

Fairtree Capital

Fundamental Systematic Investment Solutions

Presented by:

Rademeyer Vermaak M.Eng (Cum Laude), CFA®
Portfolio Manager (Smart Beta)

Fairtree Capital – Board of Directors

CHAIRMAN



Andre Malan, B Comm, MBA - Director

Andre started his asset management experience as a banks analyst at Barnard Jacobs and Mallet, where he received one of the top ratings for a banks analyst in 1997. In 1998 he joined Decillion and has managed hedge funds ever since. Andre started the Fairtree Market Neutral Fund in November 2003, and in early 2006 he performed a management buy-out of the business that managed the Fairtree Market Neutral Fund. Andre then went on to establish Fairtree Capital.

CHIEF EXECUTIVE OFFICER



Kobus Nel, CA (SA), CFA - Director

Kobus completed his CA articles with PricewaterhouseCoopers in 2000 and went on to receive his CFA in 2005. Prior to joining Fairtree, Kobus was part of the in-house corporate finance team for Sanlam, where he was involved in several large corporate transactions. Kobus was instrumental in negotiating and assisting Andre with the management buy-out of the Fairtree Market Neutral Fund in 2006. That same year, he became co-fund manager of the fund and in addition to this has been a co-fund manager of the Fairtree Long Short Fund since it was launched in 2007.

CHIEF INVESTMENT OFFICER



Bradley Anthony, CAIA – Director

Bradley started his career at Nedcor in 1993 and has held positions as head of domestic treasury, head of fixed income and as structured products fund manager at the Nedcor Banking Group, BOE Asset Management Group, RMB and Momentum Capital Management, respectively. In 2007 Bradley joined the Momentum Alternative Investments Group where he was appointed as the chief investment officer. Bradley joined Fairtree in 2011 and is responsible for the fund management of the multi-strategy products.

Fairtree Capital overview

Leading multi strategy investment manager

Started
2003

- **Directors:** Andre Malan (Founder), Kobus Nel (2006), Bradley Anthony (2011)
- **Highlights:** 2008 - Strong performance; 2010 - Launched Multi Strategy fund; 2013 - Awarded NBIM mandate

Firm AUM
R21bn

- **Type:** Long Only - 79%; Alternatives - 21%
- **Industry:** 8% of SA Hedge Fund industry
- **Investors:** Foreign - 60%; Domestic - 40%

Strategy
Teams
12

- Specialist teams across major asset classes
- Small independent teams across 3 offices
- World class quality institutional infrastructure
- Large investment team with diverse skill set

Investment
Professionals
36

- Portfolio managers: 21
- Analysts & trading: 15

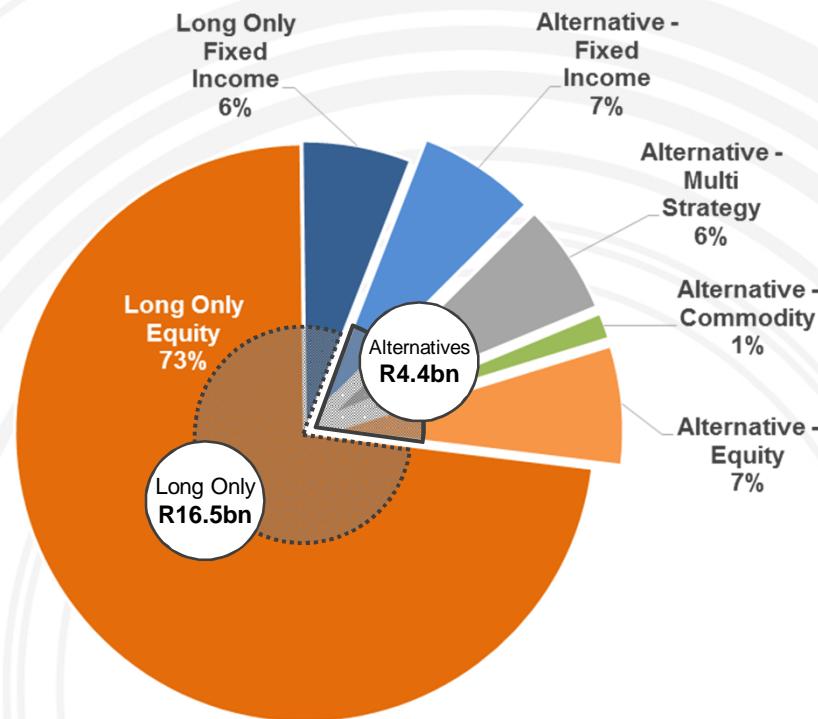
Assets under management as at Mar '15. Industry assets from Novare SA Hedge Fund Survey Jun '14.



Headquarter
Cape Town

Breadth and depth of expertise

Provide investors with access to a diversified range of opportunities



- Institutional / retail investor base split: 75 / 25%
- Largest institutional investor: Norges Bank Investment Management (NBIM)

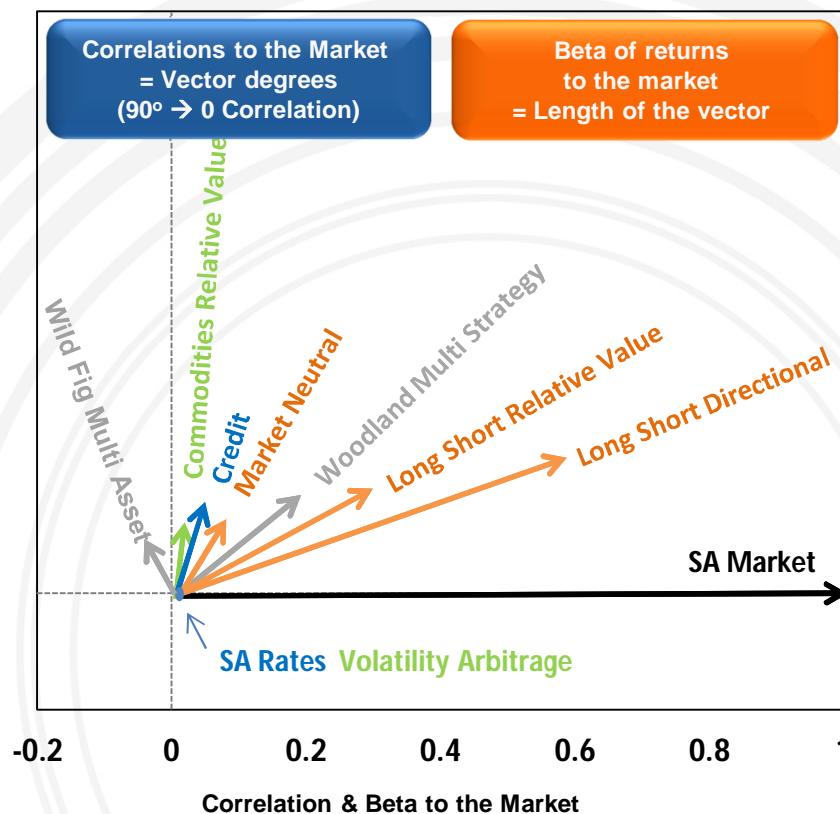
Assets as at Mar '15. Assets shown in pie chart for stand alone investment mandates. Table represents assets managed by teams for both stand alone and multi strategy products.

Strategy Teams	AUM (ZAR)	Single Strategy	Multi Strategy	Inception / Joined	Track Record
Equity					
Relative Value	1698	861	837	2003	12
Directional Bias	908	599	309	2011	4
Long Only	16498	16498	-	2011	12
Quant - Factor Based	134		134	2013	-
Global Consumer	134	57	77	2011	-
Australia	77		77	2013	-
Fixed Income					
Rates	1289	375	914	2010	7
Credit (incl. Long Only)	2693	2507	186	2013	10
Commodity (Agriculture)					
Relative Value	959	195	764	2010	6
Volatility Arbitrage	252	143	108	2013	12
Multi Asset					
Multi Strategy	1414	1414	0	2010	5
Private Equity					2014

Teams generate unique uncorrelated return streams

Our funds provide differentiated returns vs. traditional assets

Correlation and beta exposures of alternative strategies to the traditional markets



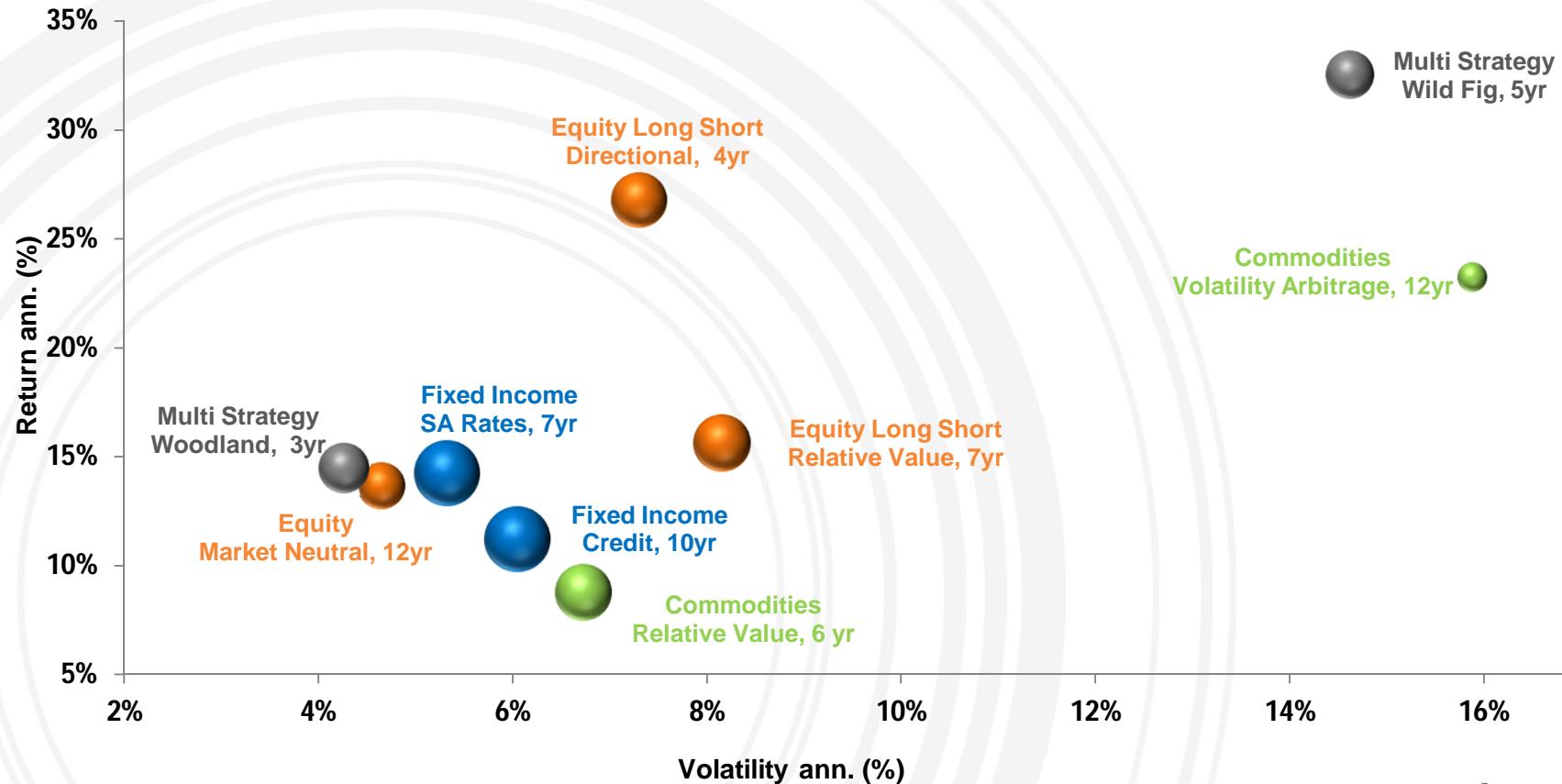
	Market Neutral	Long Short	Long Short - Directional	Fixed Income	Credit	Commodities	Volatility Arbitrage	Wild Fig	Woodland	SA Equity	SA Fixed Income	Commodities	S&P
Market Neutral	1.0												
Long Short	0.8	1.0											
Long Short - Directional	0.5	0.7	1.0										
Fixed Income	-0.1	-0.1	0.0	1.0									
Credit	0.0	0.0	0.0	0.1	1.0								
Commodities	-0.1	0.0	0.1	0.0	0.1	1.0							
Volatility Arbitrage	0.0	0.0	0.0	0.0	-0.1	0.0	1.0						
Wild Fig	0.3	0.2	0.2	0.1	0.1	0.9	-0.3	1.0					
Woodland	0.6	0.8	0.7	0.1	0.2	0.2	0.2	0.4	1.0				
SA Equity	0.3	0.6	0.8	0.0	0.1	0.1	0.0	0.3	0.6	1.0			
SA Fixed Income	-0.1	0.0	0.1	0.3	0.4	0.1	0.0	0.1	0.2	0.1	1.0		
Commodities	0.1	0.1	0.1	-0.1	0.1	-0.1	-0.1	-0.1	0.1	0.0	-0.3	1.0	
S&P	0.3	0.4	0.2	-0.1	0.4	0.0	0.0	0.0	0.3	-0.1	-0.5	0.5	1.0

As at Apr '15. Daily data used since Dec '12 for correlation matrix and since inception data used for the vector diagram. The market is represented by the FTSE/JSE All Share Total Return Index.. Daily ZAR returns used in correlation matrix except for Commodities and S&P where USD monthly data was used.

Hedge Funds: Specialist investment teams with proven track record

Credible pedigree across multiple strategies

Alternative strategies: Risk & return profiles since inception (ZAR)

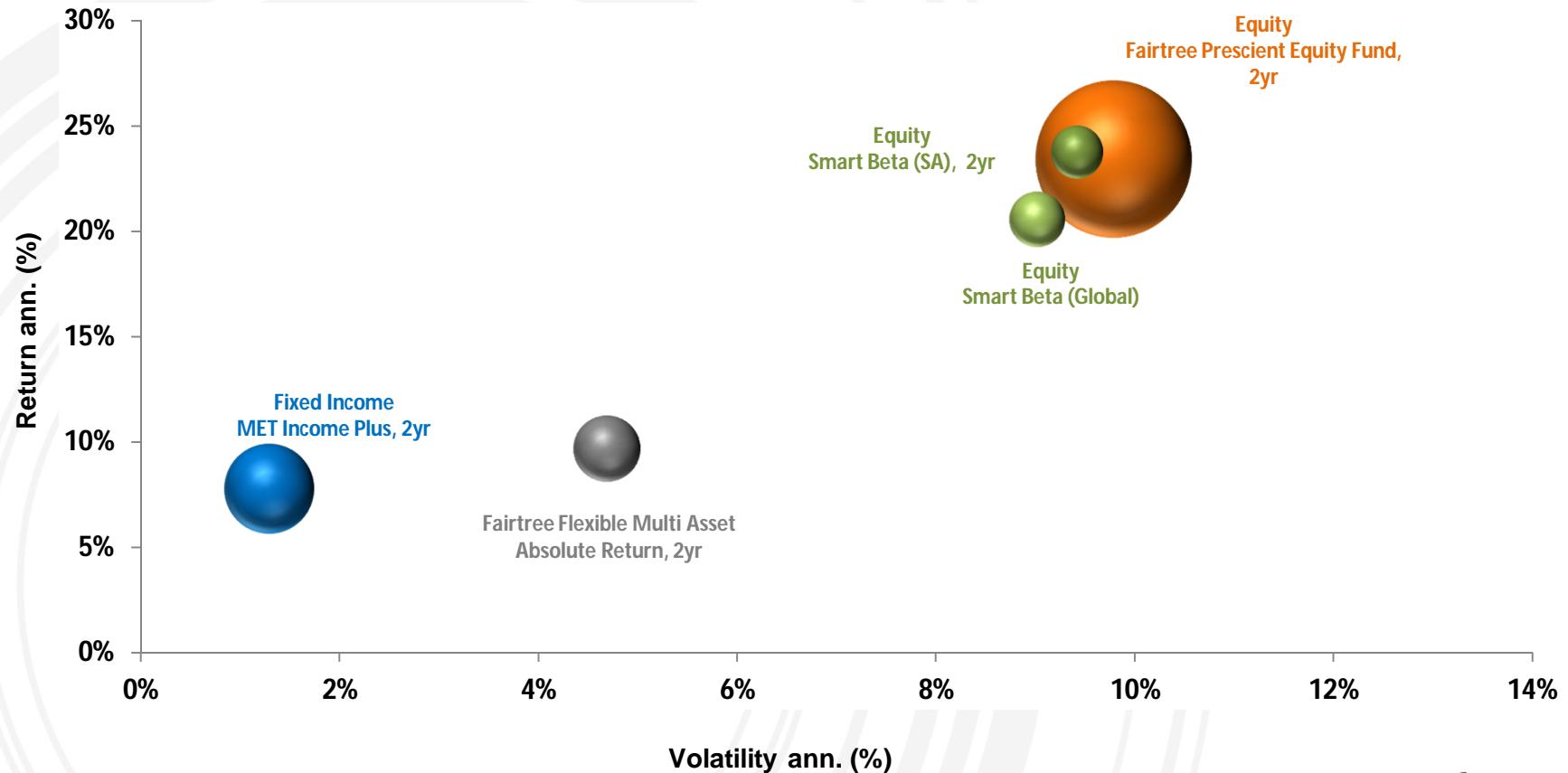


As at Apr'15. Estimated returns used for Apr '15. Risk and return is calculated since inception. Size of bubble represents assets managed under strategy.

Long Only: Specialist investment teams with proven track record

Credible pedigree across multiple strategies

Long Only strategies: Risk & return profiles since inception (ZAR)



Monthly Returns used, ss at May'15. Risk and return is calculated since inception for Prescient Equity Fund Fund(Nov-11), Flexible Balanced (Jun-13) and MET Income Plus (Jun-13). Pro-Forma monthly returns used for Smart Beta Global, and Smart Beta SA (Prior to Sep-13, actual thereafter). Size of bubble represents assets managed under strategy.

Team Background

Rademeyer Vermaak - MEng Electronic (Cum Laude), CFA

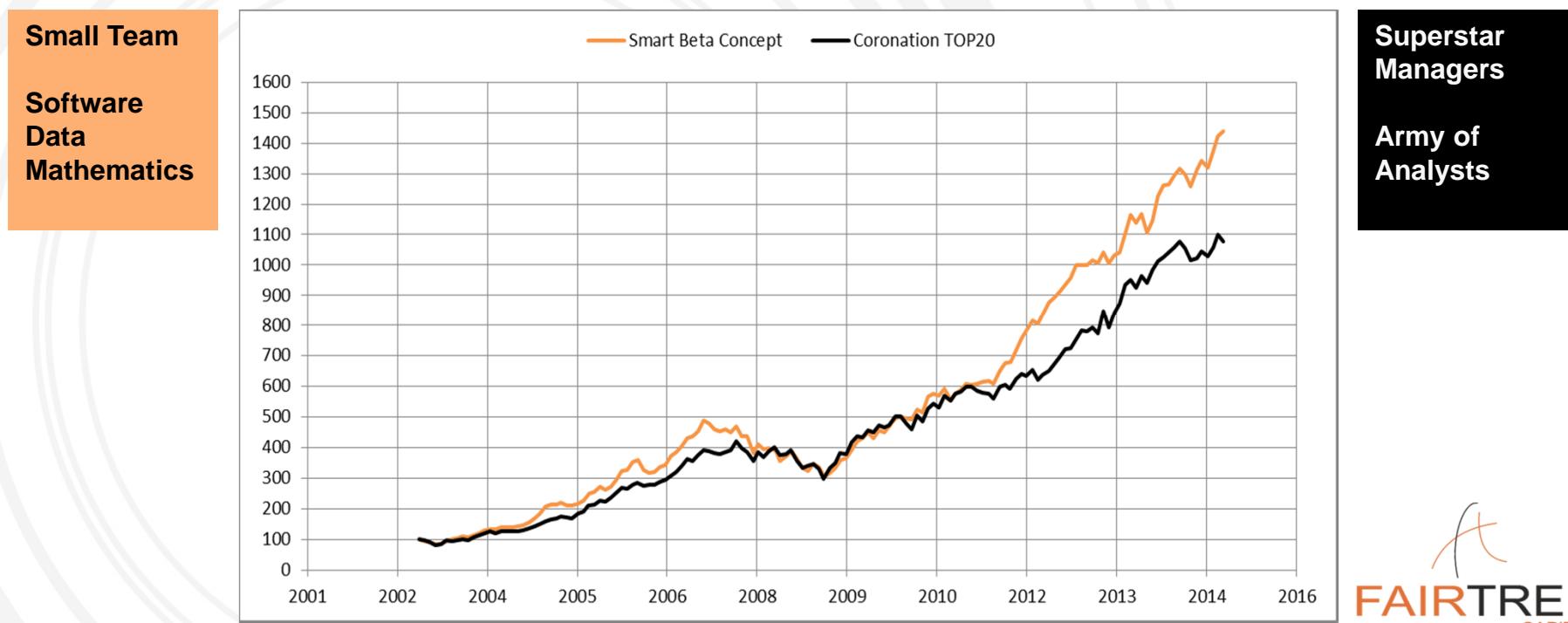
- University of Pretoria - Represented South Africa in 2002 Robot Soccer World Cup
- Kreon Technology - Research and development on Ingwe missile system
- London – Quantitative Analysis and Trading
 - Liquid Capital Markets, Barclays Capital, Dresdner Kleinwort, Mansard Capital
- Fairtree Capital – Head of Quantitative Research and Smart Beta Investments

Nico Katzke - MComm Financial Economics, (Cum Laude), Prospective PhD

- Financial Econometrics Lecturer, Stellenbosch University
- Internationally Published Economist
 - Alexander Brookes (London), Econex, Bureau of Economic Research, Frontier Advisory
- Fairtree Capital: Quantitative Analyst

Standing on the Shoulders of Giants

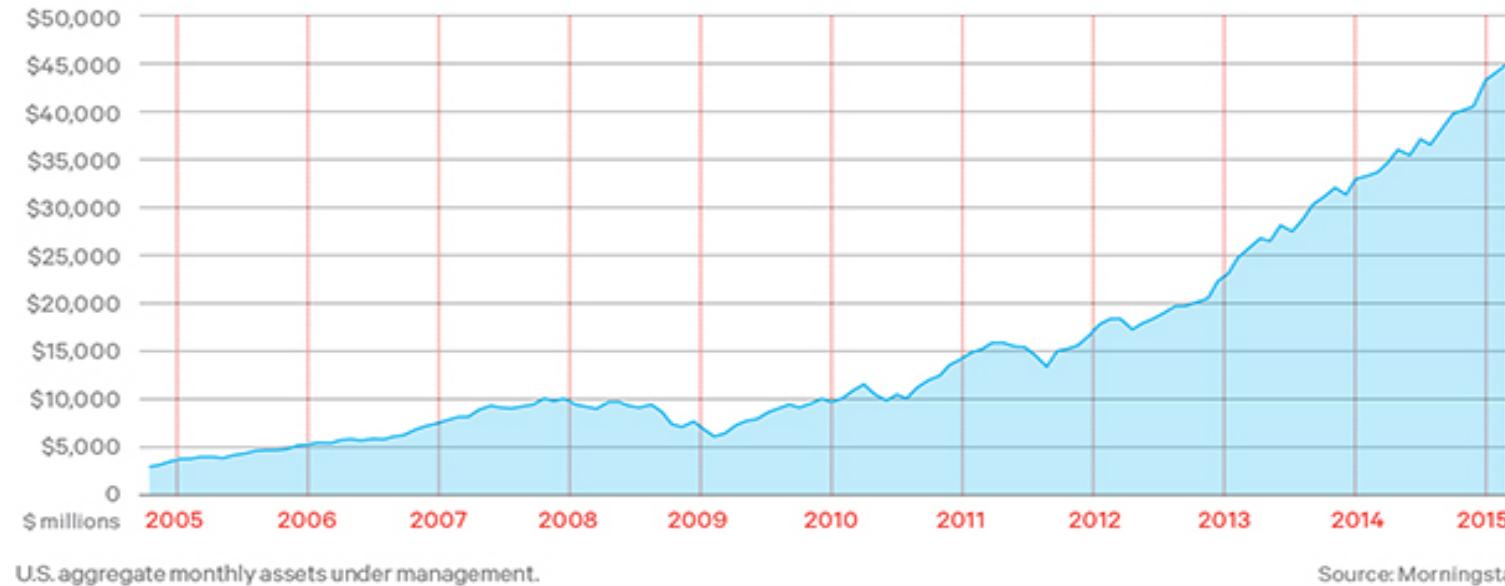
- Smart Beta = Strategic Beta = Factor Investing
- Solid grounding in Academia and Industry (3 Nobel prizes)
- Research from the most respected global universities



A Seismic shift in the Asset Management Industry

SMART THINKING

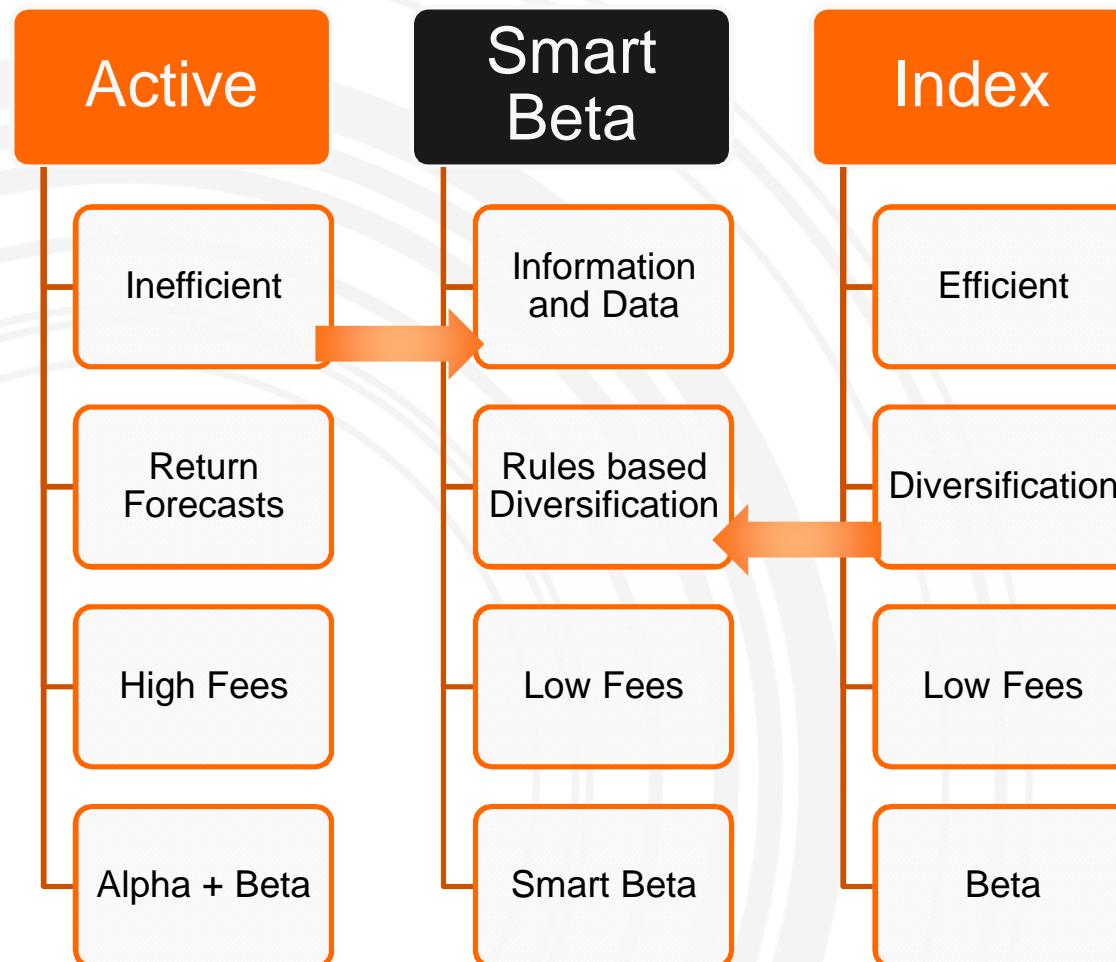
Strategic beta exchange-traded funds have taken off in popularity since the 2008–'09 financial crisis.



Smart Beta = Strategic Beta = Factor Investing

- *Institutional investors have doubled their exposure to so-called “smart beta” strategies in the past two years, according to **Towers Watson**. (Towers Watson, 2015)*
- “There is one thing stronger than all the armies in the world, and that is an idea whose time has come.” – Victor Hugo

Equity Investment Solutions

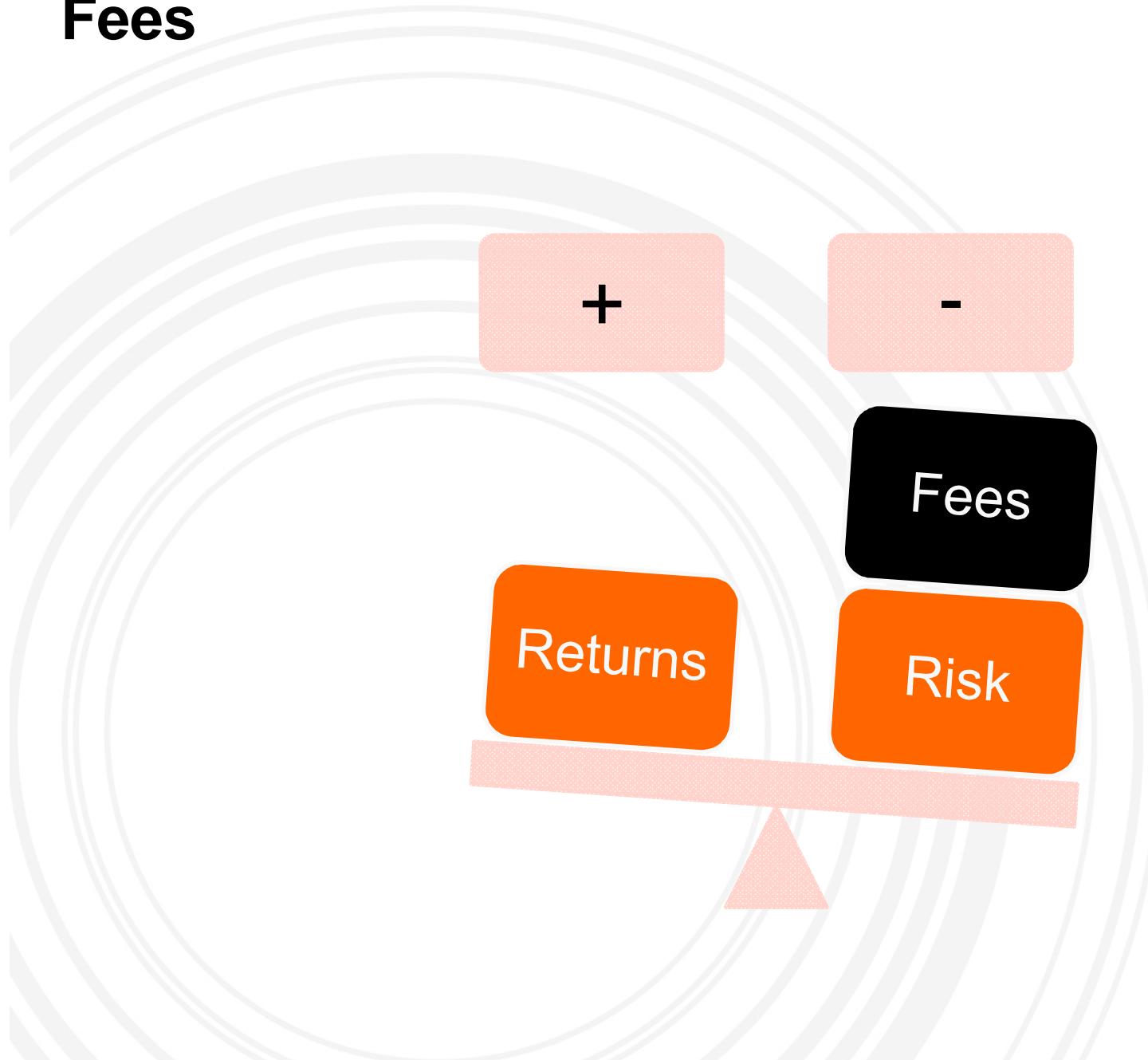


Investment Framework

“Investors want to chase returns, be fearful of risk, and minimise fees wherever possible” - Timothy Falcon Crack



Fees



+

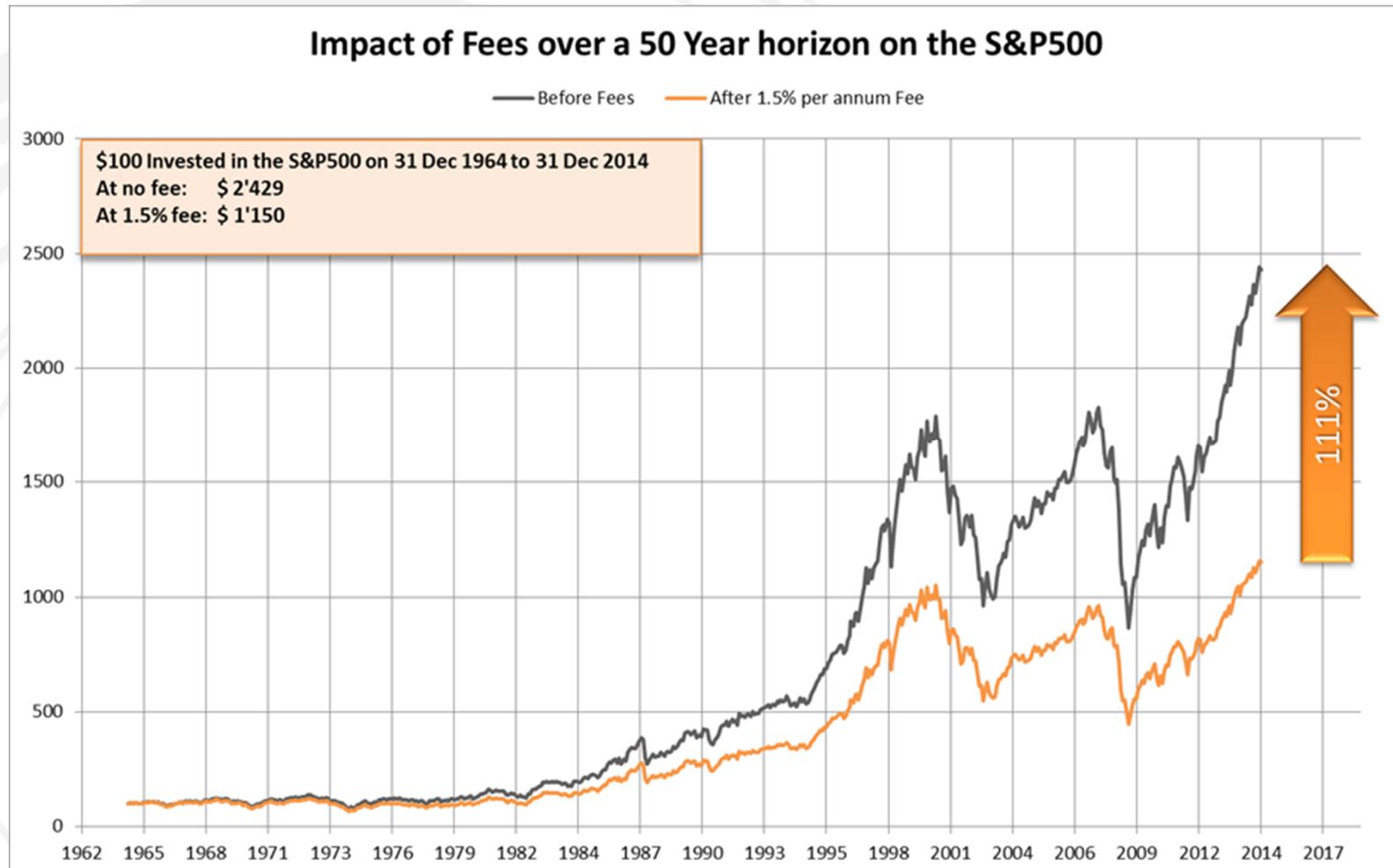
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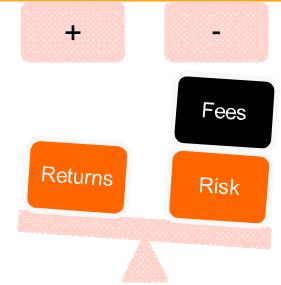
Fees

Returns

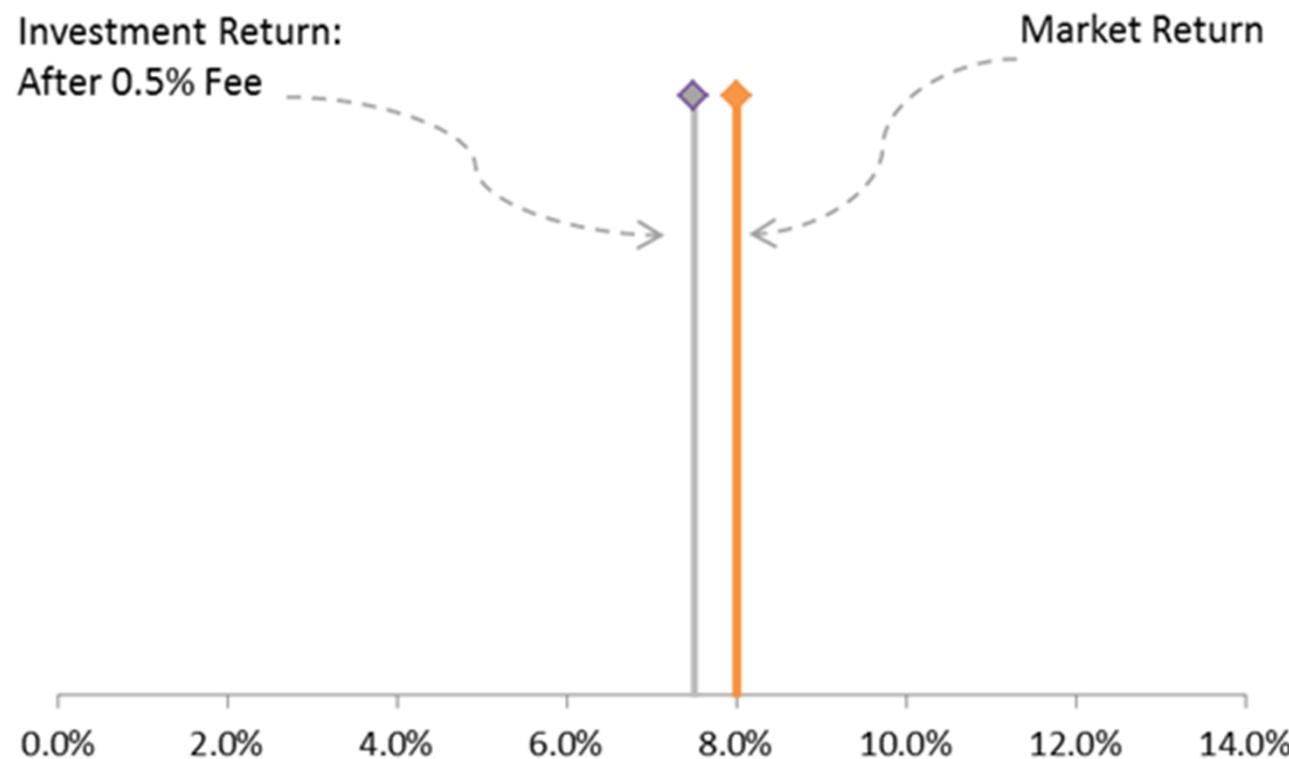
Risk

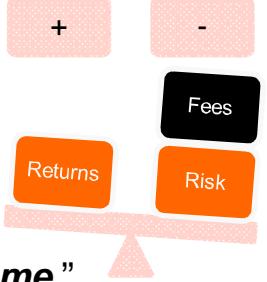
Why are Fees Important?





Fees on Index Investments

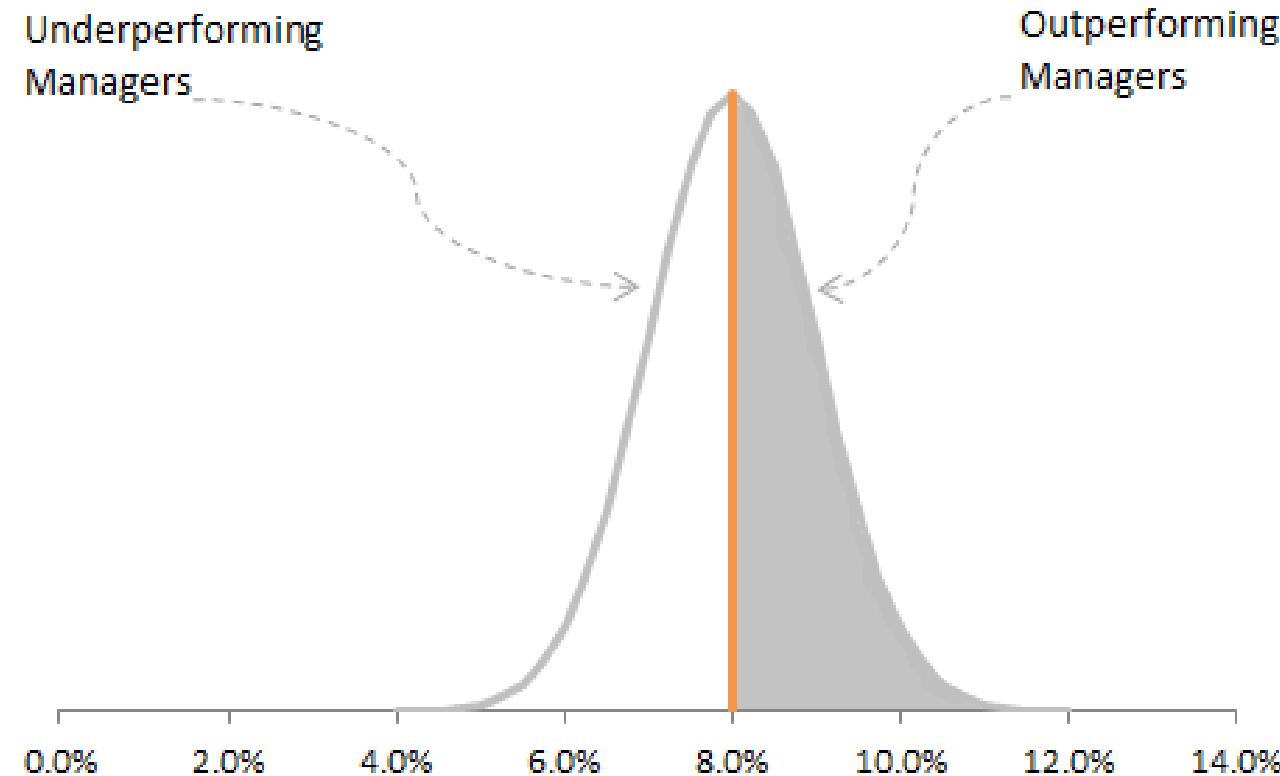




Fees on Active Investments

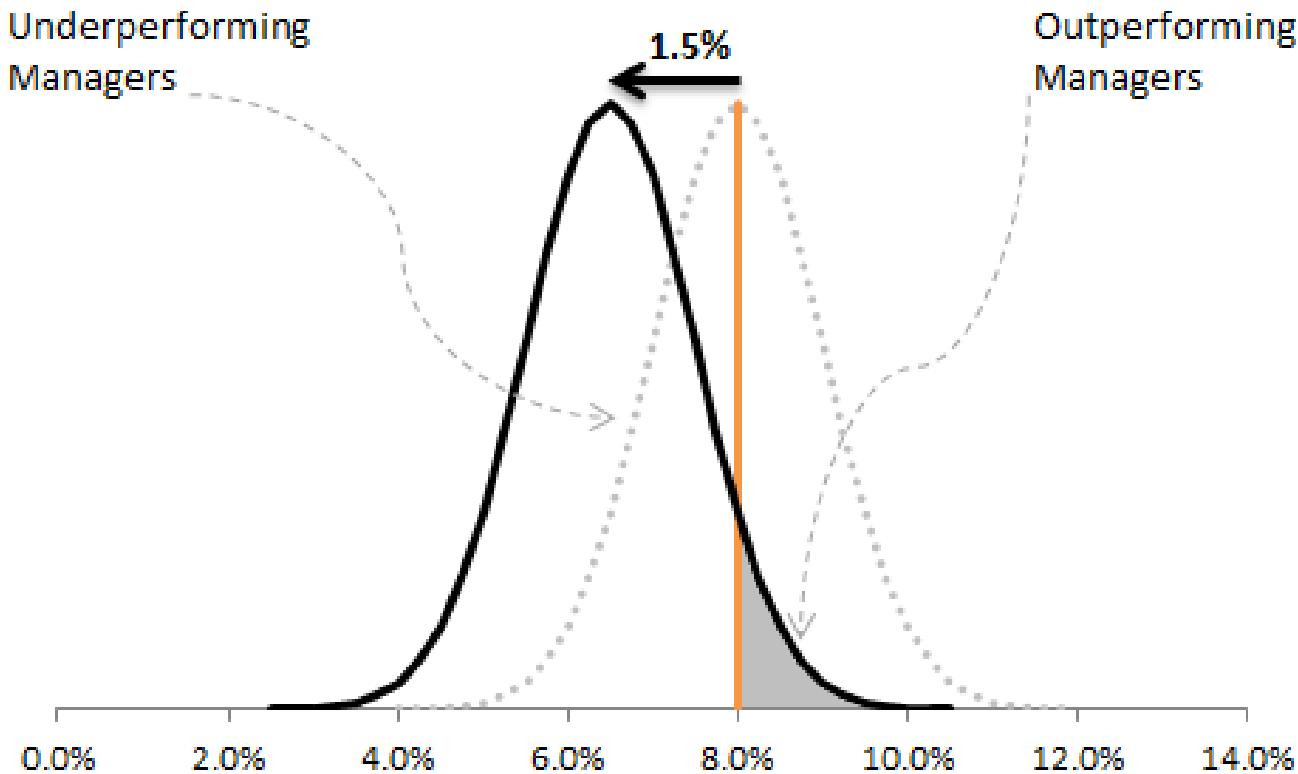
Nobel Prize winner William Sharpe: (The Arithmetic of Active Management, 1991)

"Before costs active management is a zero-sum game, and after costs it is a negative-sum game."





Fees on Active Investments



How Active is Your Fund Manager? A New Measure That Predicts Performance
(Cremers & Petajisto, 2009)

Active Share and Fees

Let me make a couple quick final points on active share. The first is that active share has been in steady decline in the last 35 years. Active share in 1980 was around 80 percent, and it's down to about 55 percent today. That, of course, excludes index funds and exchange-traded funds. So,

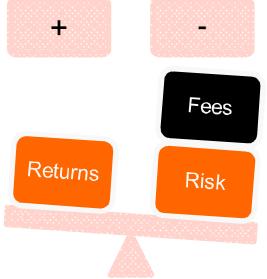
Second, active share is a nice way to think about fees. Say you are examining a mutual fund with an active share of 50 percent and total expenses of 125 basis points per year. If you work out the math, that fund has to generate excess returns in its active component of about 250 basis points in order to get to alpha of zero (see Exhibit 4). That's a difficult task, even for a skilled manager.

Exhibit 4: Closet Indexers Need Large Returns on Their Active Investments To Break Even

	<u>Percentage of Portfolio</u>	<u>Excess Return</u>	<u>Weighted Return</u>
Passive	50%	0.00%	0.00%
	100%		
Gross return		1.25%	
Less expenses		-1.25%	
Net return		= 0%	

Source: Credit Suisse.

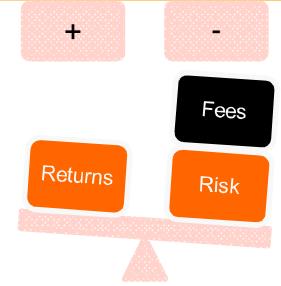
Understanding Skill (Maboussin & Callahan, 2015)



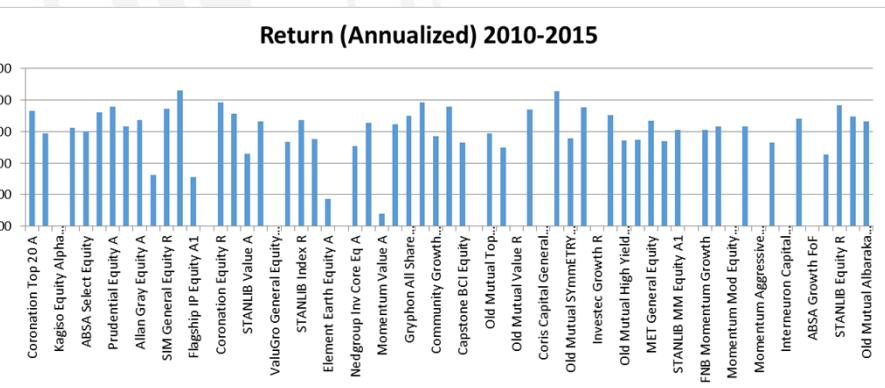
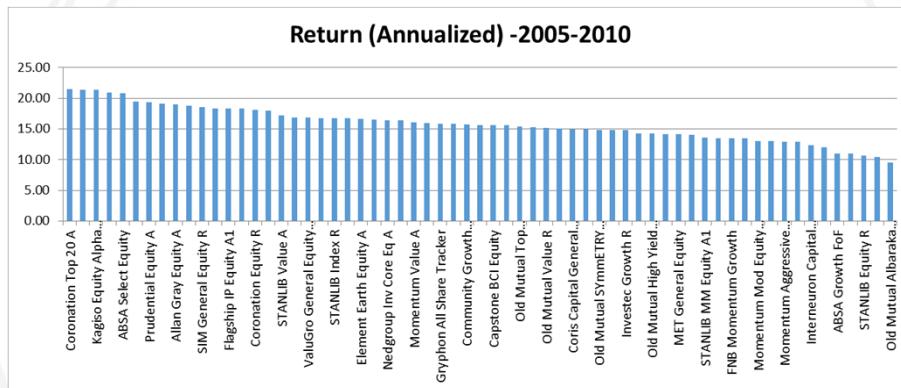
Fees on Active Investments

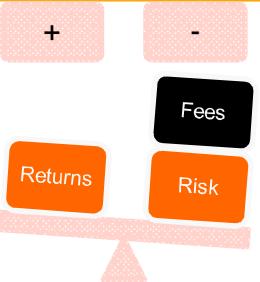
- **Average Underperformance of Active Managers relative to Benchmarks**
- The Performance of Mutual Funds in the Period 1945-1964 (Jensen 1967)
- Returns from Investing in Equity Mutual Funds 1971 to 1991 (Malkiel 1995)
- Another Puzzle: The Growth in Actively Managed Mutual Funds. (Gruber 1996)
- On Persistence in Mutual Fund Performance (Carhart 1997)
- Mutual Fund Performance: An Empirical Decomposition into Stock-Picking Talent, Style, Transactions Costs, and Expenses. (Wermers 2000)
- Investing In Equity Mutual Funds. (Pastor & Stambaugh 2001)
- Luck Versus Skill in the Cross Section of Mutual Fund Returns (Fama & French 2009)
- Active Management in Mostly Efficient Markets (Jones & Wermers 2011)

Fees on Active Investments



- Picking Stocks versus Managers
- More funds to pick from than stocks
- Past performance is no guarantee of future results (underperformance!)
- Performance Evaluation of Active Managers: An Overview of Current Practice. (Hsu, Kalesnik & Wermers, 2010)





Fees on Smart Beta Investments

- Technologies vs Salaries

Software handles large amounts of information in a structured manner, without emotion, at low cost



Exhibit 1: Machine versus Man in Various Games

Game	Date	Machine Level of Play	Description
Backgammon	1992	Superhuman	TD-Gammon program reaches championship-level ability.
Checkers	1994	Superhuman	CHINOOK program defeats reigning human champion, Marion Tinsley.
Othello	1997	Superhuman	Logistello program sweeps match against world champion, Takeshi Murakami.
Chess	1997	Superhuman	Deep Blue beats world champion, Garry Kasparov.
Jeopardy!	2011	Superhuman	Watson beats Ken Jennings and Brad Rutter, two former champions.
Go	2012	Very strong amateur	Zen series of programs attains rank 6 dan in fast games; programs improving at rate of about 1 dan per year, may surpass world champion in about a decade.

Source: Nick Bostrom, Superintelligence: Paths, Dangers, Strategies (Oxford: Oxford University Press, 2014), 12-13.



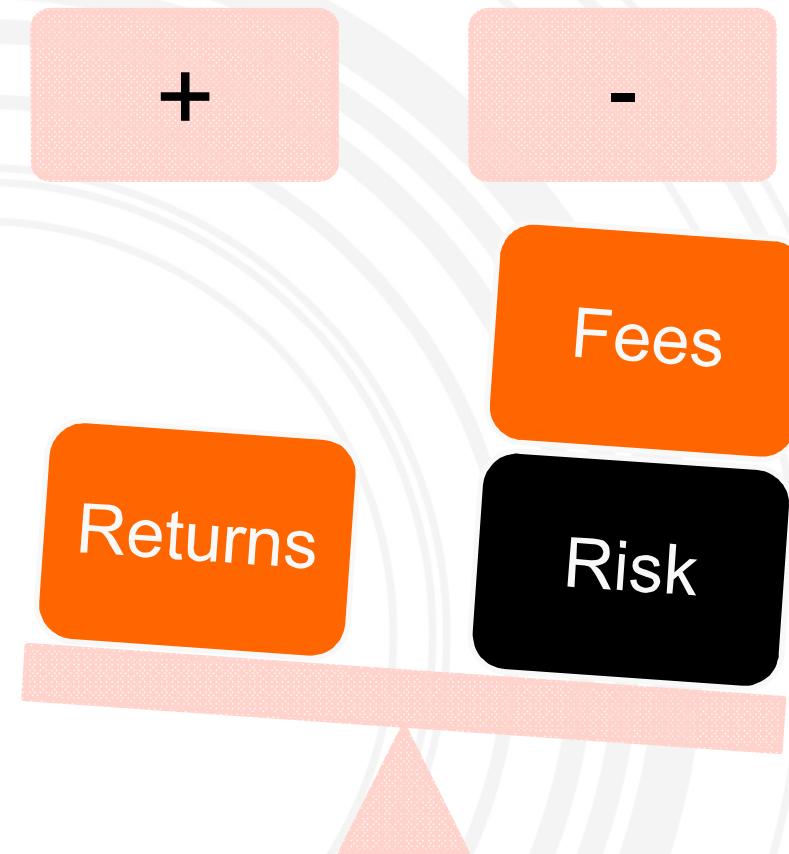
Fees on Smart Beta Investments

- Robot Soccer World Cup

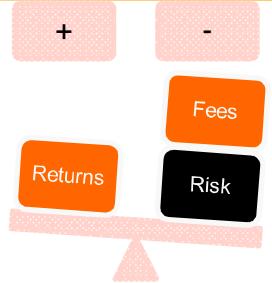


- Only true stock picking talent will be rewarded

Risk



Risk



- **The Real Goal and the Real Risk**
- Client Goal = retirement, university, home deposit



- Mind the Gap (Morningstar)
- Real Goal = keep the client invested
- How = less journey volatility, drawdowns and higher Sharpe Ratios



Risks of Index Investments

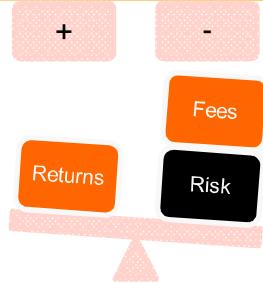
- The Index basket is Diversified... right?

TOP40 Index - 10 largest stocks: May 2015

Name	Weight in TOP40
NASPERS LTD-N SHS	11.41%
SABMILLER PLC	10.96%
BHP BILLITON PLC	9.52%
FINANCIERE RICHEMONT-DEP REC	9.20%
MTN GROUP LTD	6.62%
ANGLO AMERICAN PLC	4.48%
SASOL LTD	4.09%
BRITISH AMERICAN TOBACCO PLC	3.46%
STANDARD BANK GROUP LTD	3.29%
OLD MUTUAL PLC	3.25%
Sum:	66.29%

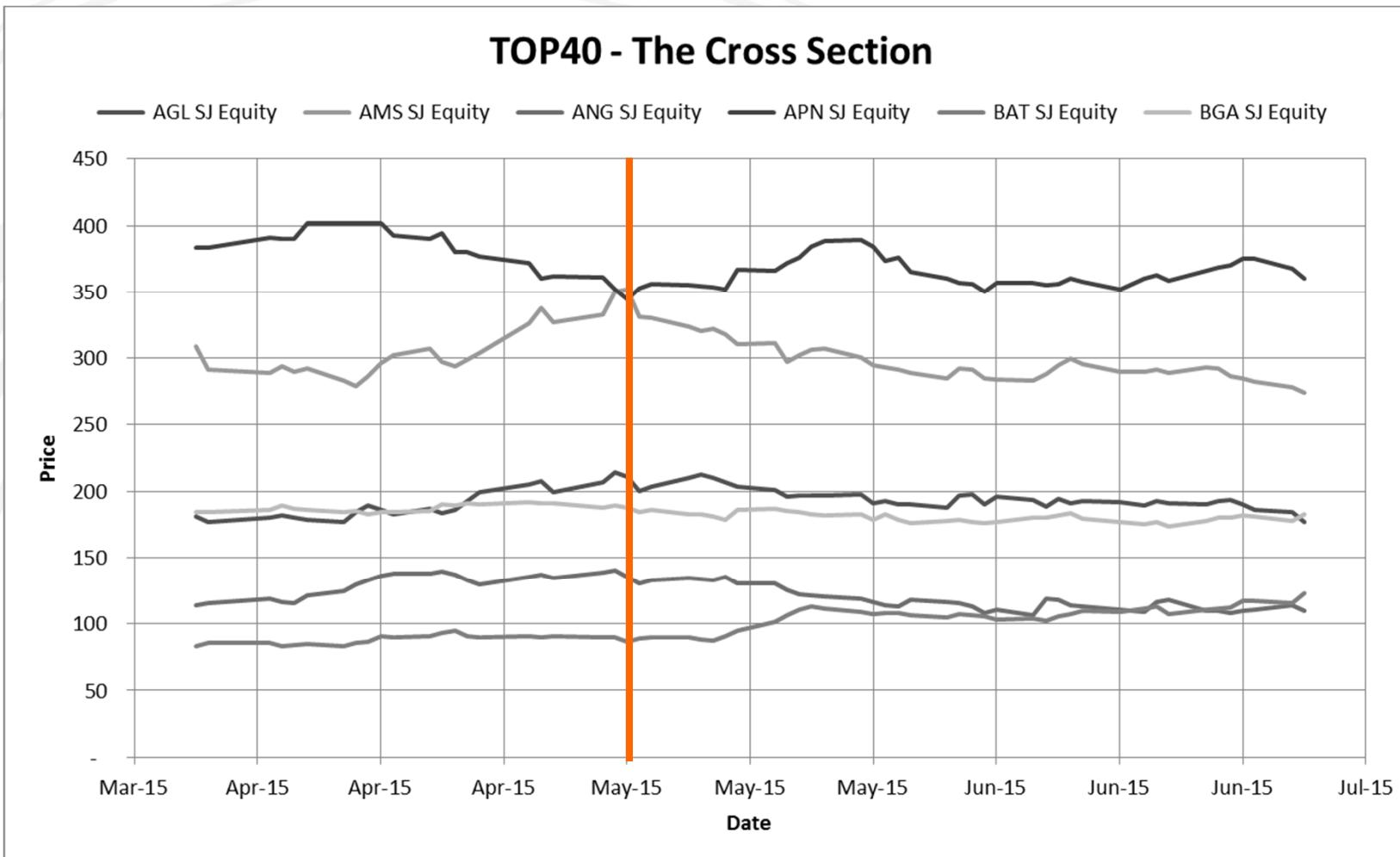
- The Index contains a large amount of stock specific risk
- The Index is popularity weighted, assigning the largest weights to the most popular, most expensive stocks

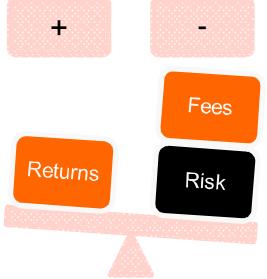
Risks of Index Investments



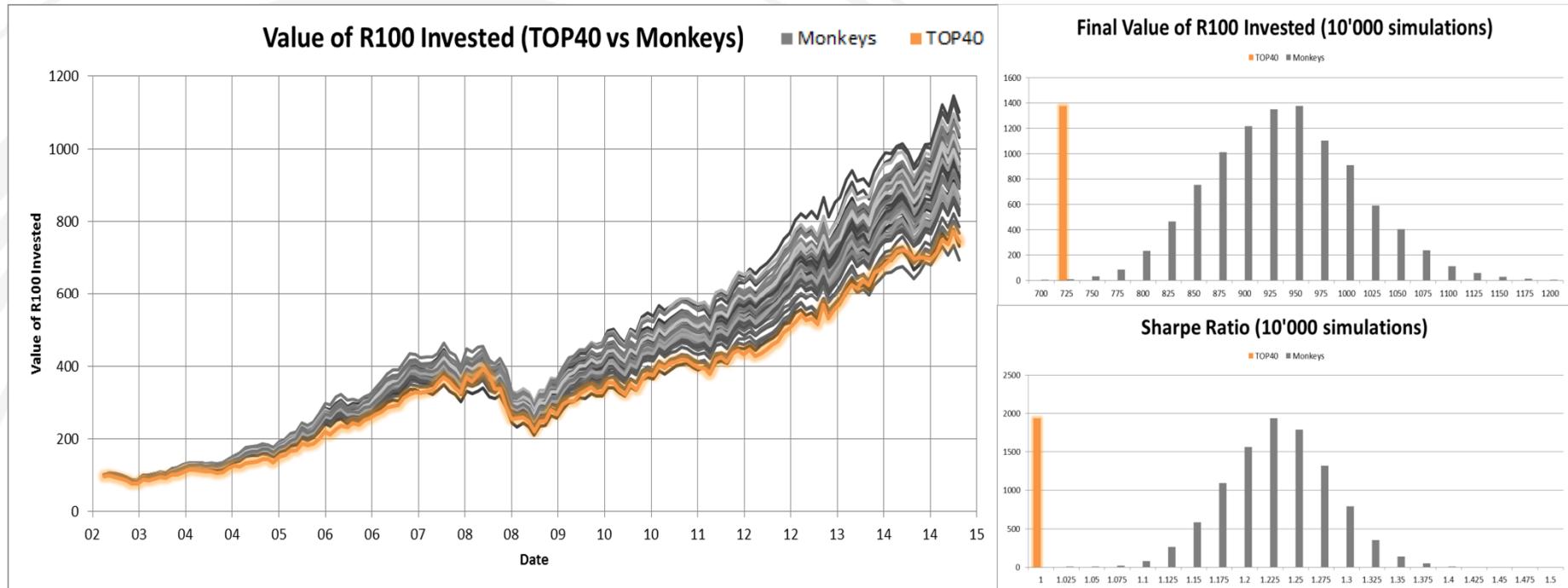
- **The Index basket is Efficient... right?**
- Does Finance Theory Make the Case for Capitalisation-Weighted Indexing (Goltz & Le Sourd, 2010)
- The efficient market inefficiency of capitalization-weighted stock portfolios (Haugen & Baker, 1991)
- Are Benchmark Portfolios Efficient? (Grinold 1992)
- A critique of the asset pricing theory's tests Part I: On past and potential testability of the theory. (Roll 1977)
- **A Monkey with a Dart**
- “A Random Walk Down Wall Street” (Malkiel, 2007)
- Cass Business School, London (Clare, et al., 2013)

The Concept of the Cross Section



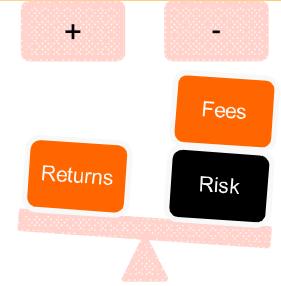


Risks of Index Investments

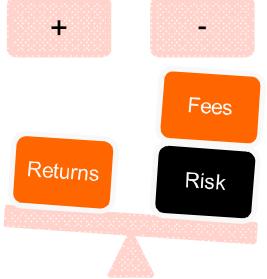


- The Monkeys are more diversified – impossible to throw dart for 11% weight in Naspers
- The Monkeys buy more of the less expensive companies
- The Monkeys buy more of the smaller companies

Risks of Active Investments

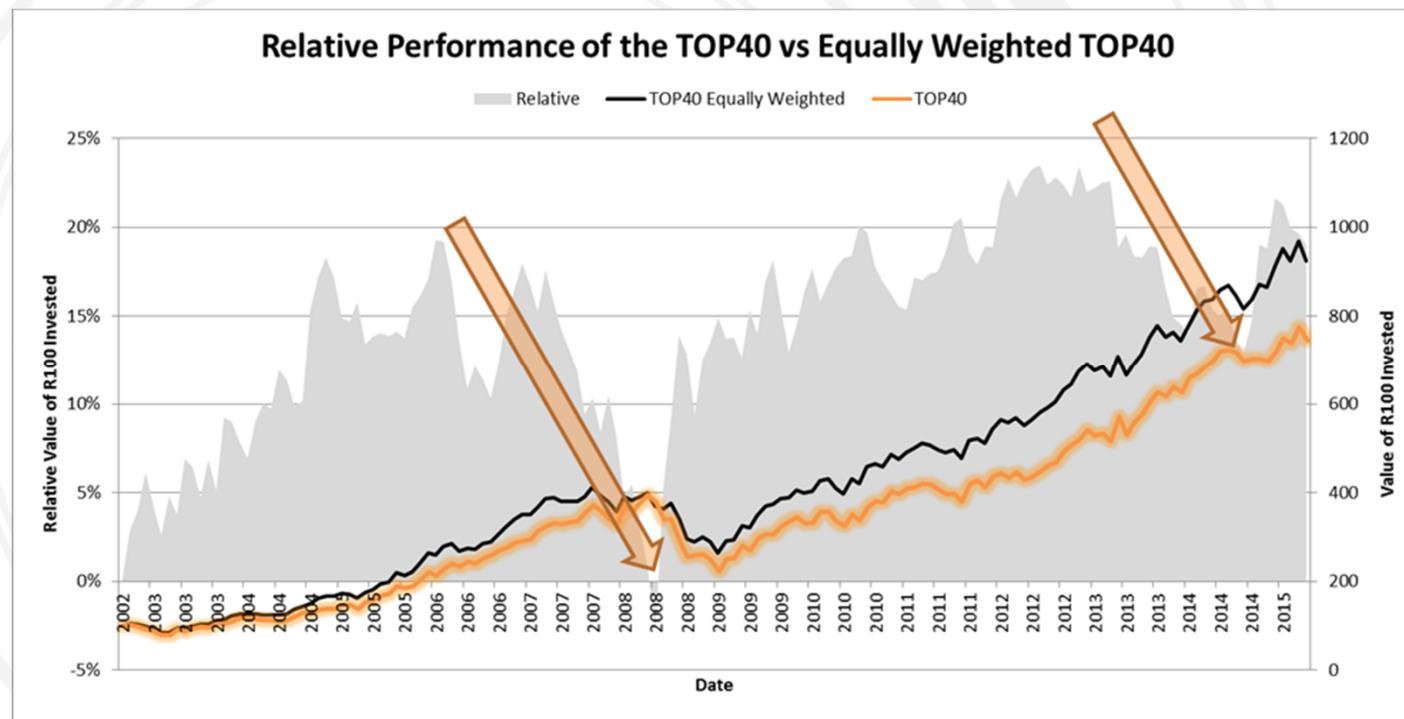


- Truly active should be concentrated (not diversified, thus no free lunch)
- The better the performance, the more cash flows into the fund, sowing the seed...
- Most of the outperformance will likely occur when the fund's assets are small.
- Active managers are humans with emotions.
- Agency risk, especially with performance fees

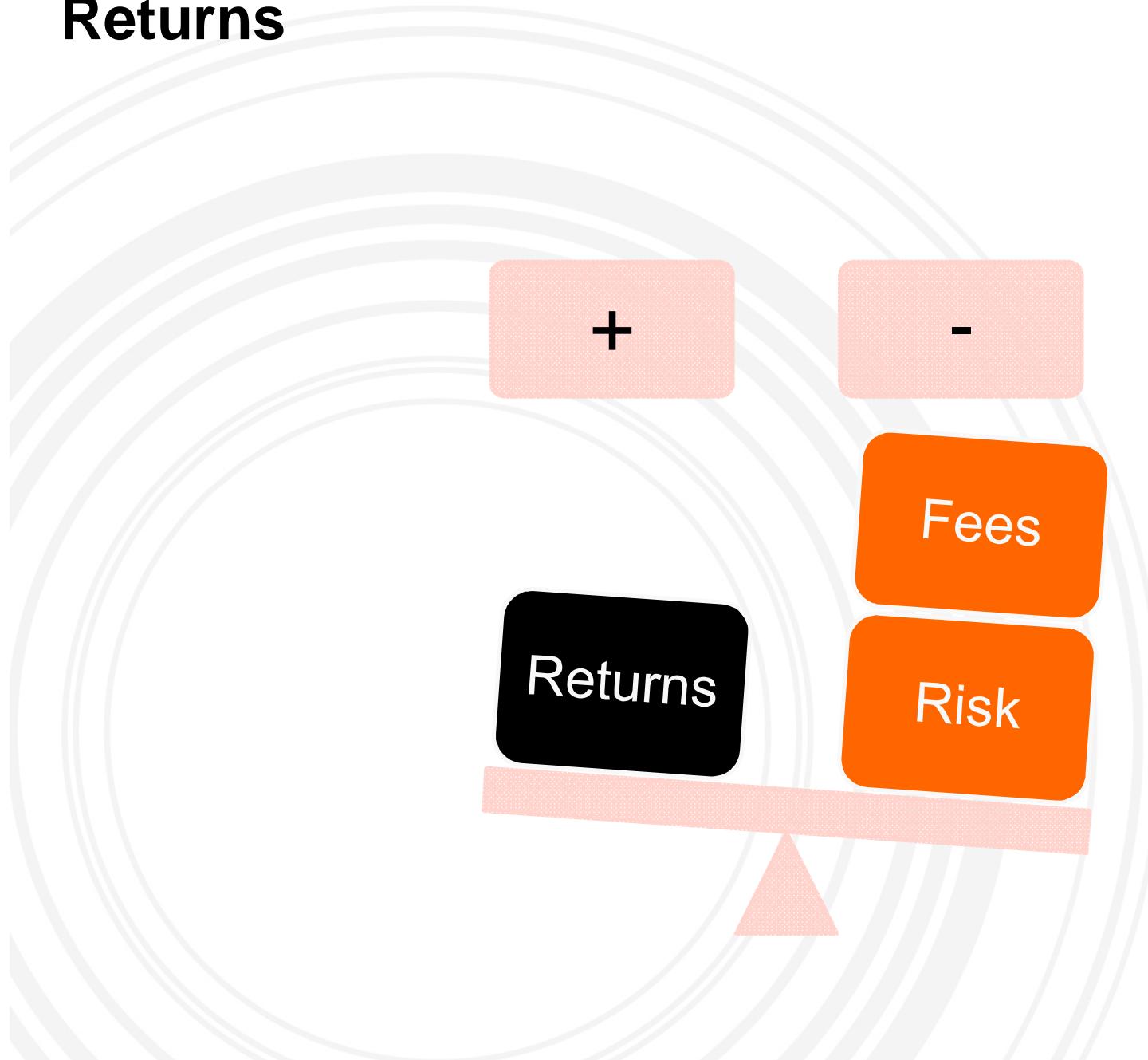


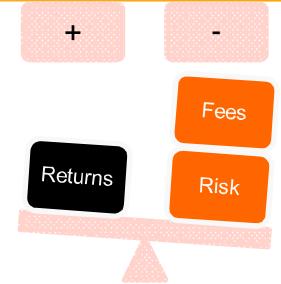
Risks of Smart Beta Investments

- Smart Beta builds a diversified portfolio from a clean slate
- Completely different holdings from Benchmark means completely different returns, especially when single stock risk pays off.
- Pick only stocks with good characteristics, but not a crystal ball - good characteristics outperform over the long term



Returns

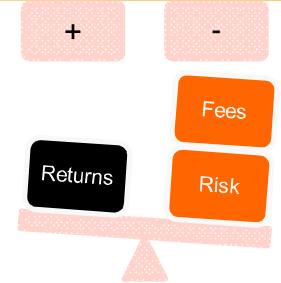




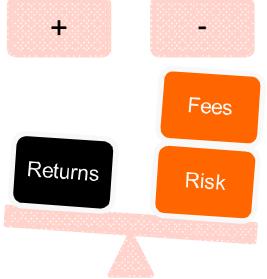
Why are Returns Important?

1. Family
2. Health
3. Money (Not money in itself, but what money provides)
 - Comfortable retirement
 - University education
 - Family home

Returns to Index Investments



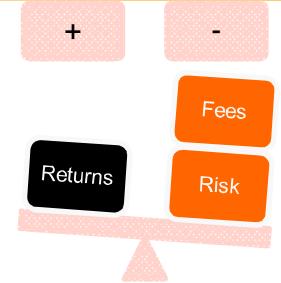
- The average Equity market return, minus management fee



Returns to Active Investments

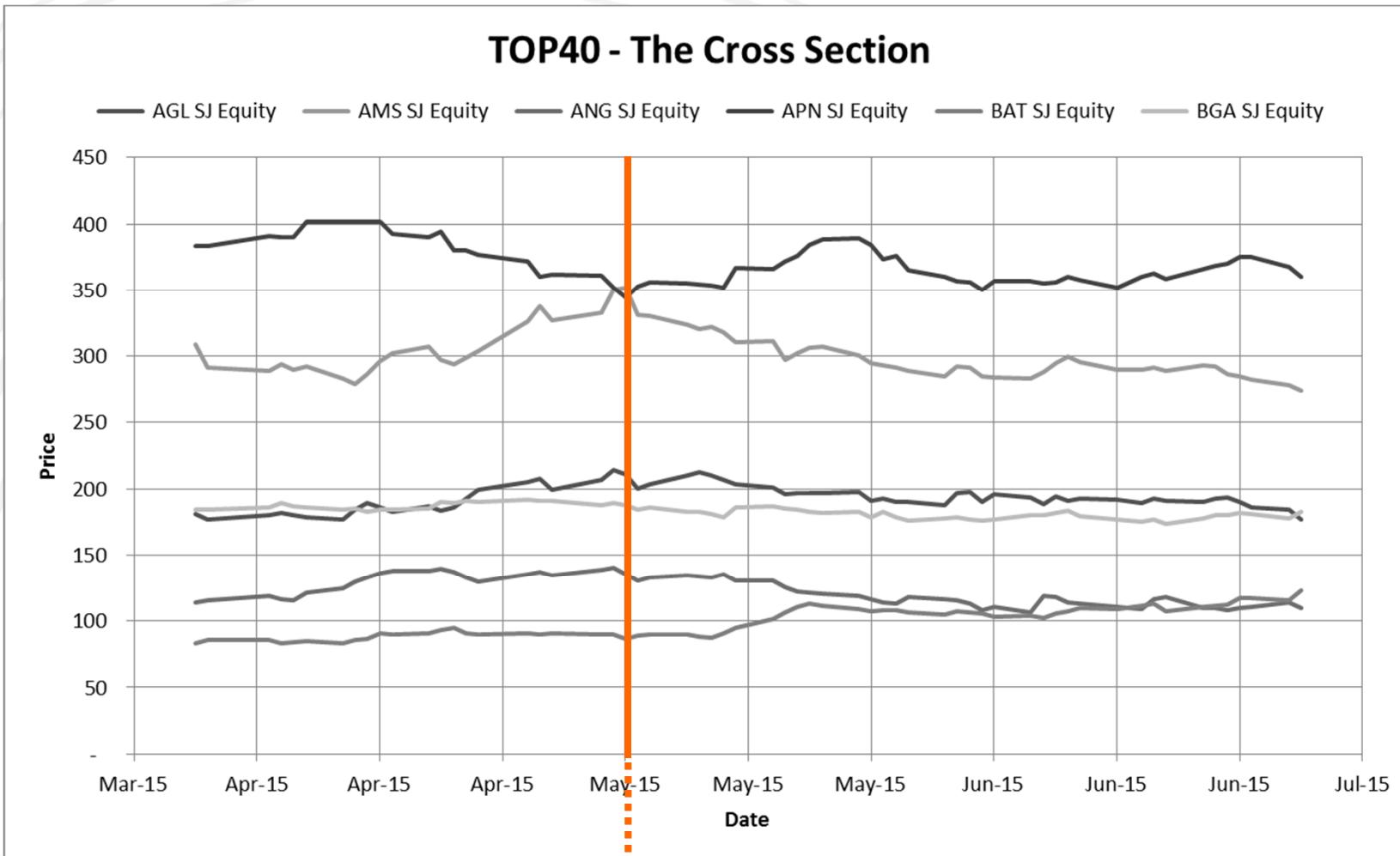
- **Stock selection**
 - Naspers is trading at R1800, but it is really worth R2000
- **Market Timing**
 - The recession or bull market is here
- **The winning strategy is then to find the managers with these abilities by studying their past performance, and then to hire the managers with the most persistent outperformance.**

Returns to Smart Beta Investments



- Rooted in Academia and Nobel Prize winning Financial Theory
 - The Cross-Section of Expected Stock Returns (Fama & French, 1992)
- Are the Monkeys on to something?
 - Do small companies tend to outperform large companies? (Size Factor)
 - Do cheap companies tend to outperform expensive companies? (Value Factor)
 - This forms the foundation of Value investing, established by Benjamin Graham, perfected by Warren Buffet
 - How do we test these Characteristics/Factors?

The Concept of the Cross Section

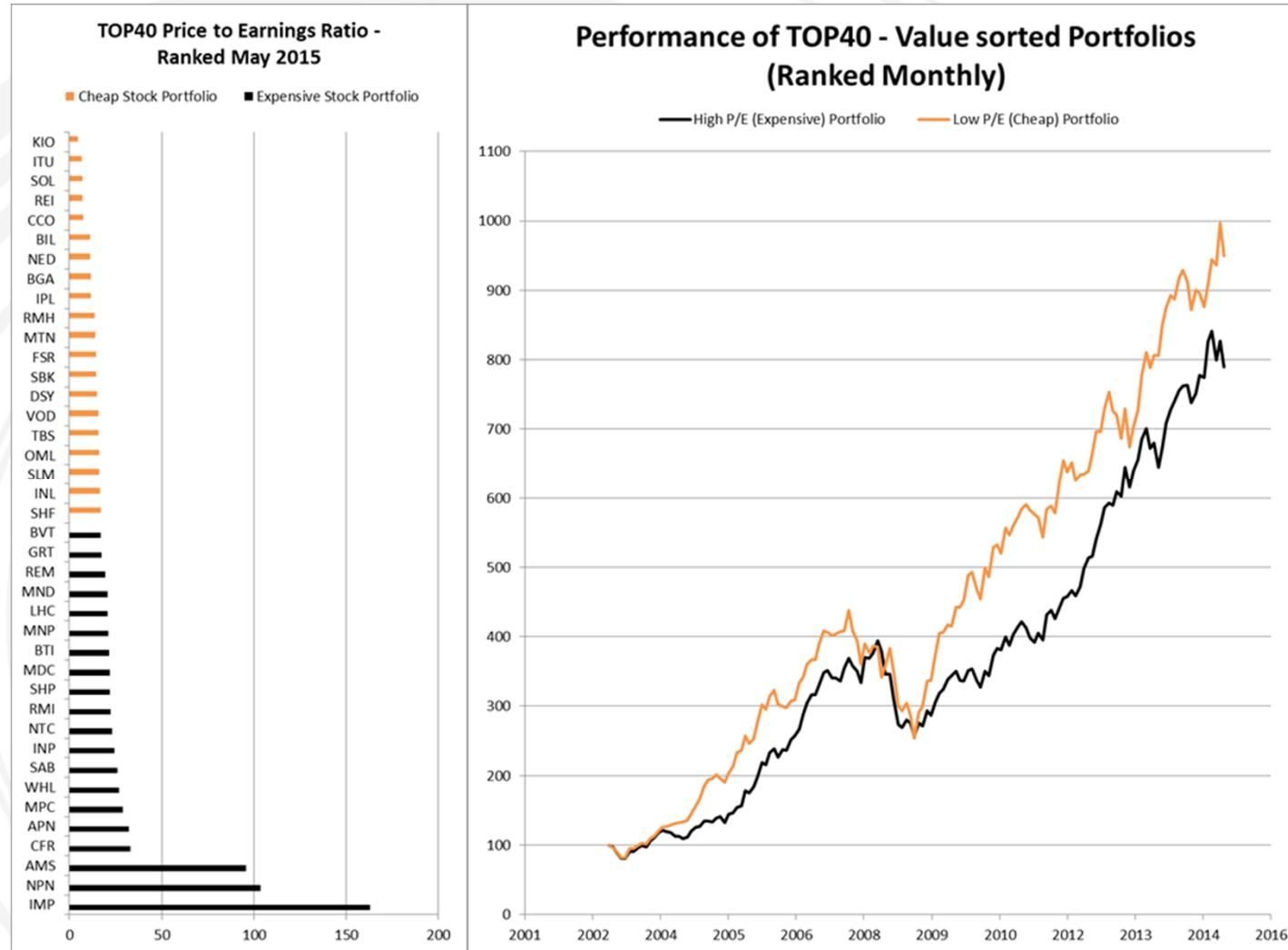


Measure stock Characteristics:
• P/E

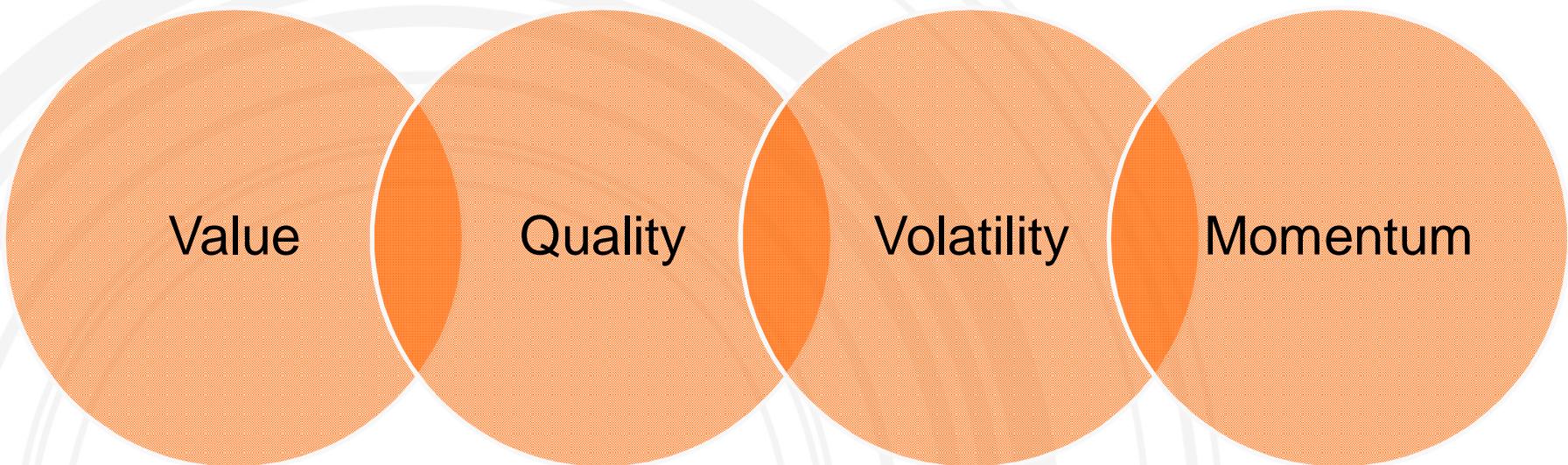


Returns to Smart Beta Investments

- Measure Value using Price to Earnings Ratio (P/E) and Rank Monthly



Fairtree - Focus on 4 Factors



Fairtree Factors linked to Graham and Dodd

- Security Analysis: Price = PV of Future Dividends:

$$P = \sum_{s=1}^{\infty} \frac{D_{t+s}}{(1 + k)^s}$$

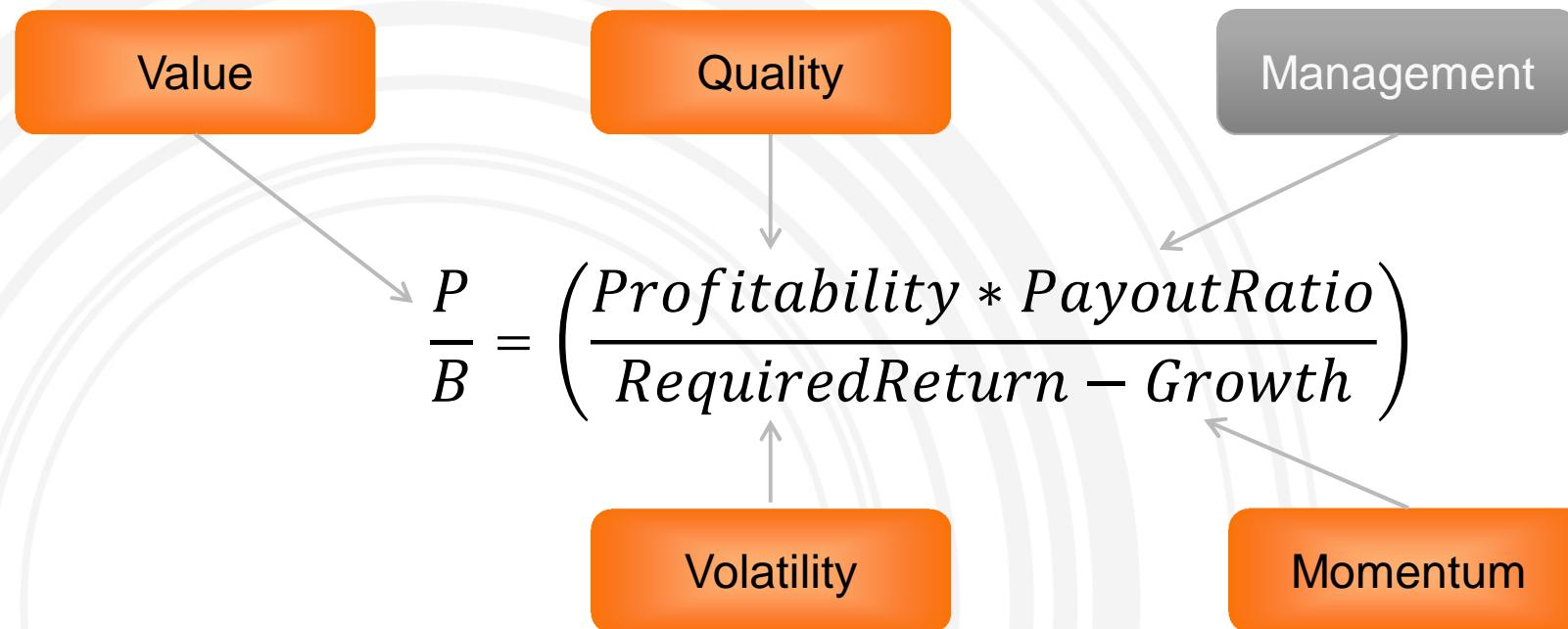
- Gordon Growth Model (constant growth):

$$P = \frac{D}{k - g}$$

- Normalise by Book value of Equity:

$$\frac{P}{B} = \left(\frac{1}{B} * \frac{D}{k - g} \right) = \left(\frac{\frac{Profit}{B} * \frac{Dividend}{Profit}}{k - g} \right)$$

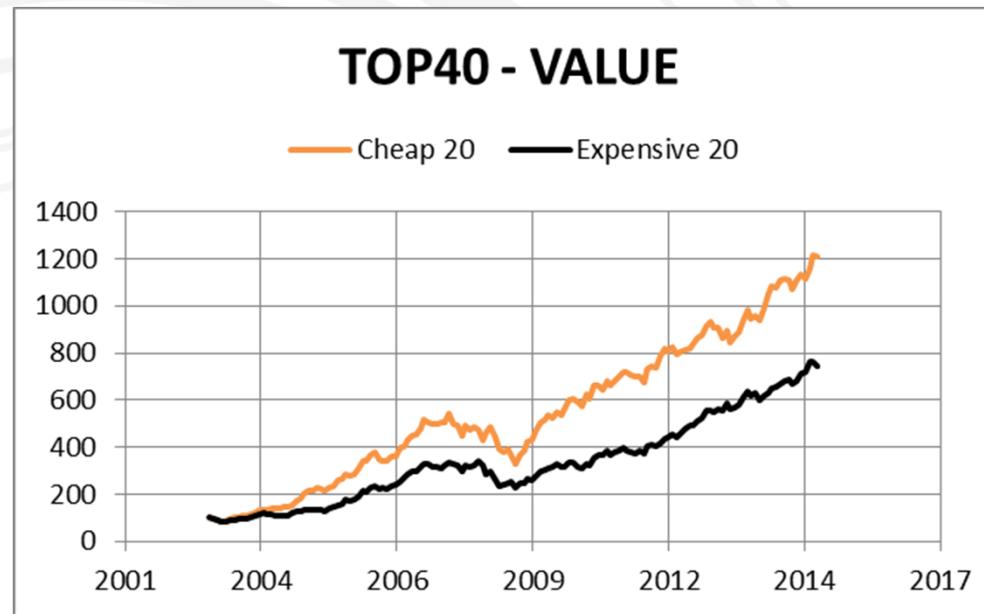
Factors affecting Valuations





Academic and Industry Accepted Equity Factors

- **Value**
- The Value factor is the tendency for cheap stocks to outperform expensive stocks.

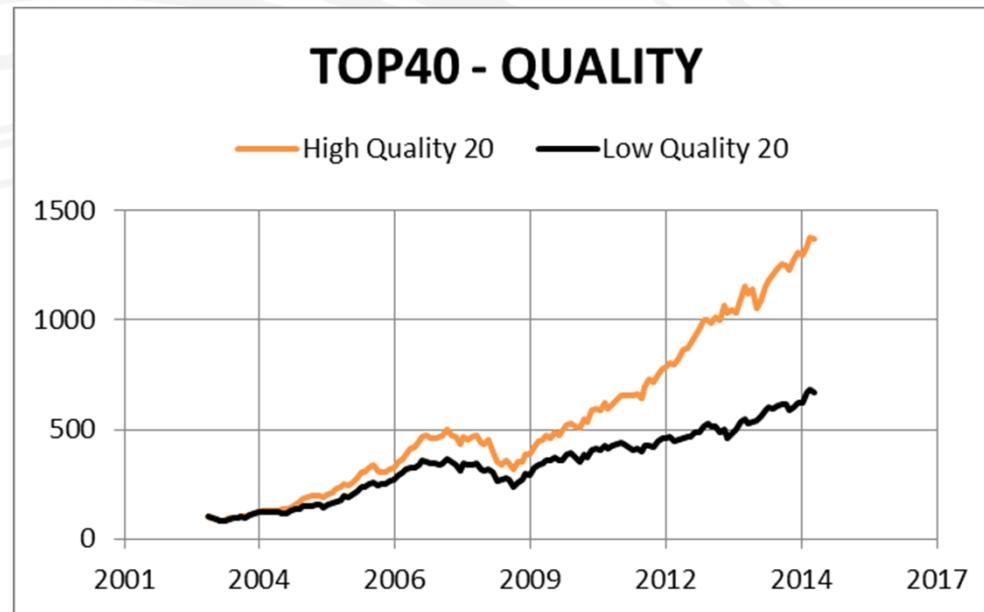


- The Relationship between Earnings Yield Market Value and Returns for NYSE Common Stocks (Basu, 1983)
- Persuasive Evidence of Market Inefficiency (Rosenberg, et al, 1985)
- The Cross-Section of Expected Returns (Fama & French, 1992)
- Value versus Growth: The International Evidence (Fama & French, 1997)
- The Risk and Return from Factors (Chan, et al., 1998)



Academic and Industry Accepted Equity Factors

- **Quality**
- The Quality factor is the tendency for high quality companies to outperform low quality.

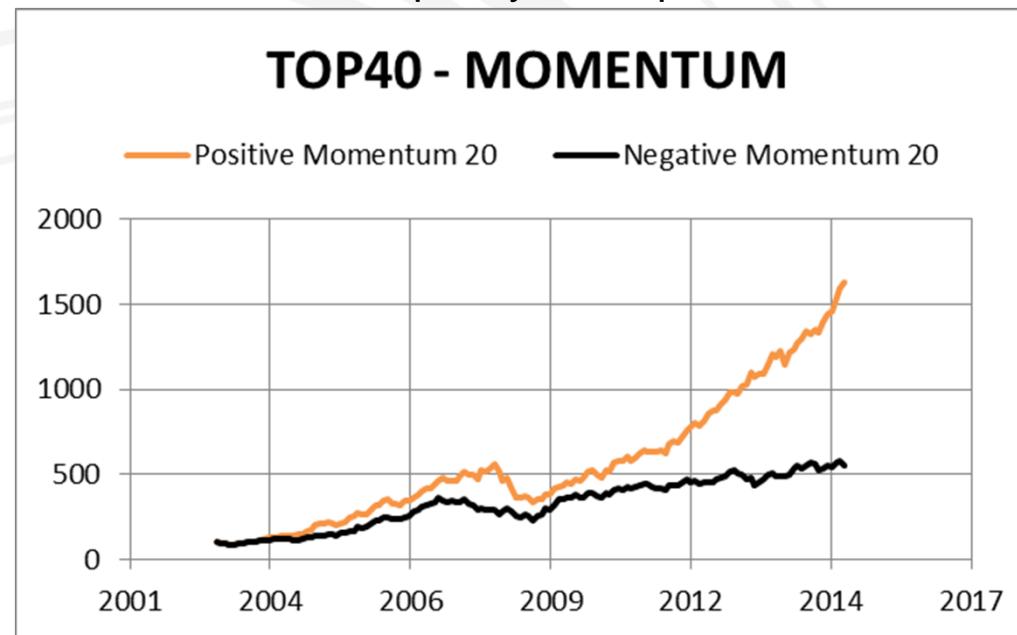


- Investing: The User of Historical Financial Statement Information to Separate Winners from Losers (Piotroski, 2002)
- The Other Side of Value: The Gross Profitability Premium (Novy-Marx, 2013)
- A Five-Factor Asset Pricing Model (Fama & French, 2014)
- Digesting Anomalies: An Investment Approach (Hou, et al., 2014)
- Quality Minus Junk (Asness, et al., 2014)



Academic and Industry Accepted Equity Factors

- **Momentum**
- The Momentum factor is the tendency for stocks that had done well in the past, to continue to do well, and for stocks that had done poorly in the past, to continue to do poorly.

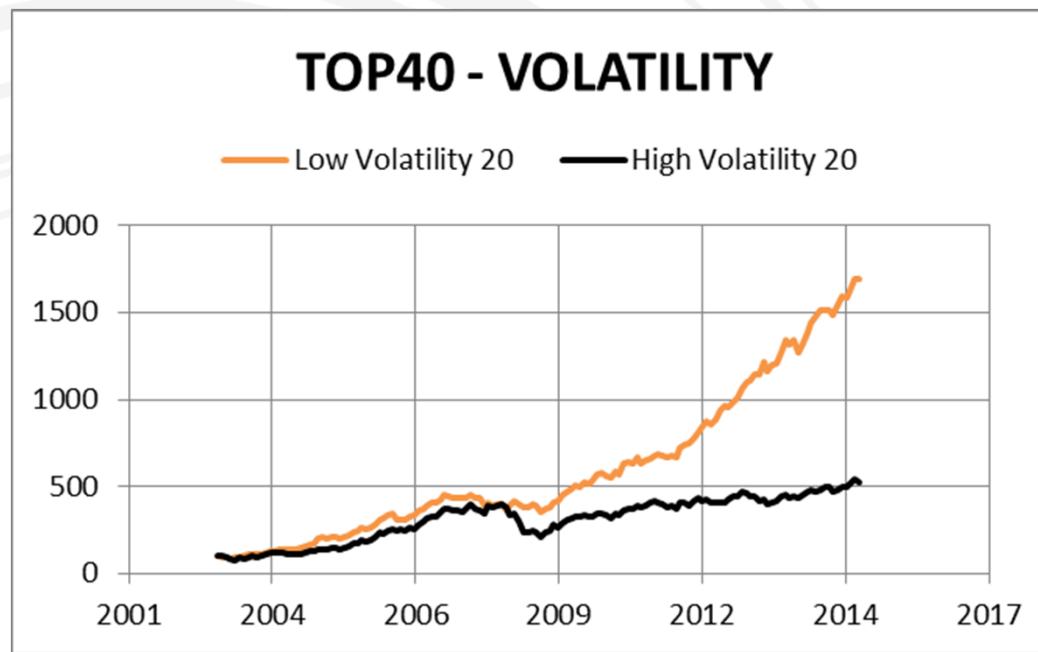


- On Mutual Fund Performance, Journal of Finance (Carhart, 1997)
- Returns to Buying Winners and Selling Losers (Jegadeesh & Titman, 1993)
- Value and Momentum Everywhere (Asness, et al., 2012)
- The Case for Momentum Investing (Berger, et al., 2009)



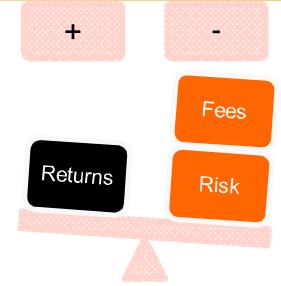
Academic and Industry Accepted Equity Factors

- **Volatility**
- The Volatility factor is the tendency for low volatility stocks to outperform high volatility



- The Paradox of Low-Risk Stocks: Gaining More by Losing Less (AllianceBernstein, 2012)
- Low Risk Stocks Outperform within All Observable Markets of the World (Baker & Haugen, April 2012)
- The Volatility Effect: Based on the CAPM Assumptions (Blitz, et al., 2013)
- The Cross-Section of Volatility and Expected Returns (Ang, et al., 2006)
- Betting against Beta (Frazzini & Pedersen, 2011)

Risk premia and Behavioral biases

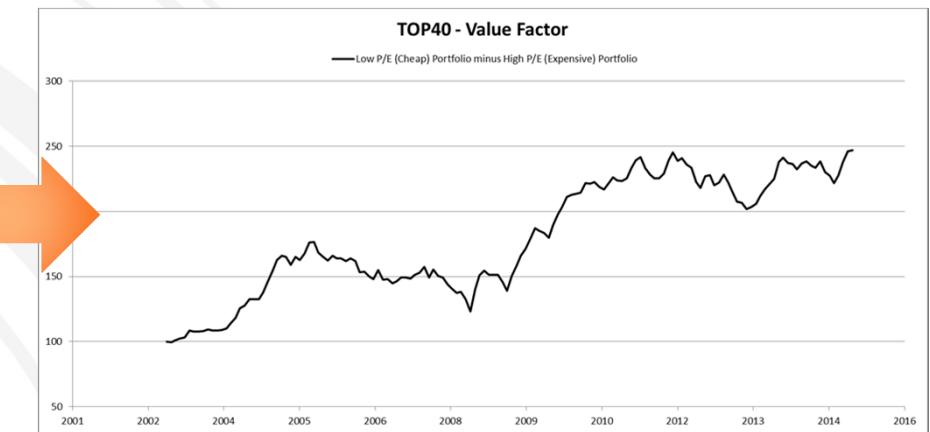
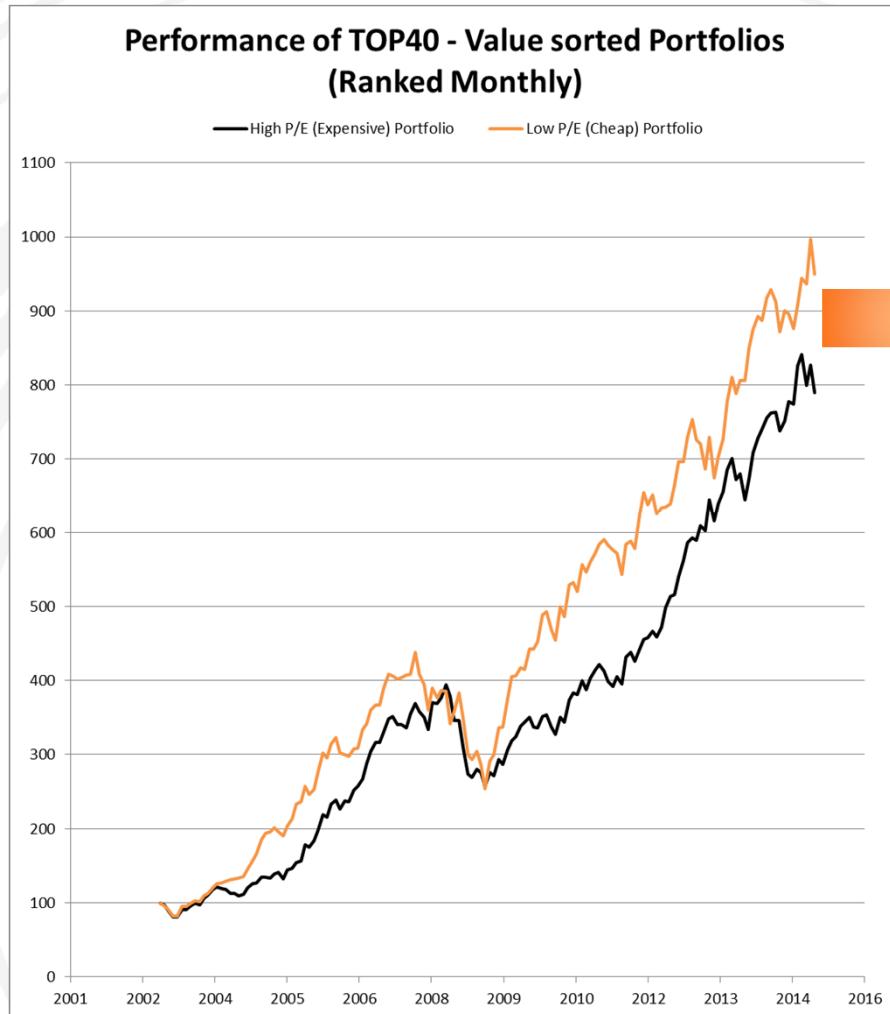


	Risk Premium	Behavioral
Value	<ul style="list-style-type: none">• Higher systematic (business cycle) risk	<ul style="list-style-type: none">• Errors in expectations• Loss aversion
Momentum	<ul style="list-style-type: none">• Higher systematic (business cycle) risk• Higher tail risk	<ul style="list-style-type: none">• Overreaction and underreaction• Flows based theory
Low Volatility	<ul style="list-style-type: none">• N/A	<ul style="list-style-type: none">• Lottery effect• Leverage Aversion• Overconfidence
Quality	<ul style="list-style-type: none">• N/A	<ul style="list-style-type: none">• Errors in expectations

Source: EDHEC Risk Institute (Goltz & Sivasubramanian, 2015)

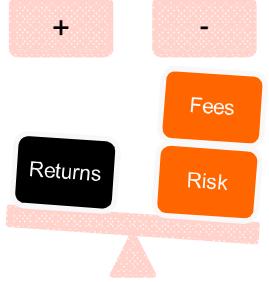


Let's Build a Fund – Step by Step...



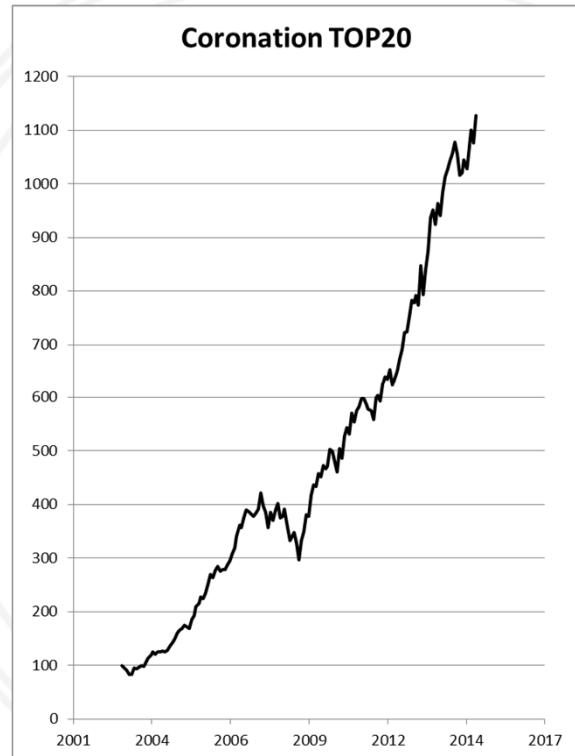
Simple Value Hedge Fund / Value Factor

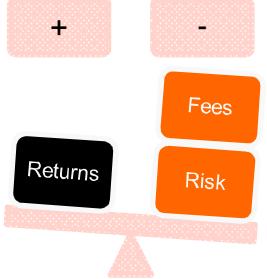
A Quick Digression on Regression



$$y = mx + c$$

$$\text{Coronation} = \text{TOP40} + \text{Value}$$

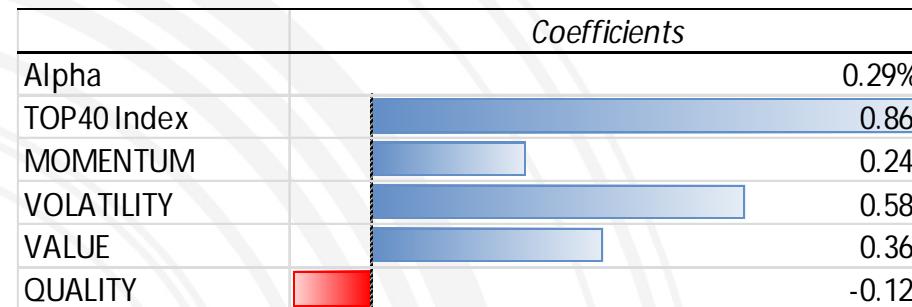




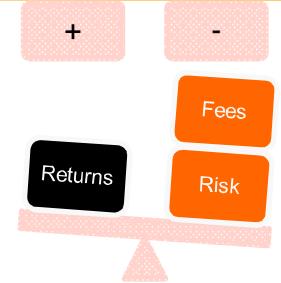
Analysis: Coronation

- Coronation are true to their philosophy

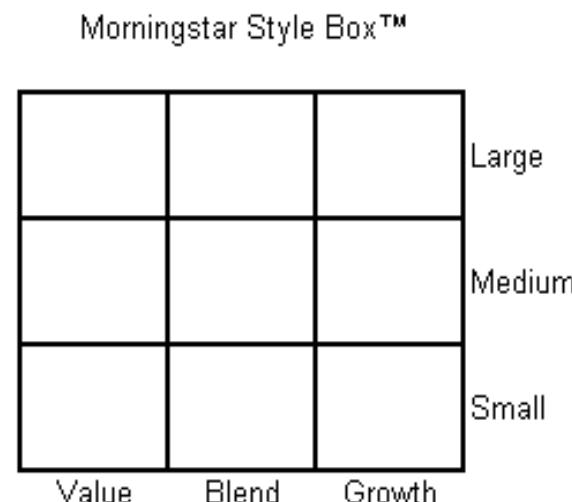
- Invested in Equity
- Chase the winners
- Buy Low Risk companies
- Buy Value companies
- No verdict on Quality companies
- Alpha is negligible...
- The regression explains 85% of Coronations returns



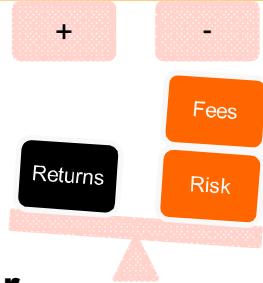
Analysis of Funds



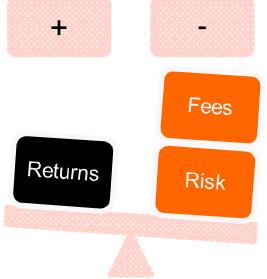
- Method led to Morningstar Style Box
- Used to analyse funds and detect style drift



Analysis: Yale Endowment



- Was Yale's success a result of manager skill or exposure to risk? Or perhaps it was a lucky random outcome?
- Yale's Endowment Returns: Manager Skill or Risk Exposure (Mladina & Coyle, 2010)
- They concluded that, while the conventional wisdom has held Yale's success is attributable to their ability to hire top active investment managers, the fund's **returns can actually be explained by consistent exposure to diversified risk premiums in equity- oriented assets.**



Analysis: Warren Buffett

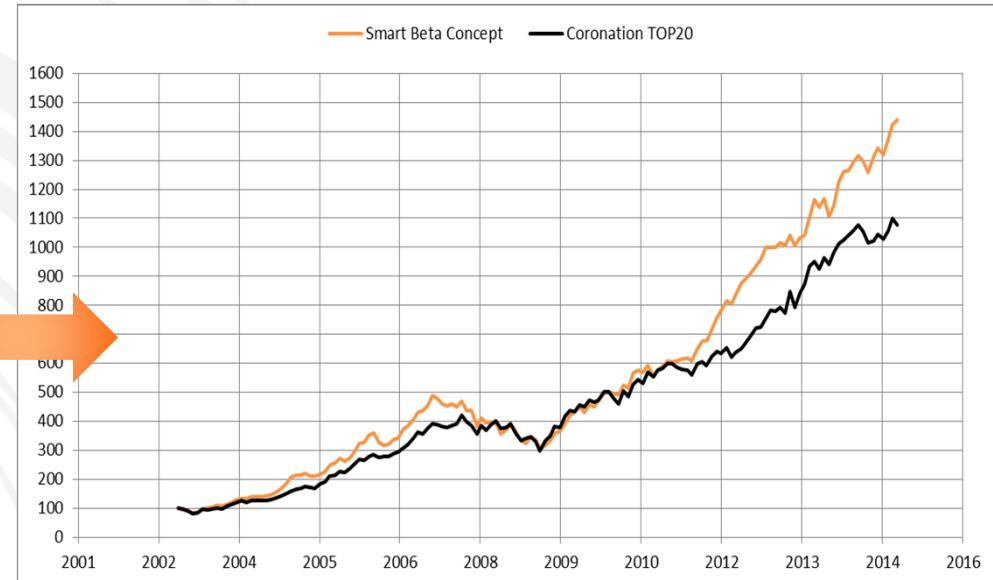
- The secrets of Buffett's success
- Buffett's Alpha (Frazzini, Kabiller, Pedersen., 2013)
- However, we find that the alpha becomes insignificant when controlling for exposures to Volatility and Quality factors. **Buffett's returns appear to be neither luck nor magic, but, rather, reward for the use of leverage combined with a focus on cheap, safe, quality stocks.**



Analysis: Coronation

- Could we replicate their returns at a lower fee by picking 20 stocks?

Name	QUALITY	VALUE	VOLATILITY	SIZE	SCORE	WEIGHT
LIBERTY HLDGS	32	3	3	13	1	5%
KUMBA IRON ORE L	4	1	48	14	2	5%
VODACOM GROUP	2	11	12	38	3	5%
CORONAT	3	19	24	2	4	5%
REINET INVEST-DR	23	9	10	12	5	5%
LIFE HEALTHCARE	5	34	30	9	6	5%
MMI HOLDINGS LTD	38	7	11	15	7	5%
MR PRICE GROUP	1	41	38	22	8	5%
SANLAM LTD	28	5	22	36	9	5%
SASOL LTD	17	1	45	42	10	5%
SPAR GRP LTD/THE	8	35	20	1	11	5%
OLD MUTUAL PLC	48	4	4	39	12	5%
RMI HOLDINGS	24	26	7	20	13	5%
TRUWORTHS INTL	6	18	42	4	14	5%
RMB HOLDINGS LTD	10	17	28	29	15	5%
DISCOVERY LTD	19	15	27	25	16	5%
BIDVEST GROUP	22	23	15	31	17	5%
INTU PROPERTIES	42	12	6	26	18	5%
MTN GROUP LTD	11	6	34	45	19	5%
INVESTEC LTD	40	16	14	27	20	5%
WOOLWORTHS HLDGS	9	37	33	24	21	0%
NEDBANK GROUP	34	13	23	33	22	0%
TIGER BRANDS LTD	20	27	31	16	23	0%
CAPITEC BANK HOL	14	28	35	17	24	0%
REDEFINE PROPERT	33	39	5	10	25	0%
THE FOSCHINI GRO	12	33	36	5	26	0%
MONDI LTD	25	25	21	32	27	0%
NETCARE LTD	16	40	25	19	28	0%
SHOPRITE HLDGS	15	30	37	28	29	0%
BARCLAYS AFRICA	39	14	26	35	30	0%
IMPERIAL HLDGS	36	10	40	7	31	0%
REMGRG LTD	13	46	19	34	32	0%
STEINHOFF INTL	30	31	9	41	33	0%
FIRSTRAND LTD	27	20	17	44	34	0%



The Future for Alpha

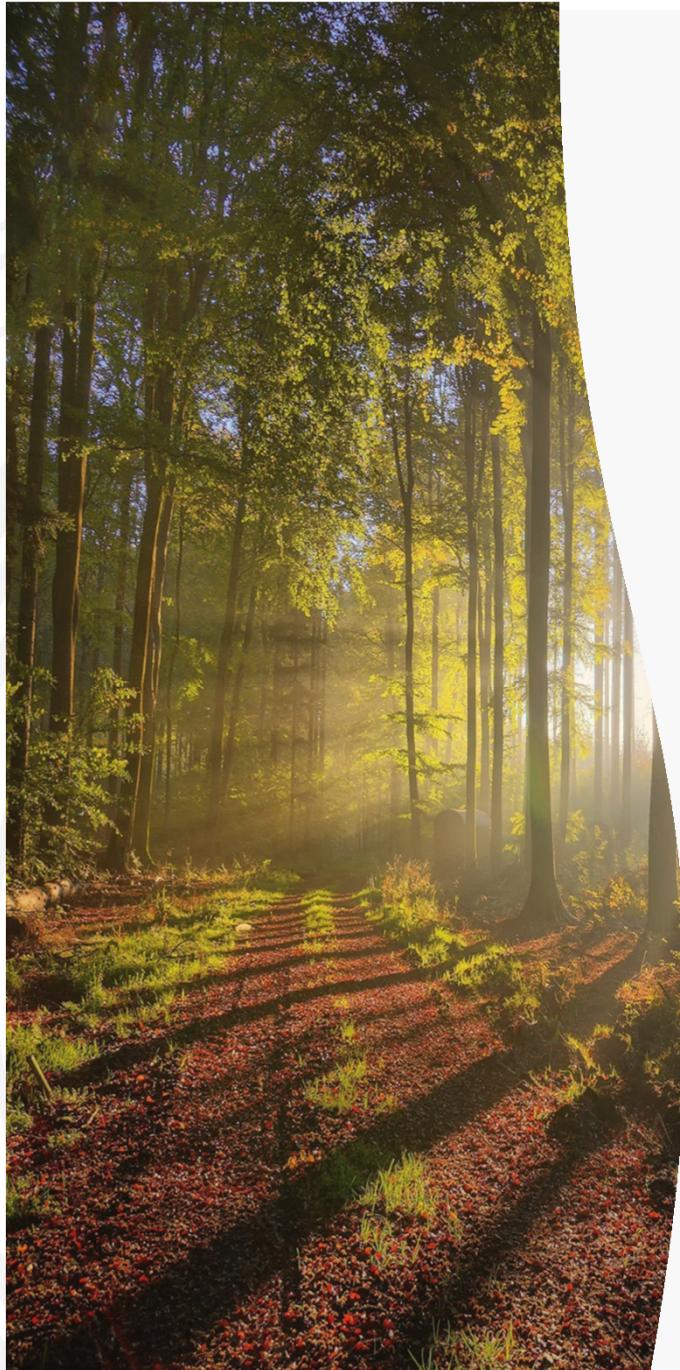
1. Alpha is shrinking: what was once Alpha is now explained as Factors
2. The pool of victims is shrinking (Stambaugh, 2014)
3. The level of competition is getting tougher (Swedroe & Berkin, 2015)
4. Luck is unfortunately now more important than skill (Mauboussin & Callahan, 2013)

All of this is Good News for the Client!

- Smart Beta products delivers exposure to the market, risk premiums and behavioral anomalies based on evidence
 - Packaged in robust and structurally diversified portfolios, aiming to provide investors with a more palatable investment journey.
 - **Smart beta offers the most likely prospect of outperformance – cannot guarantee outperformance, but can guarantee the low fee.**
-
- However – you should be confident that you are capable of bearing the associated tracking error risks. An appropriate long term allocation, one you are willing to live with through the periods of out- and underperformance is a necessary condition for investment success.
 - Be a postage stamp – stick to your letter till you get to your destination!
 - Don't look at your yo-yo while crossing the road (don't look at your returns on a daily, or even monthly basis)

Why is everyone not doing it?

- Anyone can build an F1 car – it's just wheels, an internal combustion engine, and a wing. The knowledge is out there. But the difference lies in the quality of the implementation.
- Investing is simple – but not easy:
 - “An interest in investing”
 - “The horsepower to do the math . . .”
 - “The knowledge base—Fama, French, Malkiel, Thaler, Bogle,
 - Plus, the ‘database’
 - “The emotional discipline to execute faithfully, come hell, high water. The stomach, not the head.”
 - 30% on each = 0.25% of people
- The market will probably keep on rewarding factor investing due to:
 - Focus on Cap Weighting as the benchmark
 - Most assets are long only, to become truly efficient, all must be able to short



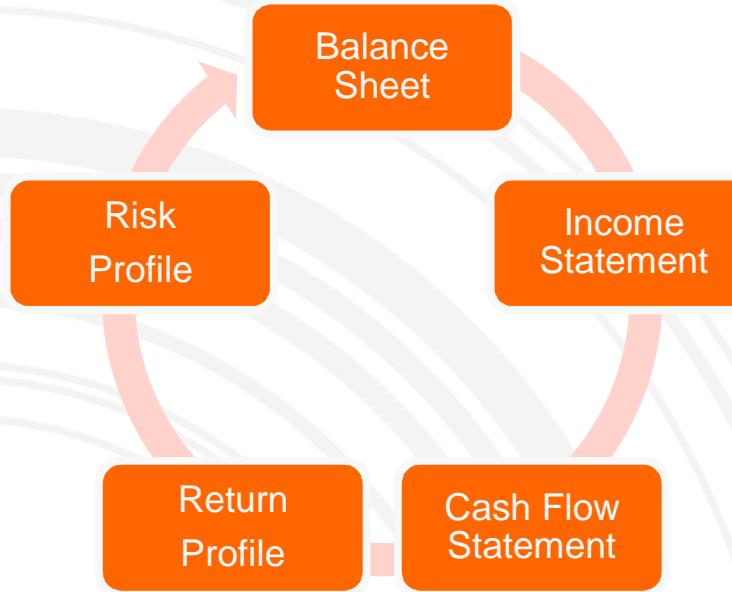
Fairtree Capital

Systematic Investment Applications

Fairtree Multidimensional Approach

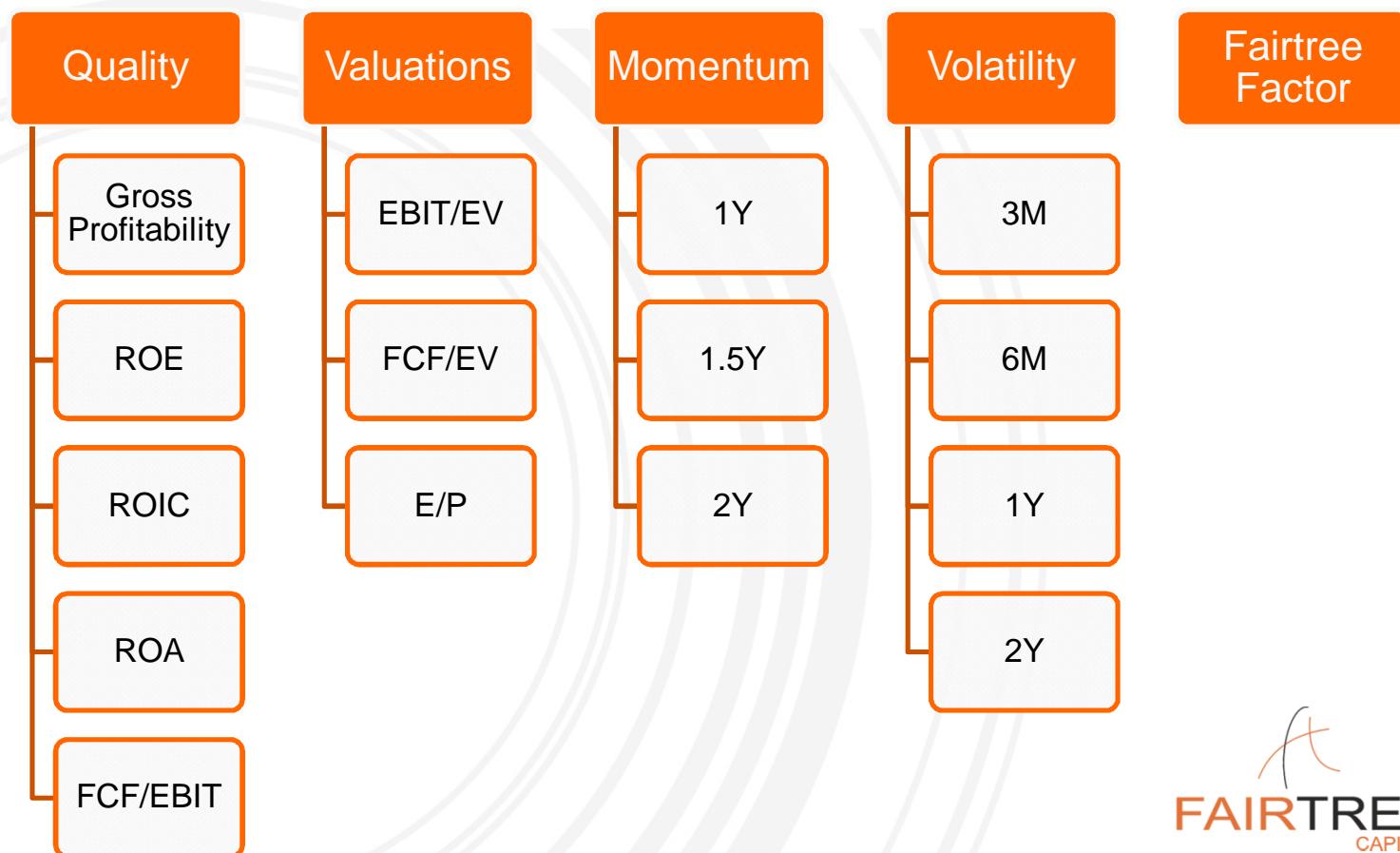
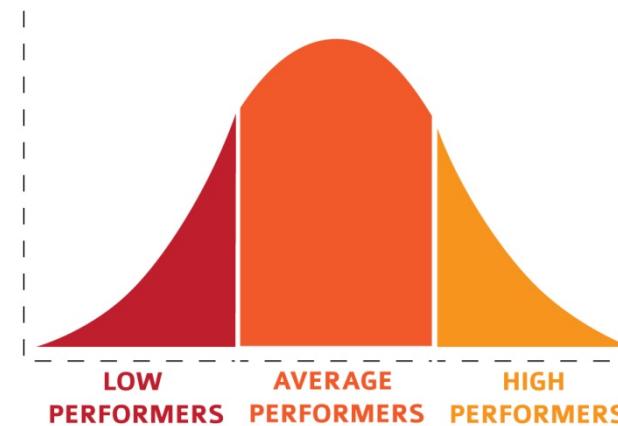
- We have four criteria for Factor Selection:
 - Academic Foundations
 - Fundamental Economic Rationale
 - SP500 research replicated
 - South Africa analysed

Intuitive Stock Selection Philosophy:



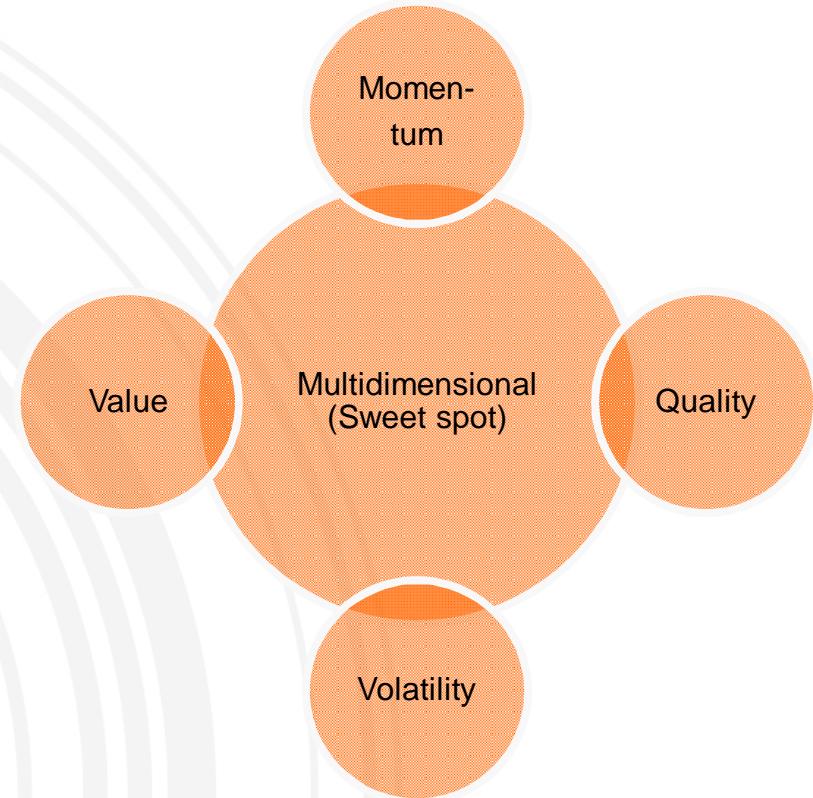
- We use comprehensive set of Rational Information
- To buy Profitable and Efficient (**Quality**) stocks
- With attractive Valuations (**Value**)
- Where the market is starting to realise the potential (**Momentum**)
- That are predictable and stable (**Low Volatility**)
- To build diversified portfolios

Fairtree Factors



The Multidimensional Sweet Spot

$$\frac{P}{B} = \left(\frac{\text{Profitability} * \text{PayoutRatio}}{\text{RequiredReturn} - \text{Growth}} \right)$$



- Diversified factor exposure
- Offsetting of transaction cost
- Integrated Protection

Multidimensional Ranking – Example

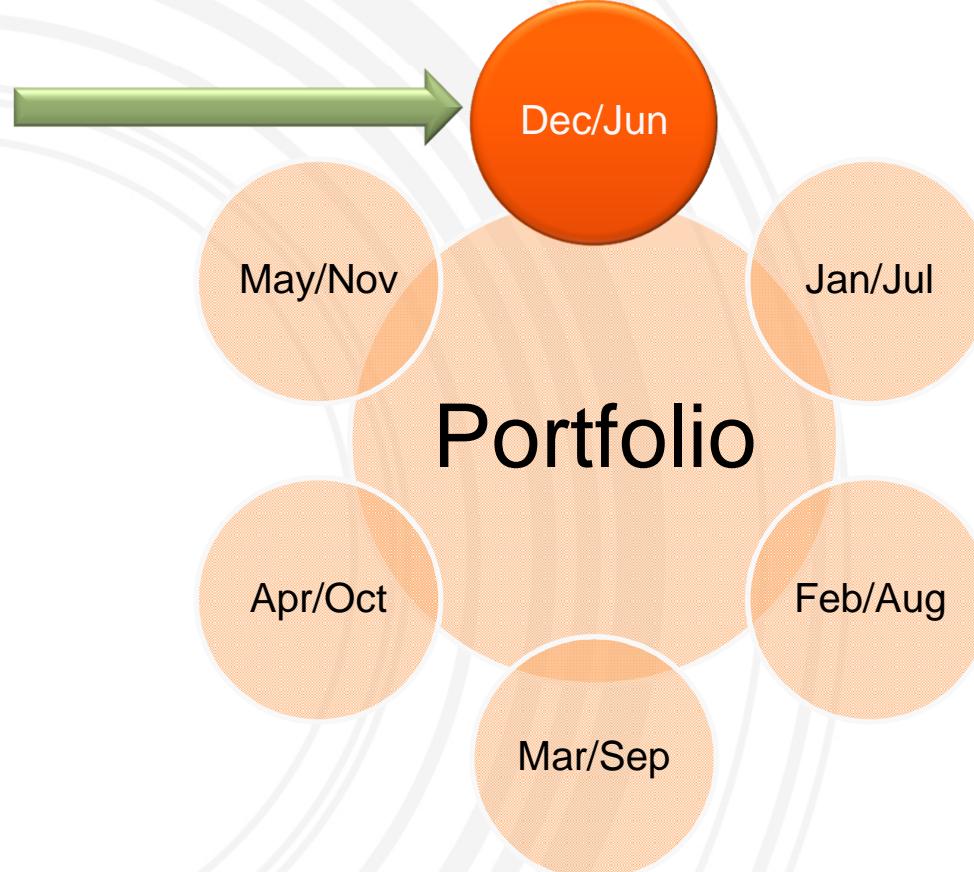
	31-May-15	QUALITY	VALUE	VOLATILITY	MOMENT	COMBINED
VODACOM GROUP		2.17	0.45	0.75	-0.49	1.25
MR PRICE GROUP		2.52	-0.76	-0.42	1.47	1.22
CORONAT		1.69	0.11	0.31	0.43	1.10
LIBERTY HLDGS		-0.22	1.85	1.24	-0.35	1.10
CAPITEC BANK HOL		0.45	-0.25	-0.21	2.45	1.06
SANLAM LTD		-0.07	1.45	0.35	0.46	0.96
STEINHOFF INTL		-0.20	-0.31	0.87	1.67	0.88
BRIT AMER TOBACC		1.13	-0.16	1.35	-0.32	0.87
TELKOM SA SOC LT		0.11	-0.04	-1.26	3.00	0.78
RMI HOLDINGS		0.03	-0.18	0.94	1.00	0.77
SPAR GRP LTD/THE		1.02	-0.49	0.43	0.55	0.66
MMI HOLDINGS LTD		-0.56	1.06	0.77	0.15	0.62
REINET INVEST-DR		0.03	0.74	0.84	-0.27	0.58
RMB HOLDINGS LTD		0.60	0.15	0.09	0.48	0.58
FIRSTRAND LTD		-0.04	0.10	0.47	0.73	0.55
OLD MUTUAL PLC		-1.48	1.68	1.20	-0.13	0.55
NETCARE LTD		0.38	-0.73	0.29	1.27	0.53
KUMBA IRON ORE L		1.66	3.00	-1.79	-1.78	0.47
LIFE HEALTHCARE		1.65	-0.35	0.02	-0.25	0.46
DISCOVERY LTD		0.25	0.18	0.23	0.34	0.43
SASOL LTD		0.38	3.00	-1.29	-1.26	0.36
MTN GROUP LTD		0.59	1.16	-0.20	-0.72	0.36
THE FOSCHINI GRO		0.55	-0.35	-0.34	0.79	0.28
MONDI LTD		-0.01	-0.16	0.37	0.30	0.22
INTU PROPERTIES		-1.03	0.42	0.95	0.13	0.20
INVESTEC LTD		-0.61	0.16	0.67	0.24	0.20

Portfolio Construction using Top (N) stocks

Diversified Risk Parity

- The Properties of Equally Weighted Risk Contribution Portfolios - Maillard, Roncalli, Teiletche (2010)

December:
Analysis
And
Target Weights



TOP70 Unit Trust after Cost vs SWIX AllShare

Dates	Portfolio Benchmarks				Portfolio Cost		Funding & Scrip	Date																									
Data Start	20021231	31-Dec-02	Equity	JSHRALTR Index	Brokerage	0.1%	Funded	TRUE	Start																								
Data End	20150630	30-Jun-15	Cash	JIBA3M Index	Impact	0.1%	Longs	0.5%	End																								
Periodicity	M	151	Cash +	0%	Management	0.4%	Shorts	0.0%	Years																								
Source Dataset	PortfolioFwdSta	TRUE			Performance	0.0%	Scrip	0.8%	Total Broker																								
File Loaded:	PortfolioFwdStats_JALSH_70_CrossSector TORTOISE_EW_RiskWeight(43%_100%_0%_0%)_6M(STA)								Capacity (%)																								
<p>— NAV — JSHRALTR Index — CASH+O</p>																																	
<table border="1"> <thead> <tr> <th>Performance</th> <th>NAV</th> <th>Benchmark</th> </tr> </thead> <tbody> <tr> <td>Annualised Return</td> <td>24.0%</td> <td>19.6%</td> </tr> <tr> <td>Volatility</td> <td>14.6%</td> <td>15.0%</td> </tr> <tr> <td>Max Drawdown</td> <td>-30.8%</td> <td>-37.0%</td> </tr> <tr> <td>Sharpe Ratio</td> <td>1.65</td> <td>1.31</td> </tr> <tr> <td>Kalmar Ratio</td> <td>0.78</td> <td>0.53</td> </tr> <tr> <td>Win Ratio</td> <td>56.0%</td> <td></td> </tr> <tr> <td>Tracking Error: M/A</td> <td>2.2%</td> <td>7.5%</td> </tr> </tbody> </table>										Performance	NAV	Benchmark	Annualised Return	24.0%	19.6%	Volatility	14.6%	15.0%	Max Drawdown	-30.8%	-37.0%	Sharpe Ratio	1.65	1.31	Kalmar Ratio	0.78	0.53	Win Ratio	56.0%		Tracking Error: M/A	2.2%	7.5%
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<p>TURNOVER</p>																																	
<p>Total Leverage</p>																																	

Risk/Return Comparison to SWIX AllShare

Returns				Drawdowns			
Year	Strategy	Benchmark	Relative	Year	Strategy	Benchmark	Relative
2003	31.3%	19.4%	11.9%	2003	-13.4%	-15.8%	2.4%
2004	59.4%	33.8%	25.6%	2004	0.0%	-2.7%	2.7%
2005	37.9%	44.9%	-7.0%	2005	-6.2%	-5.3%	-0.9%
2006	31.4%	39.3%	-7.9%	2006	-12.2%	-4.5%	-7.8%
2007	18.1%	18.1%	0.1%	2007	-7.5%	-6.7%	-0.8%
2008	-16.0%	-21.7%	5.7%	2008	-21.3%	-29.2%	7.9%
2009	29.3%	29.9%	-0.6%	2009	-10.8%	-13.7%	2.9%
2010	33.0%	20.9%	12.1%	2010	-2.1%	-7.6%	5.5%
2011	7.8%	4.3%	3.6%	2011	-5.5%	-6.5%	1.0%
2012	36.3%	29.1%	7.2%	2012	-2.6%	-3.1%	0.5%
2013	21.6%	20.7%	0.9%	2013	-2.0%	-4.0%	2.0%
2014	19.3%	15.4%	3.9%	2014	-6.3%	-3.3%	-3.0%
2015	7.3%	6.7%	0.6%	2015	-5.5%	-4.9%	-0.7%
Metric	Strategy	Benchmark	Relative	Annualised	Strategy	Benchmark	Relative
Annualised Excess (rf)	15.1%	10.9%	4.2%	3Y (2012-2014)	25.5%	21.6%	3.9%
Sharpe Ratio	1.03	0.73	42%	5Y (2010-2014)	23.2%	17.8%	5.4%
Drawdown (%)	30.8%	37.0%	-6.2%	10Y (2005-2014)	20.7%	18.6%	2.2%
Drawdown Start	31/10/2007	31/10/2007					
Drawdown Low	28/02/2009	28/02/2009					
Drawdown End	31/12/2009	30/04/2010					

Backtesting involves the use of theoretical performance developed by applying a particular investment strategy to historical financial data. The backtested results show investment decisions that theoretically would have been made had the given strategy been employed during the particular past period of time. However, backtesting does not involve actual market risk or client money. Past performance does not guarantee future results.

Fairtree Smart Beta Performance

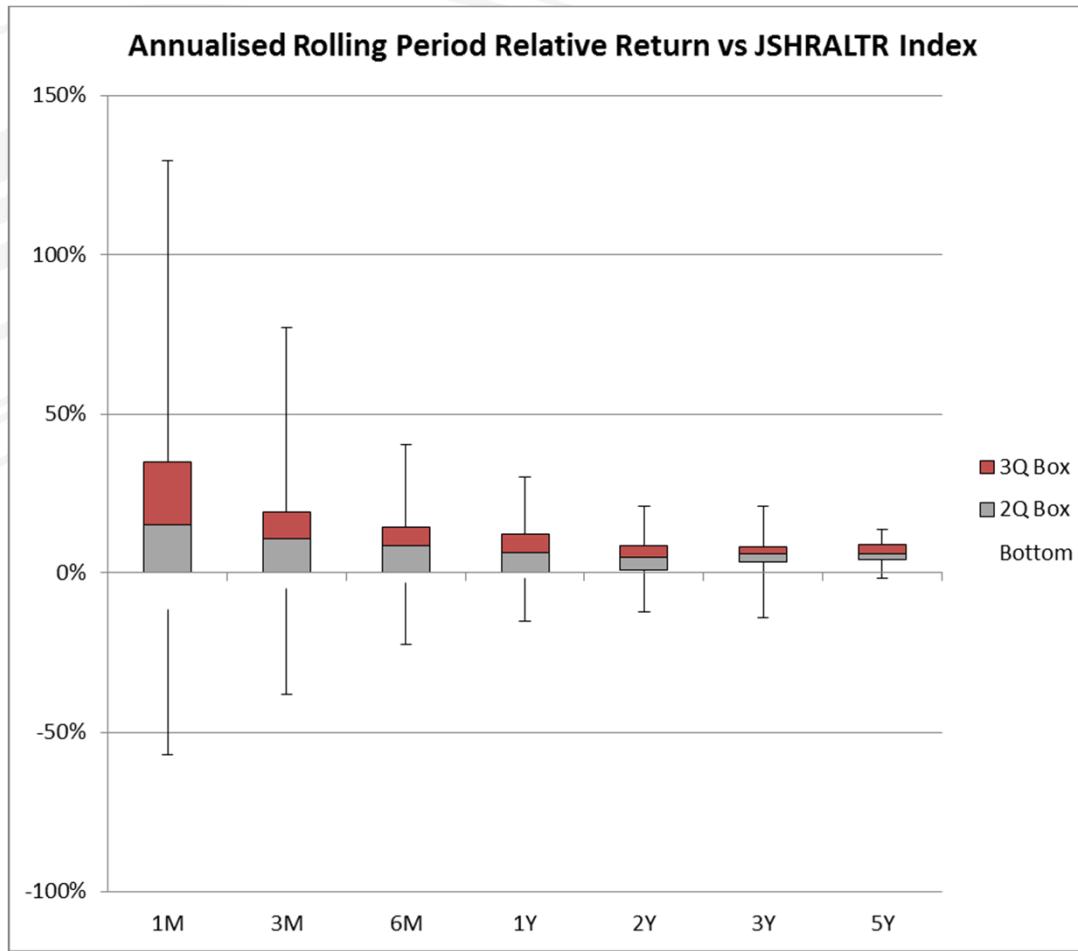
Returns

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Max Drawdown
2003	-3.3%	-3.5%	-6.5%	-0.7%	11.2%	3.7%	6.6%	3.5%	-0.7%	6.9%	4.7%	7.1%	31.3%	-13.4%
2004	0.2%	2.2%	2.0%	0.1%	0.0%	2.1%	2.5%	6.0%	7.0%	9.1%	12.0%	5.0%	59.4%	0.0%
2005	0.1%	3.1%	-4.9%	-1.3%	4.9%	3.2%	11.1%	1.9%	5.6%	-2.2%	3.6%	8.6%	37.9%	-6.2%
2006	10.4%	1.1%	5.6%	1.4%	-8.6%	-4.0%	0.7%	4.3%	-0.1%	8.1%	4.7%	5.4%	31.4%	-12.2%
2007	6.0%	1.0%	3.6%	7.0%	1.7%	-2.0%	-0.2%	0.6%	2.1%	5.4%	-6.6%	-1.0%	18.1%	-7.5%
2008	-11.4%	9.7%	-3.6%	2.5%	0.6%	-6.9%	2.5%	5.3%	-7.7%	-8.3%	-4.3%	6.7%	-16.0%	-21.3%
2009	-4.2%	-7.0%	4.1%	4.7%	6.1%	0.9%	8.2%	4.5%	3.6%	4.4%	-3.4%	5.1%	29.3%	-10.8%
2010	-0.7%	4.1%	5.1%	1.7%	-1.6%	-0.4%	8.1%	-1.5%	9.3%	1.9%	0.0%	3.6%	33.0%	-2.1%
2011	-5.5%	1.4%	0.5%	3.4%	0.0%	0.0%	0.8%	0.7%	-2.3%	6.4%	2.7%	0.1%	7.8%	-5.5%
2012	3.8%	3.9%	2.4%	3.2%	-2.6%	3.7%	5.6%	1.7%	1.0%	2.2%	3.1%	3.7%	36.3%	-2.6%
2013	0.2%	0.5%	3.2%	0.3%	5.6%	-2.0%	1.9%	-0.3%	5.7%	5.3%	-1.0%	3.0%	22.4%	-2.0%
2014	-5.7%	1.9%	5.1%	3.8%	0.2%	3.5%	1.9%	0.9%	-2.3%	2.6%	2.8%	-0.1%	14.6%	-5.7%
2015	4.1%	3.8%	2.1%	3.0%	-5.1%	-0.5%							7.4%	-5.6%

- Single Factor Monthly
- Multi Factor Monthly
- Multi Factor Semi-Annually

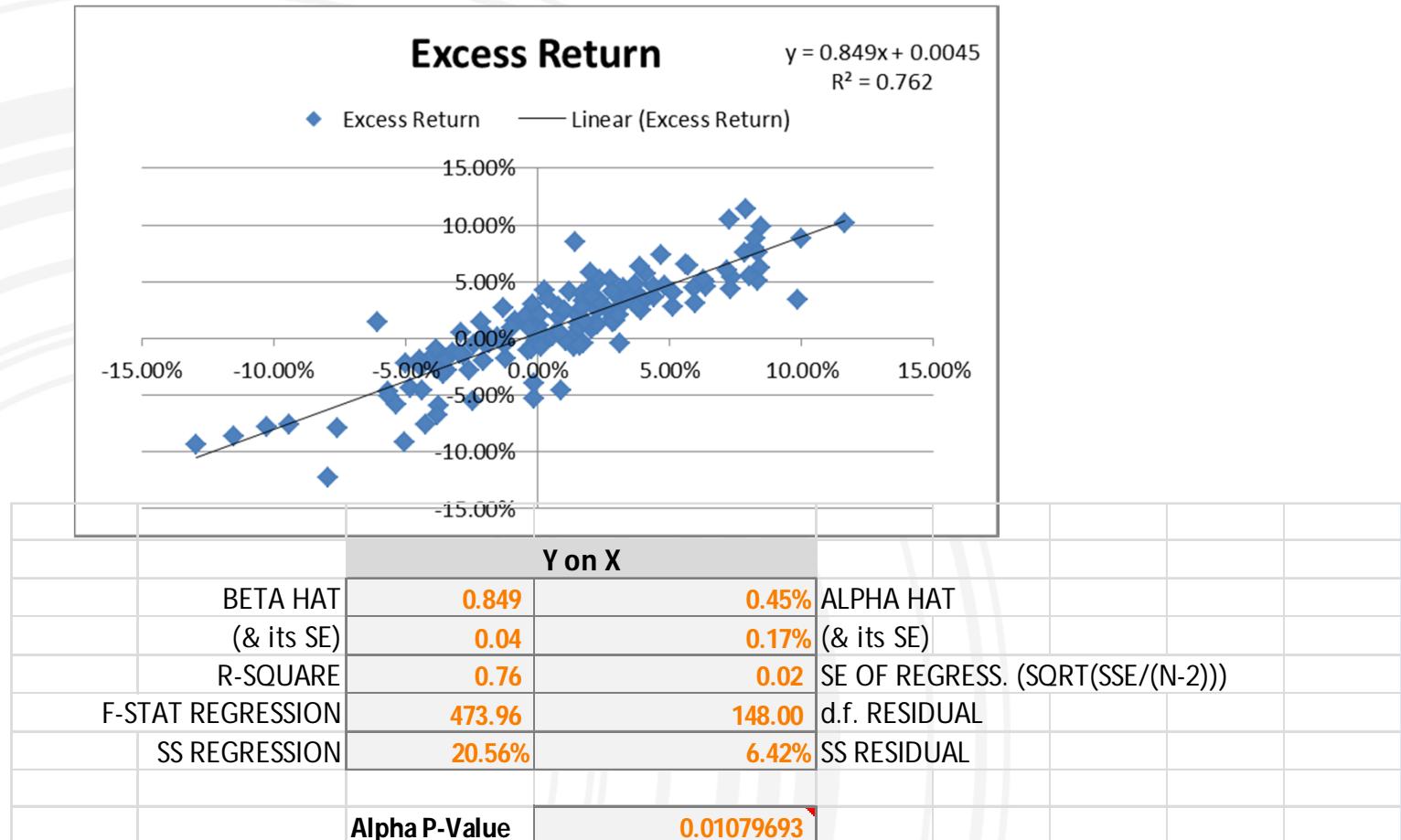
Backtesting from Jan 2003 to Aug 2013 involves the use of theoretical performance developed by applying a particular investment strategy to historical financial data. The backtested results show investment decisions that theoretically would have been made had the given strategy been employed during the particular past period of time. However, backtesting does not involve actual market risk or client money. Past performance does not guarantee future results.

Rolling Risk/Return Comparison to SWIX AllShare



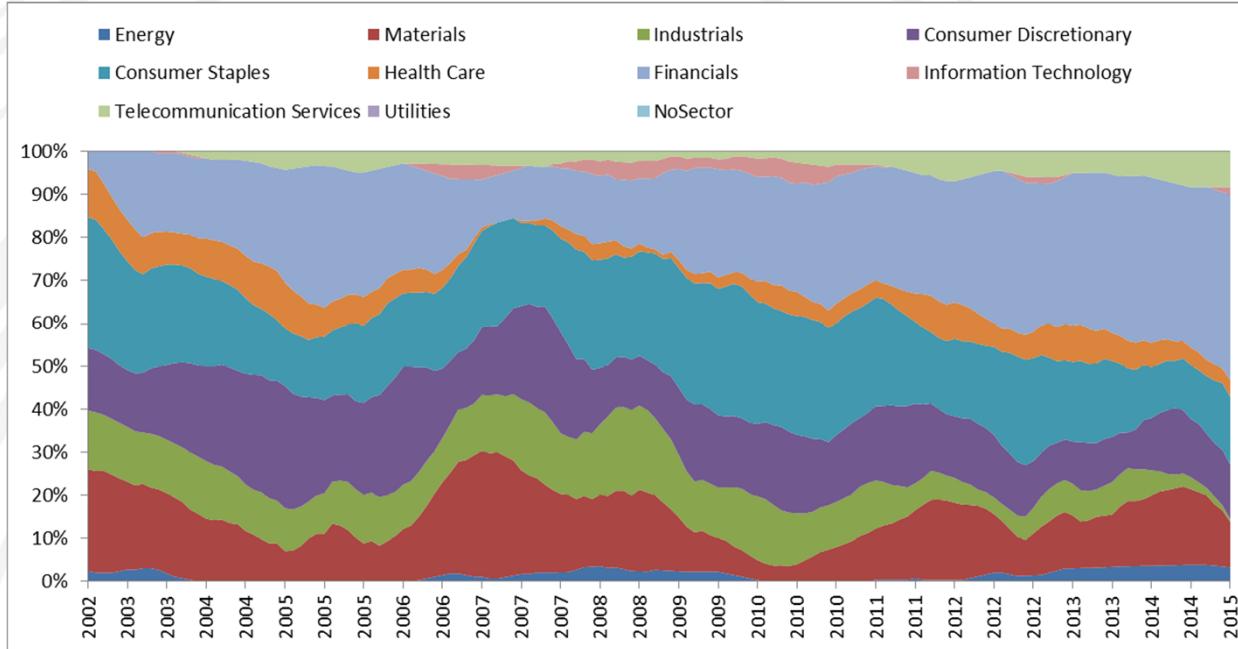
Backtesting involves the use of theoretical performance developed by applying a particular investment strategy to historical financial data. The backtested results show investment decisions that theoretically would have been made had the given strategy been employed during the particular past period of time. However, backtesting does not involve actual market risk or client money. Past performance does not guarantee future results.

Statistical Analysis vs SWIX AllShare



Backtesting involves the use of theoretical performance developed by applying a particular investment strategy to historical financial data. The backtested results show investment decisions that theoretically would have been made had the given strategy been employed during the particular past period of time. However, backtesting does not involve actual market risk or client money. Past performance does not guarantee future results.

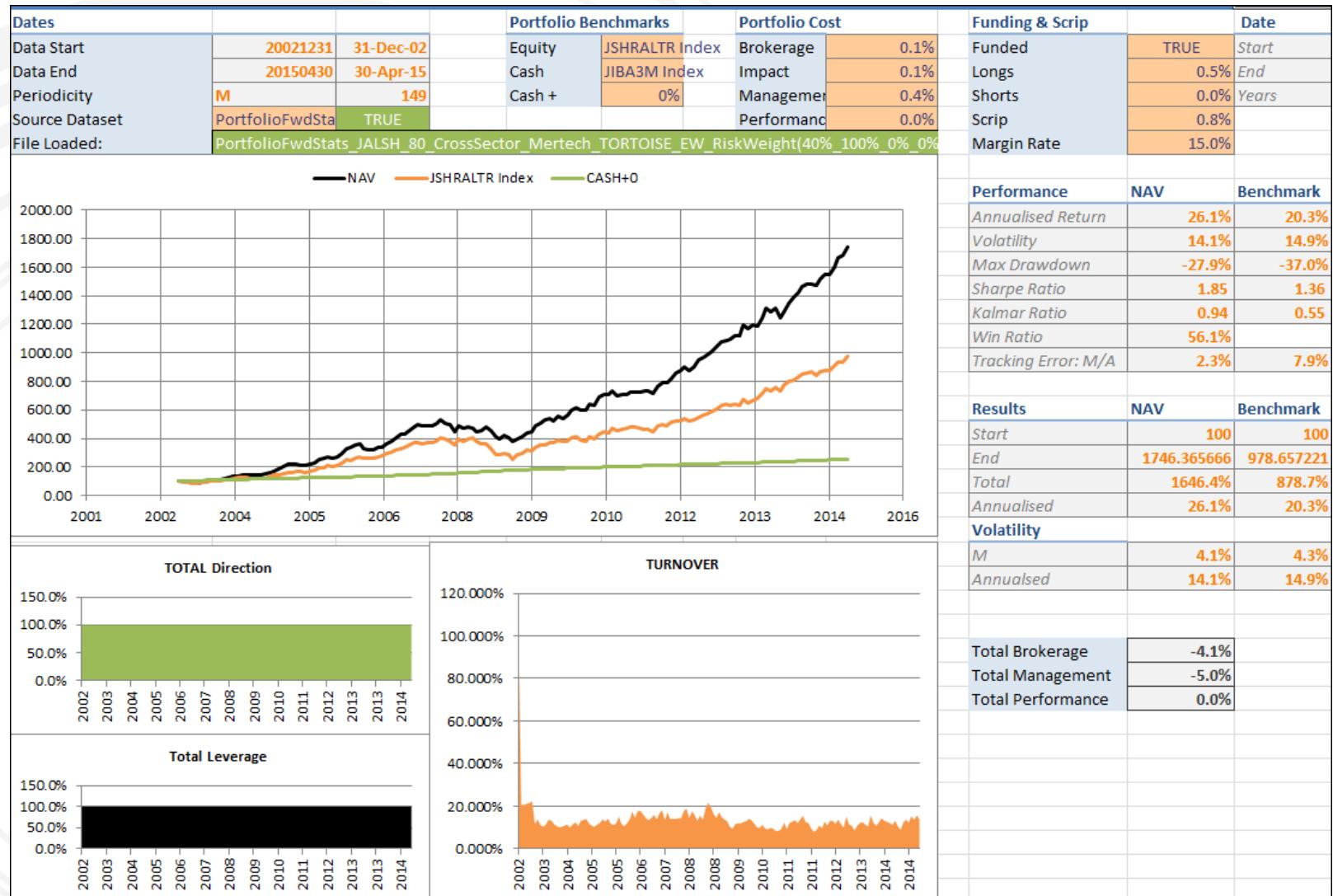
Current Holdings



Portfolio	Ticker	TargetWeight
20150630	BTI SJ Equity	4.54%
20150630	LBH SJ Equity	4.22%
20150630	OML SJ Equity	4.09%
20150630	AVI SJ Equity	3.93%
20150630	RMI SJ Equity	3.86%
20150630	REI SJ Equity	3.68%
20150630	MMI SJ Equity	3.59%
20150630	VOD SJ Equity	3.54%
20150630	SPP SJ Equity	3.40%
20150630	SHF SJ Equity	3.39%
20150630	FSR SJ Equity	3.38%
20150630	CPF SJ Equity	3.30%
20150630	DSY SJ Equity	3.24%
20150630	SLMSJ Equity	3.19%
20150630	RMH SJ Equity	3.11%
20150630	PFG SJ Equity	3.10%
20150630	CLS SJ Equity	3.08%
20150630	CML SJ Equity	2.99%
20150630	MTN SJ Equity	2.98%
20150630	CPI SJ Equity	2.80%
20150630	MPC SJ Equity	2.78%
20150630	NTC SJ Equity	2.64%
20150630	SOL SJ Equity	2.38%
20150630	HYP SJ Equity	2.26%
20150630	TKG SJ Equity	2.20%
20150630	MND SJ Equity	2.16%
20150630	RES SJ Equity	2.08%
20150630	LHC SJ Equity	2.06%
20150630	EOH SJ Equity	1.90%
20150630	TFG SJ Equity	1.40%
20150630	TRU SJ Equity	1.28%
20150630	PSG SJ Equity	1.20%
20150630	BVT SJ Equity	1.19%
20150630	ROC SJ Equity	1.17%
20150630	KIO SJ Equity	1.08%
20150630	WHL SJ Equity	1.02%
20150630	ITU SJ Equity	0.63%
20150630	PIK SJ Equity	0.50%
20150630	BAT SJ Equity	0.37%
20150630	SGL SJ Equity	0.30%

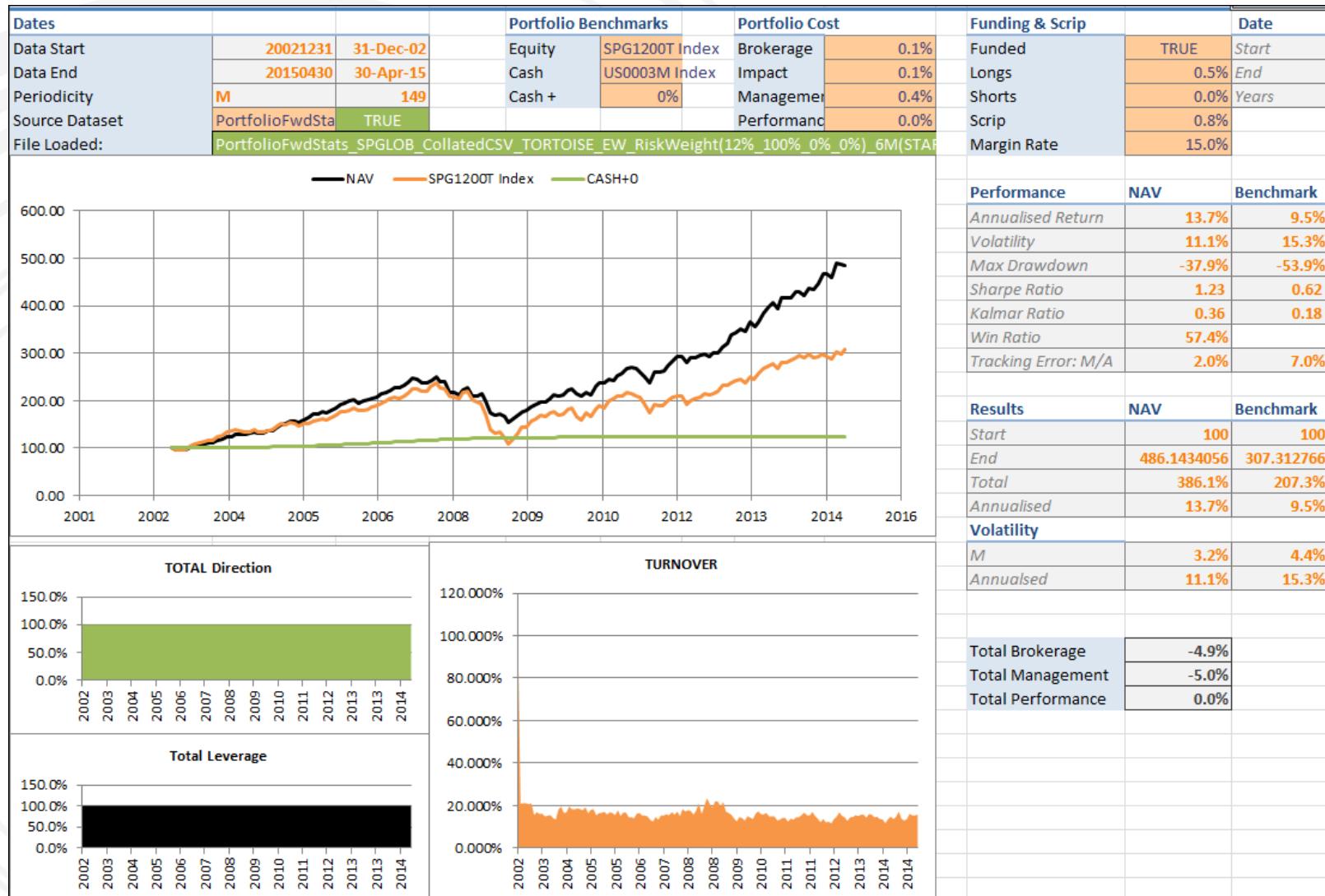
Bespoke Solutions

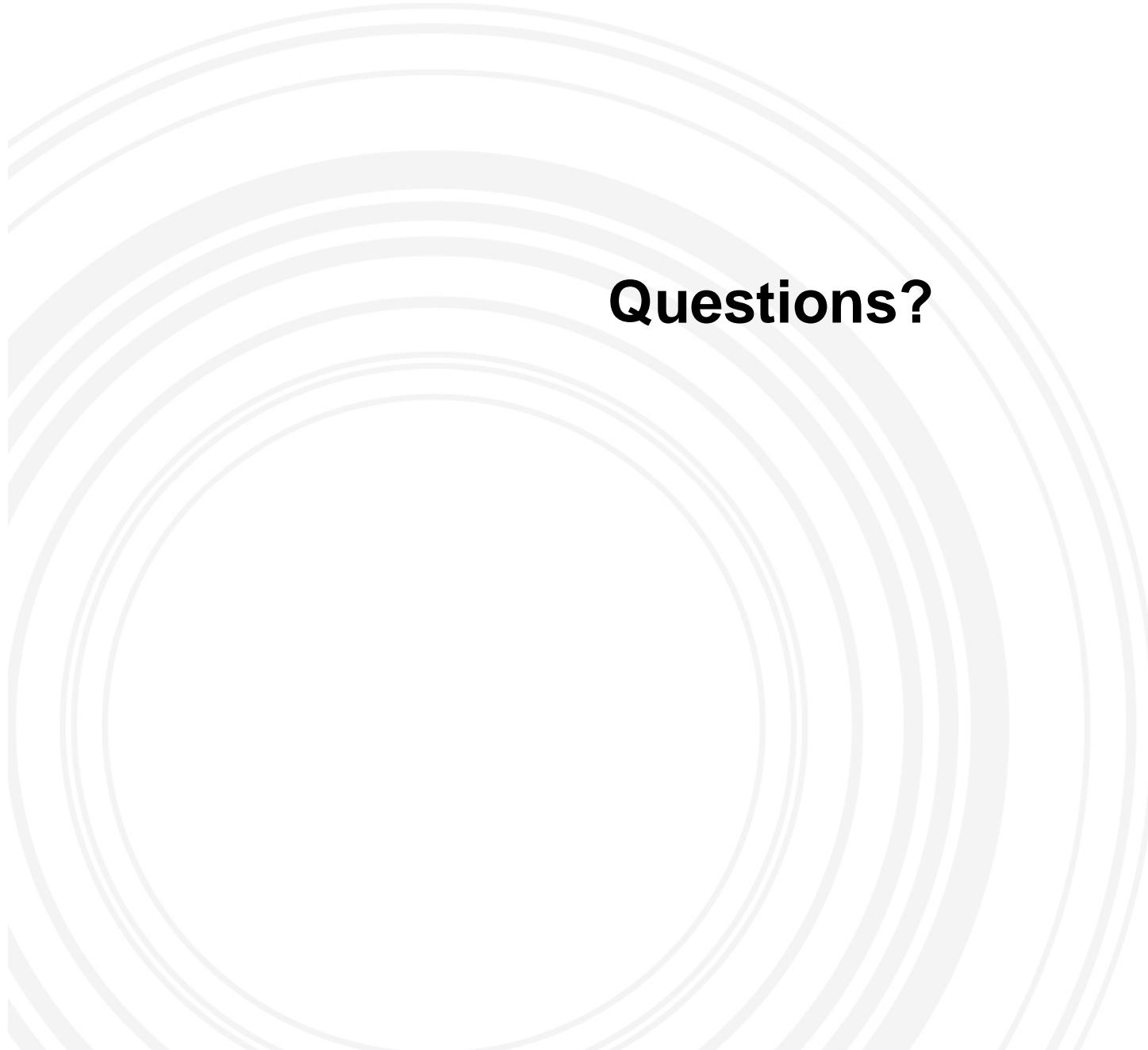
- Client needs: South African Solution (excluding Real Estate)



Bespoke Solutions

- Client needs: Global Solution (excluding Real Estate)





Questions?

