

# Investment Parameters

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## The 4 Risketeers

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# AGENDA

1. Portfolio Objectives

2. Fund Allocation Protocols

3. Proposal Requirements

# Portfolio Objectives

## Current

### Return & Volatility

- Annual Return: 19%
- Annualized Standard Deviation: 12%
- Beta: 0.7

### Risk-Adjusted Returns

- Sharpe Ratio: 1.0
- Sortino Ratio: 1.0
- Treynor Ratio: 0.15

## Proposed Update

### Return & Volatility

- Annual Return: 12%
- Annualized Standard Deviation: 12%
- Beta: 0.8

### Risk-Adjusted Returns

- Sharpe Ratio: 0.66
- Sortino Ratio: 0.94
- Treynor Ratio: 0.10

# Portfolio Objectives

## Current

### Risk Constraints

- Idiosyncratic Risk:  $\leq 20\%$  of total
- Single Stock:  $\leq 3\%$
- Industry Allocation:  $\leq 20\%$

### Performance Benchmarks

- Alpha Target: 2.75%
- Max Drawdown:  $\leq 20\%$

## Proposed Update

### Risk Constraints

- Idiosyncratic Risk:  $\leq 20\%$  of total (No Change)
- Single Stock:  $\leq 4\%$
- Industry Allocation:  $\leq 20\%$  (No Change)

### Performance Benchmarks

- Alpha Target: 3.19%
- Max Drawdown:  $\leq 20\%$  (No Change)

# Fund Allocation Protocols

## Current

- Upon a majority vote, a strategy will be added if the portfolio has sufficient cash available.
- If cash is insufficient, an existing strategy may be liquidated upon team proposal.

## Proposed Update

- Require a supermajority vote (2/3) for large allocations
- Establish a hierarchy system for liquidation:
  1. ETFs (E.g. SPY)
  2. Bond-ETFs (E.g. Vanguard Long-Term Bonds)
  3. Commodity ETFs (E.g. Invesco DB)
  4. Individual Stocks (E.g. Exxon Mobile)
- Add a quarterly review of allocations to check if strategies still align with objectives and parameters.

# Proposal Requirements

## Current

- Strategy Proposal Format: All strategy proposals should follow the templates found on Canvas, allowing for justified deviations.
- Sale Proposal Format: Sale proposals should follow the templates found on Canvas, with flexibility for justified deviations.

## Proposed Update

- No change

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# APPENDIX

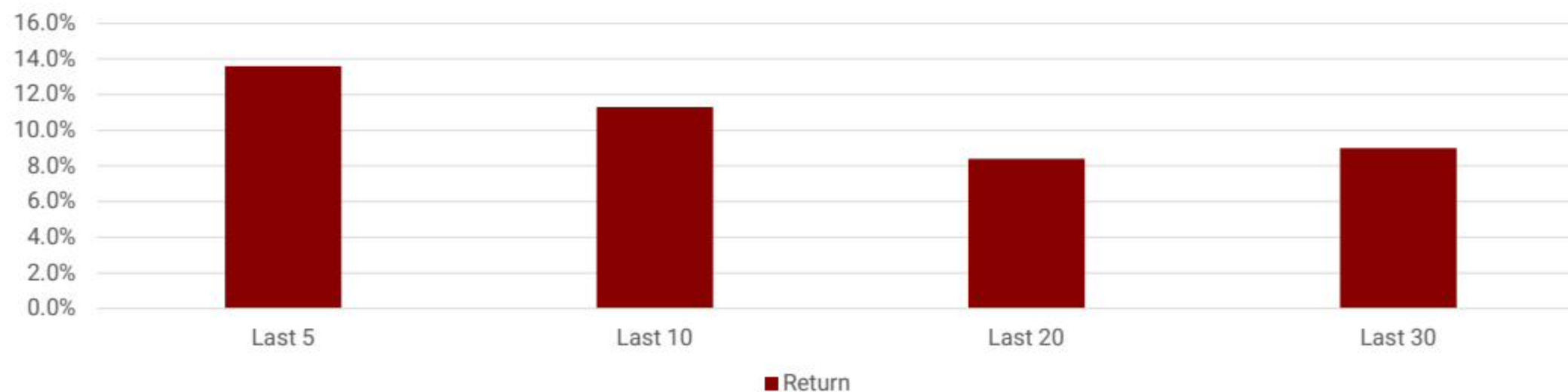
# Definitions

Term	Definition	Calc
Annual Return	The percentage change in portfolio value over one year.	$(\text{Ending Value} - \text{Beginning Value} + \text{Dividends}) \div \text{Beginning Value}$
Annualized Standard Deviation	A measure of total portfolio volatility (risk), scaled to a yearly basis.	$\text{Period Std Dev} \times \sqrt{(\text{Periods per Year})}$
Beta	Sensitivity of a portfolio's returns relative to the market; measures systematic risk.	$\text{Covariance}(\text{Portfolio, Market}) \div \text{Variance}(\text{Market})$
Sharpe Ratio	Risk-adjusted return using total volatility as the risk measure.	$(\text{Portfolio Return} - \text{Risk-Free Rate}) \div \text{Portfolio Std Dev}$
Sortino Ratio	Variation of Sharpe that penalizes only downside volatility.	$(\text{Portfolio Return} - \text{Risk-Free Rate}) \div \text{Downside Deviation}$
Treynor Ratio	Risk-adjusted return using beta (systematic risk) as the risk measure.	$(\text{Portfolio Return} - \text{Risk-Free Rate}) \div \text{Portfolio Beta}$
Alpha	Excess return of a portfolio beyond what is predicted by CAPM.	$\text{Portfolio Return} - [\text{Risk-Free Rate} + \text{Beta} \times (\text{Market Return} - \text{Risk-Free Rate})]$
Maximum Drawdown	Largest peak-to-trough decline in portfolio value before a new peak is reached.	$(\text{Trough Value} - \text{Peak Value}) \div \text{Peak Value}$
Idiosyncratic Risk	Risk specific to a single stock or small group of holdings, not explained by market factors.	$\text{Total Risk}^2 - \text{Systematic Risk}^2$
Industry Allocation	Percentage of portfolio invested in a single industry.	$\text{Value of Industry Holdings} \div \text{Total Portfolio Value}$
Single Stock Concentration	Percentage of portfolio invested in a single stock.	$\text{Value of Stock} \div \text{Total Portfolio Value}$

# Average Market Returns

Period	Approximate Annualized Average Return
Last 5 years (Dec 2019 → Dec 2024)	~ 13.6%
Last 10 years (Dec 2014 → Dec 2024)	~ 11.3%
Last 20 years (End 2004 → End 2024)	~ 8.4%
Last 30 years (End 1994 → End 2024)	~ 9.0%

[Source](#)



# Average Market Returns

Period	Rolling LTM Return
Aug 2025	15.88%
Jul 2025	16.33%
Jun 2025	13.63%
May 2025	12.02%
Apr 2025	10.59%
Mar 2025	6.80%

[Source](#)



# Volatility Ranges

