

How CAOS Can Enhance Your Buffer ETF Strategy

Learn how the Alpha Architect Tail Risk ETF (CAOS) can potentially strengthen risk management for buy-and-hold and buffer strategies.

LAST UPDATED: 6.13.25



Standardized returns as of 3/31/2025		Annualized 3 Yr. 1 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
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%	0.73%	0.63% ¹

Source: YCharts, Alpha Architect. Investing involves risk, including the loss of principal. Past performance does not guarantee future results. Returns are annualized total returns, except for those periods of less than one year, which are cumulative. 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 funds.alphaarchitect.com. 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. ¹The Adviser has contractually agreed to waive all or a portion of its management fee from exceeding 0.63% of its daily net assets.



Fixed income risks include interest-rate and credit risk. Typically, when interest rates rise, there is a corresponding decline in bond values. Credit risk refers to the possibility that the bond issuer will not be able to make principal and interest payments. Non-investment-grade debt securities (high-yield/junk bonds) may be subject to greater market fluctuations, risk of default or loss of income and principal than higher-rated securities. Mortgage-backed securities ("MBS") and commercial mortgage-backed securities ("CMBS") are subject to prepayment and extension risk and therefore react differently to changes in interest rates than other bonds. Small movements in interest rates may quickly and significantly reduce the value of certain mortgage-backed securities. There may be less information on the financial condition of municipal issuers than for public corporations. The market for municipal bonds may be less liquid than for taxable bonds. Some investors may be subject to federal or state income taxes or the Alternative Minimum Tax (AMT). Capital gains distributions, if any, are taxable. An investment in a treasury Fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency and its return and yield will fluctuate with market conditions.

International investing involves risks, including risks related to foreign currency, limited liquidity, less government regulation and the possibility of substantial volatility due to adverse political, economic or other developments. These risks often are heightened for investments in emerging/developing markets and in concentrations of single countries. Funds that concentrate investments in specific industries, sectors, markets or asset classes may underperform or be more volatile than other industries, sectors, markets or asset classes and the general securities market.

A fund's use of derivatives may reduce a fund's returns and/or increase volatility and subject the fund to counterparty risk, which is the risk that the other party in the transaction will not fulfill its contractual obligation. A fund could suffer losses related to its derivative positions because of a possible lack of liquidity in the secondary market and as a result of unanticipated market movements, which losses are potentially unlimited. There can be no assurance that any fund's hedging transactions will be effective.

There can be no assurance that performance will be enhanced or risk will be reduced for funds that seek to provide exposure to certain quantitative investment characteristics ("factors"). Exposure to such investment factors may detract from performance in some market environments, perhaps for extended periods. In such circumstances, a fund may seek to maintain exposure to the targeted investment factors and not adjust to target different factors, which could result in losses.

Alternative investments present the opportunity for significant losses and some alternative investments have experienced periods of extreme volatility. Alternative investments may be less liquid than investments in traditional securities.

Commodities' prices may be highly volatile. Prices may be affected by various economic, financial, social and political factors, which may be unpredictable and may have a significant impact on the prices of precious metals.

Actively managed funds do not seek to replicate the performance of a specified index. Actively managed funds may have higher portfolio turnover than index funds.



CAOS | Sub-adviser & Portfolio Management team

Arin Risk Advisors

The Arin team has decades of experience trading options.

Joseph DeSipio, CFA, FRM | Chief Market Strategist

- Leads strategy design and risk management
- Previously held strategist and Lead Portfolio Manager positions with SEI Investments, Evergreen Investments, Wachovia and Vector Capital Management
- BS, Indiana University of PA; MA Economics Temple University
- CFA charter holder and Financial Risk Manager

Lawrence Lempert | Trading Director

- Oversees all trading and regulatory processes.
- Previously served as market maker/index/sector correlation and dispersion trader with **Susquehanna International Group**
- BS, Statistics & Economics Rutgers College; JD, Villanova; Masters in Taxation New York University School of Law

Ryan Bailey | Lead Portfolio Manager

- Creates and monitors customized options overlay and volatility management mandates.
- Previously served as Market Maker and Proprietary Trader with **Bullock Capital and Susquehanna** International Group across the equities, options and futures markets.
- BS, Business Administration Drexel University; magna cum laude



CAOS | Sub-adviser

Alpha Architect

Alpha Architect is led by Wesley R. Gray, PhD, and Jack R. Vogel, PhD.



Wesley R. Gray, PhD | CEO, co-CIO

- PhD/MBA from the University of Chicago Booth School of Business; studied under Nobel Prize Winner Eugene Fama
- BS The Wharton School of the University of Pennsylvania, magna cum laude
- United States Marine Corps Captain (2004-2008)
- Published in multiple academic journals, including the Journal of Portfolio Management, the Journal of Investing, the Journal of Quantitative Finance, and more. Authored or co-authored four books.



Jack R. Vogel, PhD | CFO, co-CIO

- PhD Finance and an MS in Mathematics from Drexel University
- BS in Mathematics and Education, summa cum laude from The University of Scranton
- Published in multiple academic journals, including the Journal of Portfolio Management, the Journal of Investing, the Journal of Quantitative Finance, and more. Co-authored two books.

Why are we even talking about Buffer ETFs?

We're a factor-centric investment firm. What's with all the talk about structured products?

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Why?

Unprecedented Growth

As of the time of writing, buffer ETFs with exposure to the U.S. market have amassed an astounding **\$51 billion** in AUM.

According to ETF Action, Q1 of 2025 registered a record \$5.4B of inflows.¹



Buffer ETFs saw record inflows in the first quarter. Could be well timed but keep in mind that these strategies require you to hold for entire outcome period to experience stated objectives (significant time element to options pricing).



Source: FactSet. YCharts. As of 01/31/2025, there are \$51B in ETFs that have at least 50% exposure to the U.S. market and have the word "buffer" included in the name. 1@etfAction on X.



Why?

\$5 to \$181 Billion!

According to BlackRock, "outcome ETFs", which encompass options-based bear, trading and income funds have experienced about a 36x growth since 2018!



¹Source: BlackRock, Monningstar, as of 12/21/2024, 82% growth rate based on the 5-year compound annual growth rate (CAGR) of ACM for U.S. Outcome ETFs, Outcome ETFs, Unit represented by a universe of S6N U.S. housed ETFs, including S70 solutions entented strategies as categorized including derivative income and downide protection and 2% ETFs across the Bear Market, Derivative Income, Options Trading, U.S. Fund Derivative Income and U.S. Fund Options Trading Manningstar Categories. Solution-oriented strategies are ETFs that use derivatives as a source of Income or downide protection, ETFs are obliged to distribute portfolio gains to shareholders by year-end. These gains may be generated due to index relatancing, trading within the fund, or to meet diversification requirements. Trading share of ETFs may also generate tax consequences and to trades expenses.

WHAT IS SPURRING THE ADOPTION OF OUTCOME ETFs?

| Practice management

Better manage emotions, keeping your most risk-sensitive clients invested.

| Pertfolio construction

Seeks to reduce volatility, balance income and growth, or amplify cash flow in their portfolio.

I Bunefits of the ETF wrapper

Low fees, intraday liquidity, transparancy, and tax efficiency.



Takeaway: We need to pay attention!

When the market asks for something, we pay attention.

The question is: what is it asking for?

What are Buffer ETFs?

Buffer ETFs seek to:

1) Return capital appreciation.

2) Provide risk mitigation by "buffering" a set percentage of losses in a reference asset (usually the S&P 500) over a defined period.

Let's see how. \rightarrow



Defining Terms

Buffer ETFs structure returns

By deciding on the following four elements:

- **1. Buffer Size:** The first percent of losses that are "protected". Set as a percentage. (i.e. 10%)
- **2. Cap:** The maximum upside an investor can earn. Set as a percentage. (i.e. 5%)
- **3. Outcome period:** The fixed term over which the buffer and cap apply. Often 12 months.
- **4. Reference asset:** The underlying in the options bought and sold. Usually a broad index.



For illustrative purposes only.



A year-long, 10% buffer, 5% cap, buffer ETF.

Question: What happens if during that year **the reference asset drops 10%**?

Answer: The ETF would return **0%** at expiration





A year-long, 10% buffer, 5% cap, buffer ETF.

Question: What happens if during that year **the reference asset drops 20%**?

Answer: The ETF would return **-10%** at expiration





A year-long, 10% buffer, 5% cap, buffer ETF.

Question: What happens if during that year **the reference asset** gains **10%**?

Answer: The ETF would return **5%** at expiration





A year-long, 10% buffer, 5% cap, buffer ETF.

Question: What happens if during that year **the reference asset** gains **50%**?

Answer: The ETF would return **5%** at expiration



"What kind of sorcery is this?"

- Not Severus Snape

How do Buffer ETFs do what they do?



How?

Buffer ETFs utilize options to repackage risk.

Buffer ETFs tend to use the following four option legs expiring near or at to the end of the outcome period:

- Long deep in-the-money **call**¹ to replicate equity-like returns
- Long at-the-money **put**² to "protect" returns
- Short out-of-the-money put to monetize positions
- Short out-of-the-money call to monetize positions



For illustrative purposes only. ¹Call option is a financial contract that gives the holder the right, but not the obligation, to buy a specified amount of an underlying asset at a predetermined price (known as the strike price) within a specified time frame. ²Put option is a financial contract that gives the owner the right, but not the obligation, to sell a specified amount of an underlying asset at a predetermined price (known as the strike price) within a specified time frame.

So...

"Why is the market obsessed with buffer ETFs?"

What is the question to the answer?



Why buffers?

We believe the marketplace is yearning for risk-management.

And the answer growing in popularity has been this.





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Takeaway: There are hidden risks with every product...



1. "Risk cannot be destroyed, only transformed."

... and Buffer ETFs are not the exception.



Buffer ETFs aim to keep you somewhat safe...

Like a helmet, when you ride a bike!





But not THAT safe!

Helmets won't *always* save you.





The risks.

Is it always a good idea to buy?

Ask yourself the following questions:

- Would you buy at the cap, when there is only downside?
- Would you buy at the buffer, when there is mostly downside?
- If not, why would you hold?





The risks.

Let's think of returns as normally distributed.

Buffer ETFs have two main problems:

- 1. They expose the **downside**.
- 2. They cap the **upside**.



Enter CAOS.

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





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 converted¹ 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 – 12/31/2024. 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. 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. See note on category average calculation methodology. You cannot directly invest in either an index or a category average.



Positive returns during fast crashes, historically

CAOS maintains a strategic allocation to protective puts^{1,} which generate positive, asymmetric returns in a fast crash, historically.

In our view, our active approach means you **do not need to attempt to time** your CAOS allocation or the market.

CAOS vs. Aggregate Bonds vs. U.S. Large Cap | 2020



Source: YCharts, Alpha Architect, FactSet. Daily returns. 1/1/2020 – 12/31/2020. 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. ²US Large Cap represented by the average returns at NAV of the 50 biggest ETFs in the US Large Blend category based on assets under management (AUM).³US 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	0.73%
Net ²	0.63%

Net expense ratios

Select fund categories



Source: YCharts, Alpha Architect. As of 3/31/2025. ¹Equity Hedged category composed of funds that primarily focus on equity strategies involving long and short positions. These funds aim to generate returns by capturing stock price movements, often hedging market exposure through short positions or derivative instruments. ²The Adviser has contractually agreed to waive all or a portion of its management fee from exceeding 0.63% of its daily net assets.



			US Large	
	Buffer ETFs	CAOS	Сар	Agg. Bonds
YTD	13.26%	5.24%	25.50%	1.73%
1 Yr.	13.26%	5.24%	25.50%	1.73%
3 Yr.	7.31%	0.79%	7.53%	-2.17%
5 Yr.	7.80%	5.20%	12.78%	-0.04%
7 Yr				
10 Yr.				
Since incept.	9.27%	4.87%	15.53%	1.39%
Std. Dev.	10.91%	16.07%	19.76%	5.39%
Max loss	-23.57%	-37.96%	-49.15%	-21.08%
2020 return	7.53%	22.42%	16.15%	8.15%
2020 loss	-20.17%	-20.06%	-35.20%	-7.50%
Expense ratio	0.71%	0.63%	0.18%	0.55%

Returns since 2019

Buffer ETFs¹ vs. CAOS vs. U.S. Large Cap² vs. Aggregate Bonds³



Source: YCharts, Alpha Architect, FactSet. Daily returns. 1/1/2019 – 12/31/2024. Returns presented are compounded annualized return (CAGR) except for YTD and 1-yr. Returns are derived from sources believed to be accurate but are not guaranteed. **Investing involves risk, including the potential for loss of principal. Past performance does not guarantee future results.** ¹Buffer ETFs represented by ETFs that have at least 50% exposure to the U.S. market and have the word "buffer" included in the name. ²US Large Cap represented by the average returns at NAV of the 50 biggest ETFs in the US Large Blend category based on assets under management (AUM). ³Aggregate bonds represented by the average returns at NAV of the 50 biggest open-ended funds (ETFs and mutual funds) in the Intermediate Core Bond category, based on AUM. Categories determined by YCharts. You cannot directly invest in either an index or a category average. See disclosures for <u>max loss and standard deviation definitions.</u>



Low correlation¹ to core source of risk

- CAOS bears little relationship to either US Large Cap² or US Agg. Bonds³ with the lowest correlation to Buffer ETFs⁴ out of all four assets.
- Low correlation to core sources of risk makes CAOS a potentially strong diversifier for the whole portfolio.

	CAOS	Buffer ETFs	US Large Cap	US Agg. Bonds
CAOS	1.00			
Buffer ETFs	-0.04	1.00		
US Large Cap	0.01	0.97	1.00	
US Agg. Bonds	0.10	0.07	0.05	1.00

Source: YCharts, Alpha Architect, FactSet. Daily return correlations. 1/1/2019 – 12/31/2024. Investing involves risk, including the potential for loss of principal. Past performance does not guarantee future results. ¹Correlation measures the degree to which two variables move in relation to each other. Higher correlation implies a tighter relationship. ²US Large Cap represented by the average returns at NAV of the 50 biggest ETFs in the US Large Blend category based on assets under management (AUM). ³Aggregate bonds represented by the average returns at NAV of the 50 biggest open-ended funds (ETFs and mutual funds) in the Intermediate Core Bond category, based on AUM. ⁴Buffer ETFs represented by ETFs that have at least 50% exposure to the U.S. market and have the word "buffer" included in the name. Categories determined by YCharts.

Addressing Buffer ETF challenges with CAOS

We believe that a combination of CAOS and equities bridge many of the gaps in Buffer strategies



How CAOS Can Enhance Your Buffer ETF Strategy

The Alpha Architect portfolios seek to:



¹Max 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 tails.

Buffer ETFs do a good job most of the time... But they don't address the tails.

Though Buffer ETFs address situations one would encounter most of the time, sometimes equities crash down. Sometimes they crash up.

By addressing the tails, we can form more all-weather portfolios.



Buffer ETFs ignore the tails.

Let's build portfolios that:

- Potentially strengthen risk management by responding to far-left-tailed events.
- 2) Potentially enhance returns by adding uncapped exposure to melt-ups.

Let's see how.



Use case #1

<u>Replacing</u> Buffer ETFs

By investing 50% in U.S. large cap equity and 50% in CAOS, investors can potentially profit during left tail and right tail events, while potentially generating long-term positive returns.





	Buffer ETFs	CAOS Portfolio
YTD	13.26%	15.08%
1 Yr.	13.26%	15.08%
3 Yr.	7.31%	4.22%
5 Yr.	7.80%	9.59%
7 Yr		
10 Yr.		
Since incept.	9.27%	10.67%
Std. Dev.	10.91%	12.96%
Max loss	-23.57%	-35.86%
2020 return	7.53%	22.29%
2020 loss	-20.17%	-10.89%
Weighted avg. expense ratio	0.71%	0.40%

Returns since 2019

Buffer ETFs¹ vs. 50% CAOS/ 50% U.S. Large Cap²



Source: YCharts, Alpha Architect, FactSet. Daily returns. 1/1/2019 – 12/31/2024. Returns presented are compounded annualized return (CAGR) except for YTD and 1-yr. Returns are derived from sources believed to be accurate but are not guaranteed. Portfolios are rebalanced monthly. **Investing involves risk, including the potential for loss of principal. Past performance does not guarantee future results.** ¹Buffer ETFs represented by ETFs that have at least 50% exposure to the U.S. market and have the word "buffer" included in the name. ²US Large Cap represented by the average returns at NAV of the 50 biggest ETFs in the US Large Blend category based on assets under management (AUM). You cannot directly invest in either an index or a category average. See disclosures for <u>max loss and standard deviation definitions</u>.



	Buffer ETFs	CAOS Portfolio
Total Return	7.53%	22.29%
Std. Dev.	19.29%	17.08%
Max loss	-20.17%	-10.89%
Weighted avg. expense ratio	0.71%	0.40%

Fast Crash Use Case | Returns in 2020

Buffer ETFs¹ vs. 50% CAOS/ 50% U.S. Large Cap²



Source: YCharts, Alpha Architect, FactSet. Daily returns. 1/1/2020 – 12/31/2020. Returns are derived from sources believed to be accurate but are not guaranteed. Portfolios are rebalanced monthly. **Investing involves** risk, including the potential for loss of principal. Past performance does not guarantee future results. ¹Buffer ETFs represented by ETFs that have at least 50% exposure to the U.S. market and have the word "buffer" included in the name. ²US Large Cap represented by the average returns at NAV of the 50 biggest ETFs in the US Large Blend category based on assets under management (AUM). You cannot directly invest in either an index or a category average. See disclosures for max loss and standard deviation definitions.



Buffer ETFs	CAOS Portfolio
33.93%	35.72%
15.80%	16.57%
6.79%	8.19%
-6.51%	-7.47%
0.71%	0.40%
	Buffer ETFs 33.93% 15.80% 6.79% -6.51% 0.71%

Melt-Up Use Case | Returns 2023-2024

Buffer ETFs¹ vs. 50% CAOS/ 50% U.S. Large Cap²



Source: YCharts, Alpha Architect, FactSet. Daily returns. 1/1/2020 – 12/31/2020. Returns are derived from sources believed to be accurate but are not guaranteed. Portfolios are rebalanced monthly. **Investing involves** risk, including the potential for loss of principal. Past performance does not guarantee future results. ¹Buffer ETFs represented by ETFs that have at least 50% exposure to the U.S. market and have the word "buffer" included in the name. ²US Large Cap represented by the average returns at NAV of the 50 biggest ETFs in the US Large Blend category based on assets under management (AUM). You cannot directly invest in either an index or a category average. See disclosures for max loss and standard deviation definitions.



Use case #2

Complementing Buffer ETFs

By investing 50% in U.S. large cap equity, 30% in CAOS and 20% in Buffer ETFs investors can target a risk profile similar to a 60/40 portfolio while preserving many of the benefits of buffer and tail hedging products.





Buffer ETFs can be thought of as a hybrid of equity and cash.





	60/40	CAOS Portfolio
YTD	15.52%	16.75%
1 Yr.	15.52%	16.75%
3 Yr.	3.73%	5.53%
5 Yr.	7.76%	10.01%
7 Yr		
10 Yr.		
Since incept.	9.95%	11.48%
Std. Dev.	12.03%	12.80%
Max loss	-34.09%	-34.10%
2020 return	13.60%	18.60%
2020 loss	-22.93%	-16.09%
Weighted avg. expense ratio	0.40%	0.42%

Returns since 2019

60% U.S. Large¹/40% Bonds² vs. 50% U.S. Large/ 30% CAOS/ 20% Buffer ETFs³



Source: YCharts, Alpha Architect, FactSet. Daily returns. 1/1/2019 – 12/31/2024. Returns presented are compounded annualized return (CAGR) except for YTD and 1-yr. Returns are derived from sources believed to be accurate but are not guaranteed. **Investing involves risk, including the potential for loss of principal. Past performance does not guarantee future results.** ¹US Large Cap represented by the average returns at NAV of the 50 biggest ETFs in the US Large Blend category based on assets under management (AUM). ²Aggregate bonds represented by the average returns at NAV of the 50 biggest open-ended funds (ETFs and mutual funds) in the Intermediate Core Bond category, based on AUM. ³Buffer ETFs represented by ETFs that have at least 50% exposure to the U.S. market and have the word "buffer" included in the name. Categories determined by YCharts. You cannot directly invest in either an index or a category average. See disclosures for <u>max loss and standard deviation definitions.</u>



The solution.

Combining equity and CAOS empowers portfolios to potentially profit from left and right tail events.

Whether it's Buffer ETFs, or any other strategy, we believe investors looking for more all-weather profiles should include both equity and CAOS to address most market scenarios.





Ready to learn more? Click below to schedule a call.



Access additional resources by visiting the Content Library on our ETF site. Want to see how CAOS stacks up against a specific fund? Request an illustration here.

Appendix How CAOS is built.



How CAOS Can Enhance Your Buffer ETF Strategy

HOW CAOS INVESTS YOUR MONEY

CAOS=PROTECTIVE
PUTSBOX
+PUT
SPREADSPUT
SPREADS

For illustrative purposes only. For current holdings and standardized performance, visit etfsite.alphaarchitect.com/caos/.



How CAOS Can Enhance Your Buffer ETF Strategy

HOW CAOS INVESTS YOUR MONEY

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

For illustrative purposes only. For current holdings and standardized performance, visit etfsite.alphaarchitect.com/caos/.







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 Q1 2020

\$400



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



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 price¹



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 visit <u>funds.alphaarchitect.com</u> for up-to-date holdings information.





CAOS vs. Aggregate Bonds vs. U.S. Large Cap | 2020

Source: YCharts, Alpha Architect, FactSet. Monthly returns. 8/14/2013 – 12/31/2024. Investing involves risk, including the potential for loss of principal. Past performance does not guarantee future results. Protective 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. US Large Cap represented by the average returns at NAV of the 50 biggest ETFs in the US Large Blend category based on assets under management (AUM). 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.



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. 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.



How CAOS Can Enhance Your Buffer ETF Strategy

HOW CAOS INVESTS YOUR MONEY

CAOS =PROTECTIVE
PUTSBOX
+PUT
SPREADSPUT
SPREADS

For illustrative purposes only. For current holdings and standardized performance, visit funds.alphaarchitect.com/caos.







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

Fed funds rate¹



Source: YCharts. 1/1/2013 – 12/31/2024. Daily. ¹Federal 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 Can Enhance Your Buffer ETF Strategy

HOW CAOS INVESTS YOUR MONEY

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

For illustrative purposes only. For current holdings and standardized performance, visit funds.alphaarchitect.com/caos.







Put Spread Trade example

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

_	Net p	roceeds to f	und	\$26.32	
Leg 2	5150	Long	Put	-\$66.20	Paid
Leg 1	5200	Short	Put	\$92.52	Received
Sample Trade	Strike	Side	Туре	Premium	Received/ Paid
Current Index Level	5123.41				
Rolls per Year	33.18				
Day Count	11				
Expiration	4/26/2024				
Today	4/15/2024				

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



Put Spread Trade example Date 4/15/2024 A. Index 5,123.41 level Gain or **B.** Total Loss Strike $(\mathbf{B/A})$ Payoff -\$23.68 5,150 -0.46% \$26.32 5,250 0.51%



Source: Alpha Architect. **Past performance does not guarantee future results. Investing involves risk, including the potential loss of principal.** For illustrative purposes only. Holdings are subject to change. Please visit <u>funds.alphaarchitect.com</u> for up-to-date holdings information.



-5%



2023 Total return | CAOS vs. US Agg. Bonds, U.S. Large Cap

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. ¹US Large Cap represented by the average returns at NAV of the 50 biggest ETFs in the US Large Blend category based on assets under management (AUM). ²US Aggregate Bonds category average represented by the 50 biggest etfs in the US Large Blend category based on assets under management (AUM). ²US Aggregate Bonds category average represented by the 50 biggest etfs in the US Large Blend category based on assets under management (AUM). ²US Aggregate Bonds category average represented by the 50 biggest effects 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.



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IMPORTANT RISK INFORMATION: 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.AlphaArchitect.com/funds. Carefully consider the investment objectives, risk factors, charges, and expenses of funds within the model portfolios before investing. This and other information can be found in the funds' prospectuses or, if available, the summary prospectuses, which may be obtained by visiting each fund company's website, contacting your financial professional, or by visiting <u>www.sec.gov/edgar/search</u>. For Alpha Architect Funds, please visit www.etfsite.alphaarchitect.com. Read the prospectuses carefully before investing. Investing involves risk, including possible loss of principal. Asset allocation and diversification may not protect against market risk, loss of principal, or volatility of returns. Investors should read and consider the information carefully before investing.

Investment risk. When you sell your Shares of the Fund, they could be worth less than what you paid for them. The Fund could lose money due to short-term interest rate market movements and over longer periods during continued interest rate market movements. Therefore, you may lose money by investing in the Fund. Fund-of-funds risks. Because the Funds may invest in other funds, the Funds' investment performance largely depends on the underlying Alpha Architect ETFs. An investor will indirectly bear the principal risks and its share of the fees and expenses of the underlying funds. Some of the underlying funds may be concentrated in a particular sector or invest in smaller to mid-sized capitalization companies making the Fund more sensitive to changing market conditions. Investments in foreign securities involve political, economic and currency risks, areater volatility and differences in accounting methods. Hedging strategy risk. Hedging strategies could limit the Fund's gains in rising markets and may expose the Fund to costs to which it would otherwise not have been exposed. The Fund's use of hedging strategies based on mathematical models may not produce the desired result or risk that the Adviser is unable to trade certain derivatives effectively or in a timely manner. The use of derivatives in connection with the Fund's hedging strategies may expose the Fund to losses (some of which may be sudden and could amplify volatility) due to unexpected changes in the market that it would not have otherwise been exposed to if it had only invested directly in equity securities. When the Fund sells futures contracts or other securities short, the Fund is exposed to the risks associated with short sales, which involve certain risks and special considerations. Theoretically, losses from short sales are potentially unlimited. Derivatives Risk. Derivatives are instruments, such as futures contracts, whose value is derived from that of other assets, rates, or indices. The use of derivatives for non-hedging purposes may be considered to carry more risk than other types of investments, Selling or Writing Options Risk. 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. 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. 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. Box spreads are 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. Counterparty Risk. Counterparty risk is the risk that a counterparty to a financial instrument held by the Fund or by a special purpose or structured vehicle invested in 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.



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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 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 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 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 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 risks 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 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.



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 12/31/2024, 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. 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 12/31/2024, there are 257 ETFs in the US Large Blend category.



Note on buffer category average methodology.

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

- 1. Exclude non-USD denominated funds
- 2. Exclude mutual funds. We do this to facilitate a fair comparison at a structural level (ETF to ETF)
- **3.** Filter for Broad Asset Class: Nontraditional Equity.
- 4. Filter for US Equity Exposure >= 50%. Here we seek to avoid strategies that aren't focused on US equities.
- 5. Filter funds that contain the word "buffer". We believe this is a reasonable approach to identify most funds seeking to hold themselves out as a buffer strategy.

As of 01/31/2025, there are 206 ETFs that meet the given criteria that have been used to form the category average composite.

The information presented regarding buffer ETFs may be based on a limited universe of 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. Past performance is no guarantee of future results. Investors should consider factors such as risk tolerance, fees, liquidity, and investment goals before making any investment decisions. This disclosure is not an endorsement of any 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-752121-2025-06-09