Strategy & Perf. Reporting

SBM Fund

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STUDENTISCHER BÖRSENVEREIN MAGDEBURG

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Investment Targets

Capital Preservation & Benchmark Outperformance

Conservative Mindset Towards Higher Returns

» The investment objectives apply to the umbrella SBMF and its affiliated sub-funds, not necessarily to members' self-managed portfolios

Real Capital Preservation (mandatory)

- » Absolute nominal portfolio return > core inflation rate (excl. energy & food)
- » Downside risk protection (e.g. with protective put options)

Downside Risk-Adjusted Relative Benchmark Outperformance (non-mandatory)

- » *Measurement tools*: Sortino ratio, RoMaD ratio, Value at Risk (VaR)
- » Excess risk-adj. portfolio returns relative to benchmark (alpha) based on superior sector weightings and/or stock picking within those sectors
- » High total returns from capital appreciation & dividends

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Investment Strategy

Focused Investments In Intuitive Business Models, Investment Horizon

Unrestricted, Focused Investment Philosophy

High Conviction Investments

- Concentrated portfolios containing only the very best investment ideas
- The size of an investment is based on the level of conviction in the company

Investment Horizon

- No requirements for minimum length of holding period (due to shorter-focused Special Situations Fund) nor limit, as long as the investment thesis stays intact and is going to be recognize by the market more likely than not (re-evaluate regularly)

Intuitive Business Models

- Preference for businesses that our analysts understand well
- 1-3 revenue streams at maximum

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Portfolio Construction

Sector Coverage, ETFs, Restricted Investments, Sub-Funds

Cornerstones Of The Virtual Fund

Overview

- » Starting capital: €100,000 (paper money)
- » Markets: mainly USD and EUR securities
- » Number of holdings: max. 7 companies in each SBM sub-portf. (excl. ETFs)
- » Market cap size: small to medium cap companies ($300mm – $10bn)

ETFs over Cash

- » Hold Exchange Traded Funds (on sector or market indices) over cash, whilst seeking attractive stocks to put money to work
- » Minimizes cash drag on portfolio performance and provides sector exposure

Cornerstones Of The Virtual Fund

Investment Restrictions

- The team does not engage in shorting, derivatives trading, or other non-linear investment strategies
- The fund may further not acquire:
  - Commodities
  - Direct investments in real estate
  - Debt securities
  - Penny stocks

Cornerstones Of The Virtual Fund

Sector Coverage

1. Technology, Media, Telecommunications
2. Healthcare (biotech, pharmaceuticals)
3. Industrials (manufacturing, chemicals, aerospace & defense)
4. Consumer Retail (food & beverages, apparel, electronics)
5. Financials (banks, insurances, asset management, fintech)
6. Real Assets (real estate, commodities & renewables)

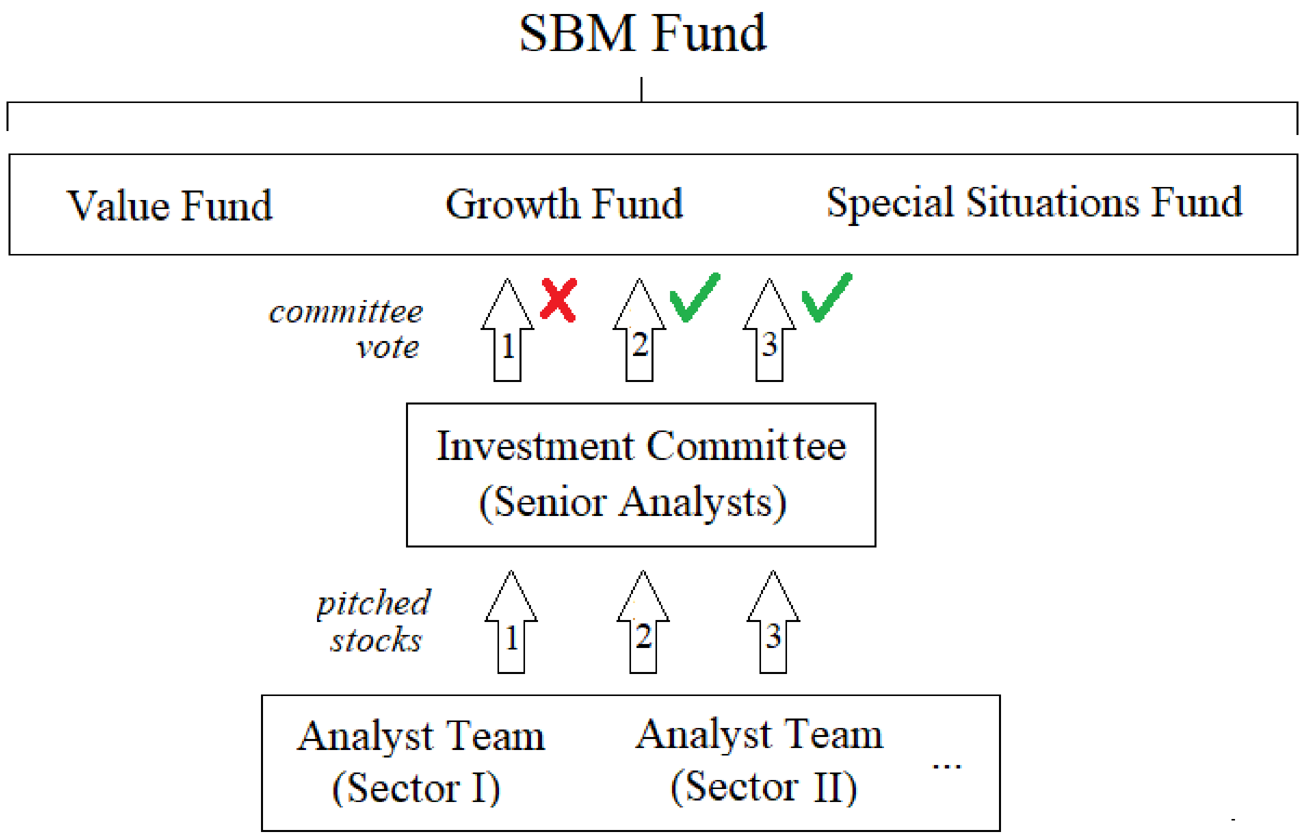
Sub-Portfolios

- For sector and strategy diversification and risk reduction, the SBM Fund is divided into 3 autonomous equity sub-portfolios
- The umbrella fund might lean towards investment style with the greatest compounding return over time
- The Value & Growth Funds receive an initial capital allocation of €40,000 each, whilst the Special Situations Fund €20,000

Sub-Portfolios

	Value Fund	Growth Fund	Special Situations Fund
Investment Focus	value-oriented	growth-oriented	opportunistic
Price Driver	capital appreciation through buying stocks at a discount to their intrinsic value & peer group	capital appreciation through future company/industry growth	capital appreciation through temporary mispricing
Dividend Yield	moderate to high	low to zero	not required
Risk Profile	lowest	in-between	highest
Holding Period	longer-term	in-between	shorter-term
Characteristics	resilient business model, consistent YoY CF generation, low price impact from market volatility & inflation	high sales growth (potential), strong price impact from market volatility & inflation	sound fundamentals, strong price impact from change in investor sentiments
Financial Metrics	low market multiples	moderate market multiples	sudden low market multiples
Benchmark	Russell 1000 Value Index	Russel 1000 Growth Index	not required

Sub-Portfolios



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Fund Management

Monitoring, Rebalancing, Sell/Hold/(Not) Buy Signals

Monitoring Current & Potential Holdings

Monitoring Current Positions

- Quarterly update on holdings (total & relative performance, status on realization of investment thesis)

Sector Exposure & Rebalancing

- We allow the fund's sector allocation to deviate from its benchmark within a range we judge reasonable
- Industry analyses help to avoid being over-exposed to undesired sector risks

Monitoring Current & Potential Holdings

Buy Signals

business model which is scalable, unique (product differentiation/niche), resilient to inflation (low commodity risk), or has low cyclicity

market share growth or leadership in a growing industry or new region with weak competitors

increasing profitability from vertical integration or cross-selling by strategic acquisitions/partnerships

successful mgmt. record & alignment through compensation (insider ownership)

smart capital allocation to high NPV R&D and S&M projects, stock buybacks at depressed valuations, deleveraging for more resilience during downturns

Re-Buy Signals

stock price is trading down whilst company is on track to realizing investment thesis (e.g. due to unjustified broader market sell-off)

market overreaction on quarterly earnings miss resulting in undervaluation of stock

lower taxes or fewer legal restrictions due to company relocation

Monitoring Current & Potential Holdings

Hold Signals

announcement of share repurchase program

continuing CF growth rewarding investors with dividends

increasing shareholder wealth through disciplined capital spending in pos. NPV projects

Exit Signals

upper target price range is reached

stock price is trading down whilst investment thesis/catalyst is far from being realized or has been disproven

alternative investments with higher upside or better risk-return profile

deteriorating growth rate due to increasing competition or shrinking market

Monitoring Current & Potential Holdings

Non-Investment Signals

RoMaD ratio or other downside risk metrices at sub-industry levels during last 12 months

overpriced stock which leaves no sufficient margin of safety

companies that are purely low-cost struggle to raise prices with inflation (low pricing power)

volatile sale/earnings and high inventory due to cyclicity

ESG concerns

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Performance Reporting

Absolute & Relative Return, Downside Risk, Perf. Attribution Analysis

Absolute & Relative Risk-Return-Profile

(Un)realized Cumulative Absolute Return

- *Cumulative return* = total return (incl. dividends) since stock invest./fund inception
- *(Un)realized return* = return from (un)sold portf. positions

$$\text{Absolute Return} = \left(\frac{\text{Ending Value} - \text{Beginning Value} + \text{Income}}{\text{Beginning Value}}\right) \times 100\%$$

(Downside Risk-Adjusted) Relative Return

- *Relative return* = total return differential (out-/underperf.) relative to a benchmark
- *Downside risk measures* = Semi-Variance, Maximum Drawdown, VaR (appendix)
- Downside risk-adj. total return metrics: (appendix)
  - Sortino ratio
  - RoMaD ratio

Performance Attribution Analysis

» Helps understanding how our chosen industry weightings as well as size of specific holdings in those industries compare to each benchmark and what deviation from the benchmark allocation resulted in a higher or lower relative active return (appendix)

Sector Allocation Effect

» Goal: overweight industries included in benchmark that generate high pos. returns

Security Selection Effect

» Goal: from those industries, select stocks also included in benchmark that generate high pos. returns (choose greater position size than benchmark for these holdings)

Thank you for your interest.

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Appendix

Adv.’s of Retail Investors, Attribution Analysis, Risk Measures & Return Ratios

Advantages of Retail Investors over Professionals

- Money managers trade with stop-loss orders (risk compliance requirement)
  - retail investors can stay invested and re-purchase cheaply when loss limits are surpassed by the market price and wave of automated sell orders is initiated
- Less investment opportunities for professionals due to:
  - Trade restrictions due to risk mgmt. (asset classes, regions)
  - Investment size (fewer investments into smaller market cap stocks)

- Market timing: plenty of capital available for overpriced stock investments during bull markets and much less for bargain purchases during bear markets
- Professionals must “waste” ~ 25% of their time on explaining the reasoning behind their trades to their clientele of investors

Sources: books written by Peter Lynch

Attribution Analysis of Sources for Active Return

» Portf. managers can outperform a benchmark (active return, R_A) by:

1. Asset class selection: expected active return (value added by mgr.) from allocating higher weights on higher-return asset classes included in benchmark
2. Security selection: expected active return (value added by mgr.) from selecting higher-return securities within asset classes, resulting in higher aggregate returns of selected asset classes relative to benchmark

$$E(R_A) = \text{Asset class selection (active) return} + \text{Security selection (active) return}$$

$$= \sum (w_{P,Class} - w_{B,Class}) * E(R_{B,Class}) + \sum w_{P,Class} * E(R_{P,Class} - R_{B,Class})$$

w = weight | E(R) = exp. return | P = (sub)portf. | B = benchmark

Value at Risk

- Forward-looking measure of downside (tail) risk
  - the minimum loss that is expected to occur with a certain probability within a specified period given the assumed market conditions
- Parametric method can be used to estimate VaR of single asset and portfolios based on historical changes in (normally distributed) asset or portf. returns over some prior lookback period

Value at Risk

» Step 1 – *Realized portf. return:*

$$R_P = w_A * R_A + (1 - w_A) * R_B$$

» Step 2 – *Portf. return volatility:*

$$\sigma_P = \sqrt{w_A^2 * \sigma_A^2 + w_A^2 * \sigma_B^2 + 2 * w_A * w_B * \sigma_A * \sigma_B * \rho_{A,B}}$$

» Step 3 – *Portf. VaR:*

$$\text{VaR (5\% of portf. value)} = (-1) * (R_P - 1.65 * \sigma_P)$$

w = weight of asset A,B | R = return of asset A,B | p = return correlation of A,B

Downside-Risk Adjusted Total Return Ratios

Sortino Ratio

» *Downside deviation* = measures the standard deviation of returns below the benchmark's return

$$\text{Sortino ratio} = \frac{\text{Total Return - Riskless Return}}{\text{Downside Deviation}}$$

Return over Maximum Drawdown (RoMaD) Ratio

» *Maximum drawdown* = largest peak-to-trough decline in the value of an investment or portfolio over a specified period

$$\text{RoMaD ratio} = \frac{\text{Total Return}}{\text{Maximum Drawdown}}$$

About the Author

Alexander Neumann plays an active role in managing the SBM fund. At present, he completes his master's degree in finance and enjoys meeting like-minded people who share his passion for investing.

For his master's thesis, he is conducting an empirical comparison of the mathematical and statistical accuracy of dividend, cash flow, and earnings based valuation models for German mid-to-large cap public stocks.

He has also passed the CFA level 2 exam.