MANAGING
PORTFOLIOS

OFFENSE VS. DEFENSE: SEASONALITY INVESTING & ETF IMPROVEMENT

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BACKGROUND – WHY SEASONALITY MATTERS

Why This Topic Matters

- Seasonality investing has guided investor behavior for decades.
- SZNE ETF is built on seasonal sector rotation, but recent market shifts question its effectiveness.
- Understanding seasonality helps improve ETF design and portfolio timing.

Market Overview

- U.S. markets now driven heavily by mega-cap tech, changing historical patterns.
- Sector performance differs sharply in bull vs. bear markets.
- Macro factors (inflation, interest rates) strongly influence monthly returns.

RESEARCH QUESTIONS

QUESTION 1

Can we validate “Sell in May and Go Away”?

QUESTION 2

Does Consumer Discretionary vs. Consumer Staples rotation work?

QUESTION 3

Do inflation/interest rate conditions change the pattern?

QUESTION 4

How can we improve SZNE ETF (sectors, timing, rebalance)?

DATA & METHODOLOGY

01

20–25 Years of S&P500 Monthly Returns

02

Seasonality windows:
Nov–Apr vs May–Oct

03

Macro segmentation:

- Inflation above / below 3%
- Interest rates below 2.5% / above 4%

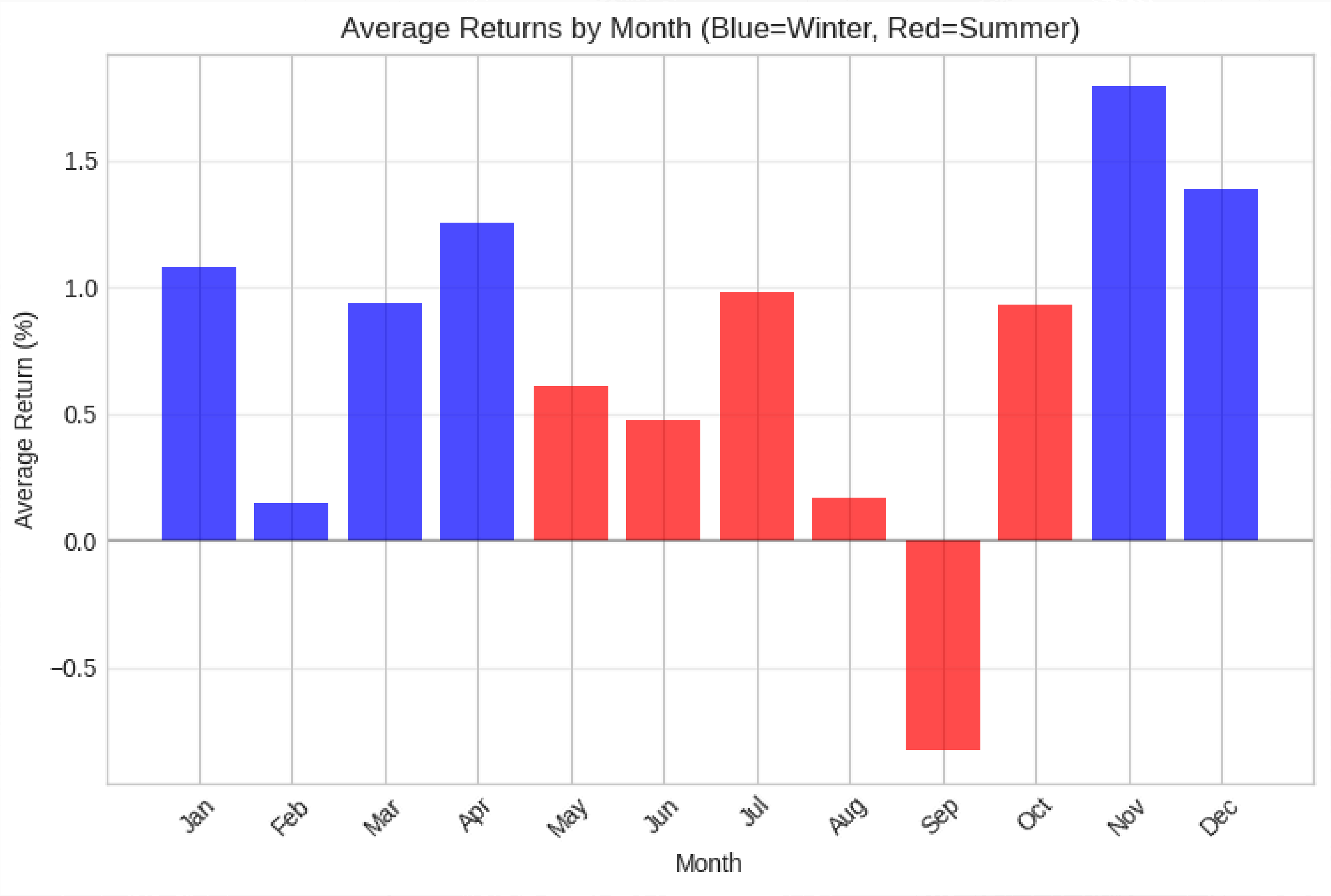
04

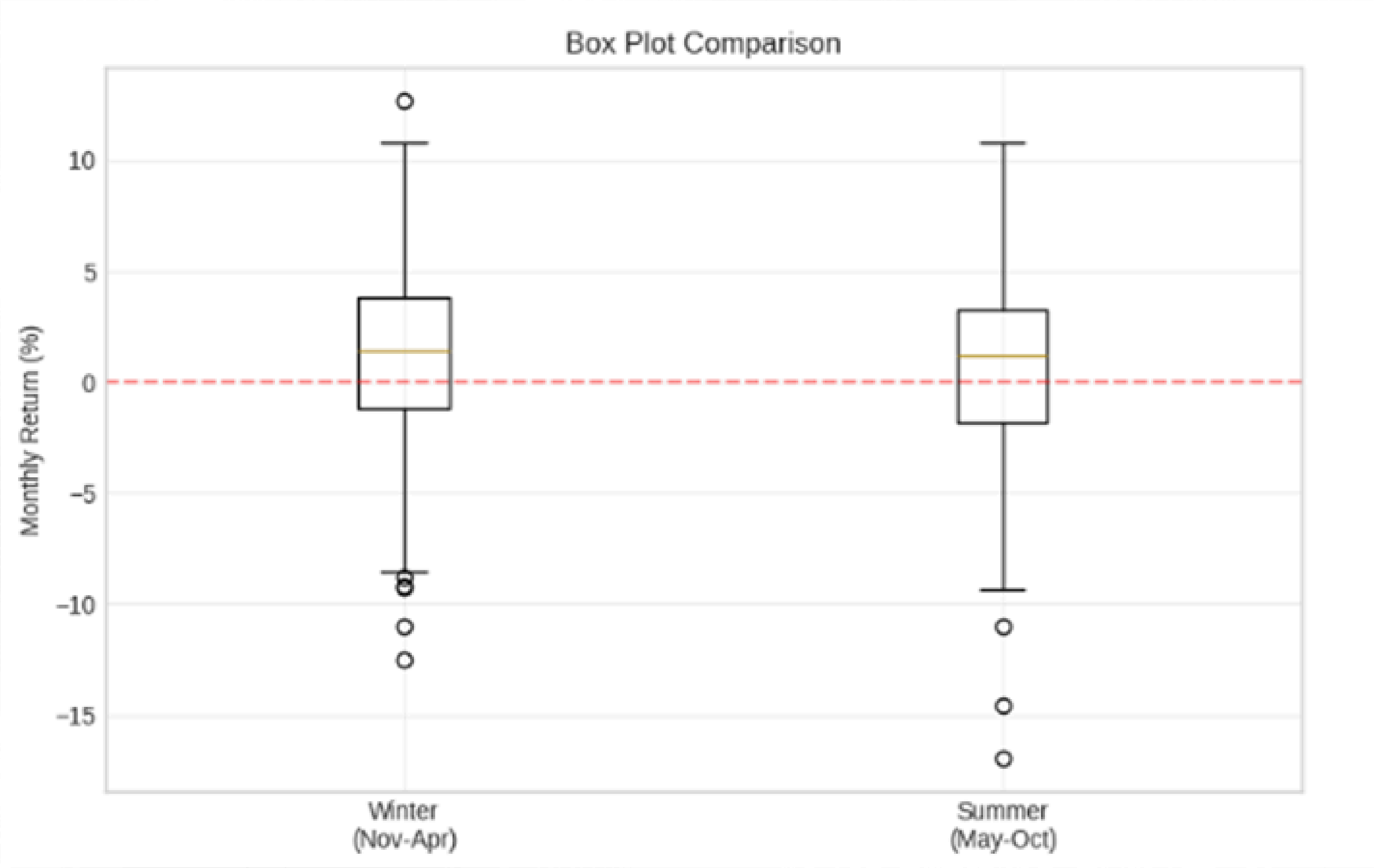
ETF structure:
SZNE breakdown

- Nov–Apr offensive
- May–Oct defensive

FINDINGS:
S&P500 SEASONALITY – A TIMELINE VIEW

FINDINGS: S&P500 MONTHLY RETURN COMPARISON 1995-2025

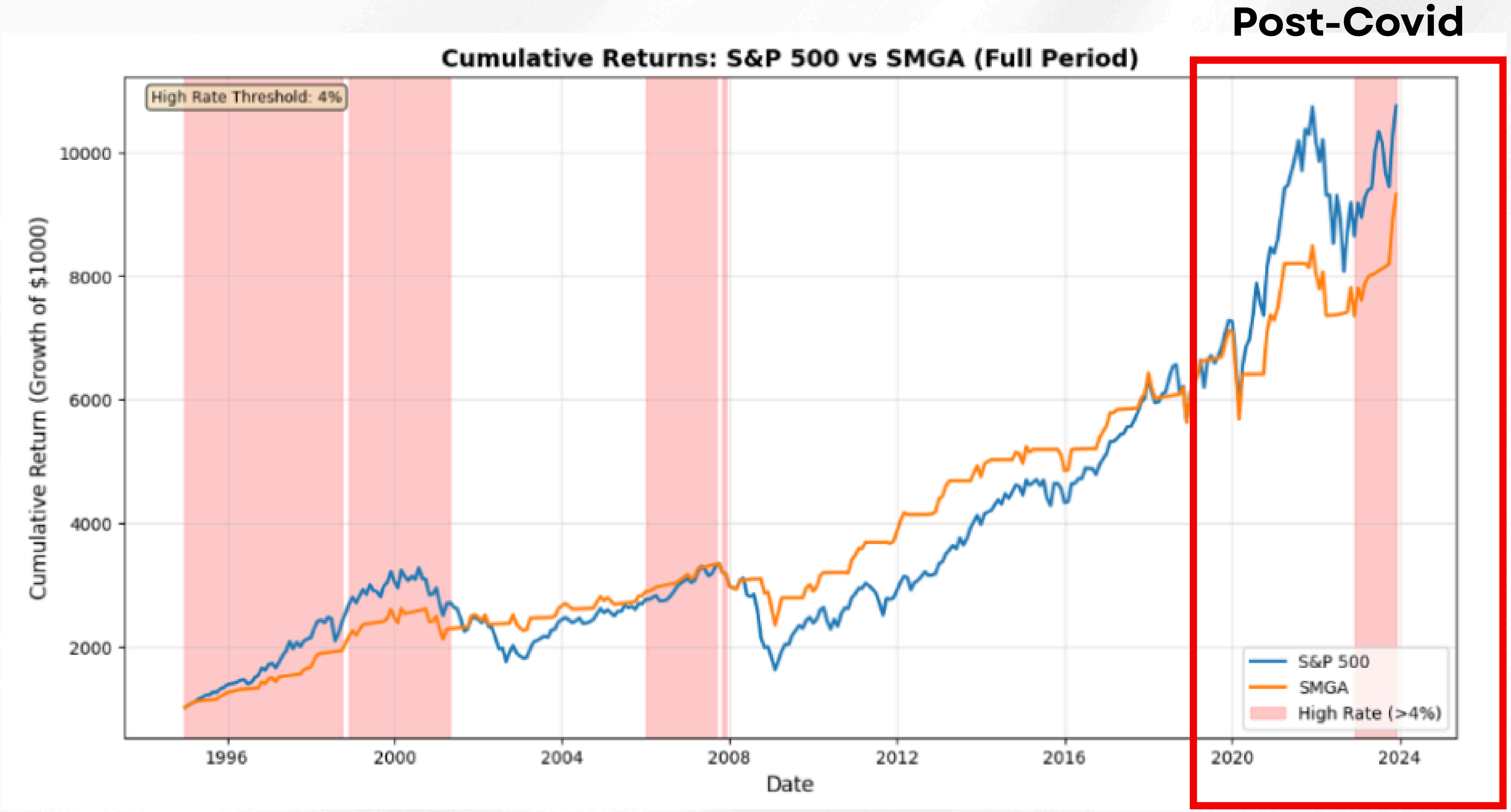




Mean Return = 1.146%
STD = 4.243%

Mean Return = 0.53%
STD = 4.433%

FINDINGS: S&P500 VS SMGA RETURNS COMPARISON 1995-2025

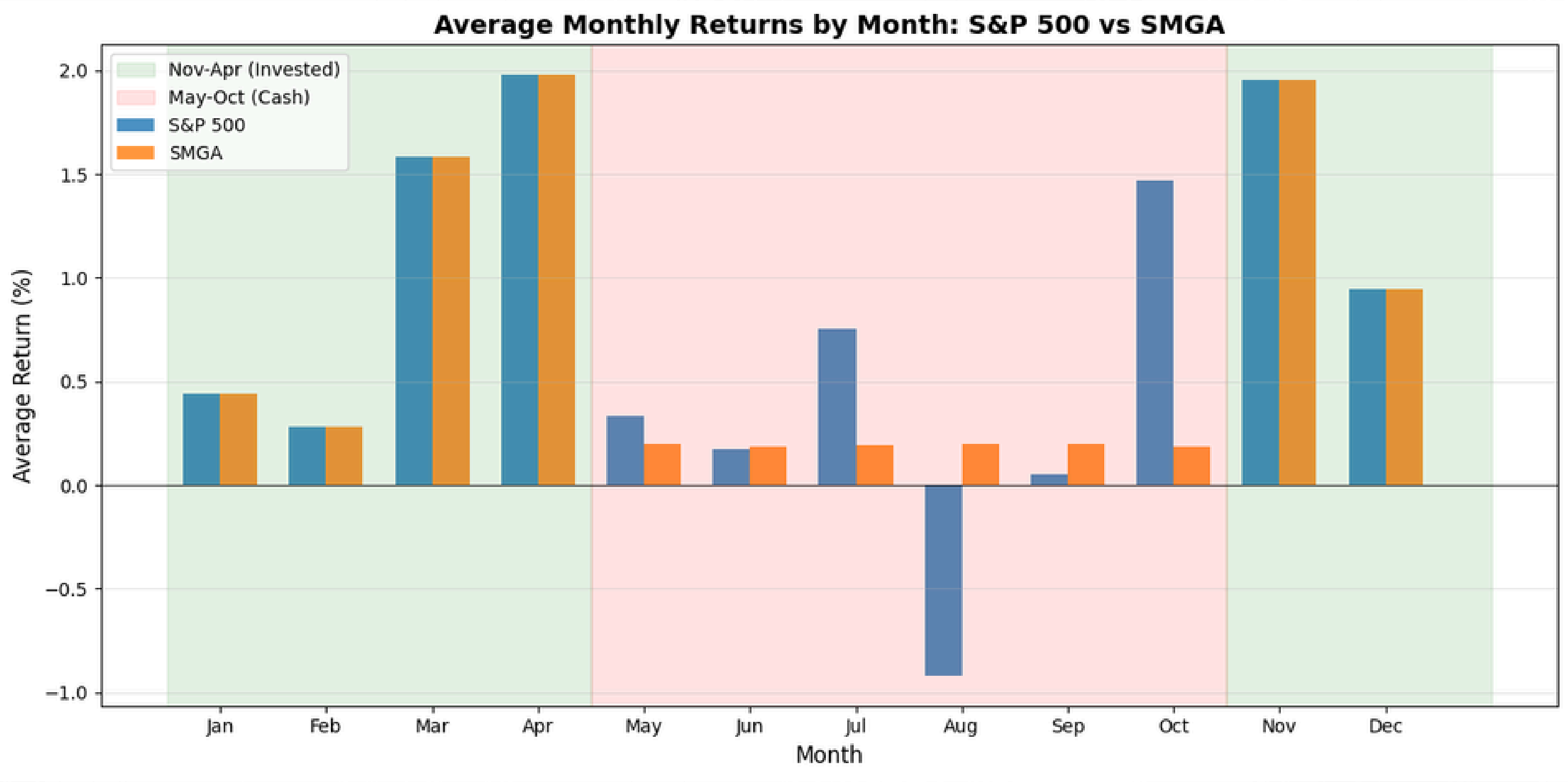


Does Sell in May and Go Away strategy still work?

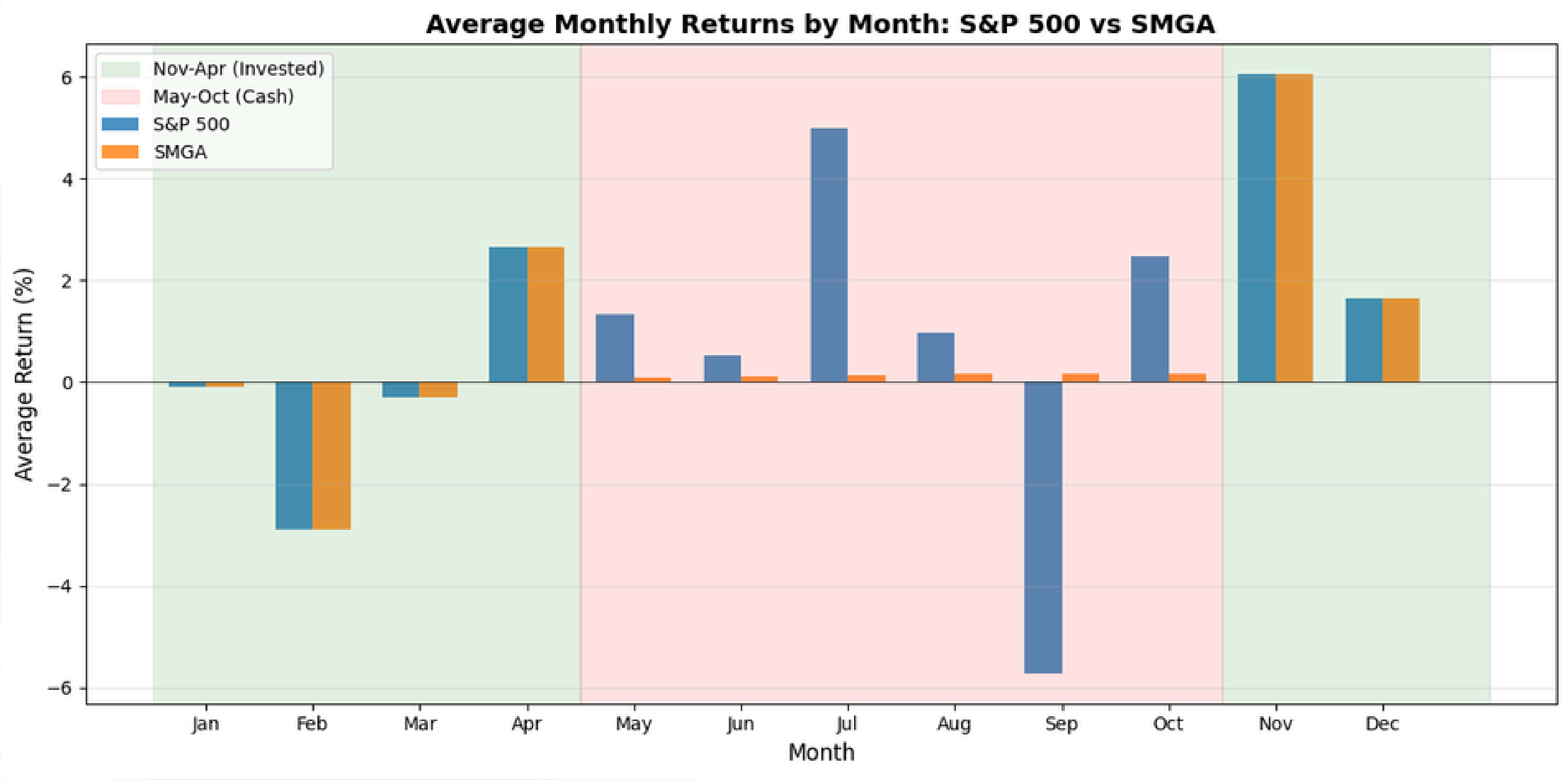
- Works only in certain decades – mainly pre-COVID (2000–2019)
- Fails in times of poor macroeconomic conditions
- Fails in post-COVID years (2020–2025)

FINDINGS – VALIDATING “SELL IN MAY AND GO AWAY”

Pre-Covid



Post-Covid



KEY TAKEAWAYS

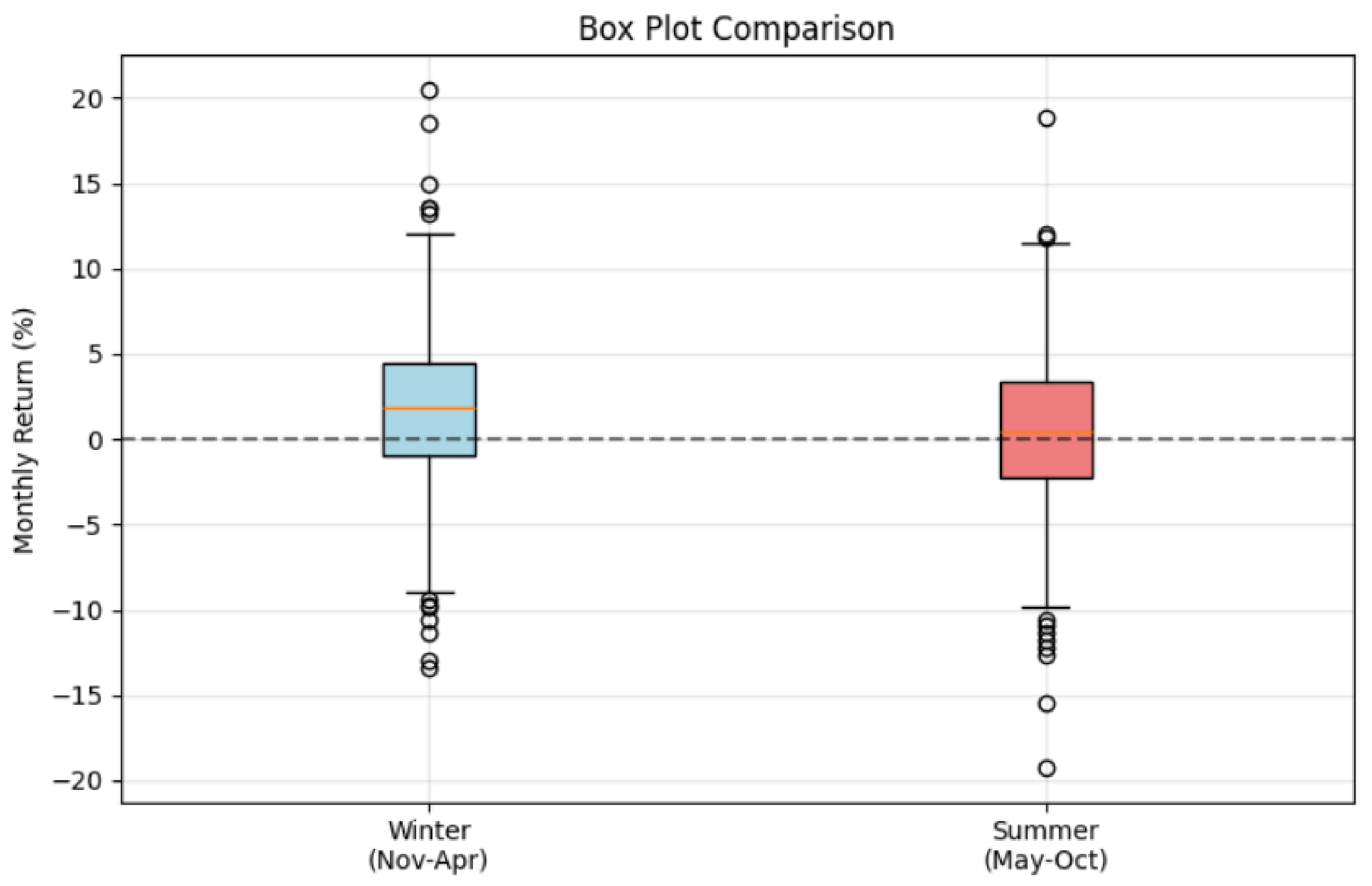
- The traditional seasonal rule is not consistently reliable today.
- Refining and updating seasonal windows rather than using the classic May–Oct split.

FINDINGS: SHARPE RATIO COMPARISON 1995-2025

S&P500 vs SMGA vs Offense-Defense Sharpe Ratio

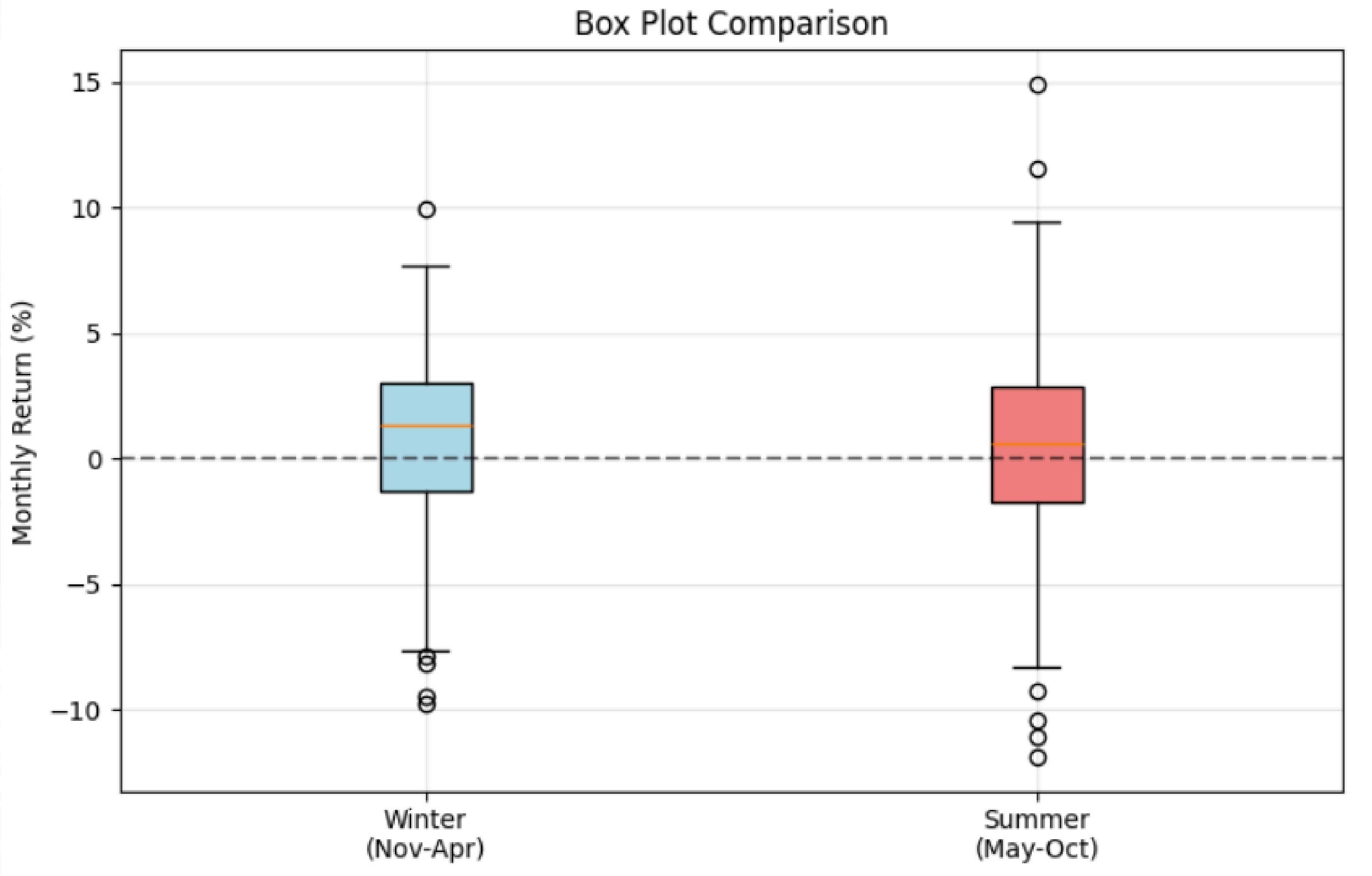
FINDINGS: RETURN OF DISCRETIONARY AND STAPLES

Consumer Discretionary in Winter vs Summer



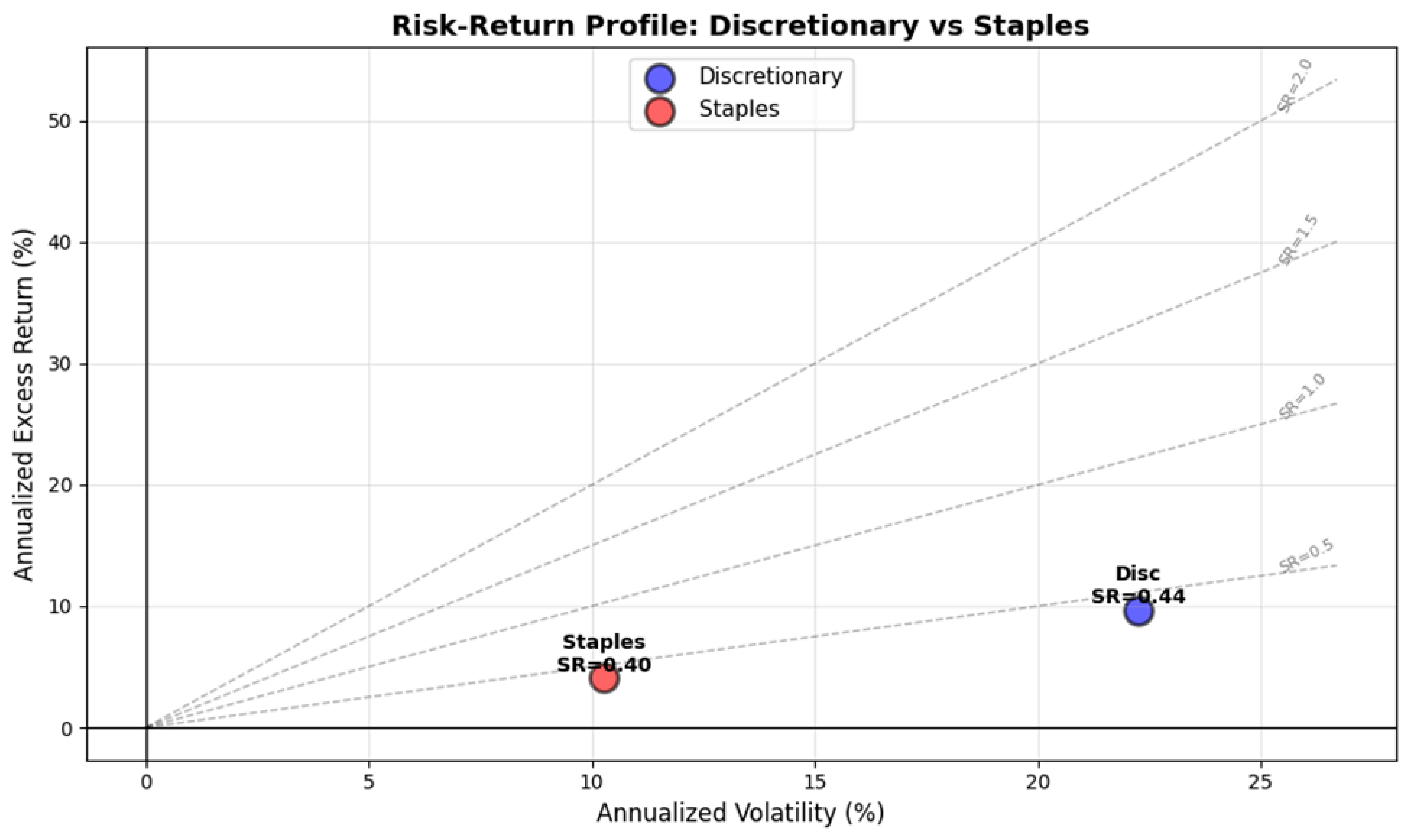
Metric	Winter	Summer	Difference
Mean	1.52%	0.41%	1.11%
Median	1.90%	0.47%	1.43%
Std Dev	5.50%	5.36%	
% Positive	65.2%	56.5%	

Consumer Staples in Winter vs Summer



Metric	Winter	Summer	Difference
Mean	0.81%	0.51%	0.30%
Median	1.36%	0.63%	0.73%
Std Dev	3.47%	3.83%	
% Positive	64.1%	57.0%	

FINDINGS: SHARPE RATIO: DISCRETIONARY AND STAPLES

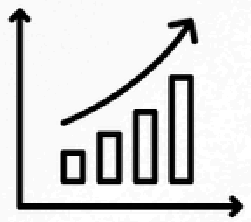


SECTOR ROTATION ANALYSIS (OFFENSE VS. DEFENSE)

Additional sectors considered for rotational analysis and strategy

Offensive Sectors (Risk-On):

- Consumer Discretionary
- Industrials
- Materials
- Information Technology



Offensive sectors tend to outperform in strong months (Nov–Apr)

Defensive Sectors (Risk-Off):

- Consumer Staples
- Healthcare
- Utilities
- Real Estate

Defensive sectors tend to hold up better in weak months (May–Oct)

CRITIQUE OF SZNE ETF STRUCTURE

Based on our analysis and historical patterns, the current SZNE monthly allocations show several limitations.

Current Seasonal Allocations (SZNE)	Key Critiques
• **Nov–Apr**: Consumer Discretionary, Industrials, Materials, Technology • **May–Oct**: Consumer Staples, Healthcare	• October is excluded, even though it historically performs well. • Treating May–Oct as one uniform period ignores July's positive performance. • Utilities and Real Estate are missing from the defensive basket. • The strategy does not adjust for inflation or interest rate regimes, even though these significantly affect returns. • The ETF omits mega-cap growth stocks, which have become defensive during modern pullbacks.

Overall, SZNE's rules are too rigid for today's market conditions and miss key sectors and macro drivers.

ACTIONABLE RECOMMENDATIONS TO ENHANCE THE SZNE ETF STRATEGY

- **Broaden Winter Offense and Strengthen Summer Defense**

Add Communication Services and Financials to the winter basket, and include Utilities, modest Real Estate, plus core Staples and Health Care in the summer allocation.

- **Adjust Rotation Timing**

Move into offense around mid-October instead of November 1, and into defense around mid-April instead of May 1, aligning with observed market turning points.

- **Incorporate Macro Conditions**

Overweight Energy and Financials during high inflation/rising rates; increase Tech and Communication Services during low inflation/rate cuts.

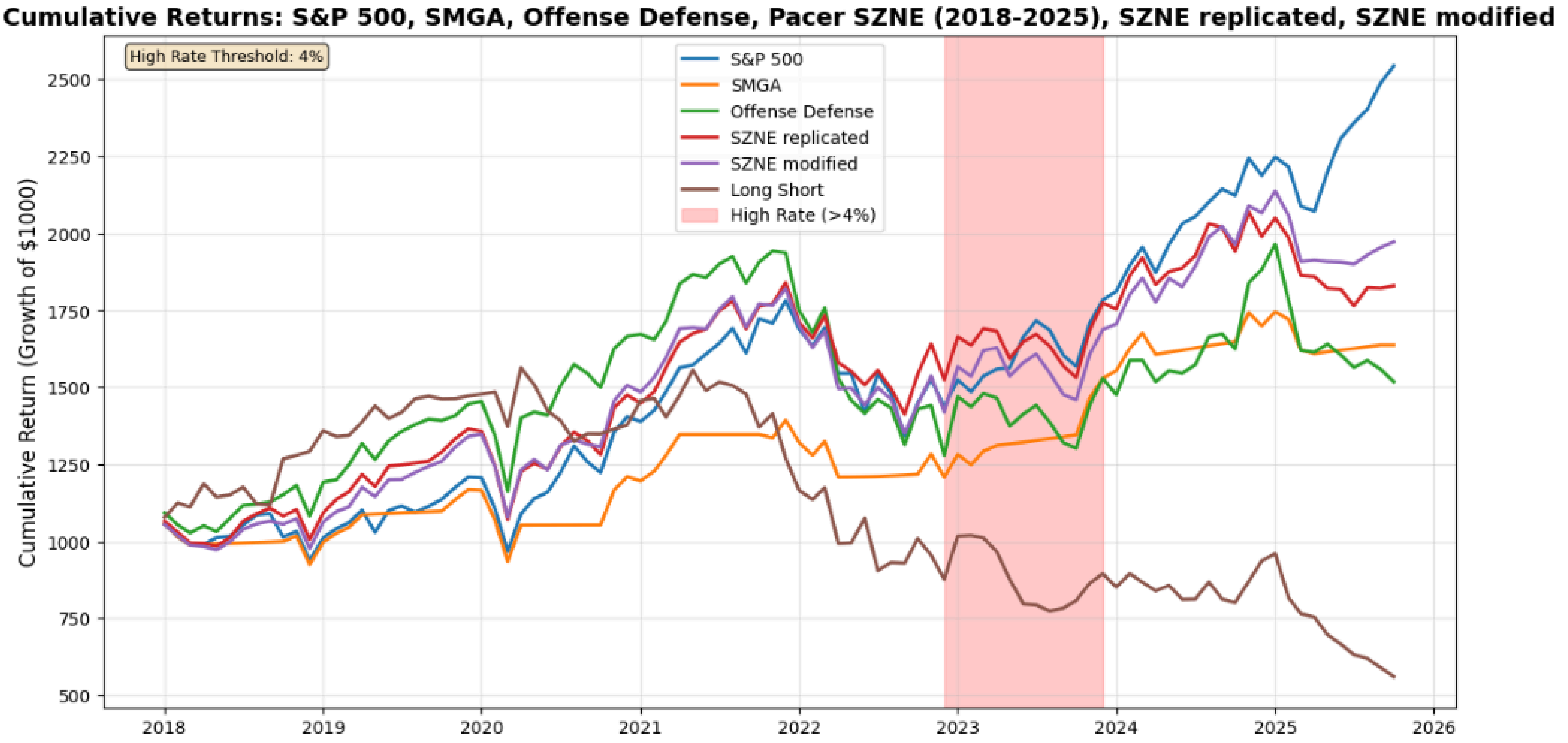
- **Include a Summer Bond Sleeve**

Add a small bond ETF allocation during May–October to reduce drawdowns and stabilize returns.

- **Use Seasonality as a Signal**

Combine seasonal indicators with sector diversification, factor analysis, and macro adjustments for effective implementation.

FINDINGS: RETURNS WITH INTEREST RATE HIGHLIGHTS



HOW DOES THESE STRATEGIES COMPARE?

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PERIOD 3: 2018-2025 STATISTICS

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Strategy	Mean (%)	Median (%)	Std Dev (%)	Sharpe	Sortino	N \
S&P 500	1.113	2.031	4.800	0.659	1.019	94
Pacer SZNE modified	0.838	1.273	4.760	0.464	0.678	94
Pacer SZNE replicated	0.758	0.724	4.783	0.403	0.663	94
Offense Defence	0.602	0.730	5.659	0.245	0.387	94
SMGA	0.595	0.200	3.731	0.366	0.394	94
Pacer SZNE	0.491	0.480	5.543	0.178	0.277	87

CONCLUSION:

Seasonal Patterns Reveal Useful Signals

SMGA and Offense-Defense Strategies reveal useful signals about investor behavior and shifts between risk-on and risk-off environments – but they no longer outperform a simple buy-and-hold S&P 500 strategy, especially after COVID and during macroeconomic shocks.

Macroeconomic Conditions Override Seasonality

High inflation, rising interest rates, and market disruptions weaken both SMGA and sector rotation performance, showing that timing rules alone are not reliable.

Pacer SZNE ETF Improvement

SZNE follows a seasonal structure, but it could improve by broadening sectors, adjusting rotation timing, and adding defensive assets in weak months.

Portfolio Management Lessons

Diversification and rebalancing remain the most reliable tools.
Consider investors' risk tolerance and utility – good portfolios match both return goals and comfort level.

THANK YOU