

# Risk Management

## Introduction to Risk Chapter 1

AND INSURANCE



# Chapter Objectives

- Explain three ways to categorize risk
- List the components of an entity's cost of risk
- Give several examples of risks involving property, liability, life, health, loss of income, and financial losses
- Distinguish between chance of loss and degree of risk
- Give examples of three types of hazards
- Identify the difference between hazards and perils
- Explain the evolving concept of integrated risk management
- Explain the four steps in the risk management process

# Introduction

- Risk regarding the possibility of loss can be especially problematic
- If a loss is certain to occur
  - It may be planned for in advance and treated as a definite, known expense
- When there is uncertainty about the occurrence of a loss
  - Risk becomes an important problem

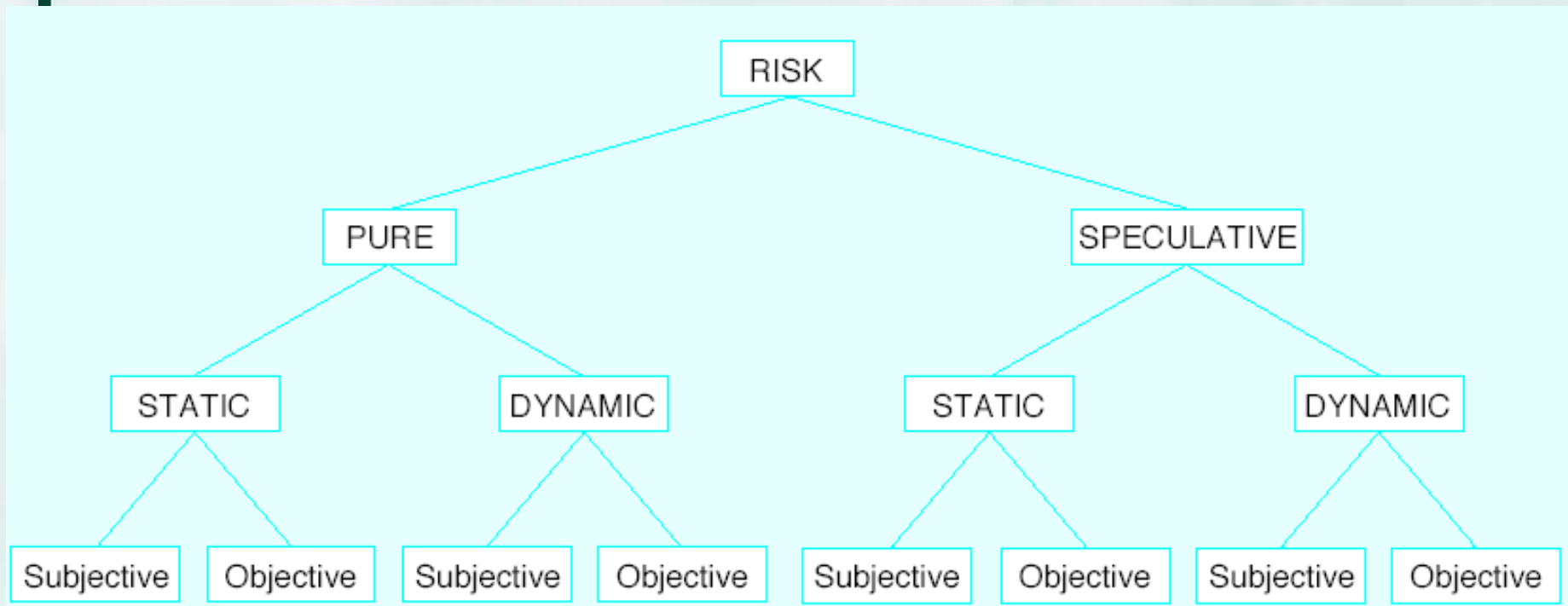
# The Burden of Risk

- Some risks involve only the possibility of loss
- Risks surrounding potential losses create significant economic burdens for businesses, government, and individuals
  - Billions of dollars are spent each year to finance potential losses
    - But when losses are not planned for in advance they may cost even more
- Risk of loss may deprive society of services judged to be too risky
  - For instance, without malpractice insurance many physicians would refuse to practice medicine

# The Burden of Risk

- Businesses may try to either avoid risk of loss or to reduce its negative consequences
- An entity's cost of risk is the sum of
  - Expenses of strategies to finance potential losses
  - The cost of unreimbursed losses
  - Outlays to reduce risks
  - Opportunity cost of activities forgone due to risk considerations

# FIGURE 1-1 Types of Risk



# Pure vs Speculative Risk

- Pure risk exists when there is uncertainty as to whether loss will occur
  - No possibility of gain is presented—only the potential for loss
- Speculative risk exists when there is uncertainty about an event that can produce either a profit or a loss
- Both pure and speculative risks may be present in some situations

# Subjective vs Objective Risk

- Subjective risk refers to the mental state of an individual who experiences doubt or worry as to the outcome of a given event
  - It is essentially the psychological uncertainty that arises from an individual's mental attitude or state of mind
- Objective risk differs from subjective risk in the sense that it is more precisely observable and therefore measurable
  - It is the probable variation of actual from expected experience

# Sources of Risk

- Property risks
  - Risk that property may be damaged, destroyed or stolen
    - For example, lightning, tornadoes, hurricanes, explosions, riots, collisions, falling objects, floods, earthquakes, freezing, *etc.*
- Liability risks
  - Legal judgments may result in payments made to compensate injured parties as well as to punish those responsible for the injuries
    - Even if the individual is absolved of liability the expenses involved in the defense may be substantial
  - All individuals who own or use real property are susceptible to liability losses if others are injured on their premises

# Sources of Risk

- Life and health and loss of income risks
  - The possibility of the untimely death of a star salesperson
  - The potential death of a parent with young children
  - Employees who become ill or injured in accidents
- Financial risk
  - Include credit risk, foreign exchange risk, commodity risk, and interest rate risk
  - These risks must be identified and assessed in order for the firm to achieve its business goals

# Measurement of Risk

- Chance of loss
  - The long term chance of occurrence, or relative frequency of loss
  - Meaningful only when applied to the chance of loss occurring among a large number of possible of events
    - Expressed as the ratio of the number of losses that are likely to occur compared to the larger number of possible losses in a given group
- Peril
  - Specific contingency that may cause a loss
- Hazards
  - Conditions that exist which either increase the chance of a loss for a particular peril or tend to make the loss more severe once the peril has occurred

# Hazards

- Physical hazard
  - A condition stemming from the material characteristics of an object
    - An icy street makes the occurrence of collision more likely to occur
      - The icy street is the hazard and the collision is the peril
- Moral hazard
  - Stems from an individual's mental attitude
  - Associated with intentional actions designed either to cause a loss or to increase its severity
  - Also describes the change in attitude that can occur when insurance is available to pay for loss
    - Such as the tendency for individuals to consume more health care if the costs are covered by insurance
- Morale hazard
  - The mental attitude of a careless or accident-prone person

# Degree of Risk

- Amount of objective risk present in a situation
- Relative variation of actual from expected losses
- Range of variability around the expected losses
  - Objective risk = probable variation of actual from expected losses  $\div$  expected losses

# Degree of Risk

- If a loss has already occurred the probable variation of actual from expected losses is zero
  - Therefore the degree of risk is zero
- If it is impossible for loss to occur the probable variation is also zero
- In measuring the degree of risk, results are meaningful only in terms of a group large enough to analyze statistically

# Management of risk

- Risk management
  - Process used to systematically manage risk exposures
- Integrated risk management and enterprise risk management
  - Intent to manage all forms of risk, regardless of type
- Many businesses have special departments charged with overseeing the firm's risk management activities
  - The head of such a department often is called a risk manager
- Some firms have formed risk management committees
- Some firms have created the position of chief risk officer to coordinate the firm's risk management activities

# Risk Management Process

- Identify risks
- Evaluate risks
- Select risk management techniques
- Implement and review decisions