



QUANTIFYING RISK, ENABLING OPPORTUNITY

Shaun Levitan
Chief Operating Officer, Colourfield Liability Solutions

An Introduction to Smart Beta

Disclaimer

This presentation was created for the sole purpose of the **ASSA Pensions Conference**. The information contained herein does not in any way constitute advice of any kind. The information contained in this presentation has been compiled with care to ensure its accuracy at the date of publication. However, Colourfield Liability Solutions makes no representation, express or implied, as to its completeness or accuracy. All research or analysis contained within this presentation has been procured by Colourfield Liability Solutions for its own use and may be acted on by Colourfield Liability Solutions in that connection. Any opinions expressed are subject to change without notice.

Colourfield is an Authorised Financial Services Provider, FSP 35113

The age old debate

Which approach to investment is better?

Active or Passive?



Have you **recommended** or do you believe that traditional **passive** management is appropriate for **local equity mandates**?

- 1) Yes – I believe in the Efficient Markets Hypothesis – why try active management?
- 2) Yes – but only for a small component of the equity portfolio
- 3) No – there are alpha opportunities in the SA market – why choose to underperform the index after fees?
- 4) No – passive management in SA is too expensive
- 5) Other

The age old debate

Which approach to investment is better?

Active or Passive?



Ranks along with life's other big key debates





More important than life and death





Sometimes differences can be settled by **uniting** both sides...



VS



"Gone is any sense of heroism, camaraderie or epic battle. In its place we have vampires that sparkle, moan and go to high school," he says. "Sci-fi fans be warned, there are no great stories, characters or profound life lessons to be found in *Twilight*...

In *Twilight*, the only message that rings through loud and clear is: 'Does my boyfriend like me?'" (George Takei)

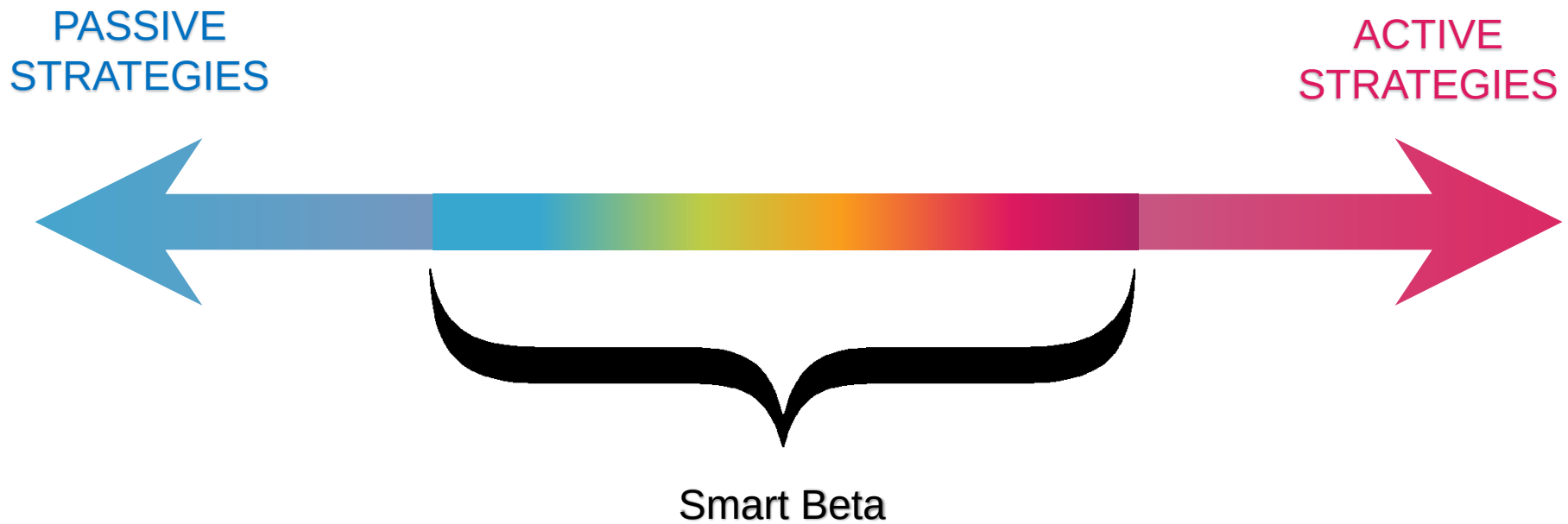


I DON'T WANT TO LIVE



ON THIS PLANET ANYMORE

What is Smart Beta?



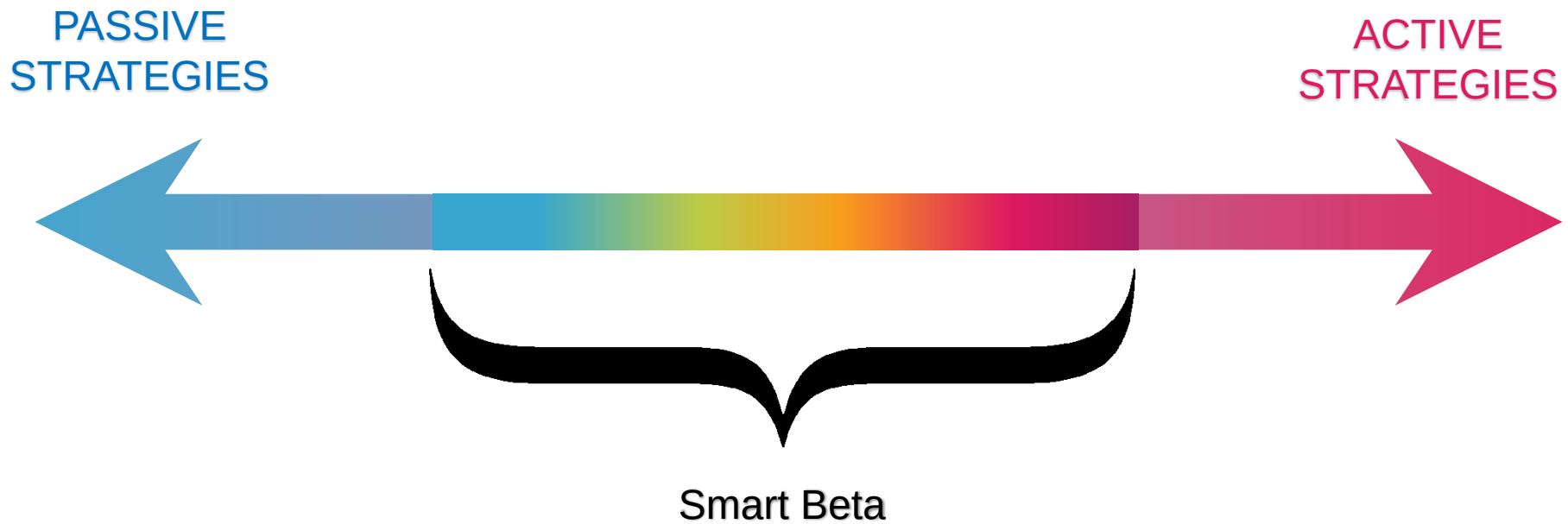
Smart Beta has the ability to unite
the Passive and the Active camps



Would you be able to **explain** what **Smart Beta** is to a board of trustees?

- 1) Yes – I've done a fair amount of research on the topic
- 2) Yes - Enough for them to understand what it is but not enough to make a decision
- 3) No – I need to get some more information
- 4) No – This is not relevant to me or my funds

What is Smart Beta?



Unfortunately ... **anything in the middle**
is now referred to as **Smart Beta**

What is Smart Beta?

Smart Beta has become a **buzz word** and a marketing term

Smart Beta History

- Smart Beta is not a new approach to investment
- Dimensional Fund Advisors created the first true Smart Beta fund in 1981 and currently manage in excess of \$400 bn in such strategies worldwide

Smart Beta consideration in SA

- Trustees and consultants will be required to consider these types of strategies
- “To increase the visibility of passive investment of listed assets in South Africa, the default regulation requires trustees to consider passive or enhanced passive investment as part or all of the default investment portfolio”

(National Treasury Draft Regulations published July 2015)

What is Smart Beta?

- There is **no single definition**
- Lack of universal definition has **created confusion** amongst investors



What is Smart Beta?

Let's try and define it
by understanding what “dumb” beta is?

Back to basics – what is “dumb” Beta?

The **beta** (β) of an investment is a measure of the risk arising from exposure to general market movements

Cap-Weighted Index



Back to basics – what is “dumb” Beta?

-  The **market** in this instance might be the All Share Index or the SWIX (a market capitalization index)
-  **CAPM** states that all investors are exposed to some level of market risk.
-  **“A rising tide lifts all ships”**
-  The amount of a particular stock’s rise or fall explained by the market is called **“Beta”**

What is Smart Beta?

What Smart Beta is **not**?

Smart Beta is **not** an investment in a typical capitalisation-weighted index

What is Smart Beta?

What **is** Smart Beta?

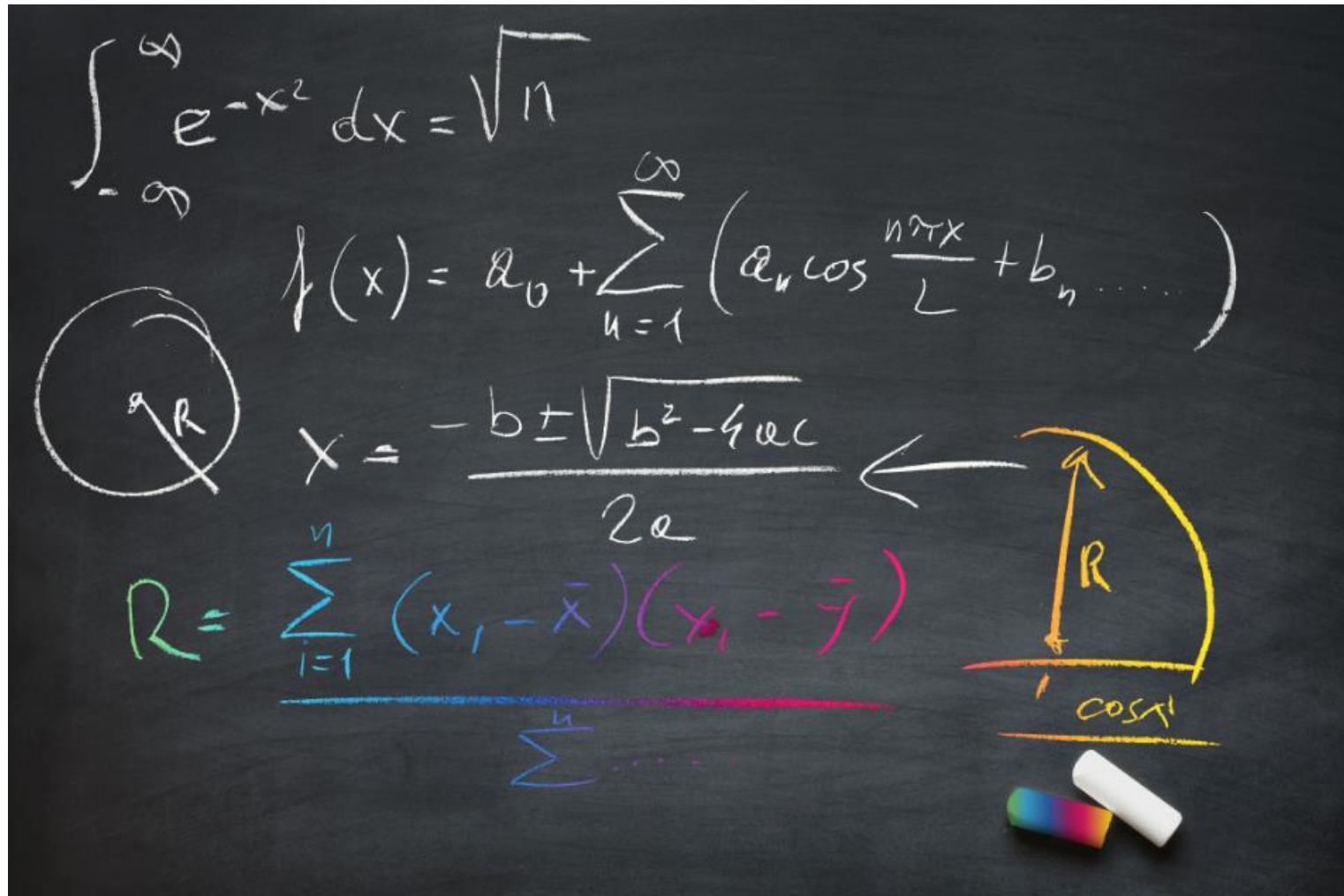
Very broad term encompassing strategies attempting to capture premiums amongst securities

What is Smart Beta?

- **Axiom: Securities have differences in expected returns**
- Smart Beta is an approach to choosing securities with **better risk-adjusted returns**
- It **breaks the connection** between a security's **price** and **weight** in a portfolio

What is Smart Beta?

Code	Share Name	Industry	Shares	Weight
NPN	Naspers Ltd -N-	Consumer Services	2896	11.94%
SAB	SABMiller plc	Consumer Goods	7862	10.98%
BIL	BHP Billiton plc	Basic Materials	16919	8.76%
CFR	Compagnie Fin Richemont	Consumer Goods	40142	8.67%
MTN	MTN Group Ltd	Telecommunications	14065	7.03%
SOL	Sasol Limited	Basic Materials	4428	4.18%
AGL	Anglo American plc	Basic Materials	10583	3.97%
BTI	British American Tob plc	Consumer Goods	2434	3.52%
SBK	STANDARD	Financials	9645	3.32%
OML	Old Mutual plc	Financials	37881	3.22%



What is Smart Beta?

Code	Share Name	Industry	Shares	Weight
NPN	Naspers Ltd -N-	Consumer Services	2896	11.94%
SAB	SABMiller plc	Consumer Goods	7862	10.98%
BIL	BHP Billiton plc	Basic Materials	16919	8.76%
CFR	Compagnie Fin Richemont	Consumer Goods	40142	8.67%
MTN	MTN Group Ltd	Telecommunications	14065	7.03%
SOL	Sasol Limited	Basic Materials	4428	4.18%
AGL	Anglo American plc	Basic Materials	10583	3.97%
BTI	British American Tob plc	Consumer Goods	2434	3.52%
SBK	STANDARD	Financials	9645	3.32%
OML	Old Mutual plc	Financials	37881	3.22%

What is Smart Beta?

Cap-Weighted Index



Alternative Index



Sources of Equity Returns

- There are **multiple sources** of equity return (or premia)
- Smart Beta involves **identify and selecting premia** that compensate investors for taking risk
- Some premia can be realised by taking advantage of **investor behaviour**

Academic Research

▀ Academic research has provided insight into why particular stocks outperform or how premia are rewarded through time:

- **Market** (Sharpe; 1964)
- **Size and Value** (Fama and French; 1992)
- **Momentum** (Carhart; 1997)
- **Profitability** (Novy-Marx; 2012)

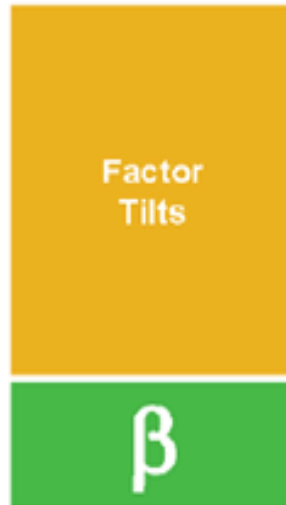
▀ In other words, stocks exhibiting certain characteristics should have higher expected returns

Smart Beta or Dumb Alpha?

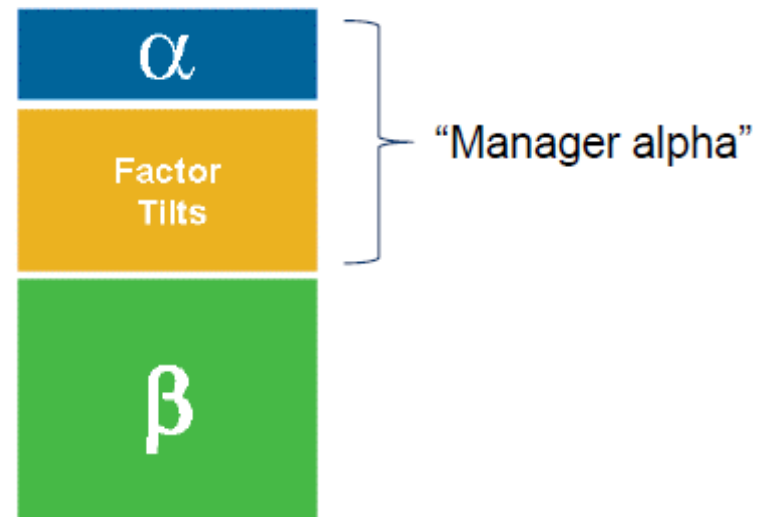
Cap-Weighted Index

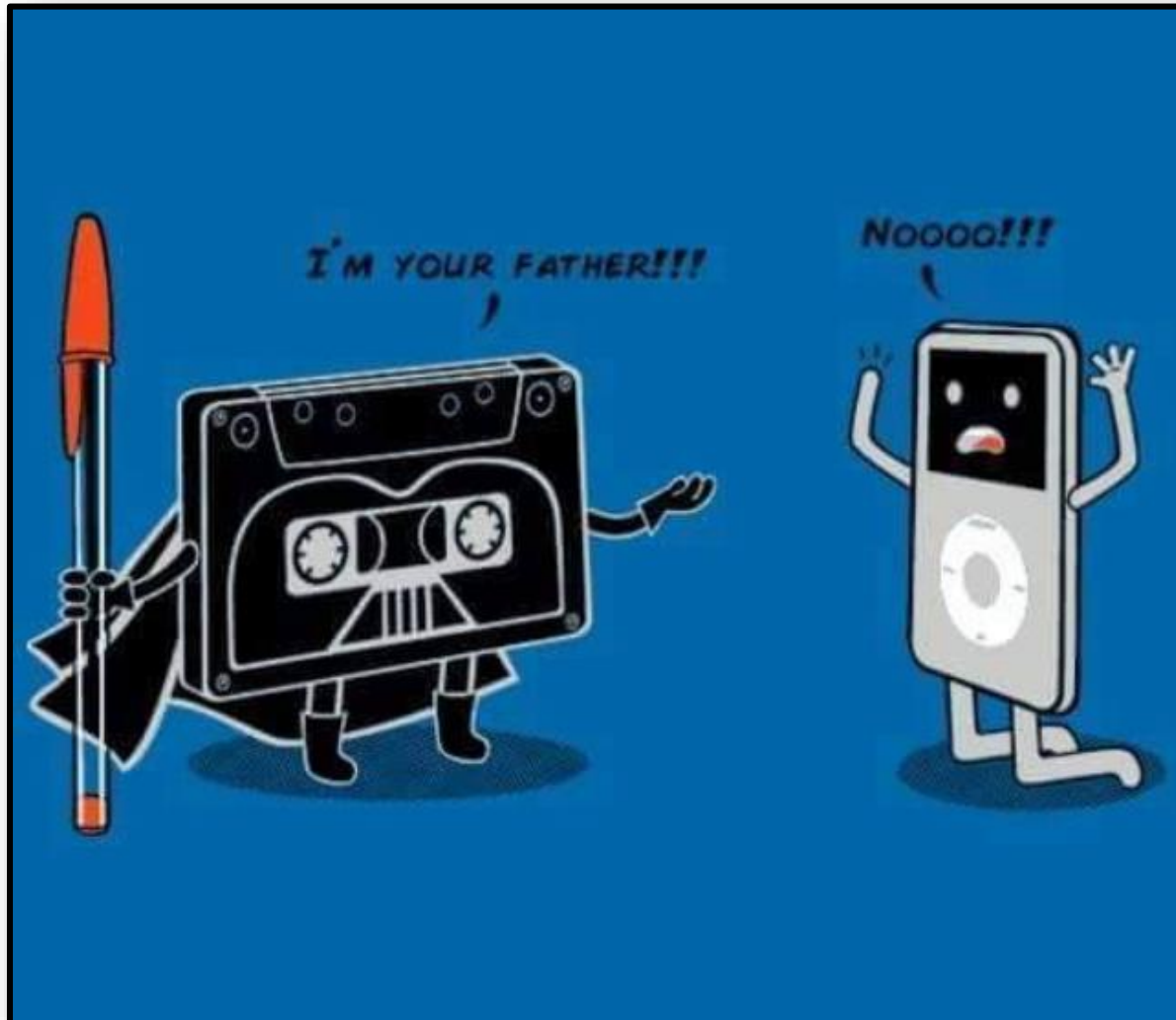


Alternative Index



Traditional Active





Smart Beta or Dumb Alpha?

-  These factors also seem to **explain the outperformance** of **active strategies**

-  Fama and French (2010) show that **less than 3%** of active managers **deliver** factor-adjusted **alpha to cover fees**

Academic Research

-  Studies have shown **outperformance** of various strategies can be explained by exposure to **well-established premia**
-  Fundamental indexation - **value**
-  Equal weighted allocations - **size**

Sources of Equity Returns

 Criteria for choosing premia

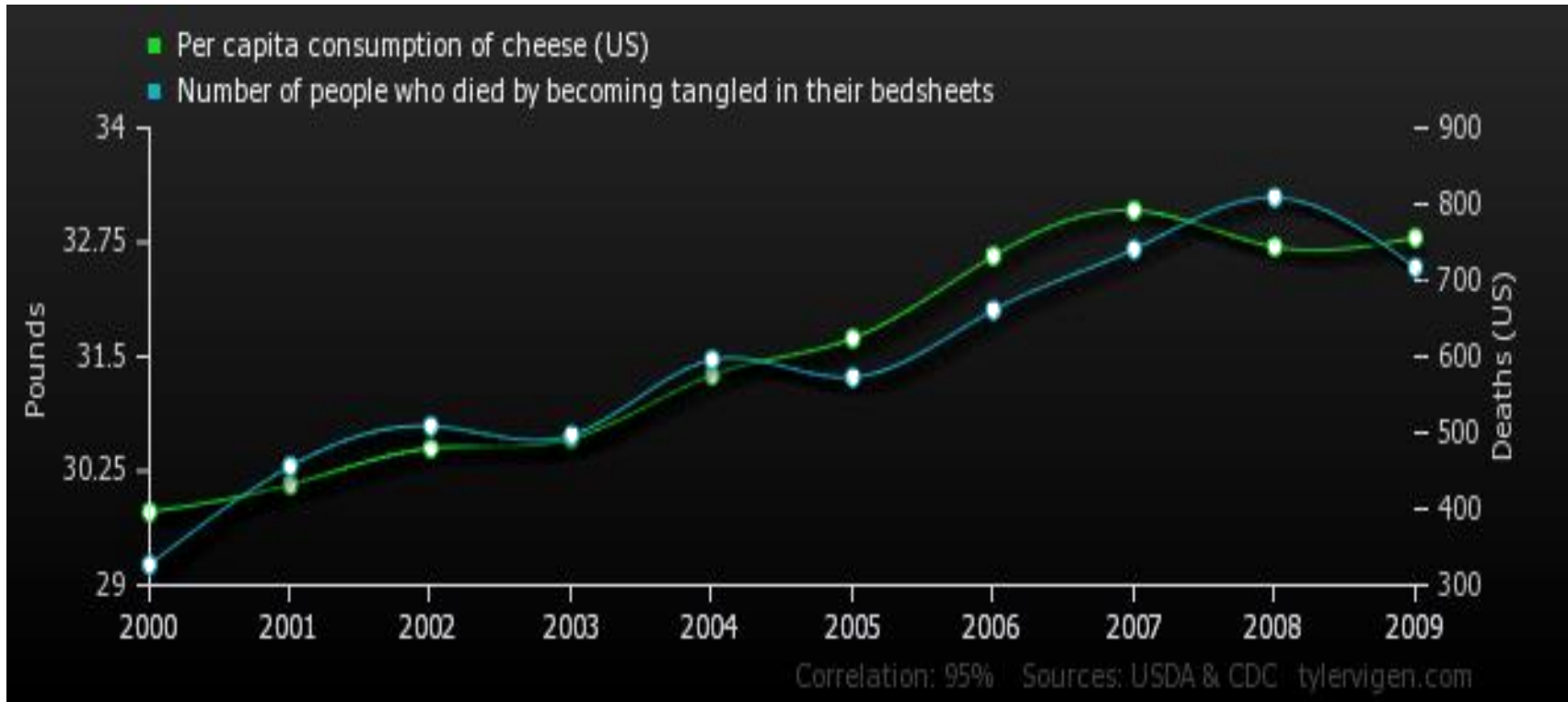
- **Sensible**
- **Persistent across time periods**
- **Pervasive across markets**
- **Robust to alternative specifications**
- **Cost-effective to capture in well-diversified portfolios**

Sources of Equity Returns

Per capita consumption of cheese (US)

correlates with

**Number of people who died by becoming tangled in
their bedsheets**



Correlation: 0.947091

Bieber Effect!

Evidence That Facebook Cancelled Out the Cholesterol-Lowering Effects of Justin Bieber

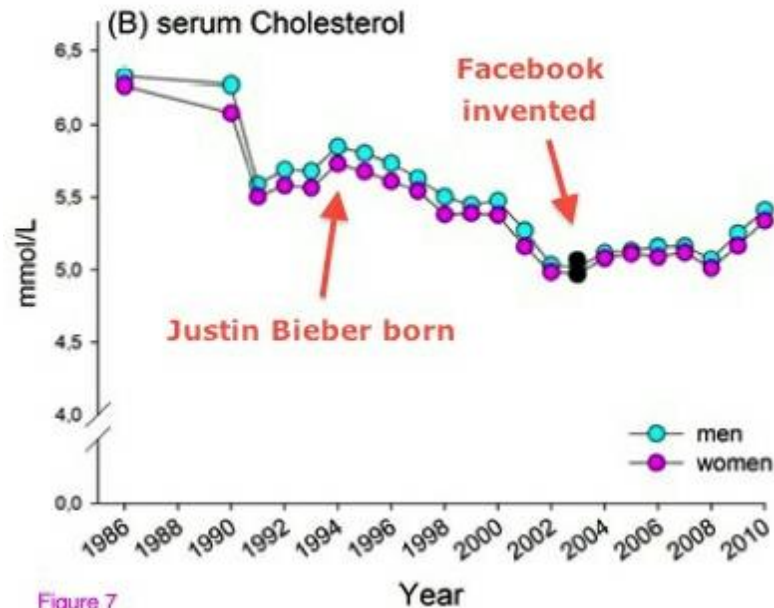
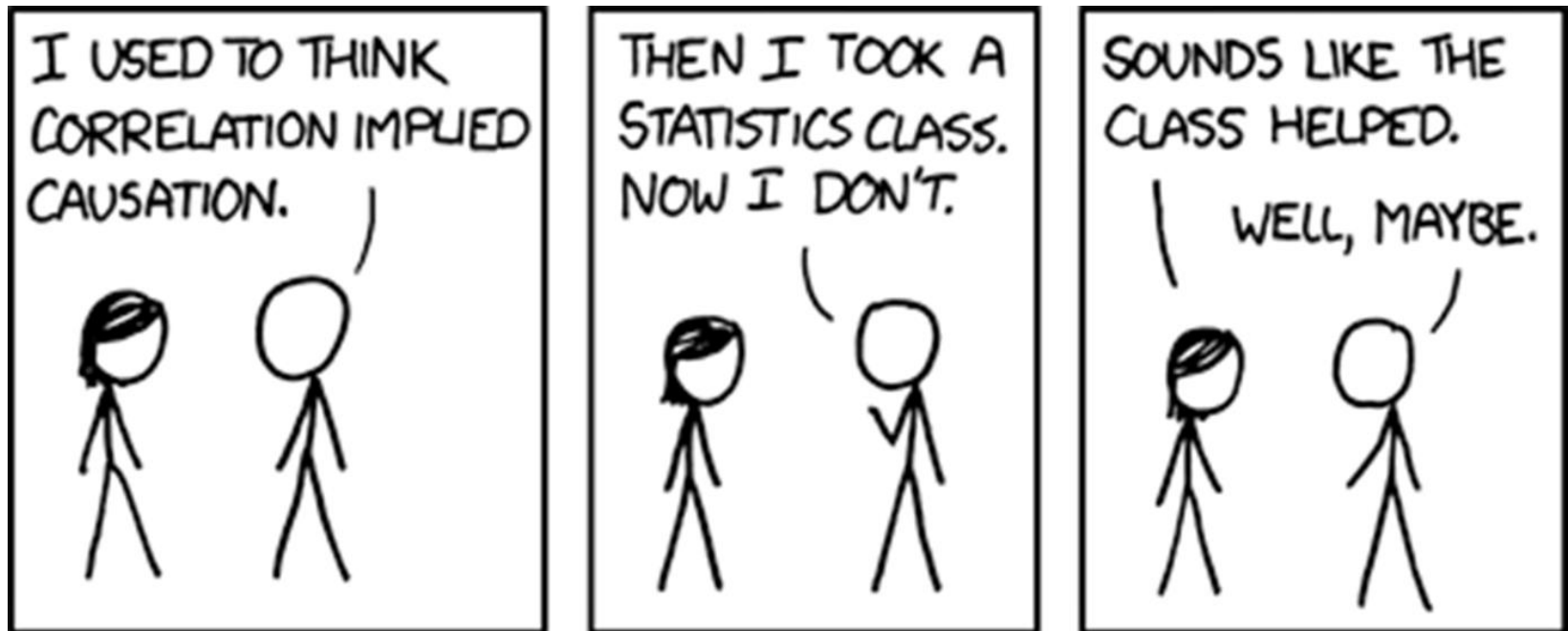


Figure 7

Courtesy of www.marksdailyapple.com

Correlation does not imply causation



Sources of Equity Returns

 Criteria for choosing premia

- **Sensible**
- **Persistent across time periods**
- **Pervasive across markets**
- **Robust to alternative specifications**
- **Cost-effective to capture in well-diversified portfolios**

Smart Beta Pitfalls

Some Smart Beta strategies point to one characteristic and identify this as a benefit



Smart Beta Pitfalls

-  Perils of **ignoring prices**
-  Back to basics – the price of a **share price is NB**
-  Reason for **deviating** from **market cap weights** is to **beat the benchmark**
-  Choose stocks that have **higher expected returns**
-  Valuation models and intuition confirms that **expected return** depends on the **profits** investors expect to receive and the **price** they pay

Smart Beta Pitfalls

- Company characteristics such as data reported in **financial statements** can be useful in assessing **expected returns**
- However these changes are typically **infrequent**
- In a well functioning market, **prices** reflect the **constantly updated** aggregate expectations of participants
- Prices** contain important, **real-time information** about **company-specific** and **market -wide** events.

Smart Beta Pitfalls

-  **Fundamental indexation weights** stocked by their “economic footprint” and **disregards share prices**
-  Regression studies done on Fundamental Indexation funds show a **significant value factor exposure**
-  This compares with **market cap-weighted indices** that tend to be style neutral and have **value coefficients close to zero**
-  Fundamental-indexation strategies are **value strategies**

Muddying the waters

- Many offered via **ETFs** which have other issues
- Some smart beta index providers have rules based strategies that require large turnover that result in **higher trading costs**
- Some strategies produce concentrated **portfolios with stock-specific risk**

What is a bad smart beta strategy

-  Fund(s) that require **trustees, members or consultants** to choose or blend various strategies
-  **Large turnover required** resulting in higher trading costs
-  Concentrated **portfolios with stock-specific risk**
-  Use of factors that **do not have academic and behavioural underpinnings.**

Smart Beta

 **Due Diligence Required** for selecting Smart Beta manager(s)

- Which factors have been chosen?
- How often are portfolios changed?
- Which factors require emphasis when there is a market environment change?
- Flexibility of trading

What is a good smart beta strategy?

-  **Proper implementation**
-  **Systemic approach** using prices and characteristics to assess expected returns every day
-  **Control turnover** by comparing benefits of selling and buying with costs of trades
-  Need to capture **higher expected returns** but at a **competitive fee**

Do you believe that **Smart Beta** might have a **role** in an **investment strategy**?

- 1) Yes – but more information is needed before I can have a firm view
- 2) Yes – active managers have used these techniques already. This is an opportunity to access them cheaper.
- 3) No – too complicated for a board of trustees and/or members to understand
- 4) No – this is flavour of the month

Smart Beta

- **Colourfield is proud to bring a true Smart Beta approach to SA**
- We have partnered with the very individuals and company who **pioneered** this concept (Dimensional Fund Advisors)
- Strong and equal emphasis on the **research** supporting the strategy as well as the **trading** and **execution**

Thank you

 Contact Details:

Shaun Levitan

shaun@colourfield.co.za

Twitter:

[@shaunlevitan](https://twitter.com/shaunlevitan)



Thanks

Unit 16b 3rd Floor
3 Melrose Boulevard
Melrose Arch
Johannesburg 2076

T+27 861 007 656
F+27 86 579 7659
info@colourfield.co.za
www.colourfield.co.za