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**Meta Title:** Alpha & Beta in Mutual Fund: Meaning, Importance and Calculation | Bajaj Finserv AMC

**Meta Description:** Learn about Alpha and Beta in mutual funds, their meaning, importance in assessing performance, and how to calculate these key metrics to make informed investment decisions.

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# **What is alpha and beta in mutual funds?**

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When you invest in or read about mutual funds, you may come across several terms that seem confusing. However, once you understand these concepts, you’ll learn that they’re not so complicated.

Two such terms are alpha and beta. These are important concepts that help investors measure the performance of a mutual fund and the risks involved in investing.

In this article, we’ll explain what alpha and beta indicate and how you can use these measures to make informed investment decisions.

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## **How is risk measured in mutual funds?**

First let’s talk about risk. When you [invest in mutual funds](https://www.bajajamc.com/mutual-fund), you’re exposed to market risks. These risks can lead to gains, but they can also result in losses. So, how do you know how much risk you’re taking when you invest in a mutual fund? This is where beta comes in handy. Beta measures how a mutual fund’s movements compare to that of its benchmark index, which in turn represents the broader market or market segment that the fund is investing in. Beta can, in simple terms, tell you whether your investment is more, less, or as volatile as the broader market.

## **What is alpha in mutual funds?**

Alpha in mutual funds is a measure of how a mutual fund performs relative to its benchmark index, such as the Nifty 50 or the BSE S&P Sensex. If the alpha is positive, the fund has performed better than its benchmark, which is usually the objective of any actively managed mutual fund. If the alpha is negative, it means that the fund’s performance is lower than that of the benchmark, which in turn represents the broader market for the relevant category.

For example, let’s say the alpha of a mutual fund is +2. This means the fund has earned 2% more than its benchmark index. If the alpha is -1, it means the fund has delivered returns that are 1% lower than the benchmark.

Key points to remember about alpha:

* Positive alpha indicates that the fund has earned higher returns than the benchmark in the period under consideration.
* Negative alpha implies that the fund has underperformed the benchmark in the given period.
* Alpha helps assess the fund manager’s skills as it gauges if the fund has the potential outperform the market in the long term.

## **What is beta in mutual funds?**

While alpha shows how well a fund has performed, beta measures the fund’s volatility compared to the overall stock market. This gives an indication of how risky an investment can be.

* Explained simply, beta shows how much the fund’s value has changed as the stock market moved during the period of consideration. Again, a benchmark index is used as the point of comparison.
* If a mutual fund has a beta of 1, it means the fund has moved in line with the market in the given period. A beta greater than 1 means the fund has been more volatile than the market, and a beta less than 1 means it has been less volatile.

Let’s look at it in more detail:

* Beta of 1: If the market goes up by 10%, the fund’s returns also went up by 10%.
* Beta is greater than 1: If beta is 1.2, that would indicate that when the market went up by 10%, the fund went up by 12%. Conversely, if the market drops by 10%, the fund dropped by 12%.
* Beta is less than 1: If beta is 0.8, the fund will go up only 8% when the market rises by 10%, but it will also fall less in case the market drops.

Key points to remember about beta:

* A higher beta means higher risk but also the potential for higher returns.
* A lower beta means lower risk but possibly lower returns.
* Beta is useful for understanding how much the value of your fund might change if the market moves.

## **Calculation of alpha and beta in mutual funds**

Next, let’s understand how to calculate alpha and beta. It’s easy to calculate both these ratios without any need for in-depth mathematical knowledge. Fund managers and financial analysts usually calculate these values and display them for you.

* **Alpha formula:** Alpha = Fund Return − (Benchmark Return + Beta × (Market Return − Risk-Free Rate)

Here, the risk-free rate is usually the return from government bonds, and the market return is the return from the benchmark index.

* **Beta formula:**  
  Beta = Covariance (of mutual fund returns and the market returns) divided by Variance (of market returns)

Making this calculation manually is challenging, but this data is readily available online. Some asset management companies also include this information in their fact sheets.

## **Why are alpha and beta important?**

Alpha and beta are important because they help you understand the balance between the and return potential of a scheme. In other words, it indicates how much risk you may be taking on and whether it may potentially be worthwhile.

* Alpha helps you see whether your fund manager is adding value. A positive alpha means your fund is doing better than its benchmark, while a negative alpha suggests underperformance.
* Beta tells you how sensitive your fund is to market movements. If you’re a conservative investor, you might prefer a fund with a lower beta, which indicates less volatility than the market.
* A high alpha with a reasonable beta suggests that the fund has shown good performance in a specified period without taking on excessive risk.

## **Practical applications of alpha and beta**

How can you use alpha and beta in real life? Let’s look at a few examples:

1. **Choosing a fund with lower risk:** If you’re a cautious investor, look for a mutual fund with a beta less than 1. This means the fund is less likely to have major swings in value compared to the market. This is useful for conservative investors who want to avoid big losses during market downturns.
2. **Looking for outperformers:** If you’re looking for a fund that has historically beaten the market, check its alpha. A positive alpha shows that the fund manager has successfully generated higher returns than the market in the period under consideration, after accounting for risk.
3. **Balancing your portfolio:** Alpha and beta can help you balance your investment portfolio. For example, you might include funds with a high alpha for growth potential and funds with a low beta for relative stability.
4. **Understanding market volatility:** If you know that the market is likely to be volatile, you can check the beta of your mutual funds to see how they might react to big market movements.

## **Conclusion**

Alpha and beta are two essential tools that can help you understand how mutual funds have performed and how much volatility they have experienced. Alpha in mutual funds shows how much a fund outperforms or underperforms its benchmark, while beta tells you how sensitive the fund is to changes in the stock market. Both these ratios are useful for making informed investment decisions. Whether you're a conservative or aggressive investor, understanding alpha and beta can help identify a mutual fund that has so far aligned with your investment style. Do note, however, that past performance may or may not be sustained in the future, so these measures can only indicate a pattern.

## **FAQs**

**How can we interpret alpha and beta in mutual funds?**

Alpha tells you how well a fund has performed compared to the market, and beta shows how volatile the fund has been compared to the market.

**Is a higher alpha good or bad?**

A higher alpha is generally good because it means the fund has outperformed its benchmark.

**What role does beta play in portfolio diversification?**

Beta helps you understand the risk of each fund in your portfolio. A mix of high and low beta funds can balance risk and return.

**How can alpha influence investment decisions?**

Alpha can help you identify funds that consistently outperform the market, guiding you toward better investment choices.

**What is the importance of alpha and beta in mutual funds?**

Alpha and beta provide insight into both the performance and risk of mutual funds, helping investors make better decisions based on their financial goals.