MEASURES OF FINANCIAL RISK

Financial risk refers to the possibility of loss in financial investments due to market fluctuations. To manage this risk, various statistical and financial measures are used.

1. **Variance**

Variance measures how much the actual returns deviate from the average return.
It indicates the dispersion of returns around the mean.

High variance → higher risk
Low variance → lower risk
Example
If stock returns vary greatly from the average return, the variance will be high, indicating higher risk.

2. **Standard Deviation**

Standard deviation is the square root of variance and is the most common measure of financial risk.
The stock whose standard deviation will be higher will be more risky.

3. **Beta (β)**

Beta measures systematic risk of a stock compared with the overall market.
It shows how sensitive a stock is to market movements.

Beta Value
$\beta = 1$
Same risk as market
$\beta > 1$
More volatile than market
$\beta < 1$
Less volatile than market
Example
If $\beta = 1.5$, when market increases by 10%, the stock may increase by about 15%.

4. **Coefficient of Variation (CV)**

CV measures risk per unit of return.

Helps compare risk between investments with different returns.
Lower CV = better investment.