



# Taking a Tactical Approach to the Bond Markets

Mathew Pasts CMT

CEO

&

Isaac Braley

President

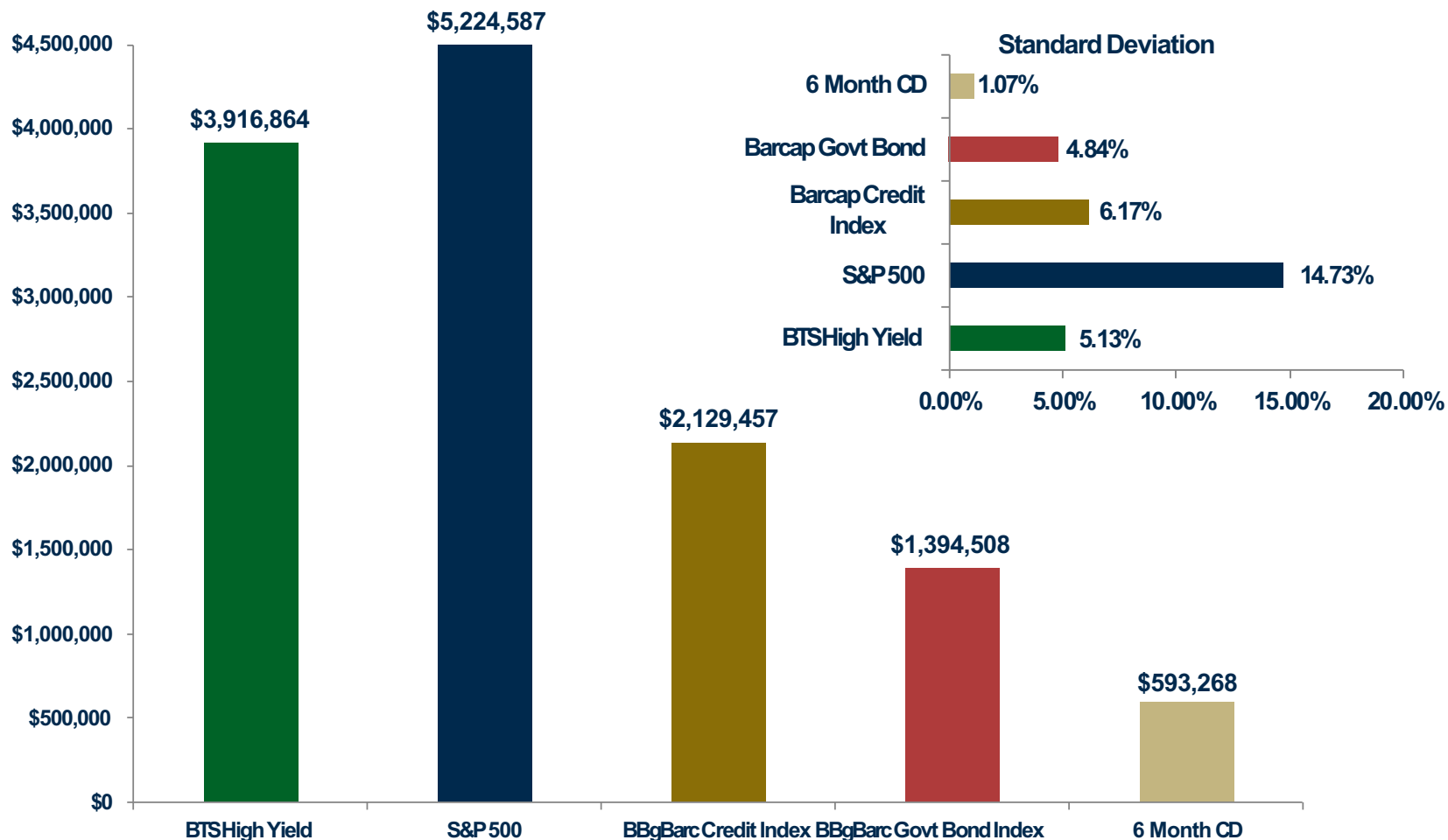


## BTS History

- Over 39 years of research and a track record since 1979
- One of the oldest nontraditional risk managers
- Tactically trade traditional assets in a quantitative nontraditional model
- Low correlation to both bond and stock markets



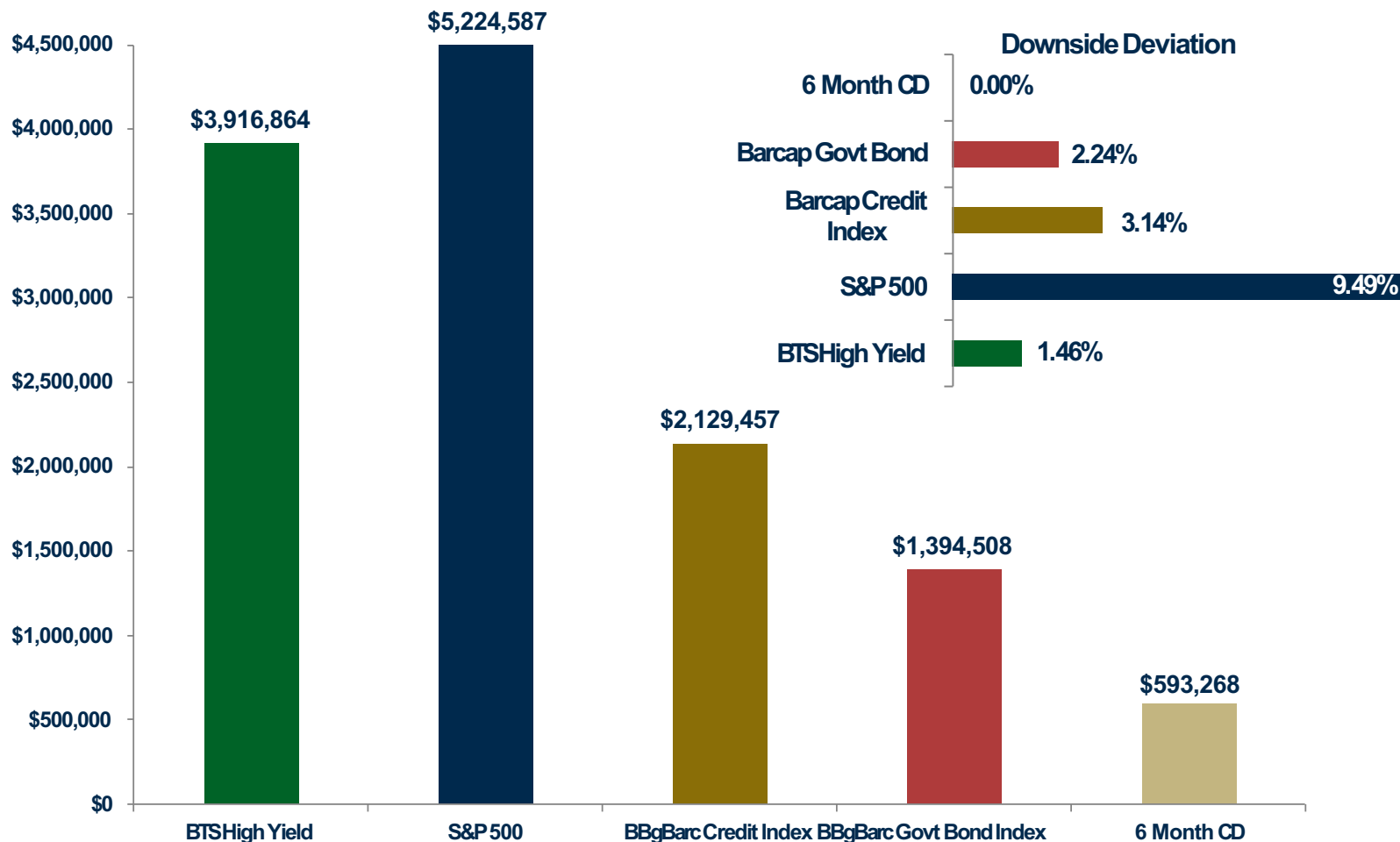
## BTS High Yield Bond Portfolio Model Net Performance vs. Investment Benchmarks \$100,000 Initial Investment 37 Years (Since Inception) ending December 31, 2017



BTS High Yield Portfolio performance returns reflect Model Portfolio returns from inception on 1/2/81 through 12/31/2017.  
Net of maximum fees. Source: Morningstar, December 2017. See slide 40 for important disclosures related to the use of historical model performance.



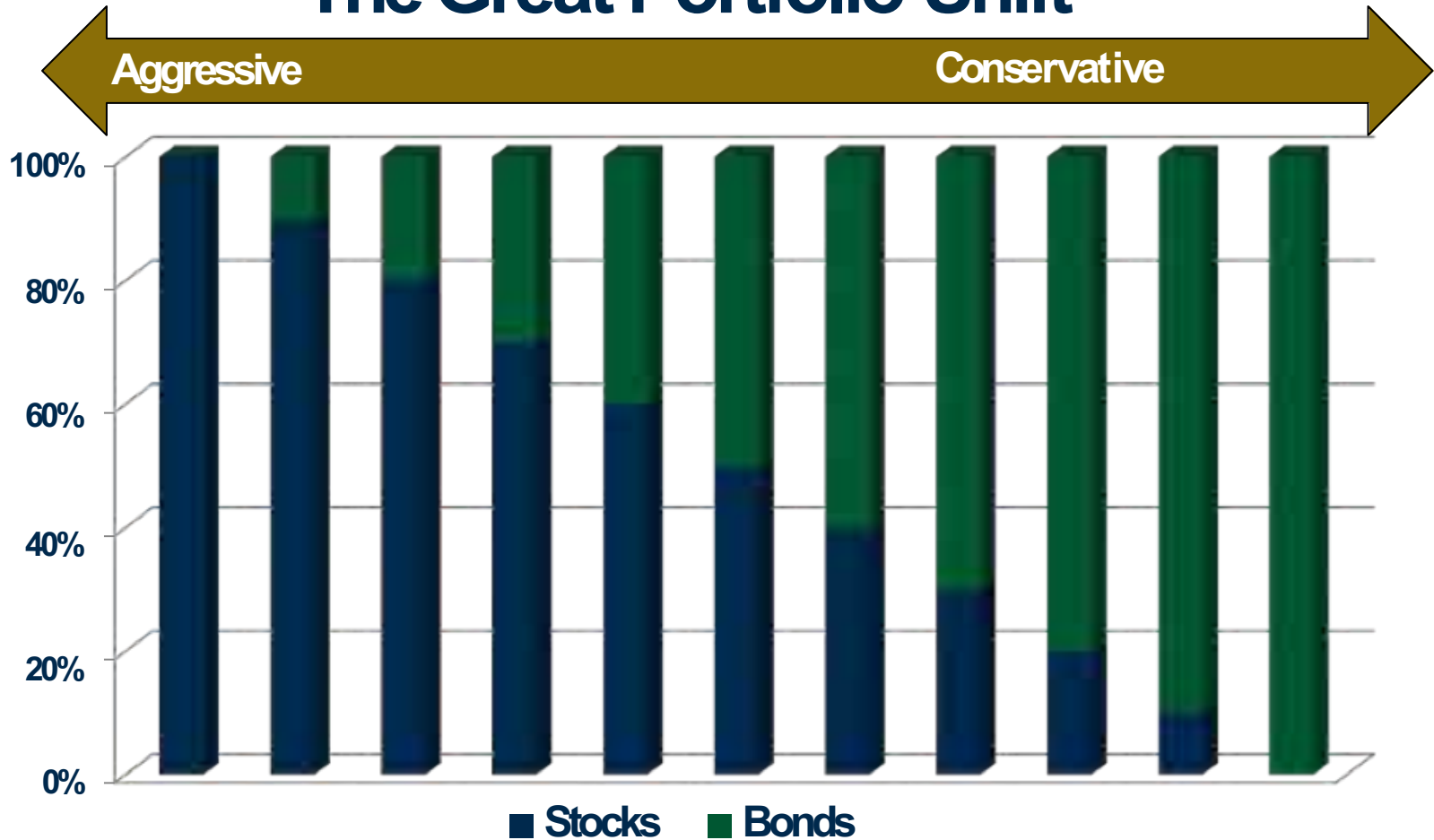
## BTSHigh Yield Bond Portfolio Model Net Performance vs. Investment Benchmarks \$100,000 Initial Investment 37 Years (Since Inception) ending December 31, 2017



BTSHigh Yield Portfolio performance returns reflect Model Portfolio returns from inception on 1/2/81 through 12/31/2017.  
Net of maximum fees. Source: Morningstar, December 2017. See slide 40 for important disclosures related to the use of historical model performance.



# The Great Portfolio Shift



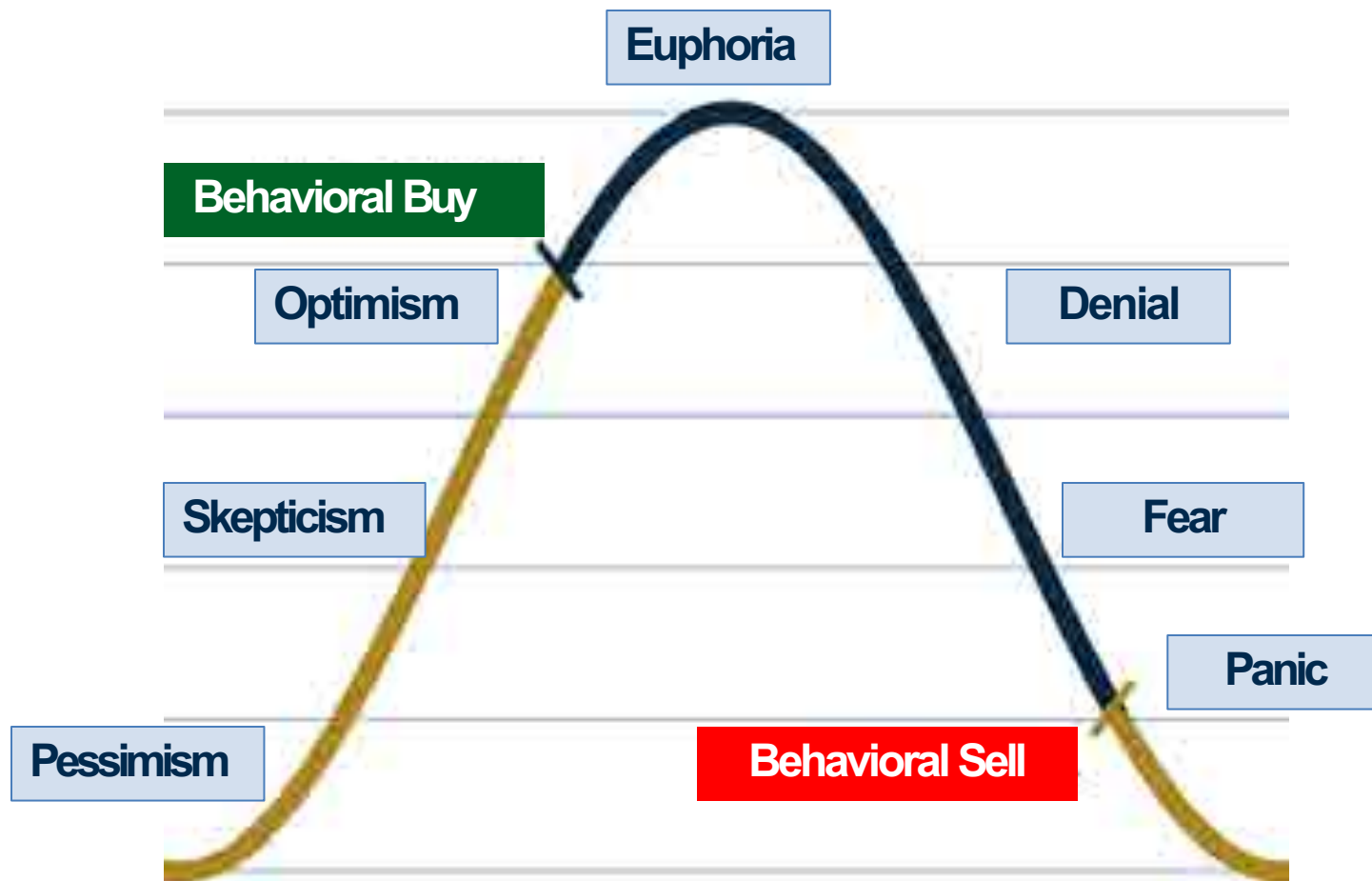
•76 million born between 1946-1964

•10,000 a day will turn 65 for the next 15 years

"Baby Boomers Retire"  
Pew Research Center, 12/29/10



# The Cycle Of Market Emotions

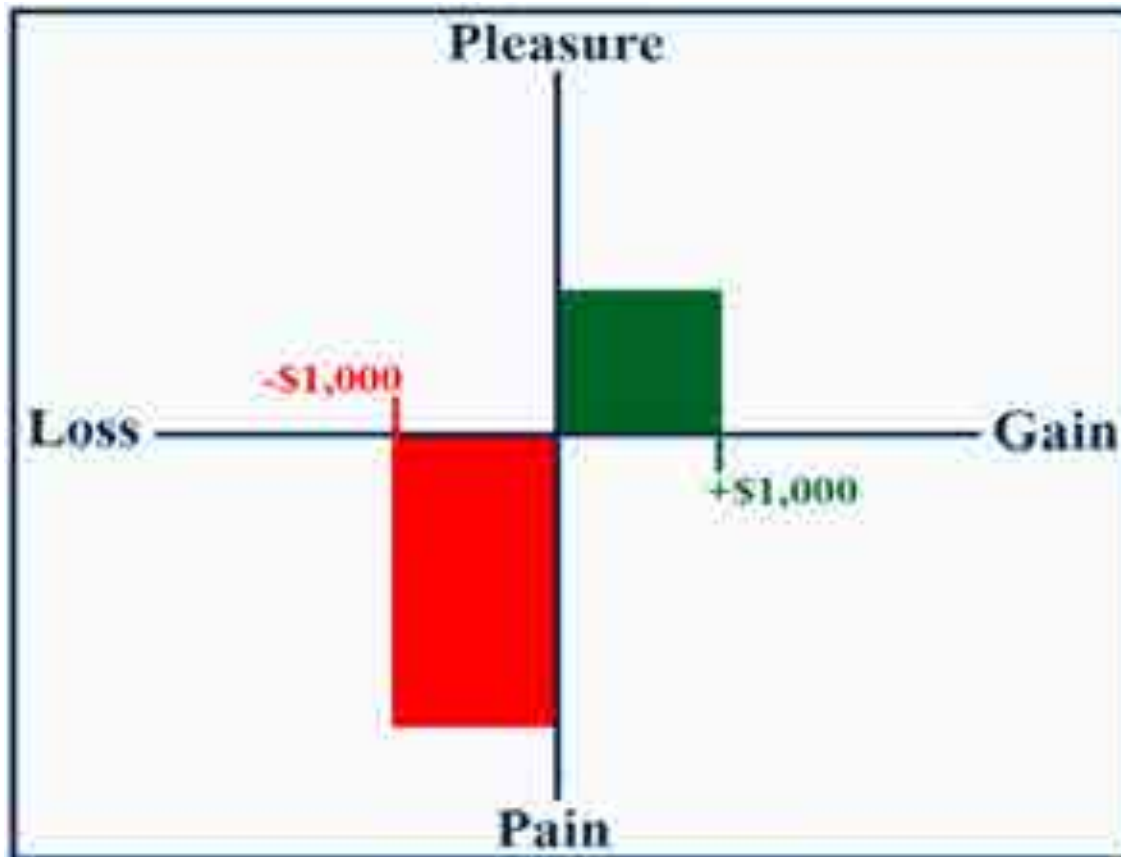






## Loss Aversion

**Losses are Twice as Painful as Gains are Pleasurable**

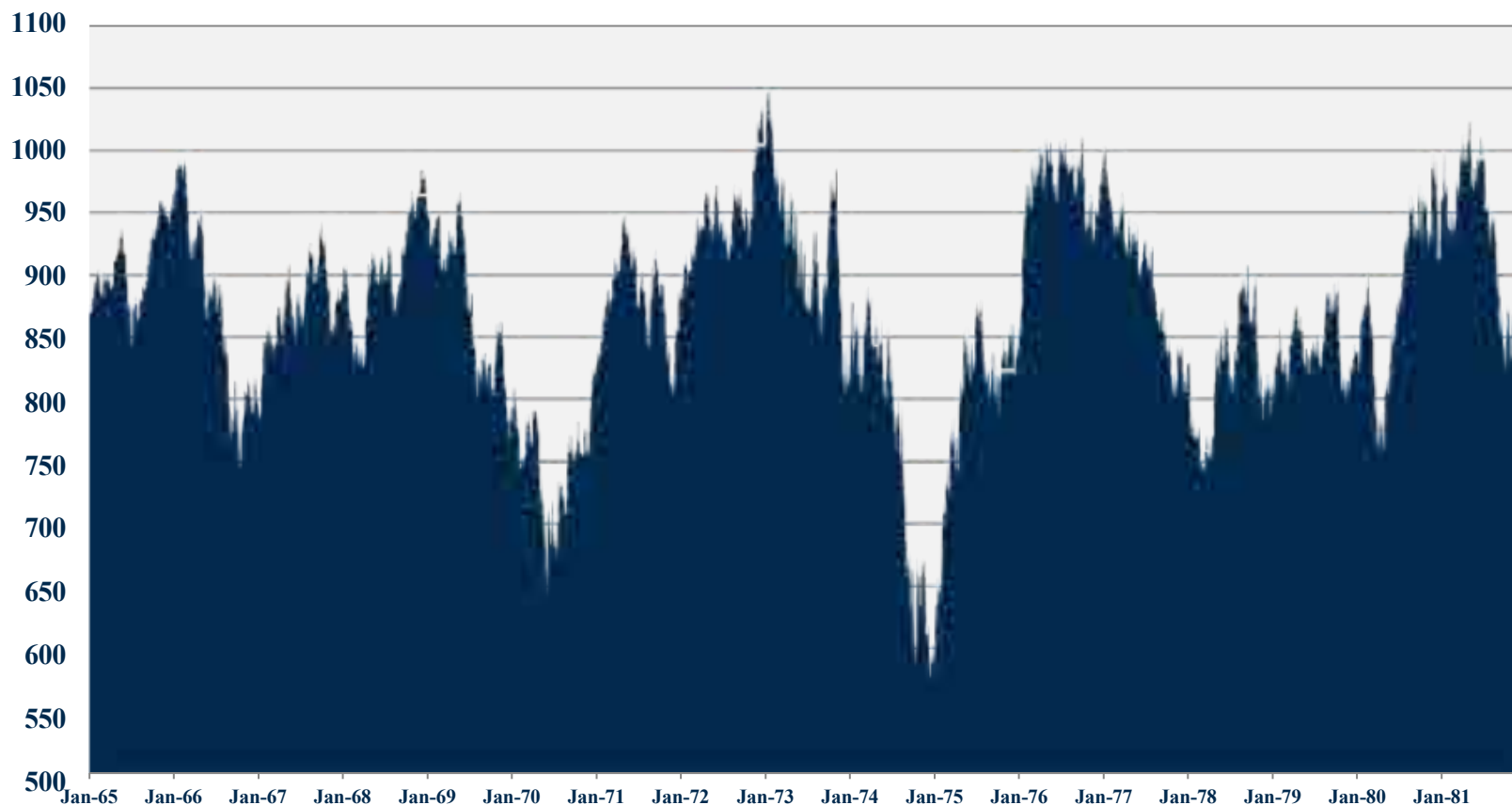


Source: Amos Tversky & Daniel Kahneman. "The Framing of Decisions and the Psychology of Choice"



# Bear Markets Shape Investor Behavior

Dow Jones Industrial Average 1/31/65-12/31/81



Source: Bloomberg.





# Have Investors Participated?

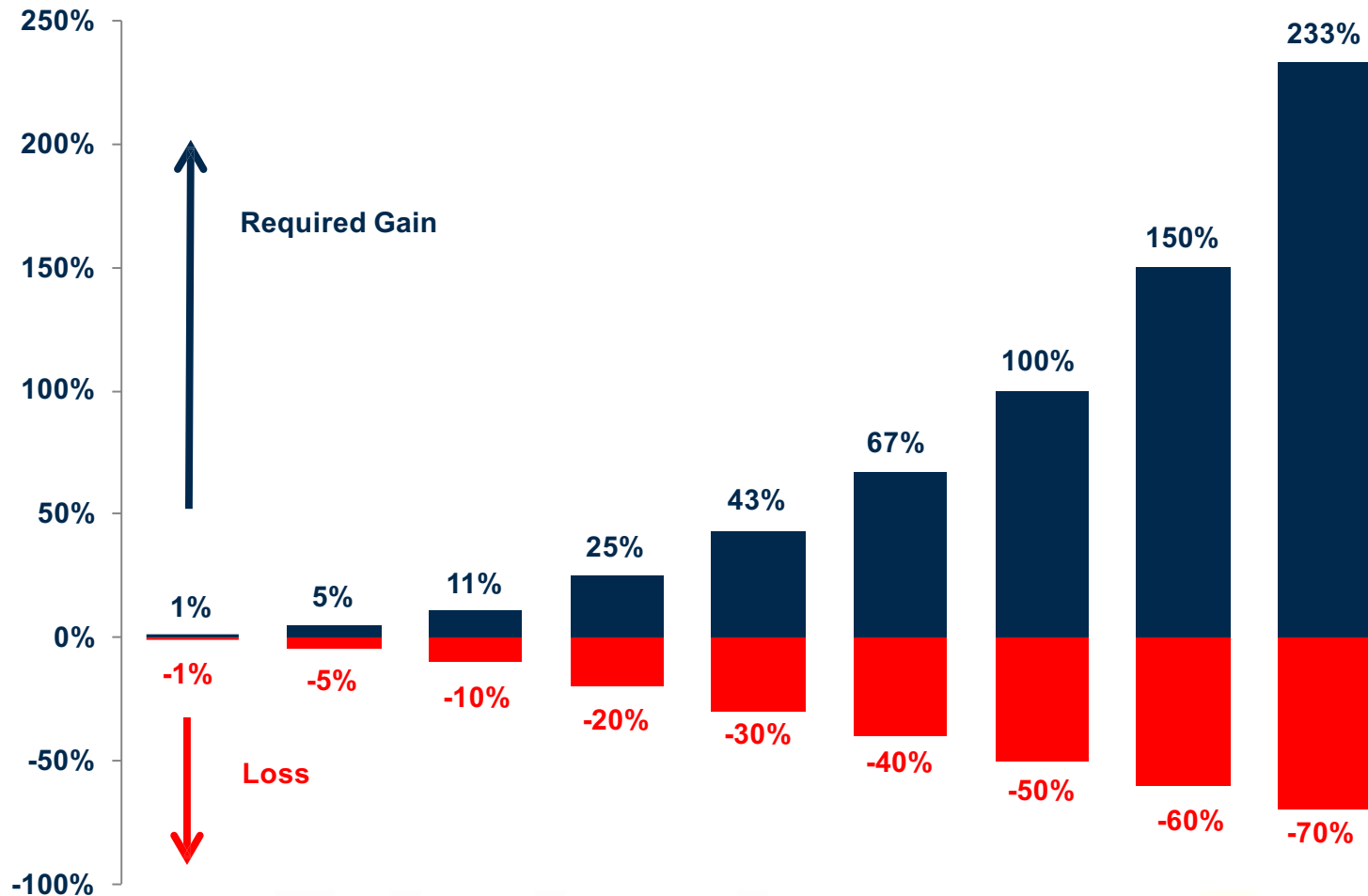
Dow Jones Industrial Average 1/1/97-12/31/17



Source: Bloomberg.



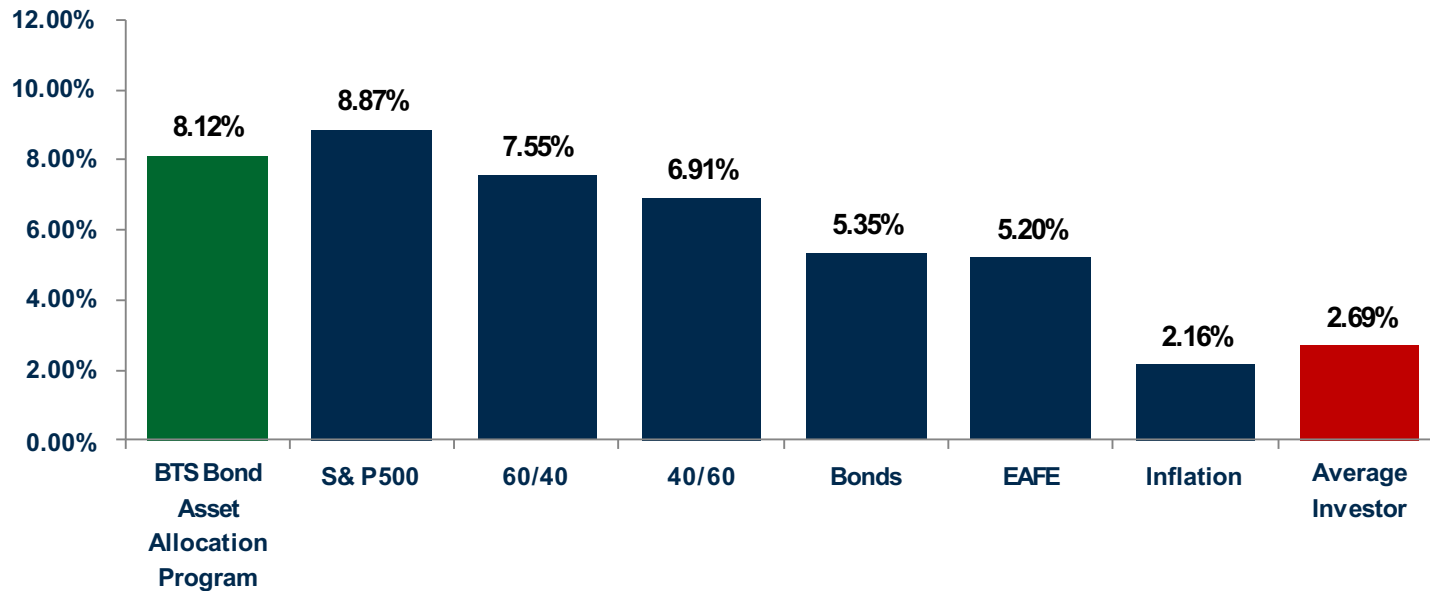
# Preservation of Capital Is Key





# Behavior Negatively Impacts Performance

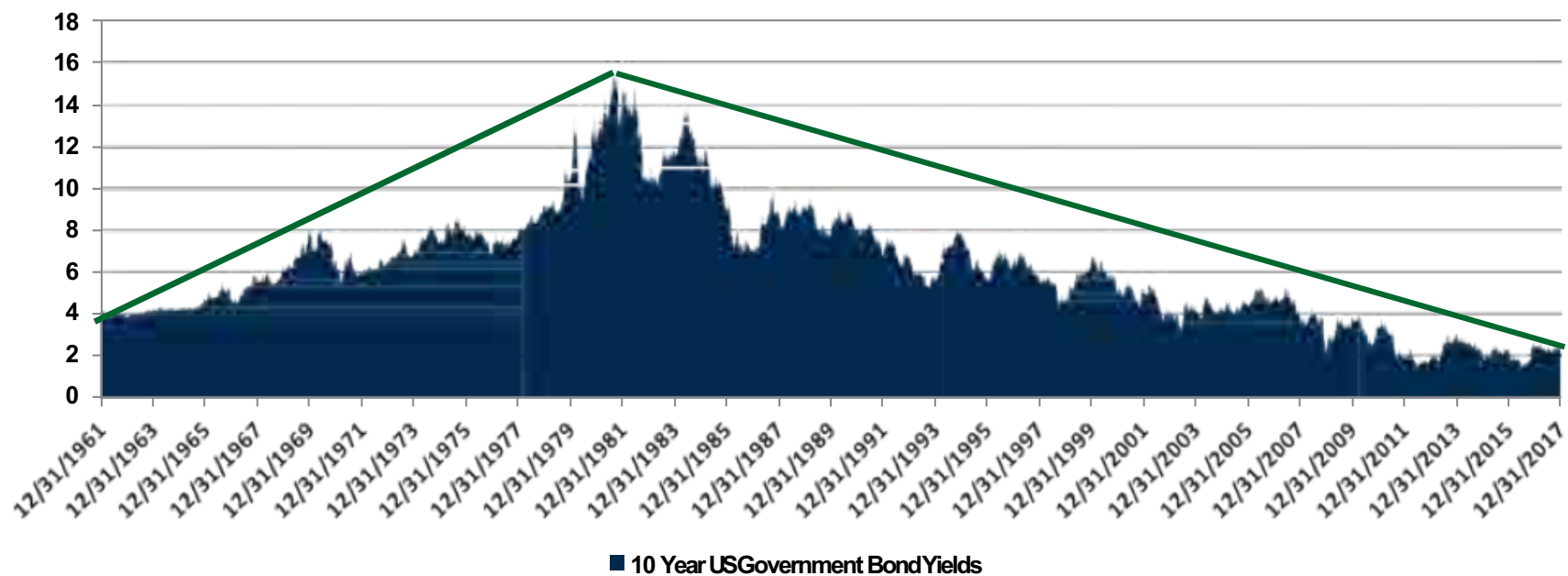
**Annualized Returns By Asset Class**  
9/1/1996 - 12/31/2017



Source: Morningstar. Indexes used are as follows: EAFE: MSCI EAFE, Bonds: Barclays Capital U.S. Aggregate Index, Inflation: CPI. Investors cannot invest directly in an index. Average Investor returns represented by asset allocation investor returns as calculated by Dalbar Inc., which utilizes the net of aggregate mutual fund sales, redemptions and exchanges each month as a measure of investor behavior. Returns are annualized (and total return where applicable) and represent the period starting 9/1/1996 and ending 12/31/17. Each of these asset classes has its own set of investment characteristics and risks and investors should consider these risks carefully prior to making any investments. \*Net of maximum fees, BTSBond asset Allocation started on 9/11/96. Results shown are net of fee Model performance results and do not necessarily reflect the performance any BTS client actually attained. Specific Model performance details, including composite construction methods and important dates, as well as other key considerations and limitations are found on Slide 41 of this presentation and should be construed as being incorporated directly into this Slide 11. This presentation assumes a sophisticated audience. Other periods, including YTD or rolling returns, are available upon request.



## It's Never A Straight Line



	%Change 10 Year U.S. Government Yield <sup>1</sup>	IA Barclays U.S. H.Y. Corporate Bond Index <sup>2</sup>	Barclays U.S. Government Index TR <sup>2</sup>
Oct 93-Nov 94	45.34%	-0.05%	-4.65%
Oct 98-Jan 00	45.75%	6.30%	-1.85%
Jun 03-Jun 06	68.14%	28.18%	3.98%
Dec 08-Jun 09	73.43%	30.43%	-3.17%

Source: 1- Bloomberg, 2- Morningstar





## Fixed Income Sector Performance



\*Sector definitions found on Slide 42



## 10 Year Correlation as of 3/31/18

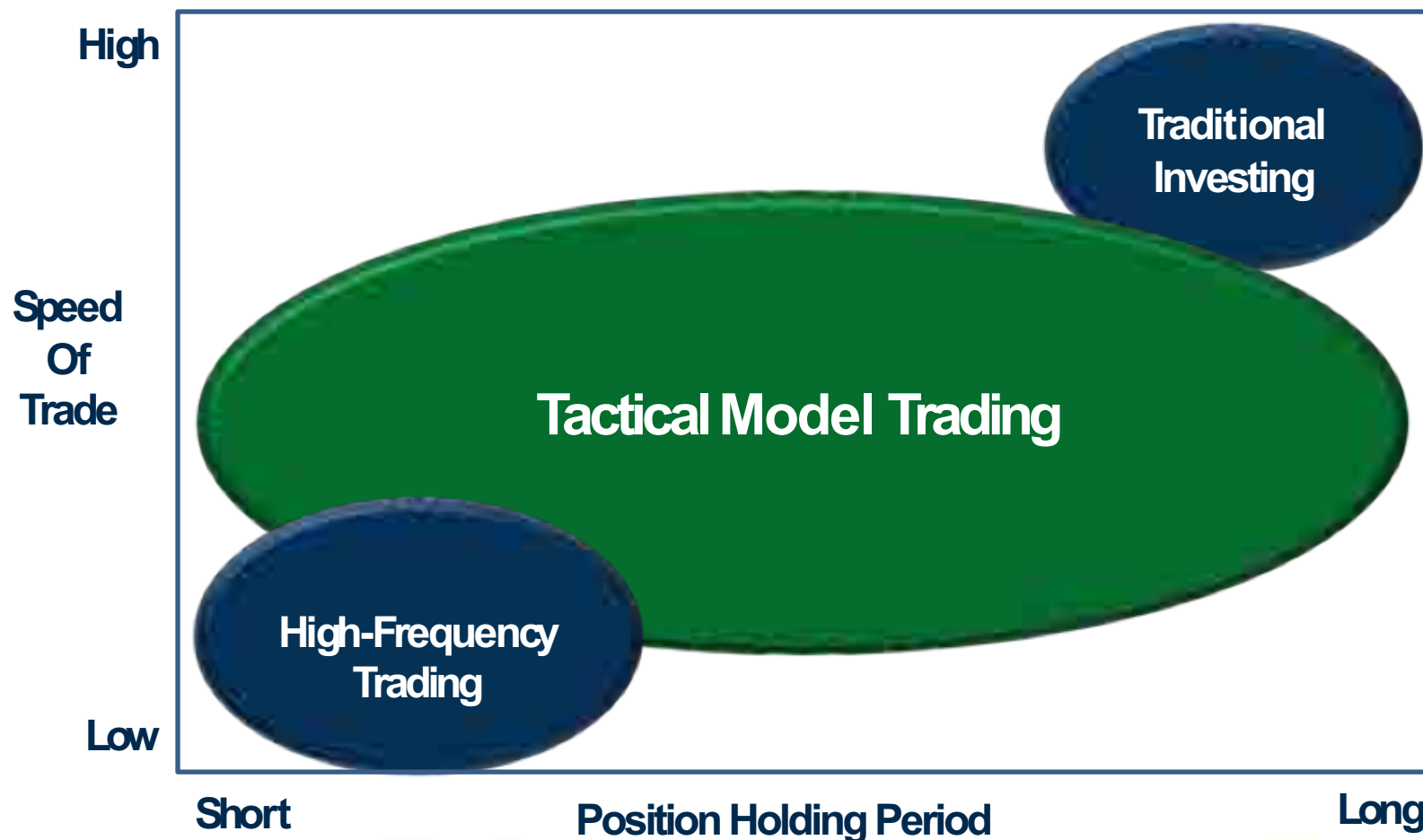
Benchmark	High Yield <sup>1</sup>	Treasury <sup>2</sup>	S&P 500 <sup>3</sup>
High Yield <sup>1</sup>	1.00	-0.20	0.73
Treasury <sup>2</sup>		1.00	-0.29
S&P 500 <sup>3</sup>			1.00

1- ICEBofAML USHigh Yield TRUSD2 - Citi Treasury Benchmark 10 Yr USD3 - S&P500 TRUSD





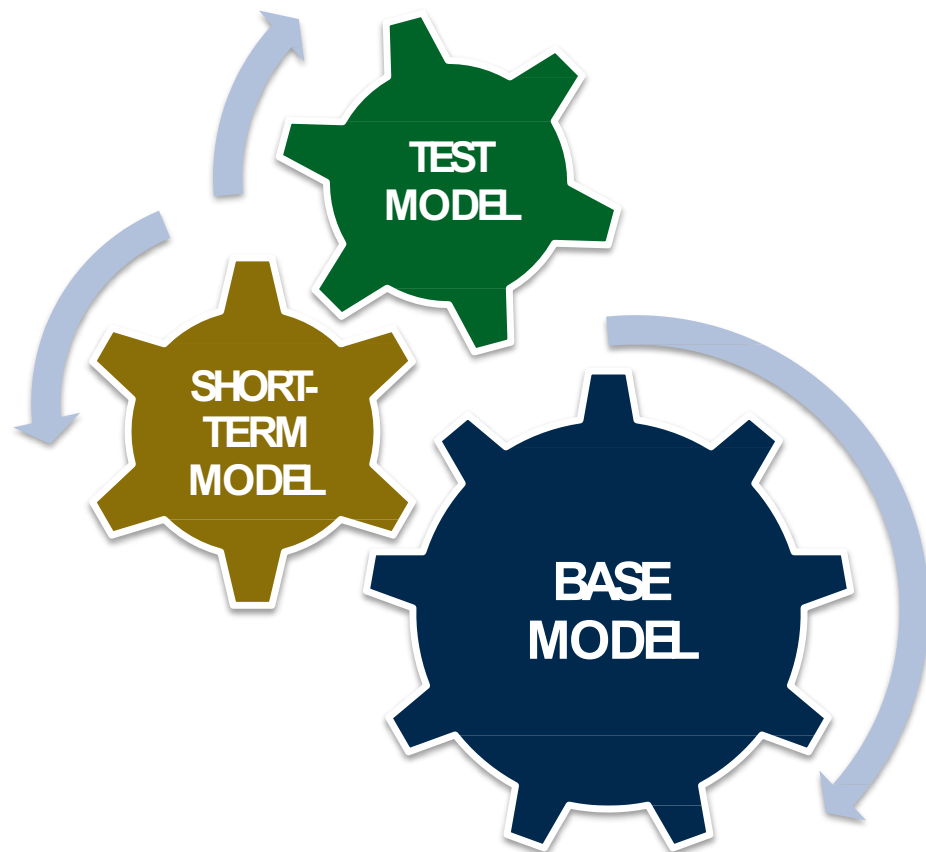
## Types Of Trading





# The Investment Process

- Constant Enhancements
- Ongoing Improvements



- Technical Analysis using Intermediate to Long-Term Trends and Momentum
- Combination of Traditional and Proprietary Weighted Technical Indicators
- 95% Quantitative
- 5% Investment Committee Experience
  - Filters Noise on Buy – Never Used on Sell
- Multiple Ratio Analysis
  - Cash vs. Derivatives vs. ETFs
- Multiple Asset Class Models
  - Treasuries, Municipals, High Yield, and Stock
- Constant Monitoring of Yield Spreads in Global Market Conditions
- Expanding and Capped Trailing Stop Loss



## Trend Analysis

- **Trend Analysis looks to predict the future movement of an asset based on its historical price movement.**
- **High Yields traditionally move in sustained trends.**



# Moving Averages on JNK

## Short, Intermediate, and Primary Trends





# Parabolics



Source: Bloomberg

Past performance is no guarantee of future results - For professional use only





## Momentum Analysis

- **Momentum indicators show the relative speed or rate of change in assets.**
- **Can help determine over-bought or over-sold assets**
- **Can be validation for trend**
- **When trend breaks down an emphasis on momentum indicators can find new entry or exit points**





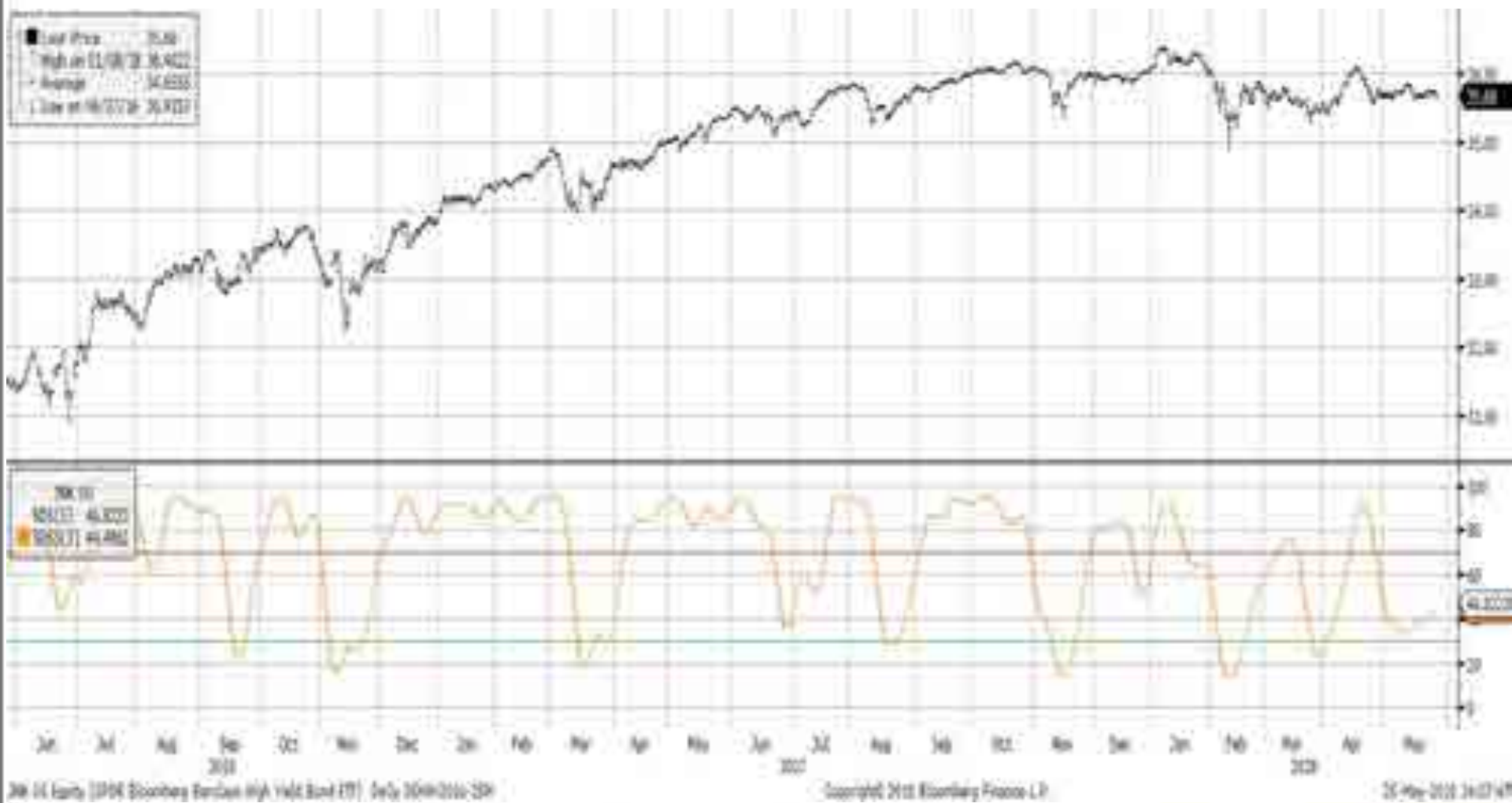
# Rate of Change



Source: Bloomberg



# Stochastics





# Back Test Optimization

No One Shows You A Bad Back Test

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Test ideas over certain periods</li> </ul>	<ul style="list-style-type: none"> <li>• Ignores market impact &amp; Liquidity</li> </ul>
<ul style="list-style-type: none"> <li>• Can help determine drawdown of indicator</li> </ul>	<ul style="list-style-type: none"> <li>• Not possible with trailing stops</li> </ul>
<ul style="list-style-type: none"> <li>• Win to loss ratios understanding</li> </ul>	<ul style="list-style-type: none"> <li>• Optimal Levels of Indicators will change as return streams differ</li> </ul>
<ul style="list-style-type: none"> <li>• Can potentially optimize algorithms</li> </ul>	<ul style="list-style-type: none"> <li>• Important to see how model does in real time</li> </ul>
<ul style="list-style-type: none"> <li>• Can help find optimal trade frequency</li> </ul>	

The evaluation and Optimization of Trading Strategies – Robert Pardot  
Bloomberg BI Function



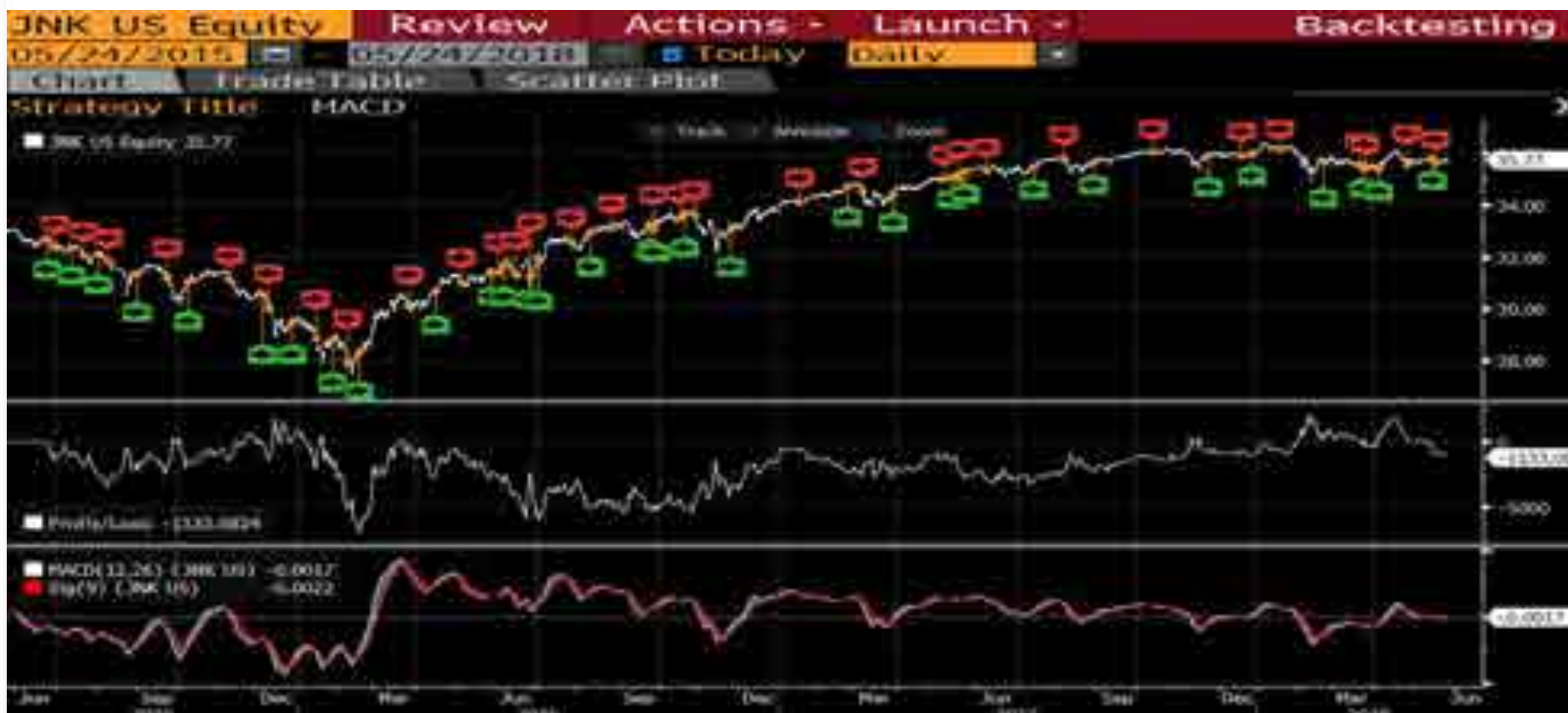
## Creating an Optimal Model

- Focus on no one single indicator
- Create proper weighting of indicators
- Create desired trade frequency
- Focus on preservation of capital approaches





## Downside of Single Indicator Models



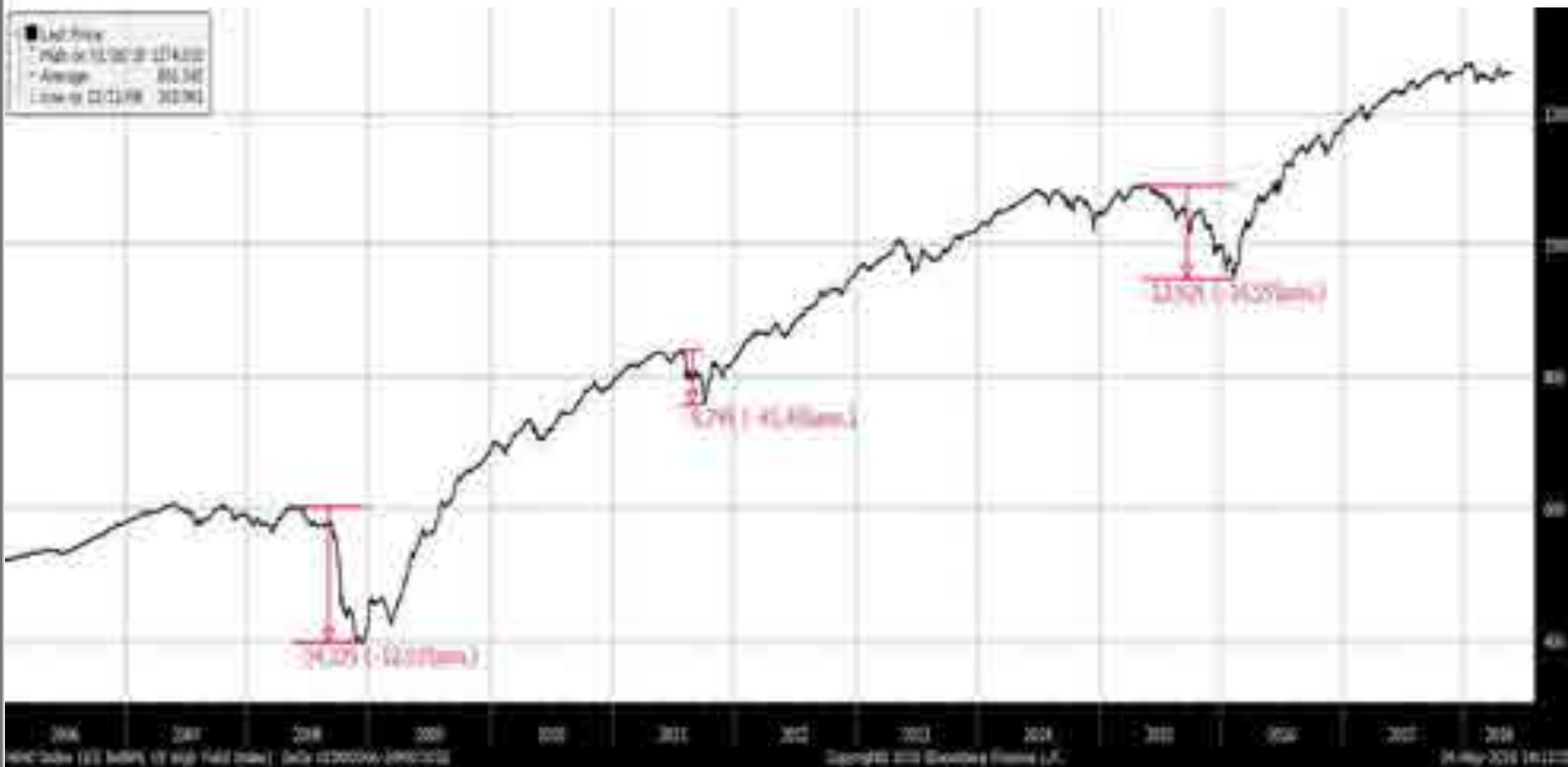
Summary Statistics	Long	Short	Total
Trades	31	31	62
Wins	15	12	27
Losses	16	19	35
P&L	3.8k	-4.85k	-1.1k
1. P&L	1.8	-1.85	1.05

Source: Bloomberg



# Preserving Client Capital Is The First Mandate

## Protecting With % Change

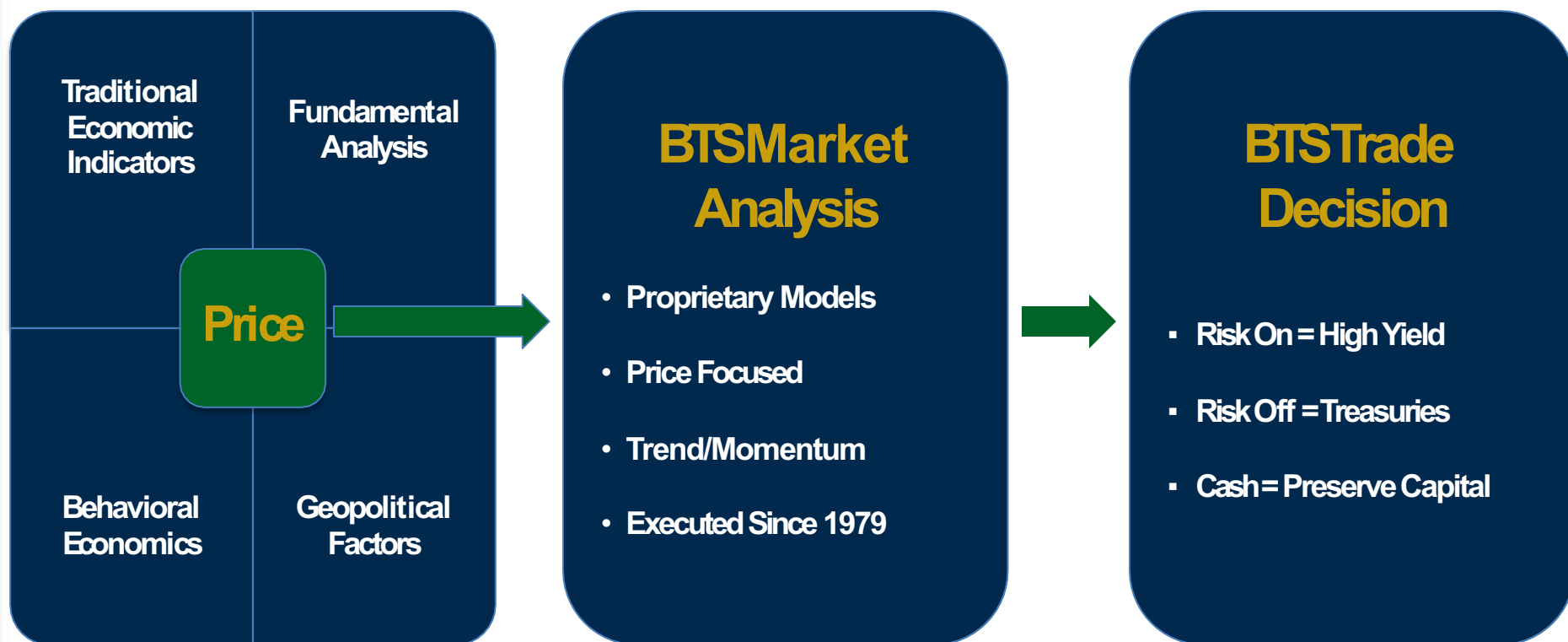


Source: Metastock



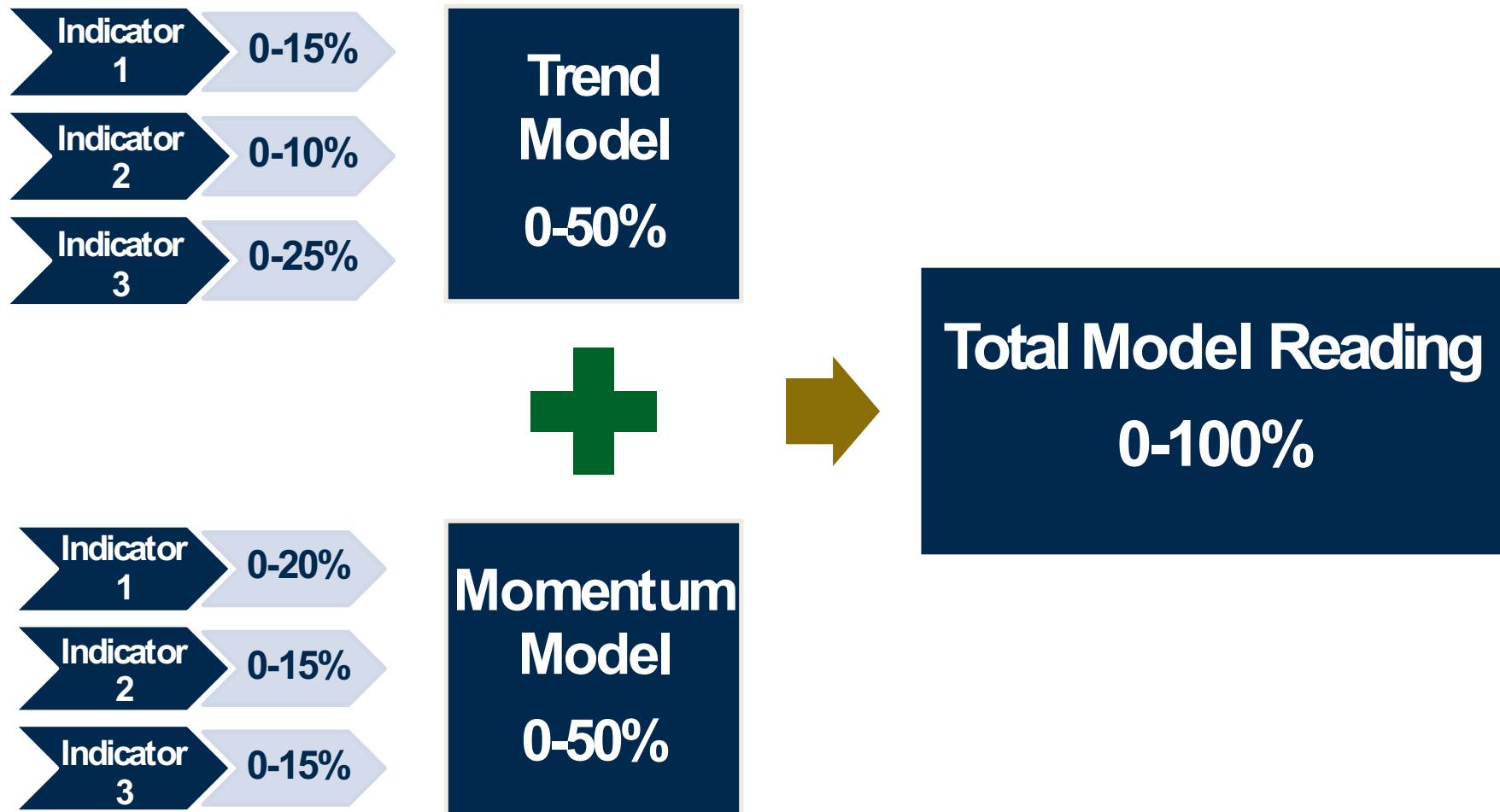


# Turning Market Information Into Decisions



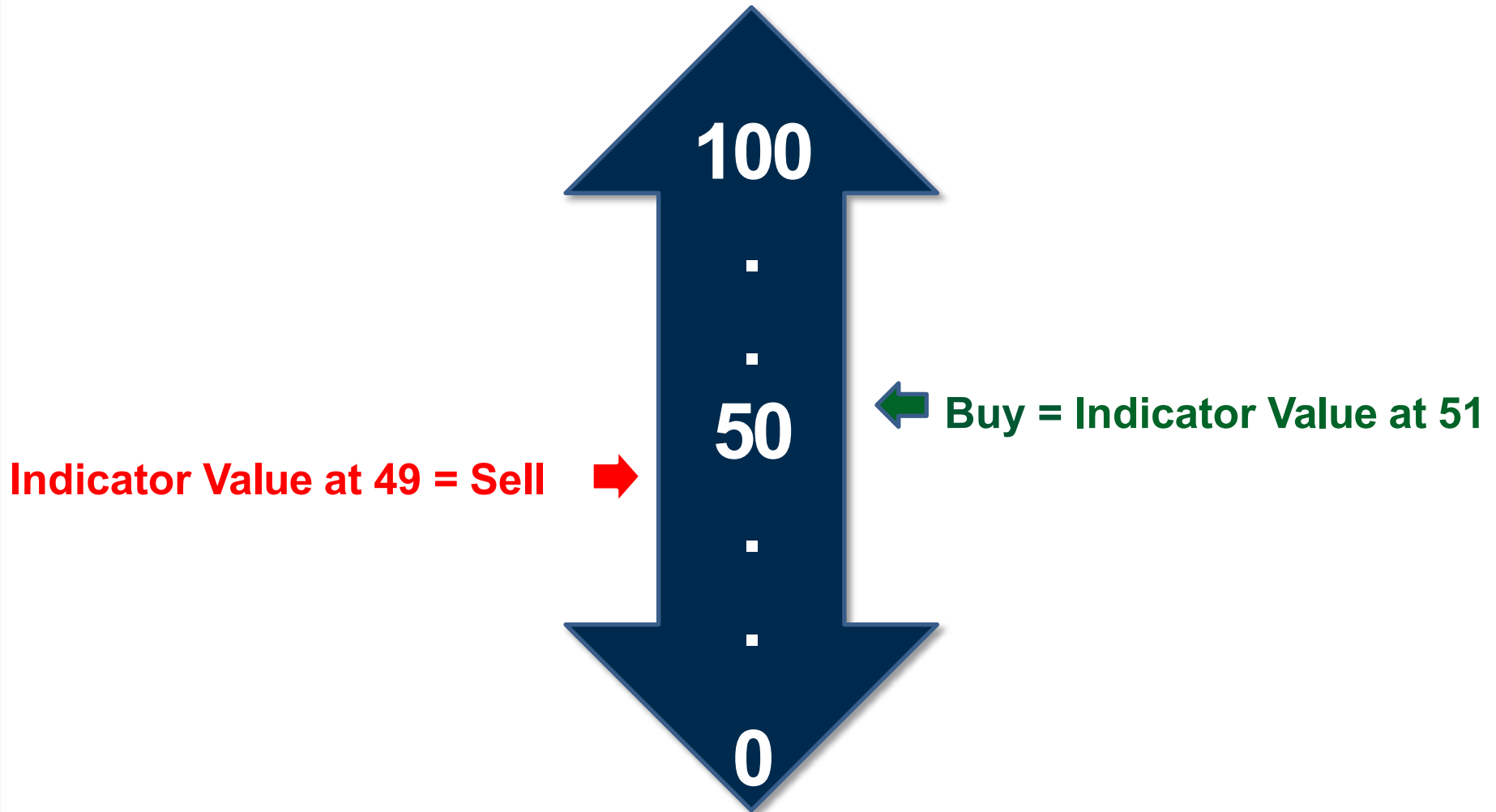


# Weighted Model Example





## A Weighted Indicator Approach with an Expanding and Capped Trailing Stop Loss



For illustrative purposes only. There is no guarantee that any investment will achieve its objectives, generate positive returns, or avoid losses.



# HYG Weekly



Source: Metastock

# Fixed Income ETF Market Profile

Asset Class	Market Size (MM) (\$)	ETFAUM (MM) (\$)	ETFAUM as % of Index (%)	Average Daily Volume (3M ADV): Bond Trading (MM) (\$)	Average Daily Volume (3M ADV): ETF Trading (MM) (\$)	ETFADV as % of Bonds' ADV (%)
<b>US High Yield Corporate Bonds</b>	<b>1,281,417</b>	<b>44,095</b>	<b>3.4</b>	<b>12,869</b>	<b>2,015</b>	<b>15.7</b>
US Investment Grade Corporate Bonds	7,531,583	113,854	1.5	21,970	1,439	6.5
US Investment Grade Floating Rate Notes	439,118	10,730	2.4	600	116	19.3
US Senior Loans	973,825	12,631	1.3	2,690	141	5.7
US Municipal Bonds	3,850,700	30,921	0.8	11,300	246	2.2
EM Bonds	1,978,569	26,509	1.3	19,117	520	2.7
US Government Bonds	14,188,300	68,194	0.5	572,400	2,176	0.4
US MBS	5,634,335	19,214	0.3	230,167	128	0.1
<b>Hybrids</b>						
US Preferreds	143,626	30,240	21.1	492	200	40.7
US Convertibles	217,579	4,370	2.0	1,448	72	5.0

Market Size Data: SIFMA (as of Q4 2017; USIG Corporate Bonds, US Government Bonds, US Municipal Bonds), Bloomberg (as of 06/09/2018; US High Yield Corporate Bonds), Barclays (as of 03/29/2018 US Convertibles, EM Bonds, US MBS, USIG FRNs), The Loan Syndications & Trading Association (as of 03/29/2018; US Senior Loans), S&P Dow Jones Indices (as of 03/29/2018; US Preferred Stocks)

ETFAUM: Bloomberg Finance, L.P., (as of 03/29/2018)

Average Daily Volume (3M ADV) Bond Trading: Bloomberg Finance, L.P. (as of 03/29/2018), EMTA (as of Q4 2017; EM Bonds), SIFMA (as of 03/29/2018; US Government Bonds, US Municipal Bonds, US MBS), S&P Dow Jones Indices (as of 03/29/2018; US Preferred Stocks)

Average Daily Volume (3M ADV) ETF Trading: Bloomberg Finance, L.P. (as of 03/29/2018)



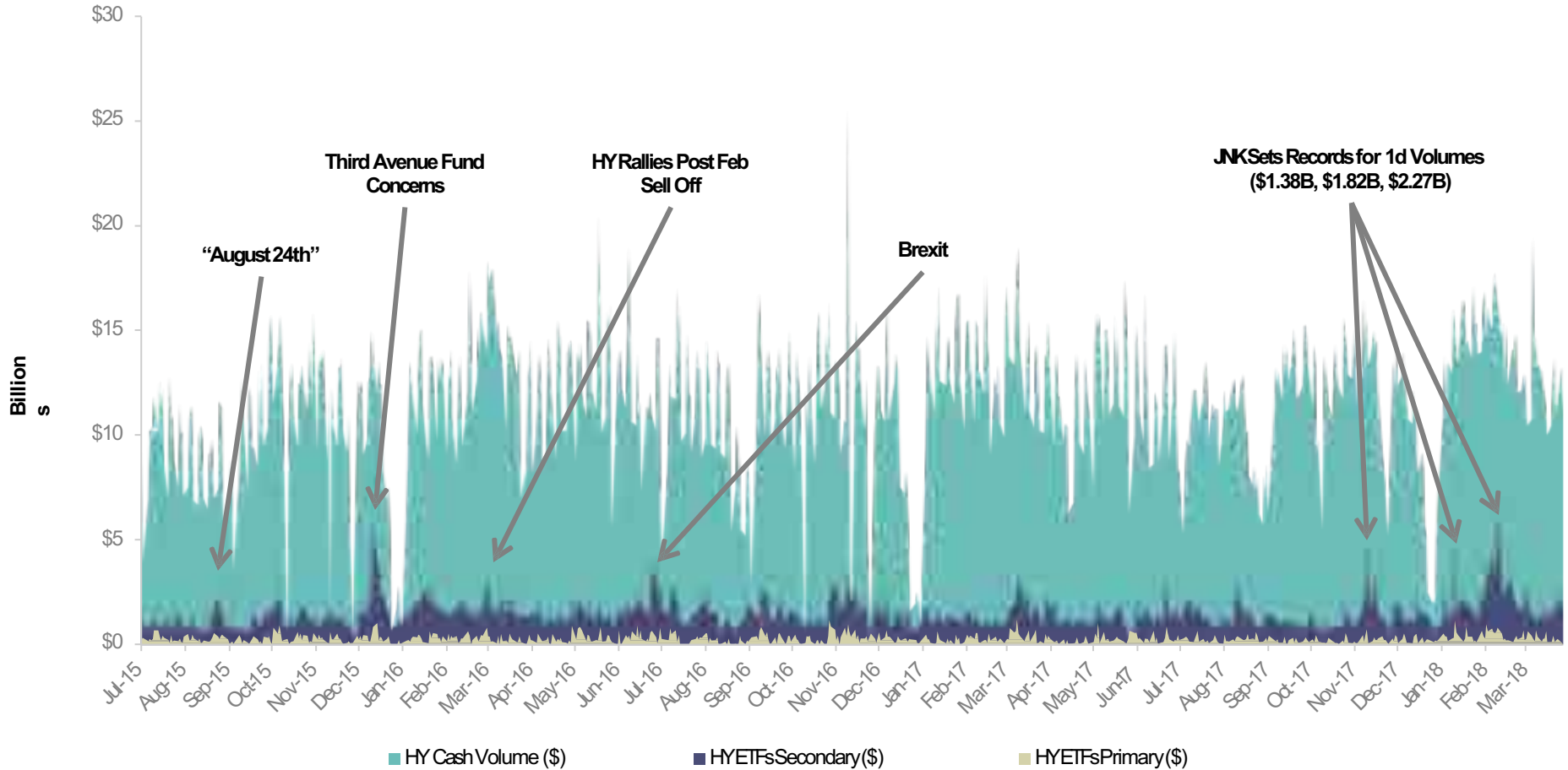
# The Case for Using ETFs

Application	Objective	ETF Solution
<b>Tactical Adjustments</b>	Over or underweight certain market segments based on short term outlook	ETFs represent virtually every asset class and can offer efficient vehicles for implementing a tactical idea.
<b>Transitions</b>	Maintain market exposure while searching for a new manager	Invest the proceeds of a manager liquidation in an ETF that seeks to track the appropriate benchmark until a manager has been selected.
<b>Fixed Income Duration &amp; Credit Adjustments</b>	Tweak duration and credit exposure to meet specified targets	Fixed Income ETFs can provide an efficient means to adjust duration and credit exposure.
<b>Cash Equitization</b>	Remain fully invested while maintaining liquidity	ETFs can be an attractive alternative solution to futures due to their transparency, lack of documentation and roll slippage. ETFs also may offer more transparency than swaps.
<b>Rebalancing</b>	Increase the speed and efficiency of rebalancing across the asset allocation	ETFs can make rebalancing more efficient due to their intraday trading capability.
<b>Asset Class Exposure</b>	Establish exposure to a difficult to reach market segment	There are a variety of ETFs which can provide exposure to difficult to reach asset classes.
<b>Liquidity Management</b>	Increase liquidity in overall asset allocation without changing allocation	Use ETFs for a given percentage of each asset class to help provide a liquidity buffer across the asset allocation.
<b>Portfolio Completion</b>	Fill any asset allocation holes without engaging a new investment manager	Use an ETF to help gain exposure to an asset class that is underrepresented in the asset allocation.
<b>Small Institutional Plans</b>	Implement desired asset allocation regardless of plan size	Aim to implement an asset allocation efficiently using ETFs. Advantages include no minimum fees and simplified rebalancing.
<b>Transfer of Assets</b>	Add portfolio liquidity by replacing individual bonds with Fixed Income ETFs or redeem Fixed Income ETFs for individual bonds	Fixed Income ETFs can be used to replace individual bonds within a managers' portfolio or exchanged for a list of bonds published by the ETF provider.

# ETF Liquidity Enhancement in US Credit

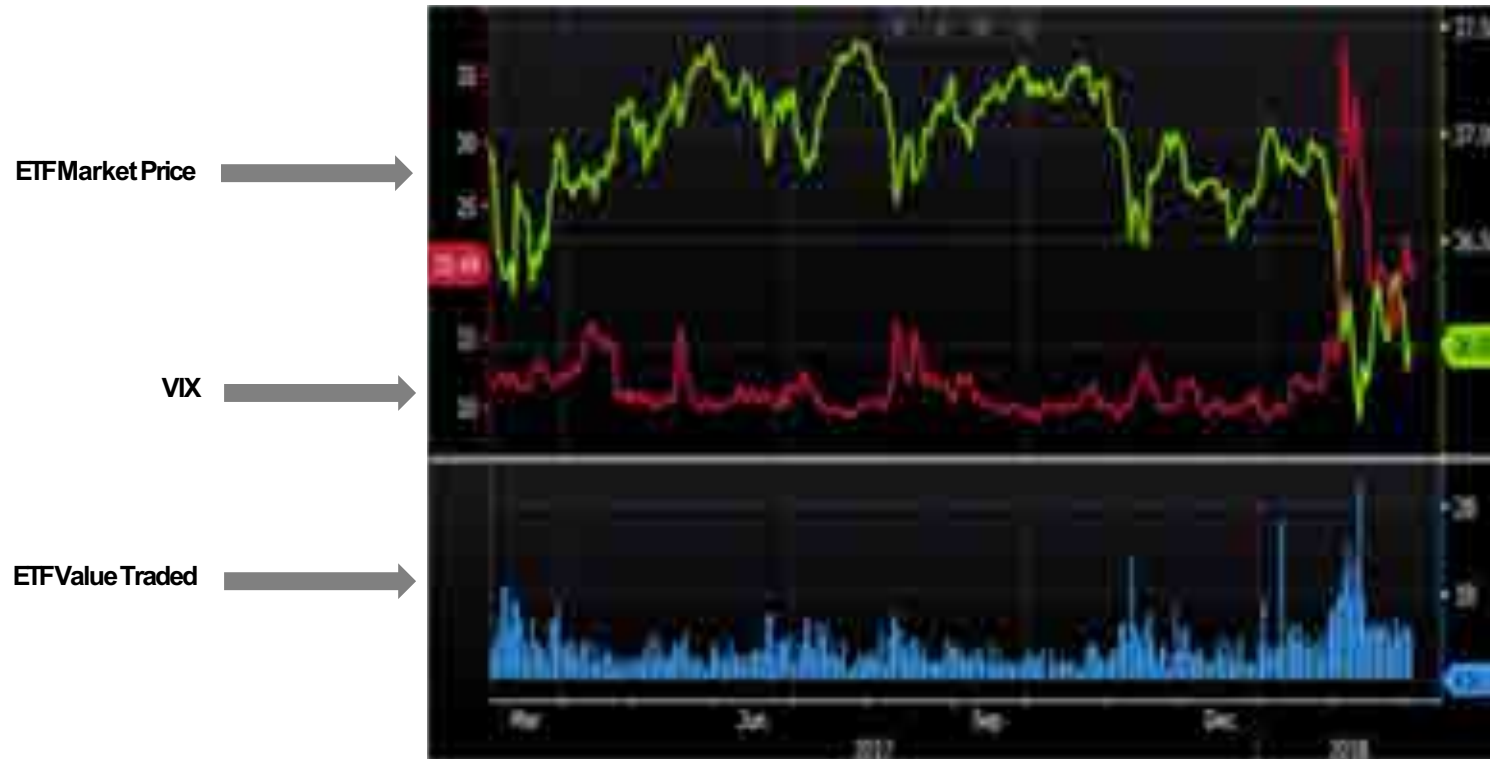
- During periods of high volatility, the High Yield ETF primary market activity is only a small percentage of overall High Yield cash bond trading
- High Yield ETFs have become a notable trading tool
- The secondary market volume is additive to the liquidity profile of the overall High Yield market

## HY Volume versus HYETF Primary & Secondary Market Activity



# ETF Liquidity During High Yield Sell-Off (February 7–11, 2018)

- JNKtraded \$7.3B the week of February 7-February 11. On February 9 JNKtraded \$2.27B, its largest trading day ever.
- JNKsaw \$1.7B of outflows for the week, part of a 13 straight day stretch of outflows.



Source: SPDR ETF Capital Markets Group, Bloomberg Finance, L.P. 03/01/2017–03/01/2018.  
Past performance is not a guarantee of future results.



# Investing Involves Risks

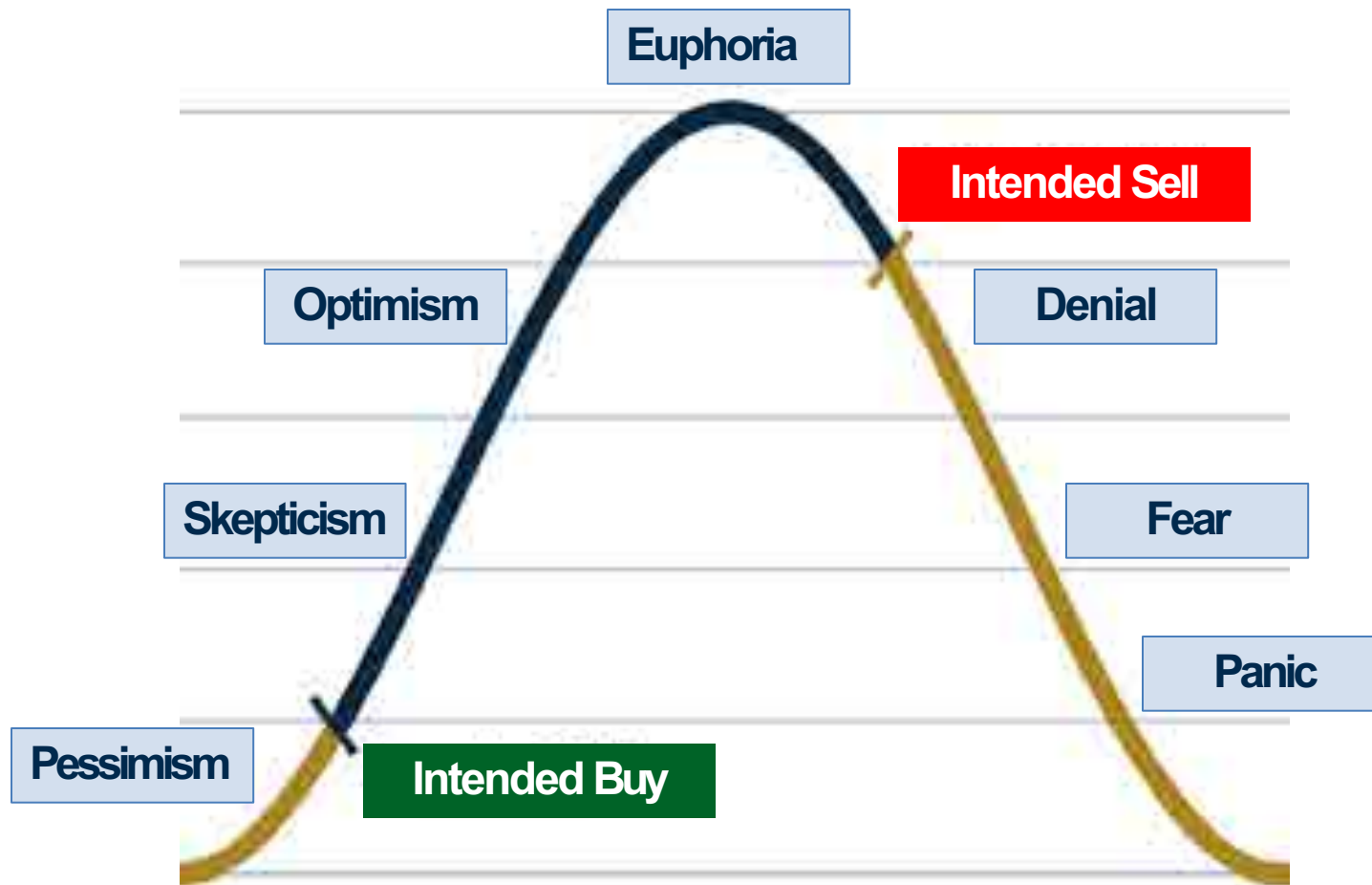
Blindly Reaching for the highest rate of return without understanding risk may lead to disaster.



BTS seeks to be in Box 1. Keep in mind that all investments entail risk. Managing risk is the key to long-term financial success.



## Seek To Participate In 80% Of Up Markets While Avoiding 80% Of Down Markets

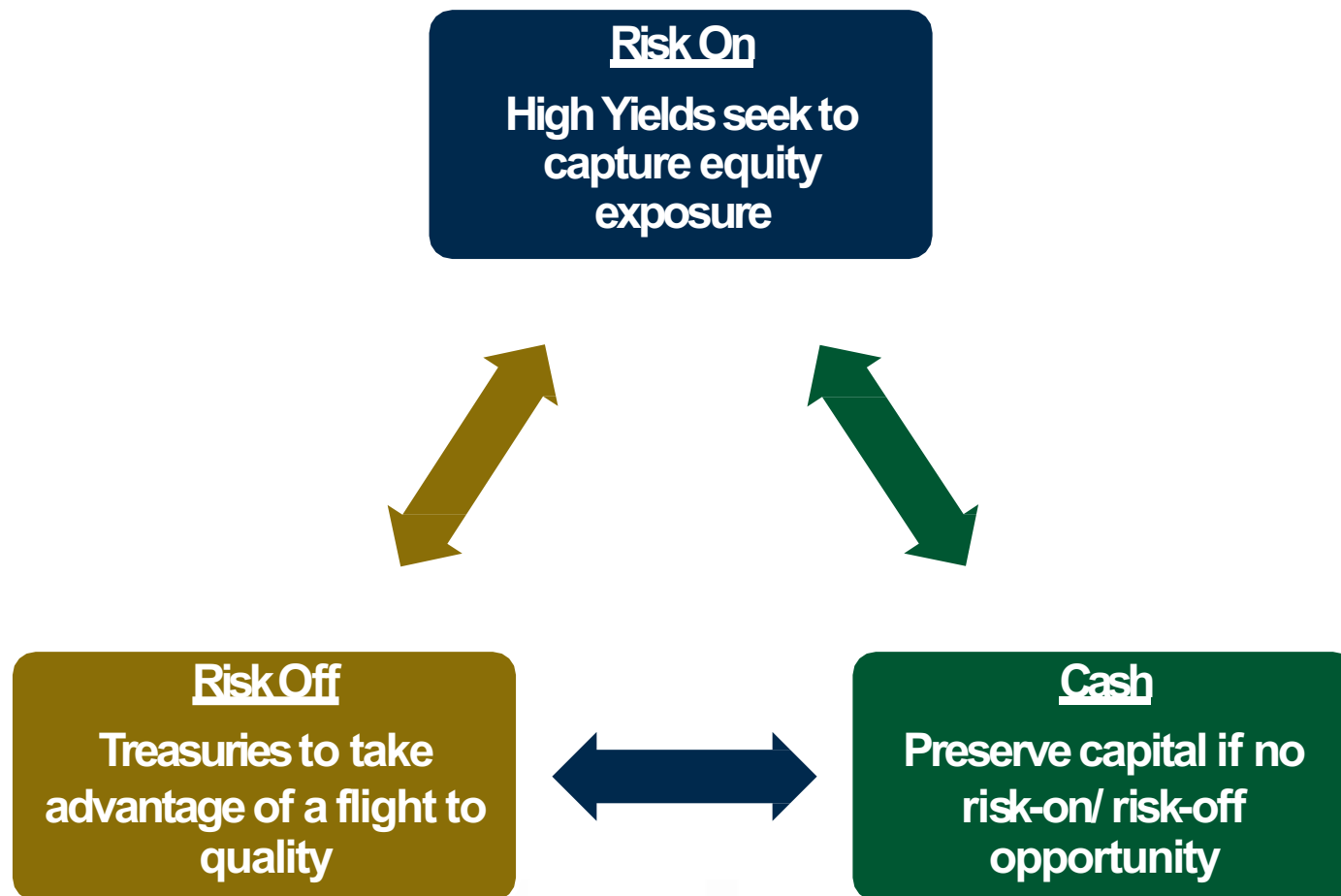






# Tactical Risk On / Risk Off Approach

Move 100% of Assets Between 3 Uncorrelated Asset Classes





# Looking To Be Where You Are

**High Yield Portfolios**  
(Est. 1981)

**Bond Asset Allocation Portfolios**  
(Est. 1996)

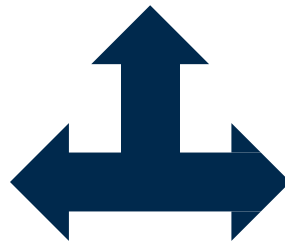
**Mutual Fund, VA, and Envestnet**

High Yield



Cash


High Yield



Cash

Treasuries

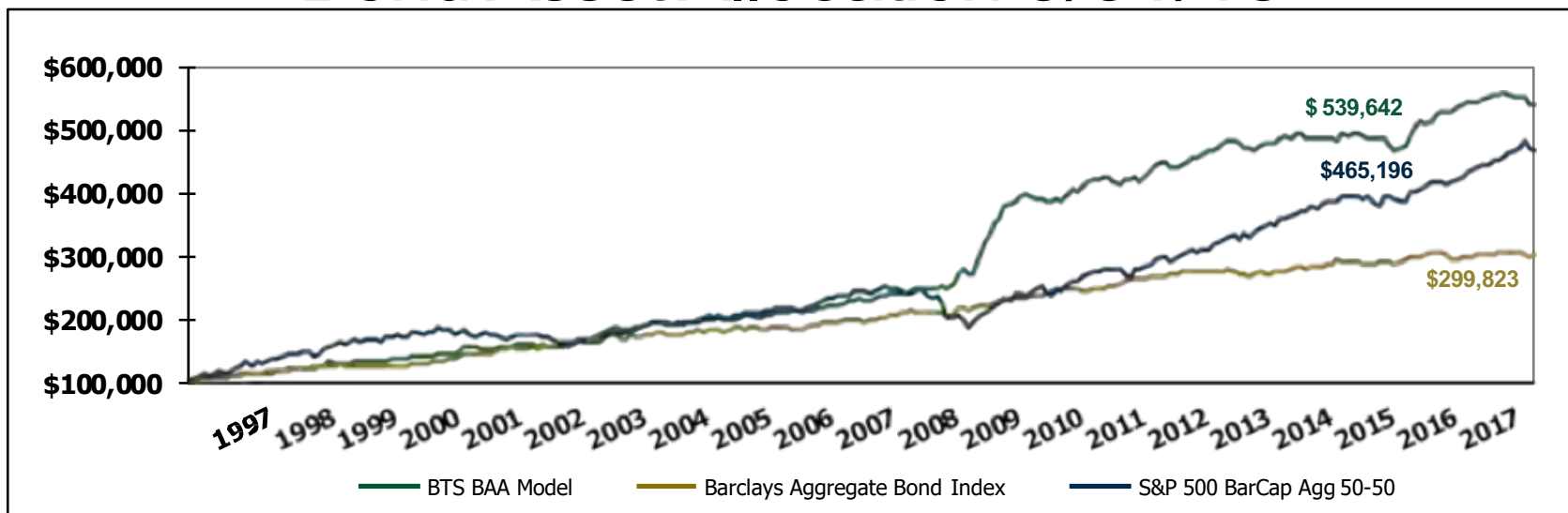
 <p>Mutual Fund</p> <ul style="list-style-type: none"> <li>• Non-Traditional Bond Strategy</li> </ul>	 <p>Variable Annuity</p> <ul style="list-style-type: none"> <li>• Non-Traditional Bond Strategy in VA Wrap</li> </ul>	 <p>Envestnet</p> <ul style="list-style-type: none"> <li>• SMA</li> <li>• UMA</li> <li>• Private Labeled at many BDs</li> </ul>
--	--	--



• Multiple Strategy Offerings



# Bond Asset Allocation 3/31/18

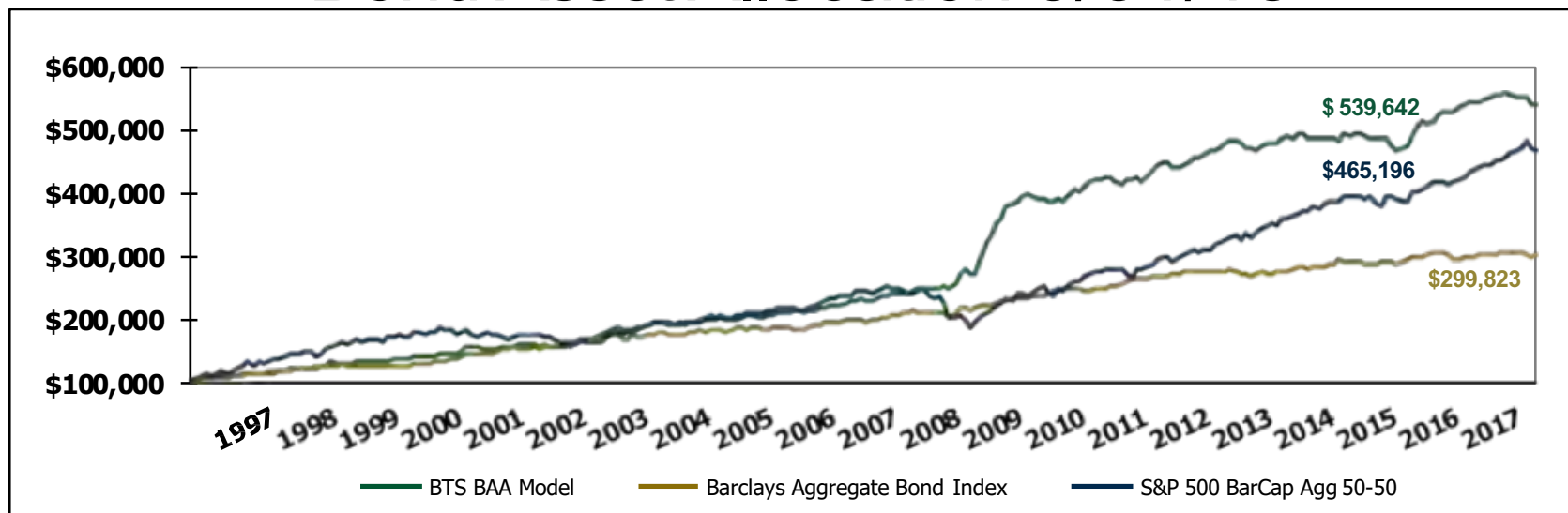


Model Performance Analysis	YTD	1Year	3 Years	5 Years	10 Years	Since Inception of BAA 9/1/1996
Bond Asset Allocation	-2.11%	-0.48%	3.29%	2.58%	8.41%	8.12%
Bloomberg Barclays Aggregate Bond Index	-1.46%	1.20%	1.21%	1.83%	3.64%	5.22%
S&P 500 BBgBarc Agg 50-50	-1.11%	7.48%	6.00%	7.53%	6.93%	7.38%

Results shown are net of fee Model performance results and do not necessarily reflect the performance any BTSclient actually attained. Specific Model performance details, including composite construction methods and important dates, as well as other key considerations and limitations are found on Slide 41 of this presentation and should be construed as being incorporated directly into this Slide 35. This presentation assumes a sophisticated audience. Other periods, including YTD or rolling returns, are available upon request.



## Bond Asset Allocation 3/31/18



Model Annualized Statistical Analysis Since Inception of BAA 9/11/96	Compound ROR	Standard Deviation	Downside Deviation	Alpha	Beta	Correlation
Bond Asset Allocation	8.12%	5.21%	1.88%			
Bloomberg Barclays Aggregate Bond Index	5.22%	3.42%	1.80%	6.18%	0.38	0.06
S&P 500 BBgBarc Agg 50-50	7.38%	7.59%	4.71%	6.07%	0.28	0.16

Results shown are net of fee Model Portfolio performance results and do not necessarily reflect the performance any BTScient actually attained. Specific Model performance details, including composite construction methods and important dates, as well as other key considerations and limitations are found on Slide 41 of this presentation and should be construed as being incorporated directly into this Slide 36. This presentation assumes a sophisticated audience. Other periods, including YTD or rolling returns, are available upon request.



# The Importance of Sequence of Returns

## Bond Asset Allocation through 12/31/2017

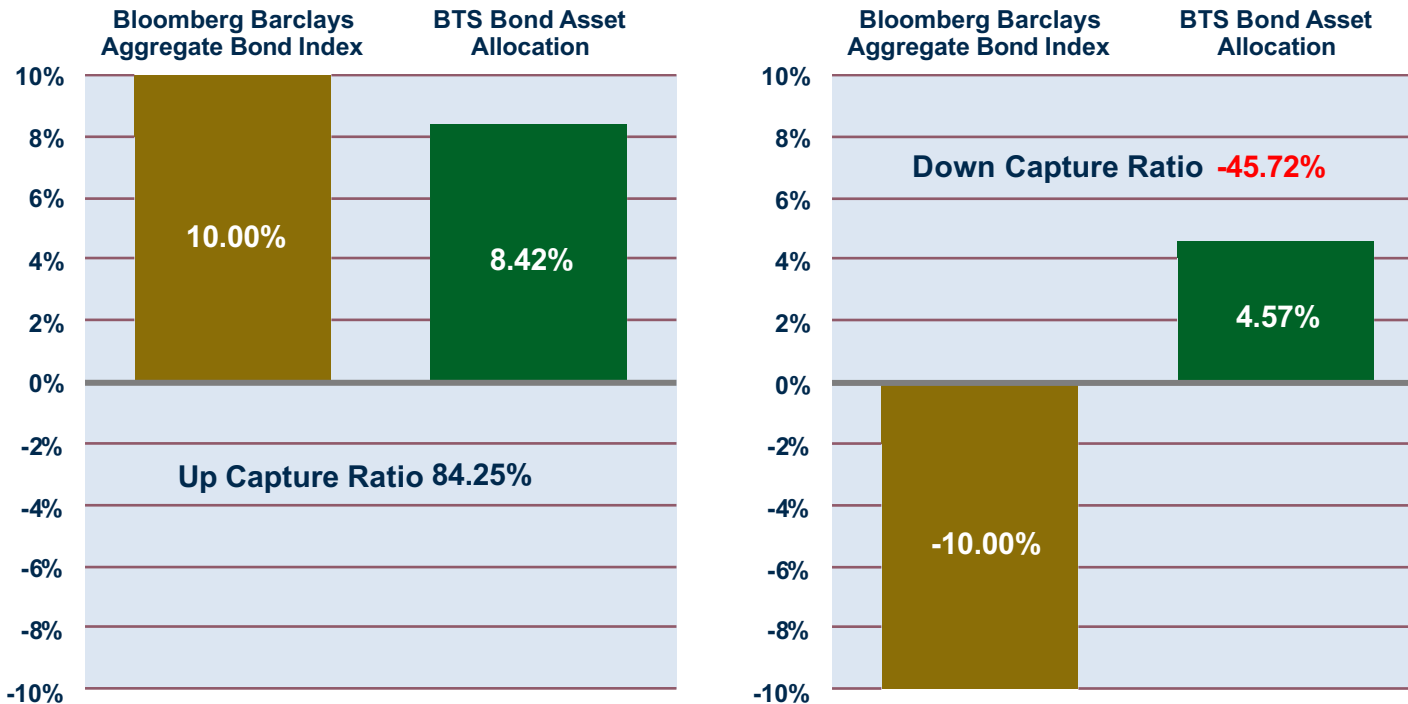
	1996*	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
BTS Bond Asset Allocation Model Performance	4.65%	8.30%	12.65%	5.70%	7.43%	8.93%	4.95%	14.64%	4.23%	3.48%	7.54%
Bloomberg Barclays Aggregate Bond Index	4.79%	9.68%	8.67%	(0.83)%	11.63%	8.42%	10.27%	4.11%	4.34%	2.43%	4.33%
S&P 500 & BBgBarc Agg. 50/50	9.56%	21.22	19.26%	10.02%	0.96%	(1.29)%	(6.25)%	16.17%	7.70%	3.70%	9.99%
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017*
BTS Bond Asset Allocation Model Performance	7.92%	12.72%	46.62%	4.08%	3.88%	9.18%	2.96%	1.33%	(3.45)%	14.66%	2.91%
Bloomberg Barclays Aggregate Bond Index	6.96%	5.24%	5.93%	6.56%	7.86%	4.23%	(2.02)%	5.94%	0.57%	2.66%	3.55%
S&P 500 & BBgBarc Agg 50/50	6.34%	(17.48)%	16.41%	11.36%	5.58%	10.21%	14.26%	9.77%	1.13%	7.29%	12.42%

Results shown are net of fee Model performance results and do not necessarily reflect the performance any BTS client actually attained. Specific Model performance details, including composite construction methods and important dates, as well as other key considerations and limitations are found on Slide 41 of this presentation and should be construed as being incorporated directly into this Slide 37. This presentation assumes a sophisticated audience. \*strategy started 9/11/96 through 12/31/17





## Up/Down Capture Ratio Converted to Total Return BTS Bond Asset Allocation vs. Bloomberg Barclays Aggregate Bond Index 9/11/96-3/31/18



**Up/ Down Capture Ratio Converted to Total Return (Model Performance):** If the portfolio generates positive returns while the benchmark declines, the portfolio's downside capture ratio will be negative (meaning it has moved in the opposite direction of the benchmark). If the portfolio's total return is the same amount as the benchmark, the upside capture ratio is 100%. If portfolio's return is 8% when the benchmark is up 10%, the Upside Capture Ratio is 80%. If the portfolio's return is 8% when the benchmark return is negative 10%, the Down Capture ratio is negative -80%. \*Results shown are net of fee Model Portfolio performance results and do not necessarily reflect the performance any BTS client actually attained. Specific Model performance details, including composite construction methods and important dates, as well as other key considerations and limitations are found on Slide 41 of this presentation and should be construed as being incorporated directly into this Slide 38. This presentation assumes a sophisticated audience. Other periods, including YTD or rolling returns, are available upon request.



## \$1,000,000 Hypothetical Comparison of \$50,000 Withdrawals Inflated By 3% Each Year Max Fees For BTS

Year	Withdrawal Amount	Bond Asset Allocation	Bloomberg Barclays Aggregate Bond Index	Bloomberg Barclays Aggregate Bond Index S&P 50-50
<b>Initial Investment</b>		\$1,000,000	\$1,000,000	\$1,000,000
1996	\$15,301			
1997	\$51,500			
1998	\$53,045			
1999	\$54,636			
2000	\$56,275			
2001	\$57,964			
2002	\$59,703			
2003	\$61,494			
2004	\$63,339			
2005	\$65,239			
2006	\$67,196			
2007	\$69,212			
2008	\$71,288			
2009	\$73,427			
2010	\$75,629			
2011	\$77,898			
2012	\$80,235			
2013	\$82,642			
2014	\$85,122			
2015	\$87,675			
2016	\$90,306			
2017	\$93,015			
<b>Total End Value</b>	<b>\$1,492,141</b>	<b>\$2,225,163</b>	<b>\$778,310</b>	<b>\$1,745,896</b>
	<b>Average Return</b>	<b>8.12%</b>	<b>5.35%</b>	<b>7.53%</b>
	<b>Downside Deviation</b>	<b>1.88%</b>	<b>1.80%</b>	<b>4.71%</b>



\*HYPOTHETICAL ILLUSTRATION: Investors cannot directly invest in an index and unmanaged index returns do not reflect any fees, expenses, or sales charges. The results portrayed use net of fee Model Portfolio performance figures and do not reflect the performance any BTS client actually attained. Specific Model performance details, including composite construction methods and important dates, as well as other key considerations and limitations are found on Slide 41 of this presentation and should be construed as being incorporated directly into this Slide 39. This presentation assumes a sophisticated audience.



## Slides 3 & 4 Performance Disclosure

**BTSHigh Yield Portfolio (HY)** performance reflects Model Portfolio returns from the BTSHigh Yield Portfolio (HY) since HY's inception on 1/2/1981 through 12/31/2017. Model Portfolio performance is defined here as applying BTS' actual asset class buy/sell signals to a composite of four high yield mutual funds and T-bills. The buy/sell signals used to calculate the Model returns since 6/24/1983 have been audited and the audited signal report is available upon request. BTSportfolios use money market funds, not T-bills; however, to calculate performance, T-bills are used as a surrogate for money market funds. The four high yield mutual funds were selected from Morningstar's universe of approximately twenty high yield mutual funds that have been in existence since the inception of HY. These four high yield mutual funds were selected because they are well-established and have been used with the program. These funds were selected with the benefit of hindsight and their names are available upon request. Because BTS did not select the specific mutual funds that clients used for HY during the model period, there are no assurances that these funds would have been or could have been used by each client in the HY portfolio. Depending on the specific high yield mutual funds or variable annuity subaccounts used, actual HY clients may have had investment results materially different from the results portrayed in the model.

The Model performance shown here of audited signals is for illustrative purposes only and does not portray actual client performance. The Model returns and assumed hypothetical investment of 100,000 made at inception reflect performance an investor would have obtained had its funds been invested in the manner described and do not reflect the actual trading or performance that any investor actually attained or could have attained. Certain assumptions have been made for modeling purposes and are unlikely to be realized. Results reflect generally rising securities markets and will fluctuate with economic conditions. No representation or warranty is made as to the reasonableness of the assumptions made or that all assumptions used in achieving the returns have been stated or fully considered. Changes in the assumptions would have a material impact on the Model returns presented.

Returns assume that all exchanges were timely. Delays of 2-3 days may occur in implementing an exchange signal and may affect performance. Mutual funds have their own expenses whose costs are borne by the clients. Returns include the reinvestment of dividends and capital gains but do not include possible sales charges, transaction fees, or custodial fees. Actual fees may vary depending on, among other things, the applicable fee schedule and portfolio size. BTS' fees are available upon request and also may be found in Part 2A of its Form ADV. Performance results are net of the maximum possible fee of 2.75%.

Selected Indices: Investors cannot invest directly in an index. S&P—A basket of 500 stocks that are considered to be widely held. The S&P 500 index is weighted by market value, and its performance is thought to be representative of the stock market as a whole; Bardays Capital Credit Index – Includes all publicly issued, fixed-rate, non-convertible investment grade corporate debt; the index is composed of both U.S. and Brady bonds; Barclays Capital Government Bond Index – Measures all publicly issued bonds issued by the U.S. government or its agencies with maturities of over one year. Volatility of the indexes is materially different from that of the portfolio. 6 Month CD- The Citigroup U.S. Domestic 6 Mo CDTR is an index created from a rotating sample of five banks and dealers surveyed daily on secondary market dealer offer rates for jumbo certificates of deposit. Bank CDs are FDIC insured.

Standard Deviation measures the degree of variation of returns around the average return; the higher the volatility, the higher the standard deviation.



## Model BAA Performance Disclosures

**BTS Bond Asset Allocation Portfolio (BAA)** performance reflects historical model returns since BAA's inception on 9/11/96, derived by applying BTS' actual buy/sell signals to a composite of four high yield mutual funds, four government bond funds and T-bills. The buy/sell signals used to calculate the historical model returns since 10/31/96 have been audited, and the audited signal report is available upon request. BTS portfolios use money market funds, not T-bills; however, to calculate performance, T-bills are used as a surrogate for money market funds. The four high yield mutual funds were selected from Morningstar's universe of approximately twenty high yield mutual funds that have been in existence since 1/1/81, the inception of BTS' High Yield Portfolio. These four high yield mutual funds were selected because they are well-established and have been used with the portfolio. The four government bond mutual funds are the four largest by total assets as of 12/31/07. These funds were selected with the benefit of hindsight and their names are available upon request. Because BTS does not select the specific mutual funds that clients use for BAA, there are no assurances that these funds would have been used. Depending on the specific mutual funds or variable annuity subaccounts used, actual clients may have had investment results materially different from the results portrayed in the model. The performance shown here of audited signals is for illustrative purposes only and does not portray actual client performance. The historical model returns presented reflect performance an investor would have obtained had its funds been invested in the manner described and do not reflect actual trading or performance that any investor actually attained.

Certain assumptions have been made for modeling purposes and are unlikely to be realized. No representation or warranty is made as to the reasonableness of the assumptions made or that all assumptions used in achieving the returns have been stated or fully considered. Changes in the assumptions may have a material impact on the historical model returns presented. Returns assume that all exchanges were timely. Delays of 2-3 days may occur in implementing an exchange signal and may affect performance. Mutual funds have their own expenses whose costs are borne by the clients. Returns include the reinvestment of dividends and capital gains but do not include possible sales charges, transaction fees, or custodial fees. Actual fees may vary depending on, among other things, the applicable fee schedule and portfolio size. BTS' fees are available upon request and also may be found in Part 2A of its Form ADV. Performance results are net of the maximum possible fee of 2.75%. The Hypothetical Cumulative Growth Chart reflects the growth of a hypothetical \$100,000 in a given investment over time. The value is equal to \$100,000 at inception, and subsequent month-end values are calculated by multiplying the previous month's index by 1 plus the current month rate of return. 1996 returns are for partial year only, beginning September 11, 1996 and ending December 31, 1996.



## Slide 13 Sectors Defined

HYCorp - The Barclays U.S. Corporate High-Yield Index measures the market of USD-denominated, non-investment grade, fixed-rate, taxable corporate bonds.

Securities are classified as high yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB+ or below, excluding emerging market debt.

IG Corp - The U.S. Corporate Index is a broad-based benchmark that measures the investment grade, U.S. dollar-denominated, fixed-rate, taxable corporate bond market. It includes USD-denominated securities publicly issued by U.S. and non-U.S. industrial, utility, and financial issuers that meet specified maturity, liquidity, and quality requirements.

MUNI - The U.S. Municipal Index covers the USD-denominated long-term tax exempt bond market. The index has four main sectors: state and local general obligation bonds, revenue bonds, insured bonds, and prerefunded bonds.

TIPS - BofA Merrill Lynch US Inflation-Linked Treasury Index is an unmanaged index comprised of U.S. Treasury Inflation Protected Securities with at least \$1 billion in outstanding face value and a remaining term to final maturity of greater than one year.

USGov't - The U.S. Government Index is comprised of the U.S. Treasury and U.S. Agency Indices. The U.S. Government Index includes Treasuries (public obligations of the U.S. Treasury that have remaining maturities of more than one year) and U.S. agency debentures (publicly issued debt of U.S. Government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. Government). The U.S. Government Index is a component of the U.S. Government/Credit Index and the U.S. Aggregate Index.



## Important Risk and Other Considerations

Investments are subject to risk and loss of capital is always possible.

Investing in fixed income securities carries specific risks that must be considered, including credit risk, which is the risk that the issuers of the bonds owned by a fund may default (fail to pay the debt that they owe on the bonds that they have issued), prepayment risk, which is the risk that the issuers of the bonds owned by a fund will prepay them at a time when interest rates have declined, and interest rate risk, which is the risk that the market value of the bonds owned will drop and fluctuate as interest rates go up and down. High yield bonds have other specific risks including a higher default risk and potential liquidity risk greater than other types of bonds.

Investing in small cap stocks involves additional risks, including operating risk and liquidity risk. Investing in international and emerging markets stocks involves additional risks, including political risk and currency risk. Investing in inverse mutual funds, which are designed to profit from declining securities prices, involves certain risks that may include increased volatility due to the funds' possible use of short sales of securities and derivatives such as options and futures. The use of leverage by a mutual fund increases risk of the fund. The more a fund invests in leveraged instruments, the more the leverage will magnify any gains or losses on those investments. Bonds are subject to interest rate risks. Bond prices generally fall when interest rates rise.

BTS Asset Management is affiliated with BTSSecurities Corporation. Securities offered through BTSSecurities Corporation and other FINRA member firms. Advisory services are offered through BTS Asset Management.



## Definitions for Frequently Cited Indices

Bloomberg Barclays Aggregate Bond Index is comprised of government securities, mortgage-backed securities, asset-backed securities and corporate securities with maturities of one year or more to simulate the universe of bonds in the market.

S&P 500 BBgBarcAgg 50-50 is a blended benchmark made up of 50% S&P 500 TR and 50% Barclays Capital Aggregate Bond Index and uses indexes to represent a stock/bond allocation that a conservative or moderate investor might have.

S&P 500 includes 500 leading companies in leading industries of the U.S. economy and is a proxy for the total stock market.

The Credit Suisse High Yield Index is designed to mirror the investable universe of the \$US-denominated high yield debt market.

# Thank You!

Phone: (800) 343-3040

[www.btsmanagement.com](http://www.btsmanagement.com)