Chapter 1

Introduction to Enterprise
Risk Management and Insurance

I. SUGGESTED CLASSROOM TIME: 60–75 MINUTES

II. CHAPTER OVERVIEW

This chapter lays the groundwork for all that follows in the book, introducing the modern concept of enterprise risk management (ERM). ERM differs in several important ways from traditional risk management and has been hailed as a giant step forward in business management. The reasons for the growth of ERM are detailed here, along with several pertinent examples.

 The methods of classifying risk are detailed, along with a discussion of the risk-averse nature of most human beings. A discussion of several of the key methods by which firms and individuals protect themselves for risk then follows.

 The most significant issue covered in this chapter is the risk management process, the process by which economic entities identify, assess, and treat their exposures to loss. Finally, a description of ERM is presented, laying out both the exposures and the key differences from traditional risk management.

III. LECTURE OUTLINE

A. Introduction: Enterprise Risk Management, with its entity-wide focus, differs from traditional Corporate Risk Management, which had a focus on pure risk.

B. Why Interest in Risk Management Is Growing

1. Catastrophe loss events, such as Hurricane Katrina and the September 11 event

2. Corporate financial failures, such as Enron and Washington Mutual

3. Shrinking employee benefits, leading to a loss of confidence in the whole concept of 401(k) plans

C. Methods of Classifying Risk

1. Pure risk, where only loss is possible, versus speculative risk, where both gain and loss are possible

2. Diversifiable risks, risks that can be offset by diversification, versus non-diversifiable risks

a. Risk pooling may be used to capture advantages of diversification

b. Some, including insurer, use the Law of Large Numbers to benefit from pooling

D. Risk Aversion: Most human beings are risk-averse, i.e., risk avoiders, yet most understand that there are risk/return trade-offs in many activities. Higher risk can bring higher returns.

E. Protection from Risk: Insurance, Employee Benefits, and Risk Management

1. The default strategy is retention, to retain the possible loss. This is called passive retention when the subject has not identified the exposure or underestimates the potential severity of the exposure.

2. A better alternative is personal insurance protection. (A later chapter looks at the possible costs of this strategy.)

a. Social insurance

b. Private insurance

2. Employee benefit plans offset particular risks, such as health care costs and retirement.

3. Corporate risk management looks at the exposures of a firm and seeks to treat them in a logical manner.

F. The Risk Management Process (Note: The term *process* implies an ongoing activity.)

1. Establish risk management goals

a. Pre-loss, e.g., prevent loss, be cost effective

b. Post-loss, e.g., survive, minimize disruption

2. Identify potential loss exposures (the KEY step)

a. Property, e.g., buildings, contents

b. Liability, e.g., products, professional

c. Human resources, e.g., employee benefits, worker safety

d. Indirect, e.g., building codes, business interruption

3. Measure potential losses

a. Frequency

b. Severity

4. Choose risk-handling techniques

a. Avoidance, i.e., frequency and severity are both zero

b. Loss control, i.e., prevention and reduction

c. Transfer

d. Financing

5. Implement techniques and monitor effectiveness

G. Enterprise Risk Management

1. Characteristics

a. Top-down focus

b. Broad scope

c. Portfolio perspective

d. Systematic process of identification, assessment, treatment

2. Types of exposures

a. Pure risk

b. Operational, e.g., supply chains, distribution chains

c. Financial, e.g., credit risk, currency risk

d. Strategic, e.g., product development

3. Chief risk officer, a new concept and a new occupant of the “C-Suite”

IV. ANSWERS TO REVIEW QUESTIONS

1. **Describe how the scope of risks encompassed in enterprise risk management differs from those of traditional corporate risk management.** Traditional corporate risk management had a focus on pure risks only, mainly those things that could be insured. Enterprise risk management has a broader scope, taking into consideration financial risks, operational risks, and strategic risks.

2. **Explain why interest in risk management has increased dramatically in the United States in recent years.** There are several factors, including catastrophic events such as the September 11, 2001, event in New York, corporate financial failures, and shrinking employee benefits. The latter has resulted in the shift of many pension plans to a government agency that oversees failed pension plans.

3. **How did the corporate scandal at Enron prompt the accounting profession to take a leading role in the call for improvements in corporate risk management?** One of the key factors in the failure of Enron was the use of fraudulent financial statements to increase the market value of Enron stock. When the company failed, these odd numbers came to light, and there were calls for not only better accounting procedures but also better management oversight.

4. **Describe the difference between pure and speculative risks. Provide an example of each.** Pure risks involve only the possibility of loss. Examples are loss of a building to fire or the premature death of a family head. Speculative risks involve the possibility of gain as well as loss. Examples are gambling, investing in the stock market, and starting a business.

5. **Describe the process of risk diversification, noting the two conditions that must exist for diversification to be effective.** Risk diversification involves spreading the losses in a group among all the members of the group. There must be a large number of members, and the potential that a loss will affect more than a few members of the group at one time must be small.

6. **Explain why auto and life insurance are two types of risk that are well suited to diversification by insurers through the use of risk pooling.** In both cases there are a large number of exposure units and a very small probability that multiple members of the group will suffer loss at the same time.

7. **Explain why damage from floods and wars are two types of risk that are not well suited to diversification by insurers through the use of risk pooling.** These are not well-suited because there is a large probability that numerous members of the group will be subject to loss at the same time.

8. **Financial advisors encourage investors to hold a well-diversified portfolio of investments. Explain whether this level of diversification can protect an investor if:**

**a. one of her stock holdings is a firm with an unsuccessful new product launch, or**

**b. the global economy falls into a recession.**

 In the case of *a.,* a well-diversified investor would normally be protected. In the case of *b.,* the investor faces market risk, a condition that might affect all of her holdings.

9. **Describe the concept of risk aversion. Is it an equally appropriate strategy for dealing with pure and speculative risks?** Risk aversion, generally the approach taken by human beings, causes one to shy away from risk. It can be an equally appropriate strategy for dealing with both pure and speculative risk, although with pure risk one gives up any opportunity for gain.

10. **Describe the alternatives available to people and firms across the globe to protect themselves from adverse loss exposures**. Generally there are four alternatives: 1) retention, best for exposures with small potential financial consequences; 2) personal insurance protection, best for exposures with significant potential financial consequences; 3) employee benefits plans, targeted to specific exposures such as retirement and health care expenses; and 4) corporate risk management, appropriate to a firm with significant loss exposures.

11. **How does social insurance differ from private insurance? In your answer, explain why some loss exposures are insured better through social insurance than through private insurance.** Social insurance is generally mandatory and involves programs sponsored by the government but not for government employees. Most of the perils covered by social insurance programs are of a catastrophic nature, that is, neither individuals nor private insurance companies can take them on. Examples are unemployment and old age.

12. **Explain why it may be advantageous for people to get insurance protection from employee benefit plans instead of buying individual insurance policies.** Because employee benefit plans have tax advantages for both the employee and the employer, they may be advantageous. The typical perils covered, such as health care expenses and old age, can be treated by risk pooling, giving the group arrangements an advantage over any individual effort.

13. **List and briefly describe the five steps in the risk management process.**

1) Formulate risk management objectives. What do you want to achieve through risk-management efforts?

2) Identify loss exposures. What is at risk, and what perils and hazards are related?

3) Measure potential loss severity. Most risk-management efforts, and dollars, are going to be directed to the exposures with the greatest potential severity.

4) Choose risk-handling techniques. What strategies will be best to deal with the identified exposures?

5) Implement techniques and monitor their effectiveness. Did what we chose work as we expected? Was it cost effective?

14. **Describe four different types of risk that need to be addressed by the risk manager in a typical corporation. Discuss whether each of these four types of risk are equally important across different industries.**

1) Pure risks—those where only loss is possible

2) Financial risks—such as currency exchange risk

3) Operational risks—such as supply chain exposures or critical dependencies

4) Strategic risks—such as product development and construction delays

 No, these are not equally important across different industries. For an importer, currency exchange risk might be the most significant exposure. For a local restaurant, this is unlikely to be a problem.

15. **Describe the difference between loss frequency and loss severity**. Loss frequency is the number of losses that occur, and loss severity is the financial consequences of the losses. Together, these make up the expected value of an entity’s losses.

16. **Describe the three broad categories of risk-handling techniques used by risk managers. In your answer, provide at least two specific examples of each technique.**

1) Avoidance or loss control—trying to affect the frequency or severity of losses. Examples are loss prevention, loss reduction, and salvage.

2) Transfer—trying to get some other entity to bear the loss. Examples are contractual provisions such as hold-harmless and indemnity agreements.

3) Financing—trying to offset or share losses. Examples are insurance and self-insured retentions (SIRs).

17. **Explain why it is necessary to monitor the effectiveness of the chosen risk-handling techniques of the risk management process on a continuous basis.** Periodically, two questions are asked about any risk-handling technique: 1) Is it effective in reducing or financing losses? and 2) Is it cost effective? If these cannot be answered in the affirmative, then the risk manager must go in another direction.

18. **While no single, universally accepted definition of ERM exists, describe four characteristics that commonly are attributed to a well-designed ERM program.** Well-designed ERM programs have these characteristics: 1) They have a top-down focus; 2) they are broad in scope; 3) they have a portfolio perspective; and 4) they involve a systematic process of exposure identification, assessment, and treatment.

19. **List and describe the four areas of risk encompassed in an enterprise risk-management program. For each risk area, provide an example of a recent risk event that has been described in the popular business media.**

1) Pure risk, for example the explosion that damaged the BP oil well that spilled oil in the U.S. Gulf Coast

2) Financial risk, for example the major derivatives losses at some of the most respected investment brokers

3) Operational risk, for example the loss of business for BP after the oil spill because they could not pump as much oil

4) Strategic risk, for example the loss of business for BP as a result of negative public reaction to the spill (this is often called reputation risk)

V. ANSWERS TO OBJECTIVE QUESTIONS

1. Which of the following have led to a growing interest in risk management?

a. The terrorist attacks of September 11, 2001

b. Corporations that filed fraudulent financial statements that overstated earnings

c. Shrinking wages and employee benefit plans during the 2008 recession

d. All of the above

2. Auto collision claims are an example of which of the following?

a. Pure risks that can be diversified across a large group of drivers

b. Speculative risks than can be diversified across a large group of drivers

c. Pure risks that cannot be diversified across a large group of drivers

d. Speculative risks that cannot be diversified across a large group of drivers

3. Which of the following is not a speculative risk?

a. An investor who invests in common stock

b. An entrepreneur who starts a new company

c. A business that develops a new product line

d. A lawsuit filed against a firm by a client who slips on the firm’s icy steps

4. Risk aversion

I. is the tendency of a person to prefer less risk instead of more risk when faced with risky decisions.

II. is a more appropriate strategy for pure risks than for speculative risks.

a. I only

b. II only

c. Both I and II

d. Neither I nor II

5. Which of the following statements about insurance is correct?

a. Insurance is available in all countries across the world.

b. Insurance is a common technique used by individuals to protect against risk.

c. Private insurance is available for non-diversifiable risks like unemployment.

d. a and b are correct.

e. b and c are correct.

6. Which of the following statements about employee benefits are correct?

I. Workers are granted favorable tax treatment on the employee benefits that they receive from their employers.

II. Employee benefits account for over half of the compensation paid by employers in the United States.

a. I only

b. II only

c. Both I and II

d. Neither I nor II

7. Which of the following is a step in the risk-management process?

a. Identifying all possible sources of financial loss

b. Setting the goals of the risk management program

c. Choosing the most efficient ways to handle the firm’s loss exposures

d. Measuring the frequency and severity of all loss exposures

e. All of the above

8. A building’s owner inserts a provision in the lease that makes the tenant legally responsible for clearing snow and ice from the building’s sidewalks. This provision is an example of which of the following?

a. Loss prevention

b. Loss reduction

c. Loss transfer

d. Self-insurance

9. ACA is a leading global automaker. ACA has to stop production of a popular vehicle when a labor strike shuts down the factories of BBB Company, the sole supplier of auto transmissions to ACA. The lost production resulting from this supply chain disruption is an example of a(n) \_\_\_\_\_\_\_\_\_\_ that is borne by ACA.

a. hazard risk

b. financial risk

c. operational risk

d. strategic risk

10. Which of the following is not a characteristic of an ERM program?

a. The decisions of the ERM department are monitored by the firm’s board of directors.

b. The ERM program focuses only on pure risk.

c. The ERM department evaluates the loss exposures of the firm as a portfolio of risk.

d. The ERM department typically uses a systematic process modeled after the risk management process to identify, assess, and treat the firm’s risks.

VI. IDEAS FOR INSTRUCTORS AND TEACHING METHODS

1. Have the class look at Review Question 19 and research a recent incident in *Business Insurance, The National Underwriter,* or *The Wall Street Journal.* Are they able to identify the strategic and operational risks? Is it sometimes difficult to tell these two types apart? (Hint: *Strategy* involves the questions of what will be done and in what time frame. *Operations* involves the methods to be used and the personnel, human resources, to be deployed.)

2. Discuss whether a Chief Risk Officer is a necessity for an ERM program or whether a traditional risk manager can be retrained. Is this a function that should be outsourced, perhaps to an insurance broker or a consultant?

3. Risk aversion leads persons to pay more for insurance than their expected value of loss. Discuss why that is so. Ask the class for examples they have seen of persons whose actions appear to indicate that they are risk seekers.