## BACKTESTING REPORT

# SMART BETA WITH TECHINAL INDICATORS, QUARTERLY AND YEARLY FINANCIAL RATIOS ${\it APRIL~1ST~2025}$

### 1 Objective and Constraint

Capital Size	3000000000 VND
Return Objective	3300000000 VND
Liquidity needs	3000000000 VND
Time Horizon	1 year
Other Specific Constraint	

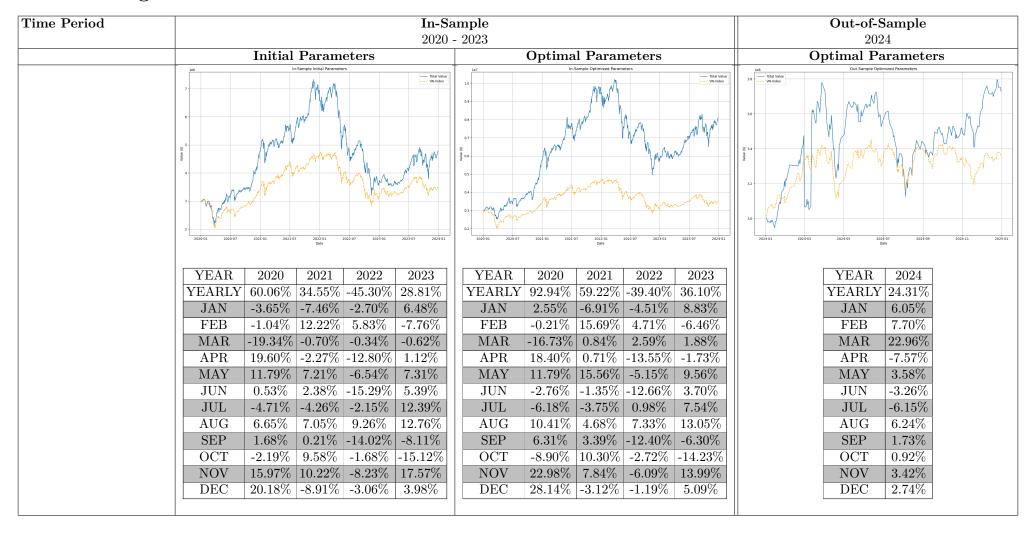
### 2 Trading Algorithm

Algorithm Name	Smart Beta
Target Market	VN100 Underlying Market
Decision-making schedule	Daily

### 3 Backtesting Assumption

Liquidity	3000000000 VND
Price slippage	0
Market impact	Negligible
Simulated fill price	Daily Closed Price
Transaction fee and taxes	0.35%
Sales proceeds advance	T + 90

#### 4 Backtesting Performance Evaluation



Time Period	In-Sample 2020 - 2023			II.	Out-of-Sample 2024	
	Initial Parameters		Optimal Parameters	Optimal I	Optimal Parameters	
	Portfolio	VNINDEX	Portfolio	Portfolio	VNINDEX	
HPR	59.82%	16.89%	170.30%	24.31%	11.93%	
Excess HPR	47.17%	n/a	157.65%	21.28%	n/a	
Annual Return	12.53%	4.01%	28.24%	24.42%	12.03%	
Annual Excess Return	9.48%	n/a	25.40%	21.37%	n/a	
Maximum Drawdown	-56.30%	-40.34%	-51.52%	-17.31%	-8.93%	
Longest Drawdown	524	495	444	187	141	
Turnover Ratio	15.30%	n/a	15.02%	3.72%	n/a	
Sharpe Ratio	0.45	0.15	0.91	0.84	0.69	
Sortino Ratio	0.53	0.06	1.07	1.01	0.91	
Information Ratio	0.27	n/a	0.65	0.46	n/a	
No. stocks in periods	,		,		·	
No. held stocks in periods						
Excess returns in periods						