

The "real life" decision process is more complicated...

Decision I:

Alternative A:

11% chance for \$1,000,000
89% chance for nothing

Alternative B:

10% chance for \$2,500,000
90% chance for nothing

EMV:

Independence Axiom (Von Neumann- Morgenstern):

A Rational choice between two alternatives should depend only on differences between the two, not on common factors.

- Add 89% chance of \$1,000,000 to both alternatives:

Decision II:

Alternative A:

Receive \$1,000,000.

Alternative B:

10% chance for \$2,500,000
89% chance for \$1,000,000
1% chance for nothing

EMV:

- Allais Paradox (Maurice Allais)