# **EVO 1: AN EVOLUTIONARY INVESTMENT STRATEGY**

# **GROSS PERFORMANCE**

JUNE 1, 2002 - NOVEMBER 30, 2018



**Strategy:** EVO 1 is a 100% mechanical investment strategy that aims to compound short-term gains into superior long-term growth. EVO generates buy, sell, and short signals based off of algorithmic rules derived from quantitative analysis. It invests in a 1.5x leveraged S&P 500 market index mutual fund when long, an unleveraged market index fund when short, and takes defensive positions in a money market fund.

		S&P 500
16 YEAR PERFORMANCE RESULTS	EVO 1	TOTAL
		RETURN
COMPOUND ANNUAL RATE OF RETURN	16.09%	8.11%
MAXIMUM DRAWDOWN (MONTHLY)	-23.89%	-50.95%
MONTHLY STANDARD DEVIATION	4.07%	4.01%
% OF TIME INVESTED LONG	51%	100%
% OF TIME INVESTED SHORT	0.31%	NA
% WINNING TRADES	62.23%	NA
AVERAGE GAIN OF WINNING TRADES	3.52%	NA
AVERAGE LOSS OF LOSING TRADE	-2.24%	NA
WINNING : LOSING TRADE RATIO	1.65X	NA
UPSIDE CAPTURE RATIO	91.50%	100%
DOWNSIDE CAPTURE RATIO	41.34%	100%

### **EVO MILESTONES:**

Annualized rate of return double that of the S&P500

Near absolute returns - max losing year of only 1%

Avoided almost all the decline during the 2002 bear market.

Turned a gain of almost 20% during the financial crisis bear market of 2008

188 Trades = statistically significant results

EVO 1				S&P 500 TOTAL RETURN					
YEAR	\$1	LOO HYPOTHETICAL	YEARLY	TOTAL	\$	100 HYPOTHETICAL	YEARLY	TOTAL	
		INVESTMENT	RETURN	RETURN		INVESTMENT	RETURN	RETURN	
*6/1/2002	\$	100,000.00	-0.34%	0%	\$	100,000.00	-16.69%	-17%	
2003	\$	99,657.84	35.49%	35%	\$	83,313.71	28.68%	7%	
2004	\$	135,029.20	19.10%	61%	\$	107,211.85	10.88%	19%	
2005	\$	160,815.21	-1.04%	59%	\$	118,878.85	4.91%	25%	
2006	\$	183,951.95	15.59%	84%	\$	144,416.45	15.79%	44%	
2007	\$	219,218.18	19.17%	119%	\$	152,350.47	5.49%	52%	
2008	\$	262,793.41	19.88%	163%	\$	95,984.01	-37.00%	-4%	
2009	\$	315,492.17	20.05%	215%	\$	121,385.75	26.46%	21%	
2010	\$	315,232.30	-0.08%	215%	\$	139,670.47	15.06%	40%	
2011	\$	331,750.41	5.24%	232%	\$	142,619.87	2.11%	43%	
2012	\$	413,970.29	24.78%	314%	\$	165,443.95	16.00%	65%	
2013	\$	624,686.82	50.90%	525%	\$	219,028.15	32.39%	119%	
2014	\$	772,186.74	23.61%	672%	\$	249,009.83	13.69%	149%	
2015	\$	866,219.57	12.18%	766%	\$	252,455.18	1.38%	152%	
2016	\$	986,108.09	13.84%	886%	\$	282,648.60	11.96%	183%	
2017	\$	1,126,811.44	14.27%	1027%	\$	344,355.31	21.83%	279%	
**2018	\$	1,172,883.11	4.09%	1073%	\$	361,935.88	5.11%	262%	
	EVO RESULTS ARE GROSS OF ADVISORY FEES. SEE FULL DISCLOSURE BELOW.								
*Inception	EVO performance has been verified to be in compliance with GIPS (Global Performance Investment Standards) by								
**Partial	Alpha Performance Verification Services through June 2014. See the separate GIPS disclosure for more information Performance since then is tracked by Theta Research. Access to Theta Research is available on request.							ation	
Year									

#### Potomac Advisors EVO 1 Performance Disclosure

Distribution of this Fact Sheet to retail customers must be accompanied by the Fact Sheet showing performance net of maximum advisory fees.

The Evolutionary Market Timing System (EVO 1) Non-Discretionary Composite is a purely mechanical trading system in which no discretion is involved. The composite is comprised of numerous long and intermediate-term market timing systems (filters) and quantitative short-term trading systems (triggers) that are integrated into one composite decision-making system. The system uses a leveraged S&P 500 index mutual fund as the primary investment for long positions in seeking to magnify the index's exposure 150% on a daily basis to increase the potential return on investment. Conversely, leverage can magnify the losses of an investment during a down market. The fund's use of derivatives, such as futures, options and swap agreements, may expose the fund's shareholders to additional risks that they would not be subject to if they invested directly in the securities underlying those derivatives. The trading system also may employ an unleveraged inverse S&P 500 index mutual fund for short positions. Short positions have been made very infrequently. Given the potential risks involved, strategies employing leverage and shorting may not be suitable for conservative investors.

EVO 1 performance is based on the oldest actual Potomac Advisor's account using the EVO 1 strategy and is considered representative of all Potomac Advisor accounts within the EVO 1 composite strategy since all accounts, with few exceptions, are traded in the same omnibus group account. Occasionally an account may have different results than the composite due to specific investor instructions, fund restrictions, when the account was opened, or when a new contribution was made to the account. The oldest account in the composite has been verified for performance since inception by Theta Research and is continuously monitored daily by Theta Research. Composite returns are precision dated, time-weighted total returns, that reflect the reinvestment of dividends and capital gain distributions. Composite returns are net of the underlying mutual fund management fees, custodial fees and other fund (administrative) expenses.

The performance results shown here reflect the use of the Guggenheim Rydex Investor class funds traded directly through the fund. Results shown here are gross and do not include the maximum management fees charged by Potomac Advisors of 2.00% annually, prorated quarterly and billed in advance. Fees charged by Potomac Advisors or other investment advisors for this strategy may be higher or lower than the fees charged by Potomac Advisors and may be calculated in a different manner, thereby resulting in different performance than shown here. No adjustments have been made for potential income tax consequences. Performance for other investment programs may differ materially (more or less) from the performance shown here. It should not be assumed that future recommendations will be profitable or equal past performance. The investment return and principal value of an investment will fluctuate so that an investor's shares, when sold or redeemed, may be worth more or less than their original cost and current performance may be lower or higher than the performance quoted.

The benchmark returns of the S&P 500 are total returns and reflect the reinvestment of dividends. The S&P 500 Index is a capital weighted index composed of 500 widely held common stocks varying in composition, and is not available for direct investment. Benchmark returns are provided exclusively for comparison purposes only so as to provide general comparative information to assist an individual client or prospective client in determining whether the performance of the EVO 1 strategy meets, or continues to meet, his/her investment objective(s).

It should not be assumed that any of the programs will correspond directly to any such comparative index. The volatility of the market indices may materially differ (more or less) from that of the actual portfolios. Since individuals cannot invest directly into any index, deductions for management fees or other custodial or transaction charges are not taken into account. These charges, if applicable, would reduce the overall return of the S&P 500 index. The strategies shown here involve investing in mutual funds. Mutual fund shares are not insured by the FDIC or any other agency, are not guaranteed by any financial institution, are not obligations of any financial institution, and involve investment risk, including possible loss of principal.

The data presented has been collected from sources believed to be reliable; however, Potomac Advisors does not guarantee nor warrant the accuracy, timeliness, or completeness of the information. Past performance is no guarantee of future results. This material is for informational purposes only and does not constitute an offer to sell or a solicitation of an offer to buy any security. Such offers can only be made where lawful under applicable law.

Potomac Advisors is registered as an investment adviser under Florida, Texas, and Maryland. Such registration does not imply a certain skill or training and no inference to the contrary should be made. Information pertaining to Potomac Advisor's advisory operations, services, and fees is set forth in their current Form ADV Part II, a copy of which is available from Potomac Advisors upon request. Information pertaining to any mutual fund that is used in the EVO 1 strategy is set forth in each respective mutual fund's prospectus, a copy of which is also available from Potomac Advisors upon request.

### **GIPS Disclosure Statement**

Potomac Advisors Inc. is an independent registered investment advisor. EVO 1 performance has been verified to be in compliance with the Global Investment Performance Standard (GIPS®) from 5.31.2992 through 6.30.2014 by Alpha Performance Verification Services who retain a CFA Institute CIPM (Certificate in Investment Performance Measurement). Valuations are computed, and performance is reported, in U.S. dollars. Composite returns are net the underlying mutual fund management fees, custodial fees and other fund (administrative) expenses. All accounts in the composite are non-fee paying and such returns are presented gross of Potomac Advisors' fees. The benchmark is the Standard and Poor's 500 Index (S&P 500). To obtain a Compliant Presentation or a list of the Composite Descriptions visit our website at www.potomacadvisorsinc.com.