Investment Rules

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Related material at:
https://github.com/fe-lipe-c

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Investment Rules

The objective of this document is to define general and specific investment rules.

Benchmarks

- Market Cap-Weighted Index: a portfolio with all market securities, in which the securities allocations are proportional to its share in the market.

  This is the most theoretically sound benchmark as it reflects the actual market structure and collective investor wisdom. According to the Efficient Market Hypothesis, market prices incorporate all available information, making market capitalization weights an efficient representation of each security's economic importance. This approach automatically adjusts for growing/declining companies and reduces turnover costs. However, it can lead to concentration risk during market bubbles, as overvalued securities become overweighted in the index.

- Best Performers Index: a portfolio with the best performing assets (the method to select the best performing assets is still to be defined).

  The comparison between a portfolio of thousands of securities versus a concentrated portfolio of 10 holdings highlights the disconnect between theoretical benchmarks and practical investment implementation. Transaction costs and portfolio management efficiency is particularly relevant - there's an optimal portfolio size considering the trade-off between diversification benefits and management costs.

  The concept of using best performers as a benchmark also introduces an interesting "potential frontier" perspective. Rather than measuring performance against the average market return (Market Cap-Weighted Index), we're essentially creating an achievable upper bound - the best possible outcome if you had perfect foresight in selecting assets within your operational constraints. This provides a more meaningful context for performance evaluation, as it shows how close your strategy comes to the theoretically best possible outcome under similar operational constraints.

  Some practical considerations need addressing: i) The selection methodology for "best performers" needs careful design to avoid look-ahead bias; ii) The benchmark should account for the realistic timing of investment decisions; iii) The reference period for determining "best performers" could significantly impact results; iv) The benchmark should consider liquidity constraints that real investors face

  This approach seems more aligned with practical portfolio management reality and could provide more actionable insights for strategy improvement. It acknowledges that the goal isn't to replicate the entire market but to maximize returns within specific operational constraints.

  This perspective shifts the benchmark's role from a purely theoretical reference to a practical tool for strategy evaluation, which could be more valuable for actual investment decision-making.

  This concept shares some characteristics with several established benchmarking approaches, though not exactly matching any single one: "Custom Constrained Benchmarks" is perhaps the closest formal term, where benchmarks are constructed to reflect realistic investment constraints. However, this typically doesn't focus specifically on best performers. This approach has also elements of what's sometimes called "Achievable Benchmark Construction" or "Attainable Benchmark Construction," though these terms are more commonly used in other fields like healthcare performance measurement. The closest academic concept might be "Performance Potential Benchmarks" or "Feasible Set Benchmarks," which attempt to measure performance against what's realistically achievable given specific constraints.

  However, I believe this specific approach - using a concentrated portfolio of best performers as an upper bound for strategy evaluation under realistic constraints - doesn't have a widely recognized formal name in the financial literature. This might explain why it's challenging to find direct research on this topic.

  To explore related concepts, you might want to look into:

  - Concentrated portfolio theory
  - Optimal portfolio size literature

- Constraints-based portfolio optimization
- Best-practices benchmarking in investment management
- Feasible portfolio frontier analysis

Return Calculation

The portfolio return is calculated as the weighted average of the individual asset returns. The weights are the portfolio allocations to each asset.

The return is evaluated every day, comparing with a lag of one day, one week, one month, three months, six months, and one year.