

Digging deeper: Reckoning with risk

3. Sharpe ratio

Sharpe ratio

The Sharpe ratio is a measure of an investment's risk-adjusted return. It measures the excess return for every unit of risk that has been taken to achieve that return.

The Sharpe ratio relies on *standard deviation*. Standard deviation measures how much an investment varies from its mean, or average value. The higher the standard deviation, the more volatile the investment is.

The Sharpe ratio measures the return of a security or portfolio earned in percentage points (or basis points) above the risk-free rate for each unit of risk taken.

- The higher the Sharpe ratio, the better the return on an investment compensates for the additional risk the investor has taken.
- Negative Sharpe ratio - the risk-free rate of return would have performed better than the investment.

Formula for calculating the Sharpe ratio of a fund:

Sharpe ratio = $(R_i - R_f) / SD_i$

- > R_i = return on the investment
- > R_f = risk-free rate of return
- > SD_i = standard deviation of the return on the investment

Example

R_i = return on the investment = 12%

R_f = risk-free rate of return = 3%

SD_i = standard deviation of the return on the investment = 4%


Sharpe ratio is $(12 - 3) / 4 = 2.25$

The Sharpe ratio is helpful in comparing the risk-adjusted performances of two funds. Even though fund manager A may have achieved a higher actual annualised return than fund manager B, fund manager B may have delivered a better result on a risk-adjusted basis – shown by the higher Sharpe ratio.


Category:

**Investment
insights**

Contact us

 0207 464 5855

 clientsupport@columbiathreadneedle.com

 columbiathreadneedle.co.uk/adviser-edge

Telephone calls may be recorded.

Important information: This document has been prepared for general information purposes only. It does not constitute advice (whether investment, legal, regulatory, tax or otherwise) provided by Columbia Threadneedle Management Limited.



© 2022 Columbia Threadneedle Investments is the global brand name of the Columbia and Threadneedle group of companies.

For professional investors only. This financial promotion is issued for marketing and information purposes only by Columbia Threadneedle Investments in the UK. This material should not be considered as an offer, solicitation, advice, or an investment recommendation. This communication is valid at the date of publication and may be subject to change without notice. Information from external sources is considered reliable but there is no guarantee as to its accuracy or completeness. Actual investment parameters are agreed and set out in the prospectus or formal investment management agreement. Financial promotions are issued for marketing and information purposes; in the United Kingdom by Columbia Threadneedle Management Limited, which is authorised and regulated by the Financial Conduct Authority.

206150 (08/22). UK.