

Implications

- Efficient Markets:
 - You can't consistently beat the market, the only way you get higher returns is by taking more risk
- Behavioral Finance:
 - Markets are often mis-priced and a skilled investor can beat the market by recognizing mis-pricing and taking advantage of it.

Implications

- Efficient Markets:
 - Markets accurately reflect all relevant information ... “the price is right”!
 - You can’t consistently beat the market. The only way you get higher returns is by taking more risk

Market Efficiency

“There is no other proposition in economics which has more solid empirical evidence supporting it than the Efficient Market Hypothesis”

-Arthur Jensen, Harvard Economist, 1978

Efficient Markets vs. Behavioral Finance

Investors are rational



Investors are irrational



Efficient Markets vs. Behavioral Finance

Irrational behavior is isolated and unimportant



Investors “herd”



Efficient Markets vs. Behavioral Finance

Professionals arbitrage away any temporary mis-pricings



Arbitrage is MUCH easier said than done.



Efficient Markets vs. Behavioral Finance

Investors are rational



Investors are irrational



Irrational behavior is isolated and unimportant



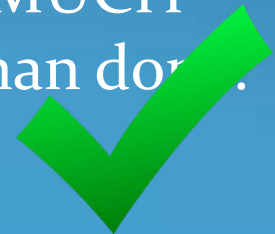
Investors “herd”



Professionals arbitrage away any temporary mis-pricings

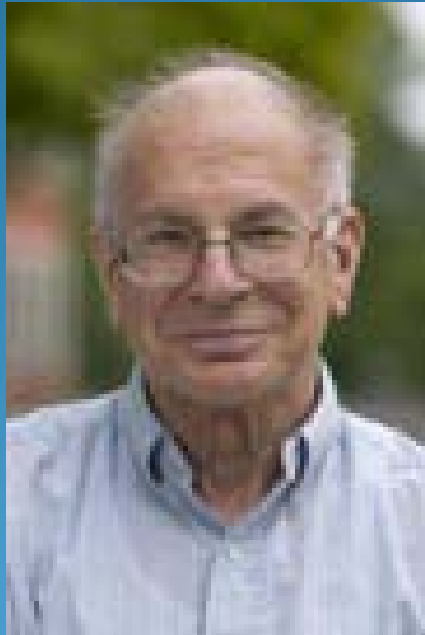


Arbitrage is MUCH easier said than done.



Investor Behavior

A lot of the initial research which preceded Shiller was by two Israeli psychologists: Daniel Kahneman and Amos Tversky



Investor Behavior

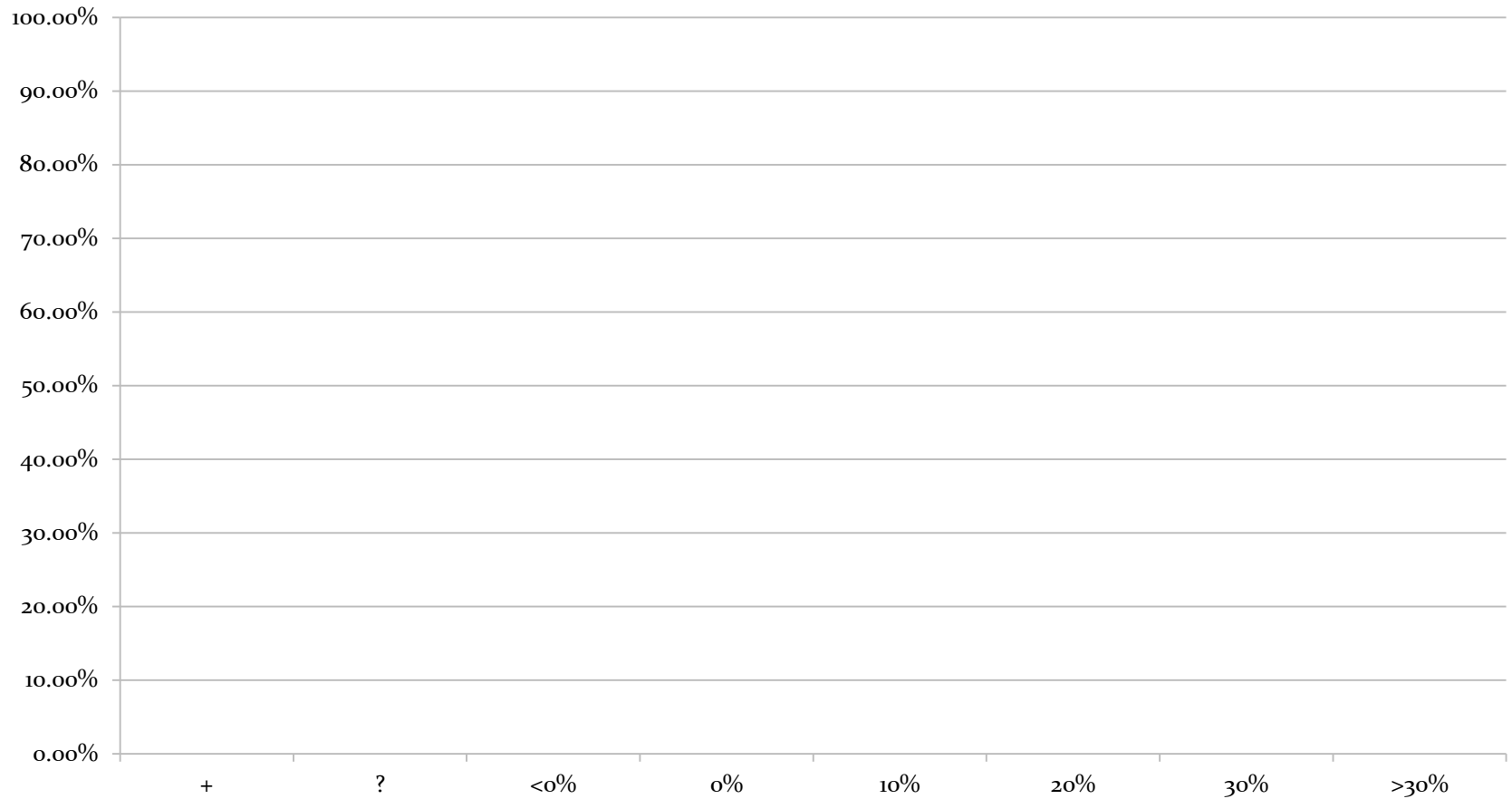
- We anchor on data ... even completely irrelevant data:
 - Listing information on houses
 - Revising our portfolio allocation

Investor Behavior

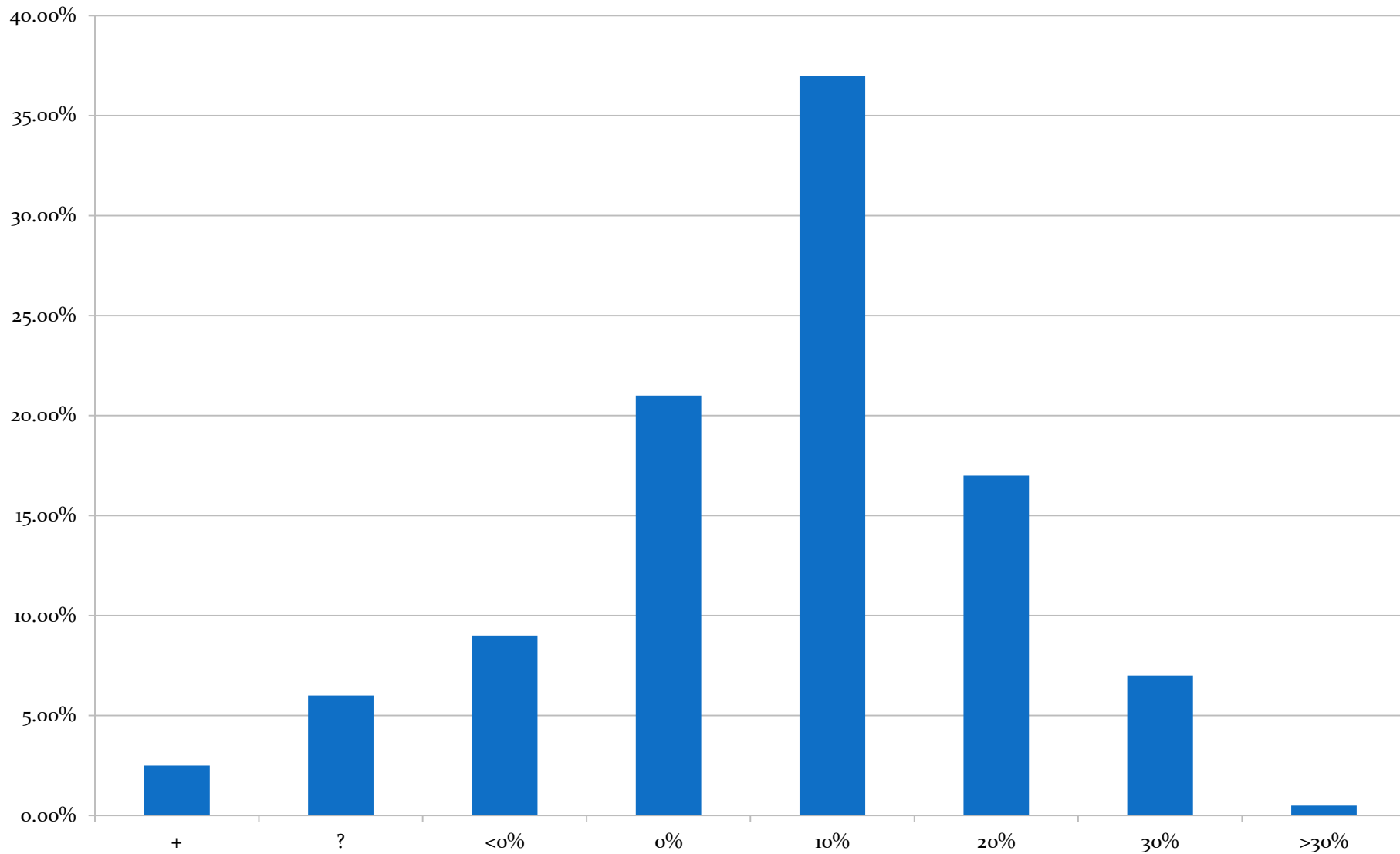
- We judge probability by how easy something is to remember:
 - Over-estimate the probability of dramatic events
 - Survey of 2013 stock market performance

Investor Behavior

Wells Fargo/Gallup Investor Survey



Investor Behavior



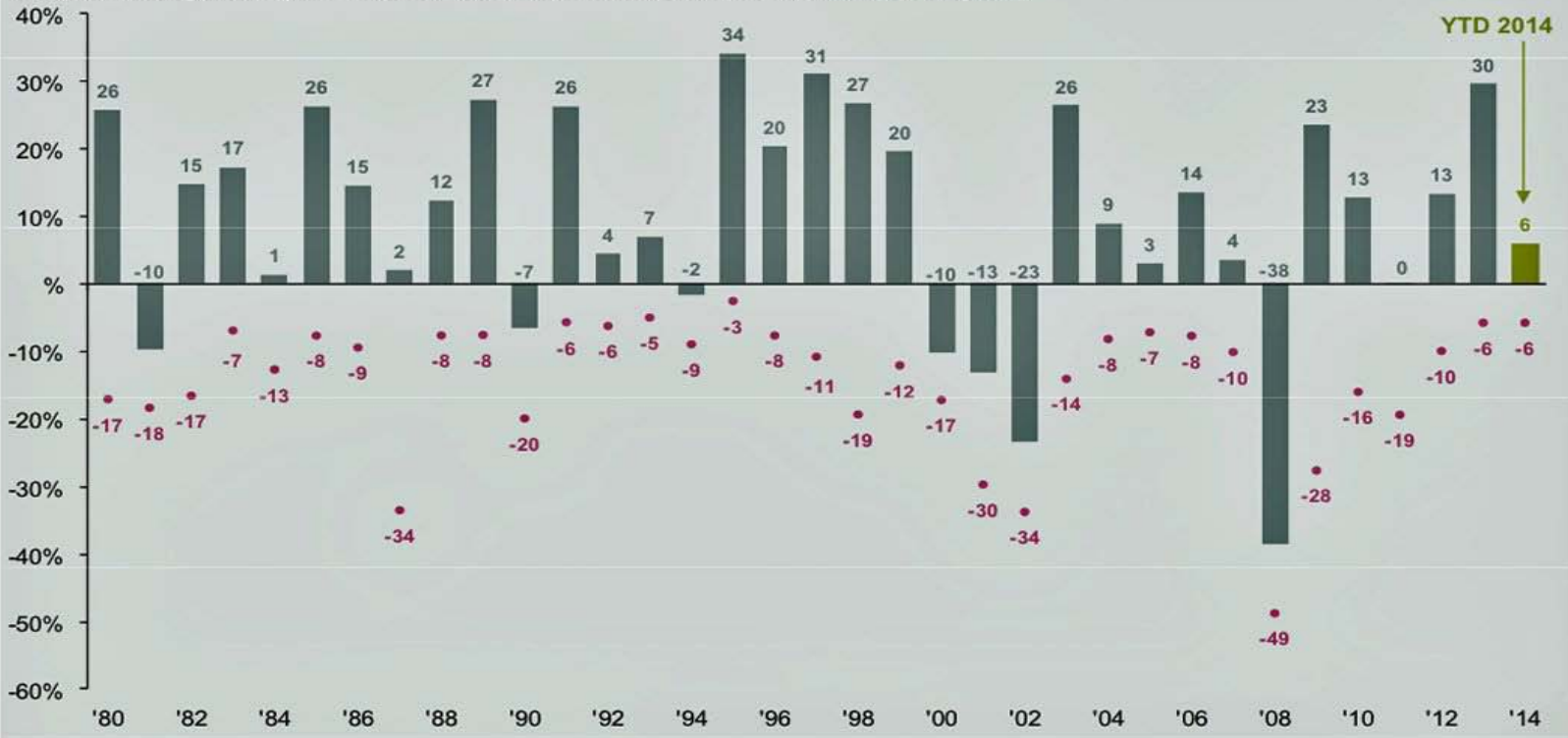
Investor Behavior

Markets Chart of the Day

Annual Returns and Intra-year Declines

S&P 500 Intra-year Declines vs. Calendar Year Returns

Despite average intra-year drops of 14.4%, annual returns positive in 26 of 34 years*



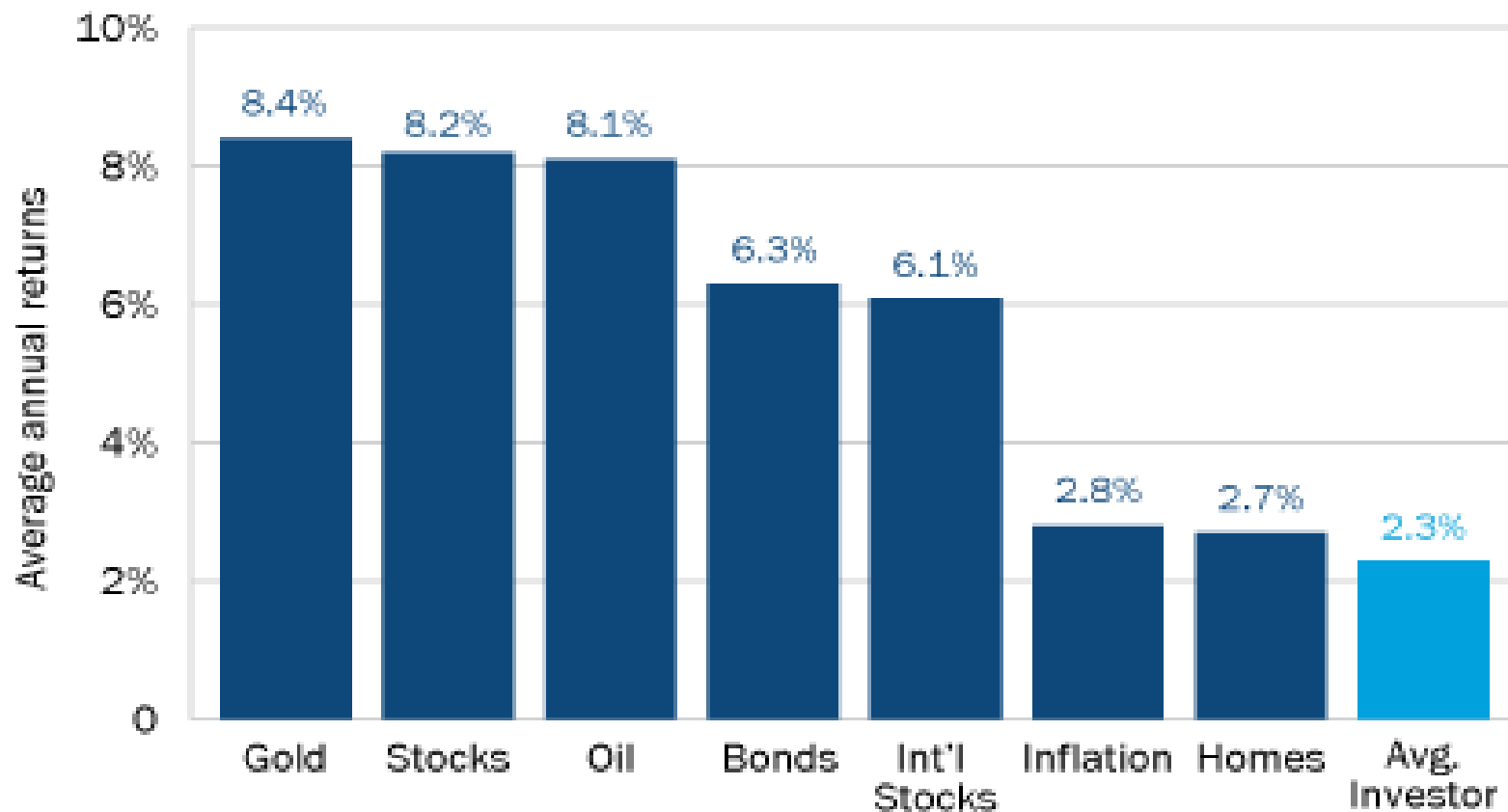
Source: Standard & Poor's, FactSet, J.P. Morgan Asset Management.
 Returns are based on price index only and do not include dividends. Intra-year drops refers to the largest market drops from a peak to a trough during the year. For illustrative purposes only. *Returns shown are calendar year returns from 1980 to 2013 excluding 2014 which is year-to-date.
 Guide to the Markets - U.S.
 Data are as of 6/30/14.

Investor Behavior

- We're not that good at timing the market
 - Investors cost themselves a lot by bad timing in trades each year
 - Particularly prone to selling good investments too soon.

AVERAGE ANNUAL RETURNS

1993 - 2012

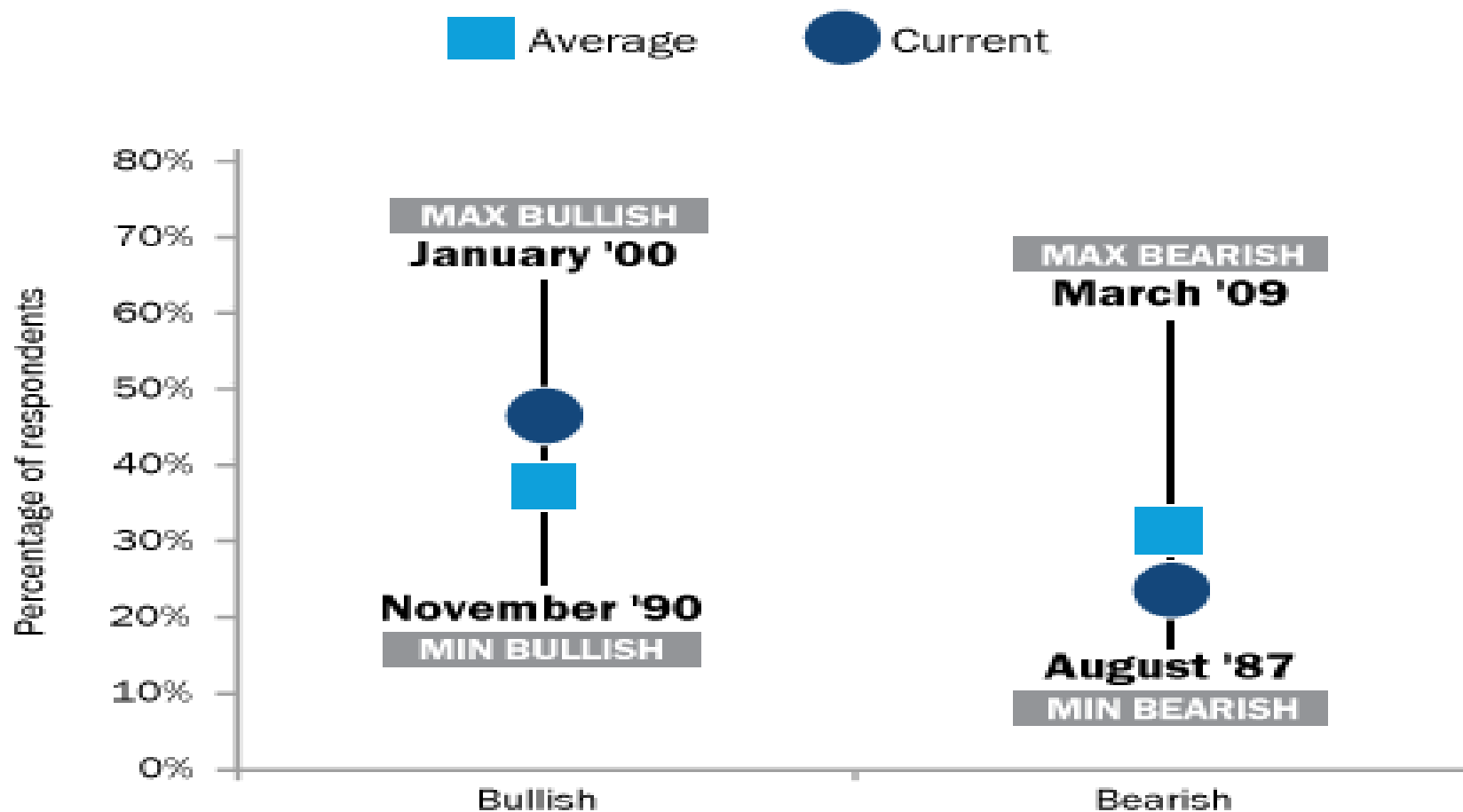


Investor Behavior

- We're not that good at timing the market
...because we make the wrong decisions under pressure. Stick to a system of timing!

AAII SENTIMENT SURVEY

JULY 1987 – AUGUST 2014



Shiller

- “Irrational Exuberance”
 - Robert Shiller, 2000.
- Market bubbles can be identified by comparing price to fundamentals.

250

200

150

100

50

0

1995

1997

1999

2001

2003

2005

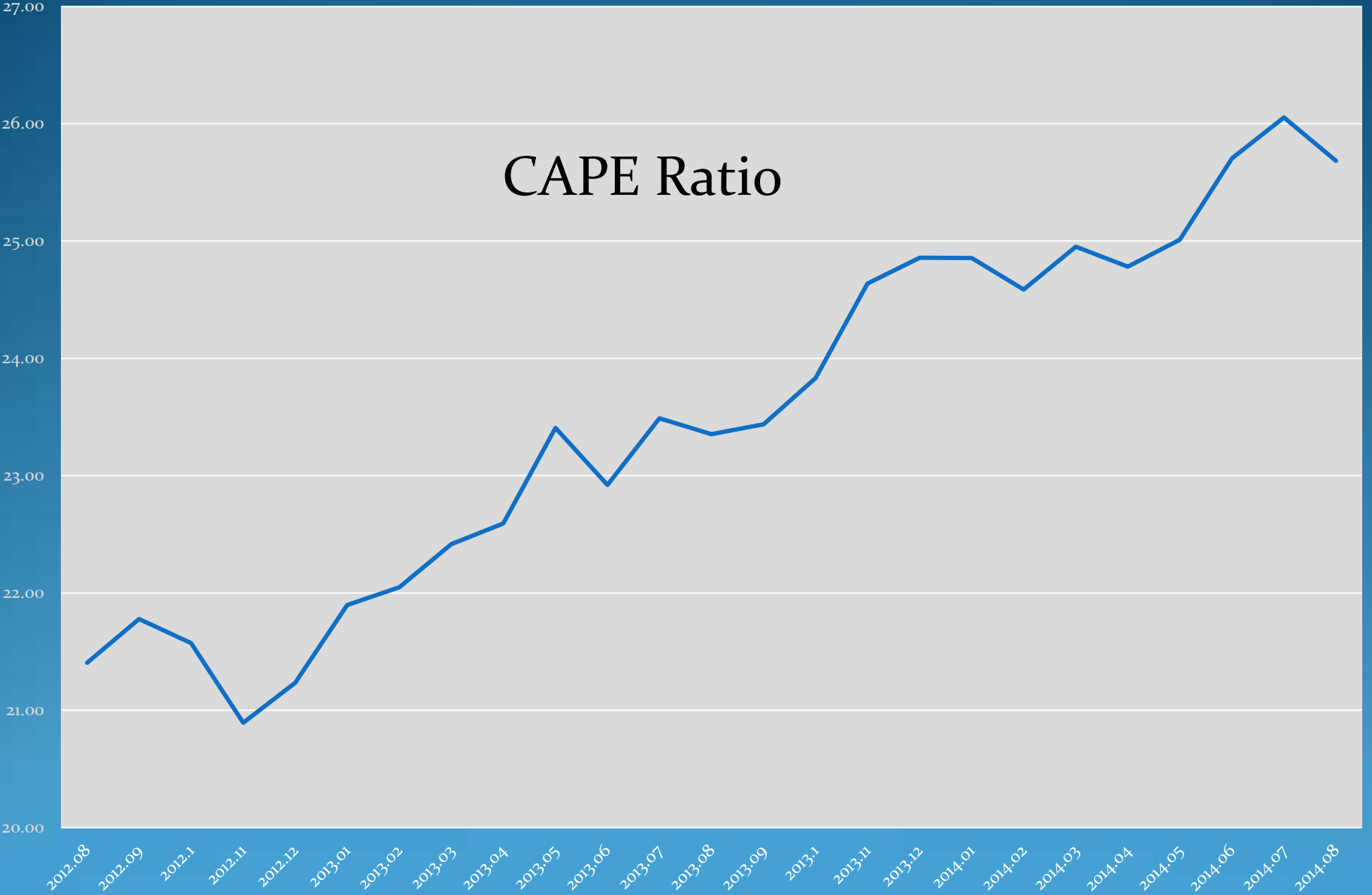
2007

Home prices

Year



CAPE Ratio



Quotes

- *Is the market rational? No, say the experts. ...but, neither are you – so don't go thinking you can outsmart it.*
 - Title of article from Fortune, December 2002
- *The market can stay irrational a lot longer than you can stay solvent.*
 - John Maynard Keynes

What does it mean to “beat the market”?

Alpha?



Conclusions

- Behavioral finance has much to teach us about our bad habits as investors:
 - Don't take profits too early
 - Don't try to time the market unless you have a clear plan that you thought out ahead of time
 - Don't put too much emphasis on rare, dramatic events as “the norm”

Conclusions

- Market efficiency guys are right: you make more money by taking more risk
- The average investor does not take enough risk or persist long enough with high-risk investments
- Your asset allocation is a much bigger factor in your returns than your stock picking
- Don't pay too much for alpha