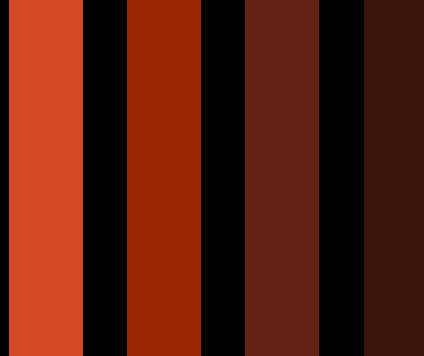




THE ASTRO ALGO

Rejecting the Efficient-Market Hypothesis.



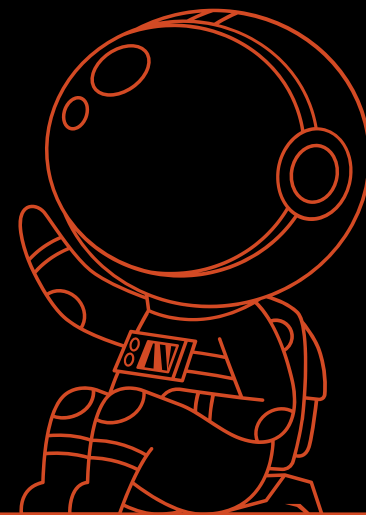
MEET THE TEAM



Aung Si



OVERVIEW



1.

Risk Aversion

A risk averse strategy, reflected in investment nature and model scoring.

2.

The Astro Algorithm

Model and sector selection over time.

3.

Backtesting

Benchmarking strategy performance.

BUSINESS UNDERSTANDING

1. MALADAPTATION

Existing models are slow to keep up with trends.

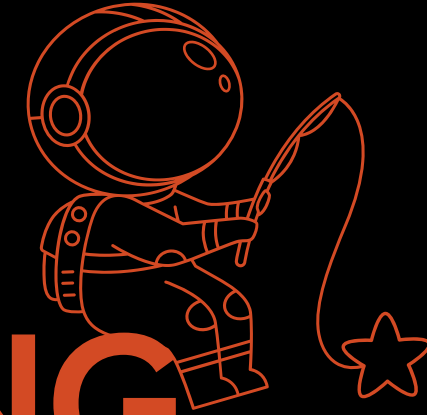
2. LACKLUSTER RISK MANAGEMENT

Often overlooked and negatively impactful.

3. THE EFFICIENT-MARKET HYPOTHESIS

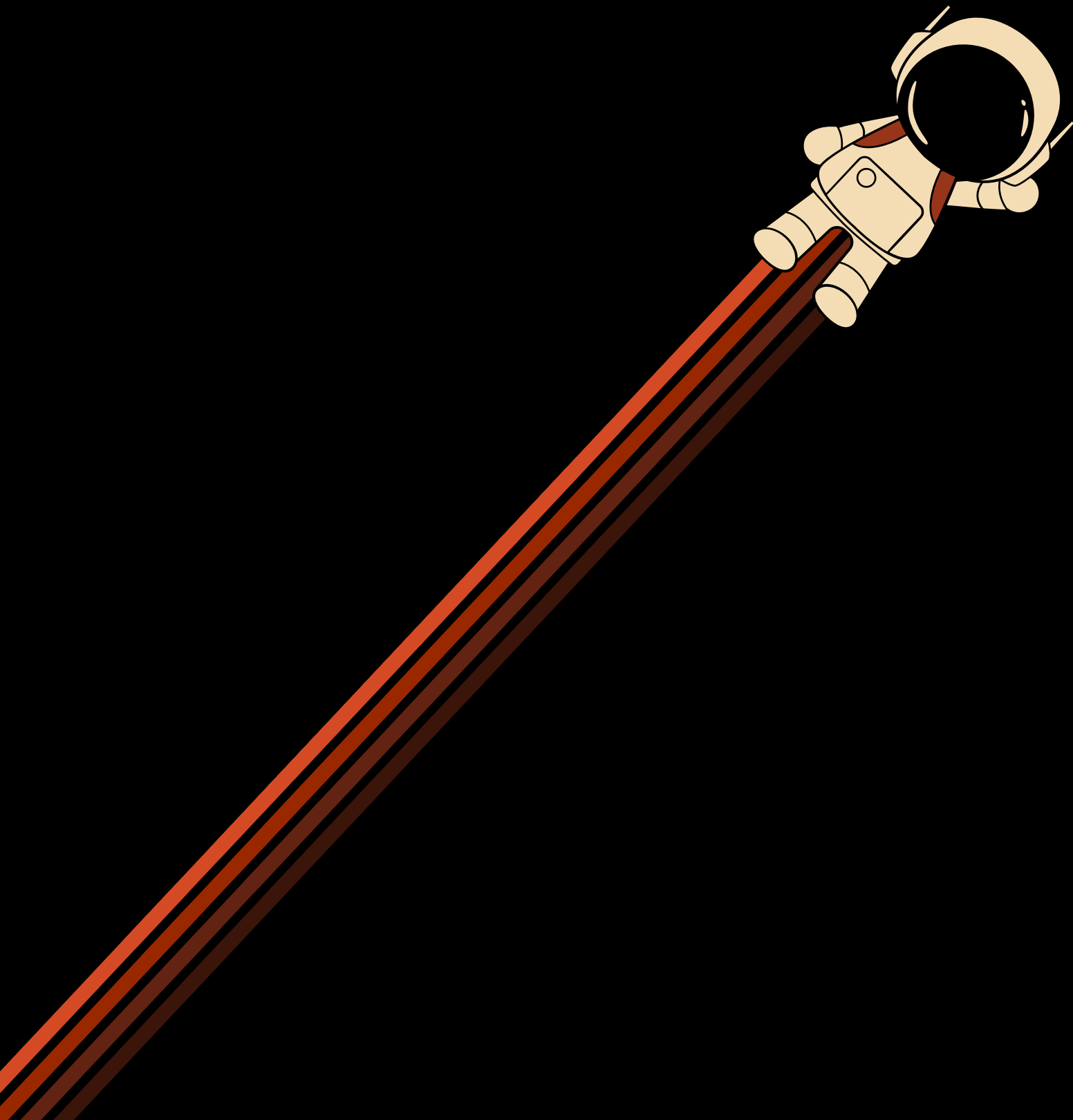
Inefficiencies exist within the market.





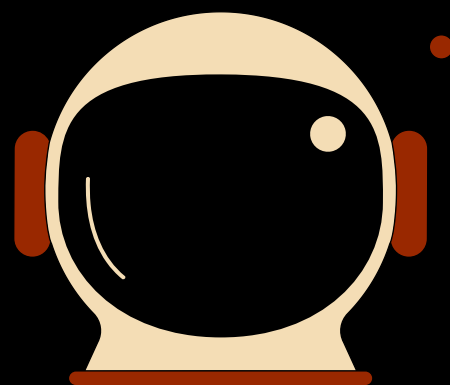
DATA UNDERSTANDING





STRATEGY: LONG ONLY

- Buy and Hold
- Simple yet effective
- Eliminate short-selling risk
- Dividend benefits
- Lower transaction costs



A RISK-AVERSE MODEL OVER-UNDER ERROR

Twice the optimism, double the fall.

MODELS USED



Elastic Net



Gradient Boosting



Support Vector Regression



Random Forest



XGBoost



ARIMAX

THE ASTRO ALGORITHM

1.

Train models on
past half-year of
data.

Oct. 2023

2.

Cross-Validate
models and
select the best-
scoring model.

3.

Choose the
sector with the
highest forecast.

4.

Optimize portfolio
allocations across
sector stocks.

5.

Hold stocks for
the next half-
year.

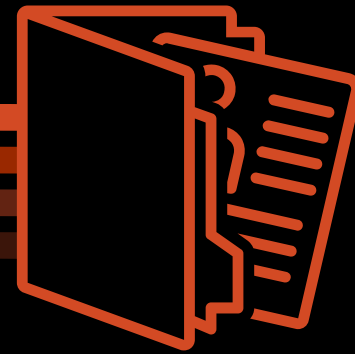
Apr. 2024

1.

Train models on
past half-year of
data.

2.

Cross-V
model an
the best-
moc



3 PORTFOLIOS

1.

Maximum Sharpe

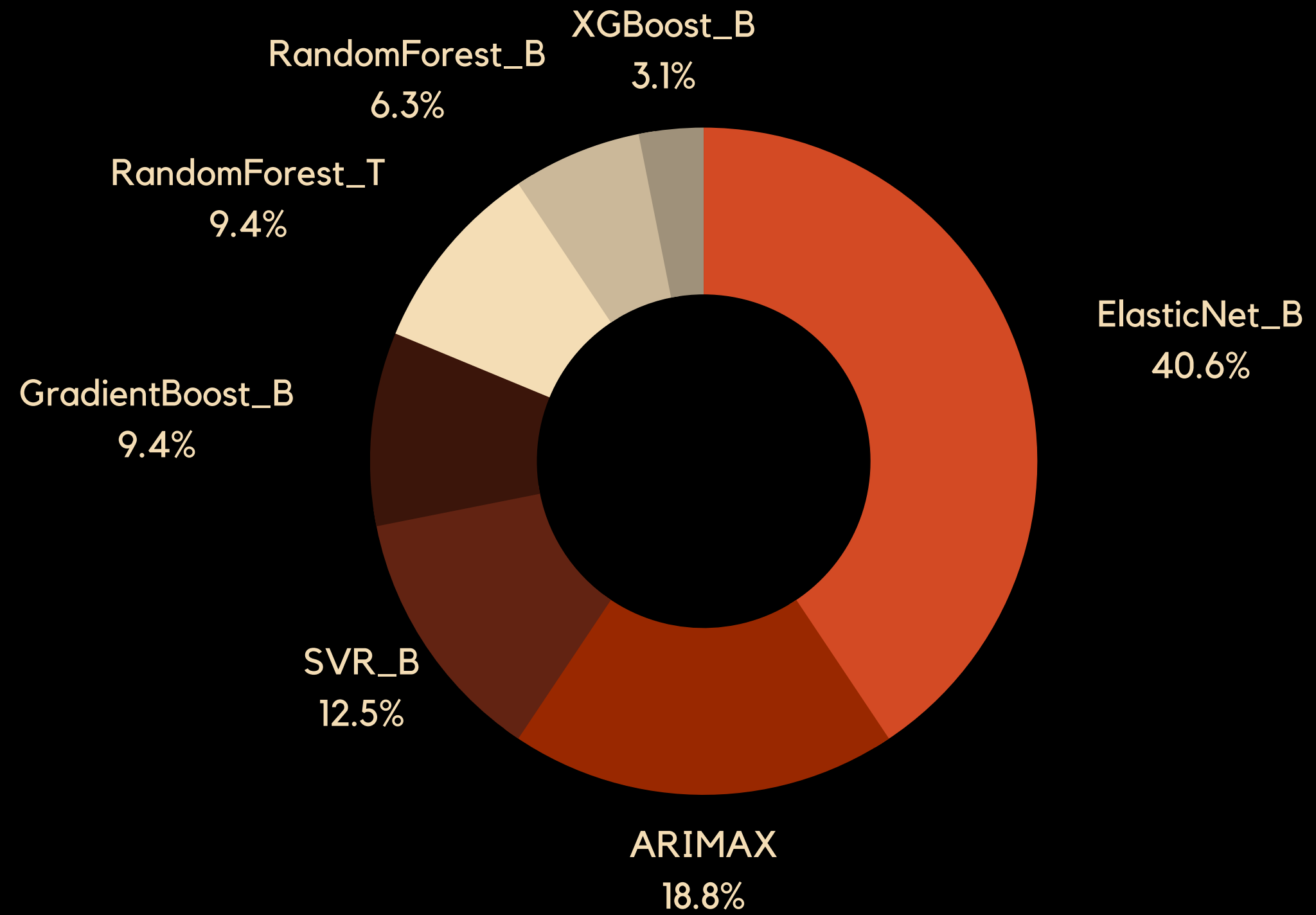
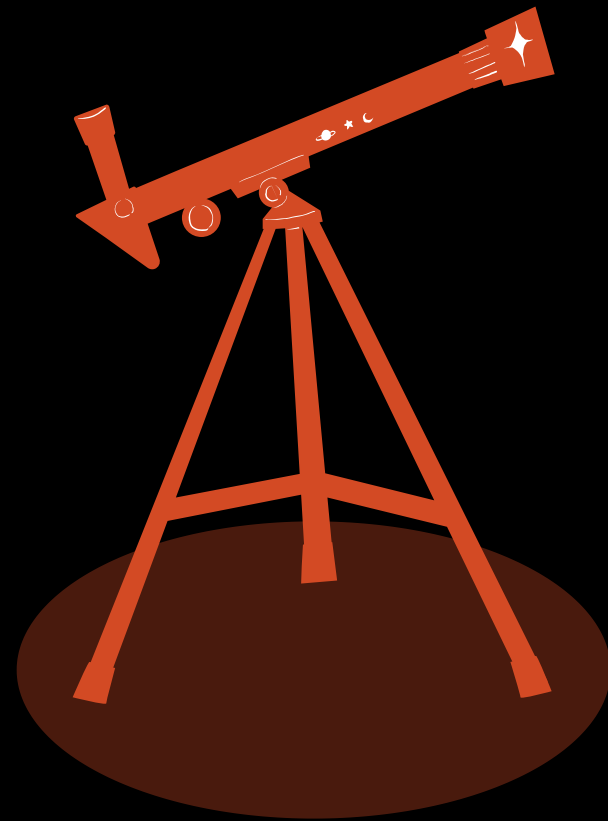
2.

Risk Parity

3.

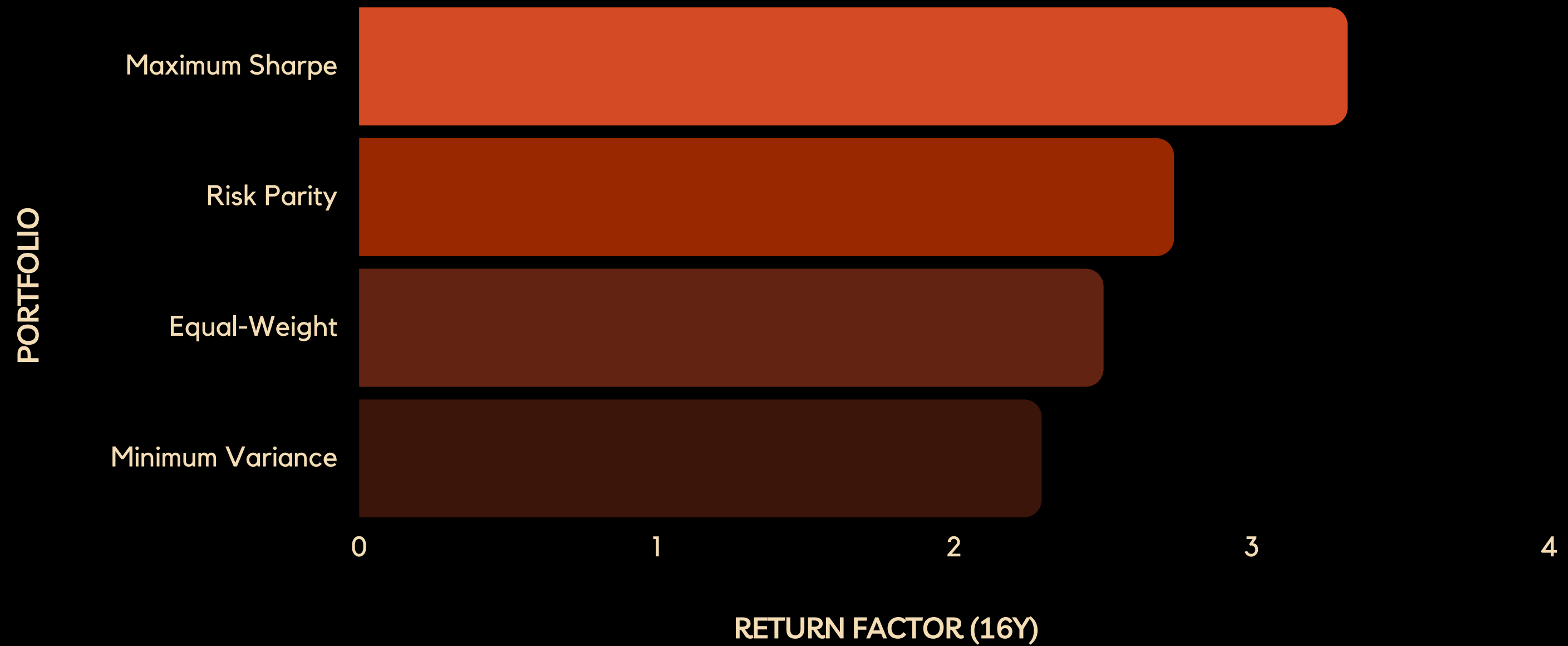
Minimum Variance

MODEL SELECTION FREQUENCY



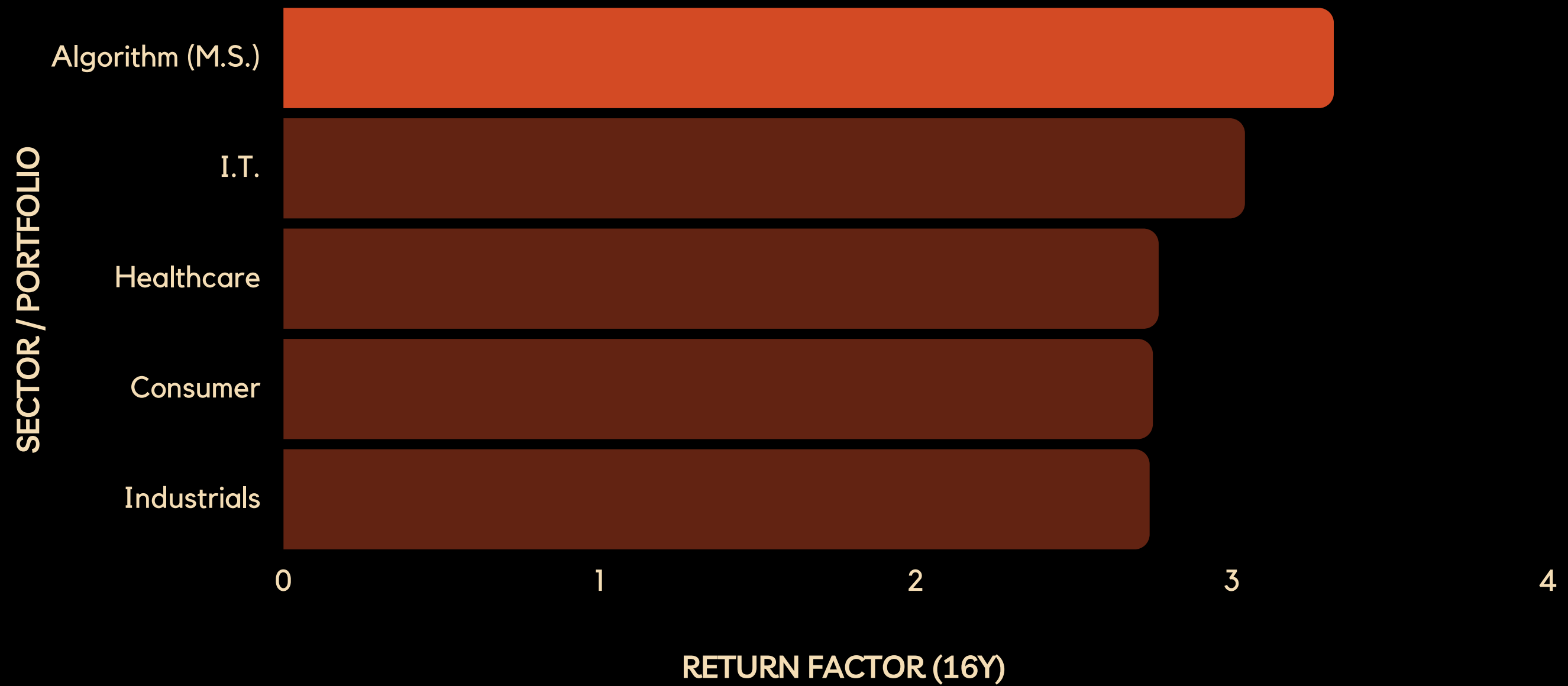
BACKTESTING

PORTFOLIOS



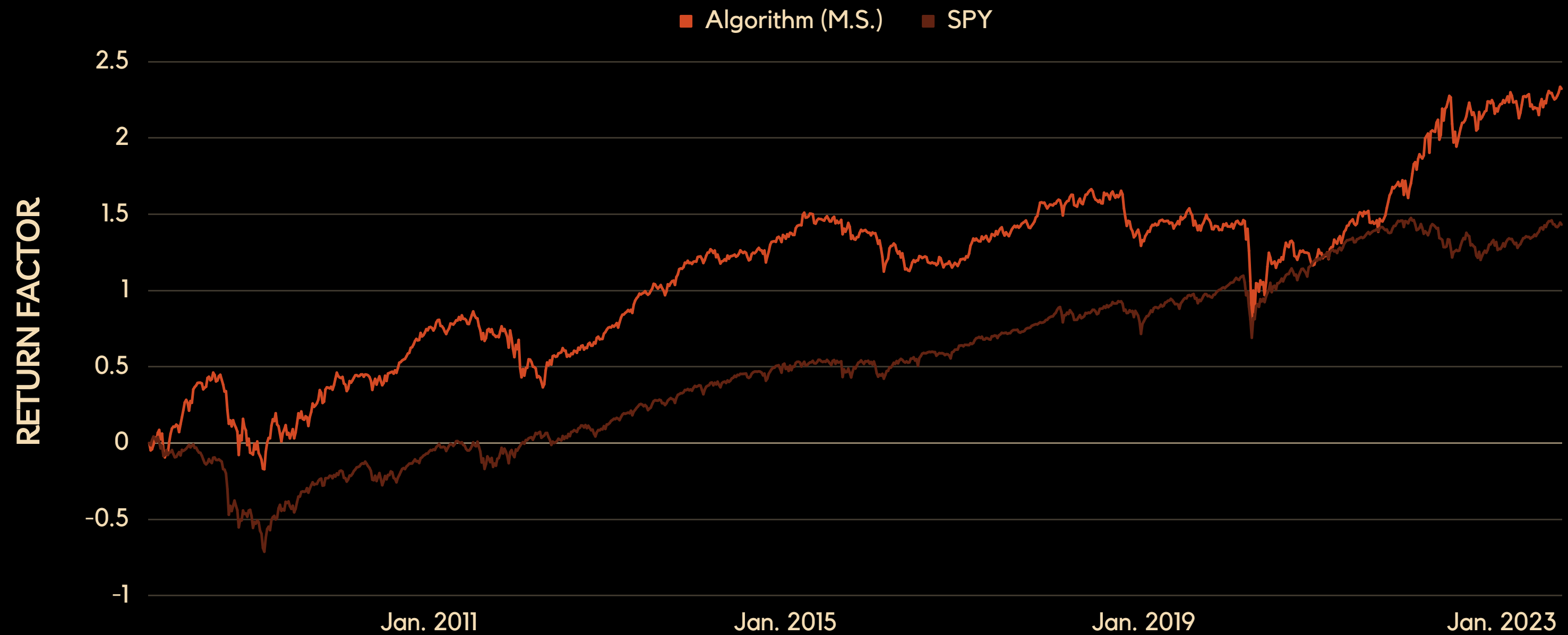
BACKTESTING

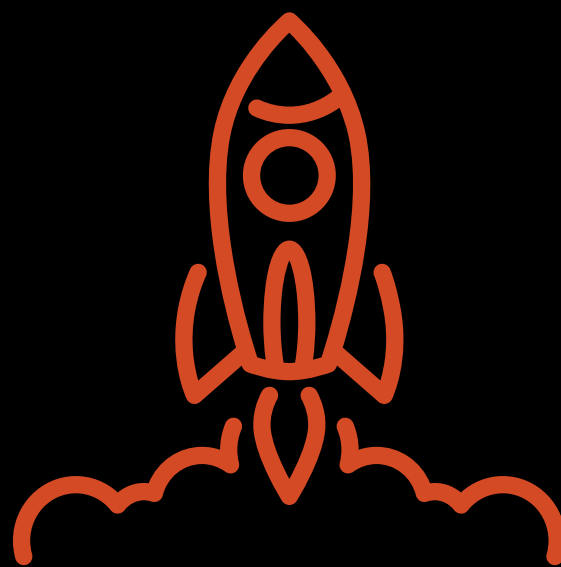
AGAINST SECTORS



BACKTESTING

AGAINST SPY



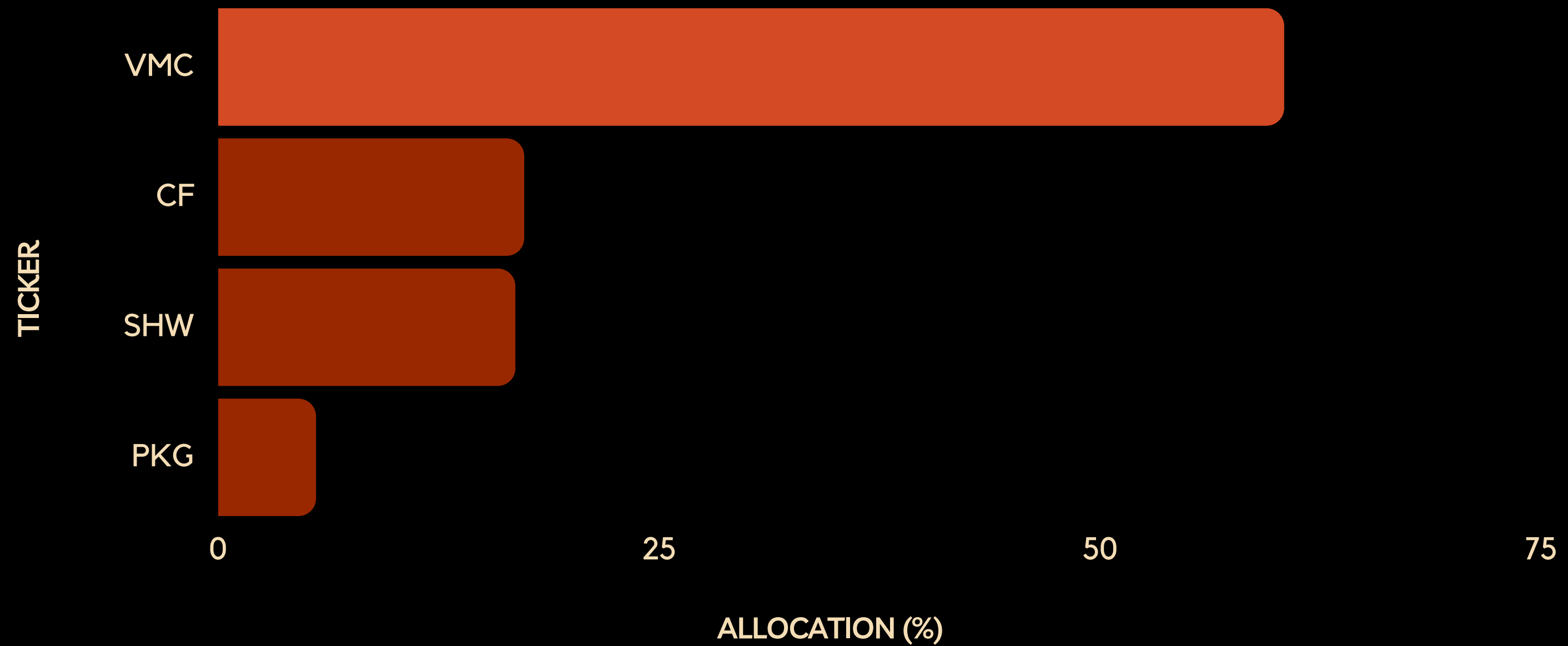


OUTPERFORMANCE

$$\alpha = 52\%$$

RECOMMENDATION

MATERIALS



PORTFOLIO STATS

based on the past half year

Sharpe Ratio

2.21

Annual Return

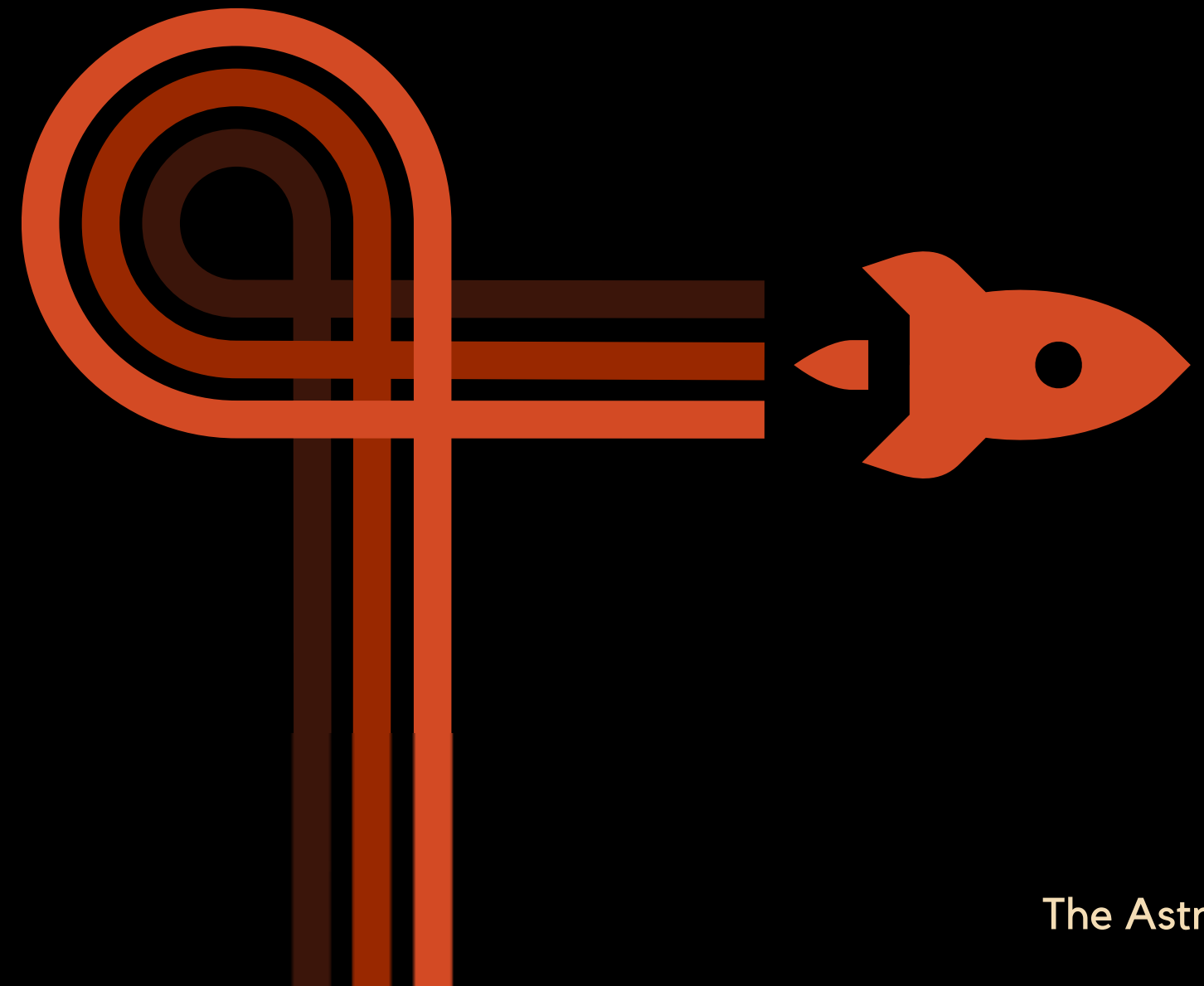
1.17x

Annual Risk

15.65%

NEXT STEPS

- 🪐 Consider multi-sector portfolios
- 🪐 Enlarge training window
- 🪐 Explore neural networks
- 🪐 Explore more optimization methodologies



Your wealth is safe with us.

