

***ADVANCED CAPITAL
BUDGETING DECISIONS***

CLASS 10-HW-Q22

Topic Risk analysis - Statistical Techniques

Mean & S.D of NPV Given

Question 22:

A company is considering Projects X and Y with following information:

Project	Expected NPV (₹)	Standard deviation
X	1,22,000	90,000
Y	2,25,000	1,20,000

- Which project will you recommend based on the above data?
- Explain whether your opinion will change, if you use coefficient of variation as a measure of risk.
- Which measure is more appropriate in this situation and why?

(Source: ICAI)

ANSWER:

- On the basis of standard deviation project X be chosen because it is less risky than Project Y having higher standard deviation.

$$\text{ii. } CV_x = \frac{SD}{ENPV} = \frac{90,000}{1,22,000} = 0.738$$

$$CV_y = \frac{1,20,000}{2,25,000} = 0.533$$

On the basis of Co-efficient of Variation (C.V.) Project X appears to be riskier and hence Y should be accepted.

- However, the NPV method in such conflicting situation is best because the NPV method is in compatibility of the objective of wealth maximisation in terms of time value.