

# THE VALUE OF VALUE INVESTING

Stephen Horan, Ph.D., CFA, CIPM  
Managing Director, Credentialing  
CFA Institute



**CFA Institute**

# TODAY'S AGENDA

Characterize Value Investing – Potential Benefits (Real and Imagined)

Compare and Contrast Measures of Value

Identify Value Index Construction Techniques and Their Implications

Identify Barriers to Successful Value Investing

Develop Techniques for Overcoming Barriers

Conclude

# CHARACTERISTICS OF VALUE INVESTING

- What does it mean to be “strategic” with value investing?
- What is the value investing opportunity on a risk and return basis?

# THE ROLE OF VALUE INVESTING

## Investment versus Speculation

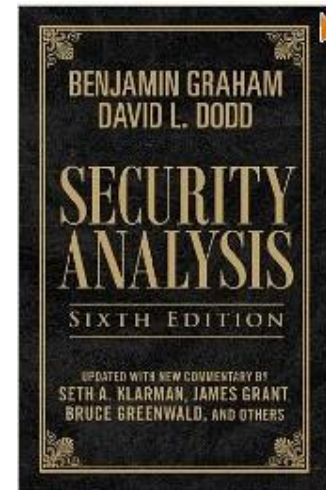
- “An investment operation is one in which, upon thorough analysis, promises safety of principal and a satisfactory return. Operations not meeting these requirements are speculative.”
  - Security Analysis, Graham and Dodd, 1934

## Grounded in Fundamental Analysis

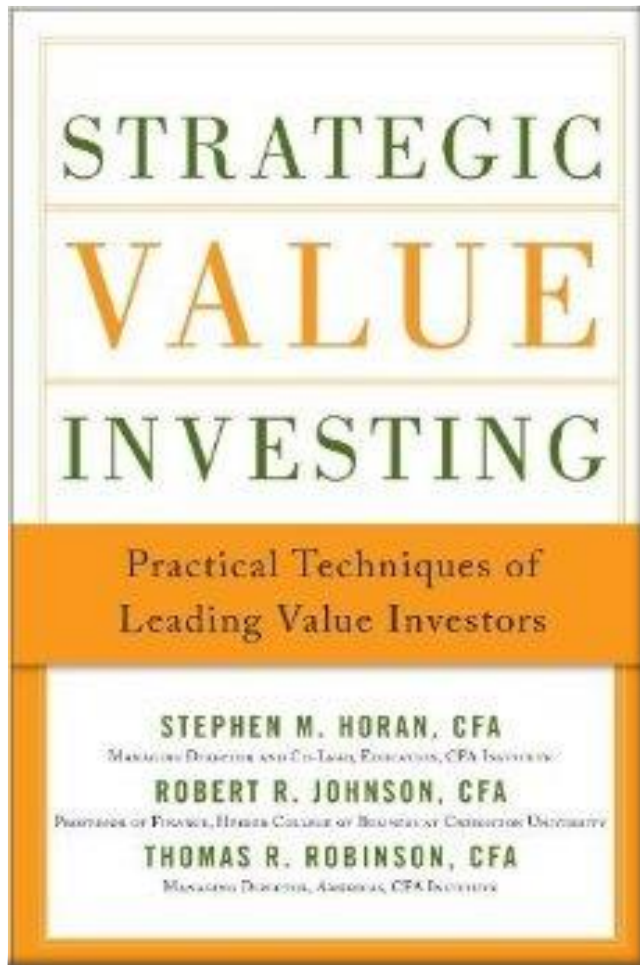
- “Intrinsic Value” – Benjamin Graham
- Warren Buffet popularized Ben Graham’s legacy
- Seth Klarman popularized margin of safety

## Empirical Challenges to Market Efficiency

- Long-term price reversals (e.g., DeBondt and Thaler (1985), Foerster (2011))
- Short-term and medium-term momentum (Jegadeesh and Titman (1993))



# EASY TO FOLLOW VALUE INVESTING ADVICE

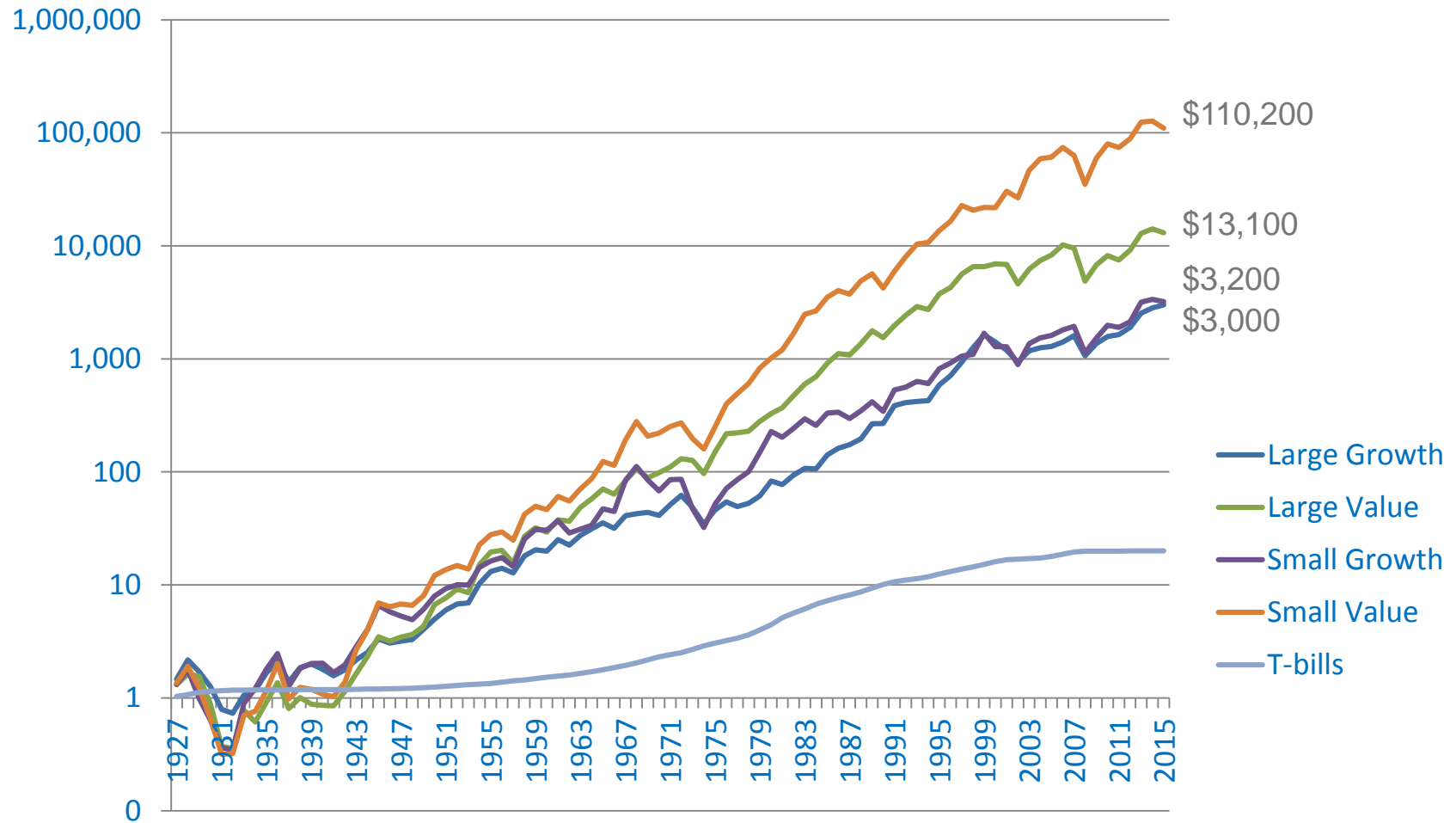


- “Strategic” Value Investing
  - Treating investments as if you were buying the whole business
  - Combining objective and subjective analysis
- Objective Analysis
  - Absolute and relative pricing models
  - Investment screens
- Subjective (Fundamental) Analysis
  - Macroeconomic analysis
  - Industry analysis
  - Company analysis
  - Based on expectations rather than hope

# HISTORICAL ANNUAL RETURN CHARACTERISTICS, 1926-2015 – FAMA AND FRENCH

	Overall	Large			Small			T-Bills
	Market	Growth	Mid	Value	Growth	Mid	Value	
<b>Arithmetic Avg.</b>	11.9%	11.4%	12.2%	14.7%	14.0%	16.4%	18.5%	3.5%
<b>Geometric Avg.</b>	9.9%	9.4%	10.0%	11.2%	9.5%	12.8%	13.9%	3.4%
<b>Median</b>	14.5%	13.2%	13.3%	18.6%	12.4%	18.3%	20.1%	3.0%
<b>Std. Deviation</b>	20.1%	20.2%	21.0%	27.3%	32.6%	28.7%	32.2%	3.1%
<b>Skewness</b>	-0.432	-0.329	-0.053	0.261	0.938	0.443	0.249	1.017
<b>Kurtosis</b>	-0.049	-0.342	2.514	1.978	3.484	1.523	0.402	0.986
<b>Sharpe Ratio</b>	0.419	0.392	0.416	0.412	0.323	0.452	0.468	0.000

# GROWTH OF A \$1 INVESTED FROM 1926 TO 2015



# WHY DOES VALUE RETURN MORE THAN GROWTH?

$$\frac{P}{E} = \frac{1}{r - g}$$

$$\frac{P}{B} = \frac{ROE}{r - g}$$



# BETA OF VALUE AND GROWTH STRATEGIES, ANNUAL DATA FROM 1926 TO 2015

	Large Capitalization	Small Capitalization
<b>Growth</b>	0.97	1.40
<b>Blend/Core</b>	0.98	1.27
<b>Value</b>	1.23	1.36

# HISTORICAL ANNUAL CORRELATION COEFFICIENTS, 1926-2015

	Large			Small		
	Growth	Mid	Value	Growth	Mid	Value
Large Growth	1					
Large Mid	0.85	1				
Large Value	0.80	0.94	1			
Small Growth	0.81	0.84	0.82	1		
Small Mid	0.80	0.89	0.90	0.94	1	
Small Value	0.73	0.86	0.90	0.87	0.96	1

# VALUE AND GROWTH PERFORMANCE, 1981 TO 2012

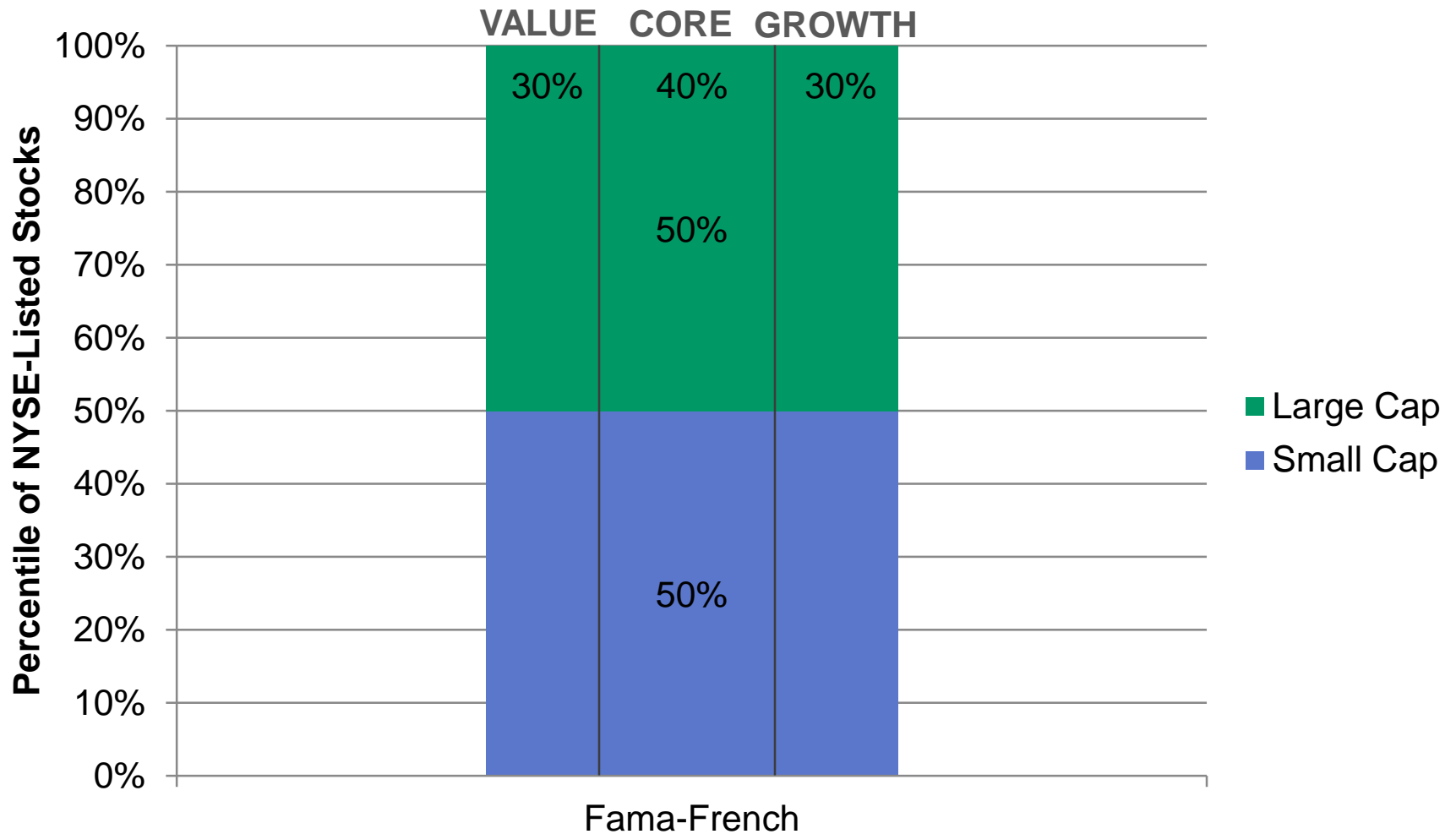
	Large		Small	
	Growth	Value	Growth	Value
1981	-7.13	12.8	-11.53	17.68
1982	21.48	27.67	19.72	39.86
1983	14.67	26.92	22.12	47.58
1984	-0.72	16.17	-12.84	7.52
1985	32.64	31.75	28.91	32.12
1986	14.38	21.82	1.95	14.5
1987	7.43	-2.76	-12.24	-7.12
1988	12.53	25.96	16.63	30.76
1989	36.11	29.7	20.58	15.7
1990	1.06	-12.75	-17.74	-25.13
1991	43.33	27.35	54.73	40.56
1992	6.41	23.57	5.82	34.76
1993	2.38	19.51	12.64	29.41
1994	1.95	-5.78	-4.36	3.21
1995	37.16	37.68	35.13	27.69
1996	21.25	13.35	12.36	20.71

	Large		Small	
	Growth	Value	Growth	Value
1997	31.61	31.88	15.29	37.29
1998	34.64	16.23	3.04	-8.63
1999	29.43	-0.22	54.75	5.59
2000	13.63	5.8	-24.15	-0.8
2001	-15.59	-1.18	0.16	40.24
2002	-21.5	-32.53	-30.87	-12.41
2003	26.29	35.07	53.2	74.69
2004	6.53	18.91	12.54	26.59
2005	2.82	12.17	5.45	3.53
2006	8.88	22.61	11.67	21.76
2007	14.08	-6.45	7.36	-15.21
2008	-33.71	-49.03	-41.56	-44.39
2009	27.91	39.15	34.45	70.54
2010	15.87	21.61	30.66	33.54
2011	4.14	-9.04	-4.32	-7.04
2012	15.41	22.99	12.22	20.07

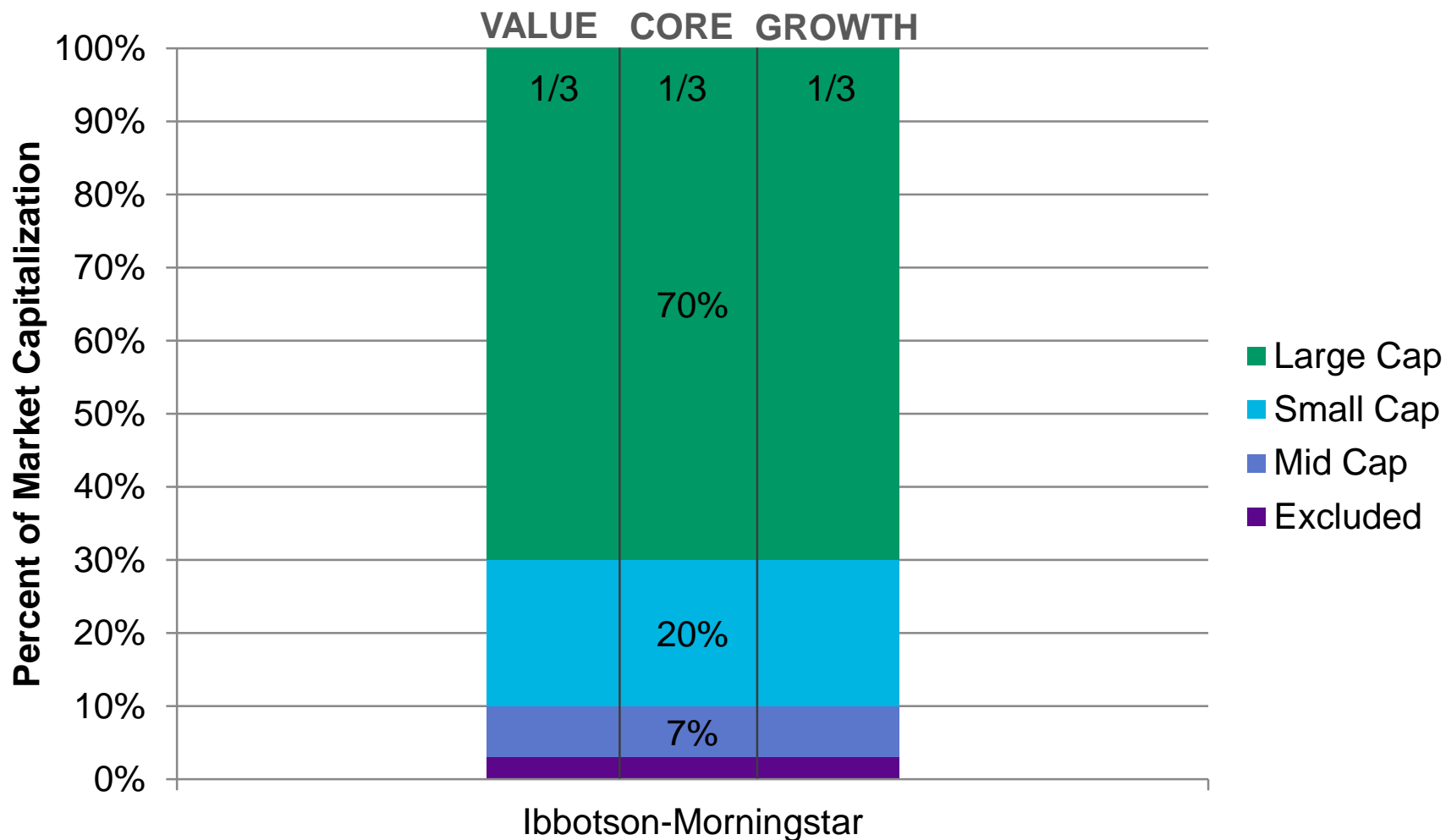
# INDEX CONSTRUCTION

- Different methods lead to different results
- Construction methods underestimate the value of “strategic” value investing

# FAMA-FRENCH PORTFOLIOS OF ALL CRSP STOCKS BASED ON NYSE BREAKPOINTS AND P/B



# IBBOTSON PORTFOLIOS BASED ON NYSE, AMEX, AND NASDAQ MARKET CAP AND P/E



# ALL “VALUE” IS NOT CREATED EQUAL: ANNUAL RETURNS FROM THE YEAR 2000

	Large		Small	
	Growth	Value	Growth	Value
Fama-French	-13.63	5.80	-24.15	-0.80
Ibbotson Associates	-22.01	-3.00	-22.60	22.69

# VALUE INDICES

Index	Description
Russell 1000 Value Index	Russell 1000 (large cap) companies with lower price to book ratios and lower forecasted growth rates
Russell 2000 Value Index	Russell 2000 (small cap) companies with lower price to book ratios and lower forecasted growth rates
S&P 500 Value	Lowest 1/3 of S&P 500 based on lower growth factors (EPS, Sales and Price) and higher value (lower P/B, P/E and P/S)
RAFI 1000	Fundamental Index based on Sales, Cash Flow, Book Value and Dividends



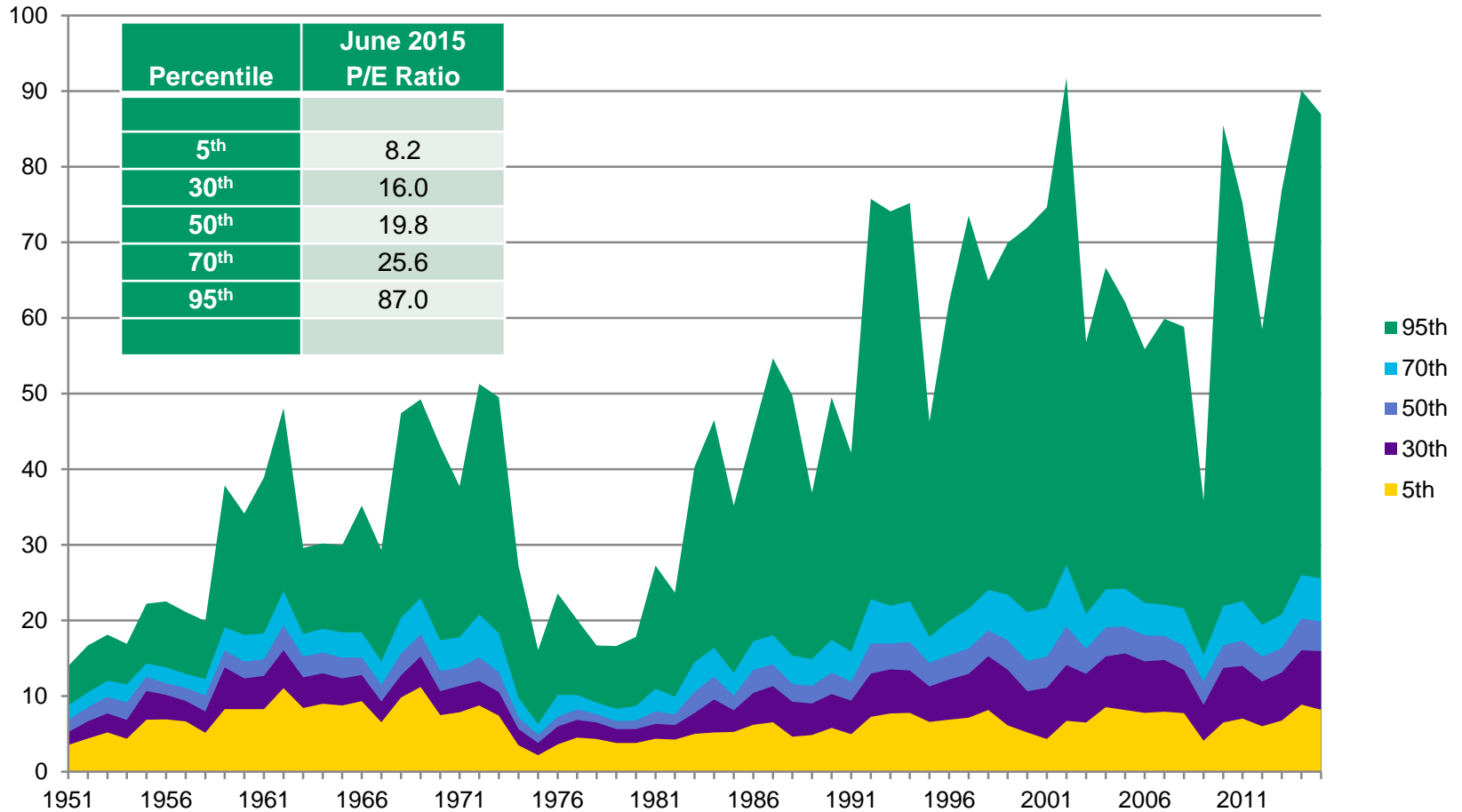
# BERKSHIRE HATHAWAY

## Trailing Total Returns BRK.A



S&P 500 index data: S&P 500 Copyright © 2016  
 Currency is displayed in USD.

# PRICE-EARNINGS RATIOS OF NYSE-LISTED STOCKS, 1951-2015



Source: Eugene Fama and Kenneth French Data Library

# CHALLENGES TO VALUE INVESTING

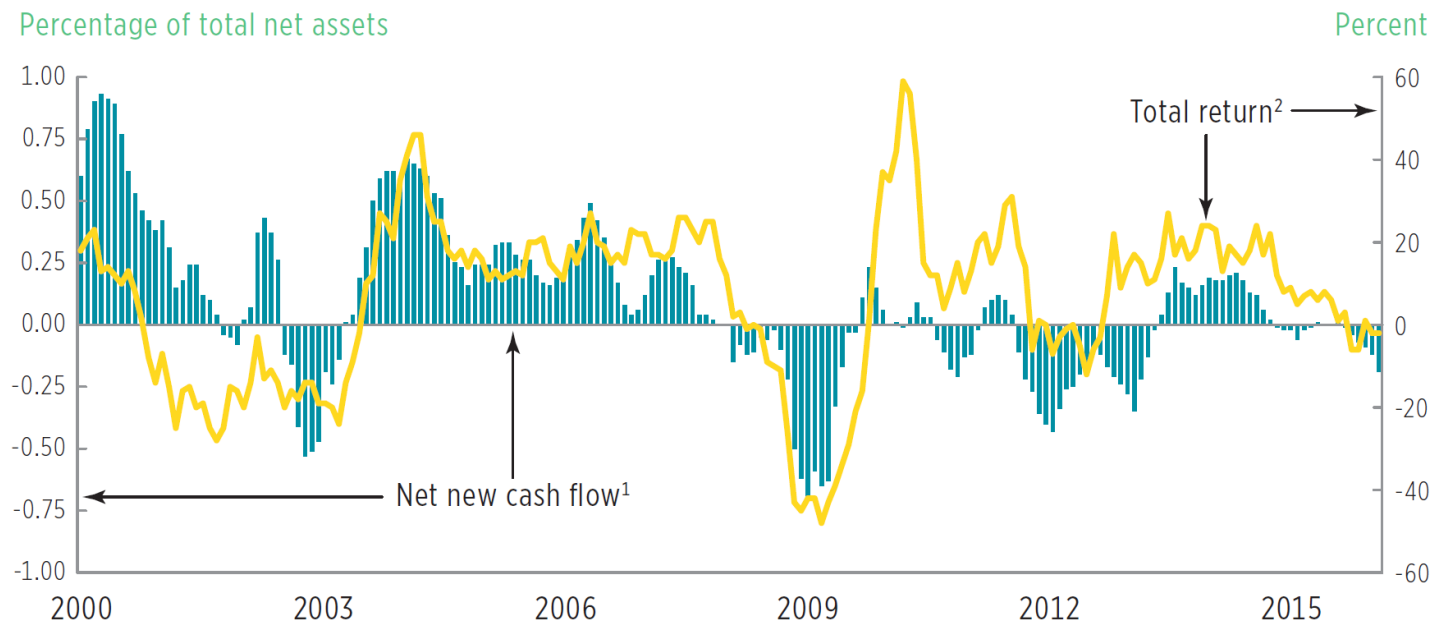
- Value investing requires discipline and fortitude
- Some obstacles are external. Some are within us (e.g., cognitive and behavior biases)
- Techniques to overcome the obstacles

# WHY DO WE DO THIS?

FIGURE 2.4

## Net New Cash Flow to Equity Funds Is Related to World Equity Returns

Monthly, 2000–2015



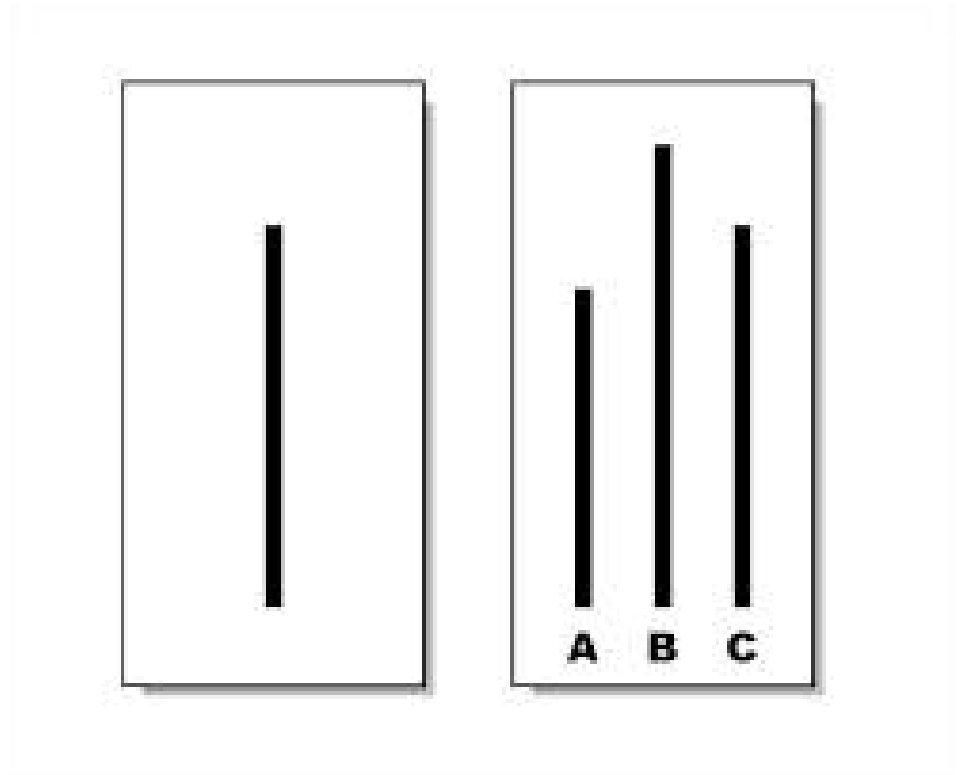
<sup>1</sup> Net new cash flow is the percentage of previous month-end equity fund assets, plotted as a six-month moving average.

<sup>2</sup> The total return on equities is measured as the year-over-year percent change in the MSCI All Country World Daily Gross Total Return Index.

Sources: Investment Company Institute, Morgan Stanley Capital International, and Bloomberg

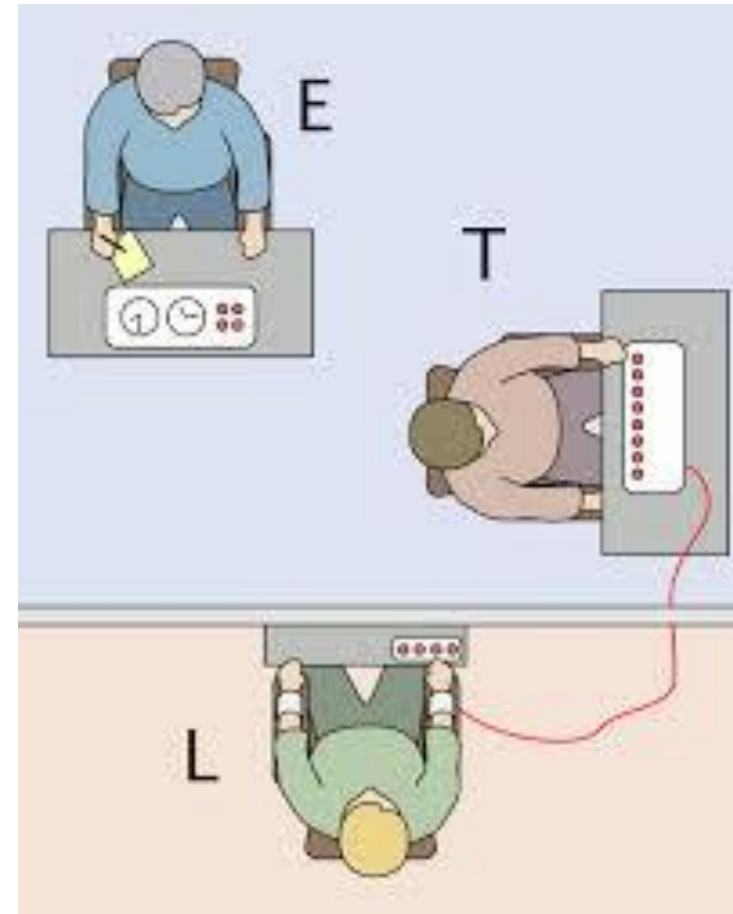
# CONFORMITY – INFLUENCE OF PEERS

## EVERYBODY ELSE IS DOING IT...



# CONFORMITY – INFLUENCE OF AUTHORITY

## YES, SIR!



# WHAT'S ON YOUR MIND?



Mary is quiet, studious, and concerned with social issues. While an undergraduate at Berkeley, she majored in English literature and minored in environmental studies.

Which is most probable?

- a) Mary is a librarian.
- b) Mary is a librarian and a member of Green Peace.
- c) Mary works in the banking industry.

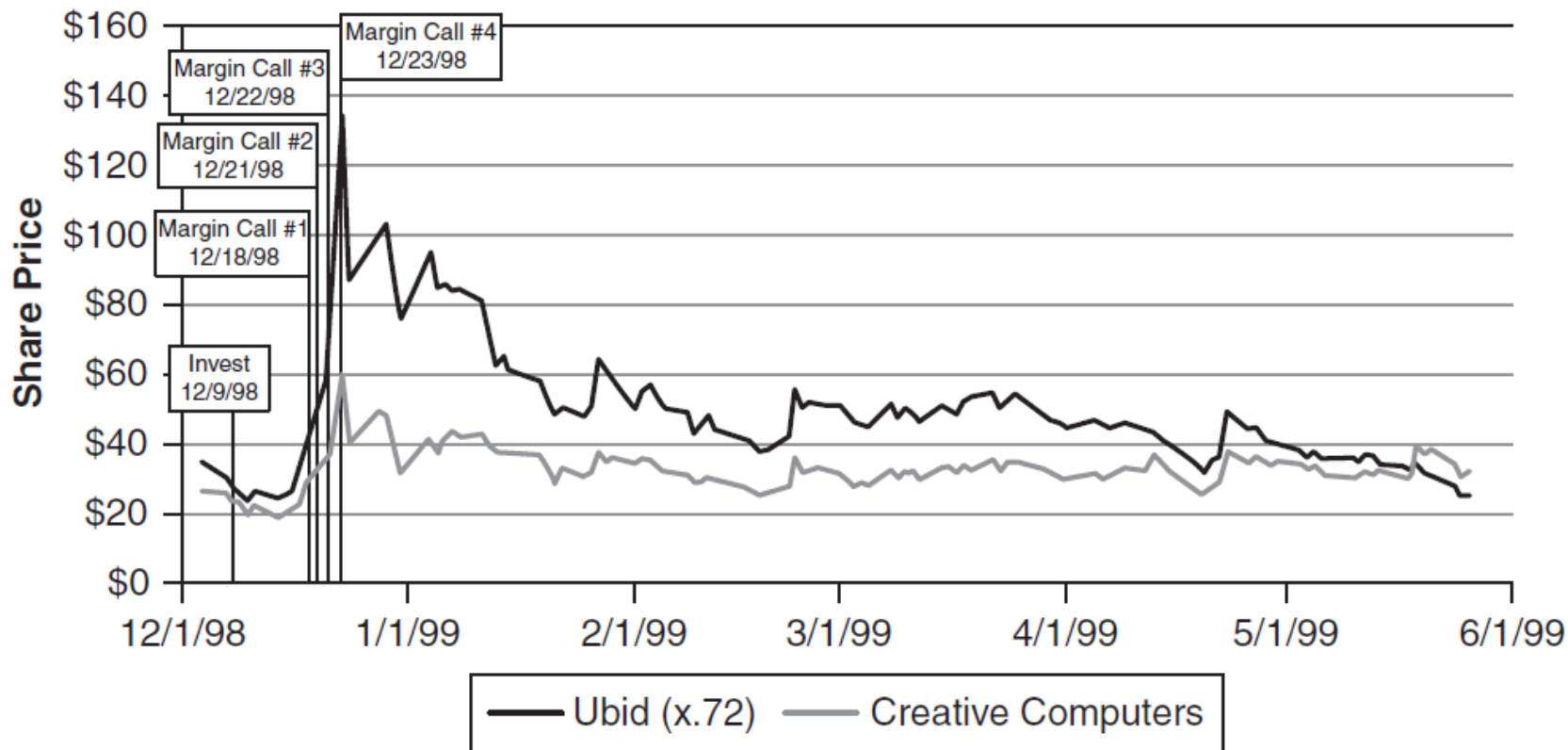
I *REALLY* HATE TO LOSE MONEY

**DOUBLE**  
♦ ♠ OR ♥ ♣  
**NOTHING**



# EVEN THE SIMPLE ONES CAN TAKE A WHILE TO CONVERGE

Stock prices for Creative Computers and uBid.



Source: Mitchell, Pulvino, and Stafford (2002)

# OVERCOMING OBSTACLES: IPS AND INVESTMENT DIARIES



# OVERCOMING OBSTACLES: SUNK COSTS, TRADING, AND LEVERAGE



# CONCLUSIONS

- Value investing is a time tested investment strategy
- Return differentials are substantial. They are partially offset by risk and implementation challenges...but not entirely.
- Measuring value is not a science, but an art, and the definitions matter.
- Value indexes under estimate the “strategic” value investing opportunity
- Any value investing approach requires large doses of intellectual and emotional discipline. Structured implementation helps.