PRINCIPLES OF RISK MANAGEMENT AND INSURANCE

CLASS NOTES

Chapter 3 Introduction to Risk Management

Topics

- **Meaning of Risk Management**
- **Objectives of Risk Management**
- **Steps in the Risk Management Process**
- **Benefits of Risk Management**
- **Personal Risk Management**

**Meaning of Risk Management**

- Risk Management is a process that identifies loss exposures faced by an organization and selects the most appropriate techniques for treating such exposures
- A loss exposure is any situation or circumstance in which a loss is possible, regardless of whether a loss occurs
  - E.g., a plant that may be damaged by an earthquake, or an automobile that may be damaged in a collision
- New forms of risk management consider both pure and speculative loss exposures

**Objectives of Risk Management**

- Risk management has objectives before and after a loss occurs
- Pre-loss objectives:
  - Prepare for potential losses in the most economical way
  - Reduce anxiety
  - Meet any legal obligations
- Post-loss objectives:
  - Ensure survival of the firm
  - Continue operations
  - Stabilize earnings
  - Maintain growth
  - Minimize the effects that a loss will have on other persons and on society

**Risk Management Process**

- Identify potential losses
- Measure and analyze the loss exposures
• Select the appropriate combination of techniques for treating the loss exposures
• Implement and monitor the risk management program

Exhibit 3.1 Steps in the Risk Management Process

Identifying Loss Exposures

- Property loss exposures
- Liability loss exposures
- Business income loss exposures
- Human resources loss exposures
- Crime loss exposures
- Employee benefit loss exposures
- Foreign loss exposures
- Intangible property loss exposures
- Failure to comply with government rules and regulations
- Risk Managers have several sources of information to identify loss exposures:
  - Questionnaires
  - Physical inspection
  - Flowcharts
  - Financial statements
• Historical loss data
• Industry trends and market changes can create new loss exposures.
  • e.g., exposure to acts of terrorism

Measure and Analyze Loss Exposures

• Estimate the frequency and severity of loss for each type of loss exposure
  – Loss frequency refers to the probable number of losses that may occur during some given time period
  – Loss severity refers to the probable size of the losses that may occur
• Once loss exposures are analyzed, they can be ranked according to their relative importance
• Loss severity is more important than loss frequency:
  – The maximum possible loss is the worst loss that could happen to the firm during its lifetime
  – The probable maximum loss is the worst loss that is likely to happen

Select the Appropriate Combination of Techniques for Treating the Loss Exposures

• Risk control refers to techniques that reduce the frequency and severity of losses
• Methods of risk control include:
  – Avoidance
  – Loss prevention
  – Loss reduction
• Avoidance means a certain loss exposure is never acquired, or an existing loss exposure is abandoned
  – The chance of loss is reduced to zero
  – It is not always possible, or practical, to avoid all losses

Select the Appropriate Combination of Techniques for Treating the Loss Exposures

Loss prevention refers to measures that reduce the frequency of a particular loss
  • e.g., installing safety features on hazardous products
Loss reduction refers to measures that reduce the severity of a loss after it occurs
  • e.g., installing an automatic sprinkler system

Risk financing refers to techniques that provide for the funding of losses
• Methods of risk financing include:
  1. Retention
  2. Non-insurance Transfers
  3. Commercial Insurance

Risk Financing Methods: Retention

• Retention means that the firm retains part or all of the losses that can result from a given loss
  – Retention is effectively used when:
• No other method of treatment is available
• The worst possible loss is not serious
• Losses are highly predictable
  – The **retention level** is the dollar amount of losses that the firm will retain
    • A financially strong firm can have a higher retention level than a financially weak firm
    • The maximum retention may be calculated as a percentage of the firm’s net working capital
  – A risk manager has several methods for paying retained losses:
    • Current net income: losses are treated as current expenses
    • Unfunded reserve: losses are deducted from a bookkeeping account
    • Funded reserve: losses are deducted from a liquid fund
    • Credit line: funds are borrowed to pay losses as they occur
• A **captive insurer** is an insurer owned by a parent firm for the purpose of insuring the parent firm’s loss exposures
  – A **single-parent captive** is owned by only one parent
  – An **association or group captive** is an insurer owned by several parents
  – Many captives are located in the Caribbean because the regulatory environment is favorable
  – Captives are formed for several reasons, including:
    • The parent firm may have difficulty obtaining insurance
    • To take advantage of a favorable regulatory environment
    • Costs may be lower than purchasing commercial insurance
    • A captive insurer has easier access to a reinsurer
    • A captive insurer can become a source of profit
  – Premiums paid to a captive may be tax-deductible under certain conditions
• **Self-insurance** is a special form of planned retention
  – Part or all of a given loss exposure is retained by the firm
  – Another name for self-insurance is self-funding
  – Widely used for workers compensation and group health benefits
• A **risk retention group** is a group captive that can write any type of liability coverage except employer liability, workers compensation, and personal lines
  – Federal regulation allows employers, trade groups, governmental units, and other parties to form risk retention groups
  – They are exempt from many state insurance laws

**Advantages**
- Save on loss costs
- Save on expenses
- Encourage loss prevention
- Increase cash flow

**Disadvantages**
- Possible higher losses
- Possible higher expenses
- Possible higher taxes

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Risk Financing Methods: Non-insurance Transfers

- A non-insurance transfer is a method other than insurance by which a pure risk and its potential financial consequences are transferred to another party
  - Examples include:
    - Contracts, leases, hold-harmless agreements

### Advantages
- Can transfer some losses that are not insurable
- Save money
- Can transfer loss to someone who is in a better position to control losses

### Disadvantages
- Contract language may be ambiguous, so transfer may fail
- If the other party fails to pay, firm is still responsible for the loss
- Insurers may not give credit for transfers

Risk Financing Methods: Insurance

- Insurance is appropriate for loss exposures that have a low probability of loss but for which the severity of loss is high
  - The risk manager selects the coverages needed, and policy provisions:
    - A deductible is a provision by which a specified amount is subtracted from the loss payment otherwise payable to the insured
    - An excess insurance policy is one in which the insurer does not participate in the loss until the actual loss exceeds the amount a firm has decided to retain
  - The risk manager selects the insurer, or insurers, to provide the coverages
  - The risk manager negotiates the terms of the insurance contract
    - A manuscript policy is a policy specially tailored for the firm
      - Language in the policy must be clear to both parties
    - The parties must agree on the contract provisions, endorsements, forms, and premiums
  - The risk manager must periodically review the insurance program

### Advantages
- Firm is indemnified for losses
- Uncertainty is reduced
- Insurers may provide other risk management services
- Premiums are tax-deductible

### Disadvantages
- Premiums may be costly
  - Opportunity cost should be considered
- Negotiation of contracts takes time and effort
- The risk manager may become lax in exercising loss control
Exhibit 3.2 Risk Management Matrix

<table>
<thead>
<tr>
<th>Type of Loss</th>
<th>Loss Frequency</th>
<th>Loss Severity</th>
<th>Appropriate Risk Management Technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low</td>
<td>Low</td>
<td>Retention</td>
</tr>
<tr>
<td>2</td>
<td>High</td>
<td>Low</td>
<td>Loss prevention and retention</td>
</tr>
<tr>
<td>3</td>
<td>Low</td>
<td>High</td>
<td>Insurance</td>
</tr>
<tr>
<td>4</td>
<td>High</td>
<td>High</td>
<td>Avoidance</td>
</tr>
</tbody>
</table>

Market Conditions and the Selection of Risk Management Techniques

- Risk managers may have to modify their choice of techniques depending on market conditions in the insurance markets.
- The insurance market experiences an underwriting cycle:
  - In a “hard” market, when profitability is declining, underwriting standards are tightened, premiums increase, and insurance becomes more difficult to obtain.
  - In a “soft” market, when profitability is improving, standards are loosened, premiums decline, and insurance become easier to obtain.

Implement and Monitor the Risk Management Program

- Implementation of a risk management program begins with a risk management policy statement that:
  - Outlines the firm’s risk management objectives
  - Outlines the firm’s policy on loss control
  - Educates top-level executives in regard to the risk management process
  - Gives the risk manager greater authority
  - Provides standards for judging the risk manager’s performance
- A risk management manual may be used to:
  - Describe the risk management program
  - Train new employees

Implement and Monitor the Risk Management Program

- A successful risk management program requires active cooperation from other departments in the firm.
- The risk management program should be periodically reviewed and evaluated to determine whether the objectives are being attained.
The risk manager should compare the costs and benefits of all risk management activities

Benefits of Risk Management

- Pre-loss and post-loss objectives are attainable
- A risk management program can reduce a firm’s cost of risk
  - The cost of risk includes premiums paid, retained losses, outside risk management services, financial guarantees, internal administrative costs, taxes, fees, and other expenses
- Reduction in pure loss exposures allows a firm to enact an enterprise risk management program to treat both pure and speculative loss exposures
- Society benefits because both direct and indirect losses are reduced

Personal Risk Management

- Personal risk management refers to the identification of pure risks faced by an individual or family, and to the selection of the most appropriate technique for treating such risks
- The same principles applied to corporate risk management apply to personal risk management.

-END OF CHAPTER 3.