Beta

Beta is a measure of a security's volatility as compared with the market portfolio. A security with a beta of 1 will tend to move up and down consistent with the market. A security with a beta greater than 1 will tend to move up and down more dramatically than the market. A security with a beta less than 1 will tend to move up and down less dramatically than the market.

Beta is a subset of an investment's total risk or volatility. Beta is that portion of the risk that cannot be diversified away by forming well-diversified portfolios. Beta measures the marginal contribution of a stock to the risk of a well-diversified portfolio. For this reason it is considered the relevant (and only) risk investors should consider when trying to determine the risk associated with an investment.

Beta almost never corresponds to a firm's standard deviation and it should not be mistaken for an investment's standard deviation.

Beta can be calculated by regressing an investment's returns on the market's returns. This regression line was called the *characteristic line* by William F. Sharpe (one of the originators of the Capital Asset Pricing Model). The slope of this line is equal to an investment's beta.

For more information see:
Efficient Market Hypothesis (EMH) and Capital Asset Pricing Model (CAPM).