

ETF SPOTLIGHT – Q&A

LEARN MORE ABOUT THE **SNUG** ETF **Merlyn.AI Tactical Growth & Income**



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Q. How is SNUG different from other ETFs?

A. SNUG is a paradigm shift in ETF design. While most ETFs focus on a specific slice of the market, such as a particular sector, factor, theme, or asset class, SNUG is a self-contained, tactical portfolio management system in an ETF wrapper. Each month it evaluates over 400 US ETFs across broad and divergent markets and selects a portfolio that seeks to provide the five things investors want most.

Q. What are those five things?

A. Investors want:

- A portfolio of momentum leaders in Bull Markets;
- A portfolio of defensive leaders in Bear Markets;
- An expert automatic method for switching between Bull and Bear portfolios;
- The benefits of tactical trading without abandoning tax-efficiency;
- Automated execution so they can focus on other more important matters.

Q. How is the ETF constructed?

A. SNUG tracks the [MAI Tactical Growth & Income Index](#), which holds a portfolio of 8 diverse ETFs selected monthly by momentum strategies. During Bull Markets, SNUG targets a conservative portfolio's allocation of 30% equities and 70% bonds. During Bear Markets, SNUG automatically moves to defensive positions and holds up to 100% in treasuries, bonds, gold, and the like.

Q. Is there anything special about SNUG's momentum strategies?

A. Yes. SNUG employs proprietary signal processing methods that reduce market noise and seek to better identify momentum leaders. SNUG additionally employs this trifecta of Artificial Intelligence:

- Adaptive Tuning that seeks to eliminate hindsight bias in the momentum algorithm;
- Fuzzy Logic that seeks to better assess the market's Bull vs. Bear status; and
- Genetic Algorithms that evolve its strategies as it learns market behavior.

Together, we refer to these methods and technologies as Temporal Portfolio Theory.

Q. Can you put Temporal Portfolio Theory into perspective?

A. [Temporal Portfolio Theory](#) (TPT) is a significant extension to 68-year-old Modern Portfolio Theory (MPT). TPT employs temporal (time-based) market data in addition to diversification. WIZ uses the cross-disciplinary sciences of Matched Filter Theory and Differential Signal Processing. These are the same technologies that have enabled WiFi, USB, iPhones, digital TV, and remotely controlled rovers on Mars. None of these were possible 68 years ago when MPT was created. Signal-to-noise ratio directly controls the probability of making a good decision. Temporal Portfolio Theory was developed over a 30-year period by Scott Juds, Co-founder and Chief Science Officer of Merlyn.AI Corporation. Temporal Portfolio Theory is further detailed in his ground-breaking book, [“Conquering the Seven Faces of Risk.”](#)

Q. How does SNUG manage risk?

A. Risk is managed in four ways:

- SNUG holds only ETFs for diversification, seeking to neutralize single-stock risk
- SNUG buys momentum leaders seeking to avoid the risk of owning future laggards
- SNUG identifies bear markets early and quickly invests defensively seeking to avoid bear losses
- SNUG is a portfolio of 8 divergent strategies, seeking to dilute single-strategy risk

Risk is not a one-dimensional problem cured by a single dose of diversification. Risk is a multidimensional problem, and diversification’s passive risk reduction is only just a start. Our research shows that avoiding laggards and bear markets is one of the more proficient risk reduction methods. Both require reliable measures of momentum. We believe that’s Merlyn.AI’s strong suit. It’s all about advanced signal processing to clarify the momentum signal.

Q. How does SNUG detect and avoid bear markets?

A. While no system can be expected to work perfectly, SNUG employs the StormGuard-Armor™ indicator developed by SumGrowth Strategies that seeks to assess US equity markets primarily across three key metrics: price-trend, market momentum, and value sentiment. Price-trend indicates the degree to which US market securities prices are trending higher or lower. Market momentum is a volume-adjusted, price-trend of US equity market securities and assesses investor conviction. Value sentiment analyzes the recent US equity market securities making 52-week highs against those making 52-week lows. When the metrics are positive or rising, SNUG employs a Bull Market portfolio of momentum leaders. Conversely, negative and declining metrics cause SNUG to employ a Bear Market portfolio of defensive leaders.

Q. Can SNUG’s tax advantages help institutional investors?

A. Absolutely. Many institutional accounts are taxable. Their fund managers must decide between the benefits of tax efficiency versus tactical trading. SNUG is designed to provide a path for ordinary taxable accounts to enjoy the benefit of tactical trading without abandoning tax-efficiency as with other ETFs. SNUG takes advantage of the IRS “in-kind exchange” rule (Section 852(b)(6) of the tax code) to make most trading within its ETF wrapper a non-taxable event. The structure of SNUG as a self-contained automated tactical portfolio management system within a tax-efficient ETF wrapper seeks to make the best of both worlds possible.

Q. How does SNUG relate to WIZ?

SNUG joins [WIZ](#), an 80/20 growth allocation ETF of similar design, which was launched by Merlyn.AI in October 2019. Together, SNUG and WIZ provide the means to target an allocation blend anywhere along the spectrum, from conservative to growth, to better serve an investor's specific needs.

Q. Hindsight bias often disappoints. How have you dealt with it?

A. Hindsight bias problems primarily affect two areas of investment model design. They are momentum filter tuning and investment candidate selection. Merlyn.AI deals with momentum filter tuning by using what some consider to be the industry gold standard, a method called "walk-forward testing", in which algorithms are adaptively tuned across time using only data available prior to the evaluation period. Merlyn.AI deals with investment candidate selection bias by using a genetic algorithm that evolves sets of candidates on a monthly basis using only fund information available prior to the period of evaluation.

Q. Some believe AI-driven ETFs have thus far failed to impress. Why will SNUG be any different?

A. SNUG seeks to differentiate in two fundamental ways. First, many other AI-driven ETFs choose to exclusively use deep learning neural networks, which are incredibly complex matrices of nodes sending messages between one another, making it difficult to ensure that "future information" does not leak into the past. When this occurs, it produces test results suggesting performance that can't be delivered. SNUG seeks to take a divide-and-conquer approach, identifying each problem and applying the right tool for each job.

Q. Can you tell us more about Merlyn.AI Corporation's business?

A. Merlyn.AI Merlyn.AI Corporation (MAI) is a Palo Alto-based ETF sponsor that was founded in January 2019 by David Epstein and Scott Juds. MAI is exclusively licensed to create and market ETFs based on the Merlyn.AI technology developed by Seattle-based SumGrowth Strategies, LLC. The Tactical Growth & Income Index is the result of more than three decades of research and development by MAI Co-founder and Chief Science Officer Scott Juds, who launched SumGrowth Strategies, LLC in 2009 and its flagship subscription services SectorSurfer (for individuals) and AlphaDroid (for advisors) in 2010 and 2017 respectively. Dave Epstein, MAI CEO and Co-founder, says "the launch of SNUG is just the beginning of the paradigm shift." For more information, please visit the www.Merlyn.AI website.

FURTHER INFORMATION

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Our research shows that avoiding laggards and bear markets is one of the more proficient risk reduction methods.

Before investing one should carefully consider the Fund's investment objectives, risks, charges, and expenses. This and other information can be found in the fund's summary or full prospectus, which may be obtained by visiting www.MerlynETFs.com. Please read the prospectus carefully before investing.

An investment in the ETF is subject to investment risk, including the possible loss of principal. SNUG ETF shares may be bought and sold on the NASDAQ stock exchange through a brokerage account. Brokerage commissions and ETF expenses will reduce investment returns. There can be no assurance that an active trading market for ETF shares will be developed or maintained. There is no guarantee the SNUG ETF strategy will be successful. Because it invests primarily in other ETFs, SNUG ETF's investment performance largely depends on the investment performance of those underlying ETFs. An investor will indirectly bear the principal risks and its share of the fees and expenses of the underlying ETFs. The risks associated with these ETFs are detailed in the prospectus and could include factors such as concentration risk, foreign and emerging markets risk, equity market risk, momentum investing risk, value investing risk, fixed income risk, gold risk, high portfolio turnover risk, and bull index bond risks. Maintaining investments regardless of market conditions or the performance of an individual investment could cause the ETF's returns to be lower than if the ETF employed an active strategy. The performance of the ETF and its Index may differ due to tracking error. The Index uses a form of (AI) artificial intelligence. Investments utilizing quantitative methods may perform differently than the market as a whole. Momentum investing can turn quickly and cause significant variation from other types of investments. There may be periods when the momentum style is out of favor, and during which the investment performance of an ETF using a momentum strategy may suffer. SNUG ETF is non-diversified and may be more sensitive to economic, business, political or other changes affecting individual issuers or investments than a diversified fund, which may result in greater fluctuation in the value of the ETF's Shares and greater risk of loss.

Diversification does not assure a profit nor protect against loss in a declining market.

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RELATED LINKS:

www.Merlyn.AI

www.MerlynETFs.com/snug/

[MAI Tactical Growth & Income Index](#)

[Temporal Portfolio Theory](#)