

BVH Wikifolio Challenge 2025

SBM Fund

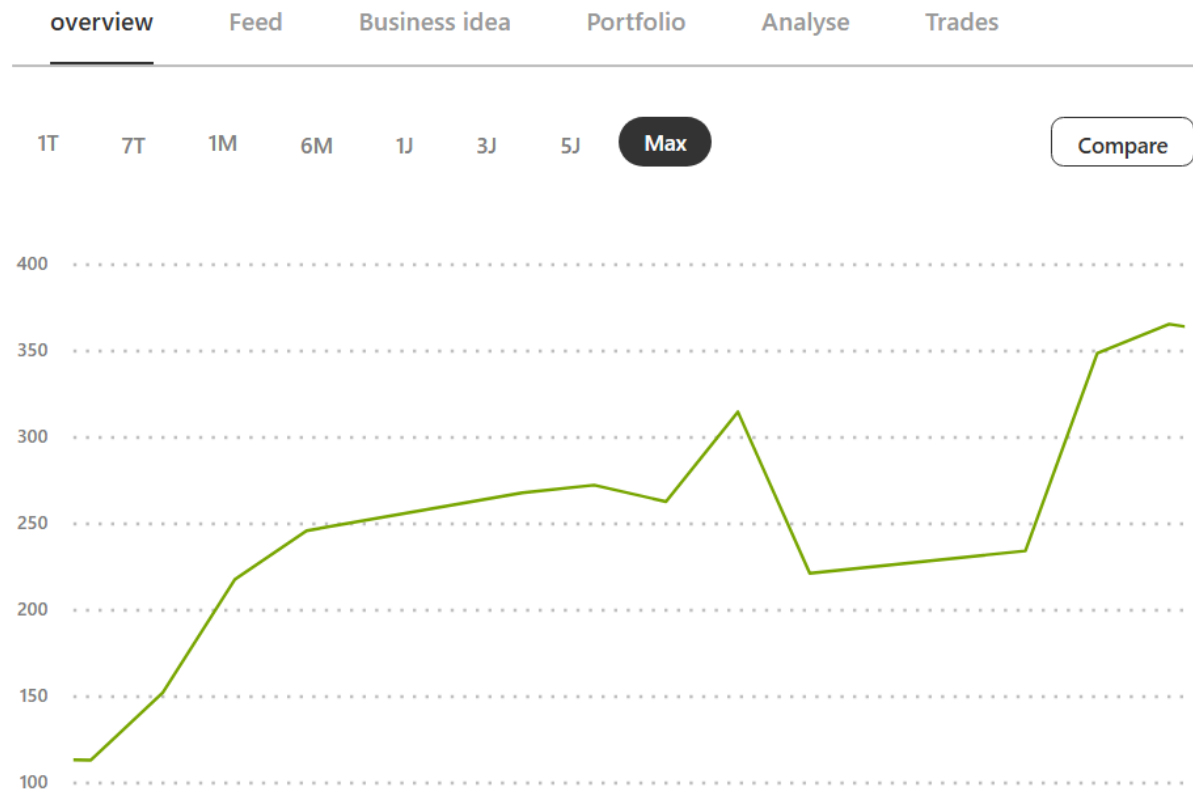
Magdeburg | March 13, 2025

Performance SBMF Wikifolio Challenge 2024



Performance SBMF Wikifolio Challenge 2024

Price Chart



Rulebook

- » Challenge rewards prudent **downside risk management & control**
 - » Useful tools: protective derivatives, stop-limit orders, diversification & rebalancing

relative risk adjustment factor
with lower (upper) limits of 1 (2)

$$\text{Score} = \underbrace{\text{Total return}}_{\text{linear growth}} - \underbrace{\left| \text{Max. drawdown}_{\text{Portf.}} \right| * \frac{\text{Max. drawdown}_{\text{Portf.}}}{\text{Max. drawdown}_{\text{DAX}}}}_{\text{exponential growth}}$$

Rulebook

Return Penalty from Excessive Risk

- » Total return (thus score) is reduced disproportionately large by an above-DAX index maximum drawdown in return:

Portf. Drawdown rel. to DAX DD: -10% (assumed)	Return Deduction (max. DD * adj. factor)	Max. Drawdown (DD)	Risk Adj. Factor
-5%	-0,050 (-5%)	$0,95/1 - 1 = -0,05$	1
-10%	-0,100 (-10%)	$0,90/1 - 1 = -0,1$	$10/10 = 1$
-15% (5% above DAX DD)	-0,225 (-22,5%)	$0,85/1 - 1 = -0,15$	$15/10 = 1,5$
-20% (10% above DAX DD)	-0,400 (-40,0%)	$0,80/1 - 1 = -0,2$	$20/10 = 2$
-30% (20% above DAX DD)	-0,600 (-60,0%)	$0,70/1 - 1 = -0,3$	2
-40% (30% above DAX DD)	-0,800 (-80,0%)	$0,60/1 - 1 = -0,4$	2

 return/score deduction per unit of risk grows fastest for portf. DD between 5-10% above market DD

Rulebook

Herfindahl-Hirschman Index (HHI)

- » Quantifies the level of **diversification** → how (un)evenly capital is distributed within the portfolio
- » Helps managing **concentration risk** that could impact portfolio's performance
 - » Might require regular rebalancing of current positions due to price appreciation

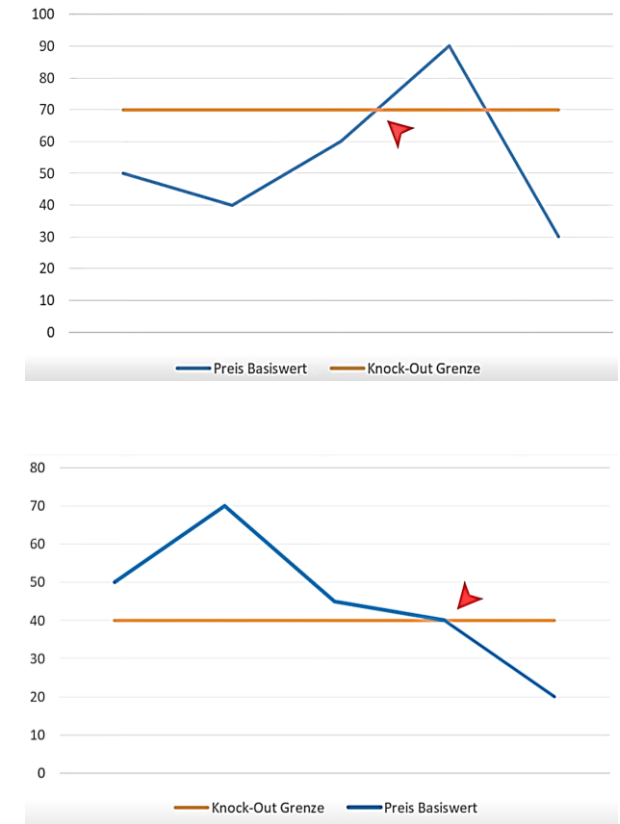
$$HHI = \sum_1^N (Portf. \text{ share of each firm}_N)^2$$

- » Challenge requirement: **HHI ≤ 3** (implies at least 4 positions of similar capital size)
 - » Ex: pos. 1 & 2 each 50% share → HHI = 0.50
pos. 1 = 10%, pos. 2 = 90% → HHI = 0.82

Trading Strategies

Knock-Out Barrier Options

- » Types:
 - » **Up-and-out** (for short bets on falling price of underlying)
 - » **Down-and-out** (for long bets on rising price of underlying)
- » Knockout barrier:
 - » Option is terminated if underlying breaks barrier (total loss)
- » Maturity:
 - » **Open end** vs. specific date
- » Leverage (multiplier, “Turbo”):
 - » Multiple by which option price will change by price move in underlying asset
- » Bid-ask spread

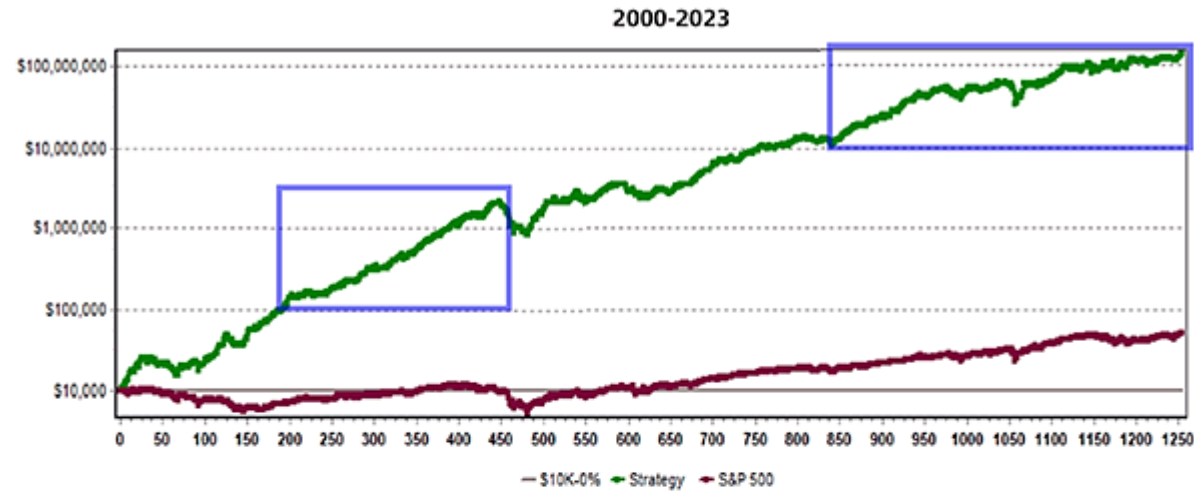


Trading Strategies

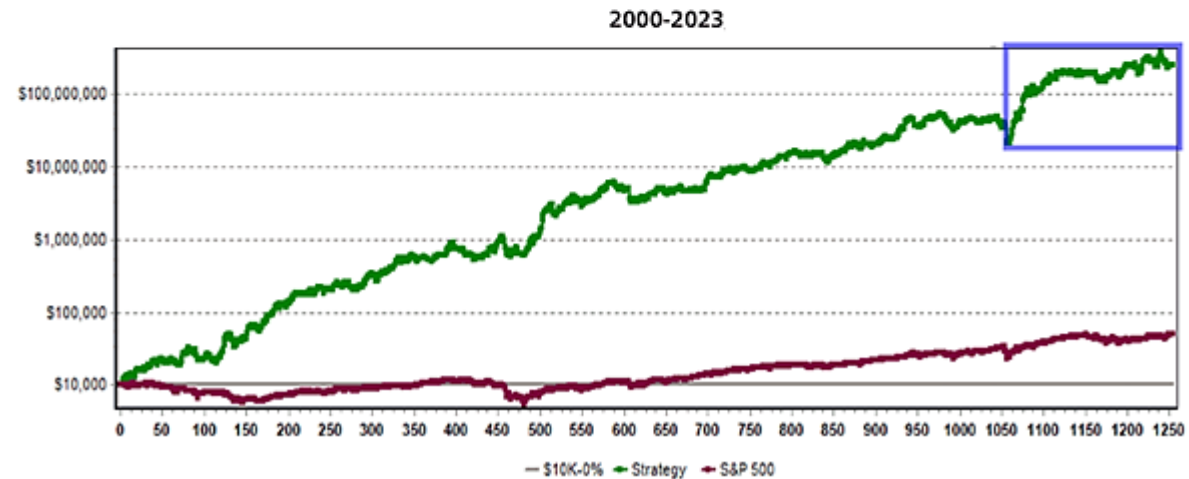
Trading Strategy	Av. Annual Gross Return (2000-2023)	Win Rate	Av. # Stocks	Filter 1	Filter 2	Filter 3
Top Ranked	48.8% 208.8% compounded (19 Nov 2021 - 22 Nov 2024)	61%	5	Zacks top ranked stocks: Pos. earnings estimate revisions for current & next fiscal year, etc.	Positive earnings estimate revisions for current quarter over last 4 weeks	Stocks with best broker rating upgrades over last 4 weeks
Top Mover	52.2% 192.2% compounded (19 Nov 2021 - 22 Nov 2024)	58%	3	Zacks top ranked stocks	Price/Sales ratio ≤ 0.5	Top percentage price gainers over the last 1/3/6 months
S&P 500	7% 33.5% (19 Nov 2021 - 22 Nov 2024)					

Trading Strategies

Top Ranked



Top Mover



 Periods of greater performance