# 2008 ODIN Value Conference

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# *Why Value Investing Works So Well: Exploiting Investor Irrationality*

Robert Q. Wyckoff, Jr.
*Managing Director*
Tweedy, Browne Company LLC
New York, NY

*The real trouble with this world of ours is not that it is an unreasonable world, nor even that it is a reasonable one. The commonest kind of trouble is that it is nearly reasonable, but not quite. Life is not an illogicality; yet it is a trap for logicians. It looks just a little more mathematical and regular than it is; its exactitude is obvious, but its inexactitude is hidden; its wildness lies in wait.*

....by G.K. Chesterton

# I. Introduction

- Behavioral finance and its implications for investors

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- Behavioral finance and its implications for investors
- Recommended reading list

## Recommended Reading List

***Influence***, Robert B. Cialdini, 1984

***Against the Gods***, Peter L. Bernstein, 1996

***When Genius Failed***, Roger Lowenstein, 2000

***Irrational Exuberance***, Robert J. Shiller, 2000

***The Contrarian Investment Strategy***, David N. Dreman, 1979

***The Superinvestors of Graham & Doddsville***, Warren Buffet, Hermes, Columbia Business School, 1984

***Academic Economics: Strength and Faults After Considering Interdisciplinary Needs***, Charles T. Munger, October 3, 2003 (Herb Kay Undergraduate Lecture, University of California, Santa Barbara Economics Department)

***Financial Decision-Making in Markets and Firms: A Behavioral Perspective***, Werner F.M. De Bondt and Richard H. Thaler, Working Paper No. 4777, National Bureau of Economic Research, June 1994

***Contrarian Investment, Extrapolation and Risk***, Josef Lakonishok, Andrei Shleifer and Robert W. Vishny, Journal of Finance, December 1994

***Value and Growth Investing: Review and Update***, Louis K.C. Chan and Josef Lakonishok, Financial Analysts Journal, January/February 2004

***What Has Worked in Investing***, Tweedy, Browne, 1994

***The Intelligent Investor***, Benjamin Graham, 1973

***The Black Swan: The Impact of the Highly Improbable***, Nassim Nicholas Taleb, Random House, 2007

***A Demon of Our Own Design***, Richard Bookstaber, John Wiley & Sons, Inc., 2007

## II. History Lesson: Efficient Market Theory – Warren Buffett – Behavioralists

- 1952 Harry Markowitz: Mean/variance optimization
- 1960's Samuelson, Fama, French: Efficient Market Hypothesis
- 1984 The Superinvestors of Graham & Doddsville
- The Rise of the Behavioralists: Kahneman, Thaler, de Bondt, O'Dean
- 1992 Fama and French: Debunking of Beta
- 1993, 2004 Lakonishok, Shleifer and Vishny: Superiority of Deep Value vs. Growth

**Yearly and Geometric Mean Returns to Value and Growth Strategies with Refined Definitions, 1969-2001**

A. Large Cap Stocks

| | Portfolio | | | | Russell 1000 | S&P 500 | (Deciles 9.10) |
|---|---|---|---|---|---|---|---|
| Year | 1 (glamour) | 2 | 9 | 10 (value) | Value Return | Return | - (Deciles 1,2) |
| 1969-2001 | 4.5% | 6.7% | 15.6% | 16.4% | NA | 11.4% | 10.4 pps |
| 1979-2001 | 7.9 | 10.4 | 18.6 | 20.4 | 15.4% | 15.1 | 10.4 |
| 1990-2001 | 3.8 | 6.0 | 16.1 | 18.0 | 12.9 | 12.9 | 12.2 |

B. Small Cap Stocks

| | Portfolio | | | | Russell 2000 | Russell 2000 | (Deciles 9.10) |
|---|---|---|---|---|---|---|---|
| Year | 1 (glamour) | 2 | 9 | 10 (value) | Value Return | Return | - (Deciles 1,2) |
| 1969-2001 | -2.8% | 4.8% | 16.6% | 18.3% | NA | NA | 16.5 pps |
| 1979-2001 | -1.8 | 7.8 | 20.8 | 22.8 | 16.0% | 13.8% | 18.8 |
| 1990-2001 | -6.2 | 3.6 | 18.4 | 17.7 | 13.4 | 11.0 | 19.4 |

N/A = not available.

Source: Financial Analysts Journal, January/February 2004
*Value and Growth Investing: Review and Update* , Chan, Louis K.C., Lakonishok, Joseph

**Yearly and Geometric Mean Returns to Value and Growth Strategies with Refined Definitions in EAFE Markets, 1989-2001**

| | Portfolio | | | | EAFE Free | (Deciles 9,10) |
|---|---|---|---|---|---|---|
| Year | 1 (glamour) | 2 | 9 | 10 (value) | Return | - (Deciles 1,2) |
| 1989 | 35.6% | 33.5% | 48.9% | 53.2% | 21.5% | 16.5 pps |
| 1990 | -35.4 | -33.6 | -24.8 | -23.6 | -29.9 | 10.3 |
| 1991 | -5.5 | 0.6 | 8.2 | 15.8 | 8.6 | 14.5 |
| 1992 | -18.4 | -15.5 | -4.6 | 2.0 | -6.3 | 15.7 |
| 1993 | 13.7 | 17.5 | 41.5 | 49.3 | 29.3 | 29.8 |
| 1994 | -4.8 | -1.7 | 0.3 | 3.2 | -2.1 | 5.0 |
| 1995 | 1.5 | 1.1 | 1.4 | 5.8 | 9.6 | 2.3 |
| 1996 | 0.9 | 10.2 | 10.3 | 12.4 | 11.4 | 5.8 |
| 1997 | -3.3 | -4.5 | 3.5 | 3.2 | 13.2 | 7.3 |
| 1998 | 12.9 | 8.9 | 6.3 | -5.9 | 12.4 | -4.8 |
| 1999 | 84.7 | 46.7 | 26.9 | 26.5 | 33.2 | -39.0 |
| 2000 | -27.8 | -21.3 | 8.1 | 15.8 | -7.3 | 36.5 |
| 2001 | -49.5 | -34.2 | 0.7 | 11.5 | -16.3 | 47.9 |
| Period Mean | -4.5 | -2.0 | 8.2 | 12.3 | 4.5 | 13.5 |

Source: Financial Analysts Journal, January/February 2004
*Value and Growth Investing: Review and Update* , Chan, Louis K.C., Lakonishok, Joseph

## III. Cognitive Biases and Agency Effects Lie at the Root of the Spread

- Behavioral Errors

  - Prospect theory:  Kahneman and Tversky

  - Thaler's "Endowment Effect"

  - "Availability Effect"

  - Mental accounting:  Frequency of valuation

## Percentage of Periods When Returns on Stocks Beat the Returns on Treasury Bond and Bills: 1871 through 1992

| Holding Period | Percentage of the Periods When Stocks Beat Treasury Bonds | Percentage of the Periods When Stocks Beat Treasury Bills |
|---|---|---|
| 1 Year | 59% | 64% |
| 2 Years | 65 | 69 |
| 5 Years | 71 | 75 |
| 10 Years | 82 | 84 |
| 20 Years | 94 | 99 |
| 30 Years | 100 | 100 |

Source: *The Road to Wealth: Long Term Investment in Stocks* , Tweedy, Browne Company, 1993.

## III. Cognitive Biases and Agency Effects Lie at the Root of the Spread

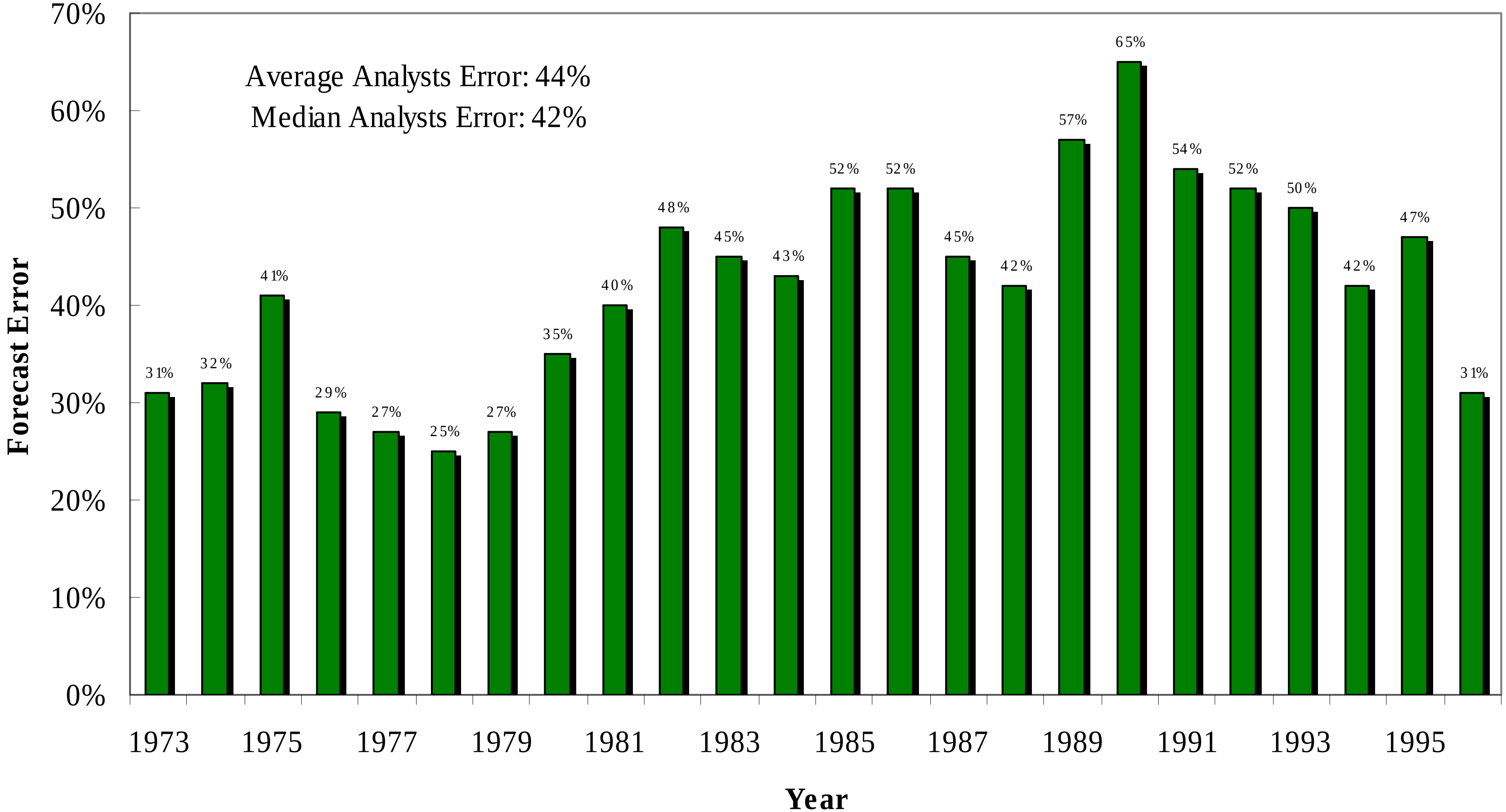
- Behavioral Errors
  - Prospect theory: Kahneman and Tweedy
  - Thaler's "Endowment Effect"
  - "Availability Effect"
  - Mental accounting: Frequency of valuation
- Agency Effects
  - Pre-occupation with short term performance, near term volatility, benchmarking and tracking error
  - Herding, bunching, benchmark hugging and bias for glamour

## IV. The Overconfidence Factor

- The tech bubble and day trading cabbies
- Swedish drivers and university graduate students
- Dreman's study of EPS forecast error

## Forecast Error as a Percent of Reported Earnings

**1973 - 1996**




Source of data: A-N Research Corp. (Formerly the research department of Abel Noser Corp.) and I/B/E/S, 1973-1996; *Contrarian Investment Strategies: The Next Generation*, by David Dreman, 1998.

## IV. The Overconfidence Factor

- The tech bubble and day trading cabbies
- Swedish drivers and university graduate students
- Dreman's study of EPS forecast error
- O'Dean and Barber's turnover studies
- Mutual fund turnover

## Mutual Funds: Annual Turnover Rates

| | |
|---|---|
| 1959 | 16.4% |
| 1979 | 63.3% |
| 1998 | 83% |

"The Velocity of Learning and the Future of Active Management", Jason Zweig, *Economics and Portfolio Strategy, Peter L. Bernstein,* February 1, 1999

## IV. The Overconfidence Factor

- The tech bubble and day trading cabbies
- Swedish drivers and university graduate students
- Dreman's study of EPS forecast error
- O'Dean and Barber's turnover studies
- Mutual fund turnover
- Hedge fund mania/leverage and concentration

## V. Examples of Two Rational Institutional Superinvestors

- FMC Corporation

# FMC Corporation Pension Fund
# Investment Record
# 1980 - 2007

**Annualized Returns**
**Periods Ending December 31, 2007**

| | 27 yrs | 25 yrs | 20 yrs | 15 yrs | 10 yrs | 5 yrs |
|---|---|---|---|---|---|---|
| **FMC** | 14.18% | 13.45% | 12.48% | 12.38% | 9.95% | 11.78% |
| **Wilshire TUCS % Rank** | 1 | 1 | 4 | 2 | 5 | 51 |
| **S&P 500** | 12.31% | 12.73% | 11.82% | 10.49% | 5.92% | 12.84% |
| **Wilshire TUCS % Rank** | 13 | 4 | 9 | 23 | 86 | 33 |

# FMC Corporation 1980 - 2007
# Consistency or Inconsistency of Returns?

**FMC outperformed the S&P 500:**

| | | | |
|---|---|---|---|
| **13 out of 27 calendar year periods** | **12 out of 25 rolling 3 year periods** | **10 out of 23 rolling 5 year periods** | **8 out of 18 rolling 10 year periods** |
| **48%** | **48%** | **43%** | **44%** |

## V. Examples of Two Rational Institutional Superinvestors

- FMC Corporation
- Grinnell College

# Grinnell College
# Endowment Fund Performance
# Periods Ending June 30, 2006

| | 1 Year | 3 Years | 5 Years | 10 Years |
|---|---|---|---|---|
| **Grinnell** | 9.3% | 13.3% | 11.5% | 13.7% |
| **S&P 500** | 8.6% | 11.2% | 2.5% | 8.3% |

## VI. Getting Out of Our Own Way

- Awareness of human behavioral bias
- Checklist

## Avoiding Irrationality …

✓Don’t obsess over near-term volatility and the randomness of markets

✓View risk as more than an algorithm

✓Avoid short cuts and oversimplification

✓Don’t frenetically transact

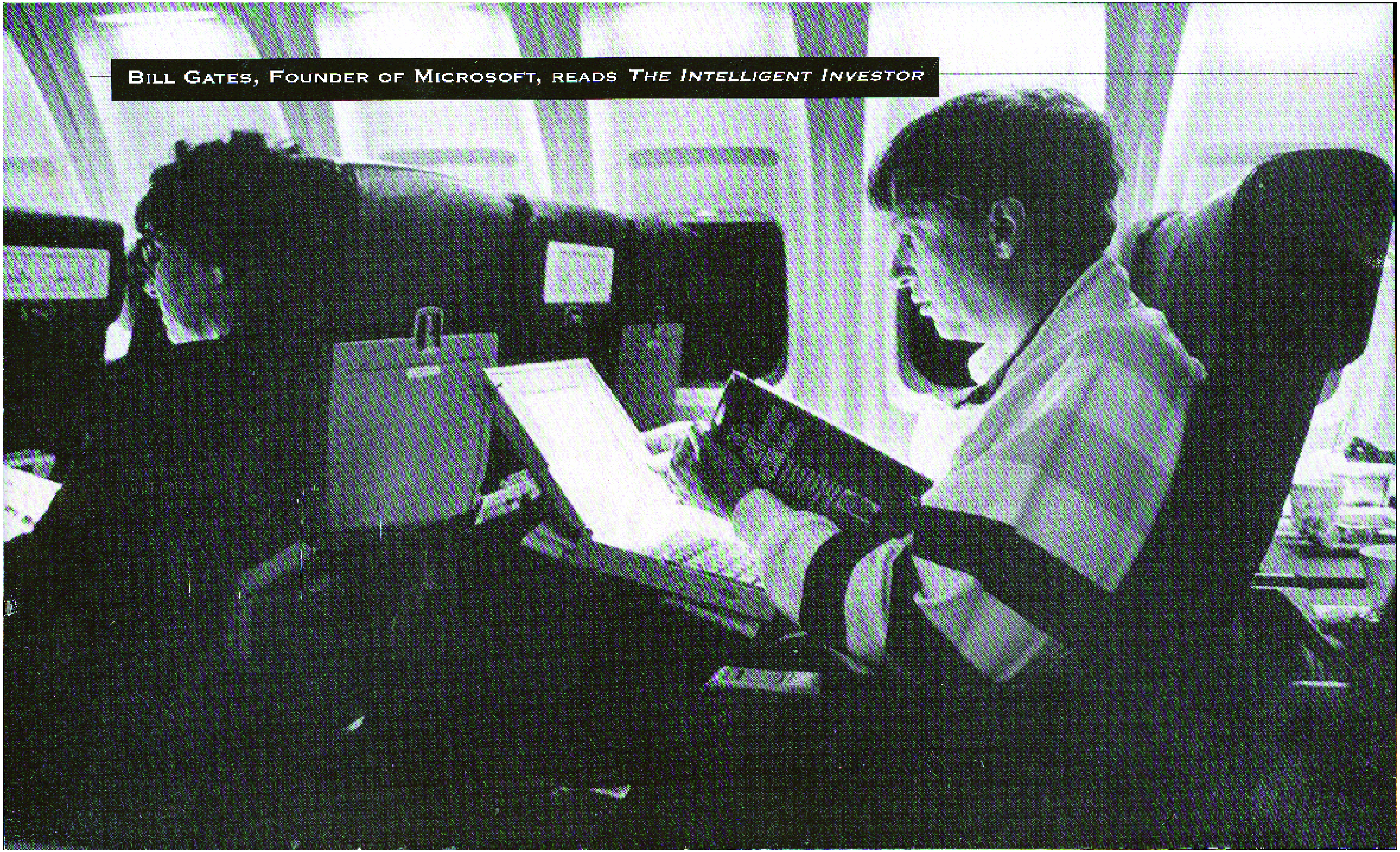
✓Be wary of the crowd

✓Limit the government’s tax take

✓Diversify

✓Think long term and be humble

✓Read your Benjamin Graham


BILL GATES, FOUNDER OF MICROSOFT, READS *THE INTELLIGENT INVESTOR*