by past history or stock selection exhibit some abnormal stock picking"*

Alpha Content – The Ugly

From '86 to '04, HF only outperformed MFs by 1.32% p.a., almost all of which was realized in '99 and '00.

Hedge Fund and Mutual Fund Performance



Note: The authors use stock holdings from 306 hedge fund holding companies from 1980 through to 2004.

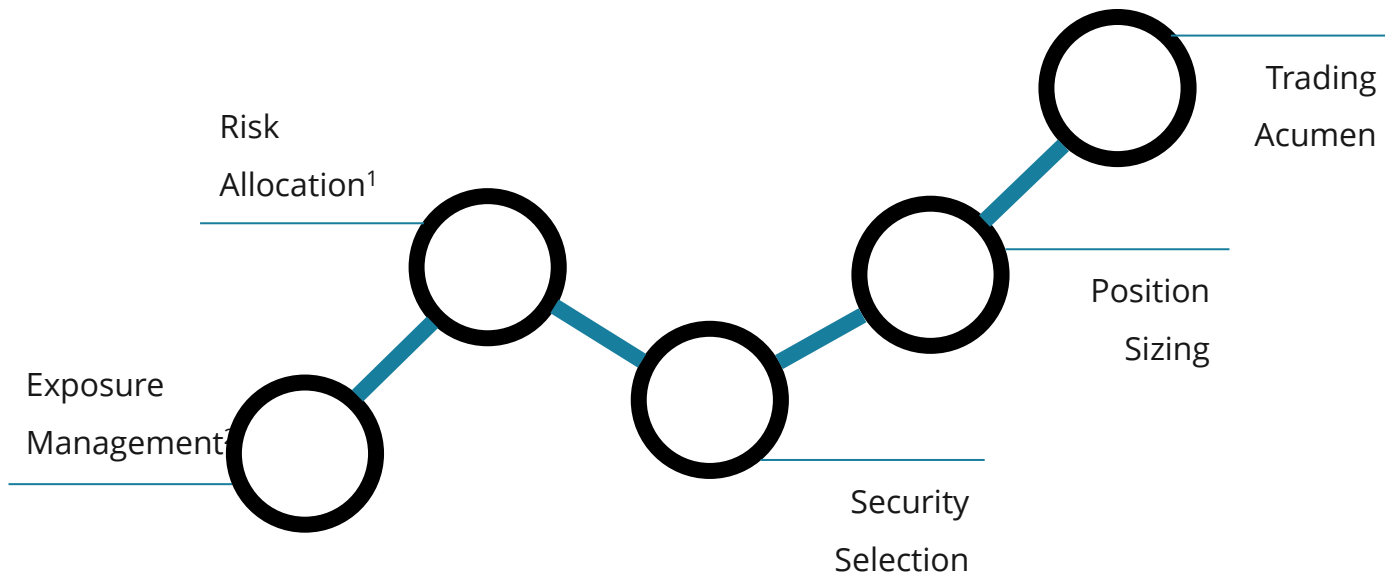
Source: "How Smart Are the Smart Guys? A Unique View from Hedge Fund Stock Holdings", J. M. Griffin, J. Xiu, May 2009. Novus analysis.

FAILED ATTEMPTS

What's been the experience thus far?

Skill Map

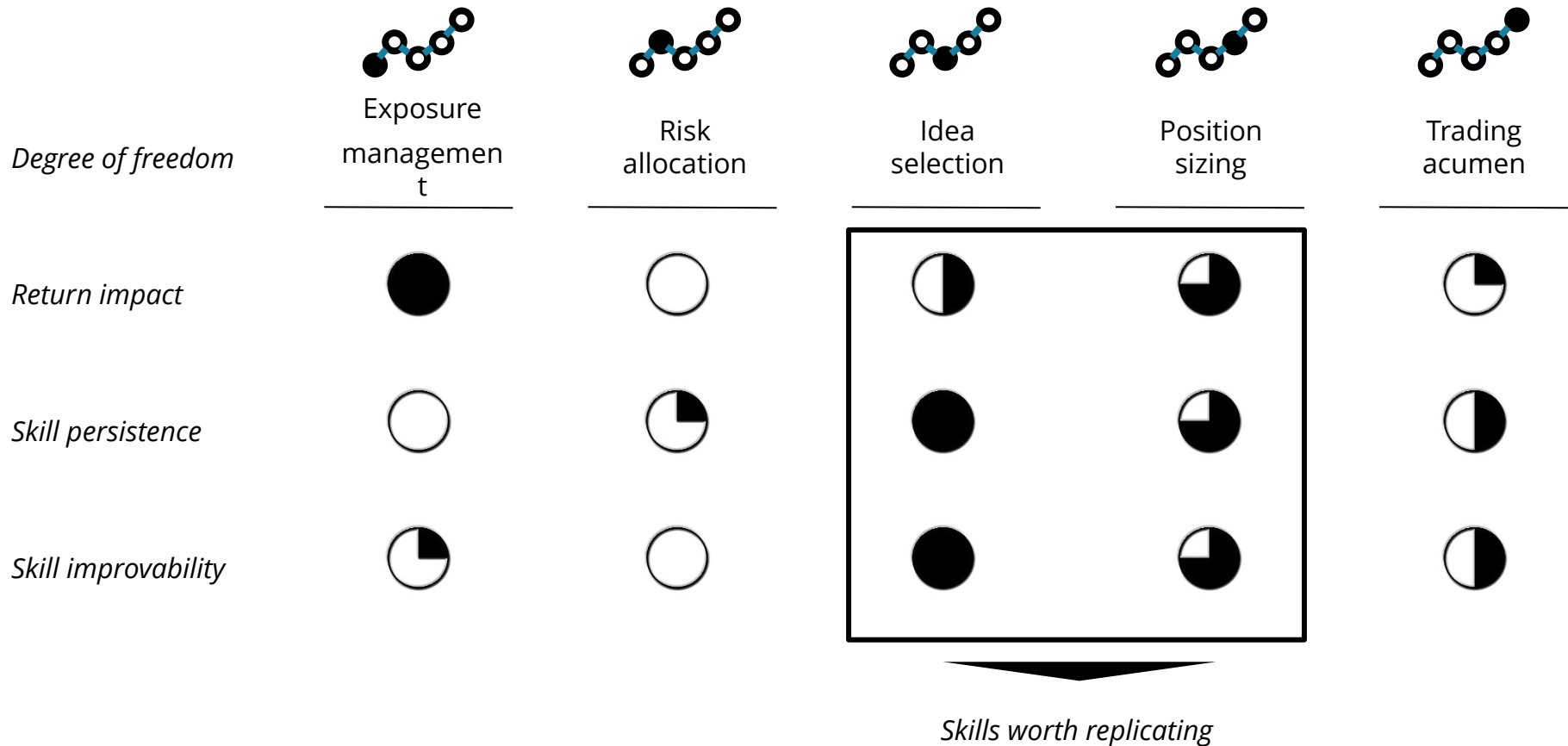
Not all skills are worth replicating through a risk premium. In fact, of the five skills HF put to work...



1. This measures the value of being in a given sector, market cap or geography. 2. This measures the value of modulating gross and net exposures over time Source: Novus analysis.

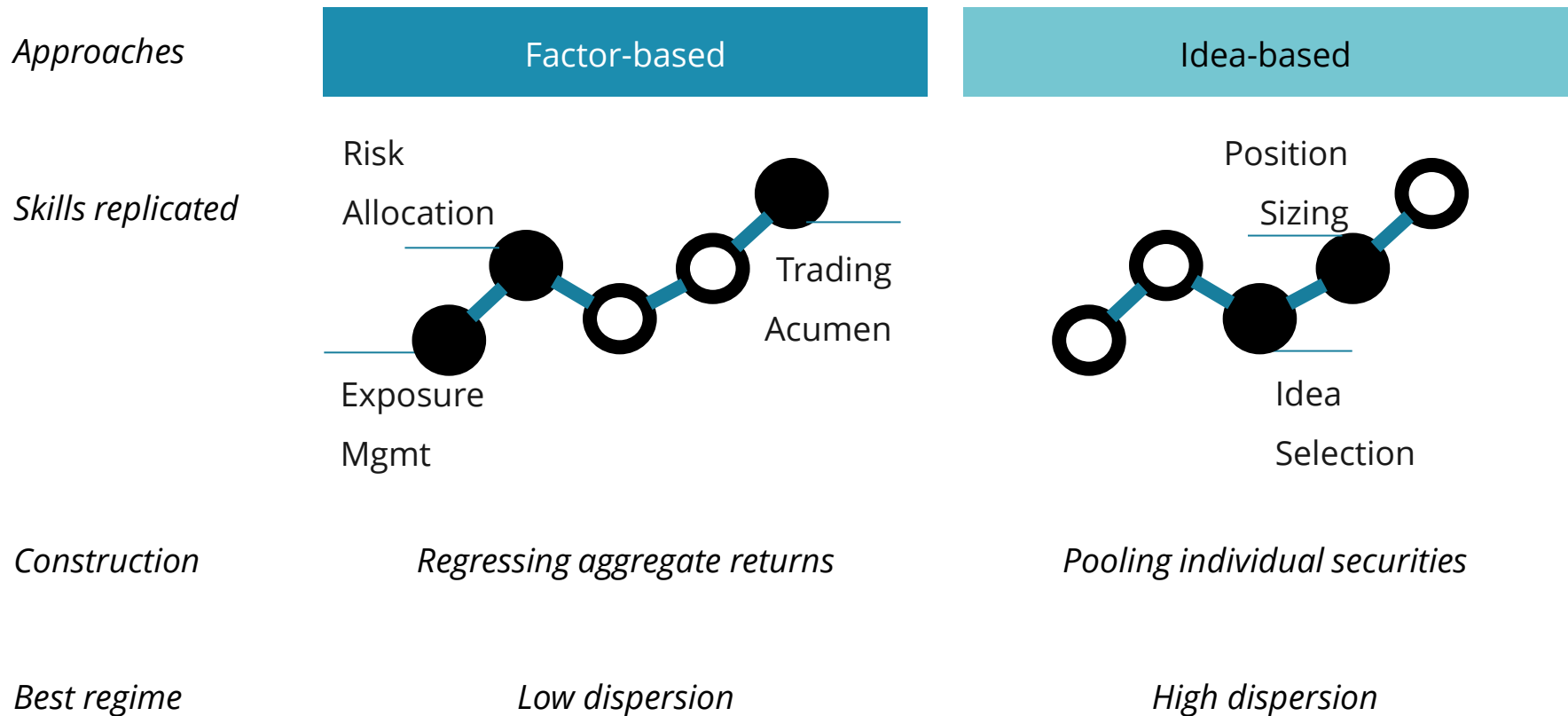
Stock Picking and Sizing

...only idea selection (read: stock picking) and position sizing are worth trying to replicate.



Approaches

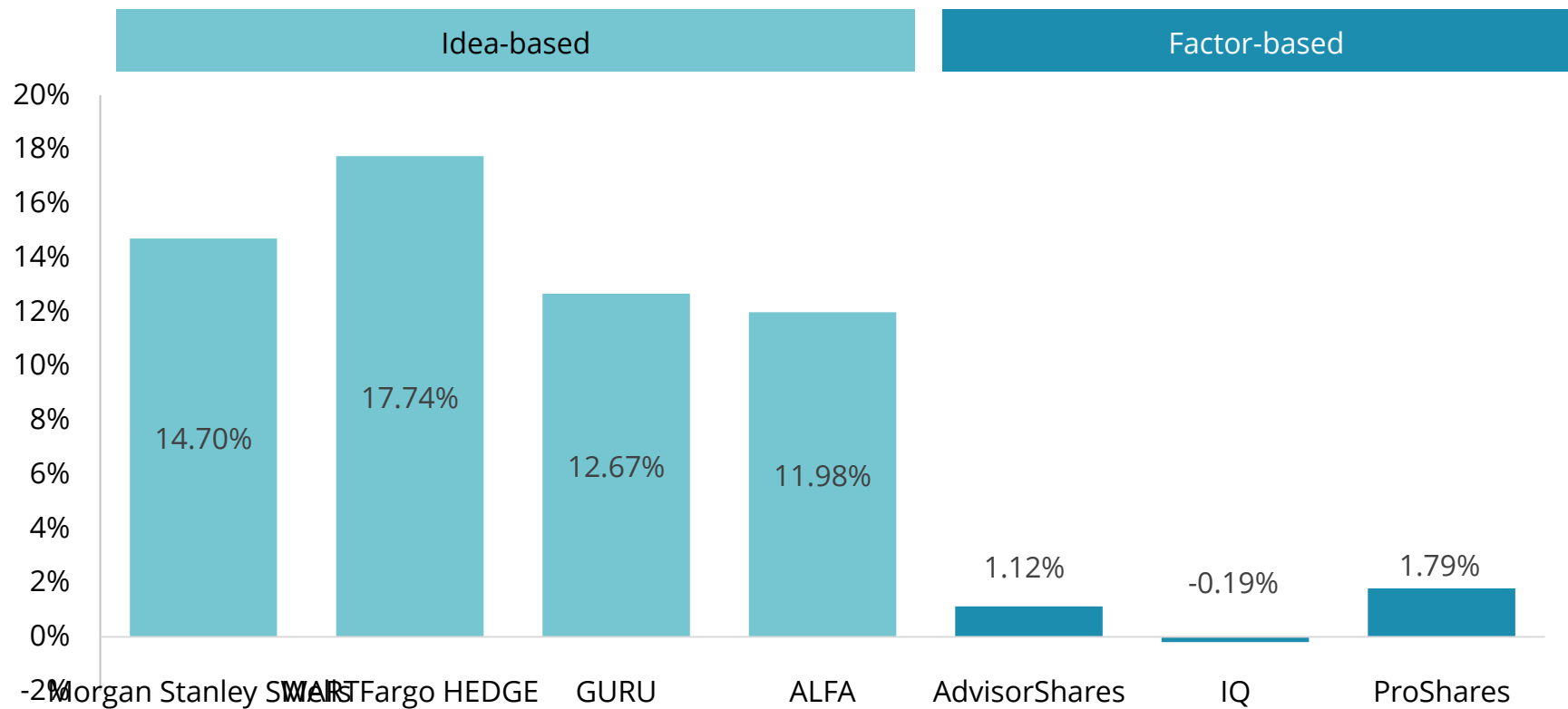
There are two approaches to replicate HF investment skill – factor or idea based.



Mixed Results

Idea-based models have outperformed during the recent bull-run.

Average returns p.a.(%)¹



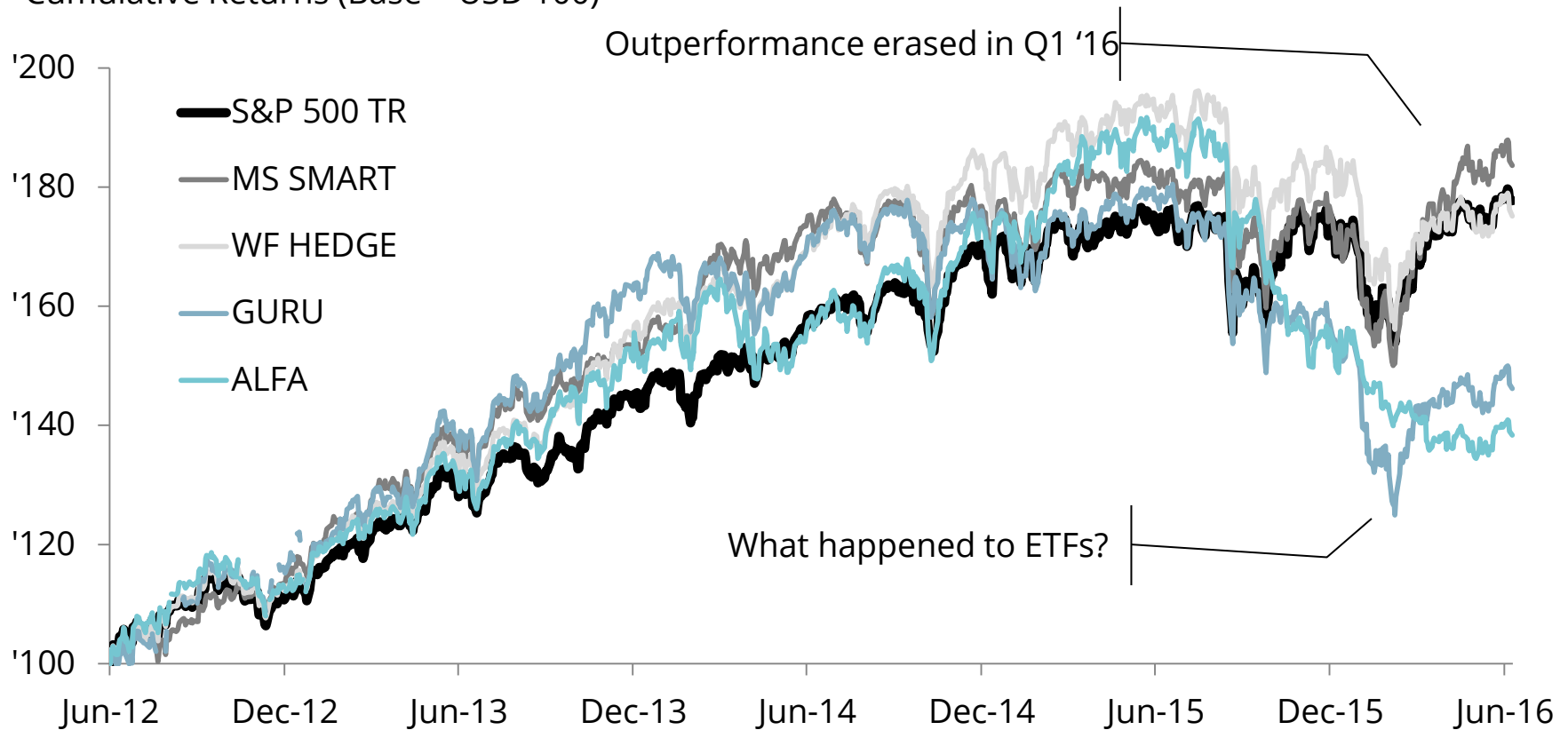
1. Average returns p.a. calculated during the period 2012-2015.

Source: Novus analysis.

Downturn

Most recently, the ETFs (GURU and ALFA) witnessed a severe drawdown.

Cumulative Returns (Base = USD 100)



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What's new in the approach we propose?

Upside Down

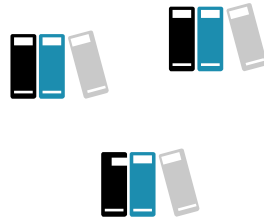
GURU and ALFA – and others too – follow pre-selected managers based on past performance, an approach which is less robust, as it is exposed to manager mean reversion / manager out of favor.

What others do

Select managers...



...and follow their stocks



Fragile – managers come in and out of favor

What Novus does

Pick stocks...



...behind which
there's manager
participation



Robust – dollars move markets, not people

Definitions Matter

We investigated four major factors behind performance.

CONVICTION



Importance

CONCENTRATION



Influence

CROWDEDNESS



Liquidity

CONSENSUS

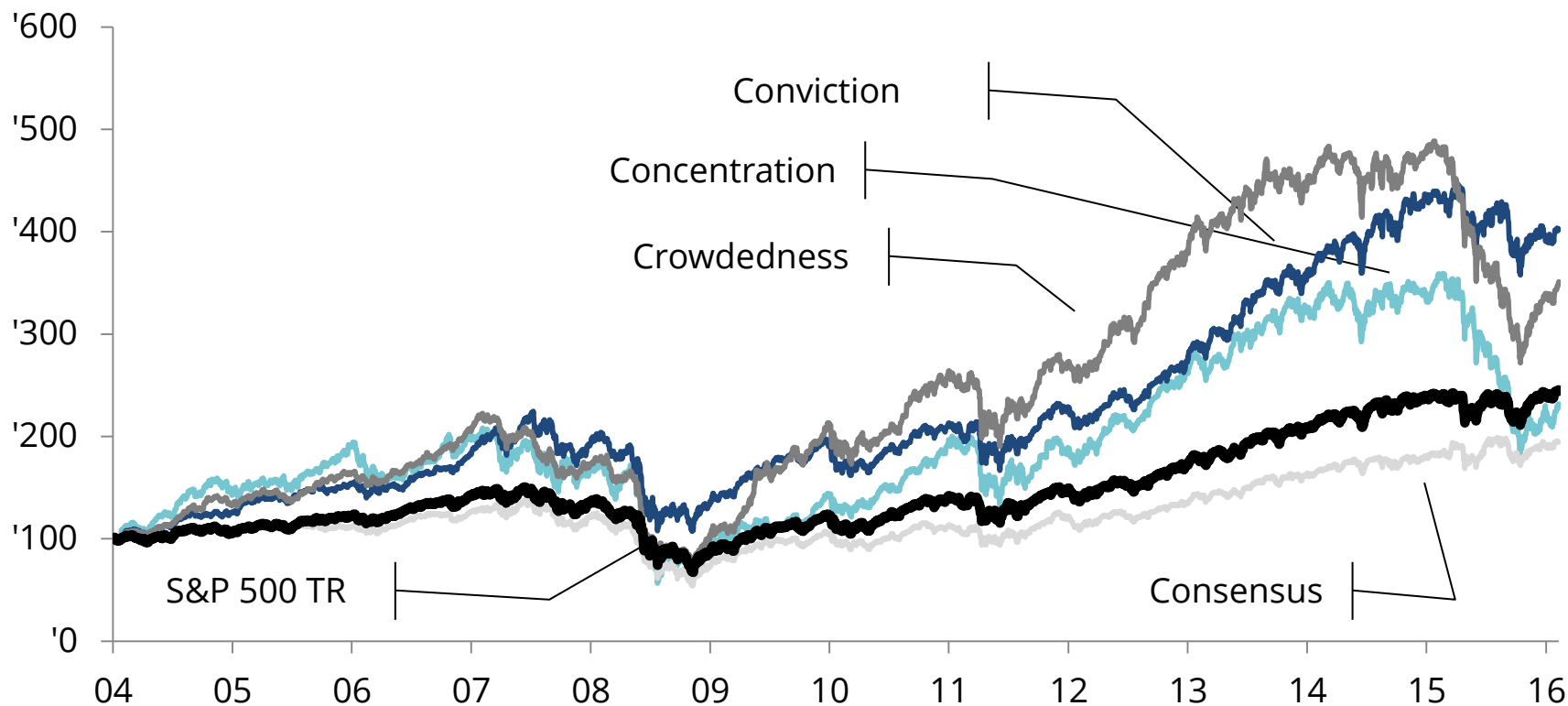


Popularity

Themes

Consensus outperforms, while Crowdedness, and Concentration are at risk of sharp reversals. Conviction – as highlighted by existing literature – has offered a steady source of alpha.

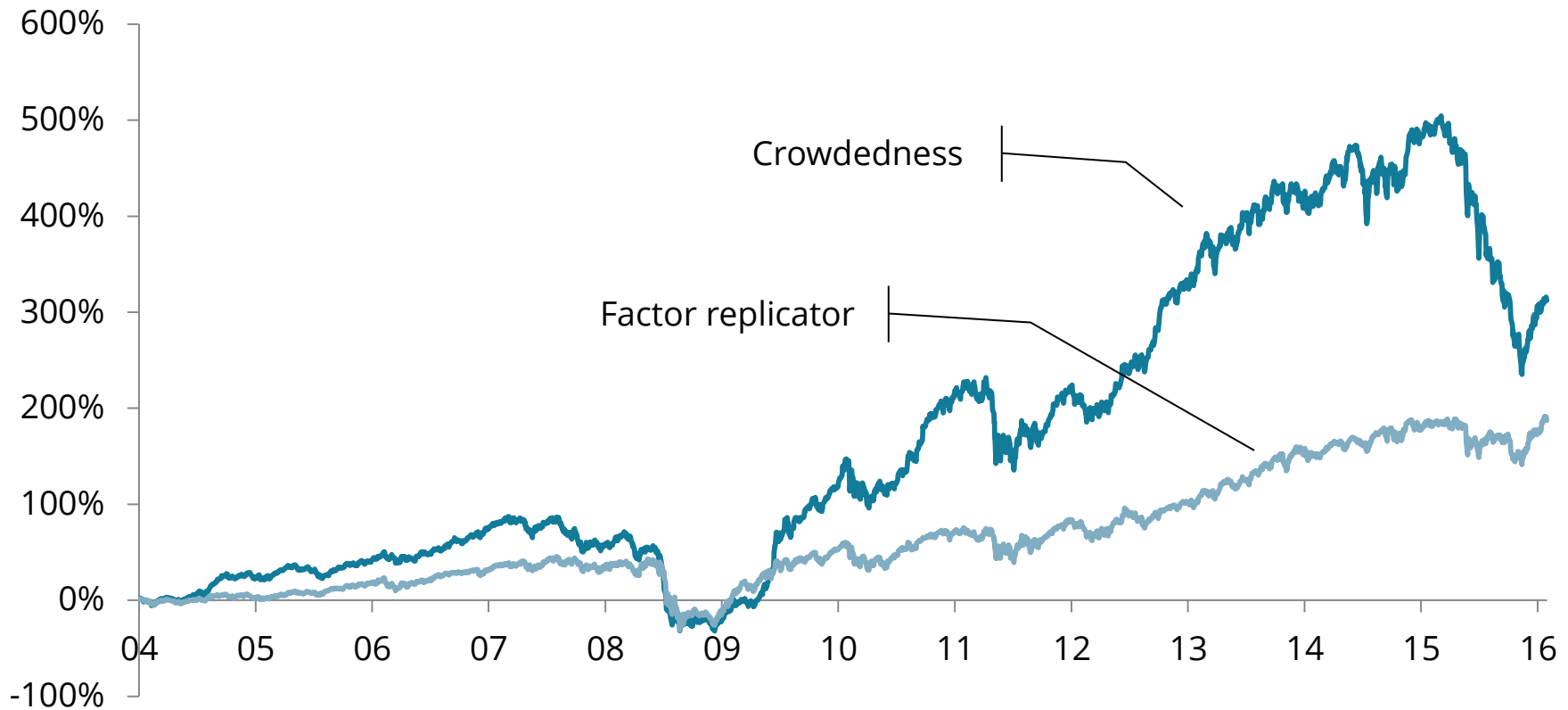
Cumulative Returns (Base = USD 100)



Orthogonality

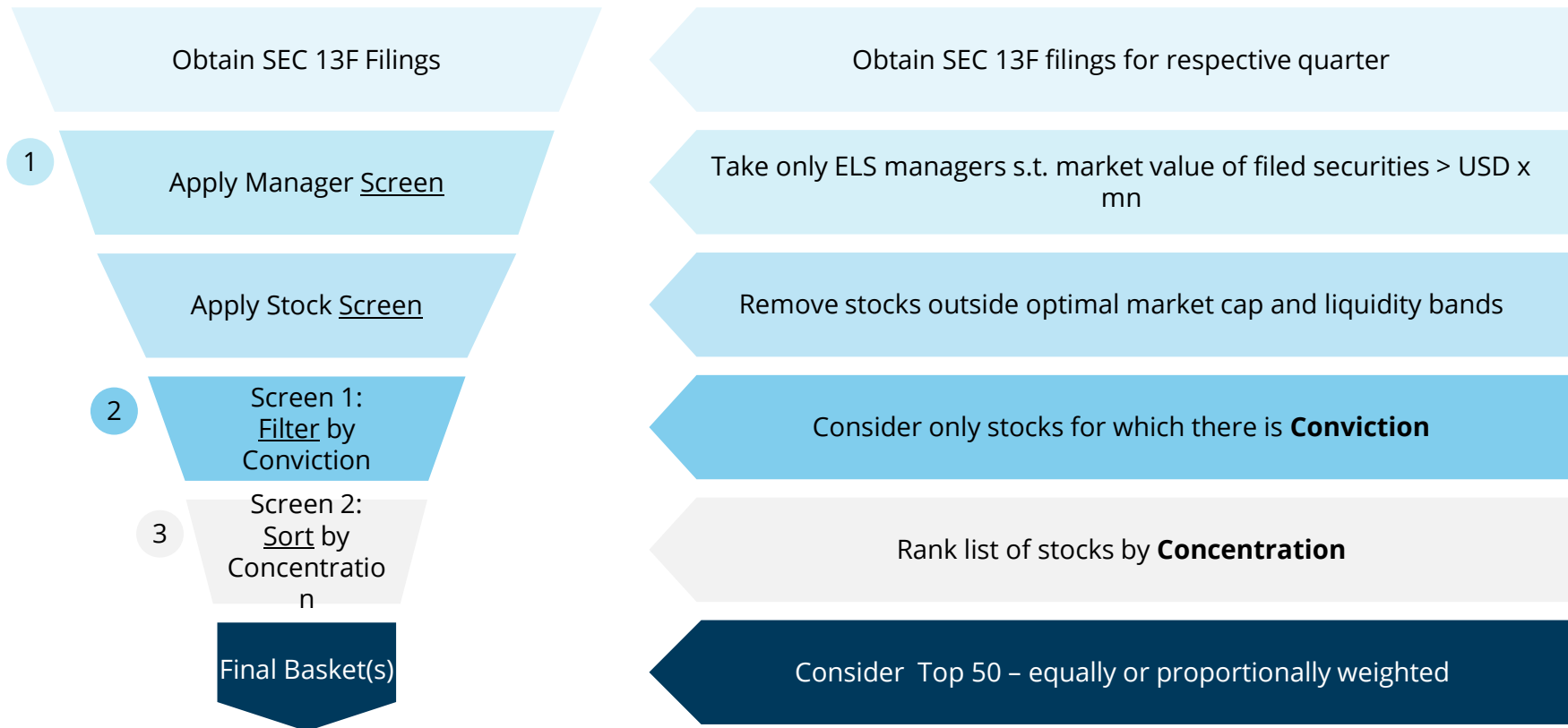
Crowdedness - as all other HF themes - can't be replicated via standard factor models

Cumulative Returns (%)



Portfolio Construction

We constructed an optimal portfolio by varying all possible permutations (after constraining for market cap, liquidity and minimum manager size). Three factors mattered: manager type, conviction and concentration (in a specific sequence).

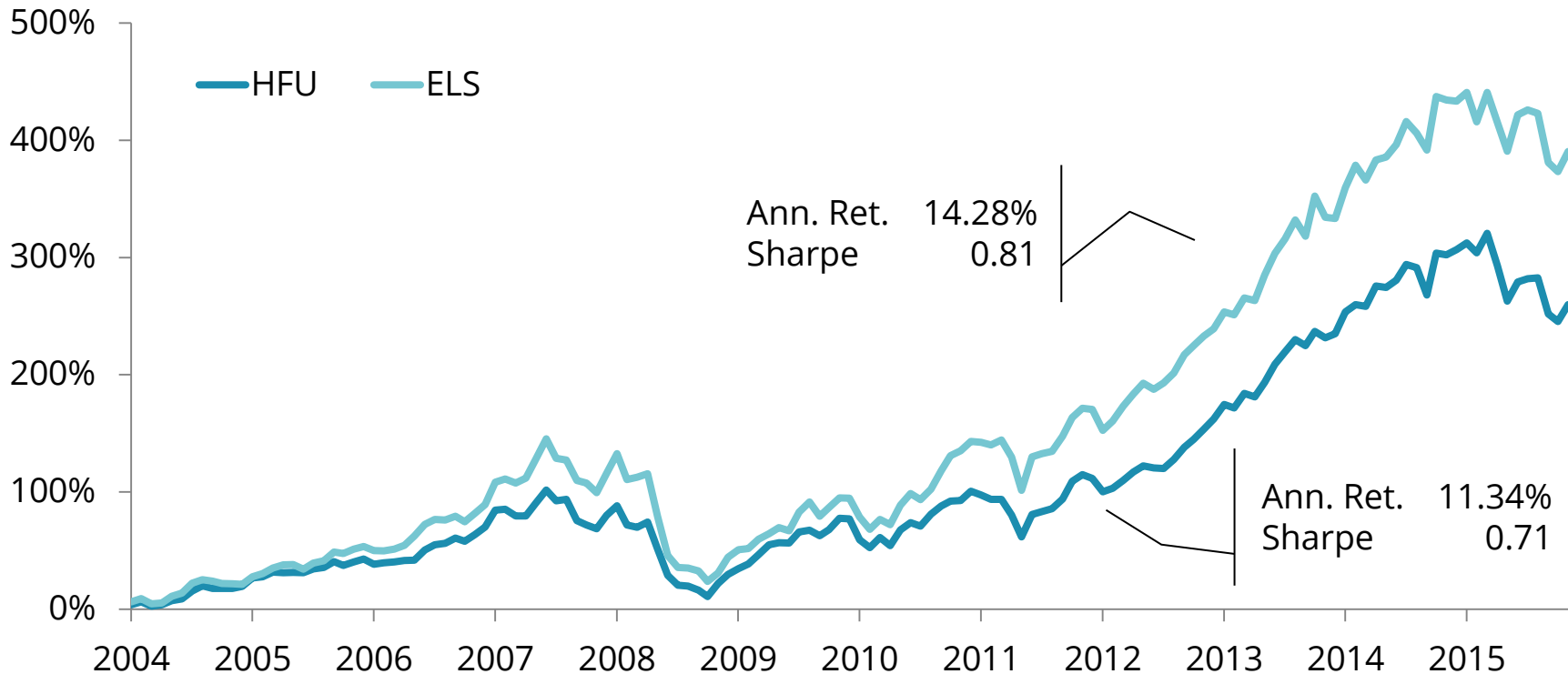


Manager Screen (1 of 2)

1 Apply
Manager
Screen

Not all managers were made equal. One obtains significantly higher performance when focusing on filers that are known to practice 'stock picking' – a subset denoted as Equity Long Short (or ELS). The outperformance is around 300 bps p.a.

Cumulative Returns

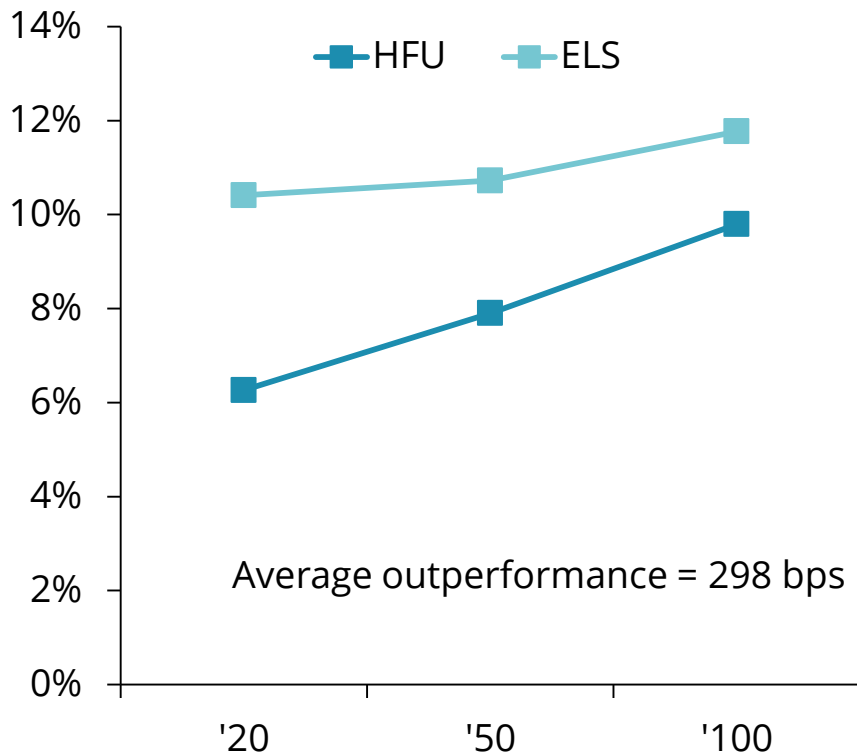


Manager Screen (2 of 2)

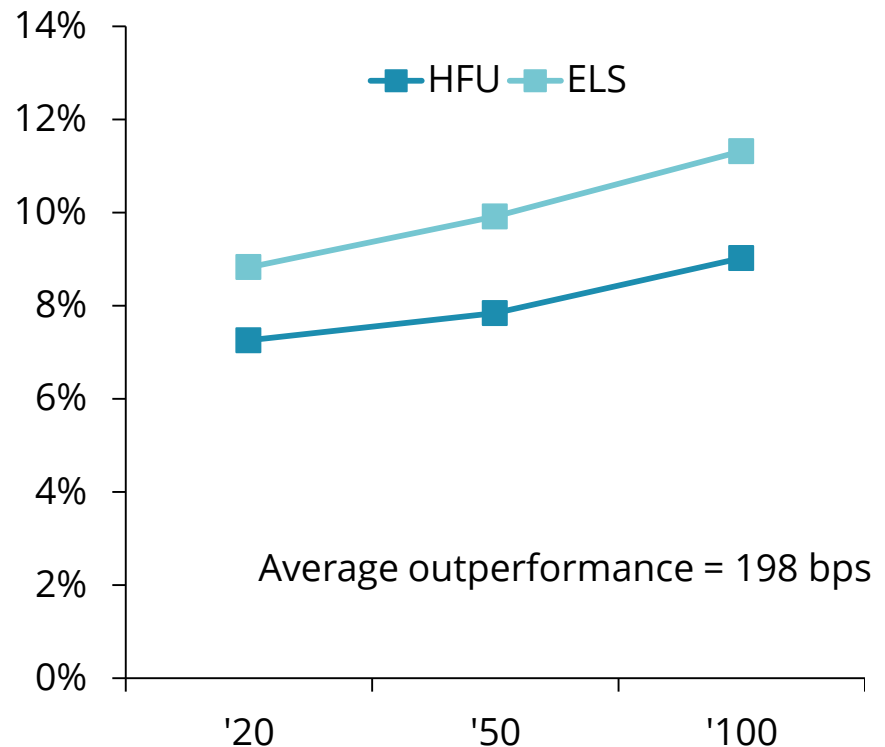
1 Apply
Manager
Screen

When taking the top 20, 50, and 100 stocks in the portfolio obtained by pooling all ELS / HFU managers, one observes that ELS portfolios outperform their HFU peers by about 300 / 200 bps when considering S&P 500 / all stocks, thus reinforcing the fact that ELS tend to be better stock pickers. Also, more diversified portfolios outperform.

S&P 500 - Annual Returns (%)



All Stocks - Annual Returns (%)

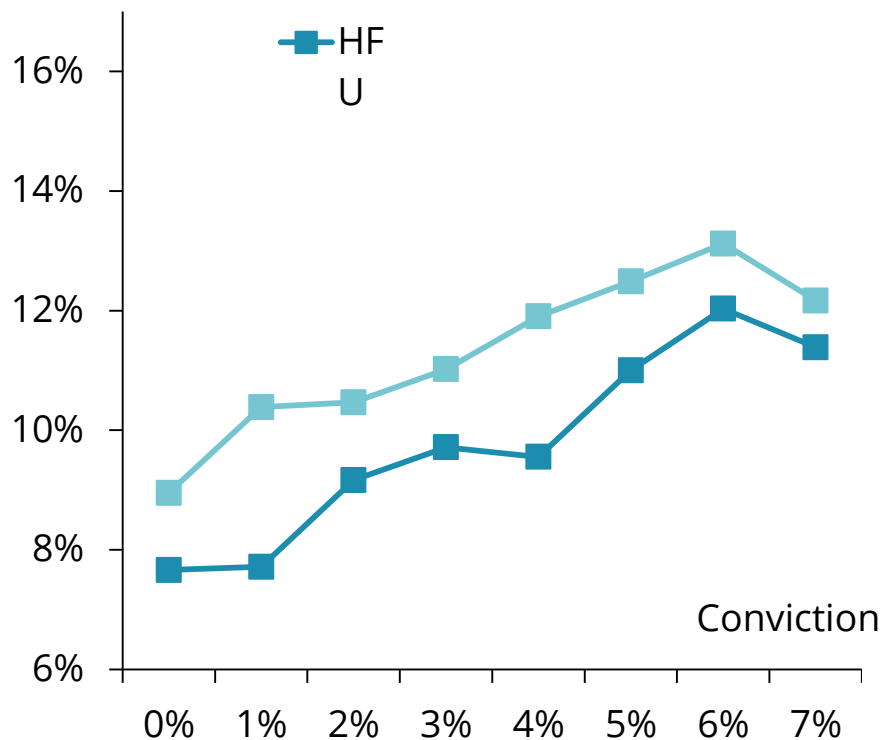


Filter by Conviction

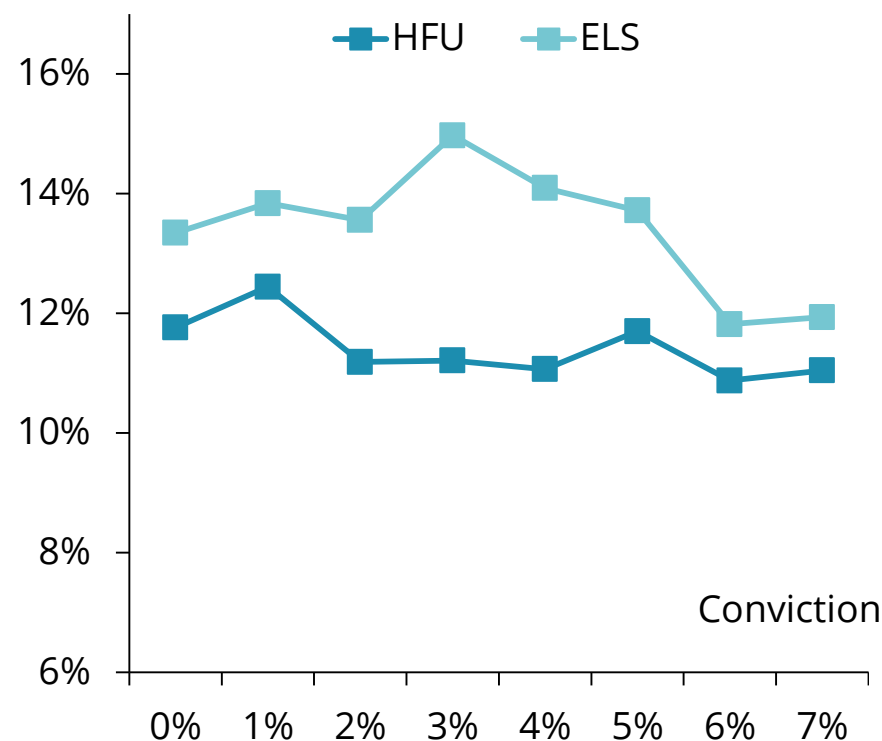
2 Filter by Conviction

We found that a conviction filter improves performance, and that an optimal value exists. Below, we select the top 50 securities by consensus and concentration. Once again, ELS managers outperform their HFU peers. Also, the relationships is better for concentration as a ranking mechanism (higher values and less sensitive to specific conviction value chosen).

Consensus – Annual Returns (%)



Concentration – Annual Returns (%)

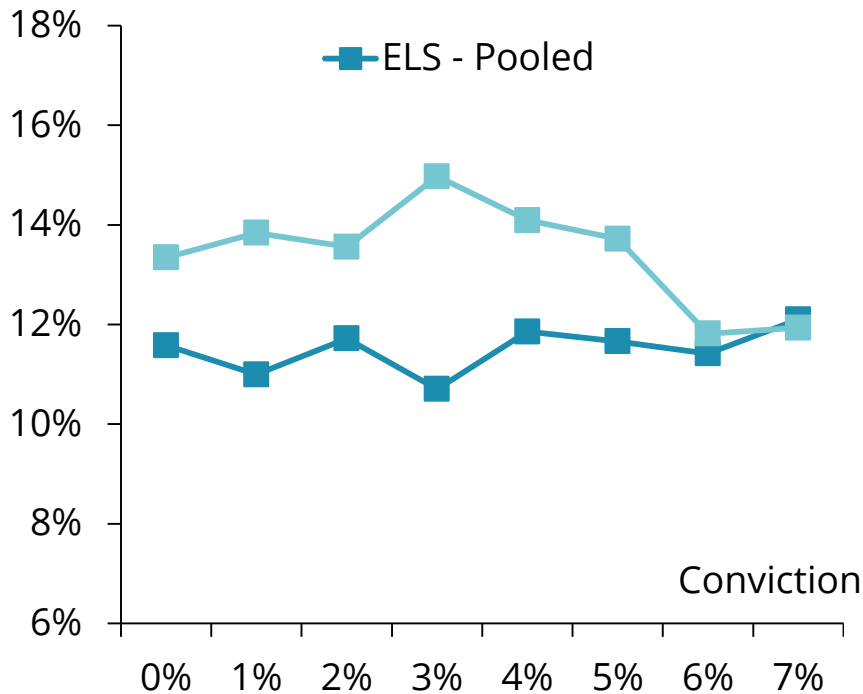


Sort by Concentration

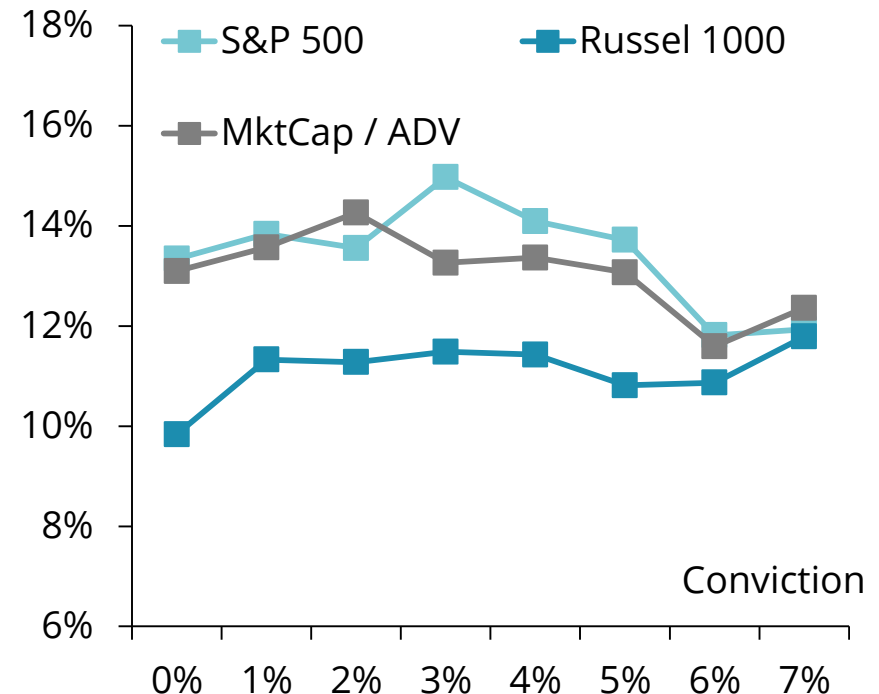
3 Sort by Concentration

ELS stocks ranked by concentration outperform the portfolio made of all ELS managers (Pooled), indicating that ranking by concentration adds value (left chart). The outperformance vanishes for too high conviction levels. The results hold when changing the selection universe (S&P 500 vs. Russell 1000 or a Market Cap / ADV approx. of the S&P 500 – right chart).

Annual Returns (%)



Annual Returns (%)



Technological Edge

Data (and the technology to make sure it's accurate) is the main barrier to entry...

This disclaimer matters..

The Securities and Exchange Commission has not necessarily reviewed the information in this filing and has not determined if it is accurate and complete. The reader should not assume that the information is accurate and complete.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 13F

FORM 13F INFORMATION TABLE

OMB APPROVAL	
OMB Number:	3235-0008
Expires:	July 31, 2015
Estimated average burden hours per response:	23.8

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5
NAME OF ISSUER	TITLE OF CLASS	CUSIP	VALUE (x\$1000)	SHRS OR SH/ PRN AMT PRN
AIR PRODS & CHEMS INC	COM	009158106	1,094,944	7,601,140 SH
CANADIAN PAC RY LTD	COM	13645T100	1,849,817	13,940,890 SH
HOWARD HUGHES CORP	COM	44267D107	377,817	3,568,017 SH
MONDELEZ INTL INC	CL A	609207105	920,442	22,942,225 SH
NOMAD HLDGS LTD	USD ORD SHS	G6564A105	300,333	33,333,334 SH
PLATFORM SPECIALTY PRODS COR	COM	72766Q105	367,542	42,737,394 SH
RESTAURANT BRANDS INTL INC	COM	76131D103	1,520,216	39,150,551 SH
VALEANT PHARMACEUTICALS INTL	COM	91911K102	567,847	21,591,122 SH
ZOETIS INC	CL A	98978V103	1,854,020	41,823,145 SH

Often, institutions will file under multiple CIKs (e.g., Marathon)¹

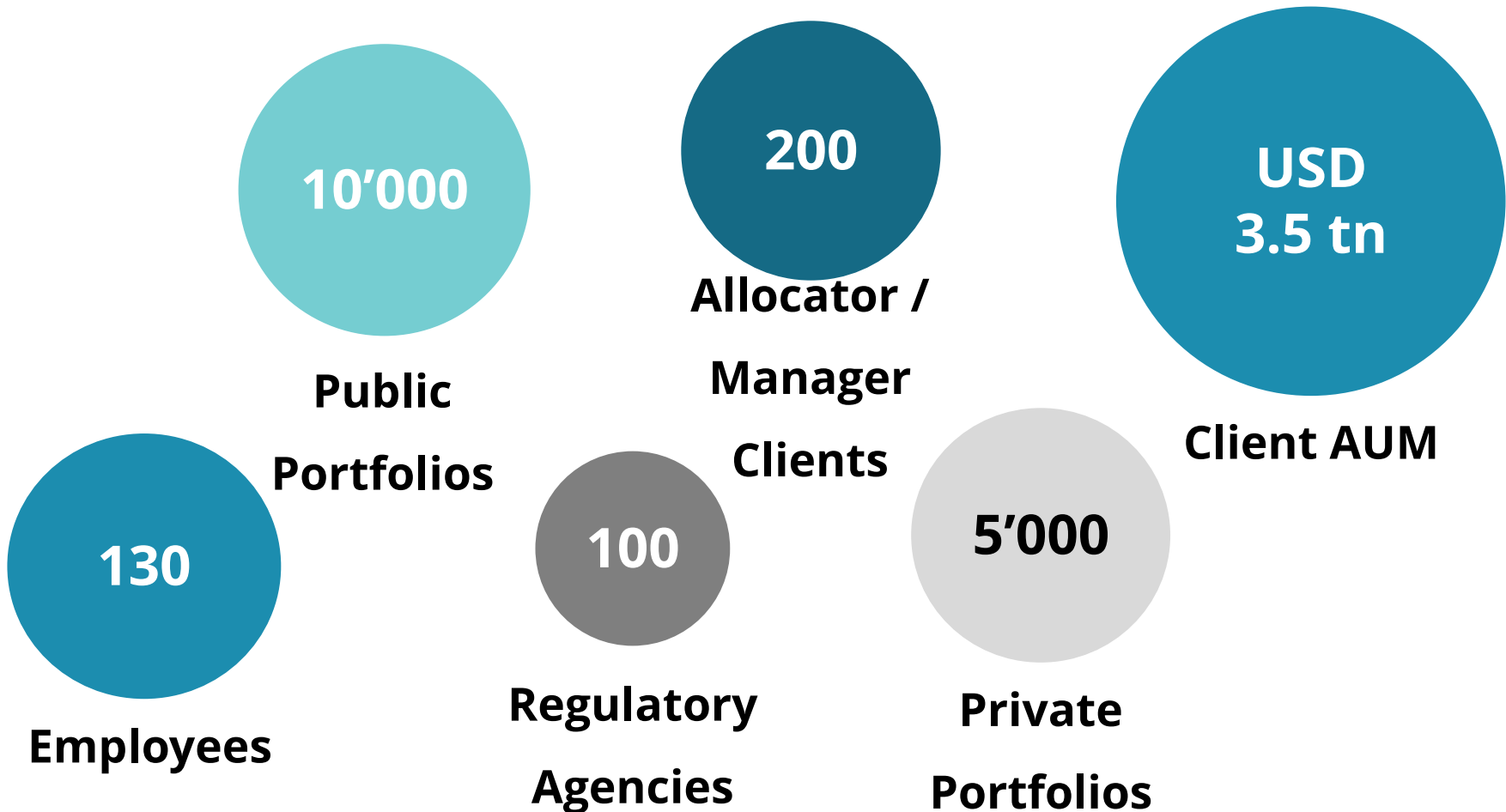
Often, filers will just make typing errors (e.g., switch value / prices)²

1.. Marathon Partners Equity Management files under both Mario Cibelli and Marathon Partners Equity Management.

2. To catch these errors, Novus matches security prices against our own security master and total Market Value against private information on the manager.

Novus

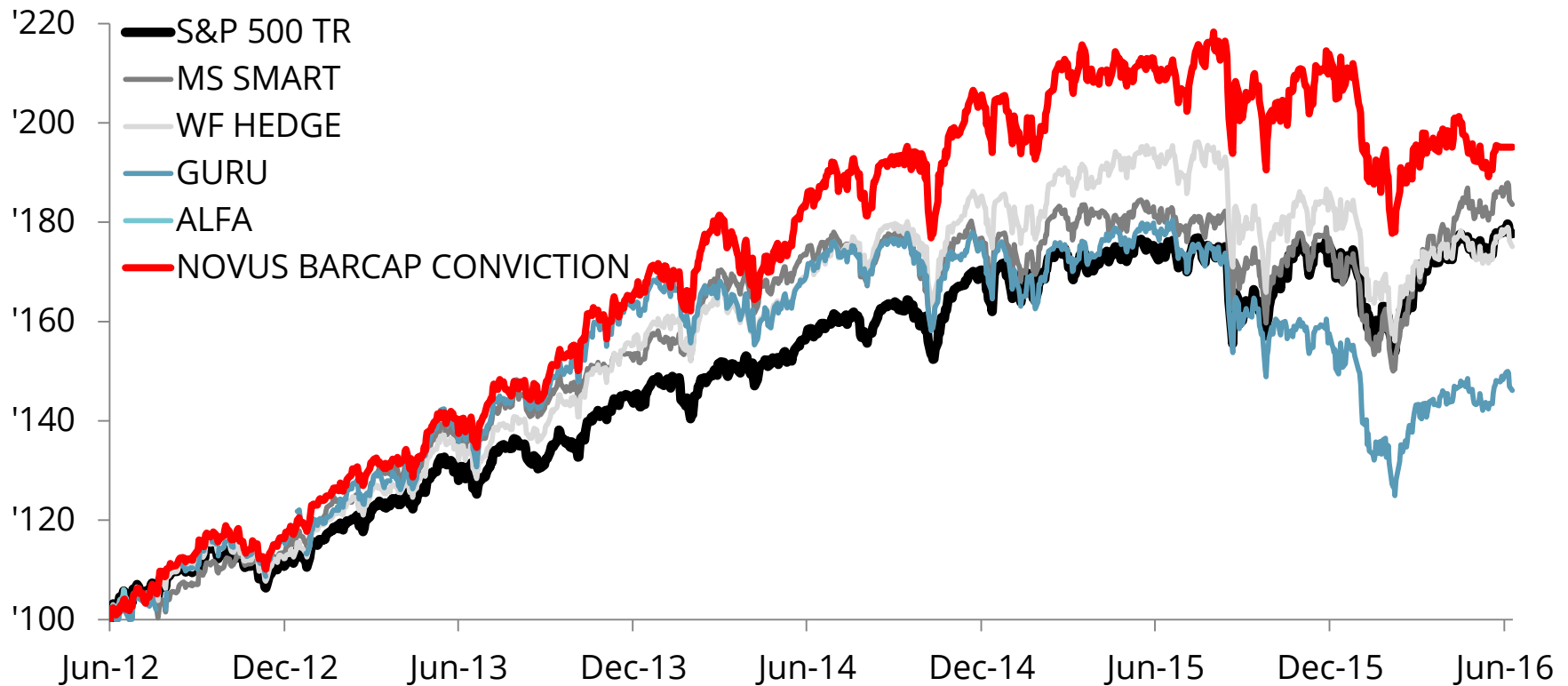
...which we perfected over the years.



Preview

Initial design is very promising.

Cumulative Returns (Base = USD 100)



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