BAJAJ MUTUAL FUND

TREYNOR RATIO

THE EQUITY COMPASS EDITION 23

Understand how much excess return a portfolio generates for every unit of market risk taken.

Imagine two sailboats crossing the same sea.
Both cover the same distance in the same amount of time. However, one uses a larger sail and is therefore more sensitive to changes in the wind. The other achieves the same result with less dependence on the wind.

Although both boats reach the destination together, their sensitivity to the common force of the wind is different.

The Treynor Ratio applies a similar idea to investing. The "wind" represents movements in the overall market, while a portfolio's sensitivity to those movements is measured by Beta.
The ratio helps investors understand the excess return generated by a portfolio in relation to the market risk it assumed.

WHAT IS MARKET RISK?

Market risk is the risk arising from movements in the overall market. It may be influenced by economic conditions, interest rates, inflation, geopolitical events, or changes in investor sentiment.

This type of risk affects most investments and cannot be completely reduced through diversification. It is therefore also known as systematic risk.

In the Treynor Ratio, market risk is represented by Beta.

WHAT IS BETA?

Beta measures how sensitive a portfolio is to movements in its benchmark.

BETA	WHAT IT MAY SUGGEST
1.0	The portfolio may move broadly in line with the benchmark
Above 1.0	The portfolio may be more sensitive than the benchmark
Between 0 and 1.0	The portfolio may be less sensitive than the benchmark

Beta does not indicate whether a portfolio will generate positive or negative returns. It only reflects the portfolio's historical sensitivity to movements in the selected benchmark.

WHAT IS THE TREYNOR RATIO?

The Treynor Ratio measures the excess return generated by a portfolio for every unit of market risk taken.

Formula: Treynor Ratio = $\dfrac{\text{(Portfolio Return – Risk-Free Rate)}}{\text{Beta}}$

COMPONENT	WHAT IT MEANS
Portfolio Return	Total return generated by the portfolio during the measurement period
Risk-Free Rate	Reference return used to calculate the additional return earned for taking investment risk
Beta	The portfolio's sensitivity to movements in its benchmark

A higher Treynor Ratio generally indicates that a portfolio generated more excess return for each unit of market risk. There is no universal Treynor Ratio that can be considered favourable in isolation. The ratio is more meaningful when similar portfolios are compared over the same period using the same benchmark and risk-free rate.

HYPOTHETICAL EXAMPLE

Three diversified equity portfolios generate the same annual return of 12%. The assumed risk-free rate is 5%, but each portfolio has a different Beta.

	PORTFOLIO A	PORTFOLIO B	PORTFOLIO C
Portfolio Return	12%	12%	12%
Risk-Free Rate	5%	5%	5%
Excess Return	7%	7%	7%
Beta	1.0	1.4	0.8
Treynor Ratio (%)	7.0%	5.0%	8.8%

The figures shown are for illustrative purposes only.

Portfolio C generated the same return as the other portfolios with lower sensitivity to market movements. As a result, it has a higher Treynor Ratio in this illustration.

This does not indicate that Portfolio C is suitable for every investor. It only shows that, based on the assumptions used, the portfolio generated more excess return per unit of market risk.

TREYNOR RATIO AND SHARPE RATIO

Both ratios measure risk-adjusted performance, but they use different measures of risk.

	TREYNOR RATIO	SHARPE RATIO
Risk considered	Market risk	Total volatility
Risk measure used	Beta	Standard deviation
Generally relevant for	Diversified portfolios	Portfolios where overall fluctuations are being evaluated
Key question	How much excess return was generated per unit of market risk?	How much excess return was generated per unit of total volatility?

A portfolio may have different readings under the two ratios because the Treynor Ratio considers only market risk, while the Sharpe Ratio considers total fluctuations in returns.
Using the ratios together may provide a broader understanding of a portfolio's historical risk-adjusted performance.

POINTS TO KEEP IN MIND

- The Treynor Ratio considers only market risk. It does not capture company-specific or portfolio-specific risk.
- It is generally more relevant for diversified portfolios, where a significant portion of security-specific risk may have been reduced.
- Beta depends on the benchmark and measurement period selected. Changing either may change the ratio.
- A higher ratio does not necessarily mean that a portfolio is suitable for a particular investor.
- Negative excess returns or a negative Beta can make the ratio difficult to interpret.
- The ratio is most useful when comparing portfolios with similar objectives, benchmarks, and measurement periods.
- The Treynor Ratio is based on historical information and does not predict future performance.

The Treynor Ratio helps investors look beyond absolute returns and understand how those returns relate to the level of market risk assumed by a portfolio.

Mutual Fund investments are subject to market risks, read all scheme related documents carefully.