Behavioral Portfolio Management

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C. Thomas Howard, PhD
Emeritus Professor of Finance
Daniels College of Business

CEO and Director of Research
AthenaInvest, Inc

Portfolio Manager, AdvisorShares Athena International Bear ETF (HDGI)
Asset Class Returns: 1950 - 2012

Source: AthenalInvest, Thomson-Reuters Financial, Center For Research In Securities Prices, St Louis Federal Reserve FRED data base.

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EMERGING PARADIGM
Convergence of Two Research Streams

Behavioral Science

Finance Research

Behavioral Finance

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# Three Eras Of Finance...

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<th>Fundamental 1934-1973</th>
<th>MPT 1974-2013(?)</th>
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BPM Basic Principles

1. Emotional Crowds dominate market pricing and volatility
   – Prices rarely reflect underlying fundamentals

2. Behavioral Data Investors can earn superior returns
   – BDIs take positions different from the crowd
   – Emotionally challenging to do so

3. Redefining Risk as the chance of underperformance
   – Volatility and risk are not synonymous
   – Volatility is emotion
Behavioral Portfolio Management

Release Your Emotional Brakes

Understand Randomness

Discard Modern Portfolio Theory
  • Rationality Model
  • Sharpe Ratio
  • Tracking Error
IMPLEMENTING BPM:

RELEASING EMOTIONAL BRAKES
Emotional Investment Decisions

- Myopic Loss Aversion
- Social Validation
- Availability Bias
- Availability Cascade
- Representativeness
- Framing

- WYSIATI
- Anchoring
- Fallacy of Information
- Fallacy of Control
- Peak-end Memories
- Fooled by Randomness
- Phantastic Objects

*Thinking, Fast and Slow* by Daniel Kahneman 2012
IMPLEMENTING BPM:
UNDERSTANDING RANDOMNESS
Since 1926, the U.S. market produced positive annual returns 72% of the time.

Indexes are unmanaged and cannot be invested in directly. Returns represent past performance, are not a guarantee of future performance, and are not indicative of any specific investment.
IMPLEMENTING BPM:

EXCESS RETURNS
Truly Active Equity Funds
Active Management Research

Active Management (Active)
- Amihud & Goyenko
- NYU
- R-squared

Best Ideas (Conviction)
- Cohen, Polk & Silli
- Harvard, MIT, LSE
- Relative Weight

Strategy (Consistency)
- Howard
- Denver University
- Own Strategy Stocks

Consistent Research Results
4%-6% Excess Returns

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For the period April 1997 through March 2012. See footnotes to previous graphs for details on how each is calculated. Data sources: AthenalInvest, Thomson Reuters Financial, and Lipper
USING BEHAVIORAL FACTORS TO SELECT TRULY ACTIVE MANAGERS
Manager Behavior is Key

• How a manager goes about making money: investment strategy

• Strategy consistently pursued

• Takes high conviction positions

Focus on Manager Behavior: Strategy, Consistency, Conviction
Desirable Fund Characteristics

- Focused strategy
- Smaller funds
- Limited number of stocks
- Low R-squared
- High tracking error
- High style drift
- High Active Share
- Solo manager is desirable
- Brand name of limited value

In short, avoid closet indexers!
USING BEHAVIORAL FACTORS TO SELECT BEST IDEA STOCKS
Includes month beginning Diamond Rated 5 US stocks, removed from the portfolio when the stock’s DR drops below 4 for 2 months for the period from April 1997 through March 2012, resulting in an average of 379 stocks held in the portfolio. Monthly returns are simple averages across stocks. DR5 stocks are best idea stocks, while DR1 are diversification stocks. Data sources: AthenaInvest, Thomson Reuters Financial, and Lipper
USING BEHAVIORAL FACTORS TO SELECT BEST MARKETS
Best Market Behavioral Factors

• How investors are rewarding investment strategies in US and Internationally

• Sentiment Index for small versus large stocks: Baker and Wurgler

• T-bills if no equity market appears attractive
Trades into a 100% single long or double long ETF for the S&P 500, Russell 2000, or MSCI EAFE or T-bills based on the beginning of the month US and International Strategy Market Barometers and the Capitalization Barometer. The latter is based on Baker and Wurgler's Sentiment Index.

Data sources: AthenaInvest, Thomson Reuters Financial, and Lipper
Concentrated Equity
Triple Play
Athena Pure returns are GIPS compliant net returns from Mar 31, 2003 through Mar 31, 2013. Russ 2000 returns are total returns for the Russell 2000 index. **Past returns are not indicative of future returns.**

Data Sources: AthenalInvest and Thomson -Reuters Financial.


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Concentrated Equity Triple Play

- Higher Returns
- Lower long-term underperformance risk
- Lower Correlations
BPM Benefits

For the period April 1997 through March 2012. See footnotes to previous graphs for details on how each is calculated.

Data sources: AthenInvest, Thomson Reuters Financial, and Lipper
Important Information

• **The figures shown are past results.** Past performance does not guarantee future results. There are risks involved with mutual fund and stock investing, including the risk of loss of principal. There is no assurance that the investment process will consistently lead to successful results. Investing in securities involves inherent risks, including the risk that you can lose the value of your investment.

• The unmanaged Standard & Poor’s (S&P) 500 Index is a market value-weighted index of large-cap common stocks considered representative of the broad market. Total returns for the unmanaged index include the reinvestment of dividends and capital gain distributions but do not reflect the costs of managing a mutual fund.

• The Strategy Based Investing methodology is based on the concept of constructing portfolios along the strategy dimension. This entire system also looks at managers this way, assembling peer groups, allocates among them, and analyzes the sources of alpha as a result. This methodology is patented.

• Opinions and forecasts regarding industries, companies, countries and/or themes, and portfolio composition and holdings, are all subject to change at any time, based on market and other conditions, and should not be construed as a recommendation of any specific security.

• Expressed in percentage terms, Thomson’s calculation of total return is determined each month by taking the change in monthly net asset value, reinvesting all income and capital-gains distributions during that month, and dividing by the starting NAV. Reinvestments are made using the actual reinvestment, and daily payoffs are reinvested monthly. Thomson does not adjust total returns for sales charges (such as front-end, deferred or redemption fees). The total returns do account for management, administrative and 12b-1 fees and other costs automatically taken out of fund assets.

• There are risks involved with mutual fund and stock investing, including the risk of loss of principal. There is no assurance that the investment process will consistently lead to successful results. Investing in securities involves inherent risks, including the risk that you can lose the value of your investment. Past performance is not indicative of future results. Investing may not be appropriate for all individuals, always consult a qualified professional prior to making any investment decision.

• You should consider the investment objectives, risks, charges, and expenses of mutual funds carefully before investing. The prospectus contains this and other information, and may be obtained from AthenalInvest at 877-430-5675. Be sure to read the prospectus carefully before investing.

• For more information please visit us on the web at [www.Atheninvest.com](http://www.Atheninvest.com).


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