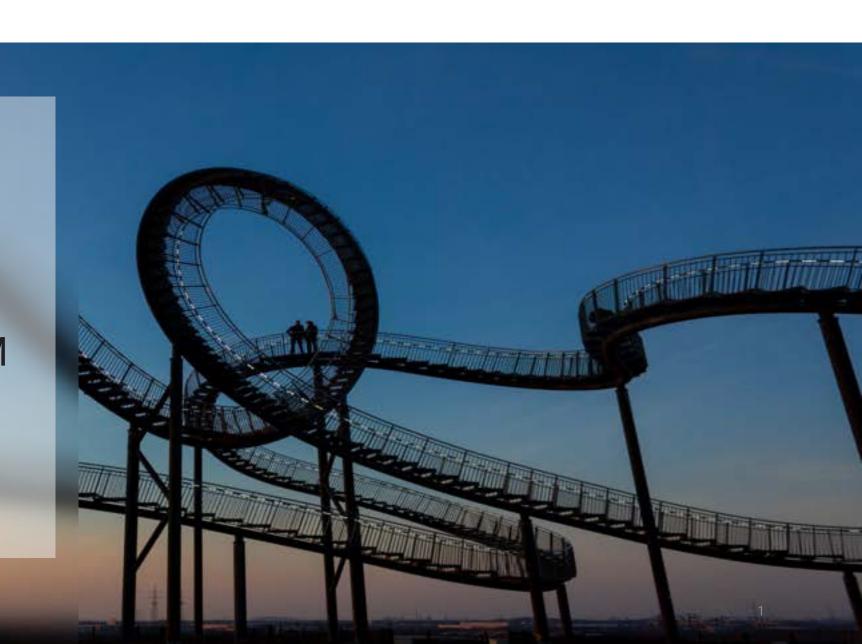


# Fear and Greed

How CAOS and QMOM can alleviate these client concerns.





Standardized return	r <b>ns</b>   as of 9/30/2024		1 Yr.			Annualized 3 Yr. Total Return		Annualized 5 Yr. Total Return		Annualized 10 yr. Total Return		Annualized Return Since Inception		Expense Ratios	
Name	Ticker	Inception Date	NAV	Mkt.	NAV	Mkt.	NAV	Mkt.	NAV	Mkt.	NAV	Mkt.	Gross	Net	
US Quantitative Momentum	QMOM	12/1/2015	49.97%	50.18%	10.17%	10.16%	17.03%	17.06%			11.91%	12.16%	0.29%	0.29%	
Tail Risk	CAOS	8/14/2013	6.36%	6.37%	0.62%	0.62%	5.48%	5.48%	3.23%	3.23%	3.57%	3.57%	0.70%	0.63%1	

Source: YCharts, Alpha Architect. Investing involves risk, including the loss of principal. Past performance does not guarantee future results. The performance data quoted represents past performance and does not guarantee future results. 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. Current performance may be lower or higher than the performance quoted. For performance data current to the most recent month end, please call (215) 882-9983 or visit www.alphaarchitect.com/funds. Returns are annualized total returns, except for those periods of less than one year, which are cumulative. Market price returns are based upon the closing composite market price and do not represent the returns you would receive if you traded shares at other times. A fund's NAV is the sum of all assets less any liabilities, divided by the number of shares outstanding. The Adviser has contractually agreed to waive all or a portion of its management fee from exceeding 0.63% of its daily net assets.



## Fear and Greed

### Fear & Greed Index

What emotion is driving the market now? Learn more about the index



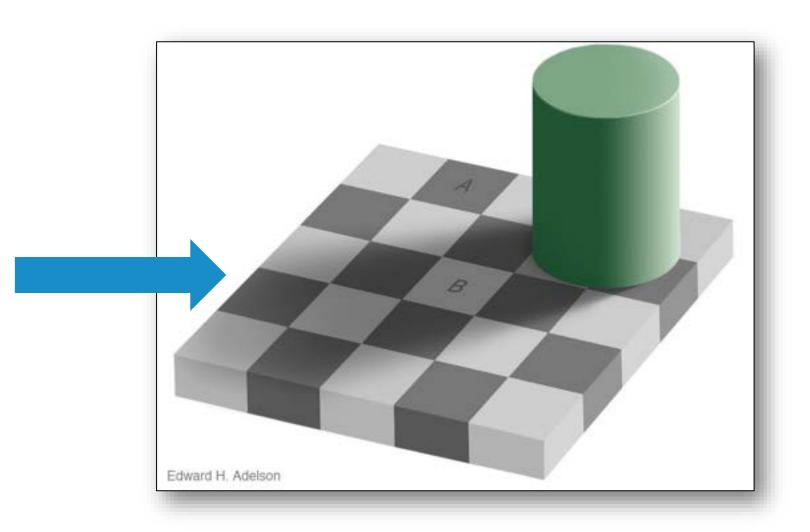
Last updated Dec 5 at 9:05:16 AM ET

Source: CNN. https://www.cnn.com/markets/fear-and-greed. The **Fear & Greed Index** is a way to gauge stock market movements and whether stocks are fairly priced. The theory is based on the logic that excessive fear tends to drive down share prices, and too much greed tends to have the opposite effect. The Fear & Greed Index is a compilation of seven different indicators that measure some aspect of stock market behavior. They are market momentum, stock price strength, stock price breadth, put and call options, junk bond demand, market volatility, and safe haven demand. The index tracks how much these individual indicators deviate from their averages compared to how much they normally diverge. The index gives each indicator equal weighting in calculating a score from 0 to 100, with 100 representing maximum greediness and 0 signaling maximum fear.



Humans can be crazy and overconfident

# Q: Is A darker than B?





"It ain't what you don't know that gets you into trouble.

It's what you know for sure that just ain't so."

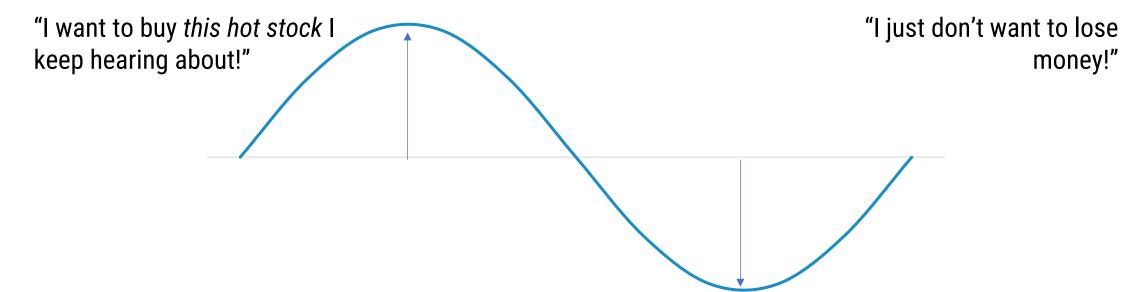
-Mark Twain



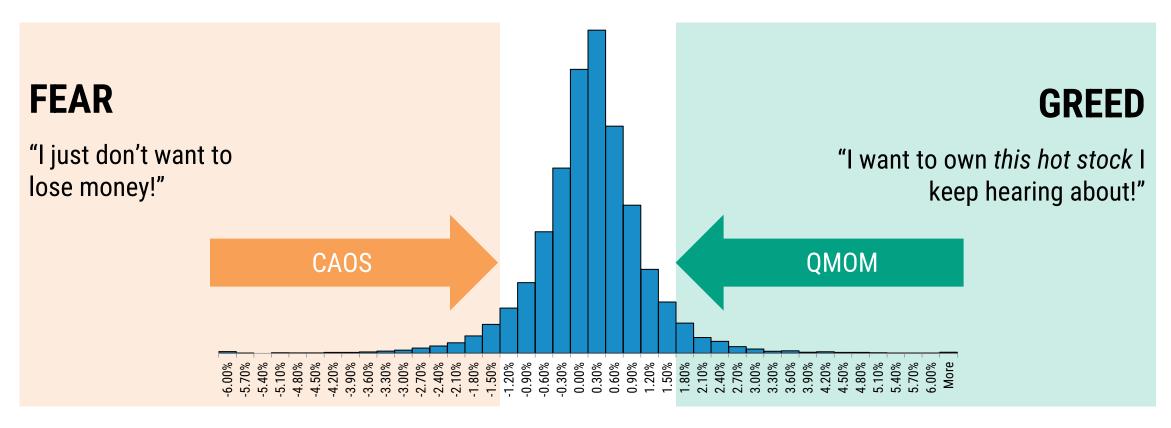


### **FEAR & GREED CYCLE**

GREED FEAR







Manage client "craziness" without making the portfolio crazy



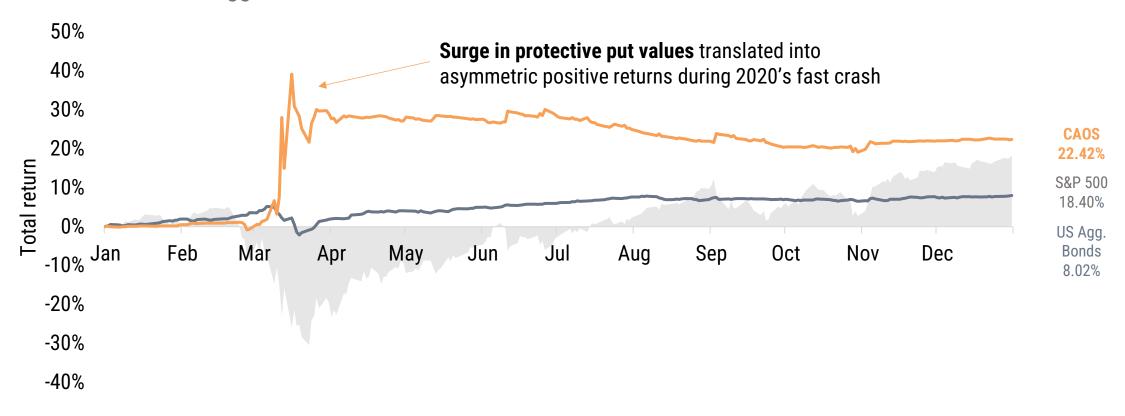
## FEAR

We believe the Alpha Architect Tail Risk ETF (CAOS) is your answer for clients before they grow fearful.

6.00% 6.



### **2020** | CAOS vs. US Agg. Bonds, S&P 500



Source: YCharts, Alpha Architect, FactSet. Monthly returns. 8/14/2013 – 9/30/2024. **Investing involves risk, including the potential for loss of principal. Past performance does not guarantee future results.**¹Protective puts are synonymous with deep out-of-the-money put option, a type of financial contract where the underlying asset's price is significantly higher than the option's strike price. **US Aggregate Bonds** category average represented by the 50 biggest open-ended funds (mutual funds and ETFs) based on assets under management (AUM) in the Intermediate Core Bond category. In the event of duplicate shares classes, the share class with the most AUM is referenced. Categories determined by YCharts. See note on category average calculation methodology. You cannot directly invest in either an index or a category average.

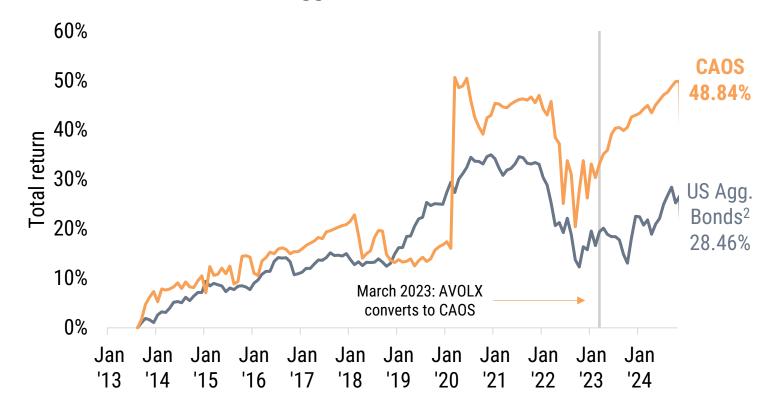


## CAOS has a 10+ year track record

Arin Risk Advisors launched CAOS as a mutual fund on 8/14/2013, ticker symbol AVOLX.

Alpha Architect converted<sup>1</sup> AVOLX to an ETF in March 2023 and rebranded to CAOS.

### **Total return | CAOS** vs. US Agg. Bonds



Source: YCharts, Alpha Architect, FactSet. Monthly returns. 8/14/2013 – 9/30/2024. **Investing involves risk, including the potential for loss of principal. Past performance does not guarantee future results.**¹Converted under Internal Review Code (IRC) Section 721. IRC Section 721 can be interpreted to permit the tax-deferred exchange of property, including securities, potentially without triggering immediate tax consequences. In the context of mutual fund to ETF conversions, this provision may enable investors to exchange their mutual fund shares for ETF shares, potentially without recognizing capital gains or losses at the time of the exchange. Definition provided for context and does not represent tax, legal, or financial advice, recommendation, or solicitation. Conversions are complex. Consult tax and legal professionals for more information. ²**US Aggregate Bonds** category average represented by the 50 biggest open-ended funds (mutual funds and ETFs) based on assets under management (AUM) in the Intermediate Core Bond category. In the event of duplicate shares classes, the share class with the most AUM is referenced. Categories determined by YCharts. You cannot directly invest in either an index or a category average.



### **HOW CAOS INVESTS YOUR MONEY**

CAOS = BOX + PUT + PROTECTIVE SPREADS + SPREADS + PUTS



### **HOW CAOS INVESTS YOUR MONEY**

CAOS = BOX
SPREADS

+ PUT
SPREADS

PROTECTIVE



What is a box spread?

A box spread is an options trading strategy that combines a long call and short put at one strike price with a short call and long put at a different strike price. The resulting payoff resembles a fixed-income investment.

Why does the box spread market exist?

Box spreads have historically provided institutional investors with an efficient alternative market to borrow and/or lend. Options market makers, proprietary trading desks, and hedge funds make up a large portion of the market.

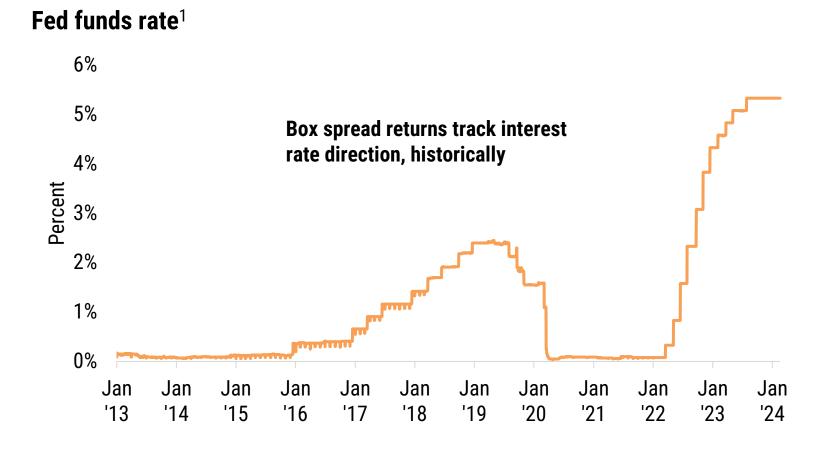
Are box spreads a new market phenomenon?

No - as early as November 1985, Billingsley and Chance published "Options Market Efficiency and the Box Spread Strategy" in <u>Financial Review.</u>



### **BOX SPREADS**

- Historically, 1-3 mo. box spreads tend to track the fed funds rate
- Box spreads may be used to offset cost of consistent protective puts exposure
- May contribute consistent, lower risk returns



Source: YCharts. 1/1/2013 – 9/30/2024. Daily. <sup>1</sup>Federal funds rate is the interest rate at which banks and credit unions lend reserve balances to each other overnight, set by the Federal Reserve as a key tool to influence monetary policy, control inflation, and manage economic growth. You cannot directly invest in an index or category average.



### **HOW CAOS INVESTS YOUR MONEY**

 $CAOS = \frac{BOX}{SPREADS} + \frac{1}{2}$ 

PUT SPREADS

PROTECTIVE



What is a put spread?

A put spread involves the purchase and sale of two put options on the same underlying asset and expiration date but at different strike prices.

Why does CAOS use put spreads?

Put spreads seek to provide capped exposure to the general direction of the market while seeking to limit downside risk. This means CAOS will track the <u>direction</u> of the S&P 500 with capped results, historically.

How does a put spread work?

A put spread seeks to limit both potential profit and risk with the net cost or credit defining the maximum loss or gain. See trade example.



### **Put Spread Trade example**

Given an index closing price of 5,123.41 on 4/15/2024

Today	4/15/2024
Expiration	4/26/2024
Day Count	11
Rolls per Year	33.18
Current Index Level	5123.41

Sample Trade	Strike	Side	Туре	Premium	Received/ Paid
Leg 1	5200	Short	Put	\$92.52	Received
Leg 2	5150	Long	Put	-\$66.20	Paid
	Net	proceeds to f	\$26.32		



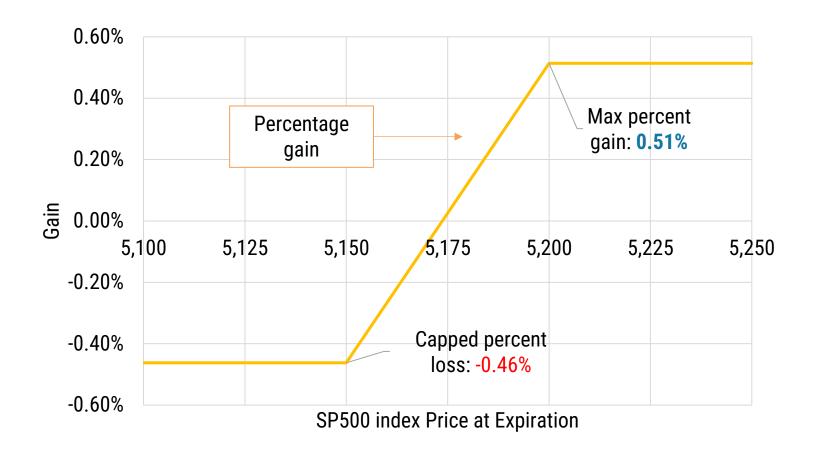
### Put Spread Trade example

Date 4/15/2024

A. Index

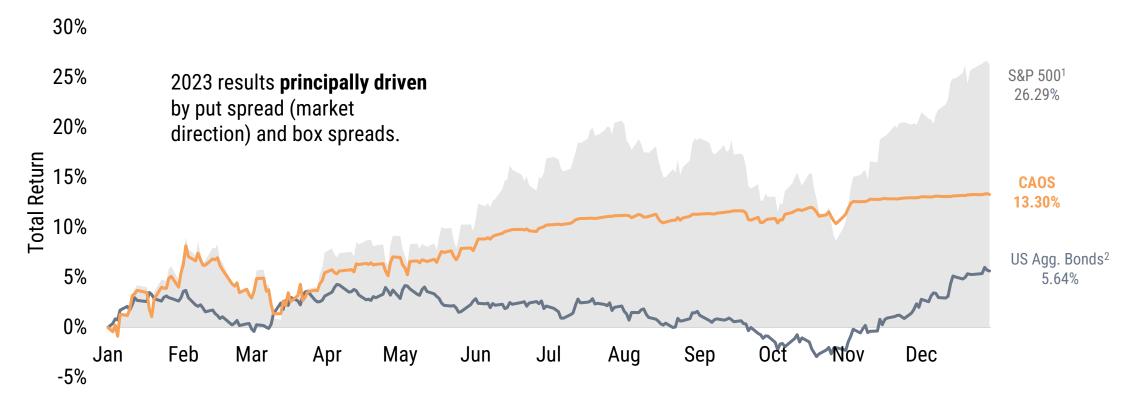
5,123.41 level

	B. Total	Gain or Loss
Strike	Payoff	(B/A)
5,150	-\$23.68	-0.46%
5,250	\$26.32	0.51%





#### 2023 Total return | CAOS vs. US Agg. Bonds, S&P 500



Source: YCharts, Alpha Architect, FactSet. Daily returns. 1/1/2020 – 12/31/2020. **Past performance does not guarantee future results. Investing involves risk, including the potential loss of principal.** 1S&P 500 Index measures the performance of the 500 largest US companies by market cap. The Index is unmanaged. 2US Aggregate Bonds category average represented by the 50 biggest open-ended funds (mutual funds and ETFs) based on assets under management (AUM) in the Intermediate Core Bond category. In the event of duplicate shares classes, the share class with the most AUM is referenced. Categories determined by YCharts. You cannot directly invest in either an index or a category average.



### **HOW CAOS INVESTS YOUR MONEY**

CAOS = BOX + PUT + PROTECTIVE SPREADS + SPREADS + PUTS



What is a protective put?

A protective put, also known as a deep out-of-the-money put option, is a put option with a strike price **significantly below** the current market price of the underlying asset, making it unlikely to be exercised.

Why does CAOS use protective puts?

Protective puts act as a historically reliable hedge against rare but severe market crashes. **CAOS maintains a consistent protective put allocation at relatively low cost** because they are unlikely to be exercised.

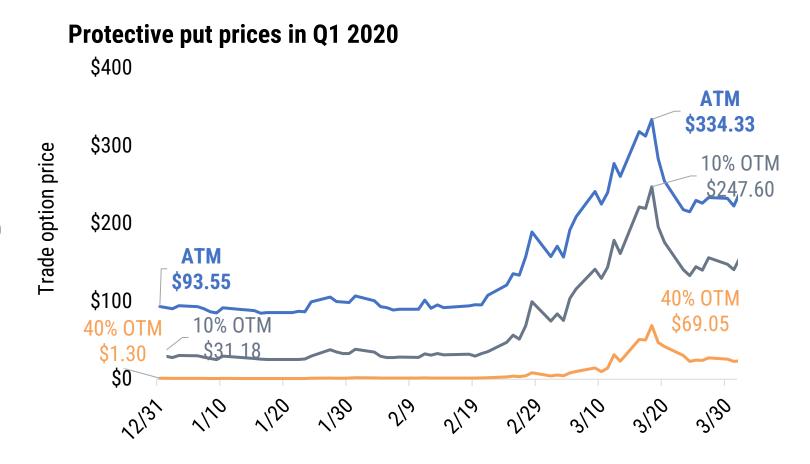
How does a put spread work?

Protective puts gain value if the index drops sharply below the option's strike price, providing protection against fast crashes, historically. If the index remains above the strike price at expiration, the option expires worthless.



### Protective put prices in 2020

- As of 12/31/2019, S&P 500 put options were priced at \$93.55 ATM, \$31.18 10% OTM, and \$1.30 40% OTM.
- During the peak of the COVID-19 pandemic uncertainty, put option prices surged to \$334.33 ATM, \$247.60 10% OTM, and \$69.05 40% OTM.

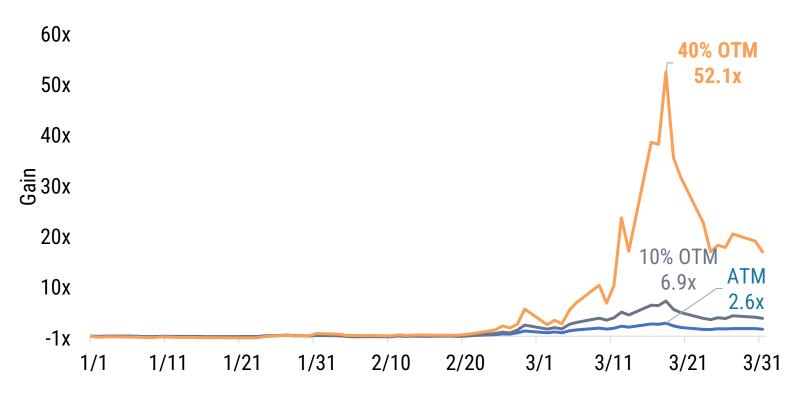




### Protective put prices in 2020

 At the peak on 3/18/2020, the price of deeper OTM puts spiked magnitudes higher than closer to the money puts.

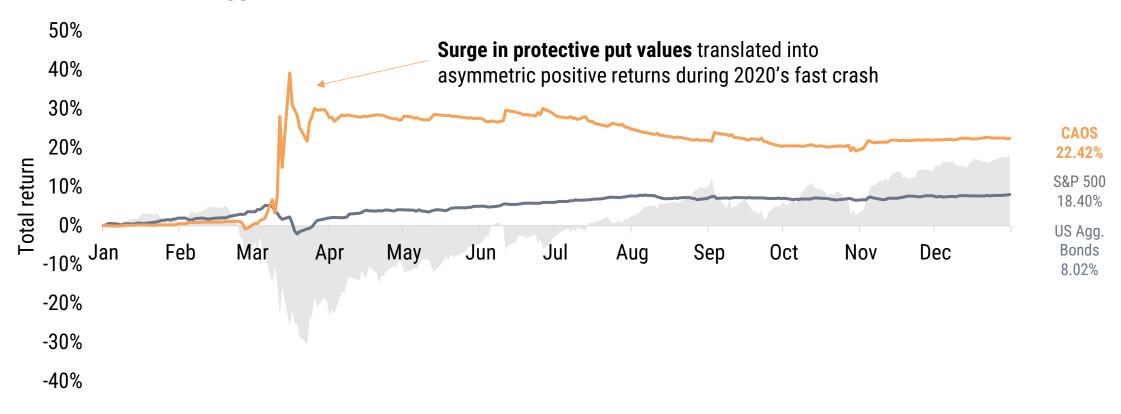
### Increase in put option price<sup>1</sup>



Source: Alpha Architect. Holdings are subject to change. **Past performance does not guarantee future results. Investing involves risk, including the potential loss of principal.** ¹Calculations based on the underlying SPX price as of 12/29/2020. The values presented are for illustrative purposes only and should not be construed as a reflection of the fund's current holdings or exposures. Please click <a href="here">here</a> or visit <a href="here">alphaarchitect.com/funds</a> for up-to-date holdings information.



### **2020** | CAOS vs. US Agg. Bonds, S&P 500



Source: YCharts, Alpha Architect, FactSet. Monthly returns. 8/14/2013 – 9/30/2024. Investing involves risk, including the potential for loss of principal. Past performance does not guarantee future results. 

¹Protective puts are synonymous with deep out-of-the-money put option, a type of financial contract where the underlying asset's price is significantly higher than the option's strike price. US Aggregate Bonds category average represented by the 50 biggest open-ended funds (mutual funds and ETFs) based on assets under management (AUM) in the Intermediate Core Bond category. In the event of duplicate shares classes, the share class with the most AUM is referenced. Categories determined by YCharts. You cannot directly invest in either an index or a category average.





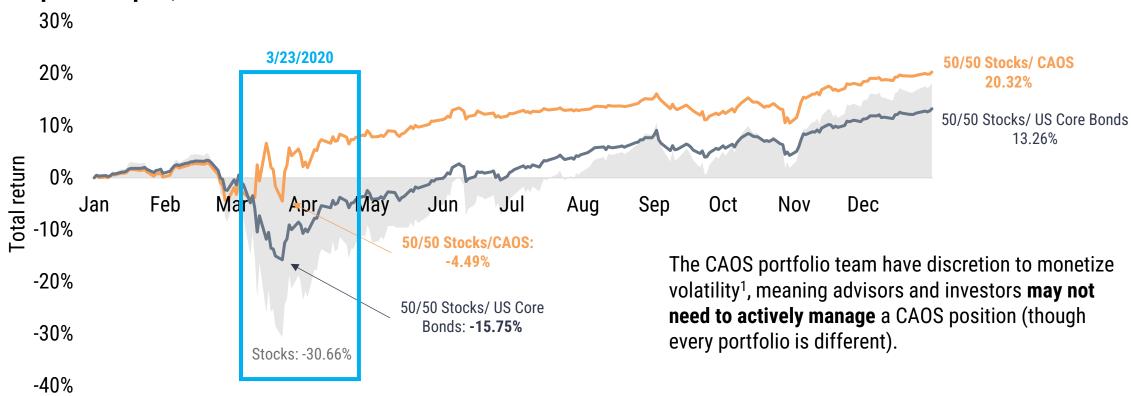
CAOS **OTM put option** positions as of 4/15/2024

Ticker	Name	Shares	Pri	ce (Local)	Ma	rket Value (\$mm)	% of Net Assets
SPX 240419P02200000	SPX US 04/19/24 P2200	2,532	\$	0.05	\$	0.01	0.01
SPX 240517P02200000	SPX US 05/17/24 P2200	2,172	\$	0.13	\$	0.03	0.01
SPX 240621P02200000	SPX US 06/21/24 P2200	2,520	\$	0.48	\$	0.12	0.06
SPX 240719P02500000	SPX US 07/19/24 P2500	2,112	\$	1.73	\$	0.36	0.20
SPX 240816P02500000	SPX US 08/16/24 P2500	994	\$	2.73	\$	0.27	0.15
BOXX	Alpha Architect 1-3 Month Box ETF	1,125,000	\$	106.66	\$	119.99	64.98
SPX 240621P04000000	SPX US 06/21/24 P4000	-442	-	8.50	\$	(0.38)	
SPX 240621C05000000	SPX US 06/21/24 C5000	-442	-	200.91	\$	(8.88)	
SPX 240621C04000000	SPX US 06/21/24 C4000	442	-	1,101.40	\$	48.68	26.36
SPX 240621P05000000	SPX US 06/21/24 P5000	442	\$	97.81	\$	4.32	2.34
2SPY 240621P00001010	SPY 06/21/2024 1.01 P	-12	\$	0.75	\$	-	0.00
2SPY 240621C01001010	SPY 06/21/2024 1001.01 C	-12	\$	0.75	\$	-	0.00
2SPY 240621P01001010	SPY 06/21/2024 1001.01 P	12	\$	487.95	\$	0.59	0.32
2SPY 240621C00001010	SPY 06/21/2024 1.01 C	12	\$	502.95	\$	0.60	0.33
SPX 240621P07200000	SPX US 06/21/24 P7200	-201	\$	2,078.90	\$	(41.79)	-22.63
SPX 240621P08200000	SPX US 06/21/24 P8200	201	\$	3,068.30	\$	61.67	33.40
Cash & Other	Cash & Other	217,211	\$	1.00	\$	0.22	0.12
SPXW 240426P05150000	SPXW US 04/26/24 P5150	354	-	109.00	\$	3.86	2.09
SPXW 240426P05200000	SPXW US 04/26/24 P5200	-354	\$	145.70	\$	(5.16)	-2.79

Source: Alpha Architect. Past performance does not guarantee future results. Investing involves risk, including the potential loss of principal. Holdings are subject to change. Please click here or visit alphaarchitect.com/funds for up-to-date holdings information.



#### Simple example | 50% Stocks/50% CAOS vs. 50% Stocks/50% US Core Bonds in 2020



Source: YCharts, Alpha Architect, FactSet. Daily returns. 1/1/2020 – 12/31/2020. **Past performance does not guarantee future results. Investing involves risk, including the potential loss of principal.** ¹Stocks represented by the 50 biggest US Large Blend ETFs based on assets under management (AUM). Large-blend portfolios are fairly representative of the overall U.S. stock market in size, growth rates, and price. Stocks in the top 70% of the capitalization of the U.S. equity market are defined as large cap. The blend style is assigned to portfolios where neither growth nor value characteristics predominate. These portfolios' returns are often similar to those of the S&P 500 Index. ²US Aggregate Bonds category average represented by the 50 biggest open-ended funds (mutual funds and ETFs) based on assets under management (AUM) in the Intermediate Core Bond category. In the event of duplicate shares classes, the share class with the most AUM is referenced. Category returns are a straight average of the total return of the ETFs in the Intermediate Core Bond category over the given frequency. Categories determined by YCharts. You cannot invest directly in an index or category average.



We believe CAOS can protect your portfolio during fast crashes and provide positive, uncorrelated returns at a reasonable cost.

### **RESULTS**

Through 9/30/2024

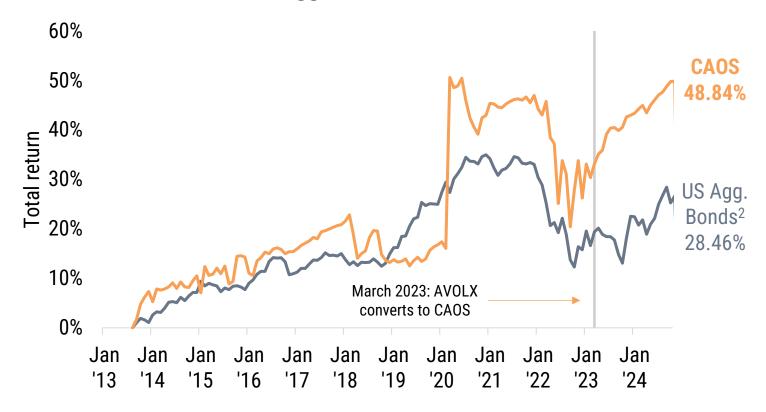


## CAOS has a 10+ year track record

Arin Risk Advisors launched CAOS as a mutual fund on 8/14/2013, ticker symbol AVOLX.

Alpha Architect converted<sup>1</sup> AVOLX to an ETF in March 2023 and rebranded to CAOS.

### Total return | CAOS vs. US Agg. Bonds



Source: YCharts, Alpha Architect, FactSet. Monthly returns. 8/14/2013 – 9/30/2024. **Investing involves risk, including the potential for loss of principal. Past performance does not guarantee future results.**¹Converted under Internal Review Code (IRC) Section 721. IRC Section 721 can be interpreted to permit the tax-deferred exchange of property, including securities, potentially without triggering immediate tax consequences. In the context of mutual fund to ETF conversions, this provision may enable investors to exchange their mutual fund shares for ETF shares, potentially without recognizing capital gains or losses at the time of the exchange. Definition provided for context and does not represent tax, legal, or financial advice, recommendation, or solicitation. Conversions are complex. Consult tax and legal professionals for more information. ²**US Aggregate Bonds** category average represented by the 50 biggest open-ended funds (mutual funds and ETFs) based on assets under management (AUM) in the Intermediate Core Bond category. In the event of duplicate shares classes, the share class with the most AUM is referenced. Categories determined by YCharts. You cannot directly invest in either an index or a category average.



### Low correlation<sup>1</sup> to core source of risk

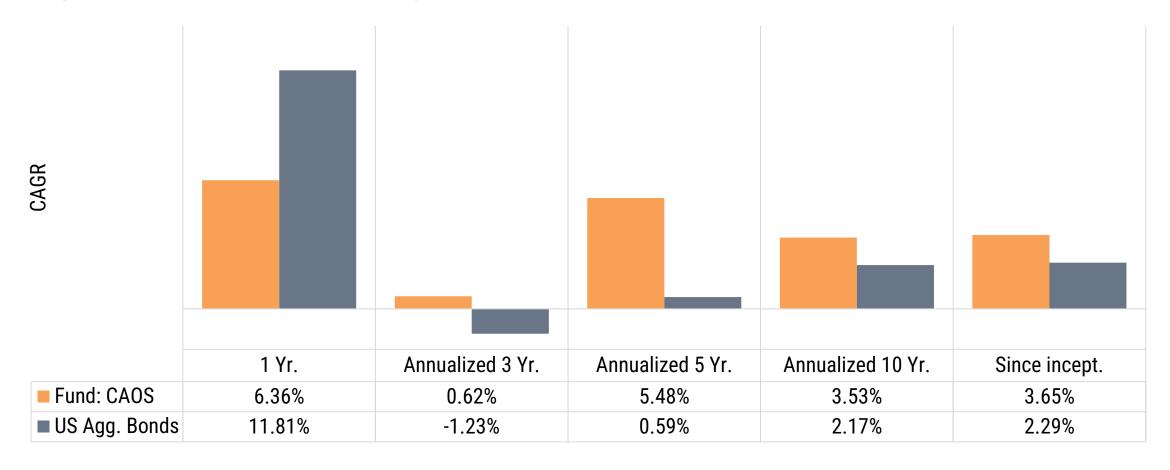
- CAOS bears little relationship to either the S&P 500<sup>2</sup> or US Agg. Bonds<sup>3</sup>
- Low correlation to core sources of risk makes CAOS a potentially strong diversifier for the whole portfolio.

	CAOS	S&P 500	US Agg. Bonds
CAOS	1.00		
S&P 500	0.19	1.00	
US Agg. Bonds	0.14	0.41	1.00

Source: YCharts, Alpha Architect. Monthly returns. 9/1/2013 – 9/30/2024. <sup>1</sup>Correlation measures the degree to which two variables move in relation to each other. Higher correlation implies a tighter relationship. <sup>2</sup>S&P 500 Index measures the performance of the 500 largest US companies by market cap. The Index is unmanaged. <sup>3</sup>US Aggregate Bonds category average represented by the 50 biggest open-ended funds (mutual funds and ETFs) based on assets under management (AUM) in the Intermediate Core Bond category. In the event of duplicate shares classes, the share class with the most AUM is referenced. Categories determined by YCharts. You cannot directly invest in either an index or a category average.



### **Compounded returns** | since CAOS inception



Source: YCharts, Alpha Architect, FactSet. Monthly returns. 9/1/2013 – 9/30/2024. **Investing involves risk, including the potential for loss of principal. Past performance does not guarantee future results. US Aggregate Bonds** category average represented by the 50 biggest open-ended funds (mutual funds and ETFs) based on assets under management (AUM) in the Intermediate Core Bond category. In the event of duplicate shares classes, the share class with the most AUM is referenced. Categories determined by YCharts. You cannot directly invest in either an index or a category average.



### **Fund expenses**

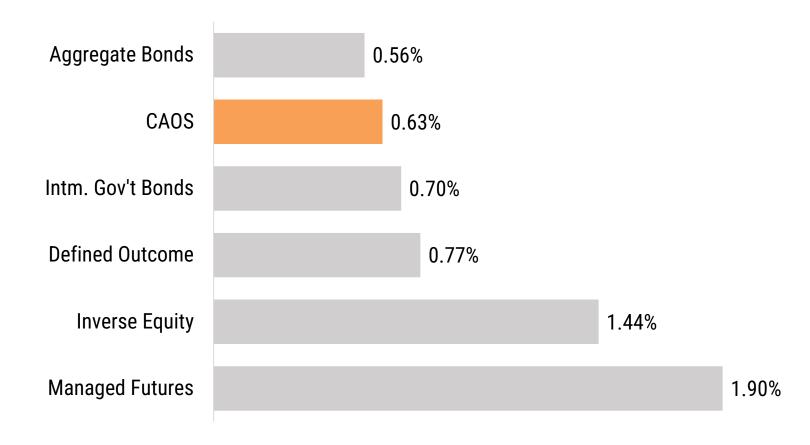
We aim to keep the fund's costs reasonable relative to peers.

#### **Expense ratios**

Gross 0.76%

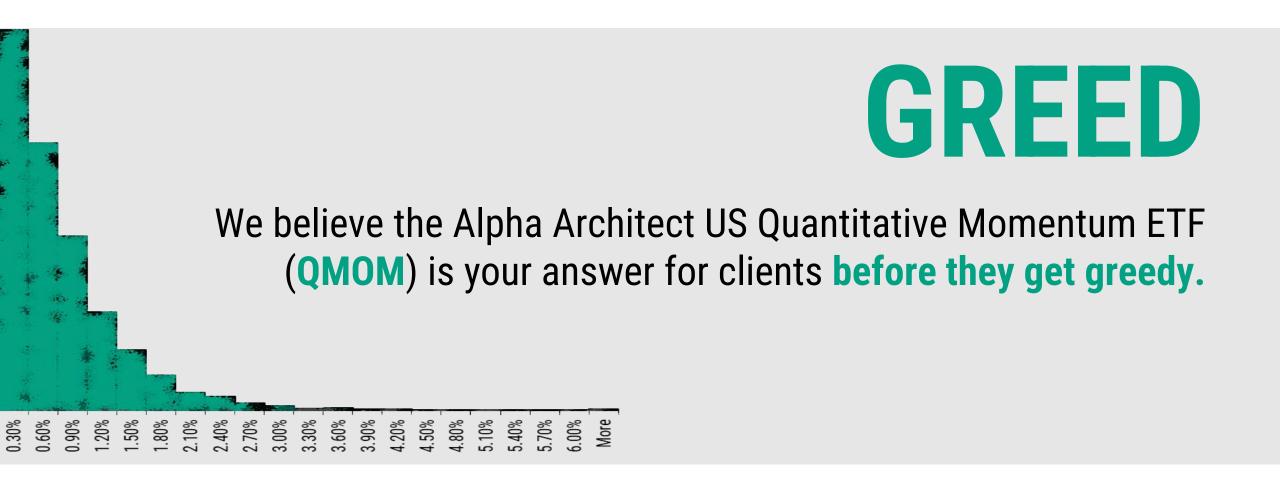
Net<sup>2</sup> 0.63%

### **Avg. Net Expense Ratio** | Relative to select fund categories.



Source: YCharts, Alpha Architect. As of 9/30/2024. ¹Categories selected based on their potential use as a tail risk hedge during fast equity crashes and positive uncorrelated returns in "normal" market conditions. See disclosures for category definitions. Average net expense ratio found by calculating the average of all open-ended funds (mutual funds and ETFS) for a given category that are open for investment as of 12/6.2024. All share classes for a given fund are included in the average.







QMOM seeks to deliver consistent exposure to the strongest momentum stocks in the US market.

What is an example of a high momentum stock that QMOM held?





**Server and AI Solutions.** Supermicro designs and manufactures high-performance servers, storage, and networking products optimized for energy efficiency and advanced workloads like AI and HPC.

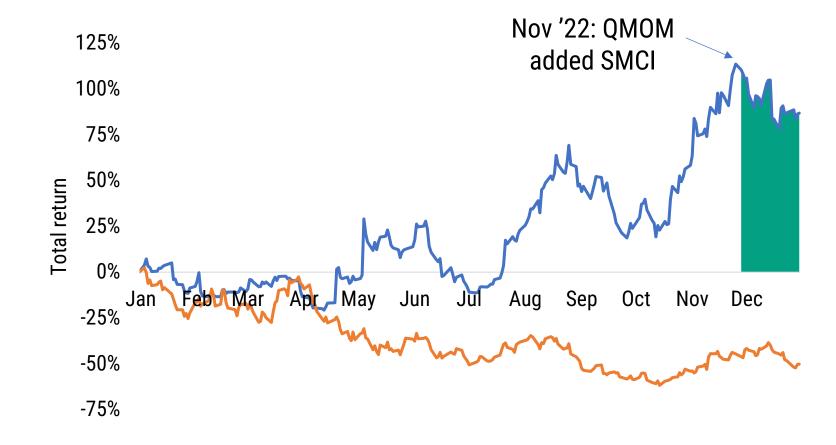
**Partnership with NVIDIA.** The company collaborates closely with NVIDIA to integrate cutting-edge GPUs, such as the NVIDIA A100 and H100, into its server platforms, enabling Al training, inference, and data-intensive applications.

**AI-Focused Innovation.** Supermicro develops NVIDIA-compatible solutions, including systems based on NVIDIA's reference designs, to support machine learning, generative AI, and other GPU-accelerated computing needs.



### **2022 | SMCI** vs. NVDA

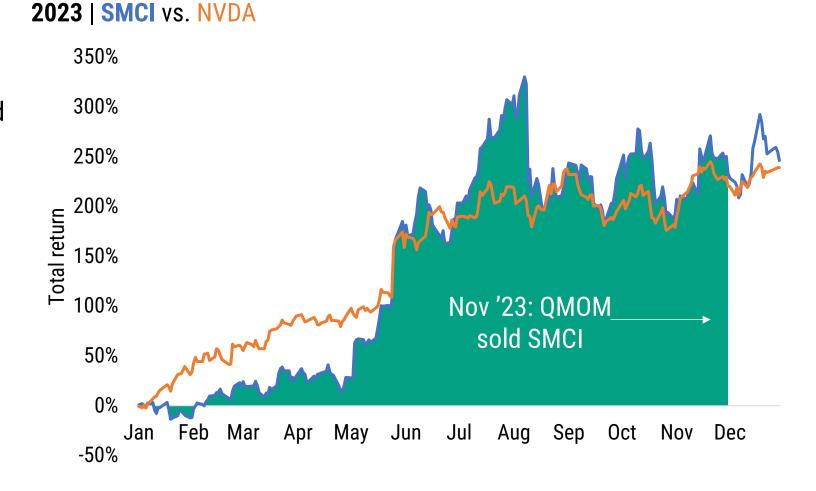
- SMCI momentum built throughout 2022
- QMOM added SMCI in the November rebalance
- SMCI finished 2022 +87%;
   NVDA -50%



Source: FactSet, YCharts, Alpha Architect. 1/1/2022 – 12/31/2022. Daily returns. **Past performance does not guarantee future results. Investing involves risk, including the potential loss of principal.** Holdings are subject to change. Visit funds.alphaarchitect.com/qmom/ for current holdings.



- SMCI momentum deteriorated in Q3/Q4 2023
- QMOM sold SMCI in Dec '23 rebalance
- SMCI gained 246% in 2023 to NVDA's 239%



Source: FactSet, YCharts, Alpha Architect. 1/1/2023 – 12/31/2023. Daily returns. **Past performance does not guarantee future results. Investing involves risk, including the potential loss of principal.** Holdings are subject to change. Visit funds.alphaarchitect.com/gmom/ for current holdings.



MARKETS & FINANCE | STOCKS | HEARD ON THE STREET Follow



# Is Anyone Crazy Enough to Audit Super Micro Computer?



Source: FactSet, YCharts, Alpha Architect. 1/1/2024 – 11/30/2024. Daily returns. **Past performance does not guarantee future results. Investing involves risk, including the potential loss of principal.** Holdings are subject to change. Visit funds.alphaarchitect.com/qmom/ for current holdings.

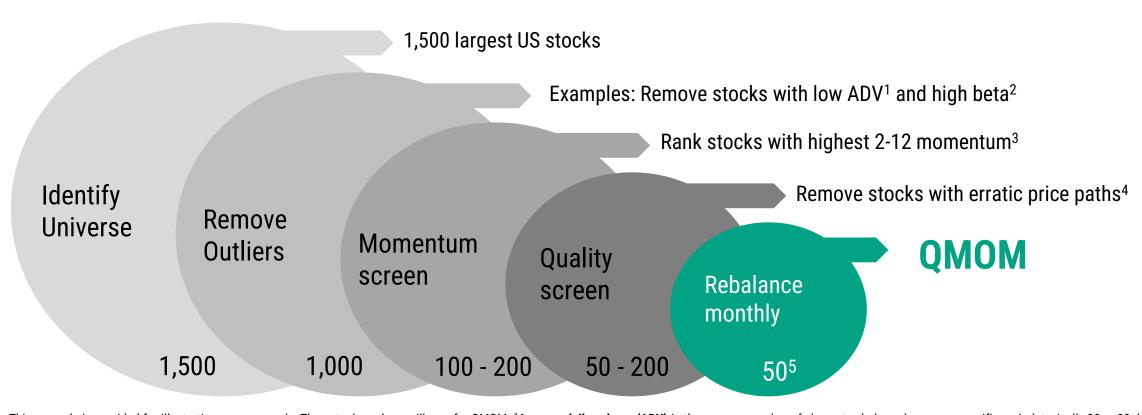


QMOM seeks to deliver consistent exposure to the strongest momentum stocks in the US market.

How do we quantify momentum and momentum quality?



# **Our systematic filtering process**



This example is provided for illustration purposes only. The actual numbers will vary for QMOM. <sup>1</sup>Average daily volume (ADV) is the average number of shares traded per day over a specific period, typically 30 or 90 days. It helps gauge a stock's liquidity, indicating how easily shares can be bought or sold without significantly impacting the price. Higher ADV suggests better liquidity. <sup>2</sup>Beta measures a security's sensitivity to market movements, indicating how much its price is expected to change in response to a 1% change in the broader market. <sup>3</sup>2-12 momentum is an investing strategy that measures a stock's performance by its total return over the past 12 months, excluding the most recent month. It aims to identify securities that have demonstrated strong price trends over the medium term. <sup>4</sup>Frog-in-the-pan (FIP) momentum filter identifies stocks with smoother, less volatile price trends, favoring those with consistent momentum over those with sharp, erratic movements. This approach assumes that gradual price changes are more likely to persist. <sup>5</sup>The Fund may hold between 50 to 200 stocks to maintain adequate liquidity. Since inception, QMOM has generally held a portfolio of approximately 50 stocks.



# **Profile of a target stock**

#### **STRONG MOMENTUM**



Suggests the market believes the stock price may continue to rise

#### **SMOOTH PATH**



Suggests the market may be **underreacting** to positive fundamentals

We believe stocks with these two characteristics have a higher probability their prices will continue to rise over the next 6–12 months.



#### **STRONG MOMENTUM**



Suggests the market believes the stock price may continue to rise

#### How do we define momentum?

We use 2-12 momentum – common in academic literature - that seeks to measure the performance of a stock over the last 12 months.

## Why is it called "2-12?"

2-12 measures the total return of a stock over the past 12 months, excluding the most recent month (i.e., months 2 through 12).

## Why exclude the most recent month?

The most recent month is excluded to avoid well-documented short-term price reversals that often occurs due to noise, overreactions, or market corrections.

### Why it matters.

Research finds that stocks with strong intermediate-term momentum (e.g., high 2-12 momentum) **tend to continue their upward trajectory** due to investor behavior like herding or delayed reactions to new information.



## Amongst our high momentum stocks, we look for smoother, less erratic return paths.

#### **SMOOTH PATH**



Suggests the market may be **underreacting** to positive fundamentals

## How do you measure "smoothness?"

We use something called "frog-in-the-pan (FIP)" momentum filter to identify stocks with smoother, less volatile price trends. This approach assumes that **gradual price changes** are more likely to persist.

## Is this like a quality screen?

A quality screen evaluates fundamental characteristics like profitability, earnings stability, and balance sheet strength, whereas the FIP filter focuses solely on price behavior and momentum characteristics.

The FIP filter aims to improve the reliability of selected stocks by focusing on sustainable characteristics—in this case, the nature of their price movement.

### Why it matters.

All else being equal, we prefer stocks that have made 1% per month for 12 months over those earning 12% in one month.



QMOM seeks to deliver consistent exposure to the strongest momentum stocks on the US market.

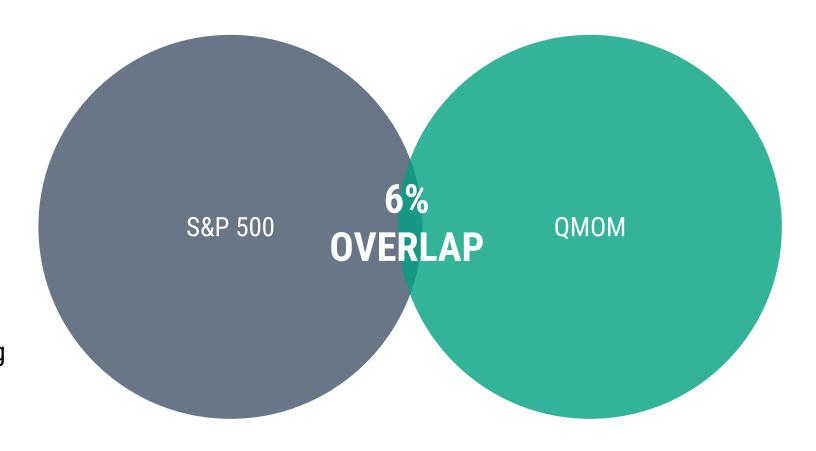
# **RESULTS**

Through 9/30/2024



# Minimal benchmark overlap

Minimal overlap<sup>1</sup> with a core holding like the S&P 500<sup>2</sup> means QMOM can potentially reduce concentration risk and improve expected returns<sup>3</sup> (without adding significant cost).



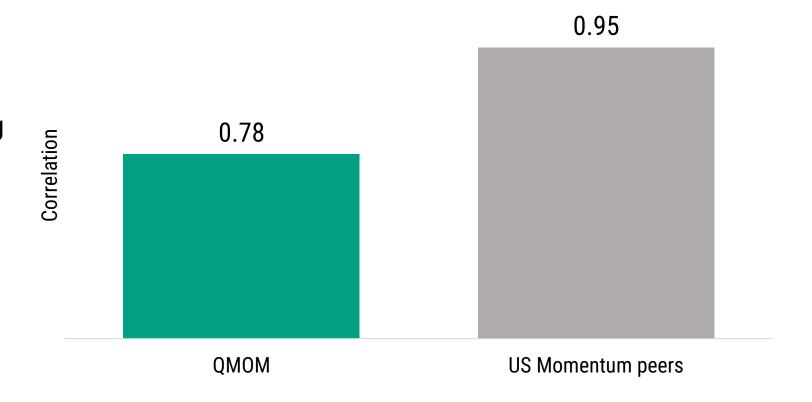
Source: FactSet, Alpha Architect. As of 9/30/2024. For illustrative purposes only. ¹Portfolio Overlap measures the similarity between a portfolio and its benchmark, calculated as 1-Active Share. A higher overlap indicates the portfolio closely mirrors the benchmark. ²S&P 500 Index measures the performance of 500 large companies listed on stock exchanges in the United States. Indices are unmanaged. Represented by the by the SPDR S&P 500 ETF (SPY). References to third-party funds are for informational purposes only and should not be considered investment advice or a recommendation of any particular security, strategy, or investment product. ³In the context of momentum, expected returns are the anticipated excess returns driven by stocks' recent price trends, based on the assumption that assets with strong past performance will continue to outperform in the near term.



## **S&P 500 Correlation | QMOM** vs. US Momentum peers<sup>2</sup>

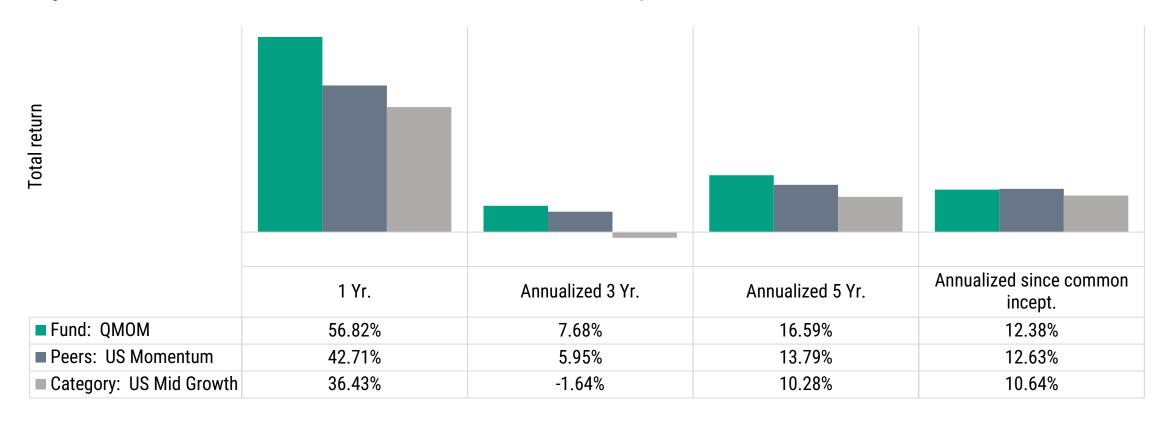
## **Lower correlation**

QMOM features lower correlation to the S&P 500, potentially making it an excellent diversification option.





#### Compounded returns at NAV | QMOM vs. US Momentum & Mid Growth peers



Investing involves risk, including the loss of principal. Past performance does not guarantee future results. The performance data quoted represents past performance and does not guarantee future results. 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. Current performance may be lower or higher than the performance quoted. For performance data current to the most recent month end, please call (215) 882-9983 or visit www.funds.alphaarchitect.com. Source: YCharts, Alpha Architect. 1/1/2016 – 9/30/2024. See disclosures for sector definitions. You cannot directly invest in either an index or a category average.



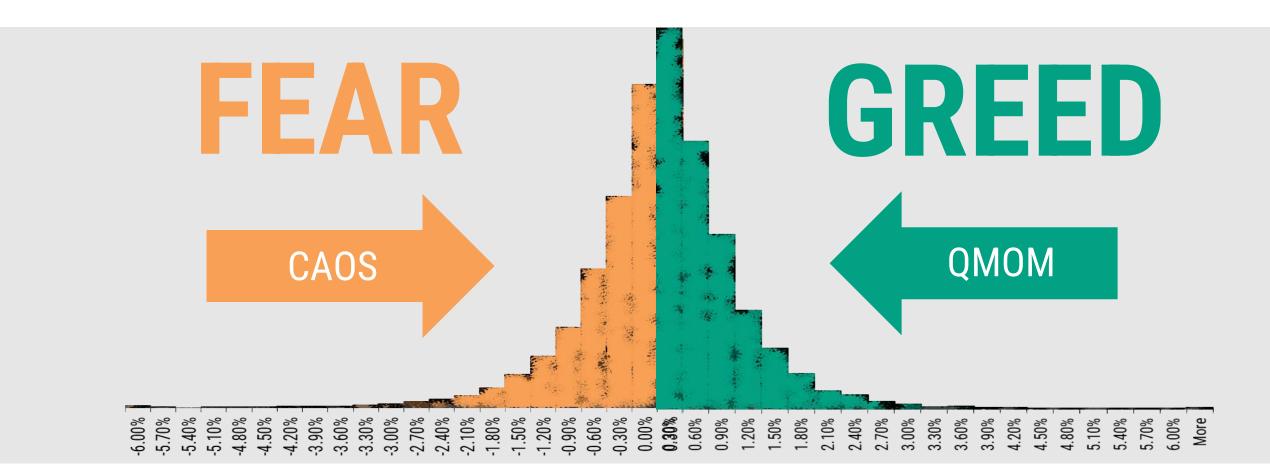
# Consistent factor exposure at a reasonable cost.

#### **Alpha Architect Expense Ratio history**

	Ticker	2015	2016	2017	2018	<b>2019</b> <sup>1</sup>	2020	2021	2022	<b>2023</b> <sup>1</sup>	<b>2024</b> <sup>1</sup>
VALUE	QVAL	0.79%	0.79%	0.79%	0.79%	0.49%	0.49%	0.49%	0.49%	0.39%	0.29%
	IVAL	0.79%	0.79%	0.79%	0.79%	0.59%	0.59%	0.59%	0.59%	0.49%	0.39%
MUTN	QMOM	0.79%	0.79%	0.79%	0.79%	0.49%	0.49%	0.49%	0.49%	0.39%	0.29%
MOMENTUM	IMOM	0.79%	0.79%	0.79%	0.79%	0.59%	0.59%	0.59%	0.59%	0.49%	0.39%

Source: Alpha Architect. <sup>1</sup>Fee change effective 1/31/2019, 1/31/2023, 1/31/2024. Investing involves risk, including the loss of principal. Past performance does not guarantee future results. Net Expense Ratio represents the percentage applicable to investors.





Manage client "craziness" without making the portfolio crazy



### 10% Band Rebal.<sup>1</sup> | 60% QMOM/40% CAOS vs. 60/40 Core<sup>2</sup>

	QMOM/CAOS	60/40 Core
YTD	27.86%	17.70%
1 Yr.	33.77%	23.00%
3 Yr.	8.47%	6.20%
5 Yr.	12.90%	9.42%
Common Incept.	9.67%	9.66%
Std. Dev.	14.14%	10.23%
Max drawdown	-21.29%	-19.99%
Best year	47.45%	22.91%
Worst Year	-9.82%	-15.79%



Source: YCharts, Alpha Architect. Monthly returns. 1/1/2016 – 9/30/2024. **Investing involves risk, including the potential for loss of principal. Past performance does not guarantee future results.** 10% Band rebalance means the portfolio is rebalanced back to the target weights when the equity portion of the portfolio either exceeds 70% or falls below 50%. 260/40 Core represented by 60% allocated to the US Large Blend category average and 40% to the US Intermediate Core Bonds category average. You cannot invest directly in an index or category average. Definitions for CAGR, standard deviation, and max drawdown are available in disclosures.



# Where to add QMOM in a portfolio

GOAL	How QMOM may help	What to target	Target QMOM weighting
Systematize sector or thematic exposure	Monthly rebalancing means QMOM will systematically allocate toward trending sectors	Target individual sector ETFs (eg, industrials ETFs) or thematic ETFs	100% replace; 5-25% overall weighting
Improve momentum characteristics	QMOM seeks to deliver consistent exposure to the strongest momentum stocks on the US market.	Target current US momentum ETFs that may have higher overlap or expense ratios than QMOM	100% replace; 10-30% overall weighting
Create an active satellite around core equity positions	Value is the best diversifier to momentum, in our view. Pair QMOM with Alpha Architect's US Quant. Value ETF (QVAL) for an active satellite position	Target "closet index" strategies, ie, funds with high S&P 500 overlap and/or low turnover in the Small- or Mid-cap category	100% replace; 10-50% overall weighting



# Where to add CAOS in a portfolio

GOAL	How CAOS may help	What to target	Target CAOS weighting
Fixed income replacement	With low correlation to both stocks and bonds, CAOS can be a hedge against fast crashes and potentially a source of positive, uncorrelated returns.	Target strategies that have shown limited effectiveness during past market crashes, such as highly correlated alternative or bond funds	Split or replace fixed income allocation with CAOS
Hedge equity allocation	CAOS's track record of positive, asymmetric returns may potentially offset losses in the equity portfolio.	Target strategies prone to sharp declines, like high-beta equity funds or sector-specific growth strategies	10-20% of total portfolio
Complement managed futures	Historically, managed futures strategies are vulnerable to short, fast equity market crashes – precisely the market conditions CAOS has thrived in, historically.	Target managed future strategies with fees >=1%, lower credit quality fixed income positions, or alternatives that have underperformed expectations	Split CAOS with target managed futures



# **APPENDIX**



#### **Annual Rebal.** 1 | **60% QMOM/40% CAOS** vs. 60/40 Core<sup>2</sup>

	QMOM/CAOS	60/40 Core
YTD	27.86%	17.70%
1 Yr.	33.77%	23.00%
3 Yr.	8.47%	6.20%
5 Yr.	12.90%	9.42%
Common Incept.	9.67%	9.66%
Std. Dev.	14.14%	10.23%
Max drawdown	-21.29%	-19.99%
Best year	47.45%	22.91%
Worst Year	-9.82%	-15.79%



Source: YCharts, Alpha Architect. Monthly returns. 1/1/2016 – 9/30/2024. **Investing involves risk, including the potential for loss of principal. Past performance does not guarantee future results.** <sup>1</sup>Annual rebalance means the portfolio is rebalanced back to the target weights in December of each year. <sup>2</sup>**60/40 Core** represented by 60% allocated to the US Large Blend category average and 40% to the US Intermediate Core Bonds category average. You cannot invest directly in an index or category average. Definitions for CAGR, standard deviation, and max drawdown are available in <u>disclosures.</u>



## Monthly Rebal.<sup>1</sup> | 60% QMOM/40% CAOS vs. 60/40 Core<sup>2</sup>

	QMOM/CAOS	60/40 Core
YTD	26.86%	17.24%
1 Yr.	32.97%	22.47%
3 Yr.	8.37%	6.02%
5 Yr.	13.61%	9.34%
Common Incept.	10.09%	9.61%
Std. Dev.	14.20%	10.25%
Max drawdown	-21.02%	-19.94%
Best year	47.45%	22.91%
Worst Year	-9.82%	-15.79%



Source: YCharts, Alpha Architect. Monthly returns. 1/1/2016 – 9/30/2024. Investing involves risk, including the potential for loss of principal. Past performance does not guarantee future results. <sup>1</sup>Monthly rebalance means the portfolio is rebalanced back to the target weights each month. <sup>2</sup>60/40 Core represented by 60% allocated to the US Large Blend category average and 40% to the US Intermediate Core Bonds category average. You cannot invest directly in an index or category average. Definitions for CAGR, standard deviation, and max drawdown are available in disclosures.



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#### **PROSPECTUS OFFER**

Investors should carefully consider the investment objectives, risk, charges, and expenses of the funds. This and other important information is in the indicated fund's prospectus, which can be obtained by calling (215) 882-9983 or by visiting www.funds.alphaarchitect.com. The prospectus should be read carefully before investing.

#### **PRINCIPAL RISKS**

Selling or Writing Options. Writing option contracts can result in losses that exceed the seller's initial investment and may lead to additional turnover and higher tax liability. The risk involved in writing a call option is that there could be an increase in the market value of the underlying or reference asset. An underlying or reference asset may be an index, equity security, or ETF. If this occurs, the call option could be exercised and the underlying asset would then be sold at a lower price than its current market value. In the case of cash settled call options such as SPX options, the call seller would be required to purchase the call option at a price that is higher than the original sales price for such call option. Similarly, while writing call options can reduce the risk of owning the underlying asset, such a strategy limits the opportunity to profit from an increase in the market value of the underlying asset in exchange for up-front cash at the time of selling the call option. The risk involved in writing a put option is that there could be a decrease in the market value of the underlying asset. If this occurs, the put option could be exercised and the underlying asset would then be sold at a higher price than its current market value. In the case of cash settled put options, the put seller would be required to purchase the put option at a price that is higher than the original sales price for such put option.

**Buying or Purchasing Options Risk.** If a call or put option is not sold when it has remaining value and if the market price of the underlying asset, in the case of a call option, remains less than or equal to the exercise price, or, in the case of a put option, remains equal to or greater than the exercise price, the buyer will lose its entire investment in the call or put option. Since many factors influence the value of an option, including the price of the underlying asset, the exercise price, the time to expiration, the interest rate, and the dividend rate of the underlying asset, the buyer's success in implementing an option buying strategy may depend on an ability to predict movements in the prices of individual assets, fluctuations in markets, and movements in interest rates. There is no assurance that a liquid market will exist when the buyer seeks to close out any option position. When an option is purchased to hedge against price movements in an underlying asset, the price of the option may move more or less than the price of the underlying asset.

**Box Spread Risk.** A Box Spread is a synthetic bond created by combining different options trades that have offsetting spreads (e.g., purchases and sales on the same underlying instrument, such as an index or an ETF, but with different strike prices). If one or more of these individual option positions are modified or closed separately prior to the option contract's expiration, then the Box Spread may no longer effectively eliminate risk tied to the underlying asset's price movement. Furthermore, the Box Spread's value is derived in the market and is in part, based on the time until the options comprising the Box Spread expire and the prevailing market interest rates. If the Fund (or an underlying ETF) sells a Box Spread prior to its expiration, then the Fund may incur a loss. The Fund's ability to profit from Box Spreads is dependent on the availability and willingness of other market participants to sell Box Spreads to the Fund (or the underlying ETF) at competitive prices.

**FLEX Options Risk.** FLEX Options are exchange-traded options contracts with uniquely customizable terms like exercise price, style, and expiration date. Due to their customization and potentially unique terms, FLEX Options may be less liquid than other securities, such as standard exchange listed options. In less liquid markets for the FLEX Options, the Fund may have difficulty closing out certain FLEX Options positions at desired times and prices.



**FLEX Options Risk (cont'd).** The value of FLEX Options will be affected by, among others, changes in the underlying share or equity index price, changes in actual and implied interest rates, changes in the actual and implied volatility of the underlying shares or equity index and the remaining time to until the FLEX Options expire. The value of the FLEX Options will be determined based upon market quotations or using other recognized pricing methods. During periods of reduced market liquidity or in the absence of readily available market quotations for the holdings of the Fund, the ability of the Fund to value the FLEX Options becomes more difficult and the judgment of Arin Risk Advisors (employing the fair value procedures adopted by the Board of Trustees of the Trust) may play a greater role in the valuation of the Fund's holdings due to reduced availability of reliable objective pricing data.

**Derivatives Risk.** A derivative is any financial instrument whose value is based on, and determined by, another asset, rate or index (i.e., stock options, futures contracts, caps, floors, etc.). When the Fund obtains exposure to derivatives it will be exposed to the risks of those derivatives. The use of derivatives for non-hedging purposes may be considered to carry more risk than other types of investments. Unfavorable changes in the value of the underlying asset, rate or index may cause sudden losses. Changes in the value of a derivative may not correlate perfectly with the underlying asset, rate or index, a the Fund could lose more than the principal amount invested. Derivative instruments are subject to a number of risks including counterparty, liquidity, interest rate, market, credit and management risks, as well as the risk of improper valuation.

Counterparty Risk. Counterparty risk is the risk that a counterparty to a financial instrument held by the Fund may become insolvent or otherwise fail to perform its obligations, and the Fund may obtain no or limited recovery of its investment, and any recovery may be significantly delayed. Exchange listed options, including FLEX Options, are issued and guaranteed for settlement by the Options Clearing Corporation ("OCC"). The Fund's investments are at risk that the OCC will be unable or unwilling to perform its obligations under the option contract terms. In the unlikely event that the OCC becomes insolvent or is otherwise unable to meet its settlement obligations, the Fund could suffer significant losses.

**Leverage Risk.** Leverage risk refers to the potential for increased volatility and losses in a portfolio due to the use of derivatives or other financial instruments that may magnify gains and losses beyond the initial investment. The Fund will utilize derivatives, such as options, to gain exposure to certain assets or markets with a smaller initial investment. While leveraging derivatives can amplify gains, it can also magnify losses significantly. Leverage could possibly create increased volatility for the Fund.

Cash and Cash Equivalents Risk. At any time, the Fund may have significant investments in cash or cash equivalents. When a substantial portion of a portfolio is held in cash or cash equivalents, there is the risk that the value of the cash account, including interest, will not keep pace with inflation, thus reducing purchasing power over time.

Market Risk. The Fund's investments are subject to changes in general economic conditions, general market fluctuations and the risks inherent in investment in interest rate sensitive markets. Interest rate markets can be volatile and prices of investments can change substantially due to various factors including, but not limited to, economic growth or recession, the investment's average time to maturity, changes in interest rates, changes in the actual or perceived creditworthiness of issuers, and general market liquidity. The Fund is subject to the risk that geopolitical events will disrupt securities markets and adversely affect global economies and markets. Local, regional or global events such as war, acts of terrorism, the spread of infectious illness or other public health issues, or other events could have a significant impact on the Fund and its investments.

**Equity Securities Risk.** Investments in securities whose performance is linked to that of equity securities, such as SPX Options, may fluctuate in value in response to many factors, including the activities of the individual issuers included in the Index, general market and economic conditions, interest rates, and specific industry changes. Such price fluctuations subject the Fund to potential losses.

Investment Risk. When you sell your Shares of the Fund, they could be worth less than what you paid for them. Therefore, you may lose money by investing in the Fund.

Large-Capitalization Companies Risk. Large-capitalization companies may trail the returns of the overall stock market. Large-capitalization stocks tend to go through cycles of doing better - or worse - than the stock market in general. These periods have, in the past, lasted for as long as several years. Larger, more established companies may be slow to respond to challenges and may grow more slowly than smaller companies.



Investment Company Risk. An investment in other registered investment companies (including other ETFs, affiliated and non-affiliated) is subject to the risk associated with those investment companies, which include, but are not limited to, the risk that such fund's investment strategy may not produce the intended results; the risk that securities in such fund may underperform in comparison to the general securities markets or other asset classes; and the risk that the fund will be concentrated in a particular issuer, market, industry or sector, and therefore will be especially susceptible to loss due to adverse occurrences affecting that issuer, market, industry or sector. Moreover, the Fund will incur duplicative expenses from such investments, bearing its share of that fund's expenses while also paying its own advisory fees and trading costs. Investments in ETFs are also subject to the "ETF Risks" described below.

In addition, the Fund may invest in underlying funds which invest a larger portion of their assets in one or more sectors than many other funds, and thus will be more susceptible to negative events affecting those sectors.

The Fund may invest in affiliated ETFs managed by the Adviser, Alpha Architect, and/or Arin Risk Advisors, including the Architect 1-3 Month Box ETF. The Adviser, Alpha Architect, and/or Arin may be subject to potential conflicts of interest in selecting underlying funds because the fees paid to it by certain affiliated underlying funds are higher than the fees paid by other affiliated and unaffiliated underlying funds. To the extent the Fund invests a significant percentage of its assets in any one affiliated ETF or across multiple affiliated ETFs, the Fund will be subject to a greater degree to the risks particular to the investment strategies employed by the Adviser, Alpha Architect, and/or Arin Risk Advisors.

Valuation Risk. Some portfolio holdings, potentially a large portion of the Fund's investment portfolio, may be valued on the basis of factors other than market quotations. This may occur more often in times of market turmoil or reduced liquidity. There are multiple methods that can be used to value a portfolio holding when market quotations are not readily available. The value established for any portfolio holding at a point in time might differ from what would be produced using a different methodology or if it had been priced using market quotations. Portfolio holdings that are valued using techniques other than market quotations, including "fair valued" securities, may be subject to greater fluctuation in their valuations from one day to the next than if market quotations were used. In addition, there is no assurance that the Fund could sell or close out a portfolio position for the value established for it at any time, and it is possible that the Fund would incur a loss because a portfolio position is sold or closed out at a discount to the valuation established by the Fund at that time.

**High Portfolio Turnover Risk.** The Fund's investment strategy is expected to result in a high portfolio turnover rate (100% or more). This will increase the Fund's brokerage commission costs, which could negatively impact the performance of the Fund. When taking into account derivative instruments, including option contracts, and instruments with maturities of one year or less at the time acquisition, the Fund's strategy will result in frequent portfolio trading and, if these instruments were included in the calculation of the Fund's portfolio turnover rate it would exceed 100%.

**U.S. Government Securities Risk.** U.S. government securities risk refers to the risk that debt securities issued or guaranteed by certain U.S. Government agencies, instrumentalities, and sponsored enterprises are not supported by the full faith and credit of the U.S. Government, and so investments in their securities or obligations issued by them involve credit risk greater than investments in other types of U.S. Government securities.

Management Risk. The Fund is actively managed and Arin Risk Advisors' ability to choose suitable investments and implement the strategies described above has a significant impact on the ability of the Fund to achieve its investment objectives. In addition, there is the risk that the investment process, techniques and analyses used by Arin Risk Advisors will not produce the desired investment results and the Fund may lose value as a result.

Authorized Participants, Market Makers and Liquidity Providers Concentration Risk. The Fund has a limited number of financial institutions that may act as Authorized Participants ("APs"). In addition, there may be a limited number of market makers and/or liquidity providers in the marketplace. To the extent either of the following events occur, Shares may trade at a material discount to NAV and possibly face delisting: (i) APs exit the business or otherwise become unable to process creation and/or redemption orders and no other APs step forward to perform these services, or (ii) market makers and/or liquidity providers exit the business or significantly reduce their business activities and no other entities step forward to perform their functions.



**Premium-Discount Risk.** The Shares may trade above or below their net asset value ("NAV"). The market prices of Shares will generally fluctuate in accordance with changes in NAV as well as the relative supply of, and demand for, Shares on Cboe BZX Exchange, Inc. (the "Exchange") or other securities exchanges. The trading price of Shares may deviate significantly from NAV during periods of market volatility or limited trading activity in Shares. In addition, you may incur the cost of the "spread," that is, any difference between the bid price and the ask price of the Shares.

Cost of Trading Risk. Investors buying or selling Shares in the secondary market will pay brokerage commissions or other charges imposed by brokers as determined by that broker. Brokerage commissions are often a fixed amount and may be a significant proportional cost for investors seeking to buy or sell relatively small amounts of Shares.

**Trading Risk.** Although the Shares are listed on the Exchange, there can be no assurance that an active or liquid trading market for them will develop or be maintained. In addition, trading in Shares on the Exchange may be halted. In stressed market conditions, the liquidity of Shares may begin to mirror the liquidity of its underlying portfolio holdings, which can be less liquid than Shares, potentially causing the market price of Shares to deviate from its NAV. The spread varies over time for Shares of the Fund based on the Fund's trading volume and market liquidity and is generally lower if the Fund has high trading volume and market liquidity, and higher if the Fund has little trading volume and market liquidity (which is often the case for funds that are newly launched or small in size).

Cash Creation Unit Risk. Unlike most other ETFs, the Fund expects to effect a substantial portion of its creations and redemptions for cash, rather than in-kind securities (although redemptions will also be done in-kind under certain circumstances). The use of cash creations and redemptions may also cause the Fund's shares to trade in the market at greater bid-ask spreads or greater premiums or discounts to the Fund's NAV. As a practical matter, only institutions and large investors, such as market makers or other large broker dealers, also known as "authorized participants," create or redeem shares directly through the Fund. Most investors will buy and sell shares of the Fund on an exchange through a broker-dealer. Cash creation and redemption transactions may result in certain brokerage, tax, execution, price movement and other costs and expenses related to the execution of trades resulting from such transactions. To offset these expenses, the Fund will collect fees from the applicable authorized participant to reimburse the Fund for any costs incurred by the Fund that result from a cash creation or redemption. The use of cash for redemptions will limit the tax efficiency of the Fund.

**Geopolitical/Natural Disaster Risks.** The Fund's investments are subject to geopolitical and natural disaster risks, such as war, terrorism, trade disputes, political or economic dysfunction within some nations, public health crises and related geopolitical events, as well as environmental disasters, epidemics and/or pandemics, which may add to instability in world economies and volatility in markets. The impact may be short-term or may last for extended periods.

**Tax Risk.** The Fund intends to qualify as a regulated investment company ("RIC") under the Internal Revenue Code of 1986, as amended. However, the U.S. federal income tax treatment of certain aspects of the options strategy employed by the Fund are not entirely clear under existing law, including identifying the issuer of an option, and could affect such qualification. If, in any year, the Fund fails to qualify as a RIC, the Fund itself generally would be subject to U.S. federal income taxation and distributions received by its shareholders generally would be subject to further U.S. federal income taxation.

**Equity Investing Risk.** An investment in the Fund involves risks similar to those of investing in any fund holding equity securities, such as market fluctuations, changes in interest rates and perceived trends in stock prices. The values of equity securities could decline generally or could underperform other investments. In addition, securities may decline in value due to factors affecting a specific issuer, market or securities markets generally.

**Security Selection Risk.** Data for some companies may be less available and/or less current than data for companies in other markets. The Adviser uses a quantitative model, and its processes could be adversely affected if erroneous or outdated data is utilized. In addition, securities selected using the quantitative model could perform differently from the financial markets as a whole as a result of the characteristics used in the analysis, the weight placed on each characteristic and changes in the characteristic's historical trends.



#### Note on category average methodology

Constituents of a given category are determined by YCharts. As of 4/30/2024, the calculation method used to determine the category average's returns changed to account for potentially different inception dates. Previously, a straight average of constituent funds' total return net asset value (NAV) was used to determine the category's average total return NAV; the percent change of the category average NAV was then used to calculate returns. As of 4/30/2024, total returns for the category are now found using a straight average of the total NAV return (percent change) for a given frequency (daily, weekly, monthly, etc.). There may be instances where the straight average of the constituent funds' NAV returns may be higher or lower than the straight average of the total NAV return. As of 4/30/2024, all category average returns are calculated using the straight average of the constituent funds' total NAV return for a given frequency.

#### Category average constituent selection criteria

Unless otherwise noted, the given category is represented by the 50 biggest funds based on assets under management (AUM). The AUM figure is point-in-time and is not retroactively applied to constituent funds. In the event fewer than 50 funds are available in a given category, all funds are used in to calculate returns. Funds that may have been open for investment over the given period but are no longer active are not included. The number of constituent funds in a given category average may affect represented returns. In the event of multiple share classes, the share class with the highest AUM is referenced. Category returns are a straight average of the total return of the constituent funds over the given period.

Wherever possible, we reference the 50 biggest funds by AUM to provide what we believe to be a reasonable sample of the most popular strategies that includes a mix of passive and active approaches. The highest AUM funds tend to have more established track records, providing what we believe to be a reasonable basis for returns.

**US Aggregate Bonds category average** represented by the 50 biggest open-ended funds (mutual funds and ETFs) based on assets under management in the Intermediate Core Bond category. Funds in the Intermediate Core Bond category invest primarily in investment-grade US fixed-income issues, including government, corporate, and securitized debt, and hold less than 5% in below-investment-grade exposures. As of 9/30/2024, there are 177 funds in the Intermediate Core Bond category.

**US Large-Blend category average** represented by the 50 biggest ETFs based on assets under management in the US Large Blend category. Funds in the US Large Blend category invest across the spectrum of US industries, and owing to their broad exposure, the portfolios' returns are often similar to those of the S&P 500 index. Stocks in the top 70% of the capitalization of the US equity market are defined as large cap. The blend style is assigned to portfolios where neither growth nor value characteristics predominate. As of 9/30/2024, there are 257 ETFs in the US Large Blend category.

Intermediate Government Bonds category average represented by funds that primarily invest in bonds backed by the US government or by government-linked agencies. This backing minimizes the credit risk of these portfolios, as the US government is unlikely to default on its debt.

Defined Outcome category average seek to deliver a predefined range of outcomes over a set period. This range is determined by equity market performance and the derivative contracts that underlie each fund.

**Inverse Equity category average** seek to generate returns equal to an inverse fixed multiple of short-term returns of an equity index. The compounding of short-term returns results in performance that does not correspond to those of investing in the index with external leverage.

**Systematic Trend (Managed Futures)** category average represented by funds that primarily implement trend-following, price-momentum strategies by trading long and short liquid global futures, options, swaps, and foreign-exchange contracts.



#### Note on momentum category

There is no explicit "momentum" category. Generally, momentum funds tend to fall into the "growth" category, however, that standard is not uniformly applied by third party data provides such as FactSet, Morningstar, YCharts, or others. To facilitate what we believe to be fair and balanced comparison, we build a momentum category using the following criteria.

#### **US Momentum**

- 1. Exclude Alpha Architect funds
- 2. Exclude non-USD denominated funds
- 3. Exclude mutual funds. We do this to facilitate a fair comparison at a structural level (ETF to ETF) and to facilitate accurate advanced characteristics data, such as active share and momentum score
- 4. Filter for Broad Asset Class: US Equity & Sector Equity. We include sector momentum ETFs on the basis that a sector-based momentum strategy could be a reasonable alternative to a broad-based momentum approach. Filtering for funds in the US Equity broad asset class excludes alternatives such as long/short momentum funds. Our goal is to identify "peer" momentum strategies that are long-only.
- 5. Filter for US Equity Exposure >=50%. Here we to seek to avoid strategies that aren't focused on US equities.
- 6. Remove funds that contain the word "value" or variations in the fund's name. This removes funds that blend value and momentum together, which may cause performance deviations.
- 7. Filter funds that contain the word "momentum" or variations in the fund. We believe this is a reasonable approach to identify most funds seeking to hold themselves out as a momentum strategy, and therefore, a peer to our momentum to our strategy.
- **US Momentum peers** represented by ETFs that we believe use a momentum-based strategy to manage its portfolio. Momentum defined as buying securities that have had high returns over a recent period and selling those that have had poor returns over the same period. Funds selected based on the appearance of "momentum" in the security's name and a portfolio that predominantly invests in US securities. As of 9/30/2024, there are 26 ETFs that meet the given criteria.

#### Limited universe

The information presented regarding peer ETFs may be based on a limited universe of comparable funds that we believe are relevant to the strategy, investment style, and asset class of this ETF. This comparison is not exhaustive and may exclude other funds that also offer similar exposures or strategies. Investors are encouraged to conduct their own research and consider other products in the marketplace that may provide comparable investment objectives or characteristics. Past performance is no guarantee of future results, and differences in fees, structures, or market conditions may lead to different outcomes between peer funds and this ETF. Investors should consider factors such as risk tolerance, fees, liquidity, and investment goals before making any investment decisions based on peer comparisons. This disclosure is not an endorsement of any peer fund, nor should it be interpreted as financial advice.

The Funds are distributed by Quasar Distributors, LLC. The Fund investment advisor is Empowered Funds, LLC, doing business as Alpha Architect.

AA-653907-2024-12-09





#### **Definitions**

CAGR stands for compounded annualized growth rate, which represents the rate at which an investment would have grown if it had grown at the same rate every year and the profits were reinvested at the end of each year.

Standard Deviation measures the degree to which an investment's historical returns deviate from its mean. Higher standard deviation implies greater deviation. Standard deviation and volatility are often synonymous.

Max Drawdown measures the largest single drop from peak to bottom in the value of a portfolio before a new peak is achieved. It may be considered an indicator of a given investment's historical downside risk.

The Funds are distributed by Quasar Distributors, LLC. The Fund investment advisor is Empowered Funds, LLC, doing business as Alpha Architect.

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