
Evaluation of Investment Performance

Chapter 22

Charles P. Jones and Gerald R. Jensen,
Investments: Analysis and Management,
13th Edition, John Wiley & Sons

Measuring Portfolio Performance

- ▶ “Bottom line” issue in investing
- ▶ Important for investors who manage their own money or have others manage it
- ▶ Performance must be evaluated before intelligent decisions can be made about portfolios
- ▶ Ratings reflect only past performance, not future performance

How Should Portfolio Performance Be Evaluated?

▶ Three key questions

1. Was the return, after expenses, satisfactory?
2. How much risk did investor/manager take?
 - Evaluate performance on a risk-adjusted basis
3. What should have been earned? That is the proper benchmark.
 - Relative comparisons necessary

Return Measures

- ▶ Change in investor's total wealth over an evaluation period

$$(V_E - V_B) / V_B$$

V_E = ending portfolio value

V_B = beginning portfolio value

- ▶ Assumes no funds added or withdrawn during evaluation period
 - Timing of cash flows is important


Return Measures

- ▶ Money-weighted returns
 - Equivalent to internal rate of return (IRR)
 - Measures actual return considering contributions and withdrawals
 - Equates initial value with PV of cash flows and ending value
 - Cash flow effects make comparisons to indexes or other portfolios inappropriate

Sortino Ratio (SR)

- ▶ Sortino ratio (SR) focuses on “excess” return relative to downside risk

$$SR = \frac{(\bar{R}_p - R_{MAR})}{(DD_{MAR})}$$


- R_{MAR} = minimum acceptable return
 - DD_{MAR} = downside deviation
- ▶ Useful measure when return distributions are not symmetric
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Style Analysis

- ▶ Seeks to identify portfolio's investing style in terms of types of securities targeted
- ▶ Two approaches to identify portfolio style
 1. Holdings-based: uses the characteristics of the portfolio's current holdings
 2. Returns-based: compares portfolio's returns to returns of market indexes
- ▶ Many mutual funds inconsistent in style

Performance Evaluation Process

Components: Measurement, Attribution, and Appraisal

- ▶ Measurement – measure the performance (risk and return) of the portfolio
 - ▶ Attribution – attribute performance to manager’s selection or allocation abilities
 - ▶ Appraisal – assess the manager’s performance
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Performance Presentation

- ▶ Minimum standards developed to reduce performance misrepresentations
 - Global Investment Performance Standards (GIPS) require:
 - Uniformity in calculations and disclosures
 - Inclusion of all fee-paying discretionary portfolios in composites with similar objectives
 - Compliance history for at least five years
- ▶ Effective evaluation requires long-term results, fair measures

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