

Beta Equation

Beta of a stock or portfolio measures the correlated volatility of an asset or portfolio in relations to the volatility of the financial market. It quantifies the sensitivity of a share price to movement in the market price. It measures systematic risk, which is the risk inherent in the whole financial system. Beta Coefficient is calculated as covariance of a portfolio or stocks returns divided by variance of market return.

A beta coefficient of 1 suggests that the stock or portfolio carries the same risk as the overall market. A negative beta is generally an asset that moves in the opposite direction as compared to the market. A beta of zero represents that the movement of the asset is uncorrelated with the movement of the benchmark. A beta below 1 but greater than zero suggests a below average risk and return, and beta higher than 1 suggests an above average risk and return.

INSTRUCTIONAL DRY AUDIO

Beta Coefficient, **The Giant Beta Fish**, is a measure of correlated volatility of an asset or portfolio in relations to the volatility of the market. To calculate the Beta Coefficient, use the covariance of the rate of return of the portfolio, and rate of return of the market, divided by variance of market return.

Virus holding a Marker under the water.

Creative story

This **marker virus** owns a beta fish farm. He is under the water marking the **beta fish** that has the most potential for profit in the volatile fish market. His **coin virus** associate is all about the money. His **portfolio red lantern** lights his way where ever he goes. He assists in marking the fish by luring them in with his **marker red lantern**.



PLAY PICMONIC

Covariance of Rates of Return

Coin Virus Holding Two Red Lanterns

Covariance between the rate of return of the portfolio and rate of return of the market.

Rate of Return of the Portfolio

Red Lantern Portfolio

Rate of Return of the Portfolio, of the asset, of the underlying stock that being measured.

Variance of the Market

Virus with Marker

Variance of the market measures the volatility of the market returns.

Rate of Return of the Market

Red Lantern Marker

Rate of Return of the overall market benchmark.