How to Calculate Alpha and Beta in Mutual Funds?

Introduction

You may have heard the terms alpha and beta females/males. These are usually used to describe gender personas. However, apart from conveying basic personality traits, they are also used to define the performance of different investments. Alpha and beta in mutual fund schemes are used to measure performance and risk. Hence, they can be critical variables to help you select suitable options based on your goals. Here's all that you need to know about them.

What is Alpha in mutual funds?

Alpha in mutual funds is the measure of a fund's performance against its benchmark. It helps you understand if a mutual fund scheme has outperformed its benchmark or not. Thus, alpha is irrelevant in the case of passive funds that simply mimic the performance of the benchmark. However, it is a critical measure for active funds as they aim to outperform the benchmark. Here's how you can read alpha:

- The baseline for alpha is 0 in the case of mutual fund schemes.
- The fund has not performed up to the benchmark if the alpha is negative.
- The fund has outperformed the benchmark if the alpha is positive.

The next variable to know before you invest in mutual fund schemes is beta.

What is Beta in mutual funds?

Beta in mutual funds helps you understand how a fund reacts to market volatility. It is an indicator of the fund's stability and how sensitive it is to market fluctuations.

Here's how you can read beta:

- The baseline for beta is 1 in the case of mutual fund schemes.
- If the beta is 1, the fund has the same variations as the benchmark index.
- If the beta is less than 1, the variation in the fund value is less than the benchmark index. This means the fund is better immune to market volatility.
- If the beta is more than 1, the fund shows more sensitivity to the variations in the benchmark index. This means the fund

is prone to react to market volatility.

The basics of alpha and beta in mutual fund schemes can be clearer by understanding how they are calculated.

Calculation of alpha ratio in mutual funds

Alpha ratio in mutual funds can be calculated with the following formula:

Alpha = (Mutual fund return – risk-free return (RF)) – [(Benchmark return – risk-free return (RF)) x Beta]

Calculation of beta ratio in mutual funds

Beta ratio in mutual funds can be calculated with the following formula:

Beta = (Mutual fund return – risk-free rate (RF)) / (Benchmark return – risk-free rate (RF))

Example for better clarity:

If a mutual fund scheme generates 20% returns and the benchmark index offers 15% in a year, the beta assuming a risk-free return of 10% would be:

Beta= (20 – 10) / (15 – 10) = 2

This means that the mutual fund is two times as volatile as the benchmark.

Now, let's calculate the alpha assuming the same figures as above but with a beta of 1.

Alpha = (20 – 10) - [(15 – 10) x 1) = 5

This means that the fund has been able to outperform the benchmark index, which makes it a viable investment option.
These figures may seem confusing. But you can always reach out to a financial advisor to get more clarity on alpha and beta.

Importance of alpha and beta

Alpha helps you understand the fund's potential to generate returns against the benchmark index. Likewise, beta helps you gauge how well the fund will survive market volatility. Together, these two variables can help align your expectations regarding performance, risk, and stability.

Conclusion

The next time you [invest in mutual fundschemes](), make sure to browse through the alpha and beta values. However, remember to use these figures along with other measures like the fund house's credentials, the market scenario, portfolio allocation, etc., to get a wholesome picture.