
Fundamental Analysis & Financial Psychology

Not everything that counts can be counted,
and not everything that can be counted counts

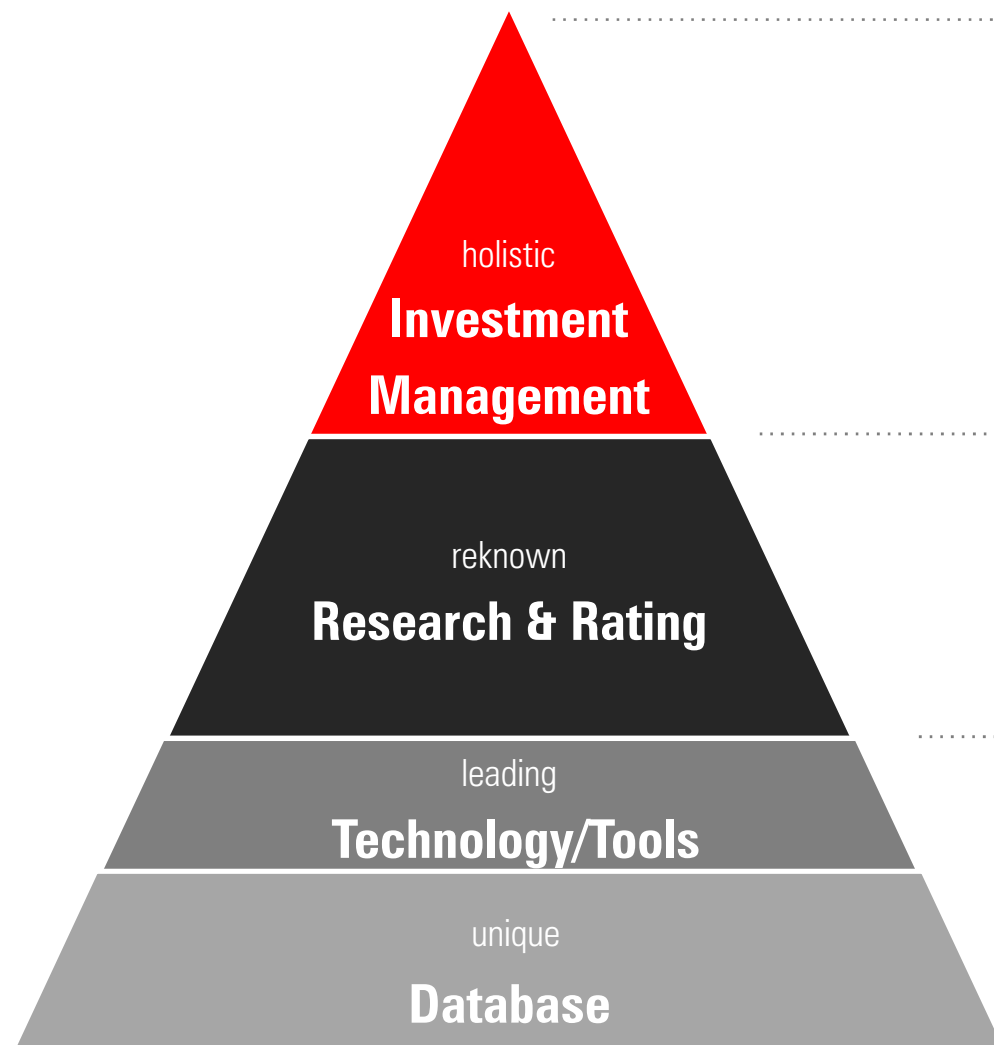
Ben Granjé,
Morningstar
Co-Author 'Waarde(n)vol'

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Morningstar – the thirty second intro



Leading provider of investment expertise

- ▶ *Thought leadership*
- ▶ *Independent advice*
- ▶ *Morningstar IM*

- ▶ *Manager & Fund Research*
- ▶ *Equity & Credit Research*
- ▶ *Lifecycle & Retirement Research*
- ▶ *Asset Allocation & Portfolio construction*
- ▶ *Investor experience Research*

- ▶ *Data processing and analysis tools*

- ▶ *Managed investment Database*
all types of portfolio's, including their holdings
Individual stocks, bonds, indices, ...

Outline: How did we get here? From 'rational' to 'real'.

- ▶ **Morningstar Equity Research: MOAT = fundamental analysis**
- ▶ Volatility and risk, Market efficiency and behavioural finance
- ▶ Mind The Gap
- ▶ No Portfolio is an Island
- ▶ Loaded



Morningstar[®] Economic Moat[™] Rating

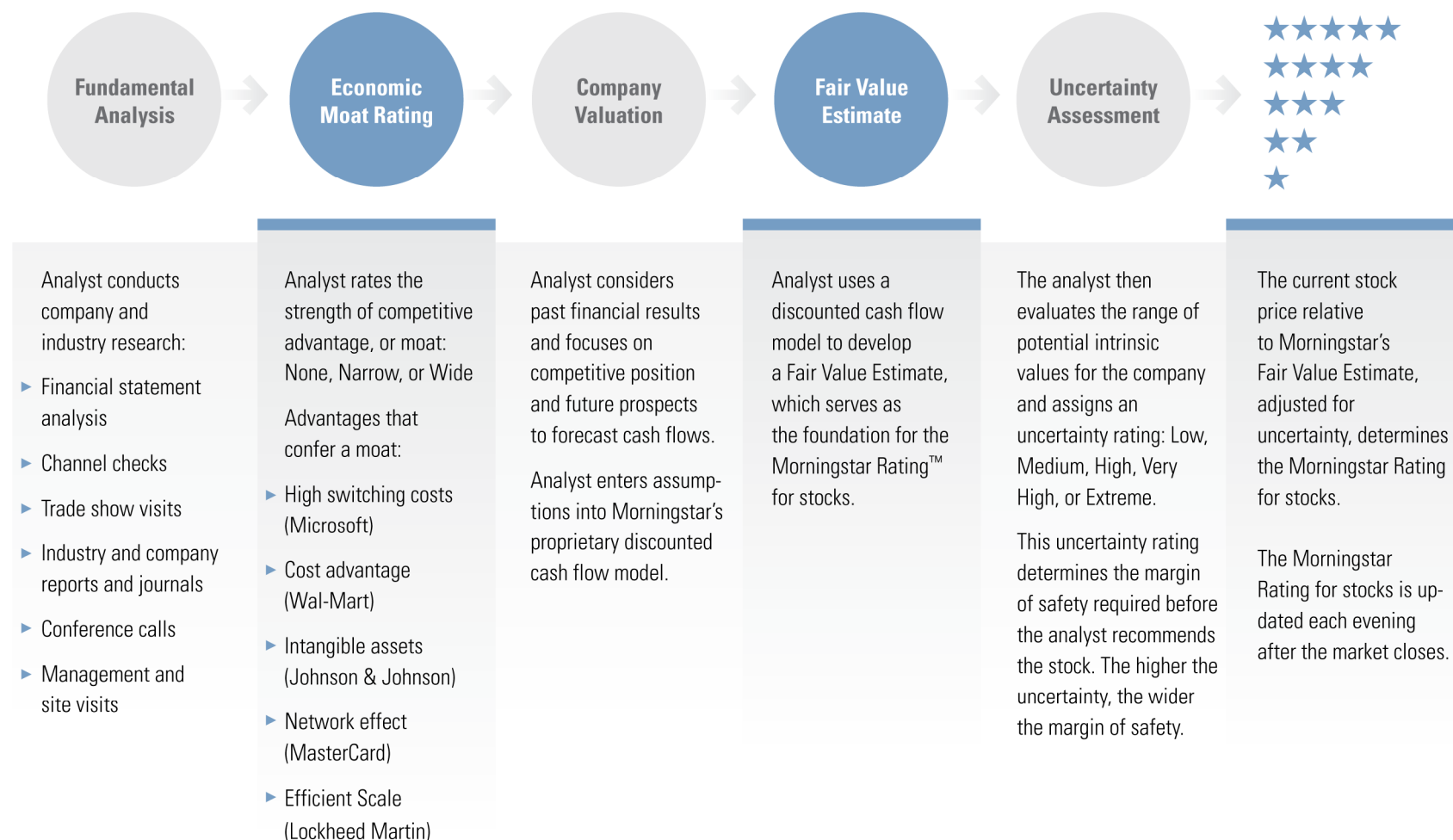
Long-Term Oriented, Fundamental Analysis Works!

- Evaluate stocks as small pieces of business
- Perform primary, fundamental research
- Take a long-term perspective
- Assess competitive advantages
- Calculate appropriate margin of safety

Invest in companies with strong and growing competitive advantages (Moats), trading at reasonable prices

"I want a business with a moat around it. I want a very valuable castle in the middle and then I want the Duke who is in charge of that castle to be very honest and hard working and able. Then I want a moat around that castle to keep away competitors"
– Warren Buffett

Morningstar Analyst-Driven Equity Research



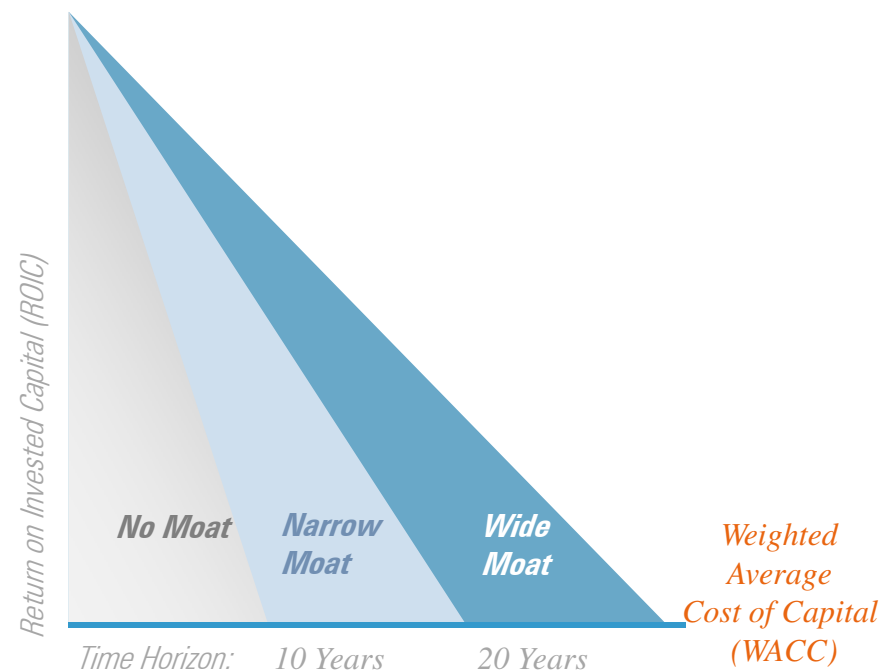
Morningstar® Economic Moat™ Rating

Measuring a Moat

Moat (Quantitatively): Return On Invested Capital (ROIC) Is Key

- Use Cash Flows not Earnings
 - Cash is King!
- IC: Compare apples to apples
- Estimate appropriate cost of capital

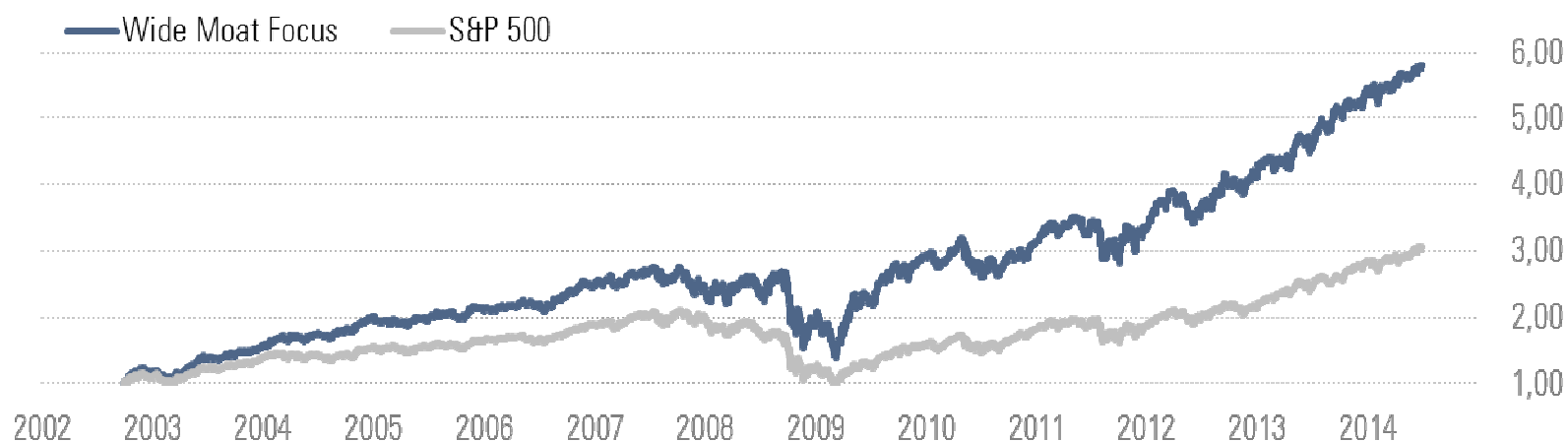
Duration of excess returns is far more important than absolute magnitude



Morningstar Institutional Equity Research Services

The Effectiveness of Our Ratings Over Time

Morningstar® Wide Moat Focus IndexSM vs. S&P 500



Trailing Annualized Returns (%)

Index	1-Year	3-Year	5-Year	10-Year	Since Inception (09/30/2002)
Morningstar® Wide Moat Focus Index SM	16.8	26.8	16.7	12.7	16.0
S&P 500 Index (cap-weighted)	19.8	23.0	15.7	8.1	9.7

Data from September 30, 2002 through September 30, 2014

Outline

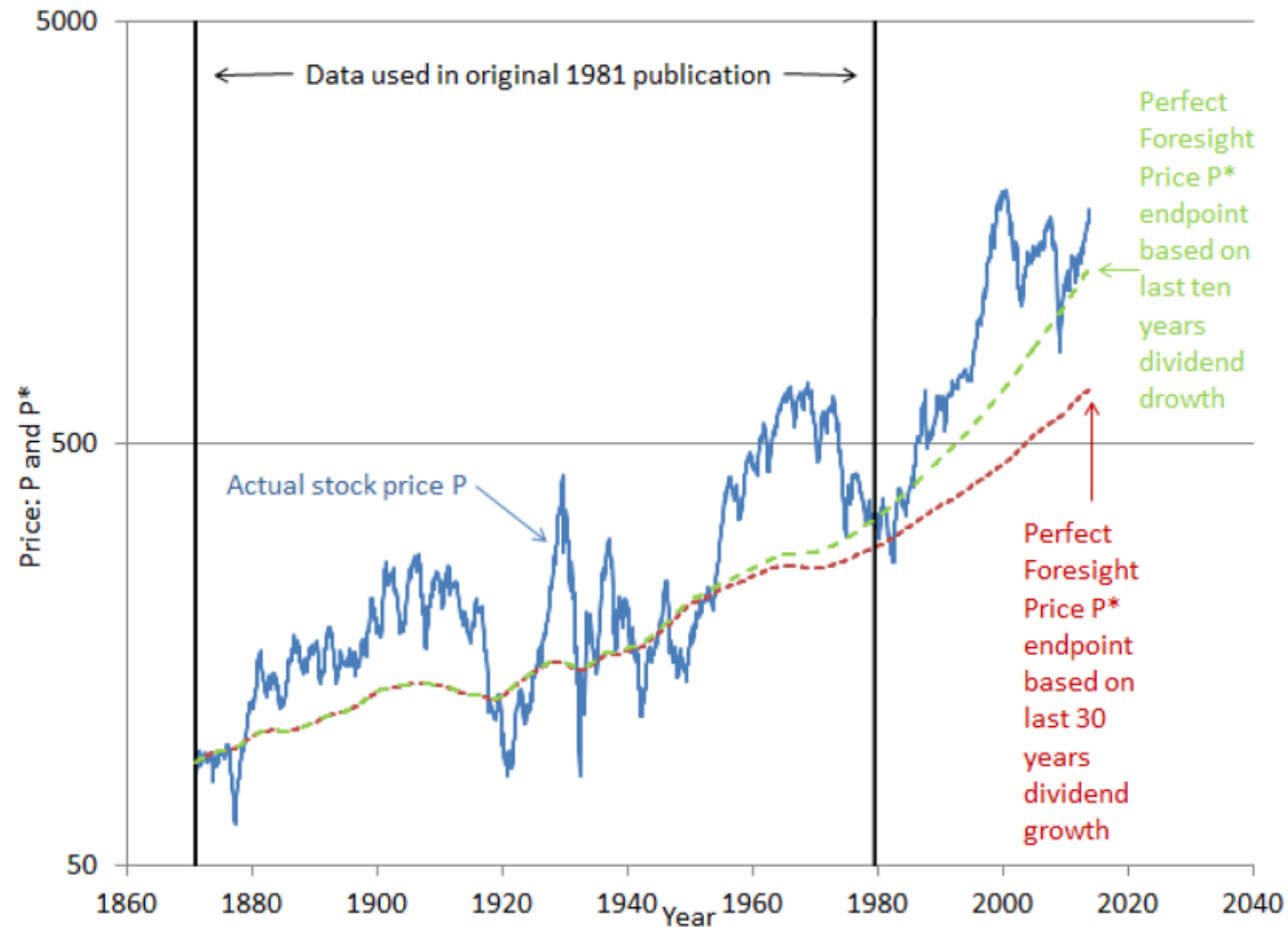
- ▶ Morningstar Equity Research:
 - ▶ Why Moats matter. Brilliant & Collins. Available through VFB.
- ▶ **Volatility and risk, Market efficiency and behavioural finance**
- ▶ Mind The Gap
- ▶ No Portfolio is an Island
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Market efficiency and price volatility

- ▶ In an efficient market, security prices reflect the available information and ...trading is based only on ... expected profits or returns in excess of equilibrium profit or return (Fama 1970)
- ▶ Efficient Market Theory rests on the key assumptions;
 - ▶ Investors are assumed to be rational
 - ▶ Where some investors are irrational, their trades cancel out
 - ▶ Rational arbitrageurs eliminate the influence of irrational investors
- ▶ When investors are rational, they value each security for its fundamental value: the net present value of its future cash flows discounted using their risk characteristics

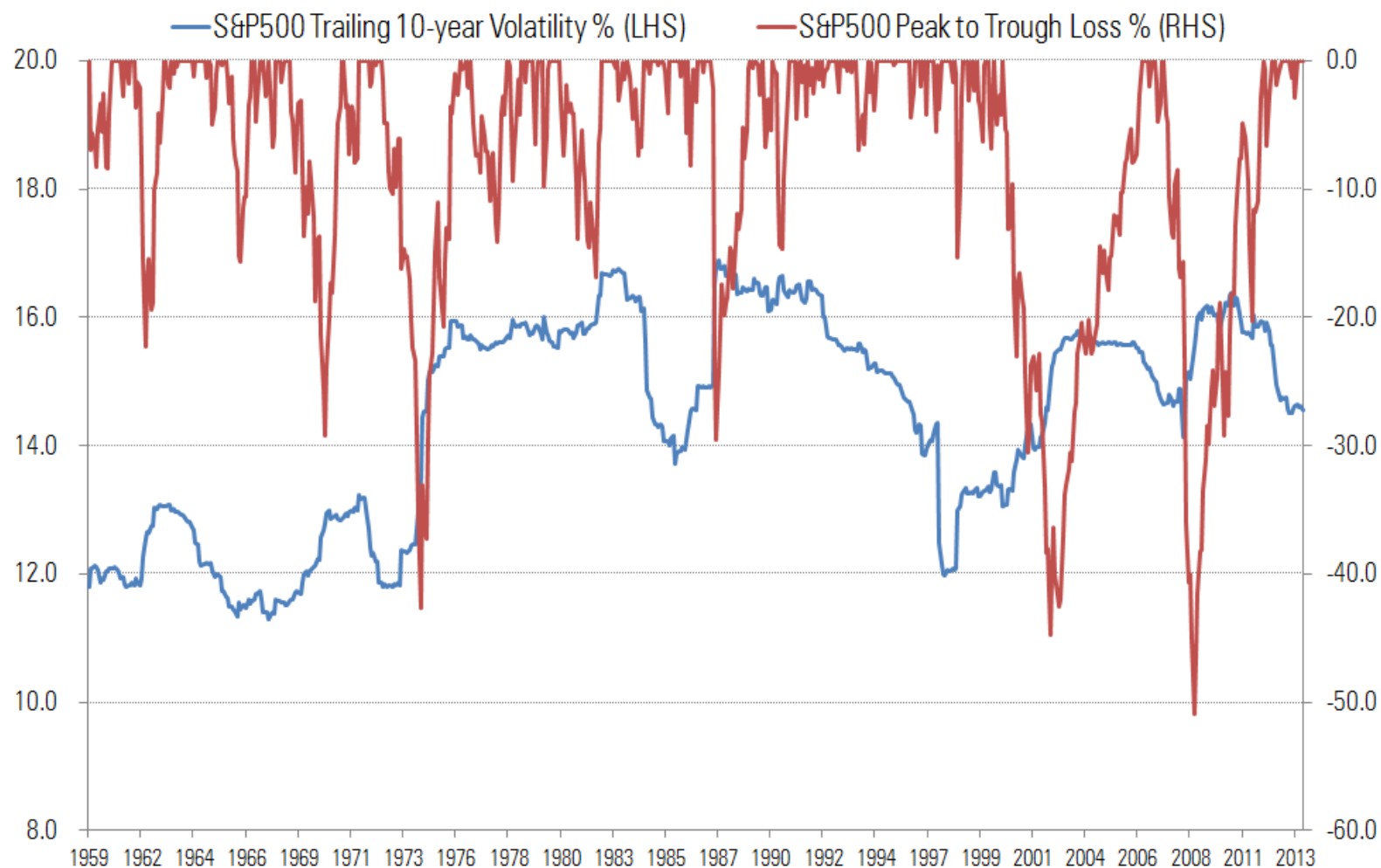
Source: Andrei Shleifer, Inefficient Markets An Introduction to Behavioural Finance 2000

Perfect foresight – fundamentals not driving price volatility



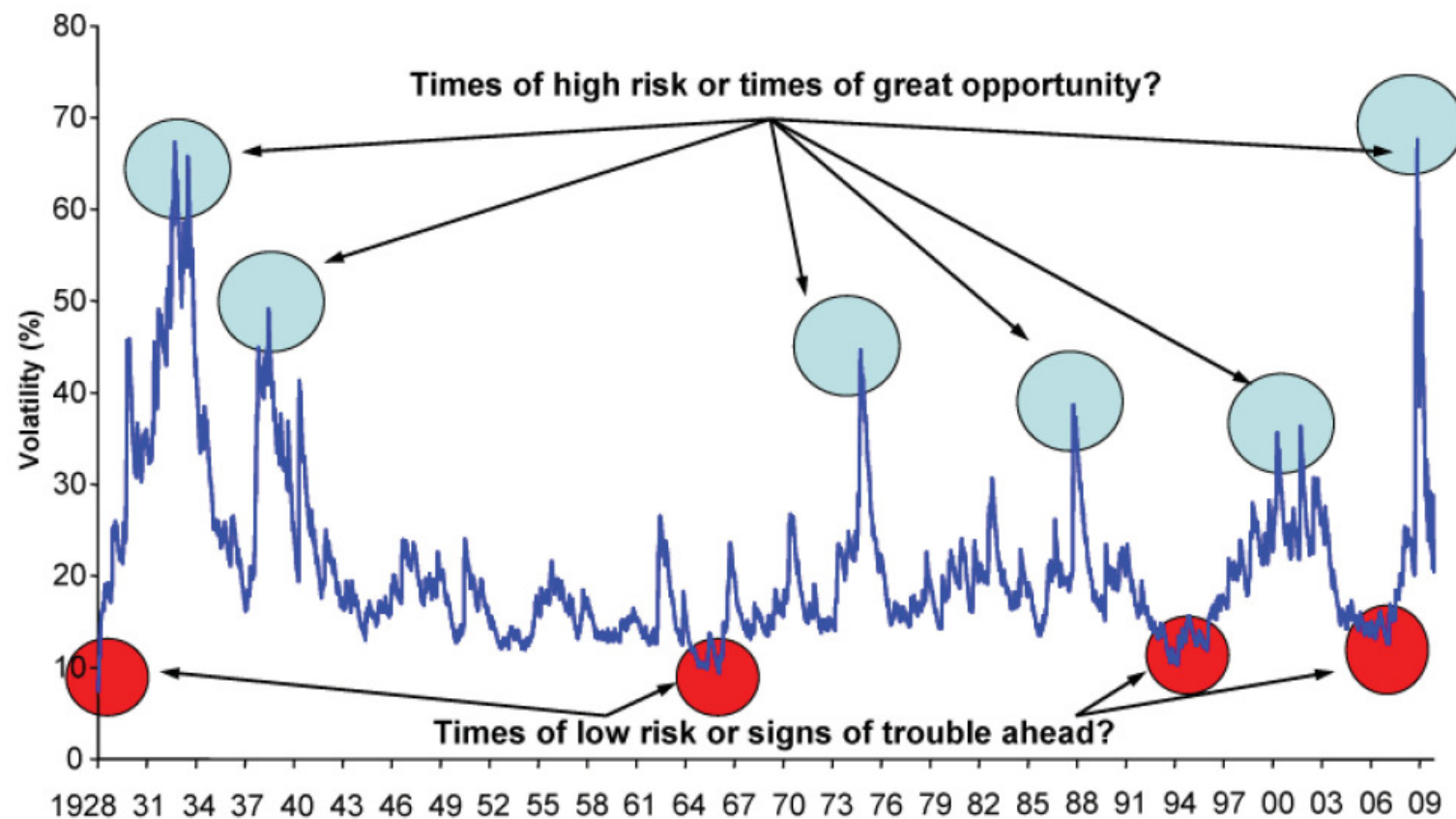
Source: Robert Shiller, 2013 Nobel Lecture

Volatility and risk – no clear signal for losses



Source: S&P, SBBI, Morningstar

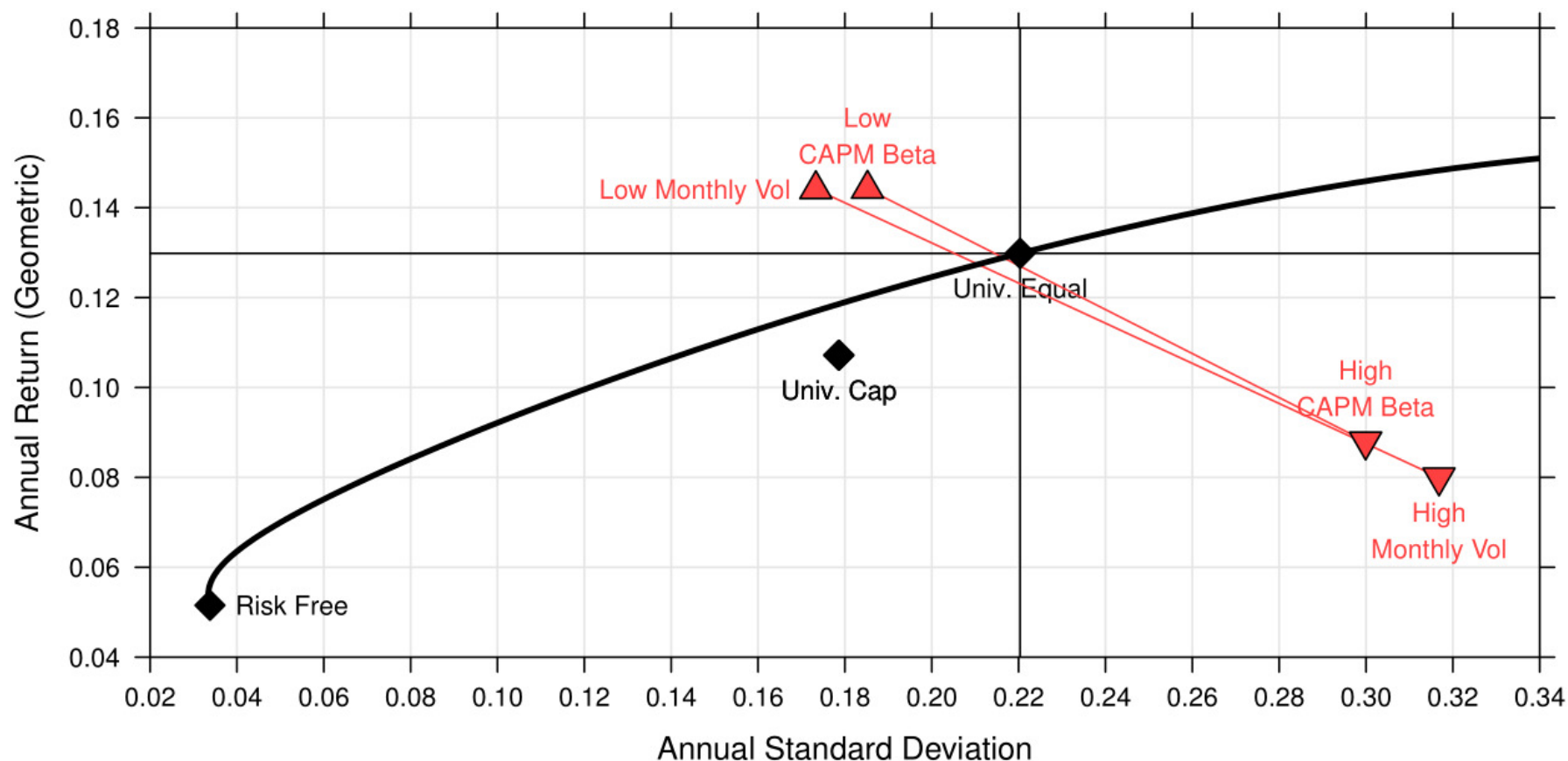
Volatility may present opportunity rather than risk



Source: GMO, SG

Source: James Montier, I Want to Break Free, or, Strategic Asset Allocation \neq Static Asset Allocation, GMO May, 2010

Risk premiums? High beta and volatility haven't outperformed



Top 3,000 US stocks ranked by capitalization 1972-2013

Source: Ibbotson & Kim, "Risk & Return Within the Stock Market: What Works Best?," Working Paper, January 2014.

Behavioural finance – another possible explanation

- ▶ Investor psychology
 - ▶ Beliefs – overconfidence, anchoring, conservatism, representativeness, availability bias
 - ▶ Preferences – risk-aversion, ambiguity aversion
 - ▶ Herding, Noise-traders, fundamental risks
 - ▶ Risk-averse
 - ▶ Price volatility > expected fundamental volatility

Source: Thaler and Baberis 2003, Shiller 1981.

Risk and uncertainty – not the same animal

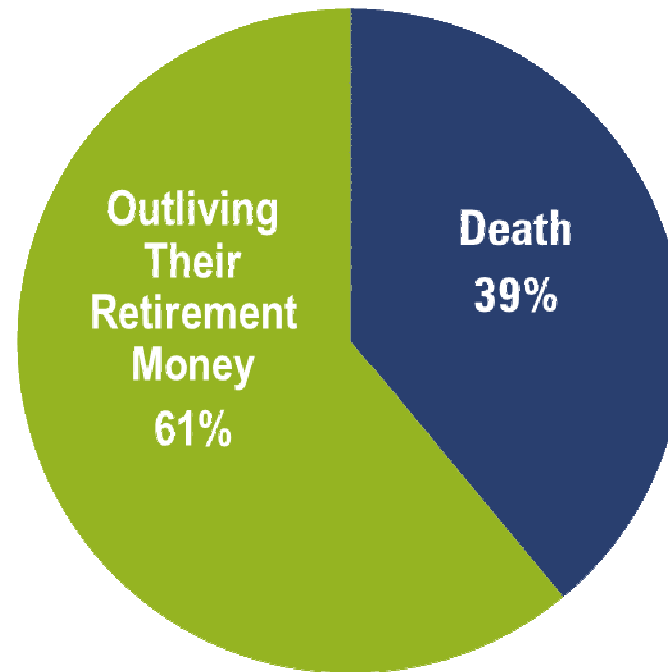
- ▶ *“the relation between different kinds of investments and the risk of loss is entirely too indefinite and too variable with changing conditions, to permit of sound mathematical formulation. This is particularly true because investment losses are not distributed fairly evenly in point of time, but tend to be concentrated at intervals . . .”*

▶ Benjamin Graham and David Dodd



Source: Knight 1921, Graham and Dodd 19.34

Risk and Uncertainty: What Do investors Fear More?



"Doubt is not a pleasant condition, but certainty is absurd"
Voltaire

Source: <https://www.allianzlife.com/content/public/Literature/Documents/ent-1154.pdf>

Key principles to help investors

- ▶ Recognise risk cannot be distilled into a single number
- ▶ Risk relates to losing money not price variability
- ▶ Uncertainty means investing risk is not the same as probabilistic risk
- ▶ Requires investors to think about many factors, such as
 - ▶ Structure of market, pricing and legal/property rights
 - ▶ Fundamental driver(s) of the asset or investment
 - ▶ Economic history and the economic cycle
 - ▶ Valuations and margins of safety
 - ▶ Fundamentals and financial leverage
 - ▶ Investor positioning and investor sentiment

Outline

- ▶ Morningstar Equity Research: MOAT = fundamental analysis
- ▶ Volatility and risk, Market efficiency and behavioural finance
- ▶ **Mind The Gap.**
 - ▶ **Investment return vs Investor return**
- ▶ No Portfolio is an Island
- ▶ Loaded

Investors Often Miss Benefits of Ownership

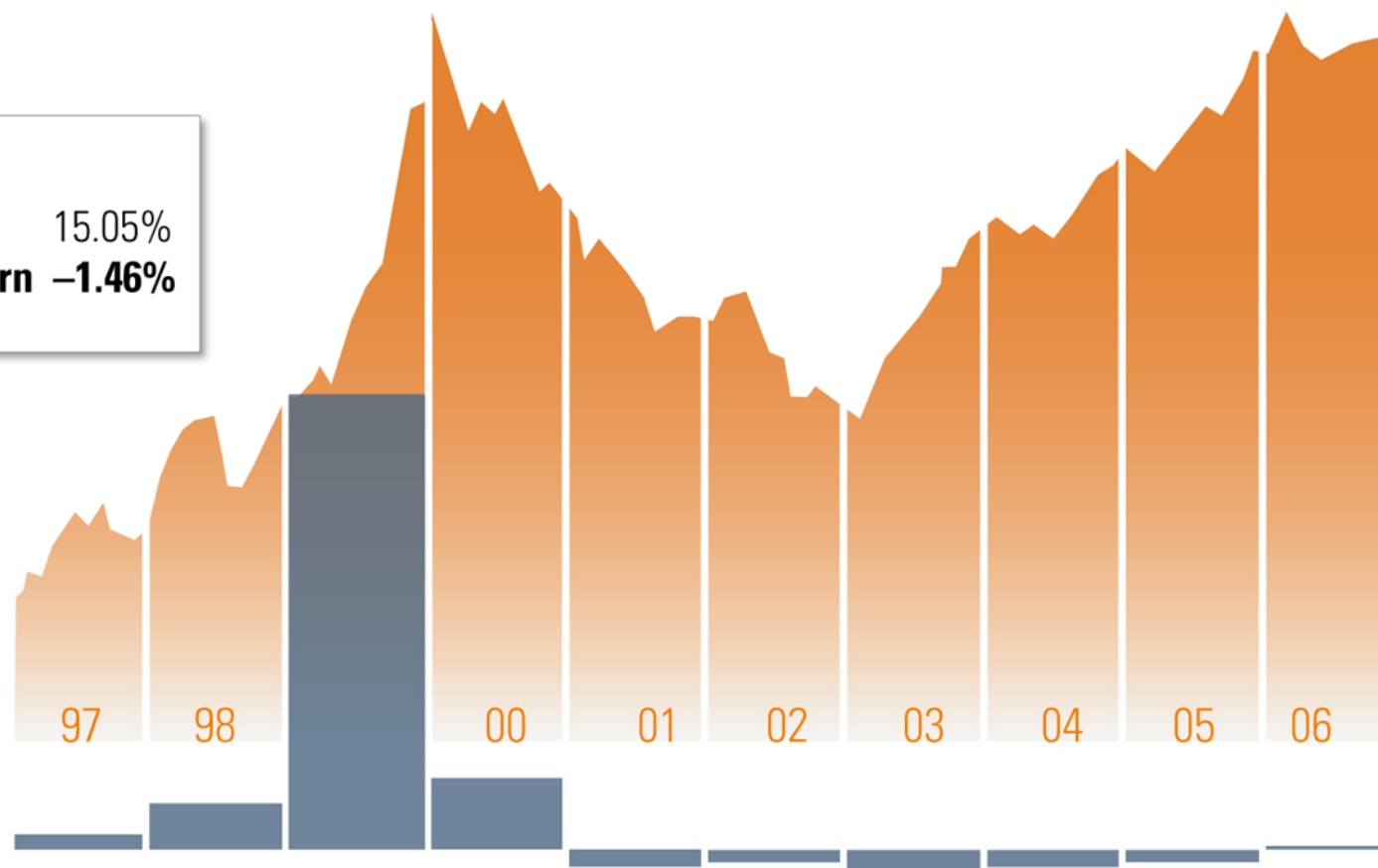
Fund A

10 Year Total Return 15.05%

10 Year Investor return -1.46%

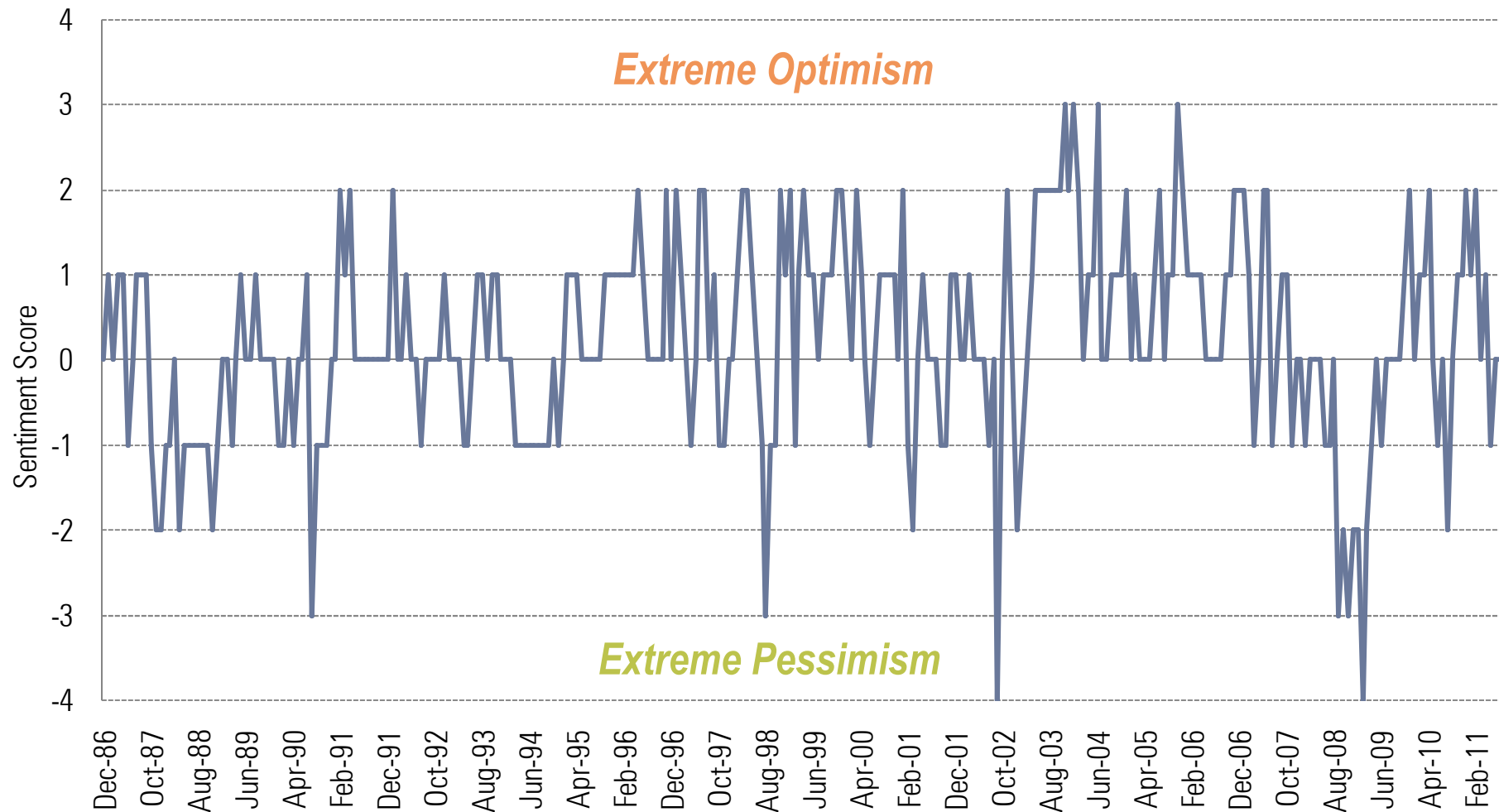
Growth of \$10,000

Net Inflows



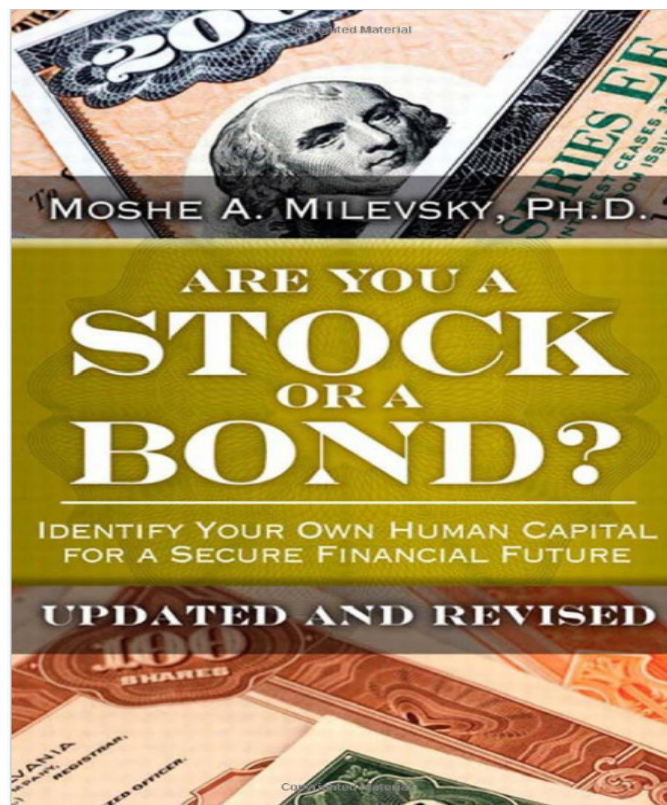
Annual Return (%)	12.7	34.9	120.1	-17.1	-27.8	-17.7	43.8	20.9	24.4	8.8
Net Assets (\$mil)	5.3	9.9	72.4	118.9	69.1	45.6	52.2	51.9	57.1	63.2

Investor sentiment: the pendulum swings wildly



Source: MSCI, JP Morgan, Investors Intelligence, Bloomberg, AAI, CBOE, Ibbotson Associates

How volatile are you?



Our Perspective

- ▶ In 1998 Ibbotson's advisory council, which included notable economists; such as Roger Ibbotson, Dick Thaler, Danny Kahneman, Harry Markowitz, Jeff Jaffe, John Carroll, and Shlomo Bernartzi determined human capital is similar to a junk bond
- ▶ During "normal" times junk bonds trade more like bonds, but during times of economic turmoil junk bonds trade more like equities
- ▶ It was established that human capital would modeled as 30% stocks and 70% bonds for the advice engine!

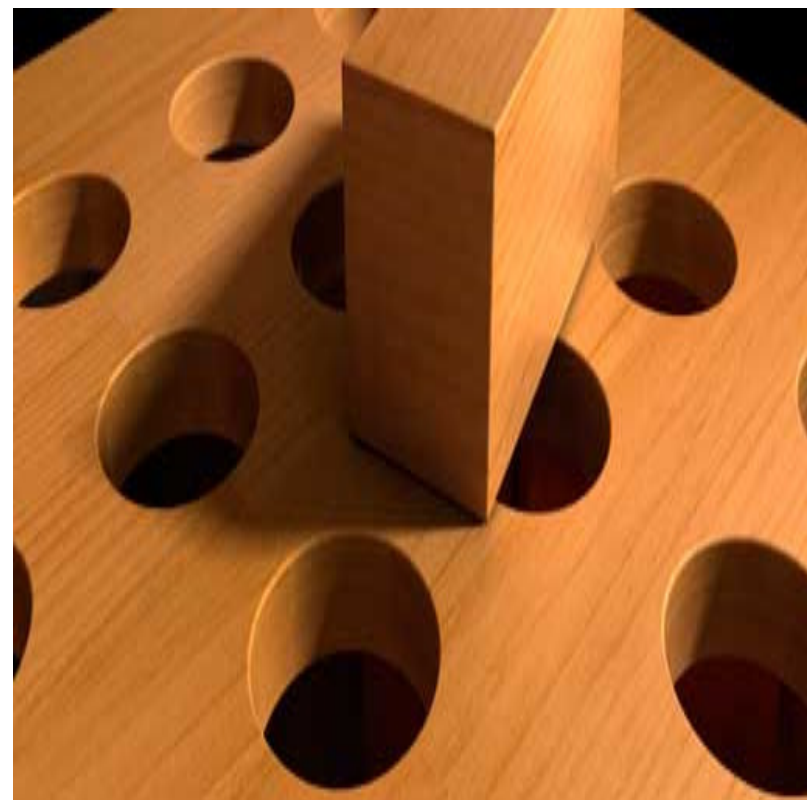
Outline

- ▶ Morningstar Equity Research: MOAT = fundamental analysis
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- ▶ Mind The Gap
- ▶ **No Portfolio is an Island. A Total Wealth Perspective.**
- ▶ Loaded

What's Your Investing Goal?

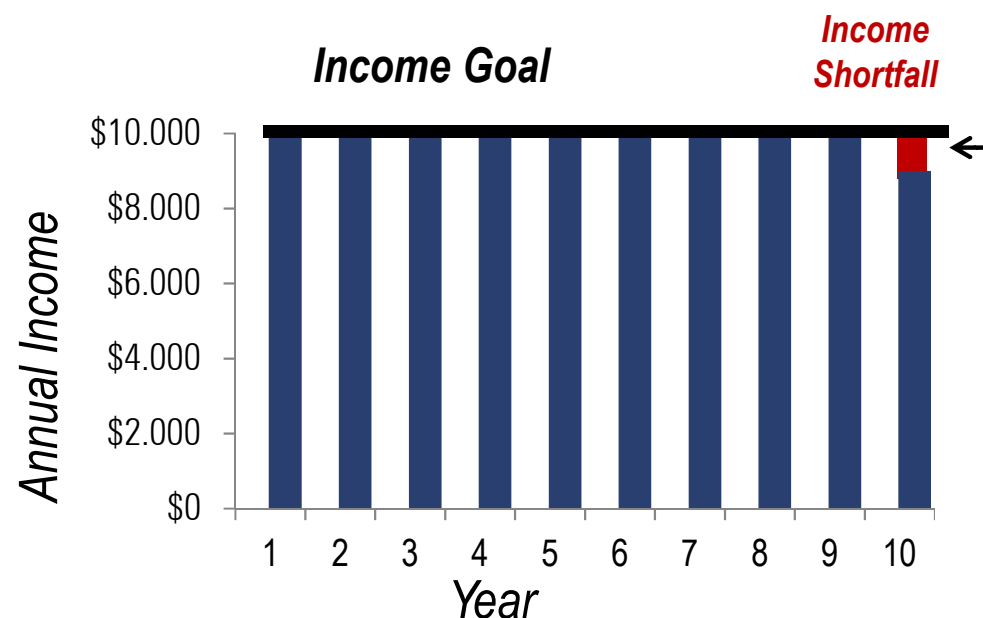


One Size Does Not Fit All



Defining Failure and success

At age 4 success is not peeing in your pants.
At age 12 success is having friends.
At age 16 success is having a drivers license.
At age 20 success is having sex.
At age 35 success is having money.
At age 50 success is having money.
At age 60 success is having sex.
At age 70 success is having a drivers license.
At age 75 success is having friends.
At age 80 success is not peeing in your pants.



For illustrative purposes only.

× You can achieve 99% of your goal and still “fail”

A Total Wealth Perspective of Asset Allocation

- ▶ Holistic view of each component of individuals' total wealth
- ▶ Objective: Find most efficient combination of available financial assets given a person's human capital and outside wealth

= *Total Economic Wealth*



+



+



+



Financial Capital Human Capital Housing Wealth Pension Wealth

Total Wealth Asset Allocation



Financial Capital

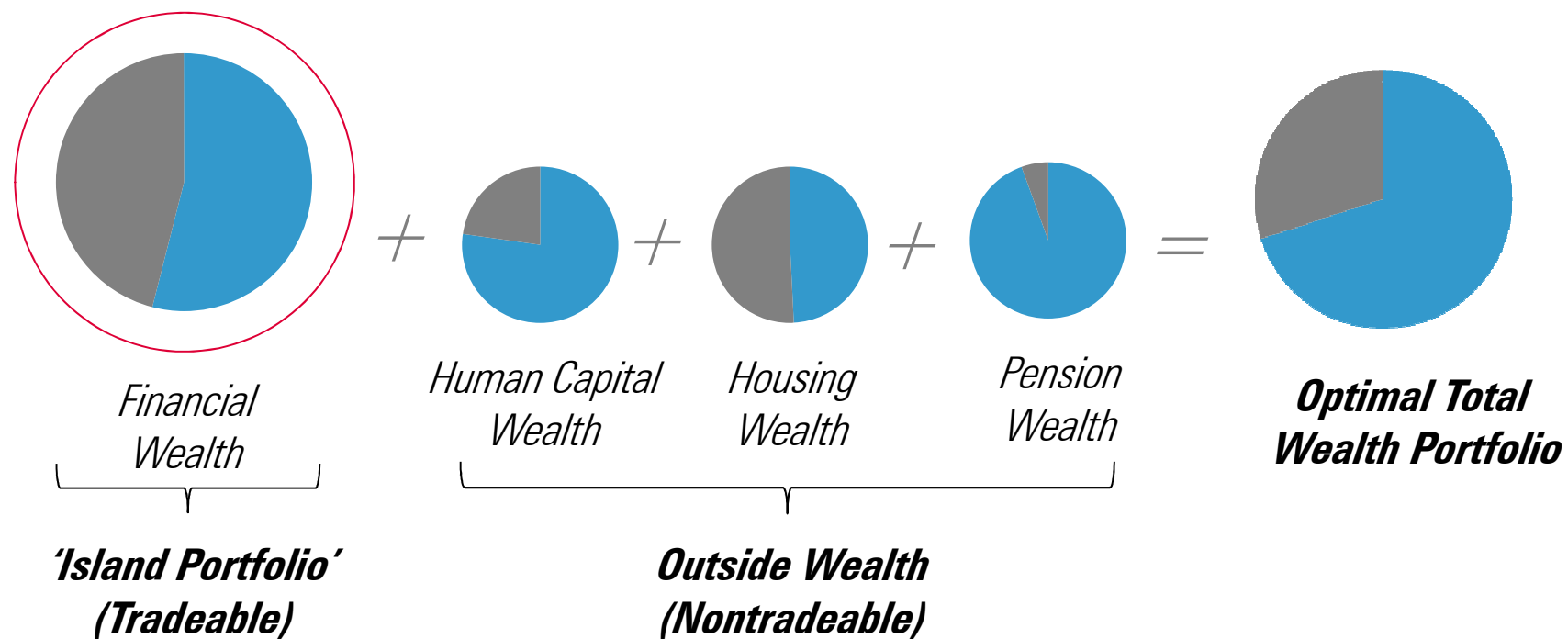
- ▶ *Tradable assets such as stocks and bonds have traditionally been used when constructing an asset allocation*
- ▶ *Incomplete without considering Human Capital*



Human Capital

- ▶ *An individual's ability to earn and save*
- ▶ *Present value of all your expected future wages including pension and social securities*

Using Financial Wealth as a Completion Portfolio



Source: "No Portfolio is an Island." Morningstar Investment Management White Paper by David Blanchett and Philip Straehl

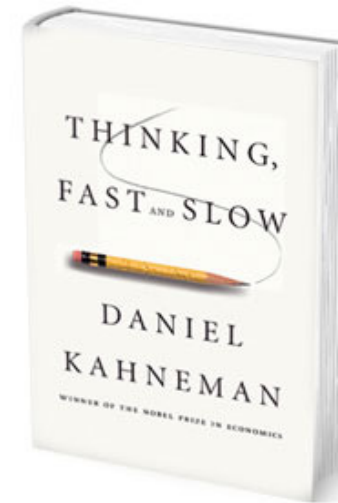
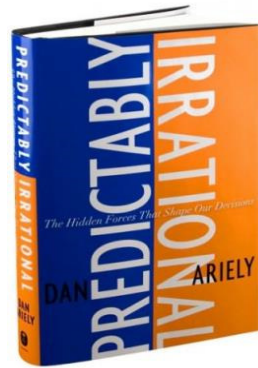
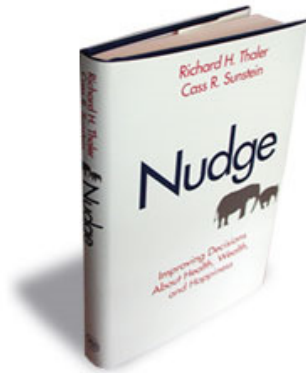
Conclusions

- ▶ Financial assets are often only a small part of investor's total wealth (regardless of investor-type)
 - ▶ There are different approaches to building portfolios that result in different "right" answers
 - ▶ Risk is not static over time, Uncertainty is.
 - ▶ A holistic view of investing makes the portfolio uniquely yours.
-
- ▶ **Still: Smart people keep making the same mistakes.
Why is it so hard to follow our financial plan?**

Outline

- ▶ Morningstar Equity Research: MOAT = fundamental analysis
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- ▶ Mind The Gap
- ▶ No Portfolio is an Island
- ▶ **Loaded. Money, Psychology & Values.**

What is Behavioral Science?



- **A new cross-disciplinary approach to understanding the mind and its decision making process, drawing heavily from psychology and economics**
- **Overturms common assumption that people carefully think through their choices and decide what is best for them (i.e., that people efficiently pursue utility-maximizing choices)**
- **Instead, shows that our minds are a) sorely limited in cognitive capacity b) rely on shortcuts or rules of thumb to make rapid decisions c) often driven by “automatic” behaviors like spending habits and emotions d) swayed by seemingly minor details of our environments for what we decide to do**

Loaded. Investor Psychology

- ▶ Money Value and Money Values: Welcome to the Dark Side.
 - ▶ Don't talk about money
 - ▶ We always talk about money, but it's not about numbers
 - ▶ Stories can help or hurt
- ▶ Heuristics & biases – we don't learn very much.
- ▶ Identifying core beliefs
- ▶ Adjusting core beliefs



Loaded. Investor Psychology

- ▶ Money Mindset and Behavior: Poverty, privilege and prejudice
 - ▶ Having / not having money: catch 22
Stereotype threat & system justification
 - ▶ Comparison affects our mind and behaviour
Prejudice, social class, culture shock
 - ▶ Thinking patterns affect financial decisions
Money triggers an independent & achievement focused state of mind
 - ▶ Time is Money
mental distance, ego depletion, impatience slo-mo



The Loaded Budget.

- ▶ Creating a human-centered money management plan
 - ▶ Where does your wealth come from? Assets & Resources
 - ▶ Where does your money go? Needs & Liabilities
 - ▶ Personal economy is more than numbers
 - ▶ To be sustainable, your financial plan must satisfy.
 - Create your avatar
 - Translating wants & needs into strategies (Maslow: needs are universal)
- ▶ Loaded is not just about balancing the books
 - ▶ A method for integrating financial strategy in the bigger picture of your life
 - ▶ Create a life of value without compromising your values.

Where to get started: books on Behavioral Science

*Risk Tolerance is Broken –
Manage the Psychology of Risk, Don't Avoid It*

Investors Don't Necessarily Know What Their Goals Are

Shooting Ourselves in the Foot: A Primer on Investment Biases

*Loaded. Money, Psychology and how to get ahead without leaving
your values behind.*

***Waarde(n)vol. Geld, Psychologie en hoe je kan omgaan met rijkdom
zonder je waarden te vergeten.***

Verschijnt Januari 2016. Granjé & Van Beek. Verkrijgbaar online of via VFB.

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