



# HARVEST

## INVESTMENT SERVICES

*"Harvest Gains and Limit Losses"*

## AlphaSolutions Reduced Volatility Bull-Bear

*An investment model based on trending strategies coupled with market analytics for downside risk control*

### Portfolio Goals

**Primary:** Seeks long term growth of capital by investing in high-ranked equity classes during bull markets.

**Secondary:** Seeks to reduce volatility during bear markets by having no equity positions and being fully invested in cash and bond positions.

### Suitability

Investors that seek long term capital appreciation.

Investors that wish to minimize volatility and risk by utilizing an active approach to portfolio management.

Investors comfortable with investments in common stock and concentrated classes of the domestic and global market.

### Investment Strategy

We analyze a number of technical indicators to determine if the equity market is in a bull or bear market. During a bull market as measured by our bull-bear indicator, we will be fully invested in equity holdings.

After the determination that the equity market is in a bull market, we then evaluate numerous equity classes and select the ones that are ranked highly, relative to other equity classes and invest in them for that quarter. During a continued bull market we examine the relative strength of numerous equity classes and reallocate the holdings on a quarterly basis

We evaluate the bull-bear indicator weekly to assess if we should maintain our equity exposure or if the market has entered a bear market and we should take risk control measures.

### Risk Control Measures

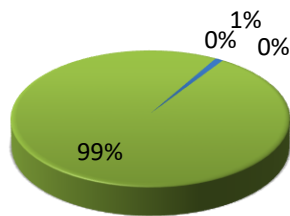
We utilize an active approach to manage risk. We employ numerous trending strategies, referred to as the bull-bear indicator, to evaluate and determine on a weekly basis if the market has entered a bear market. When the bull-bear indicator determines that the equity market has entered a bear market we then reallocate the equity positions into cash and bond holdings. We examine the bull-bear indicator throughout the quarter to determine if we are to maintain a defensive position by investing in cash and bonds.

Our trend evaluation helps to minimize or avoid losses during precipitous bear markets by removing equity allocation and maximizing bond allocation during bear markets. Bond positions historically have lower volatility and higher dividend payouts than equity holdings.

## Current Trend Status



## Allocation



- Cash
- Bonds
- Domestic Equity
- Global / International Equity

## Portfolio Characteristics

Cost-effective diversification is primarily derived from the use of Exchange Traded Funds which may track an entire index or sector without exposure to a smaller group or even an individual security.

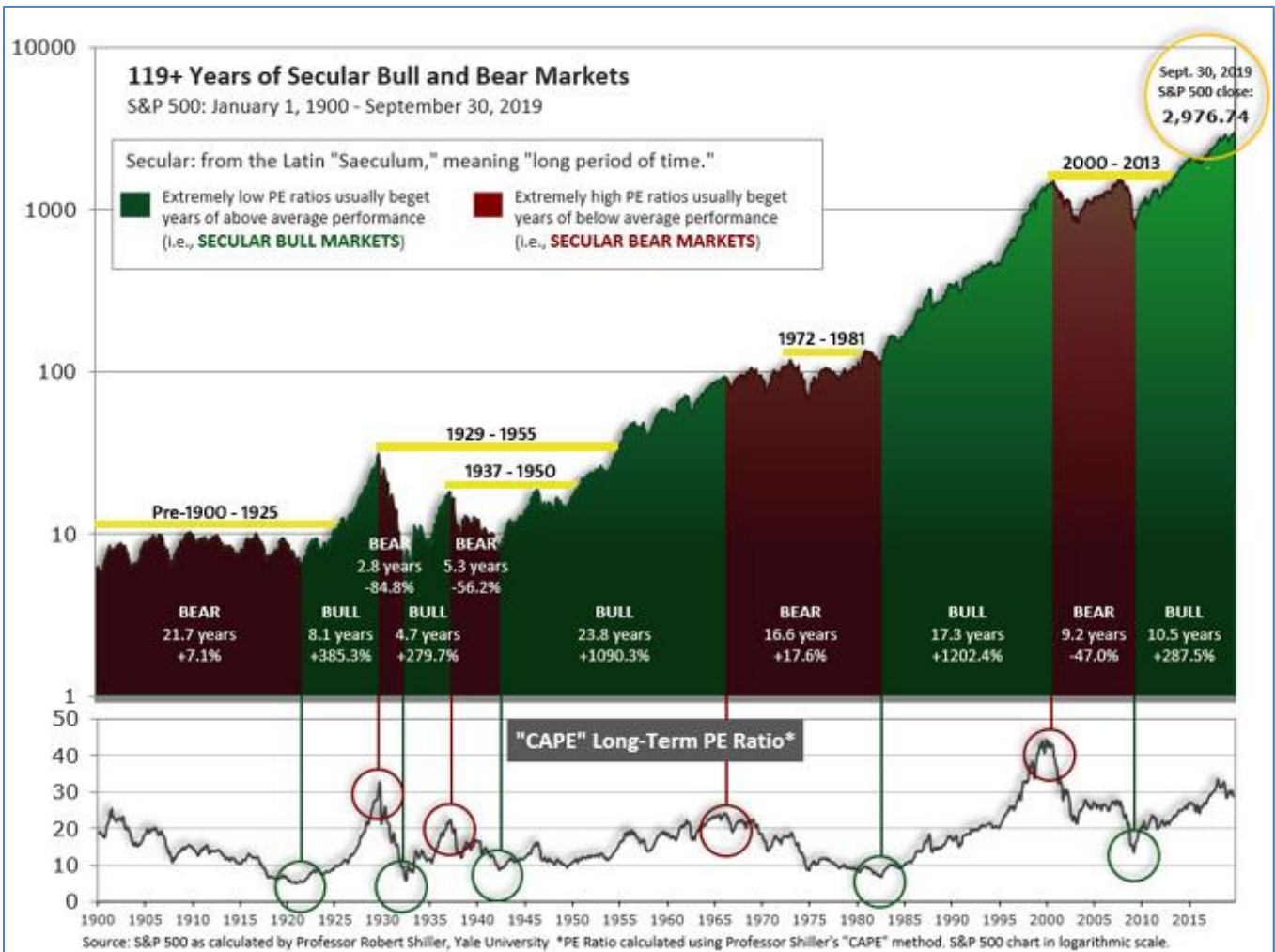
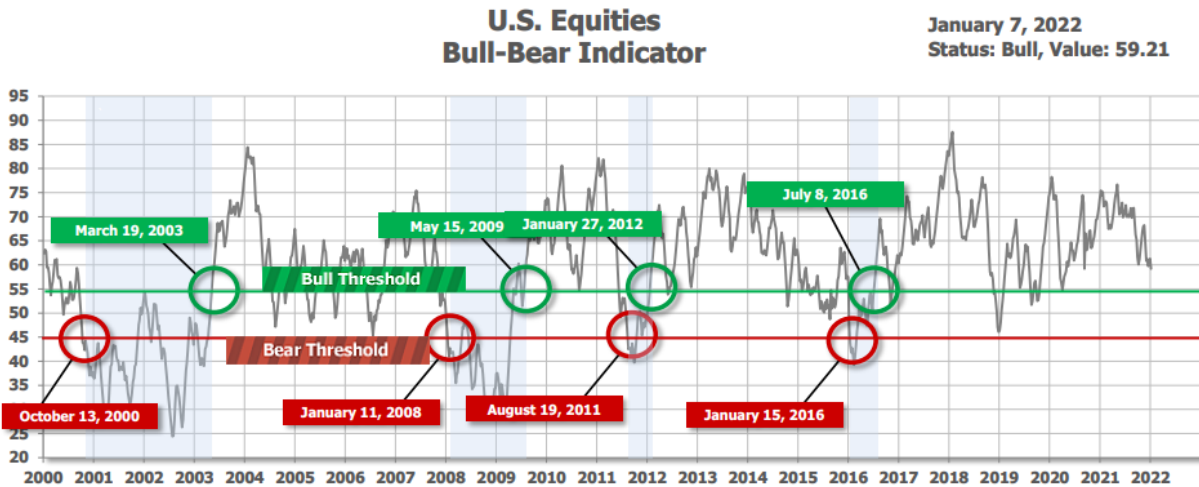
Each portfolio is managed within a single separate account and is not part of a pooled portfolio.

Technical analysis is used to minimize risk and asset class rotation based on relative performance to potentially enhance returns.

<b>Cash</b>	<b>1.0%</b>	
	Cash	1.0%
<b>Bonds</b>	<b>0.00%</b>	
	AGG	0.0%
<b>Domestic Equity</b>	<b>99.0%</b>	
	FTC	20.0%
	QQQ	20.0%
	FRI	20.0%
	SPY	20.0%
	DIA	19.0%
<b>Global / International Equity</b>	<b>0.0%</b>	
	FEM	0.0%
	FDT	0.0%

# Market and Asset Class Overview

In the Reduced Volatility Bull-Bear model we utilize the Bull-Bear indicator to determine if the equity market is in a bull or bear market. The Bull-Bear indicator utilizes a number of market derived ratios, such as, the ratio of advancers to decliners and the number of companies hitting 52 week highs relative to the number of companies hitting 52 week lows. The seven calculations that go into making the Bull-Bear Indicator are then weighted and combined into a single value.



There are a number of methods to implement a global equity class investment strategy. Generally, equity class investing is based on the relative strength or performance of stocks, sectors, asset styles or asset classes relative to the performance of a benchmark, an index or an industry. Investments are usually made in the highest ranking classes and then reallocated on a regular basis.



Figure 1: When market is trended in

The AlphaSolutions Reduced Volatility Bull-Bear strategy evaluates the relative strength of many areas of the equity market and invests in the strongest major classes of the global market. The chart below shows an example of the relative strength of numerous asset styles and classes evaluated relative to the performance the Russell 3000. As an example, the strongest positions we have highlighted and would invest in for the quarter, unless our Bull-Bear indicator signals a bear market and then we would invest in cash and bonds positions. We would analyze the trend of the market to determine the equity exposure and the relative strength of the equity classes to determine investment holdings.

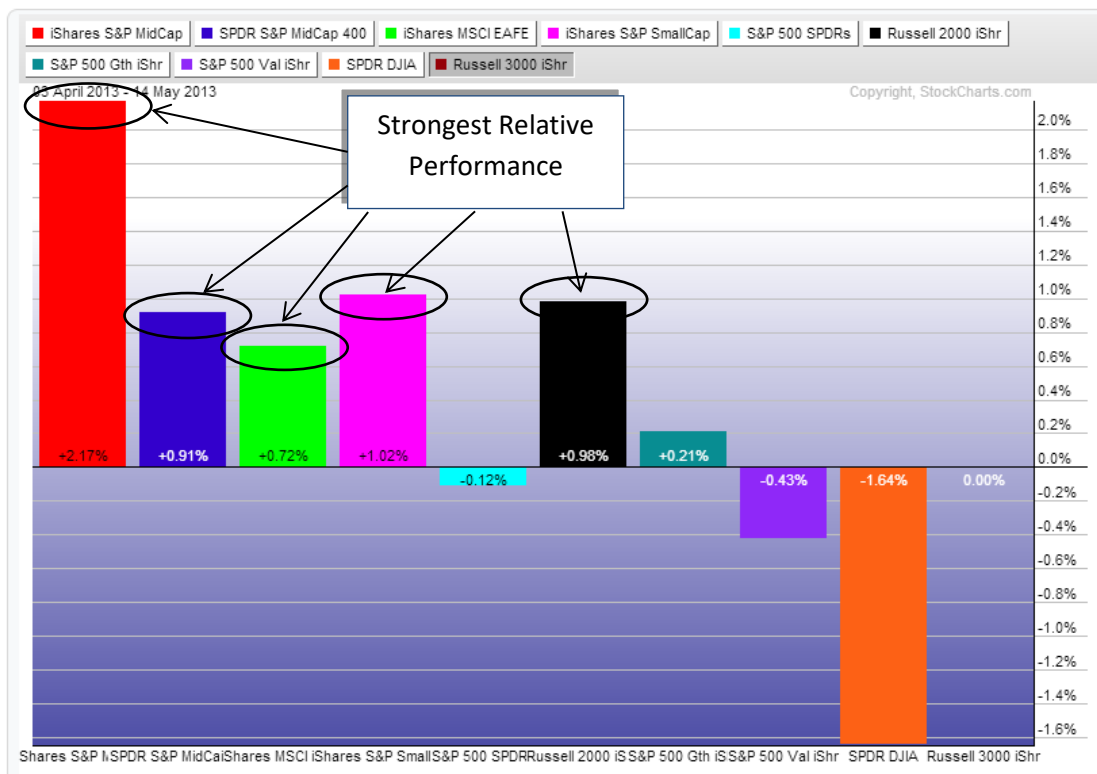
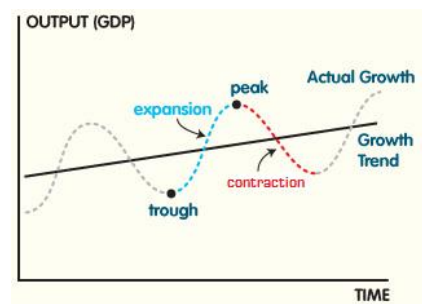


Figure 2: Relative Performance of Equity Classes. This is just a partial list of equity classes reviewed.

The idea behind asset class rotation investing is that not all the asset classes perform similar or as well during different periods of the economic cycle. For example, during a period where international sales are weak due to weak international markets, small cap's may outperform since typically a smaller percentage of their sales come from international markets.

In addition, the relative performance of an asset class may continue for a period of time because investors will invest in stronger sectors and avoid the weakest areas of the market.



## Market and Reduced Volatility Bull-Bear Strategy in 2009

One additional example that can help explain the Bull-Bear strategy is to examine what transpired in 2009. The first quarter of 2009 the market trended lower in a bear market from the great recession and hit a low on March 6<sup>th</sup>. After the market hit its low on March 6<sup>th</sup> it turned and trended in a bull market for the remainder of the year, ending the year higher.

For the first quarter of 2009 our technical trending strategy signaled to continue a risk off approach because the market was trending in a bear market. The Reduced Volatility Bull-Bear Strategy invested in more conservative bonds and cash positions during the first quarter of 2009. On March 15<sup>th</sup>, our technical trending signal crossed into bullish territory and we invested into the above average asset classes which amounted to five positions. For the third quarter our technical trending strategy signaled bull market and we continued our risk on approach and invested in the above average asset classes, which was eight positions. Lastly, for the fourth quarter our technical trending strategy signaled bull market and we invested in the above average asset classes, which for the fourth quarter was nine positions.




			
	1 <sup>st</sup> Qtr - 2009	2 <sup>nd</sup> Qtr - 2009	3 <sup>rd</sup> Qtr - 2009
	Fixed Income & Cash	MidCap Growth	MidCap Growth
		Large Cap Tech (NDX)	LargeCap Tech (NDX)
		LargeCap Growth	SmallCap Blend
		LargeCap Blend	MidCap Blend
			MidCap Value
			SmallCap Growth
			SmallCap Value
		Basic Materials	Real Estate
			Basic Materials
			Emerging Markets
			Developing Int'l Markets
			Developing Int'l Markets
Russell 3000 Index			

Table 1: 2009 Technical Market Signals and Reduced Volatility Bull Bear Investments

Past performance is no guarantee of future results. Information provided in this report is for educational and illustrative purposes only and should not be construed as individualized investment advice. The investment or strategy discussed may not be suitable for all investors. All investments involve risk although our rules based investment process utilizes downside risk controls, loss of principal can still occur. Principal values and investments returns are neither guaranteed nor issued by, guaranteed by, or obligations of a bank, savings and loan, or credit union; and are not insured or guaranteed by the FDIC, SIPC, NCUSIF or any other agency.

Current holdings are subject to change at any time without notice. In addition to the normal risk associated with equity investing, investments in small and mid-cap companies are narrowly focused investments that exhibit higher volatility and are less readily marketable than investments in larger companies. Also, international investments involve special risk consideration, which includes currency fluctuations, lower liquidity, economic and political risk. The S&P 500 Index is an unmanaged group of securities considered to be representative of the stock market in general, and its performance is not reflective of the performance of any specific investment. Investments cannot be made directly into an index.

1 Returns are through December 31, 2021. Net returns reflected after deducting portfolio management fee of .065, applicable to \$100,000 - \$499,999 account size. Management fee will vary for accounts that are less than or greater this range. Individual performance may vary depending upon the timing of contributions and withdrawals. Historical returns data are calculated using data provided by sources deemed to be reliable, but no representation or warranty, expressed or implied, is made as to their accuracy, completeness or correctness. This information is provided "AS IS" without any warranty of any kind. All historical returns data should be considered hypothetical. All AlphaSolutions rules based managed models have been back tested over multiple market cycles to prove the validity and reliability of the rules based strategy. Historical back tested returns were based on the use of Ishares ETFs; actual ETFs chosen may differ from the use of Ishare ETFs, past and future returns may be higher or lower.

Additional Definitions: The Compound Annual Growth Rate represents the annualized growth rate of an investment over a specified period of time. The Maximum Drawdown represents the greatest peak to trough decline over the life of an investment. Capture Ratio is a measure of the investment performance in periods when the benchmark has positive/negative returns. It tells you what percentage of the up/down market, as represented by the benchmark return, was captured. Standard Deviation is a statistical measurement of dispersion from an average, which, for an investment, depicts how widely the returns varied over the time period indicated. Alpha is an indication of how much an investment outperforms or underperforms on a risk-adjusted basis relative to its benchmark. Beta is a measure of price variability relative to the market. Sharpe Ratio is a measure of excess reward per unit of volatility.

Advisory Services offered through Harvest Investment Services, LLC, a Registered Investment Advisor.