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Nasdaq

Hey ChatGPT – How Can I Hedge My Portfolio?

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Volos Software
Director of Operations



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About Volos

- Volos was founded in 2014 as a software company aspiring to provide greater transparency and tooling around options trade structuring and systematic options strategies.
- Volos identified the opportunity to develop a robust options strategy development engine and became an index provider in 2019.
 - Index provider of 6 ETFs (2 additional going live in 4Q) across 3 ETF issuers.
- In 2022, Volos exposure their strategy development engine as a no-code solution.
- Recently launched AI functionality that combines GPT and Volos' engine to streamline the development of options strategies using our tool and educate users on how to create strategies using Volos.
- In the process of developing a Lite version of Volos for retail investors and advisors to more easily develop, test, and implement options strategies.



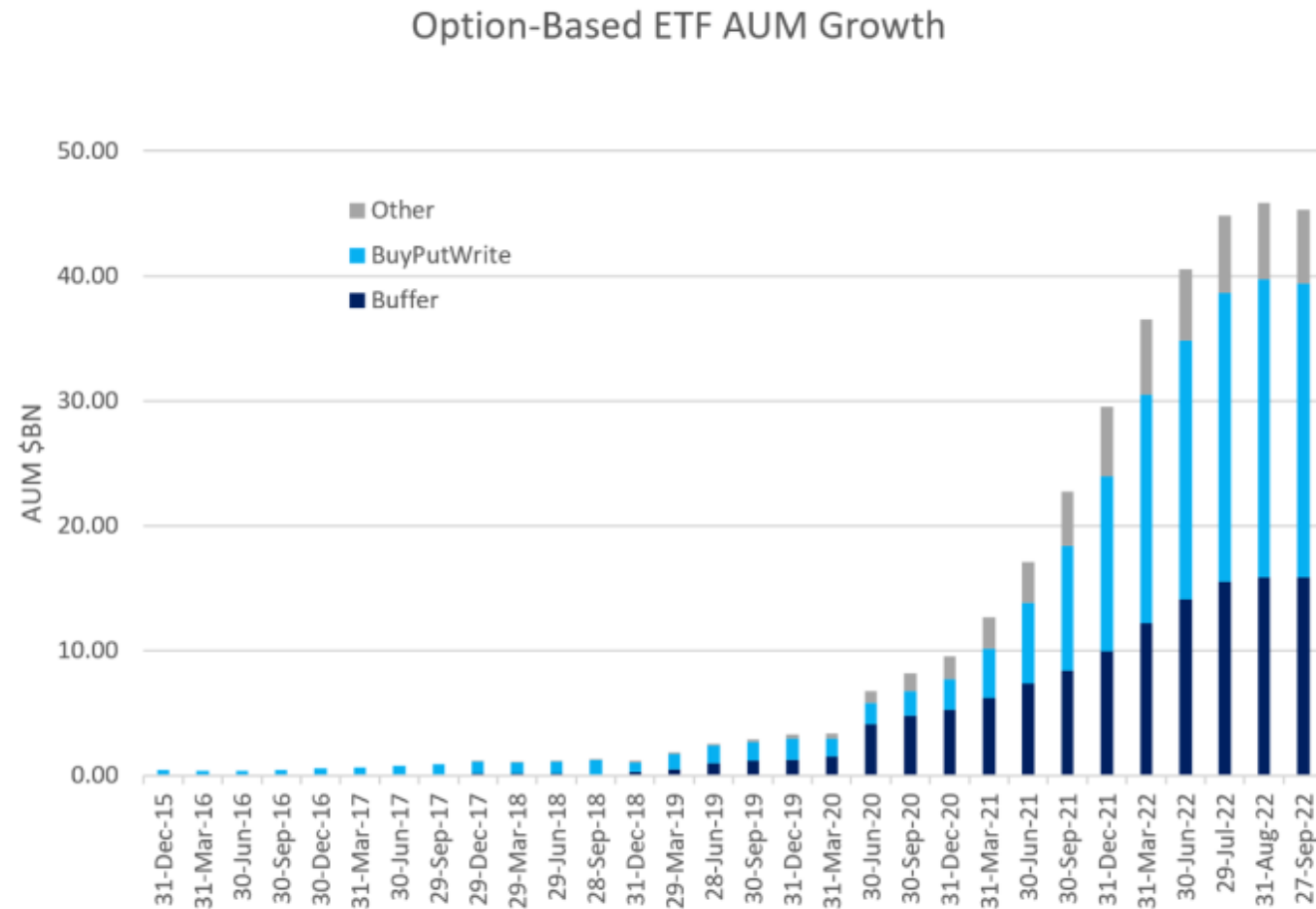
About Jeff Corrado

- Board Member (2015) and Director of Operation at Volos (operational since 2018).
 - Works directly with asset managers and options practitioners to design ETF strategies and custom solutions for clients.
- Specializes in key market areas such as small cap stocks, options & volatility strategies, AI/Machine Learning, and Alt Data.
 - Passionate about the transformation and analysis of unconventional data types to create novel alpha sources in the market.
- Currently working to develop AI-driven investment strategies for the retail investor and RIA community.



Predicting volatility in the Nasdaq-100 using tone of voice (Nasdaq.com)

Options-based strategies are becoming mainstream



Software Demo

Case Study: Creating AI factor exposure using options for different investment objectives

Study Overview

- Volos built and analyzed a set of strategies combining index options and Semiconductor ETF options to achieve different investment objectives
- Given Semiconductor ETFs contains a large constituent weighting of GPU providers, chips essential to the ongoing computational power that enables AI, Volos sought to develop strategies that provide AI factor exposure.
- Volos focused on three primary investment objectives - income generation, upside exposure, and downside protection.
- The inclusion of index options allows for a cost and risk effective expression of an AI factor exposure.

Income

Reinvestment Percentage=25 Semiconductor Income w/ NDX 95% Hedge

Start Date: 2017-12-29 **Initial Value:** 100 **Framework:** Volos Strategy Engine

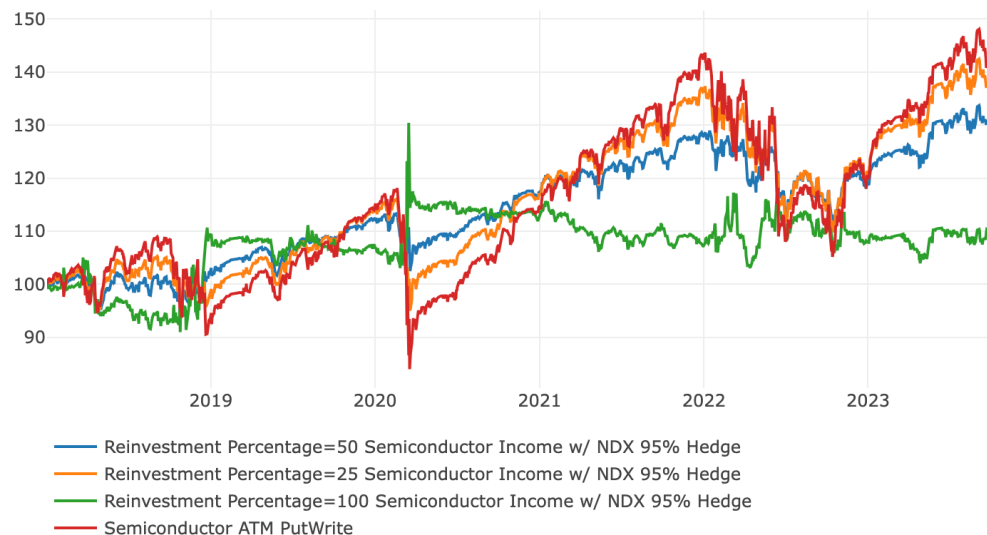
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Group A, Leg 1: NDX Long Put. 95% Moneyness. 3 month Target Expiration. Roll every 3 months. Mar Series. 25% Leg Premium.

Group B, Leg 2: SEMI ETF Short Put. 100% Moneyness. 3 month Target Expiration. Roll every 3 months. Mar Series. 100% Target Exposure.

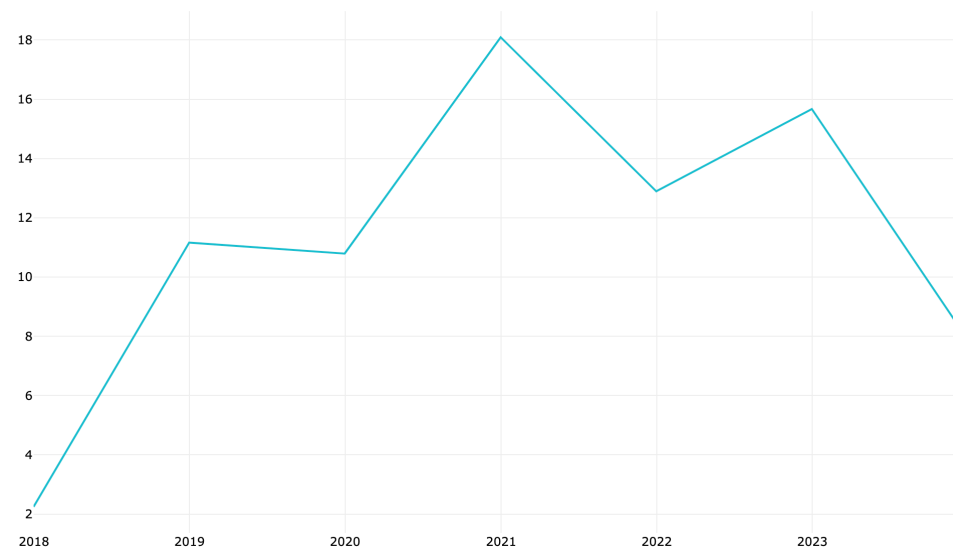
Income

Total Returns



Reinvestment Percentage=50 Semiconductor Income w/ NDX 95% Hedge

Annual (%) Income & Cost



Name	Cumulative Returns	Annual Returns	Annual Volatility	Ret/Risk ↓	Max Drawdown
Reinvestment Percentage=50 Semiconductor Income w/ NDX 95% Hedge	30.86%	4.81%	9.89%	0.49	-13.78%
Reinvestment Percentage=25 Semiconductor Income w/ NDX 95% Hedge	38.08%	5.8%	12.71%	0.46	-19.92%
Semiconductor ATM PutWrite	42.11%	6.33%	19.7%	0.32	-28.93%
Reinvestment Percentage=100 Semiconductor Income w/ NDX 95% Hedge	10.14%	1.7%	17.78%	0.1	-20.95%

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Upside Exposure

Semiconductor Upside (Funded by NDX ATM PW)

Start Date: 2017-12-29 **Initial Value:** 100 **Framework:** Volos Strategy Engine

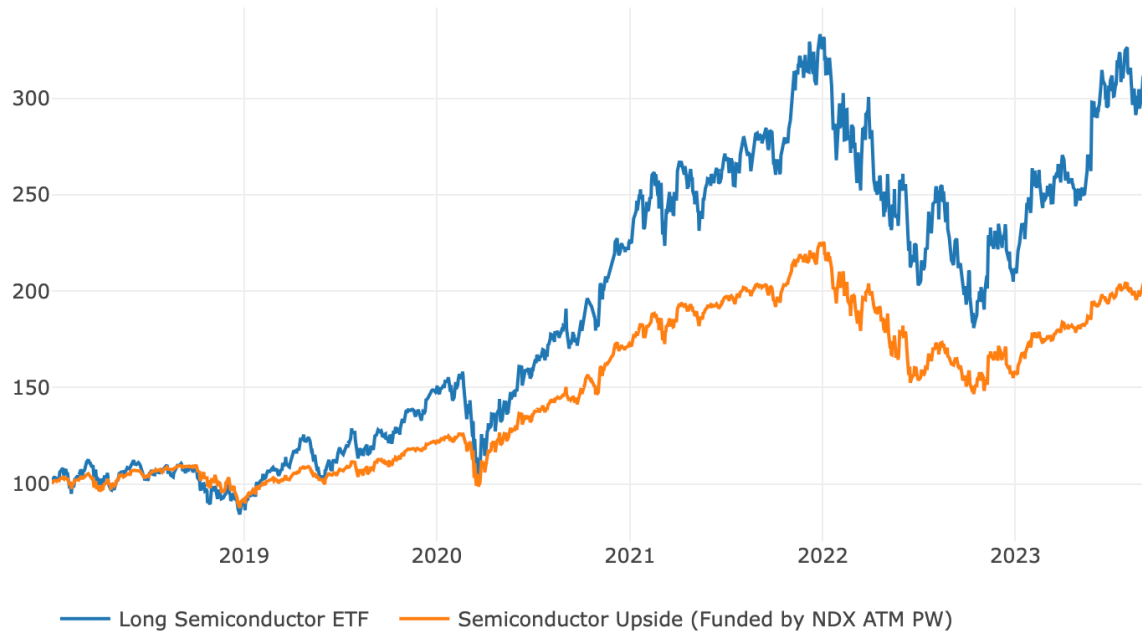
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Group A, Leg 1: NDX Short Put. 100% Moneyness. 3 month Target Expiration. Roll every 3 months. Mar Series. 100% Target Exposure. ▼

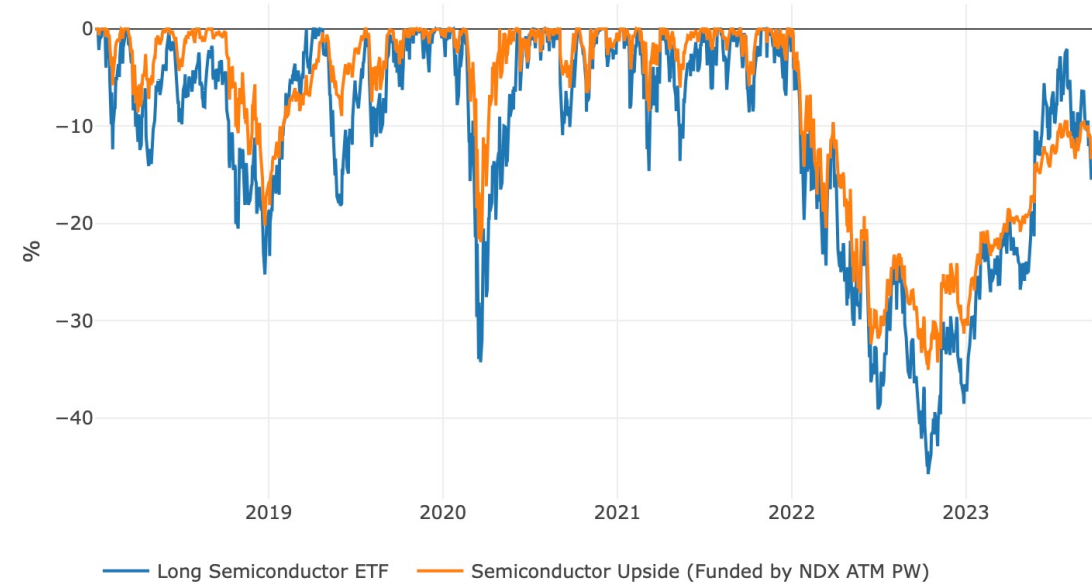
Group B, Leg 2: SEMI ETF Long Call. 100% Moneyness. 6 month Target Expiration. Roll every 3 months. Mar Series. 100% Leg Premium. ▼

Upside Exposure

Total Returns



Draw Down



Name	Cumulative Returns ↓	Annual Returns	Annual Volatility	Ret/Risk	Max Drawdown
Long Semiconductor ETF	186.13%	20.17%	34.93%	0.58	-45.75%
Semiconductor Upside (Funded by NDX ATM PW)	96.51%	12.53%	22.15%	0.57	-35.03%

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Downside Protection

Semiconductor Hedged Equity (Funded by NDX 105-120 SCS)

Start Date: 2017-12-29 Initial Value: 100 Framework: Volos Strategy Engine

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Position 1: SEMI ETF 100%

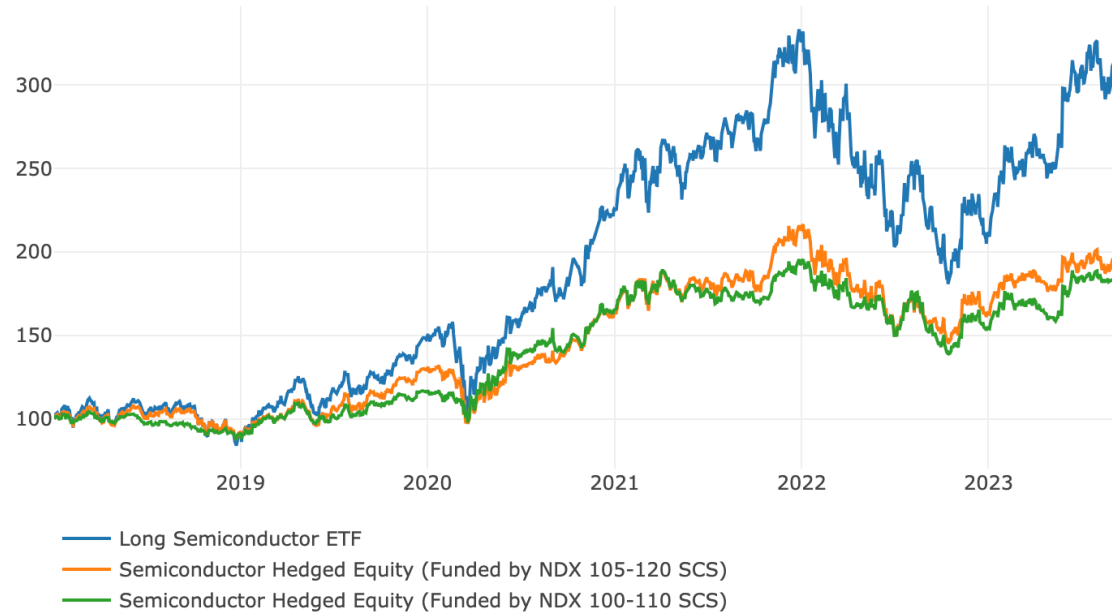
Group A, Leg 1: NDX Long Call. 120% Moneyness. 3 month Target Expiration. Roll every 3 months. Mar Series. 100% Target Exposure.

Group A, Leg 2: NDX Short Call. 105% Moneyness. 3 month Target Expiration. Roll every 3 months. Mar Series. 100% Target Exposure.

Group B, Leg 3 SEMI ETF Long Put. 100% Moneyness. 3 month Target Expiration. Roll every 3 months. Mar Series. 100% Tranche Premium.

Downside Protection

Total Returns



Max Drawdown



Name	Cumulative Returns	Annual Returns	Annual Volatility	Ret/Risk	Max Drawdown ↓
Semiconductor Hedged Equity (Funded by NDX 100-110 SCS)	78.33%	10.64%	21.61%	0.49	-29.18%
Semiconductor Hedged Equity (Funded by NDX 105-120 SCS)	84.86%	11.34%	26%	0.44	-32.98%
Long Semiconductor ETF	186.13%	20.17%	34.93%	0.58	-45.75%

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Kevin's Turn / Q&A



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