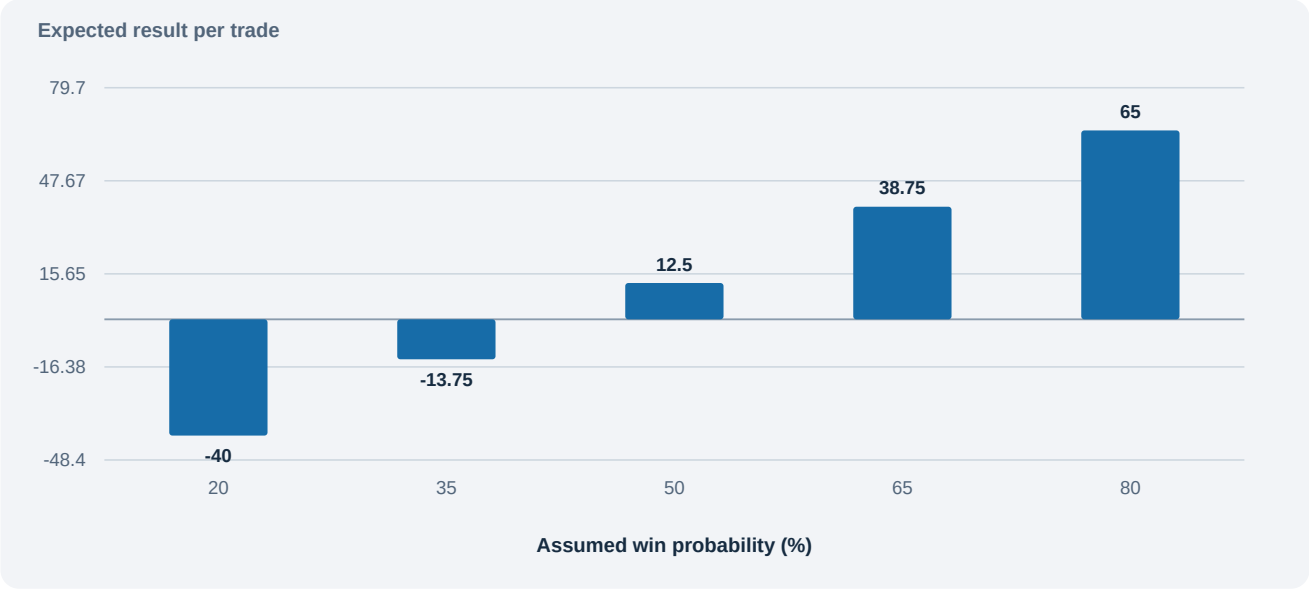
Expected value per trade

Performance arithmetic | Original synthetic example | Edition 2026-11-26

Expected value weights each possible payoff by its probability. Positive arithmetic expectation in an assumed model is not evidence that its probabilities or payoffs are stable in future data.

FORMULA EV = p x average win - (1 - p) x average loss

SCENARIO 01: Average win 100; average loss 75



WORKED EXAMPLE

At an assumed 50% win probability, EV is 0.5 x 100 - 0.5 x 75 = 12.5.

COMMON MISTAKE

Confusing a positive average with a promise of profit ignores estimation error and losing sequences.

BEFORE YOU USE THE CALCULATION

1. Use mutually exclusive outcomes.
2. Check probabilities sum to one.
3. Separate estimated inputs from observed results.

COMPARE TWO MORE INPUT SETS

Scenario 05: Average win 200; average loss 115. At an assumed 50% win probability, EV is 0.5 x 200 - 0.5 x 115 = 42.5.

Scenario 10: Average win 325; average loss 165. At an assumed 50% win probability, EV is 0.5 x 325 - 0.5 x 165 = 80.

Synthetic values are not historical market data. Educational material; trading can result in substantial losses.