HARVEST
INVESTMENT SERVICES
"Harvest Gains and Limit Losses"

AlphaSolutions Tactical Response Model

An investment model that utilizes Artificial Intelligence to identify market trends for growth and downside risk controls

Portfolio Goals

Primary: Seeks long term growth by investing in major equity indices when they are trended in or are advancing.

Secondary: Seeks to reduce market volatility by reducing or eliminating investments when major indices are trended out.

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 investing in common stock.

Investment Strategy

We employ technical analysis that includes the combination of moving averages with AI Neural Network predictive tools to analyze market trends. The combination of these two technical analytical tools analyze the trend of five major domestic indices to determine if a risk on or risk off investment approach should be taken. Risk on or risk off is determined for each index independently by examining the predicative trend relative to its current trend.

When the combined predicative trend crosses over or is above the actual trend then that index is trended in and we would invest twenty percent in that index by utilizing an Exchange Traded Fund (ETF). There will be periods when each index is trended in and the strategy is fully invested. There will be market cycles when some indexes are trended in, while others are trended out and when this occurs the strategy will be partially invested. Lastly, there will be volatile periods when the strategy has no equity exposure and is invested fully in fixed income.

Risk Control Measures

We utilize an active tactical approach to minimize downside risk, unlike a traditional buy and hold approach that stays fully invested regardless of market volatility or losses. The AlphaSolutions TR Strategy minimizes risk by taking a risk off approach by liquidating equity holdings that trend out. After we liquidate that position the funds will remain in cash until that index bottoms, turns, and trends back in.

Following the trends by liquidating equity positions to hold cash while waiting for better market conditions helps minimize or even avoid large losses during bear markets.

AlphaSolutions Tactical Response Model Overview

The AlphaSolutions TR strategy evaluates the trend of five major domestic indices, the S&P 500, the Dow Jones Industrial Average, the Nasdaq 100, MidCap and SmallCap stock indices.

An illustration of the trend, when an index trends in and when it trends out, is shown below to provide an example of the trend system that TR utilizes. 2018 was an unusual year in the market where the year started off strong, was followed by a sell off and then a recovery that led to new highs but ended the year negative after a sharp selloff.

For illustrative purposes the beginning few months of 2018 is shown below utilizing the S&P 500 (SPY ETF) with the trends and the trade signals shown. The S&P 500 is trended in when the green trend line is above the red trend line. During the periods when the S&P 500 is trended in, the strategy would invest in the SPY ETF until the it trends out. When that position trends out we would sell the position, remain in cash, and wait for it position to trend back in.

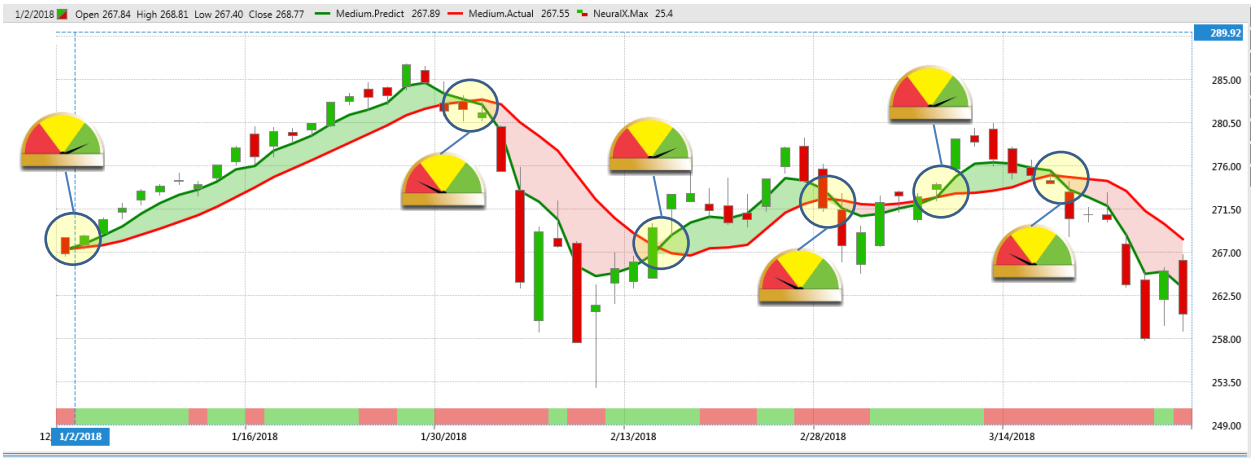
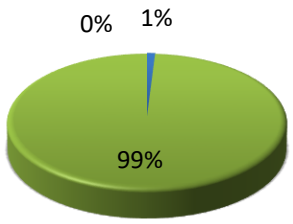


Figure 1 S&P 500 1/1/2018 – 3/30/2018

When the trend is not clearly marked we consider the trend in the yellow zone or in a cautionary trend, where it is not clearly trended in or out. When this happens, we often utilize a trailing stop on the position, which will minimize down-side risk while providing for upside potential and for the position to trend in. In addition, when the position is trended out and is starts to trend back in, but the trend is not clearly marked we would slowly reinvest in that position by not fully purchasing the position as to not be whipsawed if market conditions do turn and the trend is not very strong.

Allocation



Cash

Bonds

Domestic Equity

Portfolio Characteristics

Cost-effective diversification is primarily derived from the use of Exchange Traded Funds which track an entire index. These ETF's have exposure to many positions, often greater than a hundred positions.

Technical analysis is used to maximize growth and to minimize risk.

Each portfolio is managed within an individual's own separate account and is not part of a pooled portfolio.

Universe of Indices: S&P 500, the Dow Jones Industrial Average, the Nasdaq 100, MidCap and SmallCap stock indices. Maximum investment in any one index will be 20%.

Current Holdings as of 10/1/2019

Cash		
Cash	1%	MoneyMarket
Domestic Equity		
DIA	20%	SPDR Dow Jones Industrial Average ETF Trus
MDY	20%	SPDR S&P MidCap 400 ETF Trust Unit Ser 1 St
QQQ	20%	Invesco QQQ Trust Unit Ser 1
SPY	20%	SPDR S&P 500 ETF Trust Tr Unit
IWM	19%	iShares Trust Russell 2000 ETF

AlphaSolutions Tactical Response Recent Example

During the third quarter of 2018 the market reached new highs, our TR indicator was trended in for most of that period, however, there were brief periods where the trend was yellow. During these periods we would watch the trend closely and may put trailing stops limit down-side risk while allowing for the position to rebound if market conditions improve. The market then came under tremendous volatility in the fourth quarter when the market experienced a sharp decline. The TR trend trended out in early October until early November.

In November and early December the market was range bound and trading was choppy. When the market sold off in mid-December the Tactical Response trend trended out with the green trend line moving below the red trend line; therefore, we placed a trailing stop on the ETF. Shortly afterwards the trailing stop went off, the position was sold and remained in cash while the market continued to sell off. The market bottomed out on Christmas eve and then started to reverse some of its losses, when in early January the TR trended back in and we began to make buy purchases. January was a strong month for the market.

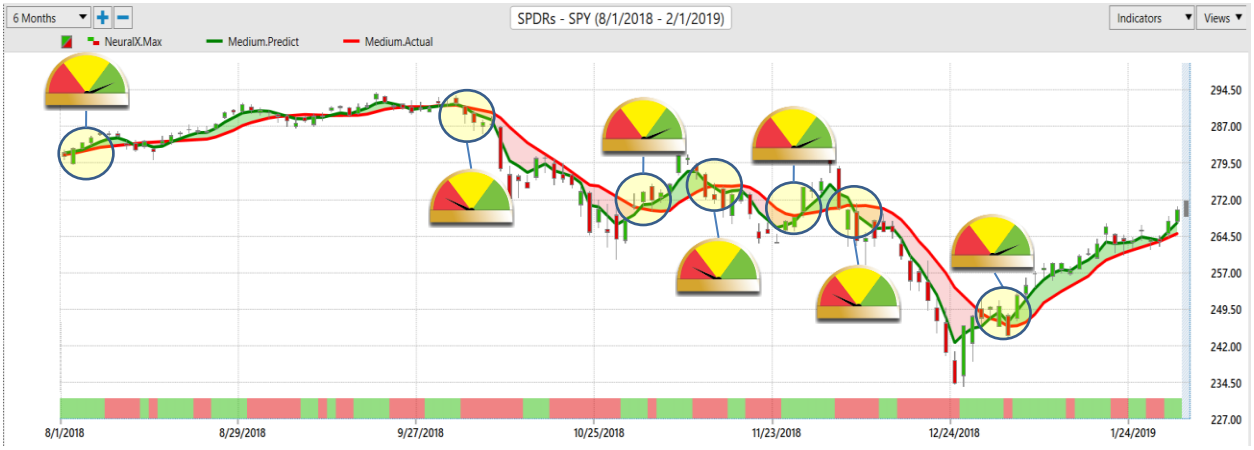


Figure 2 August 1, 2018 – January 31, 2019 SPY ETF

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 and 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 exhibit higher volatility and are less readily marketable then investments in larger companies. 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.

Calculations do not reflect all fees, charges and expenses that might be incurred over the time frame including program fees, investment advisor fees and administrative fees. 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 State Street Global Advisors SPY ETFs; different ETFs may differ from the use of the SPY Sector 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.