

**Class 1 Outline**  
**Business Finance 640 - Insurance and Risk**  
**Autumn Quarter, 2007**

**I. Introductory Comments, Review of Syllabus, Overview of Course**

Students must master a certain amount of new terminology. Studying risk and insurance is similar to becoming fluent in a foreign language. We start by building upon a basic vocabulary. Risk and Insurance are technical subjects that require a basic vocabulary.

- A. Expected Value Rule
- B. Petersburg Paradox

**II. What is Risk?**

- A. Uncertainty Concept—risk traditionally has been defined as uncertainty.
- B. Objective Risk
  - 1. Defined as the relative variation of actual loss from expected loss
  - 2. Declines as the number of exposure units increases
  - 3. Is measurable by using the standard deviation or coefficient of variation
- C. Subjective Risk
  - 1. Defined as uncertainty based on one's mental condition or state of mind
  - 2. Difficult to measure

**III. Chance of Loss**

- A. Objective Probability
  - 1. A priori—by logical deduction such as in games of chance
  - 2. Empirically—by induction, through analysis of data
- B. Subjective Probability—a personal estimate of the chance of loss. It need not coincide with objective probability and is influenced by a variety of factors including age, sex, intelligence, education, and personality.
- C. Chance of Loss Distinguished from Risk—although chance of loss may be the same for two groups, the relative variation of actual loss from expected loss may be quite different.

**IV. Peril and Hazard**

- A. Peril—defined as the cause of loss
- B. Hazard
  - 1. Physical hazard—physical condition that increases the chance of loss. Examples are icy streets, poorly designed intersections, and dimly lit stairways.
  - 2. Moral hazard—dishonesty or characteristics of an individual that increase the chance of loss
  - 3. Morale hazard—carelessness or indifference to a loss because of the existence of insurance
  - 4. Legal hazard—characteristics of the legal system or regulatory environment that increase the frequency or severity of losses

## **V. Basic Categories of Risk**

- A. Pure and Speculative Risk
  - 1. Pure risk—a situation where there are only the possibilities of loss or no loss
  - 2. Speculative risk—a situation where either profit or loss is possible.
  
- B. Fundamental and Particular Risks
  - 1. Fundamental risk – a risk that affects the entire economy or large numbers of persons or groups within the economy.
  - 2. Particular risk – A risk that affects only individuals and not the entire community.
  
- C. Enterprise Risks
  - 1. A term that encompasses all major risks faced by a business firm.
  - 2. Such risks include pure risk, speculative risk, strategic risk, operational risk and financial risk.

## **VI. Types of Pure Risks**

- A. Personal Risks
  - 1. Four personal risks are premature death, insufficient income during retirement, poor health, and unemployment.
  - 2. Types of losses are loss of earned income, extra expenses, and depletion of financial assets.
  
- B. Property Risks
  - 1. Types of losses include direct physical damage losses, indirect or consequential losses, extra expenses, and theft losses.
  - 2. Perils include fire, lightning, windstorm, natural disasters, dishonesty, and other perils.
  
- C. Liability Risks—the loss is legal liability for damages arising out of bodily injury or property damage to another party.

## **VI. Burden of Risk on Society**

- A. Need for a Larger Emergency Fund
- B. Loss of Needed Goods and Services
- C. Fear and Worry

## **VII. Methods of Handling Risk**

- A. Avoidance
- B. Loss Control
  - 1. Loss prevention
  - 2. Loss reduction
- C. Retention

1. Active (desirable) is the deliberate choice to assume part or all of a loss exposure.
  2. Passive (dangerous) often results from ignorance or inertia.
- D. Noninsurance Transfers
1. Contracts
  2. Hedging
  3. Incorporation
- E. Insurance

### **VIII. Meaning of Insurance**

- A. Definition of Insurance
- B. Basic Characteristics of Insurance
1. Pooling of losses
  2. Payment of fortuitous losses
  3. Risk transfer
  4. Indemnification
- C. Pooling Elaborated
1. Yangtze River Story
  2. Pooling Examples

### **IX. Requirements of an Insurable Risk**

- A. General Requirements
1. Large number of exposure units
  2. Accidental and unintentional loss
  3. Determinable and measurable loss
  4. No catastrophic loss
  5. Calculable chance of loss
  6. Economically feasible premium
- B. Application of the Requirements
1. How the risk of fire to a private dwelling satisfies the requirements
  2. How the risk of unemployment fails to meet the requirements