AlphaSolutions Blended Bull/Calendar

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

**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 a bear markets by utilizing risk control measures.

**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 are to maintain our equity exposure or if the market has entered a bear market and risk control measures should be taken instead.

**Risk Control Measures**

We utilize an active approach to manage risk. We employ numerous strategies to evaluate and determine on a weekly basis if the market has entered a bear market. Specifically, when the bull-bear indicator determines that the equity market has entered a bear market we reallocate the equity positions into cash and bond holdings and then examine calendar dates that coincide with the current bear market to determine what dates have historically been profitable to invest in.

Generally, there are a total of 12-14 identified periods per year, which typically range from 6-8 market days long that have historically been characterized with the highest probability of profitable. During these identified periods we will invest in the equity market, which comes out to approximately 28% of the bear market period.
An investment model that invests in equity asset classes that are outperforming the broad market when the market is trending higher and utilizes downside risk by investing in fixed income when the market trends lower. During a bear market the strategy will briefly invest in the equity market to take advantage of certain calendar events that historically have outperformed.
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. s and New Years and also a number of days just before and after the quarterly earnings season.

![Bull-Bear Indicator](chart)

Note: The Bull/Bear Indicator value is updated daily, but Bull/Bear status changes are based on weekly close data. The chart above is updated weekly.

119+ Years of Secular Bull and Bear Markets

SECULAR BULL MARKETS

SECULAR BEAR MARKETS

"CAPE" Long-Term PE Ratio

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.

The AlphaSolutions Blended Bull/Calendar 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 bond 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.

The idea behind asset class rotation investing is that not all the asset classes perform similar or as well during various 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.
One additional example that can help explain the Bull/Calendar 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 6th. After the market hit its low on March 6th 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 Bull/Calendar Strategy invested in more conservative bonds and cash positions during the first quarter of 2009. On March 15th, 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.

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<td>Fixed Income &amp; Cash</td>
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<td>LargeCap Growth</td>
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Table 1: 2009 Technical Market Signals and Bull/Calendar Investments
During periods that our bull-bear indicator has identified that the market is in a bear market, the AlphaSolutions Bull/Calendar strategy will then invest predominately in money market and bond holdings. In conjunction with taking a defensive allocation, the strategy examines the calendar dates that academics and researchers have long-established and statistically-validated tendencies of the equity market to produce higher than average returns. For example, the week between Christmas and New Years and also a number of days just before and after the quarterly earnings season.

Generally, there are a total of 12-14 periods per year, which typically range 6-8 market days long that have been historically been identified with the highest probability of profitable. During these identified periods we will invest in the equity market, which comes out to approximately 28% of the bear market period.

The chart below is an example of the calendar dates that have been identified as investable periods over the past twelve months. The strategy would invest on those days only when the bull-bear indicator has signaled a bear market.

![Calendar](image)

**Figure 4: Trailing One-Year chart illustrating periods in or out of the market**

In summary, the combination of minimizing risk during a bear market and by investing in the equity market during identified investment periods within the bear market may allow some market participation while assuming much risk. The strategy of utilizing historical data is not perfect and there may be trades or several trades that lose money.
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 then 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 September 30, 2022. Net returns reflected after deducting management fee of 0.65, 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 Ishare 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.