Microeconomics, Module 24, “Risk and Uncertainty” (Chapter 18)

Overview and Concepts

(The attached PDF file has better formatting.)

The previous modules assume that firms and consumers know the costs and benefits of all goods. But the future is unknown, and economic actors must deal with risk and uncertainty.

The chapter covers the following topics, of which the first two sections are included in the microeconomics course:

Section 18.1: We analyze consumer choice under uncertainty with indifference curves that show a person’s *ex ante* preferences between two states of the world.

- A *risk-neutral* person has preferences based solely on the expected value of a basket of outcomes.
- A risk averse person chooses the least risky basket among those with the same expected value.

A risk averse person accepts a sufficiently small bet at favorable odds, but declines a large bet at those same odds.

Section 18.2: Insurers do not offer customers fair odds for a variety of reasons.

- *Morale hazard:* people behave more recklessly when they are insured, so insurers adjust the premiums accordingly.
- *Adverse selection:* fair odds are different for different people, and the insurer may not know the odds for each person.
- *Uninsurable risks* cannot be diversified by the insurer.

The section on uninsurable risks is *not* covered in this course. Landsburg’s perspective is not actuarially correct, so we do not include it.

The paragraphs below summarize the final three sections of this chapter, which are *not* included in the readings for this course. These topics are covered more clearly in the corporate finance course, they are not covered here. However, Landsburg is a wonderful writer, and you may want to read his text.

Section 18.3: Futures markets allow a person to insure against the possibility of an unfavorably high or low future price for a product. *Speculators* attempt to earn money in the futures market by outguessing the market. *Speculators* increase social gain when they are successful, but they lower social gain if their predictions about the market are incorrect. (The standard investment perspective is not concerned with the social gain created by speculators, and it is not clear that Landsburg’s view is correct.)

Section 18.4: Investors purchase portfolios of financial assets to increase their wealth. The expected value of a portfolio is the average of its individual stocks’ expected returns, and the standard deviation of a portfolio is no greater than the average of its individual stocks’ standard deviations. A risk averse investor always holds a portfolio combining a risk-free asset and a market portfolio. A portfolio which is representative of all risky assets found in the economy is guaranteed to be a market portfolio. (All these topics are covered in more depth in the corporate finance course.)

Section 18.5: Rational expectations exist when economic agents have no reason to change their expectations. Economic predictions based on past experience may prove to be incorrect, because changes in circumstances can alter people’s rational expectations, eliminating the basis for that past experience. (The macroeconomics course covers this material in more depth.)