2. Portfolio expected return and risk

An analyst is examining the following two-stock portfolio:

| Stock | Portfolio Weight | Expected Return | Standard Deviation |
| :--- | :---: | :---: | :---: |
| Stock X | 0.40 | $18.0 \%$ | $35.0 \%$ |
| Stock $Y$ | 0.60 | $11.0 \%$ | $35.0 \%$ |

What is the portfolio's expected return?

- $15.20 \%$
( $13.45 \%$
- $13.80 \%$
- $12.75 \%$

○ $13.10 \%$

Suppose Stocks $X$ and $Y$ are perfectly, positively correlated ( $r=1$ ). What is the portfolio's standard deviation of returns?

- $0 \%$

50\%

- $70 \%$
- $20 \%$
- $35 \%$

If you added randomly selected stocks to the portfolio, the portfolio's standard deviation would increase gradually. $\nabla$

If a portfolio has no firm-specific risk remaining, which of the following is the best estimate of the standard deviation of returns?

- $0 \%$
- $70 \%$
- $50 \%$
- $20 \%$
- $35 \%$

The tradeoff between risk and return is a cornerstone concept in finance. If a security offers a higher expected return, it must have higher risk. Look at the two stocks described in this problem. They have the same risk, but one stock has a higher expected return. Does this example contradict the tradeoff between risk and return?

O No
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