

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

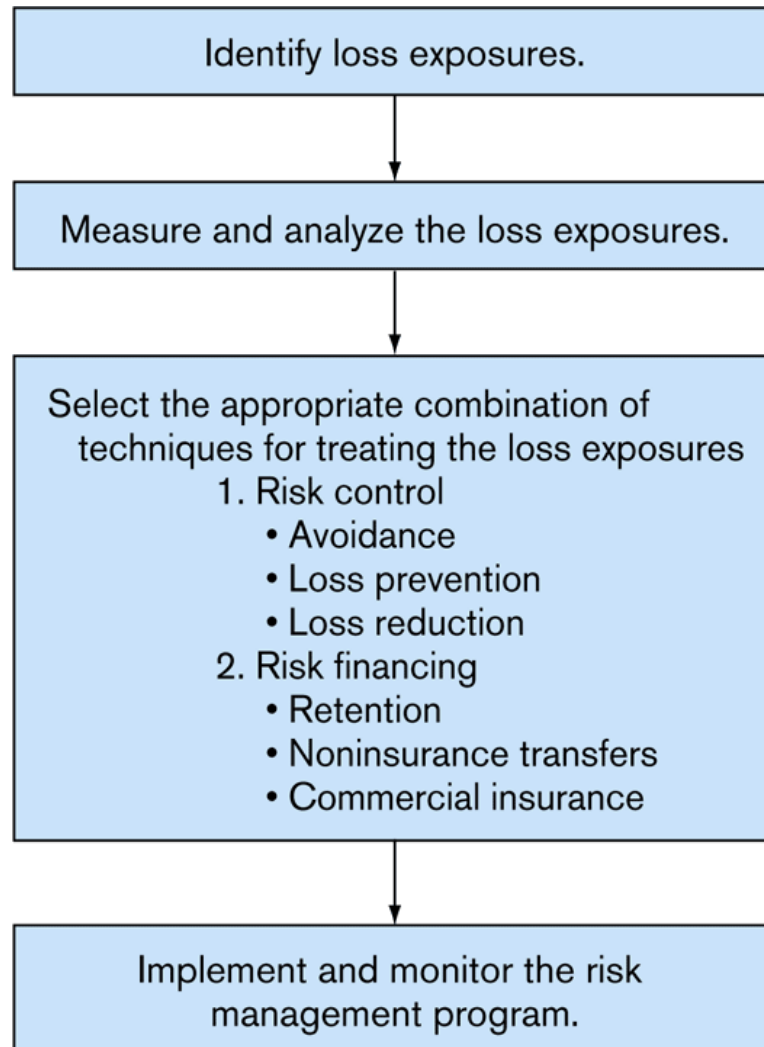
- Risk management has objectives before and after a loss occurs
- Pre-loss objectives:
 - Prepare for potential losses in the most economical way
 - Reduce anxiety
 - Meet any legal obligations
- Post-loss objectives:
 - Ensure survival of the firm
 - Continue operations
 - Stabilize earnings
 - Maintain 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

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

<i>Type of Loss</i>	<i>Loss Frequency</i>	<i>Loss Severity</i>	<i>Appropriate Risk Management Technique</i>
1	Low	Low	Retention
2	High	Low	Loss prevention and retention
3	Low	High	Insurance
4	High	High	Avoidance

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.