



NAPS - a Systematic Portfolio

Seminar - 30th April 2016



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We would like to draw your attention to the following important investment warnings:

- The value of shares and investments and the income derived from them can go down as well as up
- Investors may not get back the amount they invested
- Past performance is not a guide to future performance

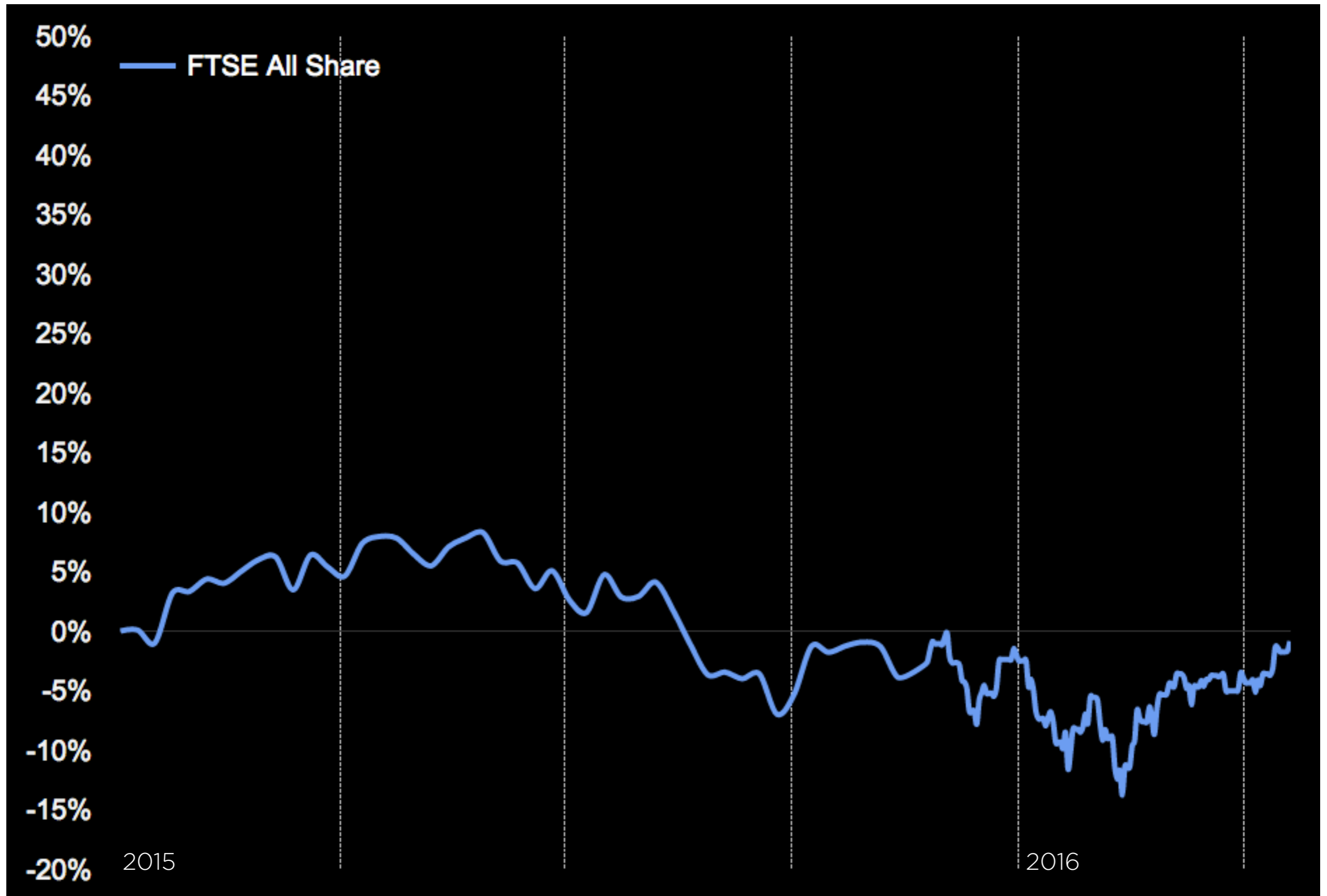
Please note that all data in this document is historic and dated when this document went to print: 30th April 2016

Seminar Agenda

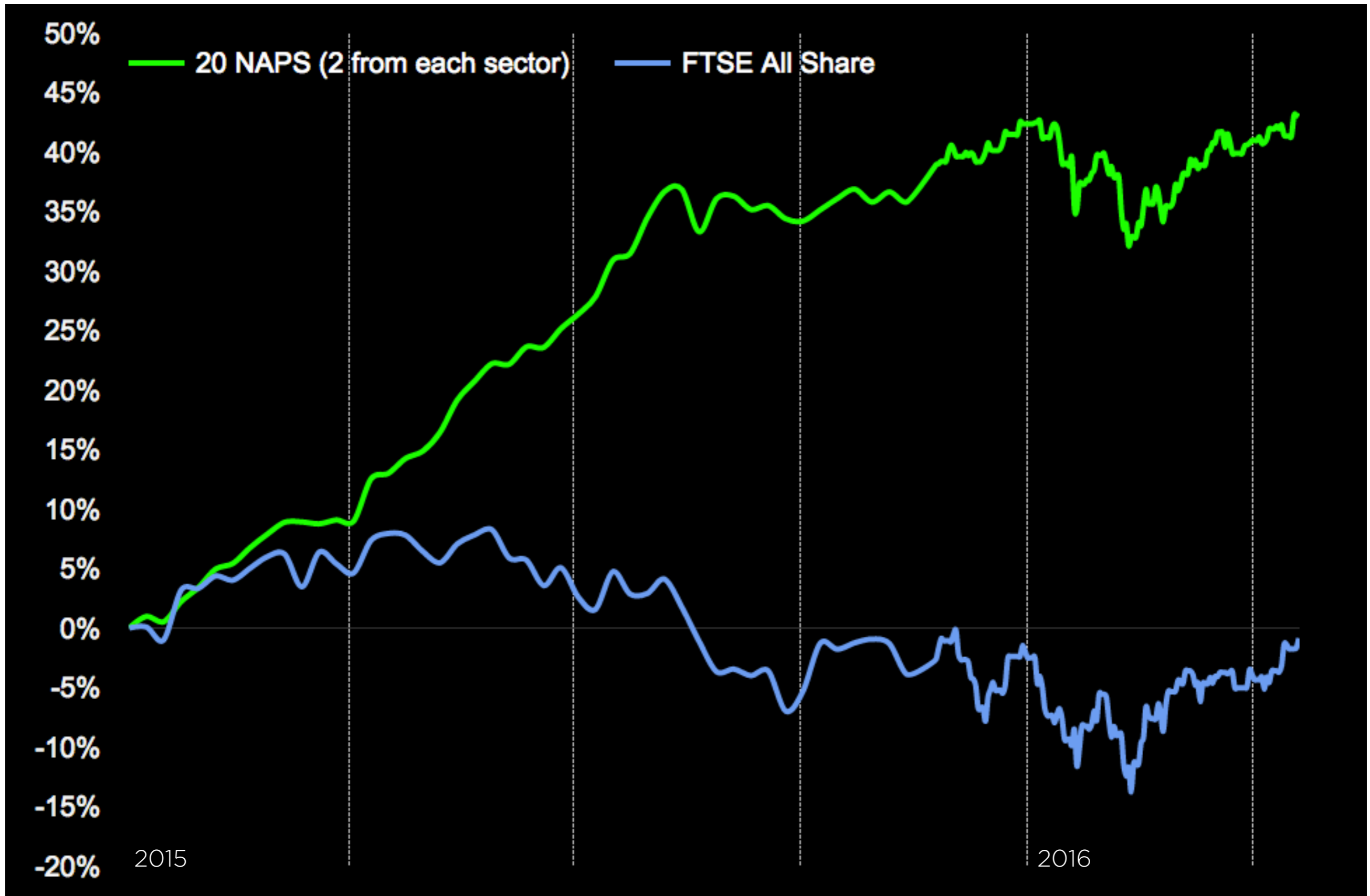
- NAPS Portfolio Performance Review
 - What are the NAPS? Performance YTD, standout winners & losers
 - Why it's gone right? Philosophy of the StockRanks
- How to construct a StockRanks Portfolio
 - Demonstration using the StockRanks portal, Folios, Screener.
 - Diversification approaches & lessons learned.
- Ongoing portfolio management
 - Sell rules & rebalancing - why rebalance at all? SNAPs portfolio lessons.
- Closing thoughts
 - Why stock pickers often choose the losers from lists of winners. StockRank Stats.
 - Q&A

Portfolio Review of the NAPS

FTSE All Share



New Year NAPS Portfolio



The NAPs

Annual StockRanks Selections



Card Game "Napoleon"

A "Nap Hand" is a declaration that you can take all 5 tricks - so it's only ever used when you've got very strong odds.

1. NAPS 2015

stk.pe/naps-2015

2. NAPS 2016

stk.pe/naps-2016

What are the NAPs?

A portfolio of shares selected according to the following simple rules.

- Rank by descending StockRank
- Exclude small & hard to trade shares
 - Market Capitalisation > £20m
 - Bid-Ask Spread < 5%
- 2 stocks from each sector

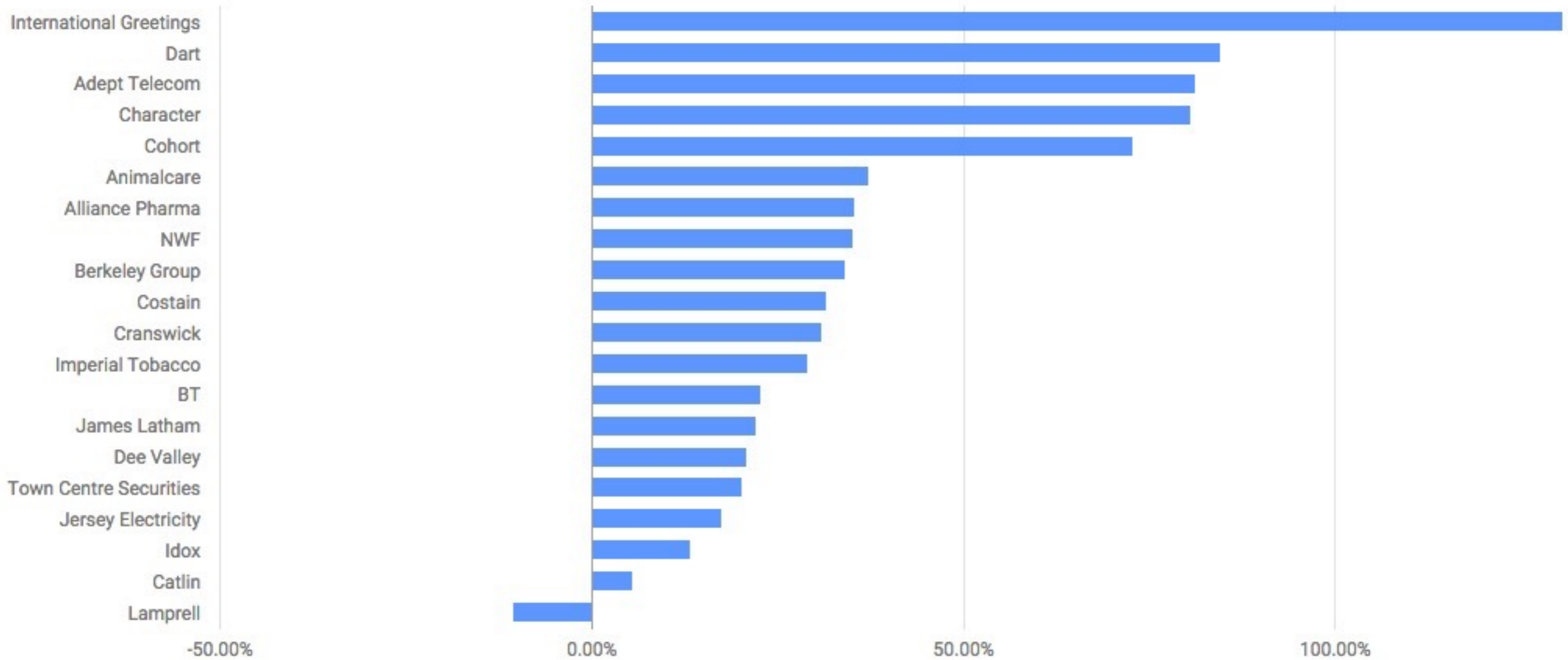
New 2016 Rules

Some additional anti-risk measures
brought in in 2016

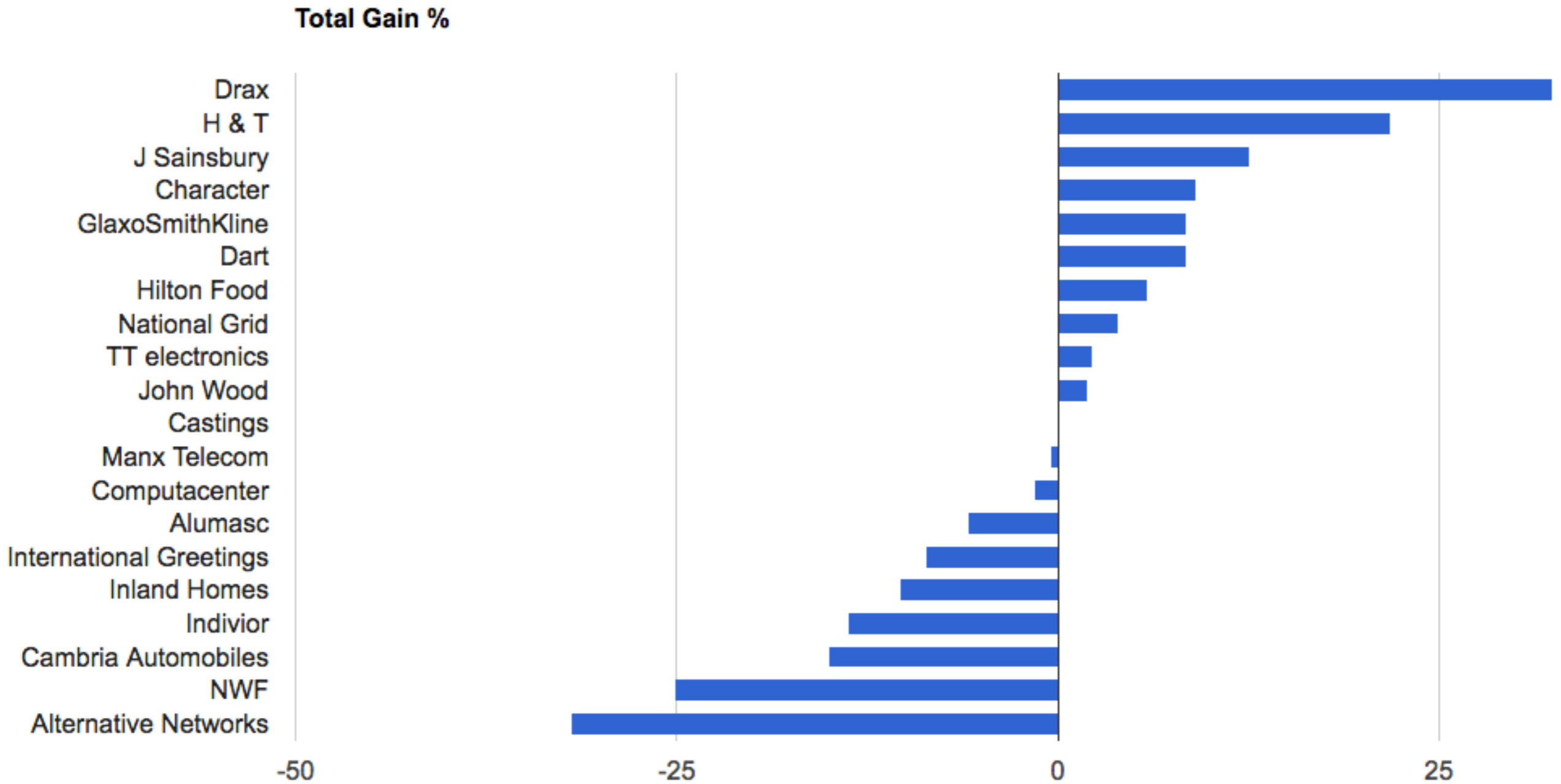
- No more than 1 in each industry group
- Size diversification - at least:
 - 6 small caps
 - 6 mid caps
 - 6 large caps
 - No Microcaps !

Winners vs Losers 2015

Total Gain % vs. Close



Winners vs Losers 2016*



*by April 30th 2016

Building the Portfolio

Four Principles

for stock market success

1. Manage the Monkey



Rules

2. Align with the Payoffs



QVM

3. Give every stock a role



Diversify

4. Keep your balance



Rebalance

1. Managing the Monkey

Using a rules-based process



“The evidence is clear: quant models usually provide a ceiling (from which we detract performance) rather than a floor (on which we can build performance). We tend to overweight our own opinions relative to those of the models.

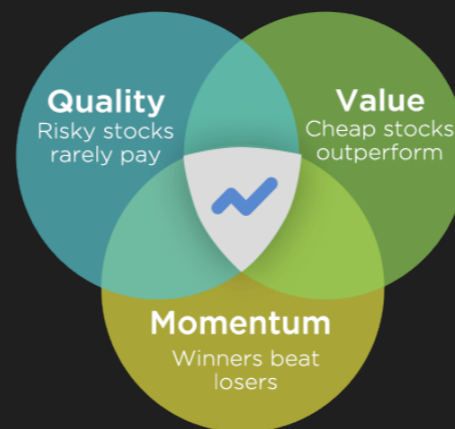
James Montier

stk.pe/ode-to-quant



2. Aligning with the Payoffs

The StockRanks



Learn more
about the **StockRanks**

stk.pe/webinar-stockranks

stk.pe/webinar-stockranks-portal

Dart

DTG  537p ▲ 2.0 0.4% 4:45pm 5.00k

Market Cap £789.6m
 Enterprise Value £356.6m
 Revenue £1.38bn
 Position in UK Edition 429th

Value	▲ 78
Quality	▲ 94
Momentum	99
StockRank™	▲ 99

StockReport™ Tools Accounts News Chart Discuss

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Zoom 1m 3m 6m YTD 1y 2y 3y 5y All Dec 18 2014 Close: 286.50



Momentum		
Relative Strength (%)		
1m	+12.2%	●
3m	+17.6%	●
1yr	+99.1%	●
Volume Change (%)		
10d v 3m	+46.5%	●
Price vs... (%)		
52w High	-2.7%	●
50d MA	+11.8%	●
200d MA	+26.2%	●

Growth & Value		vs. industry	vs. market
12m Forecast Rolling			
PE Ratio (f)	13.4	<div style="width: 20%;"></div>	<div style="width: 30%;"></div>
PEG Ratio (f)	n/a	<div style="width: 50%;"></div>	<div style="width: 50%;"></div>
EPS Growth (f)	-4.29 %	<div style="width: 10%;"></div>	<div style="width: 10%;"></div>
Dividend Yield (f)	0.68 %	<div style="width: 10%;"></div>	<div style="width: 10%;"></div>
Valuation (ttm)			
Price to Book Value	2.50	<div style="width: 30%;"></div>	<div style="width: 20%;"></div>
Price to Tang. Book	2.56	<div style="width: 30%;"></div>	<div style="width: 20%;"></div>
Price to Free Cashflow	7.12	<div style="width: 40%;"></div>	<div style="width: 50%;"></div>
Price to Sales	0.58	<div style="width: 20%;"></div>	<div style="width: 30%;"></div>
EV to EBITDA	1.86	<div style="width: 50%;"></div>	<div style="width: 50%;"></div>

Margin of Safety (beta)	
Broker Target	12%
Relative to Sector	54%
Graham Formula	72%
Stability Value (EPV)	21%

Screens Passed 8

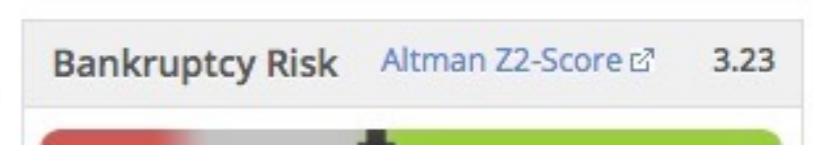


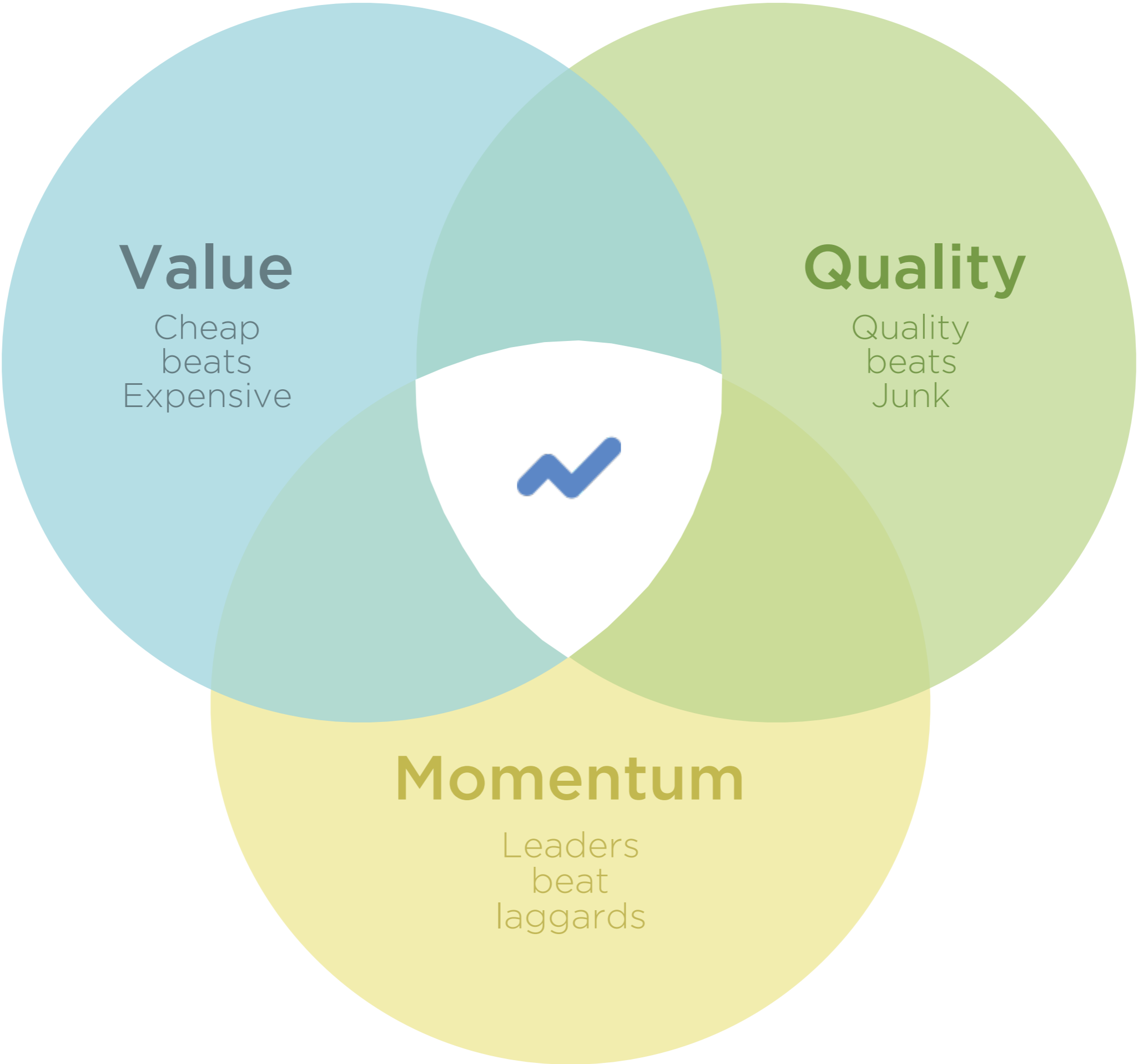
DTG qualifies for **James O'Shaughnessy Cornerstone Grow... (in Growth Investing)**.

[View Screen](#) · [View Checklist](#)

Quality		vs. industry	vs. market
Return on Capital	30.5 %	<div style="width: 80%;"></div>	<div style="width: 80%;"></div>
Return on Equity	33.6 %	<div style="width: 60%;"></div>	<div style="width: 80%;"></div>
Operating Margin	7.88 %	<div style="width: 40%;"></div>	<div style="width: 20%;"></div>

Financial Summary		Balance Sheet · Income Statement · Cashflow									
Year End 31st Mar		2010	2011	2012	2013	2014	2015	TTM	2016E	2017E	CAGR / Avg
Revenue	£m	434.5	542.9	683	869.2	1,120	1,253	1,375	1,398	1,440	+23.6%
Operating Profit	£m	22.5	26.9	28.5	37.9	49.2	33.6	108.3			+8.4%
Net Profit	£m	15.6	17.3	22.7	31.2	35.9	32.8	93.5			+16.0%
EPS Reported	p	10.6	11.8	15.4	21.4	24.3	22.2	62.9			+15.9%





Value

Cheap
beats
Expensive

Quality

Quality
beats
Junk

Momentum

Leaders
beat
laggards

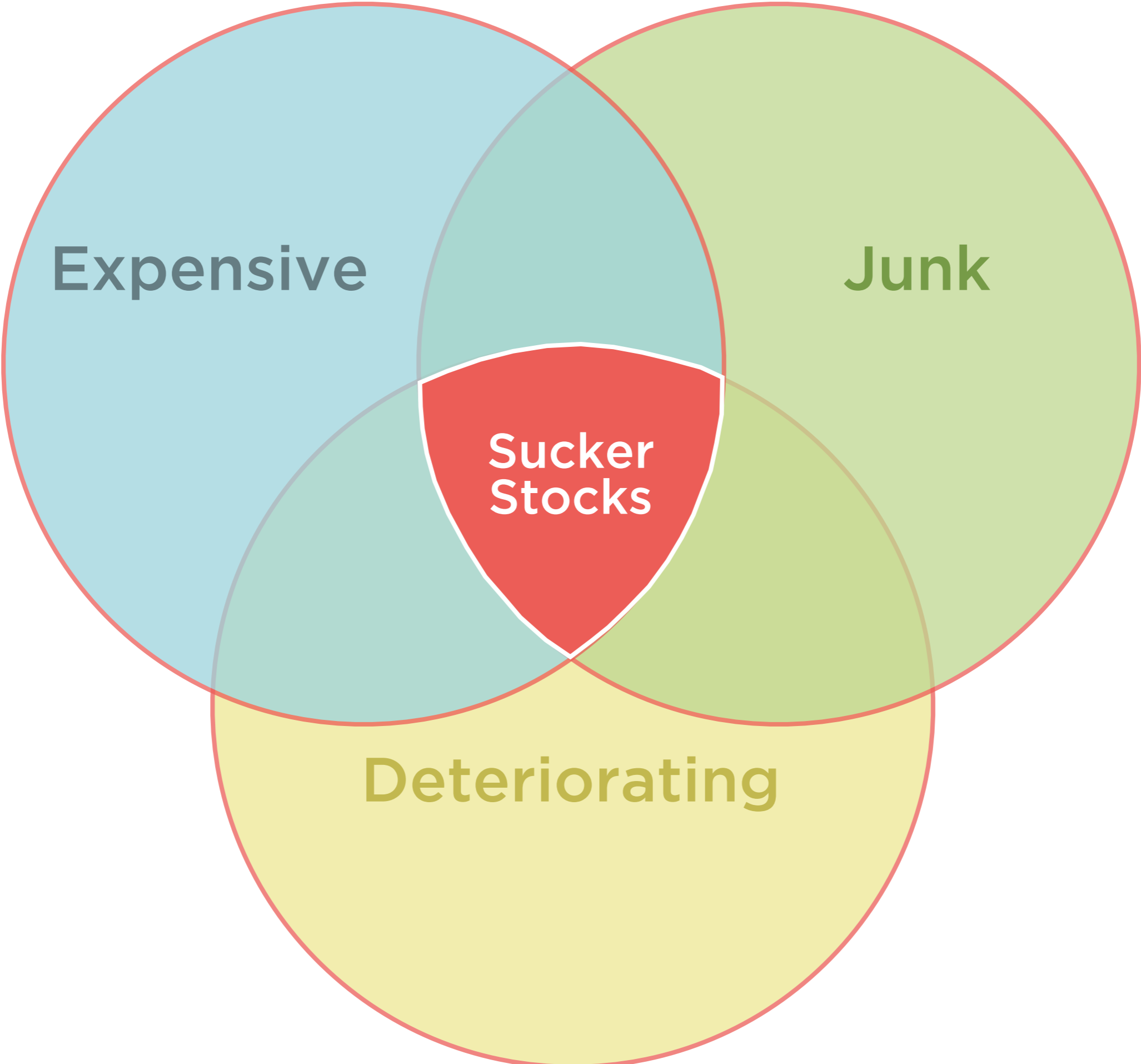


Cheap

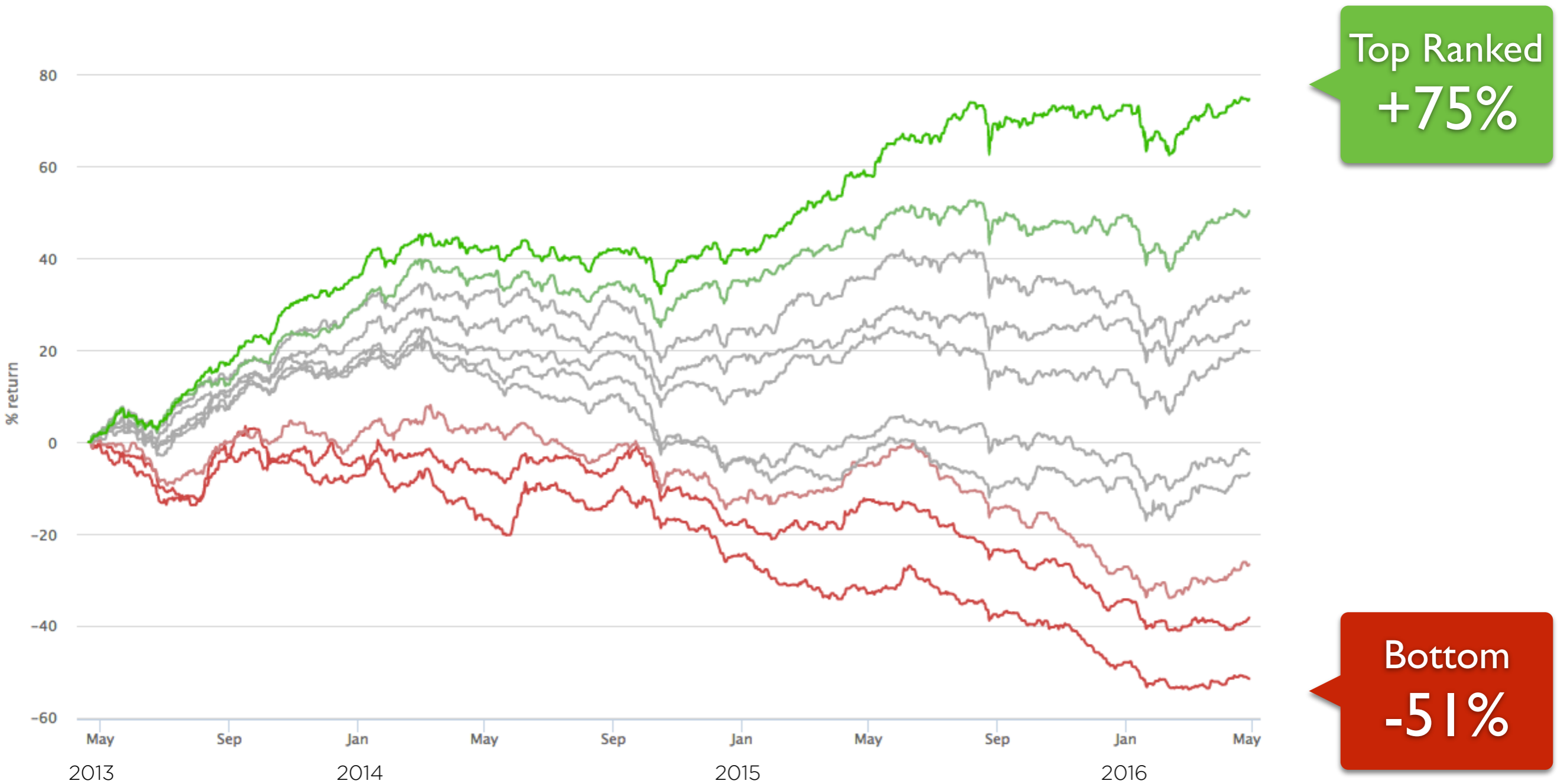
Good

**Super
Stocks**

Improving



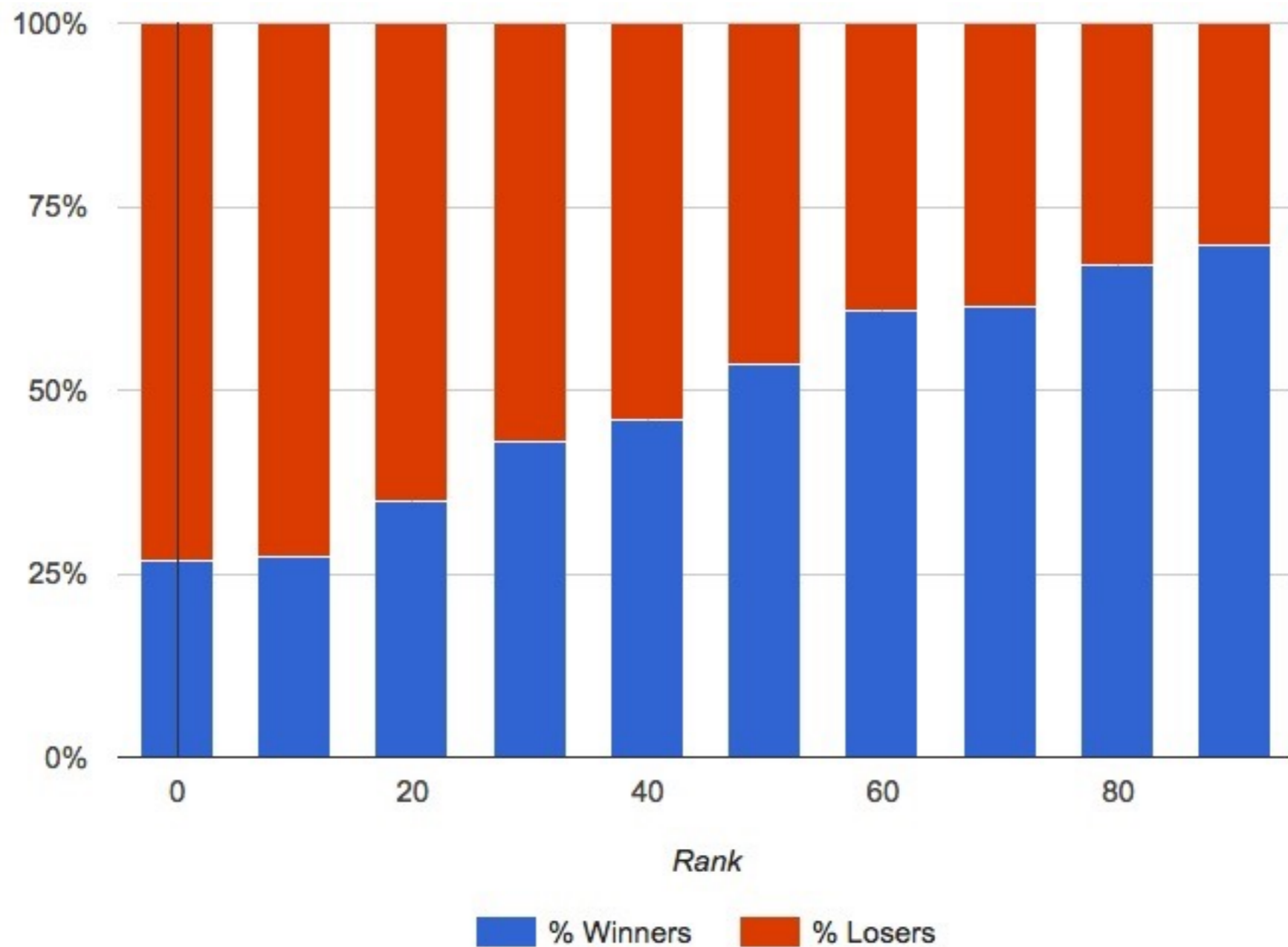
StockRanks Performance



* Based on quarterly rebalanced portfolios of >£10m market capitalisation LSE listed stocks split into deciles according to StockRank

% Hit Rate of picking winners

stk.pe/stockrank-odds



Average annual percentage of stocks with positive returns (winners) versus percentage of stocks with negative returns (losers) in each StockRank decile since launch in April 2013 (by Nov 2015).

Why is buying **high ranking stocks** hard?

Nobody likes buying cheap stocks (**problems**)

Nobody likes buying good stocks (**boring**)

Nobody likes buying leading stocks (**scary**)

It's contrary to human nature

3. Give each stock a role

On diversification



Diversification

1. How many stocks?

The most dangerous quote in finance?

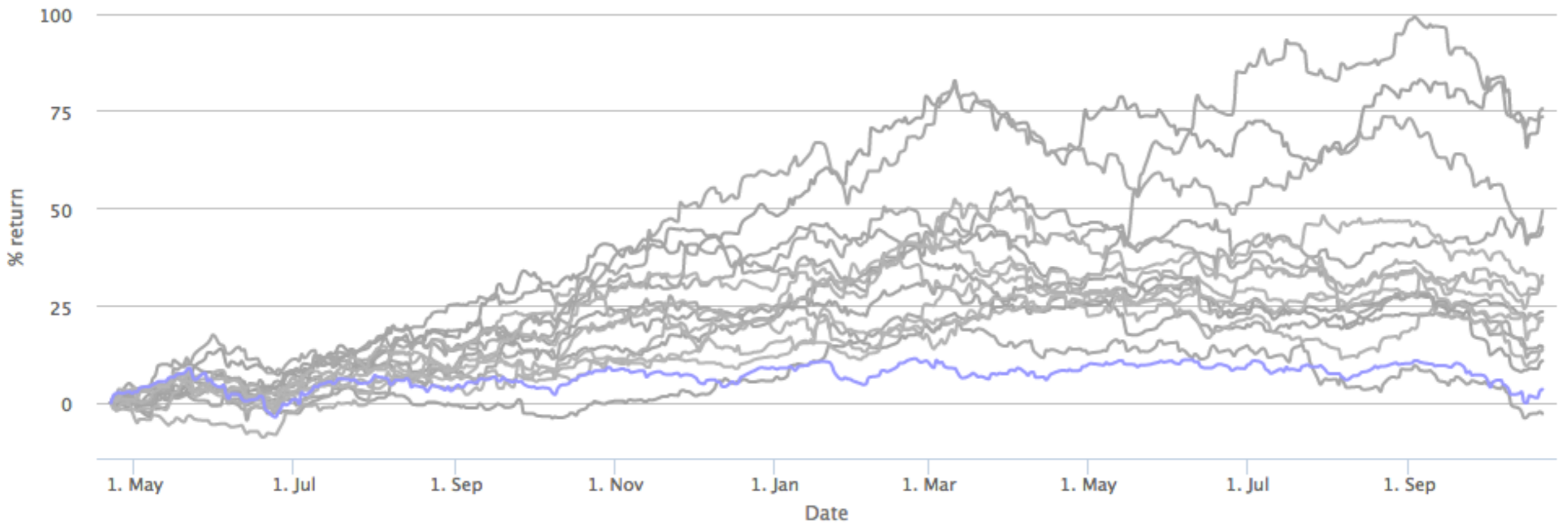
“Diversification is a hedge
for ignorance”

Warren Buffett



Random 5 stock portfolios

Rank 90+

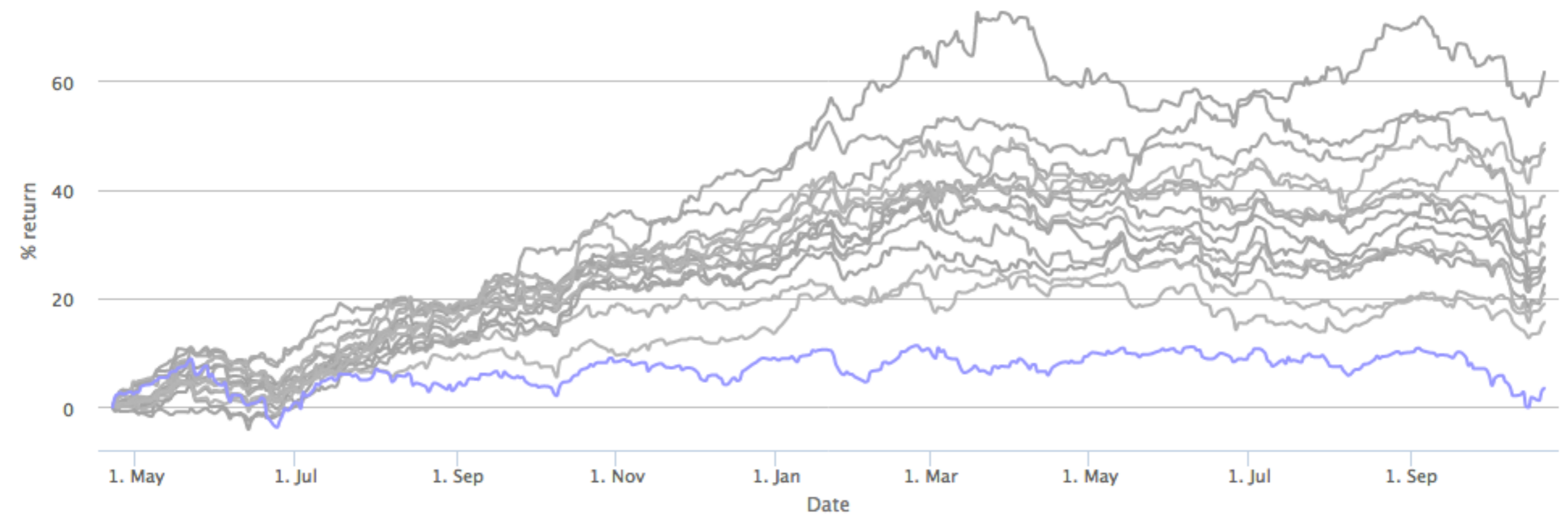


stk.pe/how-many-stocks

*Portfolios of 5 LSE stocks >£10m market cap held since inception.

Random 15 stock portfolios

Rank 90+

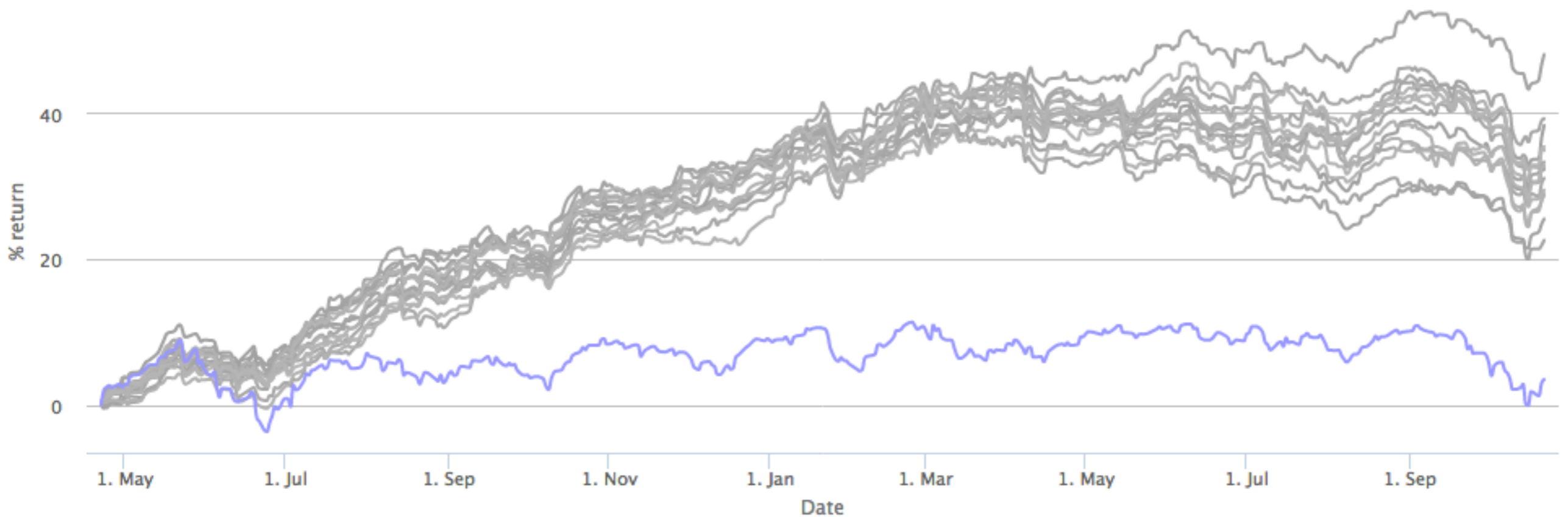


stk.pe/how-many-stocks

*Portfolios of 5 LSE stocks >£10m market cap held since inception.

Random 25 stock portfolios

Rank 90+



stk.pe/how-many-stocks

*Portfolios of 5 LSE stocks >£10m market cap held since inception.

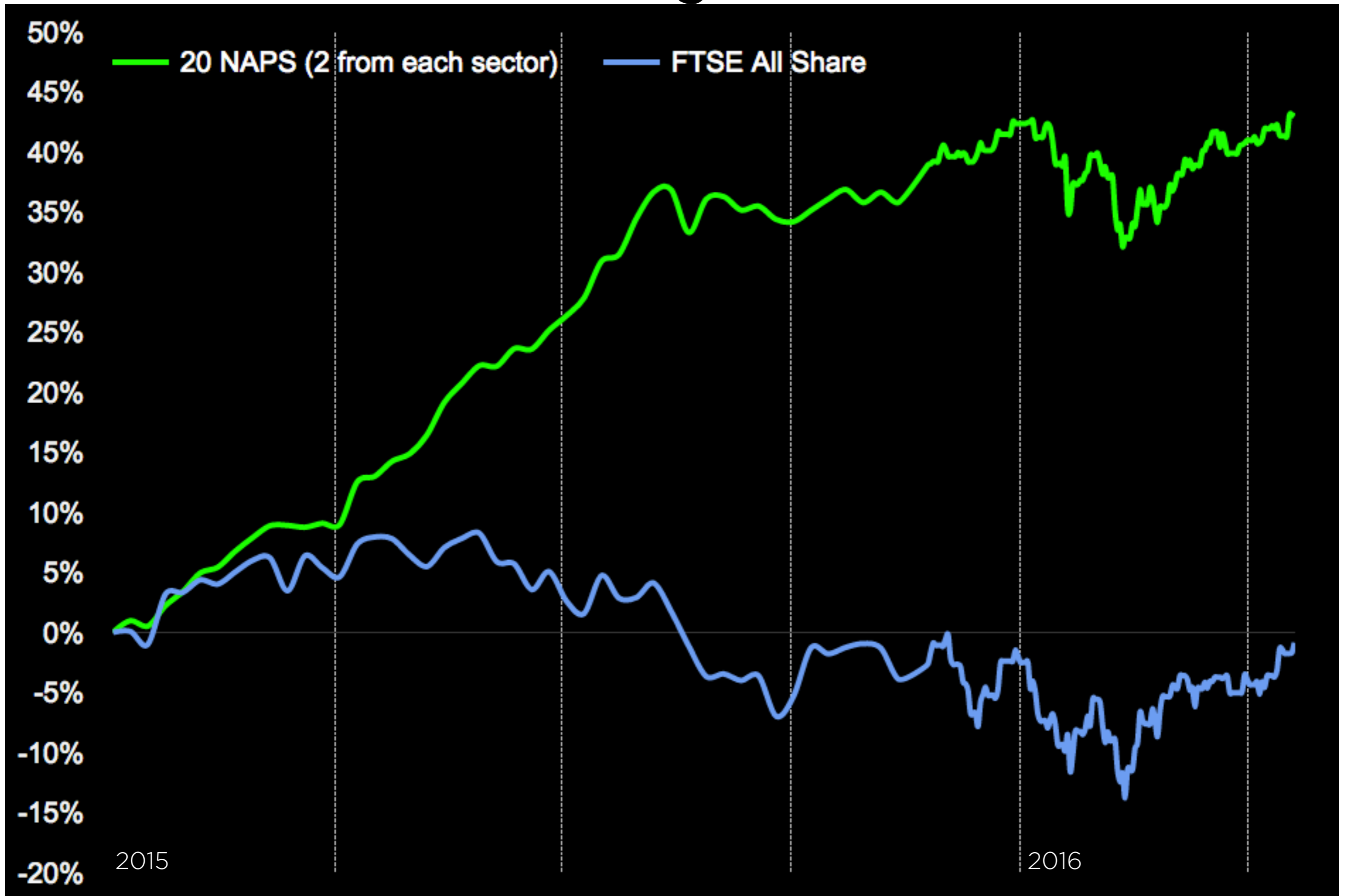
“If you are doing a limited amount of work on individual stocks or no work at all like most investors, diversifying with 20 or 30 (magic formula) stocks is most definitely the right plan for you.”

Joel Greenblatt

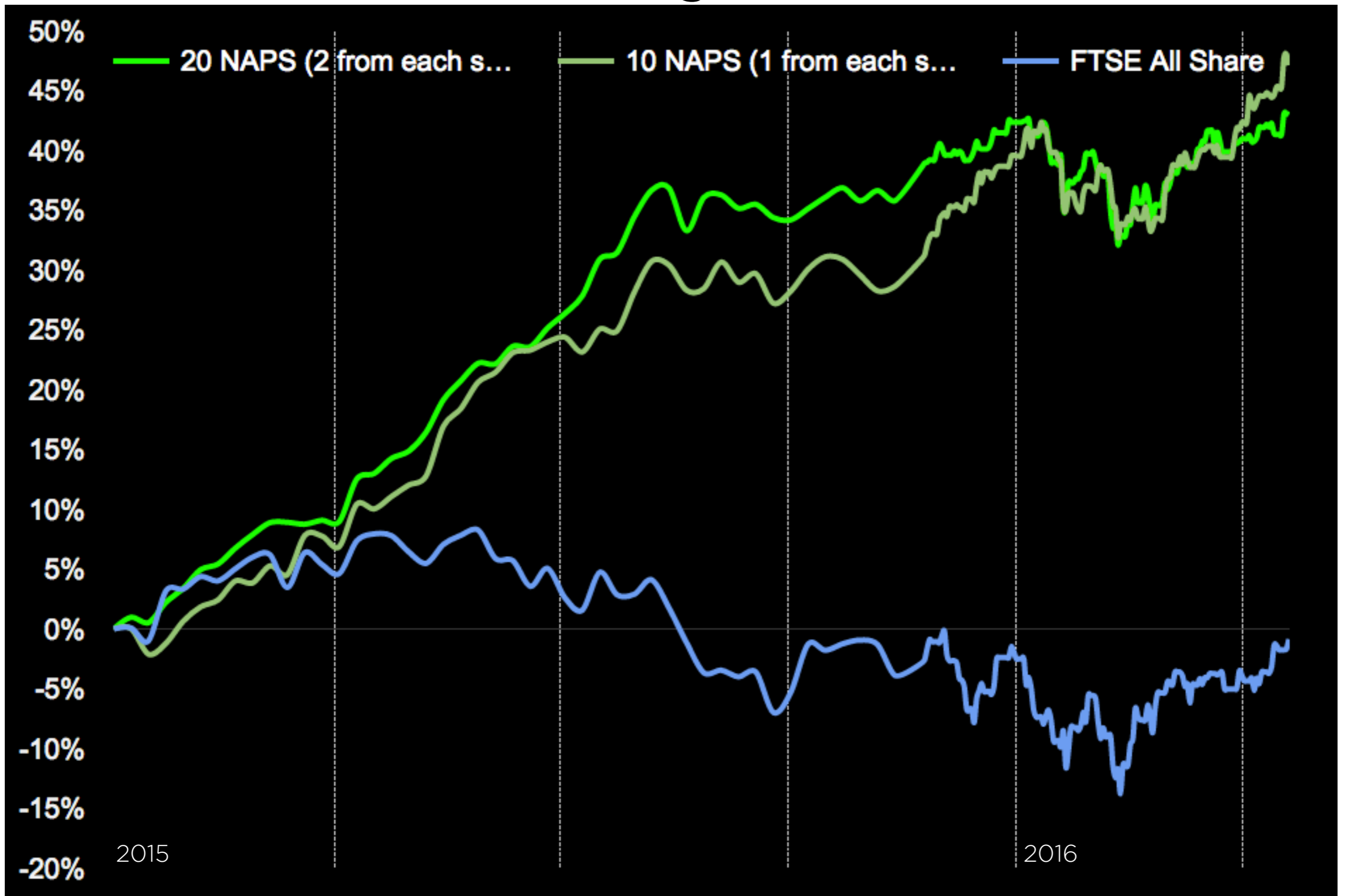
Author, Columbia Lecturer, Gotham Capital



How many stocks?



How many stocks?



How many stocks?

- Aim to build up to 25 stocks
- Bear in mind costs & size

Stocks in portfolio	Portfolio Size (£)					
	5,000	10,000	20,000	30,000	50,000	100,000
1	4.72%	2.76%	1.78%	1.45%	1.19%	1.00%
5	6.00%	3.40%	2.10%	1.67%	1.32%	1.06%
10	7.60%	4.20%	2.50%	1.93%	1.48%	1.14%
15	9.20%	5.00%	2.90%	2.20%	1.64%	1.22%
20	10.80%	5.80%	3.30%	2.47%	1.80%	1.30%
25	12.40%	6.60%	3.70%	2.73%	1.96%	1.38%
30	14.00%	7.40%	4.10%	3.00%	2.12%	1.46%
50	20.40%	10.60%	5.70%	4.07%	2.76%	1.78%

stk.pe/folio-breadth

Concentration vs Leverage

There are 2 ways to increase returns:

1. Concentrate in just a few stocks (get lucky)
2. Diversify and Leverage (get smart)

Managing leverage risk is easier than managing concentration risk !

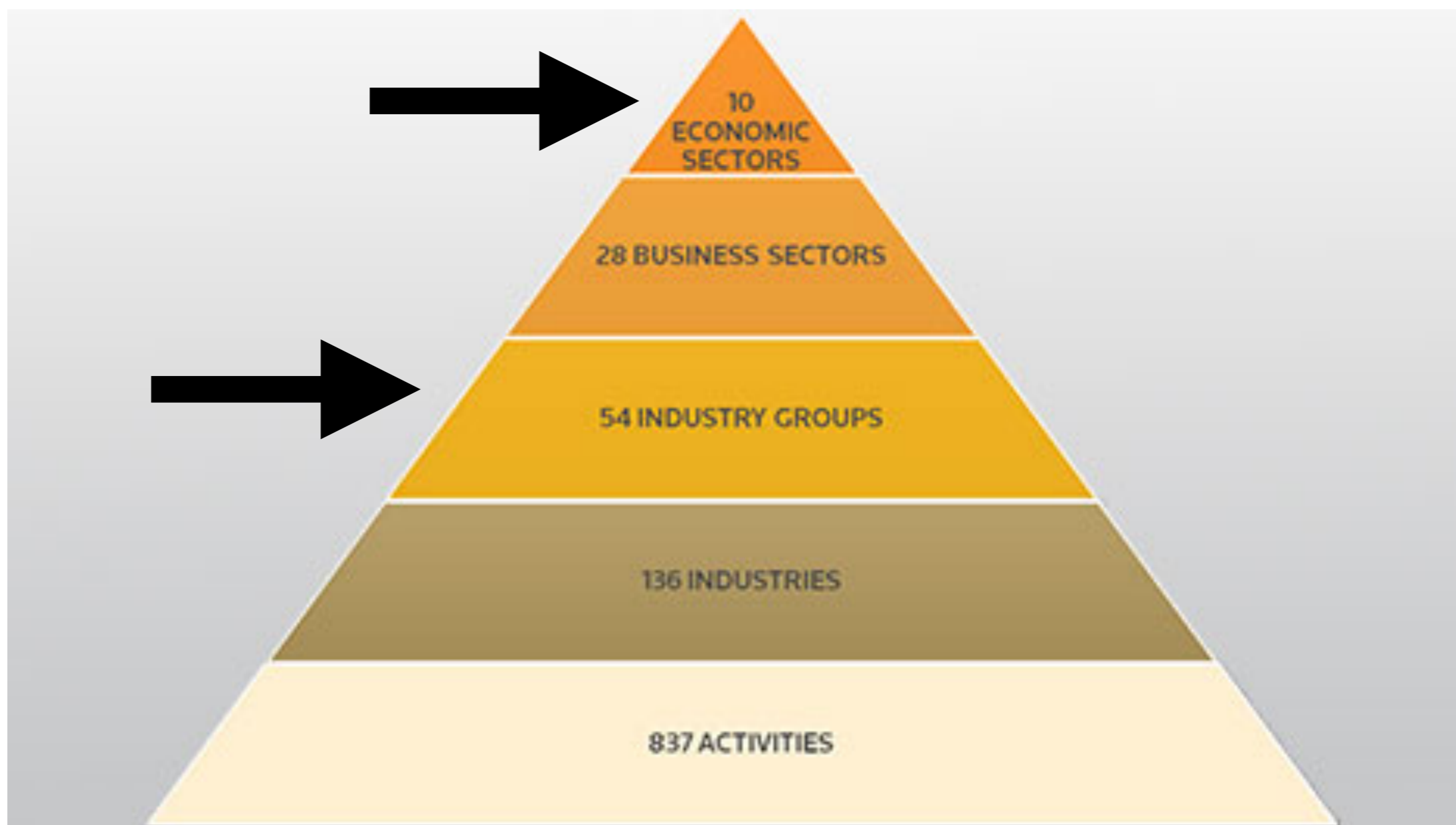
stk.pe/concentration-vs-leverage

Diversification

2. How many sectors?

TRBC Business Classification

A simple but effective sector classification schema



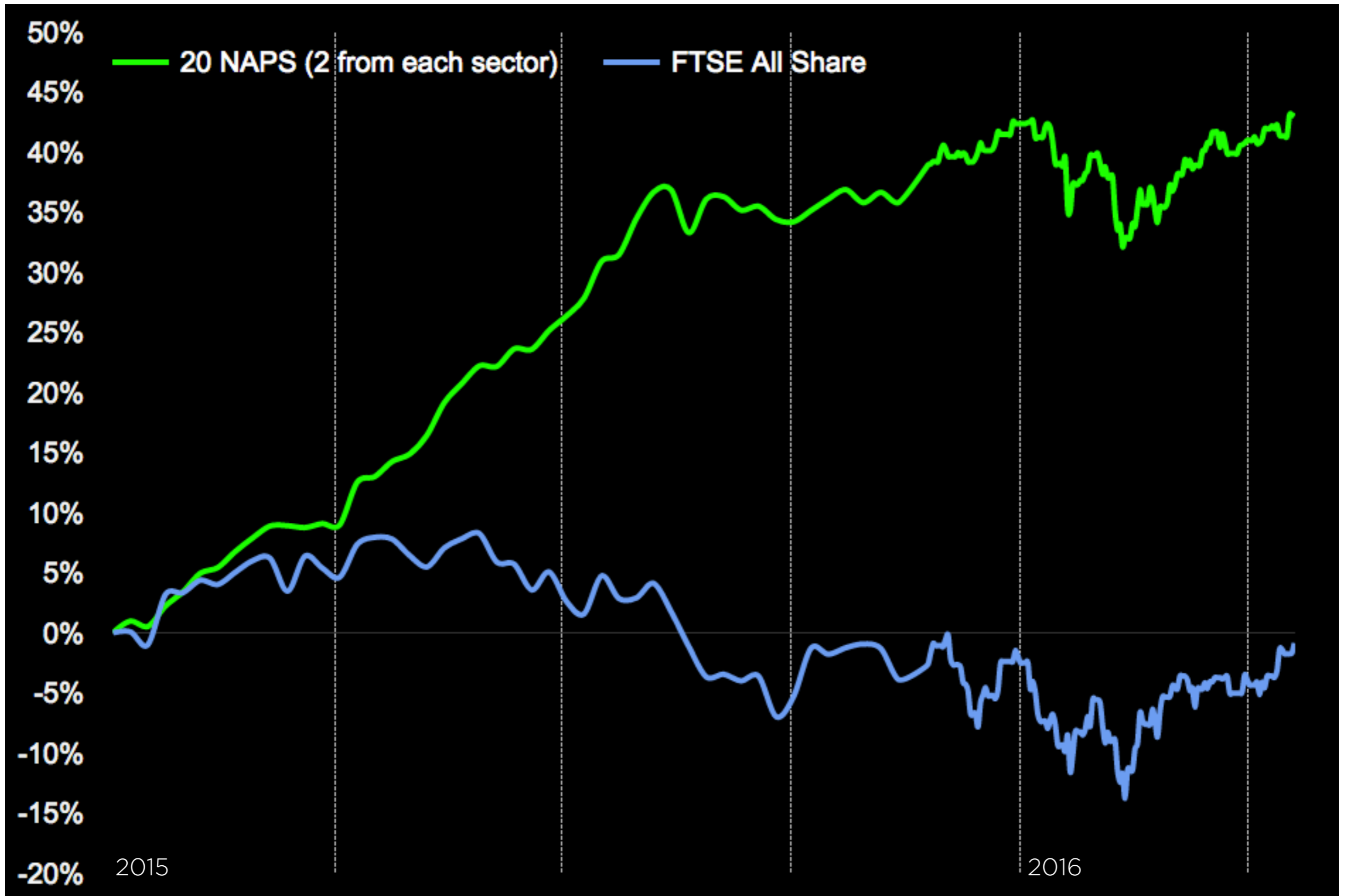
TRBC Business Classification

10 Economic Sectors

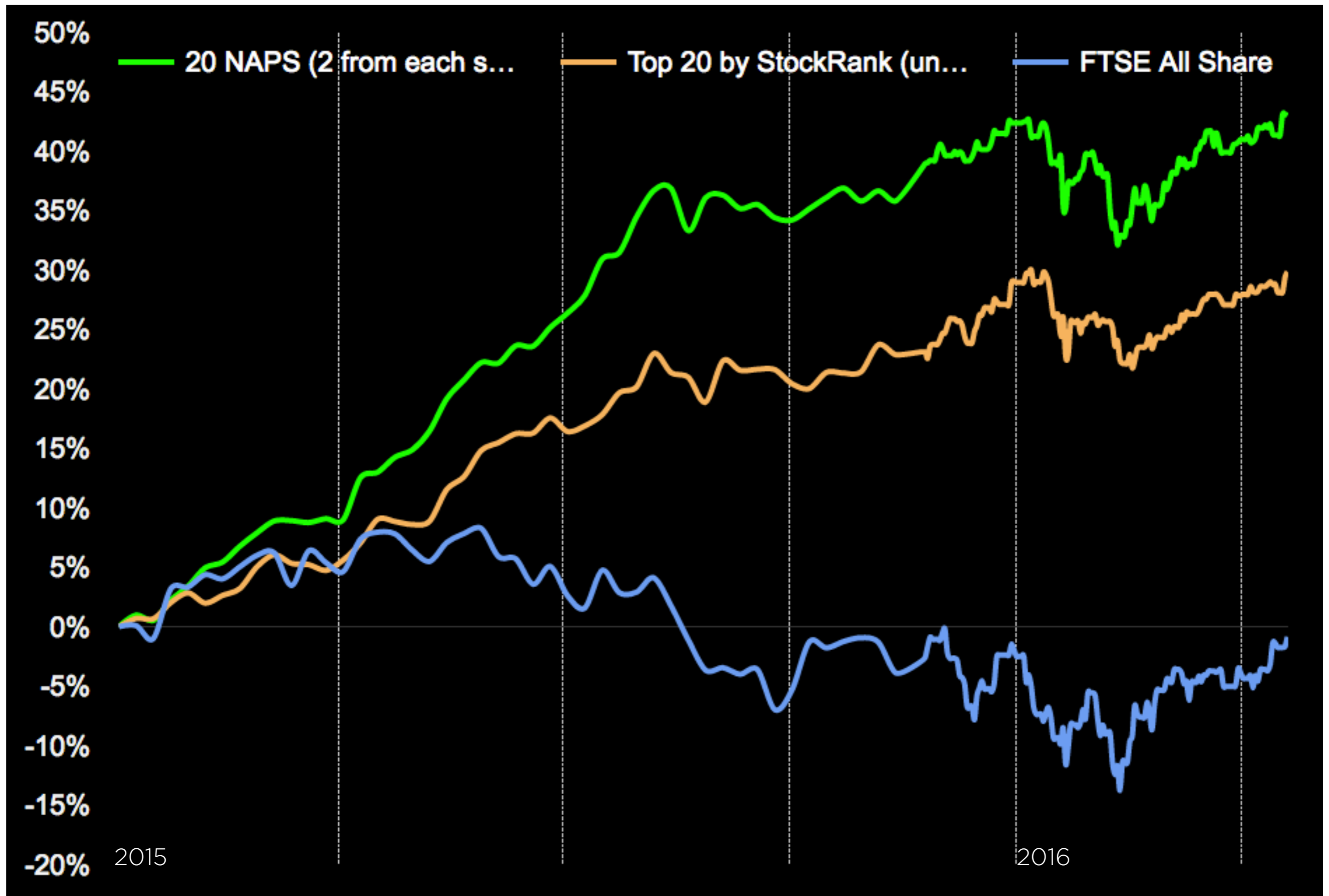
- Energy
- Basic Materials
- Industrials
- Consumer - cyclical
- Consumer - defensive
- Financials
- Healthcare
- Technology
- Telecoms
- Utilities

stk.pe/trbc-sectors

Why diversify across sectors?



Why diversify across sectors?



Diversification

3. Microcaps - a double edged sword?

4. Keeping your Balance

Position Sizing and Rebalancing



Position Sizing

- Keep things simple
- Avoid over-confidence
- Equal weighted positions ?

Why Rebalance?

- Prices drift & position sizing drifts (risk)
- Exposure to QVM payoffs drifts (risk)
- Avoid single stock overexposures.
- Remain aligned with the right payoffs.
- Mind the costs! (commission+spread+tax)

Excellent article - stk.pe/keep-rebalance

“Rebalancing is the simplest, and yet one of the most powerful, ways of buying low and selling high”

Andrew Ang

Professor of Business, Columbia Business School
Author: “Asset Management,
A systematic approach to factor investing”

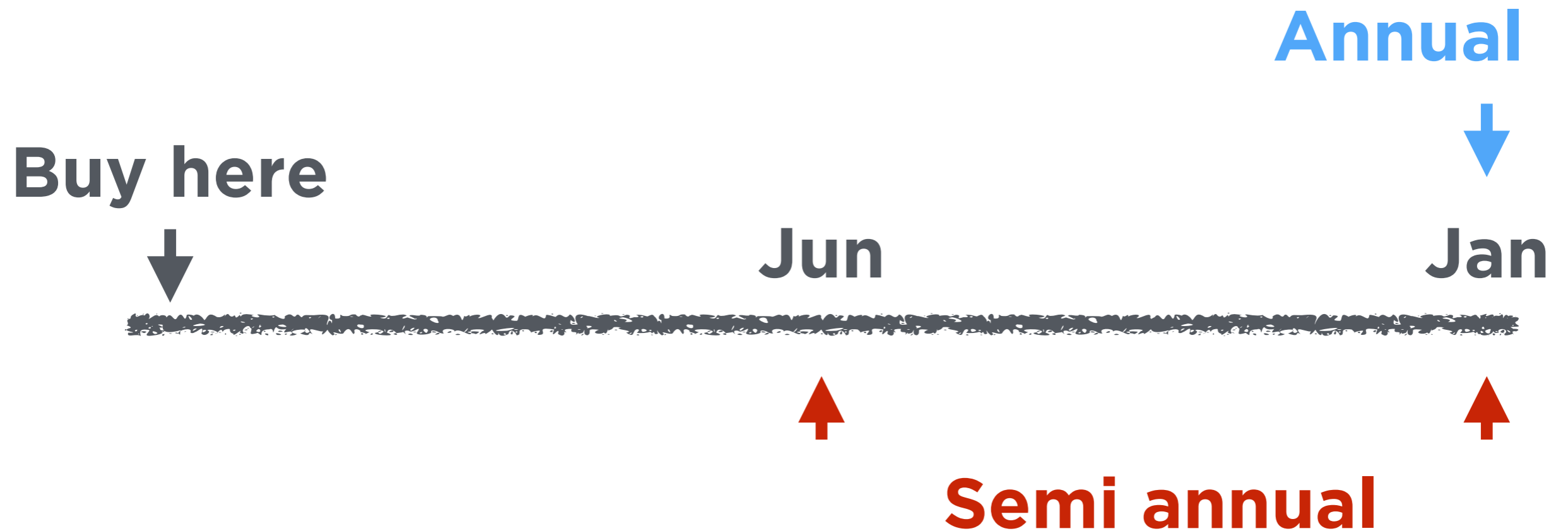


2 Approaches

- TIME based (passive)
i.e. every fixed schedule - each year
- THRESHOLD based (active)
i.e. when positions drift in size / rank



Time based



More frequent... more return, higher cost!

Time based

- Frequency depends on:
 - Account Tax Status (avoid CGT in ISA/SIPP)
 - Portfolio Size (large accounts can trade more)
 - Frictional trading cost (small caps expensive)
- Annual rebalancing ideal?
- Staggered rebalancing?

stk.pe/cost-worksheet

Threshold based



8%



SELL

4%



target

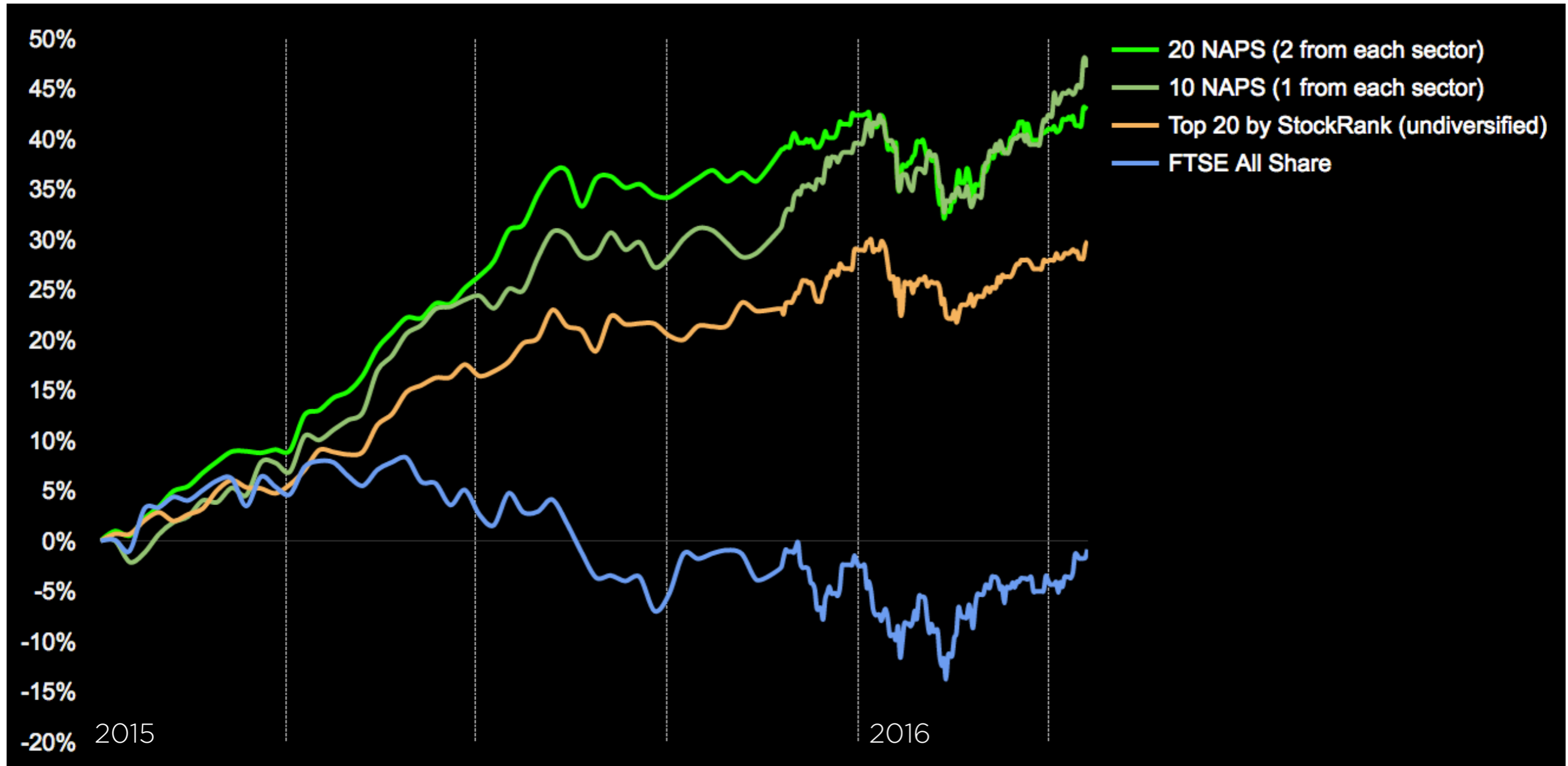
2%



BUY

take advantage of mean reversion

All the Folios



Additional Material

User Portfolios

Two of the most vocal StockRank systematic 'farmers' with their remarkable success stories to date.

Mechanical Bull

67.7 per cent in 2 years

stk.pe/mech-bull

GrinderTrader

38 per cent in 1 year

stk.pe/grinder-trader



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