

**Class 2 Outline**  
**Business Finance 640 – Insurance and Risk**  
**Autumn Quarter, 2007**

**I. Food for Thought**

“China Aviation Oil was a subsidiary of the procurer of jet fuel for Chinese airlines. The fellow who ran this firm opined that prices would fall and bet accordingly. He was wrong and bankrupted his firm. Opinionated people losing money is nothing new – it is one of the things that help other opinionated people make it....

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Reflections, January 2005 Issue 55

“To think is to act on objects and transform them.”

Jean Piaget

**II. Review: 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, variance 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. Review: Chance of Loss**

- A) 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. Review: 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

**V. Review: Peril**

- A) Peril – Cause of Loss
  - 1. Multi-peril coverage
  - 2. Named peril coverage

**VI. Review: Hazard**

- A) Hazard – A condition that creates or increases the chance of loss
  - 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

#### **VII. Review – Indirect or consequential loss**

1. Indirect or consequential loss: Financial loss that results indirectly from the occurrence of a direct physical loss

#### **VIII. Review – 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

#### **IX. Loss Exposure**

- A) Loss Exposure
  1. Set of circumstances that presents the possibility of loss
  2. Implies existence of something that may decline in value
  3. The “thing of value” and the “circumstances” are “objective”
- B) Elements of a Loss Exposure
  1. Item Subject to Loss
  2. Peril that may cause loss
  3. Potential financial impact of the loss
- C) Scooper – Dooper case

#### **X. 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

#### **XI. 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 – P. 35, Application Question # 1
1. Risk of fire
  2. Risk of war
- C) Adverse Selection and Insurance
1. Adverse selection: Tendency of persons with a higher-than-average chance of loss to seek insurance at standard (average) rates.
  2. Consequences of adverse selection: If not controlled by underwriting, results in higher-than-expected loss levels.
  3. Can be controlled by careful underwriting, by charging higher premiums to substandard applicants for insurance, and by certain policy provisions (deductibles, limits, sub-limits etc.).
  4. Example: Equal Treatment Insurance Company vs. Selective Insurance Company

## **XII. Insurance and Gambling Compared**

- A) Insurance eliminates a pure risk, while gambling creates a new speculative risk.
- B) The author's (George Rejda's) opinion: Insurance is socially productive, while gambling is socially unproductive.

## **XIII. Insurance and Hedging Compared**

- A) Insurance transfers a pure risk, while hedging involves the transfer of a speculative risk.
- B) Insurance reduces objective risk, while hedging does not.

## **XIV. Definition of Risk Management**

Risk management is defined as a systematic process for the identification and evaluation of pure loss exposures faced by an organization or individual and for the selection and administration of the most appropriate technique for treating such exposures.

## **XV. Objectives of Risk Management**

- A) Pre-loss Objectives
  1. Economy goal
  2. Reduction of anxiety
  3. Meet any legal obligations
- B) Post-loss Objectives
  1. Survival of the firm
  2. Continued operation
  3. Stability of earnings
  4. Continued growth
  5. Social responsibility
- C) Farm Breeze Case

## **XVI. Risk Management Process**

- A) Identifying Potential Losses
  - i. Types of potential losses
    - a. Property loss exposures
    - b. Liability loss exposures
    - c. Business income loss exposures
    - d. Human resources loss exposures
    - e. Crime loss exposures
    - f. Employee benefits loss exposures
    - g. Foreign loss exposures
    - h. Reputation and public image of the company
  - ii. Tools for recognizing loss exposures
    - risk analysis questionnaire
    - physical inspection
    - flow charts
    - financial statements
    - historical loss data
- B) Evaluating Potential Losses
  - i. Loss frequency
  - ii. Loss severity
  - iii. Guidelines for measuring severity
    - a. Maximum possible loss
    - b. Maximum probable loss
- C) Selecting the Appropriate Technique
  - 1. Risk control
    - a. Avoidance
    - b. Loss control
  - 2. Risk financing
    - a. Retention
    - b. Non-insurance transfers
    - c. Commercial insurance
- D) Implementing the Program
  - 1. Policy Statement
  - 2. Risk Management Manual
  - 3. Cooperation with other Departments
- E) Monitoring the Program