

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.

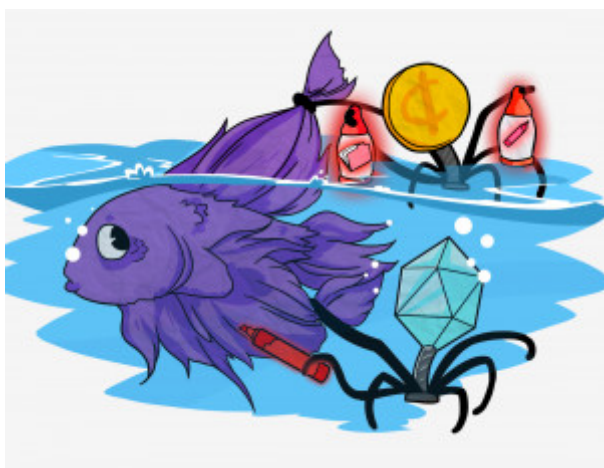
A beta coefficient of 1 suggests that the stock or portfolio carries the same risk as the overall market. A negative beta is generally an asset that moves in the opposite direction as compared to the market. A beta of zero represents that the movement of the asset is uncorrelated with the movement of 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, **Coin Virus on top of the water**, of the rate of return of the portfolio, **Red Lantern with a Portfolio in it**, and rate of return of the market, **Red Lantern with a Marker in it**, 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.