

* Intro

→ Many (or most) economic decisions are made under uncertainty about future outcomes or conditions

→ We need a framework for economic decision making to analyze factors that influence these decisions

Ex) How to save for retirement

Ex) What level of insurance coverage to purchase

* Preliminaries

→ How do we define risk?

* The chance of suffering a harmful outcome

* Economics/Finance: the dispersion in possible outcomes (harmful or beneficial)

* Study of risk heavily depends on an understanding of probabilities

→ How do we define uncertainty?

* The decision-maker doesn't know much about which of the possible outcomes will occur.

* Probabilities are unknown under uncertainty but probabilities are known under risk.

* Probability

→ Sample Space

→ An event is any collection of possible outcomes of an experiment. An event is a subset of the sample space.