Instructor's Manual and Test Item File

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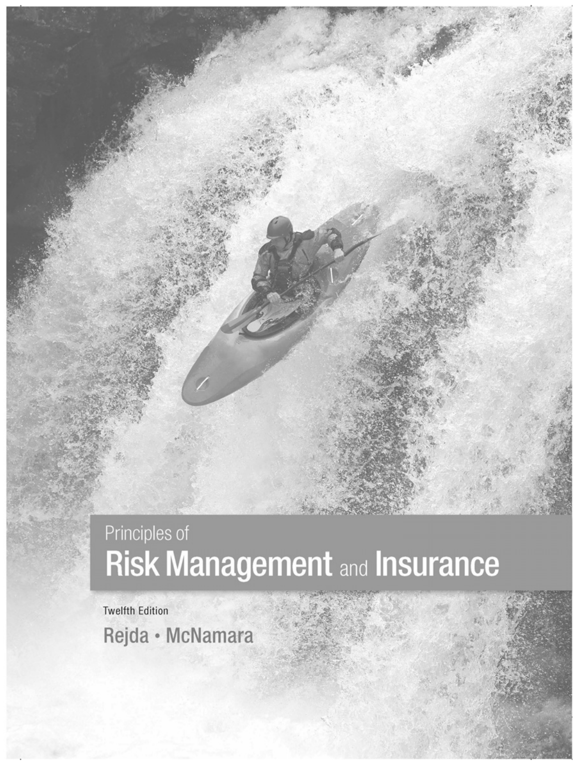

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Contents

Chapter 1
Risk and Its Treatment

■ Teaching Note

In presenting the material in this chapter, keep in mind that students must master a certain amount of new insurance terminology. Studying insurance is similar to becoming fluent in a foreign language. The student starts by building upon a basic vocabulary. The same is true for insurance. Insurance is a technical subject that requires a basic vocabulary.

It is also worthwhile to point out that there is no single definition of risk. However, risk has been traditionally defined as uncertainty concerning the occurrence of a loss.

Take some time to discuss the major types of pure risks that can result in great financial insecurity. ,This chapter summarizes the important points concerning the different types of risk and methods of handling risk. In particular, the risk of unemployment is a timely risk that could be emphasized in this chapter.

In discussing the major methods of handling risk, several points should also be stressed. First, explain that these concepts are discussed in greater detail in Chapter 3. Second, stress the idea that insurance is only one of several methods for handling risk. Finally, explain that in many cases other methods for handling risk may be more effective.

■ Outline

I. What is Risk?

A. Different definitions of risk; risk historically 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. Can be measured by using the standard deviation 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

II. Chance of Loss

A. Objective Probability
   1. A priori—by logical deduction such as in games of chance
   2. Empirically—by induction, through analysis of data

B. Subjective Probability—a personal estimate of the chance of loss. It need not coincide with objective probability and is influenced by a variety of factors including age, sex, intelligence, education, and personality.

C. 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.

III. Peril and Hazard

A. Peril—defined as the cause of loss

B. Hazard

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. Attitudinal (Morale) hazard—carelessness or indifference to a loss, which increases the frequency or severity of loss
4. Legal hazard—characteristics of the legal system or regulatory environment that increase the frequency or severity of losses

IV. 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. Diversifiable Risk and Nondiversifiable Risk—Diversifiable risk affects only individuals or small groups and not the entire economy; it can be reduced or eliminated by diversification. Nondiversifiable risk affects large numbers of persons or groups in the economy and cannot be eliminated or reduced by diversification.

C. Enterprise Risk—This is a term that encompasses all major risks faced by a business firm, including pure risk, speculative risk, strategic risk, operational risk, and financial risk.

V. Major Personal Risks and Commercial Risks

A. Personal Risks

1. Risk of premature death
2. Risk of insufficient income during retirement
3. Risk of poor health
4. Risk of unemployment

B. Property Risks

1. Direct loss
2. Indirect or consequential loss

C. Liability Risks

D. Commercial Risks

1. Property risks
2. Liability risks
3. Loss of business income

4. Other risks—crime exposures, human resources exposures, foreign loss exposures, intangible property exposures, government exposures

VI. Burden of Risk on Society

A. Need for a Larger Emergency Fund

B. Loss of Needed Goods and Services

C. Worry and Fear

VII. Techniques for Managing Risk

A. Risk Control

1. Avoidance
2. Loss prevention
3. Loss reduction

B. Risk Financing

1. Retention
2. Noninsurance transfers
3. Commercial insurance

■ Answers to Case Application

a. *Retention.* Because the car is old and has a limited market value, collision insurance should not be purchased. Retention can be used to deal with the exposure.

b. *Liability insurance.* Because the exposure has the potential for causing a catastrophic loss, auto liability insurance should be purchased.

c. *Insurance.* Property insurance could be purchased to deal with the property exposure of $10,000. The policy should contain a deductible.

d. *Retention.* The dollar value of the loss of a disposable contact lens is small.

e. *Loss control.* The waterbed should be carefully checked for possible leaks to reduce the possibility of damage to the apartment. As an alternative, an endorsement can be added to a homeowners policy to cover the liability exposure.

f. *Avoidance.* Michael should pick a new running route.

g. *Life insurance.* Michael's father should have purchased life insurance. The loss of tuition would have been replaced by life insurance.

■ Answers to Review Questions

1. (a) There is no single definition of *risk.* Historically, many insurance authors have defined risk in terms of uncertainty. *Risk* is uncertainty concerning the occurrence of a loss.

   (b) *A loss exposure* is any situation or circumstance in which a loss is possible, regardless of whether a loss occurs.

(c) *Objective risk* is the relative variation of actual loss from expected loss. As the number of exposure units under observation increases, objective risk declines. *Subjective risk* is uncertainty based on one's mental condition or state of mind. Accordingly, objective risk is measurable and statistical; subjective risk is personal and not easily measured.

2. (a) *Chance of loss* can be defined as the probability that an event will occur.
   (b) *Objective probability* refers to the long-run relative frequency of an event based on the assumption of an infinite number of observations and no change in the underlying conditions. *Subjective probability* is the individual's personal estimate of the chance of loss.

3. (a) *Peril* is the cause of loss. *Hazard* is a condition that creates or increases the chance of loss.
   (b) *Physical hazard* is a physical condition that increases the chance of loss. *Moral hazard* is dishonesty or character defects in an individual that increase the chance of loss. *Attitudinal hazard (morale hazard)* is carelessness or indifference to a loss. *Legal hazard* refers to characteristics of the legal system or regulatory environment that increase the frequency or severity of losses.

4. (a) *Pure risk* is defined as a situation in which there are only the possibilities of loss or no loss. *Speculative risk* is defined as a situation where either profit or loss is possible.
   (b) *Diversifiable risk* is a risk that affects only individuals or small groups and not the entire economy. It is a risk that can be reduced or eliminated by diversification. In contrast, *nondiversifiable risk* is a risk that affects the entire economy or large numbers of persons or groups within the economy. It is a risk that cannot be reduced or eliminated by diversification.

5. (a) *Enterprise risk* is a term that encompasses all major risks faced by a business firm, which include pure risk, speculative risk, strategic risk, operational risk, and financial risk.
   (b) *Financial risk* is the uncertainty of loss because of adverse changes in commodity prices, interest rates, foreign exchange rates, and the value of money.

6. (a) *Enterprise risk management* combines into a single unified treatment program all major risks faced by the firm. These risks include pure risk, speculative risk, strategic risk, operational risk, and financial risk.
   (b) *Traditional risk management* considered only major and minor pure risks faced by a corporation. Enterprise risk management considers all risks faced by a corporation as described in (a) above.

7. Pure risks associated with great financial and economic insecurity include the risks of premature death, insufficient income during retirement, old age, poor health, and unemployment. In addition, persons owning property are exposed to the risk of having their property damaged or lost from numerous perils. Finally, liability risks are also associated with great financial and economic insecurity.
8. Pure risk is a burden to society for at least three reasons:
   (a) The size of an emergency fund must be increased.
   (b) Society may be deprived of needed goods and services.
   (c) Worry and fear are present.

9. A direct loss is a financial loss that results from the physical damage, destruction, or theft of property. Indirect loss results from or is the consequence of a direct loss. For example, if a student's car is stolen (direct loss), he or she will lose the use of the car until it is replaced or recovered (indirect loss).

10. Major risks faced by business firms include property risks, liability risks, loss of business income, crime exposures, human resources exposures, foreign loss exposures, intangible property exposures, and government exposures.

11. (a) Risk control techniques refer to techniques that reduce the frequency or severity of losses. They include the following
    (1) *Avoidance.* This means a certain loss exposure is never acquired, or an existing loss exposure is abandoned. For example, a drug manufacturer can avoid lawsuits associated with a dangerous drug by not producing the drug.
    (2) *Loss prevention.* Certain activities are undertaken that reduce the frequency of a particular loss. One example of loss prevention is periodic inspection of steam boilers to prevent an explosion.
    (3) *Loss reduction.* This refers to measures that reduce the severity of a loss after it occurs. One example of loss reduction is an automatic sprinkler system in a department store that can reduce the severity of a fire loss.

    (b) Risk financing refers to techniques that provide for the payment of losses after they occur. They include the following
    (1) *Retention.* This means that an individual or business firm retains part or all of the losses that can result from a given loss exposure. For example, a motorist may retain the first $500 of a physical damage loss to his or her automobile by purchasing an auto insurance collision policy with a $500 deductible.
    (2) *Noninsurance transfers.* This means that a risk is transferred to another party other than an insurance company. For example, the risk of a defective television set can be shifted or transferred to the retailer by the purchase of a service contract by which the retailer is responsible for all repairs after the warranty expires.
    (3) *Insurance.* An auto insurance policy can be purchased covering the negligent operation of an automobile.

■ Answers to Application Questions

1. Objective risk is the relative variation of actual loss from expected loss. Although the chance of loss may be identical for two different groups, the relative variation of actual from expected loss may be quite different. For example, if a company has a fleet of 1000 trucks, the expected number of collision losses each year may be 30. However, actual losses may vary each year from 25 to 35. In contrast, another fleet of 1000 trucks may have the same number of expected losses (30), but the annual variation may be considerably higher, such as 20 to 40. Thus, objective risk is greater for the second fleet.

2. (a) This is a nondiversifiable risk because the entire nation can be affected by a terrorist attack.
    (b) This is a pure risk. The insured rarely profits if his or her house is damaged in a fire.
    (c) This is pure risk because of the loss of earned income. You usually do not profit if you are totally disabled.
    (d) This is a speculative risk. Profit or loss is possible.
    (e) This is a nondiversifieable risk because large numbers of people can lose their homes in a major flood.
    (f) This is a nondiversifiable risk because large numbers of home buyers will be adversely affected by higher interest rates and higher monthly mortgage payments. From the viewpoint of home

builders and realtors, a rise in interest rates is also a financial risk that can slow down the sale of new and used homes.

(g) This is a speculative risk because both profit and loss are possible.

3. (a) Risk control such as exercise, losing weight, and following a healthy diet can reduce the chance of dying prematurely from a heart attack. Life insurance can also be used, which reduces or eliminates the financial consequences to surviving family members if a family head dies prematurely.
   (b) Property insurance is an appropriate technique for dealing with the risk of a hurricane. Retention can also be used by purchasing the policy with a deductible.
   (c) Collision insurance on the new car is an effective way to deal with this exposure. Retention can also be used by purchasing the policy with a deductible for collision losses. The insured can also drive defensively, which is a form of risk control.
   (d) A catastrophic loss exposure is present. Auto liability insurance should be purchased to deal with the exposure.
   (e) Professional liability insurance should be purchased to deal with malpractice suits. The surgeon could also use risk control to reduce the possibility of injuring a patient.

4. Andrew has three noninsurance options.
   (a) *Avoidance.* Andrew can avoid the risk of burglary or robbery by going into a different line of business. However, this is not a practical solution and may not be feasible.
   (b) *Risk control.* Risk control efforts can be undertaken to reduce both the frequency and severity of losses. A burglar alarm system can be installed. The pawn shop can be relocated to another part of the city where crime rates are lower. Losses also can be prevented by hiring a guard or patrol service to protect the property.
   (c) *Retention.* Andrew may decide to retain all losses, thereby eliminating the need for burglary insurance. However, since a large loss could result in financial ruin, he may decide to retain losses only up to a certain amount, such as $1000. Excess insurance can be purchased for losses exceeding the retention limit.

5. (a) *Retention*. The firm is retaining the earthquake exposure.
   (b) *Risk control*. If a fire occurs, the sprinkler system will operate automatically to extinguish the fire, thereby reducing the size of the loss.
   (c) *Avoidance*. The firm is avoiding a lawsuit by not manufacturing products that could injure customers who use the product.
   (d) *Noninsurance transfer*. The firm manufacturing the product has transferred the risk of a liability suit to the retailers by such an agreement. This agreement is often called a hold-harmless agreement. For example, a manufacturer may insert a hold-harmless clause in a contract with a retailer by which the retailer agrees to hold the manufacturer harmless if a scaffold collapses and someone is injured.

Chapter 2
Insurance and Risk

■ Teaching Note

Three areas should be emphasized in teaching this chapter. First, the nature of insurance should be discussed. Second, the requirements of an insurable risk should also be stressed. Mention that the requirements of an insurable risk are ideal requirements and are seldom met completely in the real world. Finally, show how insurance differs from both gambling and speculation.

The remaining material is descriptive and fairly easy to grasp. It is not necessary to discuss in detail the various fields of insurance, other than to point out that the different fields of insurance are covered in future chapters. Likewise, the social benefits of insurance are quickly grasped by students and may not require a large amount of class time. However, it is worthwhile to spend some time on the less obvious costs of insurance, such as moral and attitudinal (morale) hazard. Point out that moral hazard has increased enormously in recent years, especially in the submission of fraudulent claims.

■ Outline

I. 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

II. Requirements of an Ideally 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
  1. The risk of fire to a private dwelling satisfies the requirements.
  2. The risk of unemployment does not completely meet all requirements.

C. Adverse Selection and Insurance
  1. Nature of adverse selection

2. Consequences of adverse selection

III. Insurance and Gambling Compared

A. Insurance eliminates a pure risk, while gambling creates a new speculative risk.

B. Insurance is socially productive, while gambling is socially unproductive.

IV. 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.

V. Types of Insurance

A. Private Insurance
   1. Life insurance
   2. Health insurance
   3. Property and liability insurance

B. Government Insurance
   1. Social insurance
   2. Other government insurance programs

VI. Social Benefits and Costs of Insurance

A. Benefits of Insurance to Society
   1. Indemnification for loss
   2. Less worry and fear
   3. Source of investment funds
   4. Loss prevention
   5. Enhancement of credit

B. Costs of Insurance to Society
   1. Cost of doing business
   2. Fraudulent claims
   3. Inflated claims

■ Answers to Case Application

a. This is not insurance. Although the risk of a defective television set is transferred to the manufacturer, there is no pooling of losses.

b. This is not insurance. Although the risk of defective tires for the first 50,000 miles is transferred to the manufacturer, there is no pooling of losses.

c. This guarantee is not insurance. Although the risk of a defective home is transferred to the builder, there is no pooling of losses, which is the essence of insurance. Any losses would fall directly on the builder.

d. This is not insurance. The risk of default has been transferred to the cosigner. If the debtor defaults, the cosigner must make the payments. The loss would fall directly on the cosigner, and there is no pooling of losses.

e. The elements of insurance are present here. First, risk transfer is present; the homeowner transfers the risk of fire to the group. Second, pooling of losses is also present. Pooling is the essence of insurance.

Fire losses would be pooled over the entire group, and average loss is substituted for actual loss. Third, fire losses generally are fortuitous. Finally, the homeowner would be indemnified for any loss.

■ Answers to Review Questions

1. Insurance plans have four distinct characteristics:
   (a) *Pooling.* Losses incurred by the few are spread over the entire group so that in the process, average loss is substituted for actual loss.
   (b) *Fortuitous loss.* Insurance plans provide for the payment of fortuitous losses. A fortuitous loss is one that is unforeseen and unexpected and occurs as a result of chance.
   (c) *Risk transfer.* In private insurance, a pure risk is transferred from the insured to the insurer, which is typically in a better financial position to pay the loss than the insured.
   (d) *Indemnification.* Compensation is given to the victim of a loss, in whole or in part, by payment, repair, or replacement.

2. The law of large numbers states that the greater the number of exposures, the more closely the actual results will approach the probable results expected from an infinite number of exposures. As the number of exposures increases, the relative variation of actual loss from expected loss will decline. Thus, the insurer can predict future losses with a greater degree of accuracy as the number of exposures increases. This is important, since an actuary must charge a premium that is adequate for paying all losses and expenses during the policy period. The lower the degree of objective risk, the more confidence an insurer has that the actual premium charged will be sufficient to pay all claims and expenses and leave a margin for profit.

3. There are several requirements of an ideally insurable risk:
   (a) There must be a large number of exposure units.
   (b) The loss must be accidental and unintentional.
   (c) The loss must be determinable and measurable.
   (d) The loss should not be catastrophic.
   (e) The chance of loss must be calculable.
   (f) The premium must be economically feasible.

4. Insurers can deal with the problem of a catastrophe loss by (1) reinsurance, (2) avoiding the concentration of risk by dispersing coverage over a large geographical area, and (3) use of certain financial instruments in the capital markets, such as catastrophe bonds.

5. These risks are generally uninsurable for several reasons. First, many of these risks are speculative risks, which are difficult to insure privately. Second, the potential for a catastrophic loss is great; this is particularly true for political risks, such as the risk of war. Finally, calculation of the correct premium may be difficult because the chance of loss cannot be accurately estimated.

6. (a) Adverse selection is the tendency of persons with a higher-than-average chance of loss to seek insurance at standard (average) rates, which, if not controlled by underwriting, results in higher-than-expected loss levels.
   (b) Adverse selection can be controlled by careful underwriting, by charging higher premiums to substandard applicants for insurance, and by certain policy provisions.

7. Insurance differs from gambling in two ways. First, gambling creates a new speculative risk that did not exist before, while insurance is a technique for handling an already existing pure risk. Second, gambling is socially unproductive, since the winner's gain comes at the expense of the loser. Insurance is always socially productive, since both the insured and insurer win if the loss does not occur.
8. Insurance differs from hedging. An insurance transaction usually involves the transfer of risks that are insurable, since the requirements of an insurable risk can generally be met. Hedging is a technique for handling risks that are typically uninsurable, such as protection against a substantial decline in the price of commodities. A second difference is that insurance may reduce objective risk because of application of the law of large numbers. In contrast, hedging typically involves only risk transfer, not risk reduction.

9. (a) The major fields of private insurance are life insurance, health insurance, and property and liability insurance (also called property and casualty insurance).
   (b) Property and casualty coverages can be divided into personal lines and commercial lines. Personal lines include private passenger auto insurance, homeowners insurance, personal umbrella liability insurance, earthquake insurance, and flood insurance.

   Commercial lines include fire and allied lines insurance, commercial multiple peril insurance, general liability insurance, products liability insurance, workers compensation insurance, commercial auto insurance, accident and health insurance, inland marine and ocean marine insurance, professional liability insurance, directors and officers liability insurance, boiler and machinery insurance (also known as equipment breakdown insurance), fidelity and surety bonds, and crime insurance.

10. (a) Social insurance programs are government insurance programs with certain characteristics. The programs are enacted into law to deal with social and economic problems. The programs generally are compulsory and financed by contributions from covered employers and employees; benefits are paid from specifically earmarked funds; benefits are skewed or weighted in favor of lower income groups; benefit amounts generally are related to the covered individual's earnings; and eligibility requirements and benefit rights are prescribed by statute.
    (b) Major social insurance programs are the following:
    - Old-age, survivors, and disability insurance (Social Security)
    - Medicare
    - Unemployment insurance
    - Workers compensation
    - Compulsory temporary disability insurance
    - Railroad Retirement Act

■ Answers to Application Questions

1. (i) Risk of fire
   (a) *Large number of exposure units.* This is generally met, since there are millions of homes that are insured.
   (b) *Accidental and unintentional loss.* This requirement is generally met, since most insureds do not deliberately start a fire.
   (c) *Determinable and measurable loss.* A fire loss can be determined and measured. In case of disagreement, a property insurance policy has a provision for resolving disputes.
   (d) *No catastrophic loss.* This requirement is met, since most homes do not burn at the same time.
   (e) *Calculable chance of loss.* Insurers can estimate within ranges the probability of a fire loss.

(f) *Economically feasible premium.* For most insureds, this requirement is fulfilled.

(ii) Risk of war

(a) *Large number of exposure units.* This requirement is not fulfilled. Based on the law of large numbers, it is difficult to estimate accurately the number of wars that will occur.

(b) *Accidental and unintentional loss.* This requirement is not met. Most wars are not accidental, but intentional.

(c) *Determinable and measurable loss.* Although a war loss can be determined, the measurement of loss would be difficult.

(d) *No catastrophic loss.* This requirement is not fulfilled, since large numbers of exposure units would simultaneously incur losses.

(e) *Calculable chance of loss.* This requirement cannot be easily met.

(f) *Economically feasible premium.* Because of the catastrophic potential of war, the premiums would not be economically feasible.

2. (a) (1) Indemnification means that insureds are restored to their former financial position after a loss occurs, either partly or wholly. As a result, individuals and families can maintain their economic security and are less likely to apply for public assistance or welfare, or seek financial assistance from relatives and friends.

(2) Insurance makes a borrower a better credit risk because it guarantees the value of the borrower's collateral, or gives greater assurance that the loan will be repaid. For example, life insurance can be used to pay off a bank loan if the creditor dies prematurely, and so makes the creditor a better credit risk.

(3) Premiums are collected in advance, and funds not needed to pay immediate losses and expenses can be loaned to business firms. These funds typically are invested in capital goods, such as housing developments, shopping centers, new plants, and machinery and equipment. Since the stock of capital goods is increased, economic growth and full employment are promoted. In addition, since the supply of loanable funds is increased, the cost of capital to business firms is lower than it would be in the absence of insurance.

(b) The major social and economic costs of insurance are the following:

- Cost of doing business
- Fraudulent claims
- Inflated claims

3. (a) Ideal requirements of an insurable risk:

- Large number of exposure units
- Accidental and unintentional loss
- Determinable and measurable loss
- No catastrophe loss
- Calculable chance of loss
- Economically feasible premium

(b) The requirement of not having a catastrophe loss is not met because large numbers of exposure units in a flood zone would be incurring losses at the same time. Also, the requirement of an economically feasible premium generally is not met. Without a government backup, premiums for flood insurance in major flood zones generally would be unaffordable for many insureds.

4. (a) Life insurance can provide the needed funds for a college education.
   (b) Auto liability insurance will protect the parents if Danielle negligently injures someone while driving a family car.
   (c) An individual or group disability income policy will provide periodic income payments if Jacob becomes totally disabled.
   (d) A homeowners policy will provide the desired protection. Windstorm and hurricanes are covered perils.
   (e) A commercial general liability insurance policy will cover Nathan if a customer is injured in his store.

Chapter 3
Introduction to Risk Management

■ Teaching Note

This chapter is the first of two chapters dealing with risk management. This chapter discusses the fundamentals of risk management. Four basic areas should be stressed. First, after defining risk management, briefly discuss the objectives of risk management. Second, the risk management process should also be stressed. You should discuss some typical loss exposures that a business firm faces when you explain the various steps in the risk management process. Third, the major methods for treating loss exposures should be emphasized. Be certain to inform students that these techniques were discussed earlier in Chapter 1. It is important to indicate the various situations or conditions under which each technique can be used. Finally, mention that the fundamentals of risk management discussed in this chapter can also be used by individuals and families in a personal risk management program.

■ Outline

I. Meaning of Risk Management

II. Objectives of Risk Management

- A. Preloss Objectives
  1. Economy goal
  2. Reduction of anxiety
  3. Meet any legal obligations
- B. Postloss Objectives
  1. Survival of the firm
  2. Continued operation
  3. Stability of earnings
  4. Continued growth
  5. Social responsibility

III. Risk Management Process

- A. Identify the Loss Exposures
  1. Important loss exposures
     - 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. Intangible property loss exposures
i. Failure to comply with government laws and regulations

2. Sources of information for identifying loss exposures
   a. Risk analysis questionnaires
   b. Physical inspection
   c. Flow charts
   d. Financial statements
   e. Historical loss data

B. Measure and Analyze the Loss Exposures

1. Two concepts
   a. Loss frequency
   b. Loss severity
2. Guidelines for measuring severity
   a. Maximum possible loss
   b. Probable maximum loss

C. Select the Appropriate Combination of Techniques for Treating the Loss Exposures

1. Risk control
   a. Avoidance
   b. Loss prevention
   c. Loss reduction
2. Risk financing
   a. Retention
      (1) Determining retention levels
      (2) Paying losses
      (3) Captive insurer
      (4) Income tax treatment of captives
      (5) Self-insurance
      (6) Risk retention groups
      (7) Advantages and disadvantages of retention
   b. Noninsurance transfers
   c. Commercial insurance
      (1) Advantages of insurance
      (2) Disadvantages of insurance
   d. Which technique should be used?

D. Implement and Monitor the Risk Management Program

1. Policy statement
2. Cooperation with other departments
3. Periodic review

E. Personal Risk Management

■ Answers to Case Application

a. There are four steps in the risk management process: (1) identify major and minor loss exposures; (2) measure and analyze the loss exposures in terms of loss frequency and loss severity; (3) select the appropriate technique or combination of techniques for treating each loss exposure; and (4) implement and monitor the program.

b. and c.

Major loss exposures and techniques for handling the loss exposure include the following:

- Physical damage to a bus in an accident. This exposure can be handled by a commercial auto insurance policy, by retention of part or all of the loss exposure, and by risk control activities that reduce the frequency and severity of bus accidents.
- Suits arising out of injuries to children in a bus accident. This exposure can be handled by a commercial liability insurance policy, by risk control activities, such as a defensive driving course, and by avoiding hiring drivers with poor driving records.
- Suits arising out of bodily injury or property damage to other motorists or pedestrians. This exposure can be handled by a commercial liability insurance policy, by risk control activities, such as a defensive driving course, and by avoiding hiring drivers with poor driving records.
- Physical damage losses to the three garages from natural disasters or other perils. This exposure can be handled by a commercial property insurance policy and by retention of part of the exposure by a sizable deductible.
- Loss of business income if the firm is unable to operate. This exposure can be handled by business income insurance that covers the loss of business income and extra expenses that continue during the shutdown period and by risk control activities to reduce the frequency and severity of potential losses.
- Workers compensation claims if a bus driver or other employees are injured in a work-related accident. This exposure can be handled by workers compensation insurance and by self-insurance.
- Death or disability of a key executive. This exposure can be handled by life insurance, risk control, such as an annual physical exam, and by having other employees trained to take over the duties of the key executive.

d. Sources of funds to pay losses if retention is used in a risk management program include the following:

- Pay losses out of current cash flow.
- Establish a funded reserve.
- Borrow from a bank by arranging a credit line in advance of a loss.
- The company may be able to join a trade association that owns a captive insurer.

e. The accounting department can furnish detailed financial information on various losses. The finance department can provide information on both available cash flow to pay losses and the impact of such losses on the firm's balance sheet and income statement. The maintenance department that services the buses can provide detailed information on the mechanical condition of the 50 buses and when replacement of an older vehicle is needed. The personnel department can provide information on employee benefit loss exposures. Finally, the department responsible for implementing safety programs is extremely important in a loss control program.

■ Answers to Review Questions

1. 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.

2. Preloss risk management objectives include the goals of economy, reduction in anxiety, and meeting legal obligations. Postloss objectives include survival of the firm, continued operation, stability of earnings, continued growth, and social responsibility.

3. There are four steps in the risk management process: (1) identify major and minor loss exposures; (2) measure and analyze the loss exposures in terms of loss frequency and loss severity; (3) select the appropriate technique or combination of techniques for treating the loss exposures; and (4) implement and monitor the program.

4. (a) Several sources of information can be used to identify potential losses. They are as follows:
   - Risk analysis questionnaire
   - Physical inspection
   - Flow charts
   - Financial statements
   - Historical loss data

   (b) The risk manager must consider the maximum possible loss and probable maximum loss for each loss exposure. The maximum possible loss is the worst loss that could possibly happen to the firm during its lifetime. The probable maximum loss is the worst loss that is likely to happen.

5. (a) Risk control refers to techniques that reduce the frequency and severity of accidental losses. Specific techniques are avoidance, loss prevention, and loss reduction.

   (b) (1) Avoidance means that a loss exposure is never acquired, or an existing loss exposure is abandoned. The major advantage of avoidance is that the chance of loss is zero if the loss exposure is never acquired. However, abandonment may still leave the firm with a residual liability exposure from the sale of previous products.

   (2) Loss prevention refers to measures that reduce the frequency of a particular loss. For example, measures that reduce lawsuits from defective products include installation of safety features on hazardous products, warning labels on dangerous products, and quality control checks.

   (3) Loss reduction refers to measures that reduce the severity of a loss after it occurs. Examples include installation of an automatic sprinkler system, rehabilitation of injured workers with job-related injuries, and limiting the amount of cash on the premises.

6. (a) Risk financing refers to techniques that provide for the funding of losses after they occur. Specific risk financing techniques include retention, noninsurance transfers, and insurance.

   (b) (1) Retention means that the firm retains part or all of the loss that can result from a given loss exposure. Retention can be active or passive. Active risk retention means that the firm is aware of the loss exposure and plans to retain part or all of it. Passive risk retention, however, is the failure to identify a loss exposure, failure to act, or forgetting to act.

   (2) Noninsurance transfers are methods other than insurance by which a pure risk and its potential financial consequences are transferred to another party. Examples include contracts, leases, and hold-harmless agreements.

(3) Commercial insurance can also be used to fund losses. Insurance is appropriate for loss exposures that have a low probability of loss but the severity of loss is high.

7. Retention can be used if no other method of treatment is available, the worst possible loss is not serious, and losses are highly predictable.

8. (a) A captive insurer is an insurer owned by a parent firm for the purpose of insuring the parent firm's loss exposures.
   (b) Captive insurers have several advantages:
   - The parent firm may have difficulty in obtaining certain types of insurance from commercial insurers, so a captive insurer can be formed to provide coverage.
   - Insurance costs may be lower because of lower operating expenses, avoidance of an agent's or broker's commission, and retention of interest earned on invested premiums and reserves that commercial insurers would otherwise receive.
   - A captive insurer provides easier access to a reinsurer.
   - A captive insurer can be a profit center if the captive insures the public and other parties as well.

9. (a) Self-insurance is a special form of planned retention by which part or all of a given loss exposure is retained by the firm.
   (b) A risk retention group is a group captive that can write any type of liability coverage except employer liability, workers compensation, and personal lines. For example, a group of physicians may form a risk retention group to obtain malpractice insurance because professional liability insurance is difficult to obtain or too expensive to purchase.

10. (a) Insurance has several advantages in a risk management program:
   - The firm will be indemnified after a loss occurs.
   - Uncertainty is reduced, which permits the firm to lengthen its planning horizon.
   - Insurers can provide valuable risk management services, such as loss control, identification of loss exposures, and claims adjusting.
   - Premiums are deductible for income tax purposes.

   (b) Insurance has several disadvantages in a risk management program:
   - The payment of premiums is a major cost.
   - Considerable time and effort must be spent in negotiating the insurance coverages.
   - The risk manager may have less incentive to follow a risk control program, because the insurer will pay the claim if a loss occurs.

■ Answers to Application Questions

1. (a) See answer to Review Question 3.
   (b) (1) *Avoidance.* The firm could discontinue manufacturing certain ladders and scaffolds that could result in a products liability lawsuit.
   (2) *Loss prevention.* The firm could issue detailed instructions on how the ladders and scaffolds can be safely used.
   (3) *Loss reduction.* Claims involving injured persons should be promptly investigated. Procedures for providing immediate medical attention to injured persons should be established. Such measures can reduce the severity of a loss.

(4) *Noninsurance transfers.* A hold-harmless agreement could be used by which retailers agree to hold Scaffold Equipment harmless if someone is injured while using a ladder or scaffold manufactured by Scaffold Equipment.

2. (a) The following advantages may result from the retention program:
   (1) The Swift Corporation can save money if its actual losses are less than the loss allowance in the insurer's premium.
   (2) There may also be sizable expense savings.
   (3) Loss prevention is encouraged.
   (4) Cash flow may be increased since the firm can use the funds that normally would be held by the insured.

   The major disadvantages include:
   (1) The losses retained by the firm may be greater than the loss allowance in the insurance premium that is saved by not purchasing the insurance, and there may be greater volatility in the firm's loss experience in the short run.
   (2) Expenses may actually be higher, since loss-prevention programs should be established, which may be provided by insurers more cheaply.
   (3) Contributions to a funded reserve under a retention program are not usually income tax-deductible.

   (b) The following factors should be considered in the decision to partially retain the collision loss exposure:
   (1) Average frequency and severity of losses
   (2) Company's past loss experience
   (3) Dollar amount of losses the firm will retain
   (4) Added costs of retention (administrative problems)
   (5) Elements of the premium that could be saved (potential premium savings)
   (6) Predictability of losses
   (7) Maximum possible loss and maximum probable loss
   (8) Tax aspects
   (9) Availability of excess of loss coverage
   (10) Availability of other alternatives
   (11) Whether management is risk adverse

   (c) Losses can be paid out of current net income, earmarked assets, funds borrowed from commercial lenders, or payment from a captive insurer if a captive insurer has been established. Losses in excess of the retention levels can be paid by commercial insurance.

   (d) Risk control refers to measures that reduce the frequency and severity of losses. The company could avoid hiring drivers with poor driving records. The company could also reduce losses by requiring drivers to take a defensive driving course.

3. (a) The major advantage of avoidance is that the chance of loss is reduced to zero if the loss exposure is never acquired. Also, if an existing loss exposure is abandoned, the chance of loss is reduced or eliminated because the activity or product that could produce a loss has been abandoned.

   (b) It is not feasible or practical for a firm to avoid all potential losses. Some losses will occur in the normal operations of the firm's business. For example, a paint factory can avoid fire and explosion losses arising from the production of paint by not manufacturing paint. Without paint production, however, the firm will not be in business.

4. (a) A risk management policy statement offers several advantages to a firm. The policy statement is necessary to have effective administration of the risk management program. The policy statement states the risk management objectives of the firm and the company's policy with respect to treatment of loss exposures. Also, the risk management policy statement has the advantage of educating top-level executives about the risk management process. In addition, the written policy statement enables the risk manager to have greater authority throughout the firm. Finally, the policy statement provides a standard for judging the risk manager's performance.

   (b) Other departments that are important in a risk management program are accounting, finance, marketing, production, and human resources.

5. (a) A personal risk management program has the following steps:
   - Identify loss exposures
   - Analyze the loss exposures
   - Select appropriate techniques for treating the loss exposures
   - Implement and review the program periodically

   (b) (1) Major personal loss exposures include the following:
   - Premature death of Chris or Karen and the subsequent loss of financial support to surviving family members
   - Catastrophic medical bills incurred by Chris or Karen
   - Catastrophic medical bills incurred by Christian or Kelly
   - Total disability of Chris or Karen and the subsequent loss of financial support to the surviving family members

   (2) Major property loss exposures include the following:
   - Physical damage or theft of household personal property
   - Physical damage or theft of family cars
   - Theft of the laptop computer used by Karen while traveling
   - Damage or theft of the business computer used by Chris
   - Residing in a high crime-rate area, which increases the probability of theft or robbery

   (3) Major liability loss exposures include the following:
   - Legal liability arising out of the operation of a family car by family members
   - Legal liability arising out of the use of a rental car by Karen when she is traveling
   - Legal liability arising out of other activities of family members that can result in bodily injury or property damage to others

   (c) Chris and Karen should purchase adequate life insurance and disability income insurance to deal with the risk of premature death and total disability. Chris and Karen and the children should be insured under a group or individual major medical expense policy to deal with the risk of catastrophic medical bills. Loss control could also be used by practicing healthy lifestyle habits.

   A homeowners policy would cover the physical damage and theft of household property. Collision and comprehensive auto insurance would cover the possible physical damage or theft of a family car; retention could also be used by having a deductible for collision and comprehensive losses. Chris and Karen should also check with their insurance agent to see if their homeowners policy provides adequate insurance on the business computer and laptop computer. Karen could also use risk control when she is traveling by not leaving the laptop computer unattended.

   The legal liability loss exposures can be handled by a homeowners policy, which provides personal liability insurance. Auto legal liability insurance could insure the legal liability arising out of the negligent operation of a family car by family members.

Chapter 4
Advanced Topics in Risk Management

■ Teaching Note

Some instructors wanted more extensive treatment of risk management in the text, focusing more on business risk management. This chapter was added to address this concern. As many instructors teach this as a "personal risk management" course, this chapter can be skipped without loss of continuity.

The chapter is organized as a collection of topics. The following topics are covered: (1) the changing scope of risk management, (2) insurance market dynamics, (3) loss forecasting, (4) financial analysis in risk management decision making, and (5) risk management tools.

■ Lecture Outline

I. The Changing Scope of Risk Management

A. Financial Risk Management

B. Enterprise Risk Management

II. Insurance Market Dynamics

A. The Underwriting Cycle

B. Consolidation in the Insurance Industry

C. Capital Market Risk Financing Alternatives

III. Loss Forecasting

A. Probability Analysis

B. Regression Analysis

C. Forecasting Based on Loss Distributions

IV. Financial Analysis in Risk Management Decision Making

A. The Time Value of Money

B. Financial Analysis Applications

V. Other Risk Management Tools

A. Risk Management Information Systems (RMIS)

B. Risk Management Intranets

C. Risk Maps

D. Value at Risk (VAR) Analysis

E. Catastrophe Modeling

Answers to Case Application

1. (a) (1) GWS could sell oil futures contracts to hedge the fuel oil price risk. If the price of fuel oil is lower in the future, GWS will be able to purchase fuel oil at a lower price but lose money on its futures position. If the price of fuel oil increases in the future, GWS will lose money by having to pay a higher price for fuel oil, but it can offset the higher spot price with a gain on its futures position.

   (2) GWS may also consider a double-trigger option insurance arrangement using fuel oil prices and property losses as triggers. Under the double-trigger option, the insurer would only make a payment to GWS if both contingencies—high fuel prices and high property losses—occurred. The agreement would specify both the fuel price per gallon and the level of property losses that would jointly trigger payment. If only one contingency occurred or neither contingency occurred, the insurer would have no liability.

   (b) The net present value (NPV) of an investment project is equal to the present value of the future cash flows less the cost of the project. Using 10 percent as the discount rate, the NPV of this project is $22,171.30 as shown below:

$$NPV = -\$40{,}000 + \frac{\$25{,}000}{(1+0.10)^1} + \frac{\$25{,}000}{(1+0.10)^2} + \frac{\$25{,}000}{(1+0.10)^3}$$

$$NPV = -\$40{,}000 + \$22{,}727.27 + \$20{,}661.16 + \$18{,}782.87$$

$$NPV = \quad \$22{,}171.30$$

   As the NPV is positive, the project is acceptable.

   The NPV could also have been calculated by treating the three $25,000 cash flows as an ordinary annuity.

   (c) As the independent variable is "thousands of miles traveled," the expected 640,000 miles is entered into the prediction as 640. Substituting this value into the regression equation yields an estimate of between 16 and 17 derailments, as shown below:

$$\begin{aligned} Y\text{ (\# of derailments)} &= 2.31 + 0.22(640) \\ &= 2.31 + 14.08 \\ &= 16.39 \end{aligned}$$

Answers to Review Questions

1. Three speculative financial risks that a risk manager may consider are commodity price risk, interest rate risk, and currency exchange rate risk. Traditionally, these risks were addressed by financial managers rather than risk managers. The role of some risk managers has expanded to consider not only pure risks, but also speculative financial risks.

2. Traditional risk management was limited in scope to property, liability, and personnel-related loss exposures. Enterprise risk management is a much broader concept, encompassing traditional risk management. In addition to considering property, liability, and personnel exposures, enterprise risk management considers speculative risks, strategic risks, and operational risks.

3. The underwriting cycle refers to the tendency for commercial property and liability insurance markets to fluctuate between periods of tight underwriting with high insurance premiums and periods of loose underwriting with low insurance premiums. When the property and liability insurance industry is in a strong surplus position, insurers can lower premiums and loosen underwriting standards to compete with other insurers. As competition increases, the surplus is depleted through underwriting losses that develop because of low premiums and less stringent underwriting. If investment income is not available to offset the underwriting losses, at some point premiums must be increased and underwriting standards tightened. Higher premiums and stricter underwriting help to restore the insurer to profitability. As profitability returns, the depleted surplus is restored, making it possible for insurers to enter into competition with lower premiums and less-strict underwriting.

   The market is "hard" when premiums are high and underwriting standards are tight. The market is "soft" when premiums are low and underwriting standards are loose.

4. Consolidation in the insurance industry refers to the combining of insurance business organizations through mergers and acquisitions. Three types of consolidation have been occurring. First, insurance companies have been merging with or acquiring other insurance companies. The combination of St. Paul Insurance with Travelers Insurance is an excellent example, as is the acquisition of Safeco Insurance by Liberty Mutual Insurance Company. Second, insurance brokerages have been merging with or acquiring other insurance brokerages (Marsh acquired Sedgwick, for example). Finally, there has been cross-industry consolidation. Cross-industry consolidation occurs when a company in one financial services area merges with or acquires a company in another financial services area. For example, a bank may acquire an insurance company or an insurance company may purchase an investment (mutual fund) company.

5. Securitization transfers insurable risk to the capital markets through the creation of a financial instrument, such as a catastrophe bond. Prior to securitization, the capacity of the insurance industry was limited to the capacity of insurers and reinsurers operating in the industry. Risk securitization provides an avenue through which insurable risk is spread to capital market participants (e.g., bondholders).

6. (a) Loss forecasting is necessary to enable the risk manager to make an informed decision about whether to retain or transfer loss exposures. The risk manager will be unable to evaluate an insurance coverage bid unless he or she has some level of confidence about the magnitude of expected losses and the reliability of the estimate. Based on the forecast, the risk manager may believe that an insurance bid is too high and opt for retention, or that the insurance bid is "low" relative to the expected losses, and opt for insurance.
   (b) The risk manager may use several techniques to forecast losses. Probability analysis, regression analysis, and forecasting through loss distributions may be employed.

7. Using past losses alone to predict future losses is not wise. While past losses may have some bearing upon future losses, underlying conditions may have changed. The company may have sold off or acquired new operations, expanded into new markets, or altered production processes. There may be other exposures that produce losses this year that did not produce losses in the past. While past loss data may be helpful, additional information should be considered.

8. Time value of money analysis is employed in risk management decision making to account for the interest-earning capacity of money. The same amount of money to be received or paid in different time periods is of different value in terms of today's dollars, once the interest-earning capacity of the

money is considered. Failure to consider the interest-earning capacity of money may lead to bad risk management decisions.

9. The future cash flows that a project will generate are estimated in the capital budgeting process. In addition to the cash benefits (reduced costs and increased revenues), some values that are difficult to quantify may be considered. For example, a loss control investment may result in fewer lost work days, improved morale of employees, reduced absenteeism, reduced pain and suffering, an improved public image of the company, and less "down time" when a replacement worker must be trained to substitute for an injured worker. These items are difficult to quantify in capital budgeting.

10. (a) A risk management information system (RMIS) is a computerized database that permits a risk manager to store and analyze risk management data and to use the data to predict future loss levels. Many organizations use an RMIS as a tool to help manage claims.
    (b) Some risk management departments have established their own websites. These sites contain a wealth of risk management information about the company and answers to frequently asked questions (FAQs). Risk management intranets are internal networks that incorporate search capabilities. Company personnel can access the website and search for the desired information.

■ Answers to Application Questions

1. Prior to the changing scope of risk management in the 1990s, insurers needed considerable knowledge of property, liability, and personnel risks to write the insurance coverages demanded. Given the changes that have occurred recently, insurers also need expertise in financial, strategic, and operational issues. For example, an insurer designing a multiple-trigger contract may need expertise in commodity pricing as well as traditional insurable loss exposures. An insurer designing an enterprise risk management plan may need expertise in currency exchange rate risk, the organization's competitive environment, interest rate risk, weather-related risk, and traditional property and liability insurance risks.

2. Property and liability insurance markets fluctuate. Sometimes premiums are high and underwriting standards are tight; at other times, premiums are low and underwriting standards are loose. In this case, self-insurance was probably used the first year because the risk manager believed that the risk was best handled in this way as opposed to purchasing insurance. The change in the second year likely reflects a downturn in insurance prices, making commercial insurance the most cost-effective alternative.
3. There are hundreds of insurance companies operating in most states. If several of these companies merge, or if one is acquired by another insurer, the marketplace remains very competitive. Broker consolidation leaves fewer larger players in the market. When some large brokerages merge, there are fewer large brokers (e.g., Marsh and Aon) for a risk manager to call upon when putting an insurance program out for bids. For example, a risk manager was once able to get competitive bids from Johnson & Higgins (J&H), Marsh, and Sedgwick. However, Marsh acquired J&H and Sedgwick. Often smaller national brokerages or regional brokerages must be employed in a competitive bidding process.

4. (a) Ignoring the time value of money in risk management decision making may lead to wrong decisions or at least less-than-optimal decisions. The result is especially true in capital budgeting where investment expenditures are usually made up front, but the benefits of the projects are not realized until the future. If the future cash flows were not adjusted for time value of money considerations, the value of the future cash flows would be overstated. Projects that are

unacceptable when the time value of money is considered may appear to be good projects when the time value of money is ignored.

(b) The NPV of a project is the value added to the business if the project is undertaken. As the net present value is calculated using the organization's required rate of return to discount the future cash flows back to present value, projects that have a positive net present value provide a rate of return higher than the organization's minimum acceptable return. As such, the NPV is the "value added" to the organization by undertaking the project.

5. Self-insuring workers compensation is a common practice. Use of self-insurance increases during hard insurance markets, as premiums are higher and underwriting standards are tighter. Given the cyclical nature of the commercial property and liability insurance market, the risk manager may want to purchase insurance next year if workers compensation insurance premiums have dropped significantly. As workers compensation is an experience-rated coverage, the risk manager wants to make sure that, if this year's claims experience is favorable, the risk manager will be able to document the superior performance to insurance underwriters, and obtain a lower premium from the insurer.

Chapter 5
Types of Insurers and Marketing Systems

■ Teaching Note

This chapter discusses the role of insurers in the financial services industry, the different types of insurers, and the various marketing systems. Three areas should be emphasized. First, because of the Financial Modernization Act of 1999, insurers do more than just sell insurance. Insurers also sell a wide variety of investment products, including mutual funds, annuities, and private pension plans. Insurers also issue credit cards, own banks, and provide trust and estate planning services.

Second, emphasize that the corporate structure of mutual insurers is changing because of mergers, demutualization, and the formation of holding companies. As a result, the number of insurers has declined significantly over time.

Finally, emphasize that insurers often use more than one marketing system to sell their products. For example, in addition to using licensed agents, many companies sell directly to the public by television advertising, Internet sites, and toll-free telephone numbers.

■ Outline

I. Overview of Private Insurance in the Financial Services Industry

II. Types of Private Insurers

A. Stock Insurers—owned by stockholders

B. Mutual Insurers—owned by policyholders
   1. Advance premium mutual
   2. Assessment mutual
   3. Fraternal insurer
   4. Changing corporate structure of mutual insurers

C. Lloyd's of London

D. Reciprocal Exchange

E. Blue Cross and Blue Shield plans

F. Health Maintenance Organizations (HMOs)

G. Other types of private insurers
   1. Captive insurer
   2. Savings bank life insurance

III. Agents and Brokers

A. Legal Status of an Agent

1. Authorized agent can legally bind the principal to a contract.
2. Sources of an agent's authority are express, implied, and apparent powers.

B. Brokers

1. Represent insureds, typically business firms and large corporations
2. May provide services such as risk management, loss control, and knowledge of commercial insurance markets
3. Are important in the surplus lines market

IV. Types of Marketing Systems

A. Life Insurance Marketing

1. Personal selling systems
2. Financial institution distribution systems
3. Direct response system
4. Other distribution systems

B. Property and Liability Insurance Marketing

1. Independent agency system—the agency has contracts with several insurers and owns the renewal rights to the policies. Agents are compensated by commissions based on the amount of insurance sold.
2. Exclusive agency system—agents represent only one company or group of companies and do not usually own the renewal rights to the policies sold.
3. Direct writer—the salesperson is an employee, company pays the selling expenses, and employees are compensated on a salary/bonus basis. The term "direct writer" is also used in the industry to identify insurers that use the exclusive agency system.
4. Direct response system—insurers sell to selected market segments using the Internet, television, or other mass media.
5. Multiple distribution system—many insurers are now using more than one marketing system to sell insurance.

V. Group Insurance Marketing

■ Answers to Case Application

a. A mutual insurer has no stockholders and is legally owned by the policyholders. Thus, the objective of legal ownership by Commercial Insurance would not be met if the new subsidiary were organized as a mutual insurer. The new subsidiary should be organized as a stock insurer, and Commercial Insurance should own the common stock of such insurer.

b. It is difficult to raise new capital as a mutual insurer because there are no stockholders. If additional capital is needed in the future, the new subsidiary should be organized as a stock insurer. New common stock could be sold to existing stockholders to raise the additional capital needed.

c. A mutual property and casualty insurer would meet this objective. If the operating experience is favorable, a dividend to the policyholders could be paid.

d. A mutual property and casualty insurer would meet this objective if the licensing requirements in all states are met. A stock insurer would also meet this objective.

■ Answers to Review Questions

1. A stock insurer is a corporation owned by stockholders who participate in the profits and losses of the company. The stockholders elect a board of directors who appoint the executive officers to run the company. The board of directors has the ultimate responsibility for the company's financial success.

2. (a) A mutual insurer is a corporation owned by the policyholders. The policyholders elect the board of directors who appoint the executives to manage the company. Because relatively few policyholders bother to vote, the board of directors has effective management control of the company. A mutual insurer may pay a dividend or give a rate reduction in advance. In life insurance, a dividend is largely a refund of a redundant premium that can be paid if the mortality, investment, and operating experience of the company is favorable. Dividends, however, cannot be guaranteed.
   (b) Mutual insurers include advance premium mutuals and assessment mutuals.

3. The corporate structure of mutual insurers has changed because of three major trends. First, there has been an increase in company mergers and acquisitions over time, which has reduced the number of active insurers. Second, many mutual insurers have converted to a stock form of ownership, which is called demutualization. Finally, because demutualization is slow, some insurers have formed holding companies. A holding company is a company that directly or indirectly controls an authorized insurer, such as a stock insurer.

4. Lloyd's of London has several important characteristics. First, Lloyd's technically is not an insurance company, but is a society of members (corporations and individuals) who underwrite insurance in syndicates. Second, as noted earlier, insurance is written by various syndicates, and members receive profits or bear losses in proportion to their share in the syndicate. Third, new individual members or Names who belong to the various syndicates now have limited legal liability. Fourth, corporations with limited legal liability can also join Lloyd's of London. In addition, individual members must meet stringent financial requirements. Finally, Lloyd's is licensed only in a small number of jurisdictions in the United States.

5. A reciprocal exchange can be defined as an unincorporated organization in which insurance is exchanged among the members (called subscribers). In its purest form, insurance is exchanged among the members; each member of the reciprocal insures the other members, and in turn is insured by them. Thus there is an exchange of insurance promises, hence the name *reciprocal exchange*. In addition, the reciprocal is managed by an attorney-in-fact, usually a corporation that is authorized to seek new members, pay losses, collect premiums, and perform other administrative duties.

6. An agent is someone who legally represents the insurer and has the authority to act on the insurer's behalf. In contrast, a broker is someone who legally represents the insured.

7. (a) Personal selling distribution systems are systems in which commissioned agents solicit and sell life insurance products to prospective insureds. Agents who sell life insurance include career agents for life insurance companies, independent agents in property and casualty insurance who also sell life insurance, and agents in property and casualty insurance who represent insurers that use the exclusive agency system.

(b) Many insurers today use commercial banks and other financial institutions as a distribution system to market life insurance and annuity products. These systems are referred to as financial institution distribution systems.

(c) The direct response system is a marketing system by which life and health insurance is sold directly to customers without the services of an agent. Insurers use Web sites, television, telephones, mail, and other mass media to market the insurance.

(d) Other life insurance distribution systems include worksite marketing, sales by licensed stock brokers, and sales by financial planners who provide investment advice to clients.

8. (a) Under the independent agency system, the agent is an independent businessperson who represents several companies. The agent is authorized to write business on behalf of these companies, and in turn is paid a commission based on the amount of business produced. In addition, the agency owns the expirations or renewal rights to the business. Finally, the independent agent is compensated solely by commissions that vary by line of insurance.

(b) Under the exclusive agency system, the agent represents only one company or group of companies under common ownership. Agents under the exclusive agency system do not usually own the expirations or renewal rights to the policies.

(c) This term is used in two ways. First, a direct writer refers to a company in which the salesperson is an employee of the insurer and is not an independent agent. Employees of direct writers are usually compensated on the basis of a salary plus a bonus or commission that is related to the amount of insurance sold. Second, the term "direct writer" also refers to companies who use the exclusive agency system to sell property and casualty insurance.

(d) The direct response system refers to insurers that sell through the mail or other mass media, such as newspapers, magazines, radio, or television. No agents are used to sell the insurance.

(e) A multiple distribution system describes a marketing system in which more than one distribution system is used. For example, some independent insurers also sell directly to consumers over the Internet or by television.

9. The agency owns the expirations or renewal rights to the business. If a policy comes up for renewal, the agency can place the business with another insurer if it chooses to do so.

10. Mass merchandising in property and liability insurance is a plan for insuring individuals in a group. Property and liability insurance is sold to individual members of a group, such as auto and homeowners. Individual underwriting is used; rate discounts are typically given; premiums are paid by payroll deduction; and employers do not usually contribute to the plan.

■ Answers to Application Questions

1. (a) The insurer that best fits the described characteristics is a stock insurer.

(b) The marketing system described is the direct response system.

2. (a) A stock insurer is owned by stockholders who share in the profits and losses of the company and legally own the company. A mutual insurer is owned by the policyholders.

(b) Stock insurers cannot issue assessable policies. A few small assessment mutuals have the right to issue assessable policies. However, advance premium mutuals do not issue assessable policies. Once the insurer's surplus exceeds a certain amount, the states will not permit a mutual insurer to issue an assessable policy. The advance premium mutual generally is larger and financially stronger than the assessment mutuals mentioned earlier.

(c) In a stock company, the stockholders, not the policyholders, have the right to elect the board of directors. In a mutual company, the policyholders also have the right to elect the board of directors.

3. (a) Mergers and acquisitions have increased because insurers wish to reduce their operating costs and overhead expenses; also, mergers and acquisitions occur because some insurers want to acquire a new line of insurance or enter a new area of business.
   (b) Demutualization means that a mutual insurer is converted into a stock insurer.
   (c) Demutualization increases the ability of an insurer to raise new capital, provides greater flexibility to expand, makes it possible to grant stock options to key employees, and may provide tax advantages.
   (d) Because demutualization is slow, some mutual insurers have been reorganized as a holding company. A holding company is a company that directly or indirectly controls an authorized insurer. A mutual insurer is reorganized as a holding company that owns or acquires control of a stock insurance company that could issue common stock. The mutual holding company would own at least 51 percent of the subsidiary stock insurer if the latter issues common stock.
   (e) Holding companies make it easier for insurers to raise new capital, to enter new areas of insurance more easily, and to grant stock options to key employees.

4. (a) New individual members (called Names), who belong to the various syndicates, now have limited legal liability with respect to insurance written as individuals. Corporations can also join Lloyd's of London with limited legal liability.
   (b) Lloyd's writes a considerable amount of ocean marine and property and casualty insurance. Life insurance generally is written only on a short-term basis. Lloyd's is also famous for writing insurance on heterogeneous exposure units, such as strike insurance for major league baseball players.
   (c) Each member must post a substantial underwriting deposit. All premiums are deposited into a premium trust fund, and withdrawals are allowed only for claims and expenses. A central guarantee fund pays the loss if an individual underwriter becomes financially insolvent.

5. (a) The independent agent represents several insurers. The exclusive agent represents only one insurer or a group of insurers under common ownership.
   (b) Under the independent agency system, the agency owns the expirations or renewal rights to the business. Under the exclusive agency system, agents usually do not own the expirations renewal rights to the policies. However, some insurers may grant limited ownership of the expirations while the agency contract is in force; this interest terminates when the agency contract is terminated. In addition, the contract usually permits the insurer to buy the expiration list from the exclusive agent to establish its value if the agency contract is terminated. In contrast, under the independent agency system, the agency has complete ownership of the expirations.
   (c) Independent agents are compensated by commissions that vary by line of insurance. The commission rate on renewal business is typically the same as that paid on new business. If a lower renewal rate is paid, the insurer may lose business, because the agent would place the insurance with another insurer at the time of renewal.

   Exclusive agency insurers generally pay a lower commission rate on renewal business than on new business. This approach gives the agent a financial incentive to write new business that pays a higher commission rate. In contrast, as noted earlier, insurers using the independent agency system typically pay the same commission rate on new and renewal business.

Chapter 6
Insurance Company Operations

■ Teaching Note

This chapter should be of interest to students for two reasons. First, it gives students an insight into the important aspects of an insurer's operations. Second, and perhaps most important, it gives students knowledge of the various job opportunities in the insurance industry.

The material in this chapter is easy to present because it is largely descriptive and not too technical. It is not necessary to spend an undue amount of time on each operation. One exception is reinsurance. Some instructors cover reinsurance quickly on the assumption this topic is not particularly important to beginning students who may take only one course in insurance. However, for risk management and insurance majors, knowledge of reinsurance is important. Some class time will be needed to explain the purposes of reinsurance and the various insurance treaties.

■ Outline

I. Basic Company Functions

A. Ratemaking

B. Underwriting

C. Production

D. Claim Settlement

E. Reinsurance

F. Investments

G. Accounting

H. Legal Function

I. Loss Control Services

J. Information Technology

II. Rate Making

A. How Insurance Pricing Differs from Pricing of Other Products

B. Activities of Actuaries

III. Underwriting

A. Refers to the process of selecting and classifying applicants for insurance

B. Underwriting Policy
   1. Importance of a clear statement of underwriting policy
   2. Underwriting policy followed spelled out in the underwriting guide

C. Basic Underwriting Principles
   1. Seeking an underwriting profit
   2. Providing equity among policyholders

D. Steps in Underwriting
   1. Agent as the first underwriter
   2. Sources of underwriting information
      a. Application
      b. Agent's report
      c. Inspection report
      d. Physical inspection
      e. Attending physician's report and physical examination
      f. Medical Information Bureau (MIB) report
   3. Making an underwriting decision

E. Other Underwriting Considerations
   1. Rate adequacy
   2. Reinsurance and underwriting
   3. Renewal underwriting

IV. Production

A. General Nature

B. Agency Department

C. Professionalism in Selling
   1. The professional's approach
   2. Professional designations—Chartered Life Underwriter (CLU), Chartered Property Casualty Underwriter (CPCU), Chartered Financial Consultant (ChFC), Certified Financial Planner (CFP), Certified Insurance Counselor (CIC)

V. Claims Settlement

A. Basic Objectives
   1. Verification that a covered loss has occurred
   2. Fair and prompt payment of claims
   3. Providing personal assistance to the insured

B. Types of Claims Adjustors
   1. Agent—usually authorized to handle small first-party claims
   2. Company adjustor—salaried employee of the company who handles the investigation, negotiation, and payment of both first- and third-party claims
   3. Independent adjustor—often used when a catastrophic loss produces a large number of claims in a geographical area; also used in areas where a company does not have enough volume to warrant setting up an office and also where special technical skills are needed

4. Public adjustor—represents the insured

C. Steps in Settlement of a Claim
1. Notice of loss to the company
2. Investigation of the claim
3. Filing a proof of loss
4. Decision concerning payment

VI. Reinsurance

A. Key Definitions
1. Reinsurance—primary insurer transfers to the reinsurer part or all of the potential losses associated with such insurance
2. Ceding company—insurer that initially writes the business
3. Reinsurer—firm that accepts insurance from the ceding insurer
4. Net retention—the amount of insurance kept by the ceding company
5. Retrocession—reinsurer obtains reinsurance

B. Reasons for Reinsurance
1. To increase underwriting capacity
2. To stabilize profits
3. To reduce drain on surplus because of the unearned premium reserve
4. To protect against a catastrophic loss

C. Types of Reinsurance
1. Facultative reinsurance
2. Treaty reinsurance
   a. Advantages
   b. Types of automatic treaties
      (1) Quota share
      (2) Surplus share
      (3) Excess of loss
      (4) Reinsurance pool

D. Alternatives to Traditional Reinsurance
1. Securitization of risk
2. Catastrophe bonds

VII. Investments

A. Life Insurance Investments
1. Primary objective is safety of principal.
2. Yield is also important because it lowers the cost of life insurance.
3. Investments have considerable economic and social impact on the economy.

B. Property and Casualty Insurance Investments
1. Liquidity is more important than in life insurance because the contract is for a shorter period of time and claims are settled quickly.
2. Investment income is important because it can offset any unfavorable underwriting results.

VIII. Other Insurance Company Functions

A. Information Systems

B. Accounting
   1. Internal controls
   2. Preparation of reports to management
   3. Preparation of tax returns
   4. Preparation of financial statements for review by regulators

C. Legal Function

D. Loss Control Services

■ Answers to Case Application

a. An excess-of-loss treaty can be used to provide protection against a catastrophic loss. The reinsurer pays losses in excess of the retention limit up to some maximum limit. The excess-of-loss treaty can be written to cover a single exposure, or it can apply to a single occurrence, such as a catastrophic loss from a tornado or hurricane.

b. A quota share treaty can be used. The ceding company and reinsurer agree to share premiums and losses based on some proportion. The ceding company's retention limit is stated as a percentage rather than as a dollar amount. Premiums and losses are then shared based on this percentage. However, the reinsurer pays a ceding commission to the primary company to help compensate for the first-year acquisition expenses in writing the business.

   The major advantage of quota-share reinsurance is that the unearned premium reserve is reduced. Thus, for smaller companies and rapidly growing companies that wish to reduce a surplus drain, a quota-share treaty can be especially effective.

c. Facultative reinsurance can be used. The primary company shops around for reinsurance before the life insurance policy becomes effective. If a willing reinsurer can be found, the primary company and reinsurer can then enter into a valid contract. The reinsurer would be responsible for the amount of loss that exceeds the primary company's underwriting limit.

d. A surplus-share treaty can be used to increase the primary company's underwriting capacity. An example of surplus-share reinsurance can be found in Chapter 6 of the text.

■ Answers to Review Questions

1. Ratemaking differs from the pricing of other products. When other products are sold, the company generally knows in advance what its costs of production are, so that a price can be established to cover all costs and yield a profit. However, an insurer does not know in advance what its actual costs are going to be. The premium may be inadequate for paying all claims and expenses during the policy period. It is only after the period of protection has expired that an insurer can determine its actual losses and expenses.

2. (a) *Underwriting* is the process of selecting and classifying applicants for insurance.
   (b) There are several important underwriting principles:
      (1) Attaining an underwriting project

        (2) Selecting insureds according to the company's underwriting standards
        (3) Providing equity among policyholders
    (c) In determining whether to accept or reject an applicant for insurance, underwriters have several sources of information. They include the application, agent's report, inspection report, physical inspection, physical examination, attending physician's report, and a Medical Information Bureau (MIB) report.

3. *Production* refers to the sales and marketing activities of insurers. Agents who sell insurance are frequently referred to as producers. The key to the insurer's financial success is an effective sales force. Marketing activities include the development of a marketing philosophy and strategy, identification of short- and long-run production goals, marketing research, developing new products, and advertising the insurer's products.

4. From the insurer's viewpoint, there are several basic objectives in settling claims:
    (a) Verification of a covered loss
    (b) Fair and prompt payment of claims
    (c) Personal assistance to the insured

5. Several steps are involved in settling a claim:
    (a) Notice of loss must be given to the company.
    (b) The claim is investigated by the company.
    (c) A proof of loss may be required.
    (d) A decision is made concerning payment.

6. (a) An agent typically has the authority to settle small first-party claims up to some maximum limit. This type of claim settlement is speedy, reduces adjustment expenses, and preserves the policyholder's good will.
    (b) A company adjustor is usually a salaried employee who represents only one company. After notice of the loss is received, the company adjustor will investigate the claim, determine the amount of loss, and arrange for payment.
    (c) An independent adjustor is a firm or individual that adjusts claims and is compensated by a fee. An independent adjuster may be used when a catastrophic loss occurs. An insurer may also use an independent adjustor in certain geographical areas where the volume of claims is too low to justify a branch office with a staff of full-time employees.
    (d) A public adjustor represents the insured rather than the insurance company and is paid a fee based on the amount of the settlement. A public adjustor may be employed by the insured in a complex loss situation and in those cases where the insured and insurer cannot resolve a claim dispute.

7. (a) *Reinsurance* is an arrangement by which the primary insurer that initially writes the insurance transfers to another insurer (called the reinsurer) part or all of the potential losses associated with such insurance.
    (b) Reinsurance is used for several reasons:
        (1) To increase the company's underwriting capacity
        (2) To stabilize profits
        (3) To reduce the unearned premium reserve
        (4) To provide protection against a catastrophic loss

(c) Securitization of risk means that an insurable risk is transferred to the capital markets through the creation of a financial instrument, such as a catastrophe bond, futures contract, options contract, or other financial instrument. These financial instruments are used as alternatives to traditional reinsurance.

8. Facultative reinsurance is an optional, case-by-case method used when the ceding company receives an insurance application that exceeds its retention limit. Reinsurance is not automatic. The primary insurer negotiates a separate contract with a reinsurer for each loss exposure for which reinsurance is desired. However, the primary insurer is under no obligation to cede insurance and the reinsurer is under no obligation to accept the insurance. If a willing reinsurer is found, the primary insurer and reinsurer can then enter into a valid contract.

9. (a) Under a quota-share treaty, the ceding insurer and reinsurer agree to share premiums and losses based on some agreed-on percentages. The ceding insurer's retention limit is stated as a percentage rather than as a dollar amount. Premiums are also shared based on the same agreed-on percentages. However, the reinsurer pays a ceding commission to the primary insurer to help compensate for the expenses incurred in writing the business.

(b) Under a surplus-share treaty, the reinsurer agrees to accept insurance in excess of the primary insurer's retention limit, up to some maximum amount. The primary insurer and reinsurer then share premiums and losses based on the fraction of total insurance retained by each party. Premiums are also shared based on the fraction of total insurance retained by each party. However, the reinsurer pays a ceding commission to the primary insurer to help compensate for the acquisition expenses incurred in acquiring the business.

(c) An excess-of-loss treaty is designed largely for a catastrophe loss. Losses in excess of the primary company's retention limit are paid by the reinsurer up to some maximum limit.

(d) A reinsurance pool is an organization of insurers that underwrites insurance on a joint basis. Pools are formed because a single insurer alone may not have the financial capacity to write large amounts of insurance; the insurers as a group, however, can combine their financial resources to obtain the necessary capacity. Each pool member agrees to pay a certain percentage of every loss. Another arrangement is similar to the excess-of-loss reinsurance treaty. Pool members are responsible for their own losses below a certain amount. Losses exceeding that amount are shared by all pool members.

10. (a) Information systems have changed the insurance industry by speeding up the processing of information and by eliminating many routine tasks. Computers are used in accounting, policy processing, premium notices, information retrieval, telecommunications, simulation studies, market analysis, forecasting sales, and training and education. Information can be obtained quickly with respect to premium volume, claims, loss ratios, investments, and underwriting results.

(b) The accounting department is responsible for the financial accounting operations of an insurer. Accountants prepare financial statements, develop budgets, analyze the company's financial operations, and keep track of the millions of dollars that flow into and out of a typical company each year. Accountants also prepare state and federal income tax returns and file an annual convention statement for review by state regulatory officials.

(c) In property and casualty insurance, the legal department is often part of the claims department. The attorneys may serve as defense counsel for the company if claims are litigated. In life insurance, attorneys are widely used in advanced underwriting and estate planning. Attorneys also review insurance contracts before they are marketed to the public, provide testimony at rate hearings, and provide general legal advice concerning taxation, marketing, investments, and insurance laws. Finally, attorneys lobby for legislation favorable to the insurance industry.

(d) The loss control department is responsible for helping individuals and firms reduce the frequency and severity of losses. Loss-control services include advice on alarm systems, automatic sprinklers, fire prevention, occupational safety and health, reduction of occupational exposures, prevention of boiler explosions, and other loss-prevention activities. Also, the loss control department can provide valuable advice on the construction of a new building or plant to make it safer and more resistant to damage.

■ Answers to Application Questions

1. (a) The total amount of insurance in force is \$1,600,000. Delta Insurance has a retention limit of \$200,000, or 1/8 of the total amount. Delta Insurance will pay 1/8 of the \$800,000 loss, or \$100,000.
   (b) Delta Insurance has a retention limit of \$200,000. Eversafe Re takes the remaining amount of \$1,400,000, or 7/8 of the total amount. Thus, Eversafe Re will pay 7/8 of the \$800,000 loss or \$700,000.
   (c) Delta Insurance has a retention limit of \$200,000. Nine lines of insurance, or \$1,800,000, are ceded to the reinsurer. Delta can write a maximum of \$2,000,000 on any single building.

2. (a) The reinsurance contract that best describes the reinsurance arrangement is a quota-share treaty.
   (b) Under the reinsurance arrangement, Bermuda Re pays 75 percent of the losses. Thus, Bermuda Re pays 75 percent of the \$50 million loss, or \$37.5 million.
   (c) A ceding commission is paid to Liability Insurance to help compensate the ceding company for the acquisition expenses incurred in placing the business on the books.

3. Statutory accounting rules require the entire gross premium to be placed in the unearned premium reserve. An insurer's ability to grow may be restricted by the unearned premium reserve, because the entire gross premium must be placed in the unearned premium reserve when the policy is first written. However, the insurer incurs relatively heavy first-year acquisitions expenses because of commissions, state premium taxes, underwriting expenses, and other expenses in issuing the policy. In determining the size of the unearned premium reserve, there is no allowance for these first-year acquisition expenses, and the insurer must pay them out of its surplus. As a result, a rapidly growing company may experience a surplus drain, and its ability to write new business may eventually be impaired. Reinsurance reduces the level of the unearned premium reserve required by law and temporarily increases the insurer's surplus position. As a result, the ratio of policyholders' surplus to net written premiums is improved, which permits the insurer to continue to grow.

4. Felix should ask the following questions before the claim is approved:
   - Did the loss occur while the policy was in force?
   - Does the policy cover the peril that caused the loss?
   - Does the policy cover the property destroyed or damaged in the loss?
   - Is the claimant entitled to recover?
   - Did the loss occur at an insured location?
   - Is the type of loss covered?
   - Is the claim fraudulent?

Chapter 7
Financial Operations of Insurers

■ Teaching Note

Some instructors have requested additional material on the financial operations of insurance companies. It seems natural to combine this "new material" with the discussion of rate making from prior editions. This chapter begins with an overview of insurance company financial statements and then discusses rate making in property and casualty insurance. Life insurance rate making is discussed in greater detail in the appendix to Chapter 13.

As the first endnote in the chapter indicates, the goal of this chapter is not to make a student an expert on the intricacies of statutory accounting, or on generally accepted accounting principles, as they apply to insurance companies. Rather, the goal is to introduce students to the financial operations of insurance companies in general terms.

■ Lecture Outline

I. Property and Casualty Insurance Companies

A. Balance Sheet
   1. Assets
   2. Liabilities
   3. Policyholders' Surplus

B. Income and Expense Statement
   1. Revenues
   2. Expenses
   3. Net Income

C. Measuring Profit or Loss

D. Recent Underwriting Results

II. Life Insurance Companies

A. Balance Sheet
   1. Assets
   2. Liabilities
   3. Policyholders' Surplus

B. Income and Expense Statement
   1. Income
   2. Expenses

3. Net Gain from Operations

C. Measuring Profitability

III. Rate Making in Property and Casualty Insurance

A. Objectives in Rate Making
   1. Regulatory Objectives
   2. Business Objectives

B. Basic Rate Making Definitions

C. Rate Making Methods
   1. Judgment Rating
   2. Class Rating
   3. Merit Rating
      a. Schedule Rating
      b. Experience Rating
      c. Retrospective Rating

IV. Rate Making in Life Insurance

■ Answers to Case Application

1. According to the balance sheet equation, total assets equals total liabilities plus owners' equity. If the total assets are $900 million and the total liabilities are $640 million, then owners' equity must be $260 million.

2. Under statutory accounting rules, premiums can only be counted as "earned" after the time period for which the premium was collected has passed. Rock Solid may have written more insurance coverage in the prior year than in this year. So in this year, the premiums earned may be more than the premiums written by Rock Solid.

3. Lonnie must remember that insurers have two major sources of income: underwriting income and investing premiums. While Rock Solid's underwriting results were not profitable, the company earned enough investment income to offset the underwriting loss. The company was required to pay taxes on this gain.

4. The pure premium is the expected claim costs divided by the number of exposure units. The pure premium is $200 per car as shown below:

$$\text{Pure Premium} = \frac{\$10{,}000{,}000}{50{,}000} = \$200$$

5. The gross rate is equal to the premium divided by one minus the expense ratio. The gross rate is $500 per unit of coverage, as shown below:

$$\text{Gross Rate} = \frac{\$300}{1 - 0.40} = \$500$$

■ Answers to Review Questions

1. (a) The three major sections of a balance sheet are the assets, liabilities, and owners' equity. Assets are items of value that the company owns. Liabilities are what the business owes. Owners' equity (called policyholders' surplus) is the difference between the assets and the liabilities. Owners' equity is the amount that would remain if a company paid off all of its liabilities using its assets. Owners' equity is not observed directly, and is the "balancing" item on the balance sheet.

   (b) The balance sheet equation is:

   Assets = Liabilities + Owners' Equity

2. (a) The assets of an insurance company are primarily financial assets. An insurance company invests premium dollars and retained earnings. These assets back the insurer's liabilities and help to generate investment income. Specific assets held include bonds, common stock, preferred stock, real estate, and mortgage-backed securities. Two additional asset categories for life insurance companies are life insurance policy loans and separate account assets.

   (b) Liabilities are more difficult to measure because one of the largest liability items, loss reserves, is not known for certain. Loss reserves are an estimated value, but the actual loss experience could be different from the expected loss experience.

3. (a) The two major sources of revenue for a property and casualty insurance company are the premiums that it earns for providing insurance coverage and investment income generated from its portfolio of invested assets.

   (b) The major expenses for a property and casualty insurance company are loss payments, loss adjustment expenses, commissions, premiums taxes, and general expenses.

4. (a) The combined ratio is the sum of the loss ratio and the expense ratio. The loss ratio is calculated by dividing the sum of losses and loss adjustment expenses by premiums earned. The expense ratio is calculated by dividing underwriting expenses by premiums written.

   The combined ratio measures underwriting profitability. If the ratio exceeds 1 (or 100 percent), the insurer has lost money from its underwriting activities. If the combined ratio is less than 1 (or 100 percent), it means that the insurer has made money from its underwriting activities.

   (b) It is important to remember that the combined ratio measures underwriting performance only. Insurance companies have a second source of revenues: investment income. An insurance company can lose money on its underwriting activities, but still be profitable overall if its investment income offsets the underwriting loss.

5. Although the assets of a life insurance company are quite similar to the assets of a property and casualty insurance company, there are three important differences. First, an important asset for many life insurance companies is policy loans. Policyholders who own cash-value life insurance products may borrow the cash value from the insurer. Life insurance policy loans are an interest-earning asset for a life insurance company. The second difference between a life insurance company's investments and the investments of a property and casualty insurance company is investment duration. Life insurers tend to invest with a longer time horizon, matching the maturity of the contracts offered with the investments backing the contracts. Finally, life insurers have "separate account" assets. Some insurers sell products that are interest-sensitive (e.g. variable life insurance, variable annuities, and private pension benefits). The assets backing these products are held separate from the insurer's general assets in a different account.

6. In life insurance, a policy reserve is defined as the difference between the present value of future benefits and the present value of future net premiums. Policy reserves or legal reserves are a formal recognition of a company's obligation to pay future benefits. Also, the reserve is a legal test of the company's solvency, since the company must hold assets equal to its legal reserves and other liabilities.

7. The major expenses for a life insurance company are benefits paid (death benefits, health benefits, annuity benefits, matured endowments, and policy surrenders), claims expenses, commissions, premium taxes, and general insurance expenses.

8. (a) The rates charged by insurers must meet certain regulatory objectives: they must be adequate, not excessive, and not unfairly discriminatory.
   (b) The rating system must also meet certain business objectives: rates should be easy to understand, stable, responsive, and encourage loss prevention.

9. (a) The rate is the price per unit of insurance.
   (b) The exposure unit is the unit of measurement used in insurance pricing. For example, in fire insurance, the exposure unit is $100 of coverage.
   (c) The pure premium refers to the portion of the rate that is needed to pay losses and loss adjustment expenses.
   (d) The gross premium is the gross rate multiplied by the number of exposure units. The gross rate, in turn, is the pure premium plus the loading for expenses, profit, and other contingencies.

10. (a) The pure premium is that portion of the gross rate needed to pay losses and loss-adjustment expenses. The pure premium can be determined by dividing the dollar amount of incurred losses and loss-adjustment expenses by the number of exposure units. A loading for expenses is then added to the pure premium to determine the gross premium.
    (b) Under the loss ratio method, the actual loss ratio is compared to the expected loss ratio, and the rate is adjusted accordingly. The actual loss ratio is the ratio of incurred losses and loss-adjustment expenses to earned premiums. The expected loss ratio is the percentage of the premium that is expected to be used to pay losses.

11. (a) Under schedule rating, each exposure is individually rated, and debits and credits are applied based on the physical characteristics of the exposure to be insured.
    (b) Experience rating means that the insured's past loss experience is used to determine the premium for the next policy period.
    (c) Retrospective rating means the insured's loss experience during the current policy period determines the actual premium paid for that period.

■ Answers to Application Questions

1. The policyholders' surplus is equal to total assets minus total liabilities. Total assets are $90 million and total liabilities are $70 million. Therefore, the policyholders' surplus is $20 million.

2. The gain from operations before dividends and taxes equals total revenues minus total expenses. Mutual Life Insurance Company's total revenues are $23.0 million (total premium income plus net investment income). The company's total expenses are the sum of each of the other listed items: death benefits paid, commissions paid, surrender benefits paid, licenses/taxes/fees, general expenses,

and annuity benefits paid. These cash outflows total \$17.38 million. Therefore, the company's gain from operations before dividends and taxes was \$5.62 million.

3. The pure premium is \$300. The pure premium is that portion of the gross rate needed to pay losses and loss-adjustment expenses. The pure premium is determined by dividing the dollar amount of incurred losses and loss-adjustment expenses by the number of exposure units. Incurred losses and loss-adjustment expenses are \$30,000,000. The number of exposure units is 100,000 cars insured for one year. The premium is \$30,000,000 divided by 100,000, or \$300.

4. (a) The loss ratio is 70 percent. The loss ratio is the ratio of incurred losses and loss-adjustment expenses to earned premiums. Incurred losses and loss-adjustment expenses are \$14 million, and earned premiums are \$20 million. The ratio, \$14 million divided by \$20 million, is 0.70 or 70 percent.
   (b) The expense ratio is 20 percent. The expense ratio is the ratio of expenses incurred to written premiums. Expenses incurred were \$5 million, and premiums written at \$25 million. The expense ratio is \$5 million divided by \$25 million, or 20 percent.
   (c) The combined ratio is 90 percent. The combined ratio is the sum of the loss ratio and the expense ratio (0.70 + 0.20 = 0.90).

5. (a) Property and casualty insurers are required to maintain certain loss reserves. A loss reserve is the estimated cost of settling claims that have already occurred but have not been paid as of the valuation date. Most specifically, the loss reserve is an estimated amount for:
      (1) Claims reported and adjusted but not yet paid
      (2) Claims reported and filed but not yet adjusted
      (3) Claims incurred but not yet reported to the company
   (b) (1) Under the judgment method, a loss reserve is established for each claim. This method is used when the number of claims in a particular line of insurance is too small or the variation in claims is too large to assign an average value to each claim.
      (2) Under the average value method, an average value is assigned to each claim. This method is used when the number of claims is large, the average amount of each claim is relatively small, and the claims are quickly settled.
      (3) Under the tabular value method, loss reserves are determined for certain claims for which the amounts paid depend on the length of life, duration of disability, remarriage of the beneficiary, and similar factors. The loss reserve is called the tabular reserve because the duration of the benefit period is based on data derived from mortality, morbidity, and remarriage tables.
   (c) The IBNR reserve is the loss reserve for claims that have already occurred but have not been reported. As of a specified date, such as December 31, a certain number of claims have already occurred but have not yet been reported to the insurer.

Chapter 8
Government Regulation of Insurance

■ Teaching Note

Students should understand the reasons for insurance regulation, so some class time should be devoted to this topic. Two timely and controversial issues should also be discussed: (1) the quality of state regulation and whether federal regulation such as a federal charter would be superior, and (2) the recent financial meltdown and severe recession that resulted in a breakdown in current regulation and the need to completely overhaul the financial services industry, which includes the regulation of insurers. Finally, the use of credit-based insurance scores in auto and homeowners insurance should be of interest to students.

■ Outline

I. Reasons for Insurance Regulation

A. Maintain Insurer Solvency
1. Premiums are paid in advance but protection extends into the future.
2. Policyholders are exposed to financial insecurity if insurers become insolvent and claims are unpaid.

B. Compensate for Inadequate Consumer Knowledge
1. Insurance contracts are complex legal documents.
2. It is difficult to compare and determine the monetary value of insurance contracts.
3. Protection is needed against unethical agents.

C. Ensure Reasonable Rates

D. Make Insurance Available

II. Historical Development of Insurance Regulation

A. Early Regulatory Efforts
1. State-chartered companies
2. State insurance commissions

B. *Paul v. Virginia*
1. Ruled that insurance was not interstate commerce
2. The states rather than the federal government had the right to regulate the insurance industry

C. South-Eastern Underwriters Association Case
1. Reversed the *Paul v. Virginia* decision—court ruled that insurance was interstate commerce when conducted across state lines and was subject to federal regulation
2. The decision cast doubt on the legality of private rating bureaus and the power of the states to regulate and tax the insurance industry.

D. McCarran-Ferguson Act (Public Law 15)
   1. The McCarran-Ferguson Act states that continued regulation and taxation of the insurance industry by the states are in the public interest
   2. It also states that federal antitrust laws apply to insurance only to the extent that the insurance industry is not regulated by state law

E. Financial Modernization Act of 1999
   1. Allows banks, insurers, investment firms, and other financial services firms to compete in financial markets outside their core area
   2. Both state and federal regulatory authorities are now involved in insurance regulation

III. Methods for Regulating Insurers

A. Legislation
   1. State laws—formation of insurance companies; licensing of agents and brokers; solvency regulation; rates; sales practices and claims practices; taxation; rehabilitation or liquidation of insurers; protection of consumer rights
   2. Federal laws—mail-order sales; advertising; sale of variable annuities; private pension plans

B. Courts
   1. Constitutionality of state insurance laws
   2. Interpretation of policy clauses and provisions
   3. Legality of administrative actions by state departments

C. State Insurance Departments

IV. Areas That Are Regulated

A. Formation and Licensing of Insurers

B. Solvency Regulation
   1. Admitted assets
   2. Reserves
   3. Surplus
   4. Risk-based capital
   5. Investments
   6. Dividend policy
   7. Reports and examinations
   8. Liquidation of insurers

C. Rate Regulation
   1. Prior-approval law
   2. Modified prior-approval law
   3. File-and-use law
   4. Use-and-file law
   5. Flex-rating law
   6. State-made rates
   7. No filing required

D. Policy Forms

E. Sales Practices and Consumer Protection
   1. Licensing of agents and brokers
   2. Unfair trade practices
   3. Twisting
   4. Rebating
   5. Complaint division
   6. Publications and brochures

F. Taxation of insurers

V. State versus Federal Regulation

A. Advantages of Federal Regulation
   1. Uniform state laws and regulations
   2. More effective negotiation of international insurance agreements
   3. More effective treatment of systemic risk
   4. Greater efficiency of insurers

B. Advantages of State Regulation
   1. Quicker response to local insurance problems
   2. Increased costs from dual regulation
   3. Poor quality of federal regulation
   4. Promotion of uniform laws by the NAIC
   5. Greater opportunity for innovation
   6. Unknown consequences of federal regulation

C. Shortcomings of State Regulation
   1. Inadequate protection of consumers
   2. Improvements needed in handling complaints
   3. Inadequate market conduct examinations
   4. Insurance availability studies conducted only in a minority of states
   5. Regulators overly responsive to the insurance industry

D. Repeal of the McCarran-Ferguson Act

VI. Modernizing Insurance Regulation

A. Need for modernization

B. Dodd-Frank Act and insurance regulation

C. Creation of Federal Insurance Office

D. Optional federal charter

VII. Insolvency of Insurers

A. Reasons for insolvencies

B. Methods of insuring solvency

VIII. Credit Based Insurance Scores

A. Arguments for insurance scores

B. Arguments against insurance scores

■ Answers to Case Application

a. The risk-based capital requirements have increased the minimum amount of capital for many insurers and decreased the chance that a failing insurer will exhaust its capital before it can be seized by regulators. Thus, the overall result is to limit an insurer's financial risk and reduce the cost of insolvency.

b. The company has a risk-based capital ratio of 75 percent, which is at the company action level. The company must file a plan with regulators to increase its risk-based capital.

c. Yes. The ratio has fallen below the mandatory control level of 35 percent. Regulators are required to seize the company and place it under regulatory control.

d. Common stocks are riskier than bonds. All things equal, the sale of stocks with the proceeds invested in government bonds will improve the risk-based capital ratio of Mutual Insurance.

■ Answers to Review Questions

1. The insurance industry is regulated for the following reasons:
   (a) To maintain insurer solvency
   (b) To compensate for inadequate consumer knowledge
   (c) To ensure reasonable rates
   (d) To make insurance available

2. (a) In *Paul V. Virginia*, the court held that insurance was not interstate commerce and that the states rather than the federal government had the right to regulate the insurance industry. This decision stood for about 75 years until the Supreme Court reversed it in 1944.
   (b) In the South-Eastern Underwriters Association Case in 1944, the Supreme Court ruled that insurance was interstate commerce when conducted across state lines and was subject to federal regulation.
   (c) To resolve the confusion and doubt that existed after the South-Eastern Underwriters decision, Congress passed the McCarran-Ferguson Act (Public Law 15) in 1945. The McCarran Act states that continued regulation and taxation of the insurance industry by the states are in the public interest and that federal antitrust laws apply to insurance only to the extent that the insurance industry is not regulated by state law.
   (d) The Financial Modernization Act of 1999 (also called the Gramm-Leach-Bliley Act) had a significant impact on insurance regulation. The legislation changed federal law that earlier prevented banks, insurers, and investment firms from competing fully in other financial markets outside their core area. As a result, insurers can now buy banks, banks can underwrite insurance and sell securities, brokerage firms can sell insurance, and a company that wants to provide insurance, banking, and investment services through a single entity can form a new holding company for that purpose.

3. Three principal methods are used to regulate the insurance industry:
   (a) Legislation
   (b) Courts
   (c) State insurance department

4. The principal areas that are regulated include the following:
   (a) Formation and licensing of insurers
   (b) Solvency regulation
   (c) Rate regulation
   (d) Policy forms
   (e) Sales practices and consumer protection

5. (a) Under prior-approval law, the rates must be filed and approved by the state insurance department before they can be used. In most states, if the rates are not disapproved within a certain period, such as 30 or 60 days, they are deemed to be approved.
   (b) Under a modified prior-approval law, if the rate change is based solely on loss experience, the insurer must file the rates with the state insurance department, and the rates can be used immediately (i.e., file and use). However, if the rate change is based on a change in rate classifications or expense relationships, then prior approval of the rates is necessary (i.e., prior approval).
   (c) Under a file-and-use law, insurers are only required to file the rates with the state insurance department, and the rates can be used immediately.
   (d) A variation of file and use is a use-and-file law. Under this law, insurers can put any rate changes into effect immediately, but the rates must be filed with the regulatory authorities within a certain period after first being used, such as 15 to 60 days.
   (e) Under a flex-rating law, prior approval of rates is required only if the rate increase or decrease exceeds a specific predetermined range.
   (f) A few states make rates that apply to specific lines of insurance, such as title insurance.
   (g) Finally, insurers may not be required to file their rates for certain lines with the state insurance department.

6. (a) Twisting is the inducement of a policyholder to drop an existing policy in another company because of misrepresentation or incomplete information by the agent. Twisting laws apply primarily to life insurance policies. The objective is to prevent policyholders from being financially harmed by replacing one life insurance policy with another.
   (b) Rebating is giving a premium reduction or some other financial advantage not stated in the policy as an inducement to purchase the policy. An example is rebating part of the agent's commission to the policyholder. Rebating is illegal in the vast majority of states.
7. Advocates of federal regulation present the following arguments in support of their position:
   (1) Uniform state laws and regulations
   (2) More effective negotiation of international insurance agreements
   (3) More effective treatment of systemic risk
   (4) Greater efficiency of insurers
   (a) The major advantages claimed for state regulation are as follows:
   (1) Quicker response to local insurance problems; Greater responsiveness to local needs
   (2) Increased costs from dual regulation Uniformity of laws by NAIC

(3) Poor quality of federal regulation
(4) Promotion of uniform laws by NAIC
(5) Greater opportunity for innovation

(b) Critics claim that state regulation has several shortcomings, which include the following:
(1) Inadequate protection of consumers
(2) Improvements needed in handling complaints
(3) Inadequate market conduct examinations
(4) Insurance availability studies conducted only in a minority of states
(5) Regulators overly responsive to the insurance industry

8. (a) Arguments for repeal of the McCarran Act include the following:
(1) The insurance industry no longer needs broad antitrust exemption.
(2) Federal legislation is needed because of the defects in state legislation.

(b) Arguments against repeal of the McCarran Act include the following:
(1) The insurance industry is already highly competitive.
(2) Small insurers would be harmed.
(3) Insurers may be prevented from developing common coverage forms.

9. To ensure solvency, insurers must meet certain risk-based capital requirements based on the riskiness of their investments and insurance operations. Insurers are also periodically examined by insurance examiners, annual financial statements must be submitted, and there are restrictions on the types of investments that insurers can purchase.

10. The risk-based capital requirements in life insurance are based on a formula that considers four types of risk—asset default risk, insurance risk, interest rate risk, and general business risk. The company's total adjusted capital is compared with the amount of required risk-based capital (RBC). Certain regulatory and company actions must be taken if an insurer's total adjusted capital falls below its required RBC level.

■ Answers to Application Questions

1. (a) The major regulatory obstacle is getting each state to approve the new annuity product in a timely manner because of differences and inconsistencies in 50 state laws. It may take as long as two years to get the new product approved in all states.

(b) The major advantage is that a federal charter would enable large life insurers to speed up the development of new products and get regulatory approval more quickly. As a result, large life insurers would be more competitive with other financial institutions at the national level.

(c) There are several arguments against a federal charter. First, there will be a dual system of insurance regulation with the present system and a new federal system. The cost of regulation will increase because new federal employees must be hired, a mandatory federal charter could result in the loss of premium taxes to the states, and taxpayers will have to pay more because of an additional layer of federal regulation.

Second, a new federal regulator would have the power to preempt state laws and may not agree with existing state laws that now affect policyholders and claimants under the present system. Dual regulation may result in regulatory overlaps and confusion among policyholders and insurers as to which laws should apply.

Finally, some consumer advocates believe that greater regulation of cash value products is needed at the state level to protect consumers. A federal charter may result in lower consumer protection standards if an insurer is chartered at the federal level.

2. (a) The agent is guilty of twisting. As stated earlier, twisting is the inducement of a policyholder to drop an existing policy in another company because of misrepresentation or incomplete information by the agent. The agent gave false information about the amount of money that could be withdrawn without penalty the first year. Also, the agent told Opal the annuity pays lifetime benefits. However, Opal is 75, and the annuity payments are scheduled to start at age 85. Once again, Opal has been misled by the agent's misrepresentations.

   (b) The state insurance department can discipline the agent by a fine. The state insurance department can also revoke the agent's license.

   (c) The insurer can be fined for improper supervision of agents. In addition, the state insurance department has the authority to revoke the insurer's license to do business in the state.

3. (a) It will take Auto Insurance a substantially longer period to get the rates approved in a prior approval state, and the rate increase granted may be less than the rate increase requested. In a file-and-use state, the rates can be used immediately once they are filed. In a flex-rating state, if the rate increase is within the band or range allowed by law, the higher rates can go into effect without undue delay.

   (b) As noted earlier, there may be a substantial delay before the rate increase is granted by the state insurance department. The request for a rate increase may also be denied, or the increase granted is less than the amount requested. Additionally, the needed rate increase may be delayed or denied because some politicians believe that auto insurance premiums are too high, and that auto insurance is becoming unaffordable. Finally, if the rate increase is denied or is inadequate, Auto Insurance may decide to reduce the volume of new business written and may even withdraw from the state. If other insurers react in a similar manner there could be a market shortage of auto insurance in the state, which can result in market inefficiencies and distortions.

4. (a) Insurers believe there is a high correlation between an applicant's credit record and future claim experience. Applicants as a group with poor or marginal credit records are more likely to submit more auto claims than applicants with good or superior credit records. Insurers maintain that credit-based insurance scores enable insurers to predict future claim experience with greater accuracy, that underwriting and rating may be more objective and consistent, and that most consumers who have good credit records and can be treated more equitably.

   (b) Proponents of credit-based insurance scores offer the following arguments:

   - There is a high correlation between an applicant's credit record and future claims experience.
   - Insurance scores benefit consumers since underwriting and rating can be more objective and accurate.
   - Most consumers have good credit scores and benefit from credit scoring.

   Critics of credit-based insurance scores present the following counterarguments:

   - The use of credit data in underwriting or rating discriminates against minorities and other groups.
   - Credit-based insurance scores may penalize consumers unfairly during business recessions.

Chapter 9
Fundamental Legal Principles

■ Teaching Note

This chapter discusses several important legal principles that are reflected in insurance contracts. Emphasis should be placed on the principles of indemnity, insurable interest, subrogation, and utmost good faith. These principles are important in understanding individual insurance contracts discussed later in the text. How insurance contracts are formed is another area that merits some discussion if time permits.

■ Outline

I. Fundamental Legal Principles

A. Principle of Indemnity
   1. Insurer agrees to pay no more than the actual amount of loss; the insured should not profit if a loss occurs.
   2. Actual cash value rule
      a. Replacement cost less depreciation
      b. Fair market value
      c. Broad evidence rule
   3. Exceptions to the principle of indemnity
      a. Valued policy
      b. Valued policy laws
      c. Replacement cost insurance
      d. Life insurance

B. Principle of Insurable Interest
   1. Insured stands to lose financially if a loss occurs.
   2. Purposes of an insurable interest
      a. To prevent gambling
      b. To reduce moral hazard
      c. To measure the amount of the insured's loss in property insurance
   3. Examples of an insurable interest
   4. Time that an insurable interest must be met

C. Principle of Subrogation
   1. Insurer is entitled to recover from a negligent third party any loss payments made to the insured.

2. Purposes of subrogation
   a. To avoid collecting twice
   b. To hold the negligent person responsible
   c. To hold down rates

D. Principle of Utmost Good Faith
   1. Higher degree of honesty is imposed on both parties to an insurance contract
   2. Areas of application—legal doctrines of misrepresentation, concealment, and breach of warranty

II. Basic Requirements of an Insurance Contract

A. Offer and Acceptance
   1. The applicant usually makes the offer.
   2. The insurer accepts or rejects the offer.
   3. Agent's authority to bind the insurer varies by type of insurance.
      a. Property and casualty insurance
      b. Life insurance

B. Consideration
   1. Insured's consideration generally is payment of the first premium.
   2. Insurer's consideration is the promise to perform the contract.

C. Competent Parties

D. Legal Purpose

III. Special Characteristics of an Insurance Contract

A. Insurance Is an Aleatory Contract
   1. An aleatory contract is a contract where the values exchanged may not be equal but depend on an uncertain event.
   2. In contrast, other commercial contracts are commutative. A commutative contract is one in which the values exchanged by both parties are theoretically equal.

B. Insurance Is a Unilateral Contract
   1. This means that only the insurer makes a legally enforceable promise to pay a claim or provide other services to the insured.
   2. In contrast, most commercial contracts are bilateral. Each party makes a legally enforceable promise to the other party.

C. Insurance Is a Conditional Contract
   1. Conditions are provisions that qualify or place limitations on the insurer's promise to perform.
   2. The insurer does not have to pay the claim if the policy conditions are violated. For example, in property insurance the insured must give immediate written notice of a loss in order to collect.

D. Insurance Is a Personal Contract
  1. Consent of the insurer is required to assign a property or liability insurance policy to another person.
  2. Since loss payments are usually money, they can be freely assigned without the insurer's consent.

E. Contract of Adhesion
  1. An insurance policy is offered on a "take-it-or-leave-it" basis with no bargaining over its terms.
  2. The result is that any ambiguity in the contract is strictly construed against the insurer.

IV. Law and the Insurance Agent

A. General Rules of Agency
  1. There is no presumption of an agency relationship.
  2. Agents may bind the principal by express authority, implied authority, or apparent authority.
  3. Principal is responsible for an agent's torts and is charged with agent's knowledge of notice.

B. Doctrines of Waiver and Estoppel
  1. Waiver—voluntary relinquishment of a known legal right
  2. Estoppel—representation of fact made by one person to another person that is reasonably relied on by that person to such an extent that it would be inequitable to allow the first person to deny the truth of the representation
  3. Practical significance of these legal doctrines—insurer may be required to pay a claim that it ordinarily would not have to pay

■ Answers to Case Application

a. (1) Jeff has an insurable interest equal to the full value of the building, since he would lose financially if a loss occurs.
   (2) Richard does not have an insurable interest, since the building was sold earlier.
   (3) Gateway Bank has an insurable interest equal to the unpaid balance of the loan. The mortgaged building serves as collateral for the loan.

b. No. A property insurance contract is a personal contract between the property insurer and policyholder. Richard cannot validly assign the policy to Jeff without the insurer's consent. In practice, new property owners get their own insurance, so consent of the previous insurer is not required.

c. Yes. A restaurant on the premises can substantially increase the probability of a fire or other loss. Premiums must be substantially higher if the restaurant were also covered. Since the physical hazard would be substantially increased and this fact was not disclosed, the insurer could attempt to deny coverage on the basis of a material concealment.

d. Subrogation applies when the insurer makes a loss payment to the insured because of a loss caused by the negligence of a third party. In this case an electrician improperly wired an electrical outlet, which caused the fire. The insurer could attempt to recover the loss payment from the negligent electrician or from the firm employing the electrician.

Answers to Review Questions

1. (a) The principle of indemnity states that the insurer agrees to pay no more than the actual amount of the loss; stated differently, the insured should not profit from a loss.
   (b) The normal rule for determining actual cash value is replacement cost less depreciation. However, some courts have ruled that fair market value should be used to determine the actual cash value. Finally, some states use the broad evidence rule to determine the actual cash value. The broad evidence rule means that the determination of actual cash value should include all relevant factors an expert would use to determine the value of the property.
   (c) Insureds are indemnified when they are restored to approximately the same financial position they were in before the loss occurred. Actual cash value, which is defined as replacement cost less depreciation, supports the principle of indemnity because it is designed to prevent profiting from insurance.

2. (a) A valued policy pays the face amount of insurance in the event of a total loss. Valued policies are used to insure valuable property, such as antiques, fine arts, rare paintings, and family heirlooms. Because of the difficulty of determining the actual value of the property at the time of loss, the insured and insurer both agree on the value of the property when the policy is first issued.
   (b) A valued policy law requires payment of the face amount of insurance if a total loss to real property occurs from a peril specified in the law.
   (c) Replacement cost insurance means there is no deduction for depreciation in determining the amount paid for a loss.

3. (a) The principle of insurable interest means that the insured must stand to lose financially if a loss occurs.
   (b) An insurable interest is required in every insurance contract to prevent gambling, to reduce moral hazard, and to measure the amount of the insured's loss in property insurance.

4. (a) Subrogation is taking over another person's right to recover in a legal action against a negligent third party.
   (b) It is used to support the principle of indemnity by preventing an insured from collecting twice, once from the insured and a second time from the negligent party.

5. (a) Representations are statements made by the applicant for insurance. A misrepresentation is a statement that is material, false, and relied on by the insurer. A material misrepresentation allows the insurer to void the policy.
   (b) Concealment is the intentional failure of the applicant for insurance to reveal a material fact to the insurer. The legal effect of a material concealment is the same as a misrepresentation—the contract is voidable at the insurer's option.
   (c) A warranty is a statement that becomes part of the insurance contract and is guaranteed by the maker to be true in all respects. For example, a bank may warrant that a guard will be on the premises 24 hours a day. In the past, under the common law, any breach of the warranty, even if slight, permitted the insurer to deny liability for the claim. However, this harsh doctrine has been substantially modified by court decisions and legislation.

6. Four requirements must be met for a valid insurance contract:
   (a) There must be an offer and acceptance.
   (b) There must be consideration to support the contract.

(c) There must be competent parties.
(d) To be enforced, the contract must be for a lawful purpose.

7. (a) The insurance contract is *aleatory.* The values exchanged are not equal. If a loss occurs, the insured may recover an amount in excess of the premiums paid. In a commutative contract, theoretically, there is an equal exchange of values.
   (b) The insurance contract is *unilateral* since only the insurer makes a legally binding promise. Most ordinary contracts are bilateral, and either party may be sued for breach of contract.
   (c) The contract is *conditional.* In order to collect, a number of duties must be complied with, such as giving prompt notice of loss and submitting proof of loss.
   (d) A property insurance contract is *personal.* Personal characteristics of the insured influence the insurer's willingness to issue a policy. Accordingly, these contracts can be validly assigned only with the consent of the insurer. A life insurance policy is not a personal contract and can be freely assigned.
   (e) Insurance is a *contract of adhesion* in that it is not bargained. Rather, the policy is offered on a "take-it-or-leave-it" basis, and any ambiguity is construed against the insurer.

8. The general rules are:
   (a) There is no presumption of agency. There must be evidence sufficient to establish that a person has authorized someone to act on his or her behalf.
   (b) The agent must have authority to bind the principal. There are three sources of such authority:
      (1) Expressed authority
      (2) Implied authority
      (3) Apparent authority
   (c) The principal is responsible for acts of an agent who is acting within the scope of his or her authority. Accordingly, the principal can be bound by contracts that the agent has entered into and is also liable for the agent's torts.

9. See 8(b) above.

10. *Waiver* is defined as the voluntary relinquishment of a known legal right. The insurer voluntarily waives a legal right under the contract, and in so doing cannot later deny payment of a claim by the insured.

    Estoppel is a representation of fact made by one person to a second person that is reasonably relied upon by that second person to such an extent that it would be inequitable to allow the first person to deny the truth of the representation. Based on the legal doctrine of estoppel, an insurer legally may be required to pay a claim that it ordinarily would not have to pay.

■ Answers to Application Questions

1. (a) (1) The Gateway Bank has an insurable interest in the boat because it serves as collateral for the loan. Thus the Gateway Bank has an insurable interest in the amount of $800,000.
      (2) The Harbor Company also has an insurable interest in the property. The Harbor Company is a bailee, and there may be possible legal liability if Jake is negligent while docking the boat and using the facilities. Also, the Harbor Company would lose rental income if the boat is damaged. The loss of rental income will support an insurable interest.

(3) The White Shark Fishing Company also has an insurable interest in the property. Jake is acting as the company's agent, and his negligence can be imputed to the White Shark Fishing Company. Thus, potential legal liability for a negligent act by Jake would support an insurable interest.

(b) Yes. Jake is using the boat and has a potential legal liability as a bailee if he should damage the boat. In addition, if the boat is damaged there may be a business income loss and the loss of earnings, which would also support an insurable interest.

2. Actual cash value (ACV) is replacement cost less depreciation. Replacement cost is \$6000. Depreciation is \$3000 because the dining room set is 50 percent depreciated. Ashley would collect \$3000 as shown by the following:

$$\begin{aligned} ACV &= \text{Replacement cost} - \text{depreciation} \\ &= \$6000 - \$3000 \\ &= \$3000 \end{aligned}$$

3. ACV is replacement cost less depreciation. Replacement cost of a new computer is \$500. Depreciation is \$250 because the laptop is 50 percent depreciated. Nicholas would collect \$250.

4. Under a valued policy, the face amount of insurance is paid if a total loss occurs. Megan would collect \$12,000.

5. (a) No. If Kristen collects from her own insurer, she gives her insurer the right to subrogate against the negligent driver who caused the accident. Her insurer then has the legal right to collect damages from the negligent driver or negligent driver's insurance company.

   (b) Subrogation supports the principle of indemnity since the insured does not profit from the loss. By giving up subrogation rights, the insured does not collect twice for the same loss, which supports the principle of indemnity.

6. (a) Three additional factors are (1) offer and acceptance, (2) consideration, and (3) competent parties.

   (b) The applicant for an auto insurance policy fills out the application for insurance. This constitutes the offer. The insurer then accepts or rejects the offer.

   Consideration by the applicant is payment of the premium or a promise to pay the premium plus an agreement to abide by the conditions specified in the policy. The insurer's consideration is the promise to do certain things as specified in the contract, which can include payment of a loss from an insured peril, providing certain services, or defending the insured.

   Each party must be legally competent and have legal capacity to enter into a binding contract. The applicant for auto liability insurance must not be a minor, insane, or intoxicated when he or she applies for insurance. Also, the liability insurer must have legal authorization to sell auto liability insurance.

7. (a) The insurer could attempt to deny payment of the claim on the basis of a material concealment.

   (b) The principal is responsible for all acts of the agents when they are acting within the scope of their authority. Also, knowledge of the agent is presumed to be knowledge of the principal with respect to matters within the scope of the agency. In this case, the agent knew that Nicole had a health problem and deliberately omitted this information from the application. This knowledge is imputed to the insurer.

Thus, if the insurer issues the policy, it cannot later attack the validity of the policy on the grounds that Nicole concealed a material fact. Based on the doctrine of estoppel, the company could not deny liability for the claim. The agent told Nicole the health information would be given to the underwriters. Nicole relied on the agent's statement and believed she had coverage. Since the insurer is responsible for the acts of agents, including acts of omission and fraud, the company cannot deny liability for the claim.

Chapter 10
Analysis of Insurance Contracts

■ Teaching Note

This chapter is divided into several parts. First, the basic parts of an insurance contract are discussed in some detail. The difference between a named-perils policy and an open-perils policy (formerly called "all-risks") should be made clear to the student. Second, the definition of an insured should be stressed. It is worthwhile and relevant to show students that they can be insured under another auto insurance policy if they are driving another person's car with permission. Third, endorsements and riders can be briefly discussed. Finally, some time should be spent on coinsurance in property insurance and coinsurance in health insurance. Coinsurance is a fundamental principle of insurance and is worthy of some class time.

■ Outline

I. Basic Parts of an Insurance Contract

- A. Declarations Page
  1. Nature—statements made by the applicant for insurance
  2. Purpose— to identify the insured(s), period of coverage, amounts of insurance, and property or activity that is insured
- B. Definitions—key definitions have quotation marks around them.
- C. Insuring Agreement
  1. Named-perils coverage
  2. Open-perils coverage (formerly called "all risks" coverage)
- D. Exclusions
  1. Excluded perils
  2. Excluded losses
  3. Excluded property
  4. Reasons for exclusions
     - a. Some perils are considered uninsurable
     - b. Extraordinary hazards are present
     - c. Coverage is provided by other contracts
     - d. Moral hazard is present to a high degree
     - e. Coverage is not needed by the typical insured
- E. Conditions
  1. Give notice of loss
  2. Preserve and protect property from further loss or damage
  3. Submit proof of loss

F. Miscellaneous Provisions
   1. Cancellation clause
   2. Appraisal
   3. Assignment
   4. Other insurance

II. Definition of the Insured

A. Named insured

B. First named insured

C. Other insureds

D. Additional insureds

III. Endorsements and Riders

A. Purpose—to add, delete, or modify provisions in the original contract

B. Riders may increase or decrease benefits or amounts of insurance

C. Riders may add coverage for new perils or losses

IV. Deductibles

A. Purposes of Deductibles
   1. Eliminate small claims
   2. Reduce premiums
   3. Reduce moral and morale hazard

B. Types of Deductibles
   1. Property insurance
      a. Straight deductible
      b. Aggregate deductible
   2. Health insurance
      a. Calendar-year deductible
      b. Elimination period

V. Coinsurance

A. Nature of Coinsurance

B. Purpose of Coinsurance—to achieve equity in rating

C. Coinsurance in Health Insurance

VI. Other Insurance Provisions

A. Types
   1. Pro-rata liability clause
   2. Contribution by equal shares
   3. Primary and excess coverage
   4. Coordination-of-benefits provision

B. Purpose is to prevent profiting from insurance and to support the principle of indemnity

■ Answers to Case Application

a. Donna is covered under her policy since she is driving a nonowned car with the permission of the owner. She is also covered under Mike's policy. However, Mike's policy is primary, and Donna's policy is excess. Accordingly, Donna's policy does not pay until Mike's policy limits are exhausted. Mike's policy will pay $100,000. Donna's policy pays nothing.

b. Mike's policy pays $250,000. Donna's policy pays $50,000.

c. $100,000

■ Answers to Review Questions

1. There are six basic parts to an insurance contract:
   (a) Declarations
   (b) Definitions
   (c) Insuring agreement
   (d) Exclusions
   (e) Conditions
   (f) Miscellaneous provisions

2. (a) All policies contain one or more exclusions. There are three major types of exclusions:
      (1) Excluded perils
      (2) Excluded losses
      (3) Excluded property
   (b) Exclusions are necessary for several reasons. The peril may be uninsurable by private insurers, extraordinary hazards may be present, coverage may be provided by other contracts, moral hazard may be present to a high degree, and coverage may not be needed by the typical insureds.

3. (a) *Conditions* are provisions inserted in the policy that qualify or place limitations on the insurer's promise to perform.
   (b) The legal significance is that if the policy conditions are not met by the insured, the insurer can refuse to pay the claim.

4. (a) The named insured is the person or persons named in the declarations section of the policy.
   (b) The policy may cover additional insureds even though they are not specifically named in the policy. For example, in addition to the named insured, the homeowners policy also covers other persons under age 21 who are in the care of the named insured or in the care of a household resident who is a relative. Examples are a foster child, a ward of the court, or a foreign exchange student.

5. (a) An *endorsement* or *rider* is a written provision that adds to, deletes, or modifies the provisions in the original contract.
   (b) An endorsement normally has precedence over any conflicting terms in the contract to which the endorsement is attached.

6. (a) With a straight deductible, the insured must pay a certain number of dollars before the insurer is required to make a loss payment. Such a deductible applies typically to each loss.
   (b) A calendar-year deductible is typically present in major medical policies. Eligible medical expenses are accumulated during the calendar year, and once they exceed the deductible amount, the insurer pays the promised benefits. Once the deductible is satisfied during the calendar year, no additional deductibles are imposed on the insured.
   (c) Commercial insurance contracts may contain an aggregate deductible. An aggregate deductible means that all losses that occur during a specified time period, usually a policy year, are accumulated to satisfy the deductible amount. Once the deductible is met, the insurer pays losses in excess of the deductible.

7. (a) See Chapter 10 in the text for an illustration of the coinsurance clause.
   (b) The fundamental purpose of coinsurance is to achieve equity in rating. Most property losses are partial and not total. If everyone insures only for the partial loss rather than the total loss, the premium rate for each $100 of insurance must be higher. This would be inequitable to the insured who wishes to insure his or her property to its full value. Thus, if the insured meets the coinsurance requirement he or she will receive a rate discount, and the person who is underinsured will be penalized through application of the coinsurance formula.

8. In health insurance, a typical coinsurance provision requires the insured to pay 20, 25, or 30 percent of covered medical expenses in excess of the deductible up to some maximum annual limit. The purposes are to reduce premiums and prevent overutilization of policy benefits.

9. (a) Other-insurance provisions are typically present in many insurance contracts. These provisions apply when more than one policy covers the same loss. The purpose of these provisions is to prevent profiting from insurance and violation of the principle of indemnity. Some important other-insurance provisions include the pro-rata liability clause, contribution by equal shares, and primary and excess insurance.
   (b) For an example of the pro-rata liability clause, see Chapter 10 in the text.

10. The primary insurer pays first, and the excess insurer pays only after the policy limits under the primary policy are exhausted. No more than 100 percent of the loss is paid. Thus, profiting from insurance by duplicate payment of benefits is avoided.

■ Answers to Application Questions

1. (a) The homeowners policy excludes certain types of property such as aircraft because the protection is not needed by the typical insured. To cover aircraft under the homeowners policy as personal property would be grossly unfair to other insureds who would then be required to pay substantially higher premiums for coverage they do not need.
   (b) Other reasons for exclusions include the following: (1) the peril may be considered uninsurable by commercial insurers; (2) extraordinary hazards are present; (3) coverage is provided by other contracts, (4) moral hazard is present; and (5) the loss may he difficult to determine and measure.
2. (a) (1) Loss A $1500
   Loss B $2500
   Loss C $9000

(2) Loss A $0

Loss B $0

Loss C $1000. The three losses total $16,000. Since the annual aggregate deductible is $15,000, the amount paid after the occurrence of loss C is $1000.

(b) The coordination-of-benefit provisions in most group plans are based on complex rules developed by the National Association of Insurance Commissioners (NAIC). The following summarizes the major provisions based on the NAIC rules:

- Coverage as an employee is usually primary to coverage as a dependent. For example, Karen and Chris Swift both work, and each is insured as a dependent under the other's group medical insurance plan. If Karen incurs covered medical expenses, her plan pays first. She then submits any unreimbursed expenses (such as the deductible and coinsurance payments) to Chris' insurer for payment. No more than 100 percent of the eligible medical expenses are paid under both plans.
- With respect to dependent children, if the parents are married or are not separated, the plan or the parent whose birthday occurs first during the year is primary; the plan of the parent with the later birthday is secondary. For example, if Karen's birthday is in January and Chris' birthday is in July, Karen's plan would pay first if her son is hospitalized. Chris' plan would be secondary.

3. (a) $25,000

$$\frac{\$200,000}{80\% \times \$500,000} \times \$50,000 = \$25,000$$

(b) $10,000

(c) The fundamental purpose of coinsurance is to attain equity in rating. Most property insurance losses are partial and not total. If everyone in the insured group insures only for the partial loss rather than for the total loss, the premium rate for each $100 of insurance would be higher. To promote rate equity, the insured who meets the coinsurance requirement is given a rate discount, while insureds who do not meet the coinsurance requirement at the time of loss are penalized according to the coinsurance formula.

4. (a) Company A has one-fifth of the total amount of insurance. Thus, based on the pro-rata liability clause, it will pay one-fifth of the $100,000 loss or $20,000. Company B and Company C will each pay $40,000.

(b) The purpose is to reduce profiting from insurance and violation of the principle of indemnity.

5. (a) Based on contribution by equal shares, each company shares equally in the loss until the share of each insurer equals the lowest limit of liability under any policy, or until the full amount of the loss is paid. Company A and Company B will each contribute $125,000 toward the loss.

At that point, the limit of liability under Company B's policy is exhausted. Therefore Company A will pay the remaining $50,000. Thus Company A pays a total of $175,000 and Company B pays $125,000.

(b) $25,000

6. Ashley must first satisfy the $1000 deductible. The insurer pays 80 percent of the remaining $9000 of medical expenses, or $7200. Ashley pays 20 percent of the remaining $9000, or $1800. Including the deductible, Ashley must pay a total of $2800.

7. The 80 percent coinsurance clause requires the insured to carry at least $800,000 of property insurance to avoid a coinsurance penalty (80% × $1,000,000). The clubhouse, however, is insured for only $600,000, or three-fourths of the required amount. Thus only three-fourths of the $100,000 loss will be paid, or $75,000.

Chapter 11
Life Insurance

■ Teaching Note

This chapter discusses the fundamentals of life insurance. Three areas are emphasized. The first part of the chapter discusses the impact of premature death on the different types of families and the need for life insurance. Emphasize that unmarried single students with no dependents to support generally do not need large amounts of life insurance other than the amount needed to pay funeral expenses and any outstanding student loans. However, if dependents are present, the need for life insurance is increased enormously.

The second area of emphasis deals with the various methods of determining how much life insurance to purchase. The chapter discusses three approaches—the human life value approach, needs approach, and capital retention approach. Stress that the needs approach is the major method used currently to determine the amount of new life insurance to purchase.

Finally, the remainder of the chapter discusses the major types of life insurance sold today. Two points should be emphasized. First, students should know that there is no one best life insurance policy. The best life insurance policy to purchase is the one that best meets the financial needs of the insured. Second, tell students that from a generic viewpoint, all life insurance policies can be classified into two categories—term insurance and cash value life insurance. However, many policies sold today include both term insurance and cash value insurance. It is also important to mention that the primary purpose of the legal reserve, which results in the accumulation of cash values, is to provide lifetime protection, and not to build up a savings account in the form of cash values. The savings feature is incidental to the fundamental goal of lifetime protection.

■ Outline

I. Premature Death

A. Meaning of Premature Death

B. Costs of Premature Death

C. Chances of Dying Prematurely

D. Economic Justification of Life Insurance

II. Financial Impact of Premature Death on Different Types of Families

A. Single People

B. Single-Parent Families

C. Two-Income Earners

D. Traditional Families

E. Blended Families

F. Sandwiched Families

III. Amount of Life Insurance to Own

A. Human Life Value Approach

1. Estimates the value of the family's share of the breadwinner's earnings
2. Principal advantage: Provides a crude measure of the economic worth of a person
3. Major defects: Other sources of income are not considered; assumes work earnings remain constant; employee benefits are ignored; amount of money allocated to the family can change quickly; discount rate selected is critical; effects of inflation are ignored.

B. Needs Approach

1. The amount of insurance required depends upon the existence and extent of certain needs:
   a. Estate clearance fund
   b. Income during the readjustment period
   c. Income during the dependency period
   d. Life income to the surviving spouse
   e. Special needs
   f. Retirement needs
2. Major advantages: Reasonably accurate; considers other assets and sources of income; considers needs other than premature death
3. Major disadvantages: Some unrealistic assumptions; needs may change; no consideration of inflation in its simplest form
4. Illustration of the Needs Approach (see Chapter 11)

C. Capital Retention Approach

1. Assumes the retention of capital
2. Steps
   a. Prepare a personal balance sheet
   b. Determine the amount of income-producing capital
   c. Determine the amount of additional capital needed

D. Interactive calculators on the Internet

E. Adequacy of life insurance for American families

F. Opportunity cost of buying life insurance

IV. Types of Life Insurance

A. Term Insurance

1. Temporary protection—pays the face amount if the insured dies within a stated period or before reaching a stated age
2. Renewable—policy coverage may be extended for additional time periods without evidence of insurability
3. Convertible—a permanent policy can be obtained without evidence of insurability
4. Types—yearly renewable; 5, 10, 15, or 20 years; term to age 65; decreasing term; reentry term, and return-of-premium term
5. Uses of term insurance—amount of income that can be spent on life insurance is limited; need for protection is temporary; term insurance can also be used to guarantee future insurability
6. Limitations of term insurance—premiums increase with age; not suitable for lifetime protection; no saving component

B. Whole Life Insurance
   1. Ordinary life insurance
      a. Level premiums and lifetime protection
      b. Actuarially overcharged during early years and undercharged during later years
      c. Excess premiums paid during early years are accumulated at compound interest and used to supplement the inadequate premiums paid during the later years
      d. Excess premiums reflected in a legal reserve, which is a liability item that must be offset by sufficient financial assets; as the legal reserve increases, the net amount at risk declines, and lifetime protection is possible
      e. Cash surrender values are available if the policyholder wishes to surrender the policy or obtain a policy loan
      f. Major advantages of ordinary life insurance are lifetime protection and a method for saving money
      g. Major disadvantage is that some people are underinsured after the policy is purchased
   2. Limited payment life insurance—premiums are payable only for a certain number of years and the policy become paid-up; no additional premiums are required

C. Endowment Insurance
   1. Pays the face amount if the insured dies within a stated period or if the insured is alive at the end of the period
   2. Not widely sold in the United States because of adverse tax consequences

V. Variations of Whole Life Insurance

A. Variable Life Insurance
   1. Death benefit and cash values vary according to the investment experience of a separate account
   2. Premiums are invested in equities or other investments
   3. Cash values are not guaranteed

B. Universal Life Insurance
   1. Unbundling of component parts
   2. Two forms of universal life insurance available
   3. Considerable flexibility
   4. Cash withdrawals permitted
   5. Favorable income tax treatment
   6. Limitations of universal life
      a. Misleading rates of return
      b. Possible consumer dissatisfaction if interest rates decline
      c. Right of the company to increase the mortality charge
      d. Lack of firm commitment to pay premiums

C. Indexed universal life insurance—a variation of universal life insurance with certain characteristics
   1. Minimum interest rate guarantee (usually lower than a regular universal life policy)
   2. Additional interest credited to the policy based on the favorable performance of a specific stock index, such as the S&P 500 stock market index (excluding dividends)
   3. Have a cap on the maximum upper limit of additional interest credited to the policy

4. May have a limit on the participation rate that applies to the index (may be less than 100 percent of the gain in the index)

D. Variable Universal Life
   1. Cash values can be invested in a wide variety of investments (e.g., stock fund, bond fund, global fund, money market fund)
   2. There is no minimum guaranteed rate of interest, and cash values are not guaranteed
   3. Policy has relatively high expense charges
   4. Policy has a substantial investment risk for the policyholder

E. Current Assumption Whole Life Insurance
   1. Nonparticipating whole life policy in which the cash values are based on the insurer's current experience with respect to mortality, investment income, and expenses
   2. Guaranteed minimum interest rate and minimum cash values; higher cash values may be available based on current interest rates
   3. Two forms
      a. Low-premium products
      b. High-premium products

VI. Other Types of Whole Life Insurance

A. Modified Life Insurance—lower premiums during the early years

B. Preferred Risks—life insurance sold to individuals with lower-than-average mortality experience
   1. High minimum amounts of insurance required
   2. Lower rates and more selective underwriting

C. Second-to-Die Life Insurance

D. Juvenile Insurance

E. Savings Bank Life Insurance

F. Industrial Life Insurance

G. Group Life Insurance

■ Answers to Case Application

a. Because the amount of money available for life insurance is limited, the five-year renewable and convertible policy should be purchased. A substantial amount of life insurance can be purchased for a relatively small premium.

b. Universal life insurance can be used to accumulate a college education fund. Universal life insurance permits cash withdrawals that can be used to pay college expenses.

c. Universal life insurance can be used to accumulate a down payment on a home. Universal life insurance permits cash withdrawals that can be used for a down payment on a home.

d. The major obstacle is that Sharon may be unable to pay the premiums necessary to meet all of her financial needs. Because cash value life insurance is more expensive than term insurance and the amount of income available for life insurance is limited, she may be substantially underinsured. Thus the amount of cash value life insurance purchased may not meet all of her financial needs.

e. Term insurance contracts are usually convertible. If the term policy is converted into an ordinary life or universal life policy, Sharon would be able to accumulate a fund for retirement.

■ Answers to Review Questions

1. (a) Premature death means that a person dies with outstanding unfulfilled financial obligations, such as children to support or a mortgage to be paid off.
   (b) There are at least four costs associated with premature death. There is the loss of the human life value; additional expenses may be incurred; because of insufficient income, some families may experience a reduction in their standard of living; and noneconomic costs are incurred, such as the emotional grief of surviving dependents.
   (c) The purchase of life insurance can be economically justified if a person has an earning capacity, and someone is dependent on those earnings for part or all of their financial support.

2. The financial impact of premature death on the family varies by type of family. Premature death can cause considerable economic insecurity if a family head dies in a single-parent family; in a family with two income earners with children; or in a traditional, blended, or sandwiched family. In contrast, if a single person without dependents dies, or an income earner in a two-income family without children dies, financial problems for the survivors are generally lower.

3. (a) The *human life value* is defined as the present value of the family's share of the deceased breadwinner's earnings. This approach crudely measures the economic value of a human life.
   (b) The human life value can be measured by the following steps:
      (1) Estimate the individual's average annual earnings over his or her productive lifetime.
      (2) Deduct federal and estate income taxes, Social Security taxes, life and health insurance premiums, and the costs of self-maintenance.
      (3) Determine the number of years from the person's present age to the contemplated age of retirement.
      (4) Using a reasonable discount rate, determine the present value of the family's share of earnings for the period determined in Step (3).

4. (a) (1) An estate clearance fund is immediately needed when a family head dies. Cash is needed for burial expenses, uninsured medical bills, installment debts, estate administration expenses, and estate, inheritance, and income taxes.
      (2) Income needs include income during the readjustment period, income during the dependency period, and life income to a surviving spouse.
      (3) Special needs include a mortgage redemption fund, educational fund, and emergency fund.
   (b) The capital retention approach is based on the assumption that the capital needed to provide income will not be liquidated. Three steps are involved. First, prepare a personal balance sheet that includes all death benefits from life insurance and other sources. Second, determine the amount of income-producing capital. Finally, determine the amount of additional capital (if any) that is needed.

5. (a) Term insurance provides temporary protection. Most term insurance policies are renewable and convertible to some stated age with no evidence of insurance. Term insurance policies do not accumulate cash values.
   (b) The major types of term insurance are yearly renewable term, 5, 10, 15, or 20-year term, term to age 65, decreasing term, reentry term, and return-of-premium term.
   (c) Term insurance is appropriate when income is limited or a temporary need must be met. Term insurance can also be used to guarantee future insurability.
   (d) Term insurance has several limitations. Premiums increase with age, term insurance is not suitable for lifetime protection, and because term insurance does not accumulate cash values, it is inappropriate for retirement or saving purposes.

6. (a) Ordinary life insurance provides lifetime protection. The premiums are level and payable for life. The policy develops an investment or savings element called cash surrender values, which result from the overpayment of premiums during the early years.
   (b) Under the level-premium method, the insured pays more for the insurance protection in the early years than is actuarially needed. The redundant or excess premiums are invested and used to supplement the inadequate premiums that are being paid in the later years of the policy. In recognition of the fact that the redundant premiums paid in the early years will be needed later, the policy develops a legal reserve. As the legal reserve increases, the net amount at risk declines. Thus, lifetime protection is possible.
   (c) Ordinary life insurance is appropriate when lifetime protection is desired or additional savings are desired.
   (d) Because of higher premiums that are required, some people may still be underinsured after an ordinary life policy is purchased. For the same premium, substantially higher amounts of term insurance could be purchased.

7. Variable life insurance is a policy in which the death benefit and cash surrender value vary according to the investment experience of a separate account maintained by the insurer. The entire reserve is held in a separate account and is invested in equities or other investments. The cash surrender values are not guaranteed.

8. (a) Universal life insurance is another form of whole life insurance. Universal life insurance has the following features:
      (1) Unbundling of protection, savings, and expense components
      (2) Two forms of universal life available
      (3) Relatively higher investment returns
      (4) Considerable flexibility
      (5) Cash withdrawals permitted
      (6) Favorable income tax treatment
   (b) Universal life insurance has several limitations. The rates of return advertised are gross rates and not net rates and do not reflect the true rate of return on the saving component. In addition, the attractiveness of universal life to consumers may decline as interest rates decline. The insurer also has the right to increase the mortality charge to the maximum permitted under the policy. Finally, because of the flexibility in paying premiums, some policyholders do not have a firm commitment to pay premiums.

9. (a) Variable universal life insurance allows the policyholder to invest the premiums in a wide variety of investments, such as stock funds, bond funds, or money market funds. There is no minimum guaranteed rate of interest on the cash values, and the cash values are not guaranteed. In addition, the policy has relatively high expense charges and a substantial investment risk.
   (b) There are two major differences. First, under a variable universal life policy, the policyholder can invest the cash values in a wide variety of investments; a universal life policy does not have this feature. Second, there is no minimum guaranteed interest rate on the cash values; a universal life policy has a guaranteed minimum interest rate.
   (c) Expense charges may include a front-end load, back-end surrender charge, state's premium and federal taxes, investment management fee, mortality and expense (M&E) charges, and administrative fees.

10. (a) Current assumption whole life insurance is a nonparticipating whole life policy in which the cash values are based on the insurer's current mortality, investment, and expense experience. The policy has an accumulation account that reflects the cash value under the policy. If the policy is surrendered, a surrender charge is deducted from the accumulation account. The policy also has a guaranteed minimum interest rate and a higher interest rate based on current market conditions and company experience. A fixed death benefit and maximum premiums are stated in the policy at the time of issue. Under the low-premium product, premiums are guaranteed only for a fixed period, such as three to five years. After that time, the insurer can change the premiums.
   (b) Many life insurers sell life insurance at lower rates to preferred risks whose mortality experience is expected to be lower than average. The insurance is carefully underwritten and is sold only to individuals whose health, history, weight, occupation, and habits indicate more favorable than average mortality experience. Certain minimum amounts of insurance must be purchased.

■ Answers to Application Questions

1. Richard has average annual earnings of \$60,000. One-third of his earnings, or \$20,000, is used for taxes, insurance premiums, and the costs of self-maintenance. His family receives the remaining \$40,000. The present value of \$1 payable for 20 years at a discount rate of 6 percent is \$11.47. Richard has a human life value of \$458,800 (\$40,000 × \$11.47).

2. (a) (1) If the discount rate is increased, the human life value is reduced. A smaller amount of money is needed because of a higher interest rate.
   (2) If the amount of average annual income going to the family is increased, the human life value is increased. More money is needed to provide a higher amount of income to the family.
   (3) If the period over which income is paid to the family is reduced, the human life value is also reduced. Less money is needed to provide the desired family income.
   (b) The human life value has several defects. First, other sources of income to survivors, such as Social Security, are ignored. Second, earnings and expenses are assumed to remain constant over time, and employee benefits are ignored. Third, the amount of money allocated to the family can change quickly because of a birth, death, or divorce. Also, the discount rate used is critical because the human life value can be substantially increased by assuming a lower rate. Finally, the effects of inflation on earnings and expenses are ignored.

3. (a) Kelly needs $583,000 of new life insurance, excluding Social Security. She has the following cash needs:

Funeral costs and uninsured medical bills	$ 10,000
Pay off mortgage	150,000
Pay off car loan and credit card debts	15,000
College education fund for son	150,000
Total cash needs	$325,000

Kelly also has the following income needs:

Monthly income support of $2000 for 17 years for her son	$408,000
Total needs	$733,000
Less existing resources (checking account, IRA, 401K plan, individual and group life insurance)	–150,000
	$583,000 new life insurance needed, excluding Social Security

(b) Kelly needs $419,800 of new life insurance if Social Security benefits are considered. Cash needs remain the same. If Social Security benefits of $800 monthly are considered, only $1200 monthly for 17 years, or $244,800, is needed.

	$325,000	cash needs
	244,800	income needs, including Social Security
Total needs	$569,800	
Less existing resources	–150,000	
	$419,800	new life insurance needed

4. Janet needs an additional $15,000 of life insurance to pay off the mortgage, credit cards, and car loan debts. She also needs $400,000 of new life insurance to attain her income objective of $2000 monthly for her family.

The capital retention approach requires three steps. First, prepare a personal balance sheet.

Assets	
House	$250,000
Checking account	1,000
Individual life insurance	100,000
Total	$351,000

Liabilities	
Mortgage payoff	$100,000
Credit cards and car loan	16,000
Total	$116,000

Second, determine the amount of income producing capital.

Total assets	$351,000
Less:	
Mortgage payoff	$100,000
Credit cards and car loan	16,000
Non income-producing capital (value of home)	250,000
Total	–$15,000

Janet has no income-producing capital. In fact, she will need an additional $15,000 of life insurance just to pay off her debts.

Finally, determine the amount of additional capital needed.

Income objective for family	$ 30,000 yearly
Capital now available for income	0
Social Security survivor benefits	10,000
Income shortage	$ 20,000
Total new capital required to meet income objective ($20,000/.05)	$400,000

5. Megan purchased a universal life insurance policy.

6. Todd is considering the purchase of a variable universal life insurance policy.

7. (a) The face amount of insurance under a variable life insurance policy will increase if the investment results are favorable. Variable universal life insurance and indexed universal life insurance are also acceptable answers.
   (b) Decreasing term insurance equal to the individual's human life value can be used to insure the individual at the lowest possible annual premium.
   (c) A variable universal life insurance policy allows the policyholder to determine how the premiums will be invested.
   (d) A universal life policy allows cash withdrawals, such as a down payment on a home or payment of college tuition.
   (e) A preferred risk policy is sold to individuals with favorable mortality experience. Premiums are relatively lower under a preferred risk policy.
   (f) Under a modified life insurance policy, premiums are lower for the first three to five years and higher thereafter.
   (g) A second-to-die policy is designed to pay estate taxes when a surviving spouse dies.

8. (a) Decreasing term insurance can be used to pay off the remaining mortgage balance; it can also be used to provide monthly income payments to his family. However, because term insurance has no cash values, decreasing term cannot be used to accumulate a retirement fund or to pay college expenses of the children.

   (b) Ordinary life insurance can be used to pay off the mortgage, to accumulate a retirement fund, and to pay monthly income payments to the family. The cash values could be borrowed to pay college expenses when the children reach college age. The policy could also be surrendered for its cash value to pay college expenses.

   (c) Universal life insurance can be used to pay off the mortgage, to accumulate a sizable retirement fund, and to pay monthly income to the family. In addition, universal life insurance allows cash withdrawals that could be used to pay college expenses.

   (d) Variable universal life insurance can be used to pay off the mortgage, to accumulate a sizable retirement fund, and to pay monthly income to the family. A variable universal life insurance policy also allows the withdrawal of funds that could be used to pay college expenses.

Chapter 12
Life Insurance Contractual Provisions

■ Teaching Note

This chapter analyzes the basic contractual provisions that appear in life insurance contracts, many of which are required by state law. Students should be able to understand most provisions without extensive discussion.

With respect to dividends, point out that dividends on a participating cash value policy are relatively small during the early years and then increase, aided by excess interest on a growing legal reserve. Insurers occasionally change their dividend scales. In recent years, dividends have been substantially reduced because of the sharp decline in interest rates. Note also that universal life policies do not pay dividends.

This chapter also discusses nonforfeiture options and settlement options. Point out that state law regulates the minimum nonforfeiture values, but insurers can be more liberal.

Finally, it is worthwhile to discuss briefly the additional life insurance benefits that can be added to a policy. These include the waiver-of-premium provision, guaranteed purchase option, accidental death benefit rider, cost of living rider, and accelerated death benefits rider.

■ Outline

I. Life Insurance Contractual Provisions

A. Ownership Clause
   1. Possible owners: the insured, beneficiary, or a third party
   2. Owner's rights: may change the beneficiary (unless irrevocable); surrender the policy; receive dividends; elect settlement options
   3. Ownership change

B. Entire Contract Clause

C. Incontestable Clause

D. Suicide Clause

E. Grace Period

F. Reinstatement Clause
   1. Allows a lapsed policy to be reinstated
   2. Requirements: evidence of insurability; payment of past-due premiums; repayment or reinstatement of policy loans; must be reinstated within a certain period, such as three years or five years; policy must not have been surrendered for its cash value

3. Advantages: lower premiums; no additional acquisition expenses; cash values and dividends are higher; suicide and incontestable clause may have expired

G. Misstatement of Age or Sex Clause

H. Beneficiary Designation
1. Primary and contingent
2. Revocable and irrevocable
3. Specific and class

I. Change of Plan Provision

J. Exclusions and Restrictions
1. Suicide clause
2. War clause
3. Aviation exclusion

K. Payment of Premiums

L. Assignment Clause

M. Policy Loan Provision
1. Nature—the policyholder can borrow the cash values
2. Advantages—a low annual percentage rate; no paperwork; flexibility in repaying
3. Disadvantages—heavy borrowing may cause policy to lapse; the amount of protection is reduced

N. Automatic Premium Loan
1. Nature—allows overdue premiums to be paid by borrowing from the cash value at the end of the grace period
2. Purpose—to prevent the policy from lapsing
3. Main disadvantages—may be overused; amount of protection is reduced

II. Dividend Options

A. Sources of Surplus for Dividends
1. Higher interest earnings than assumed
2. Lower mortality than expected
3. Lower operating expenses than expected

B. Ways of Taking Dividends
1. Cash
2. Reduction of premiums—the dividend is used to reduce the next premium coming due
3. Accumulate at interest—company guarantees a minimum rate on dividend accumulations but may pay a higher rate depending on market conditions
4. Paid-up additions—the dividend can be used as a single premium to buy additional amounts of paid-up insurance
5. Term insurance—in some policies, the dividend can be used to purchase term insurance

C. Other Uses of Dividends
1. Can convert the policy into a paid-up contract
2. Can mature the policy as an endowment

III. Nonforfeiture Options

A. Cash Value

1. Surrender of the policy for its cash value
2. Little or no cash value during the early years
3. Payment of cash value can be delayed for six months if policy is surrendered (seldom used)

B. Reduced Paid-up Insurance

1. Cash value is used to buy a reduced paid-up policy
2. Appropriate option for someone with limited income who still needs life insurance

C. Extended Term Insurance—cash value is used to extend the full face amount of insurance into the future as term insurance for a certain number of years and days

IV. Settlement Options

A. Cash—most proceeds are paid as cash

B. Interest Option

1. Interest paid to the beneficiary
2. Minimum interest rate guaranteed
3. Beneficiary can make withdrawals
4. Advantages: flexibility; may allow a change to another option; can be used in a variety of circumstances
5. Main disadvantage: other investments may yield higher return

C. Fixed-Period Option

1. Pays monthly, quarterly, semiannual, or annual payments
2. Death of beneficiary—remaining payments go to a contingent beneficiary or to the estate of primary beneficiary if the beneficiary dies before receiving all payments
3. Uses—where income is needed for a definite period of time, such as the Social Security "black-out" period; readjustment period; family dependency period
4. Limitations—inflexible since partial withdrawals are not allowed

D. Fixed-Amount Option

1. Specified amount paid to beneficiary each time period
2. Advantages: considerable flexibility on withdrawals; may be allowed to change to another option or increase and decrease the fixed amount

E. Life Income Options

1. Life income only
2. Life income with guaranteed period
3. Life income with guaranteed total amount
4. Joint-and-survivor life income option

F. Advantages of Settlement Options

1. Periodic income to the family
2. Guaranteed principal and interest
3. Can be useful in life insurance planning
4. Long-term guarantees
5. No additional cost

G. Disadvantages of Settlement Options
   1. Higher yields elsewhere
   2. Settlement agreement may be inflexible and restrictive
   3. Life income options not attractive at younger ages
   4. Insurance windfall can create problems for the beneficiary

H. Use of a Trust
   1. Desirable when the amount of insurance is substantial and judgment in making payouts is required
   2. Limitations: expense involved; no guarantee of investment results

V. Additional Life Insurance Benefits

A. Waiver-of-Premium

B. Guaranteed Purchase Option

C. Double Indemnity Rider

D. Cost-of-Living Rider

E. Accelerated Death Benefits Rider

■ Answers to Case Application

a. The death claim must be paid, since the insured died during the grace period when the policy was still in force.

b. The death claim is paid, since the two-year suicide period has expired.

c. The policy proceeds will be reduced. Under the misstatement-of-age clause, the amount payable is the amount that the premium would have purchased at the correct age.

d. Under the guaranteed purchase option, she would be permitted to purchase additional amounts of life insurance with no evidence of insurability. The first option can be exercised at age 28.

e. Under the waiver-of-premium provision, all premiums would be waived after a six-month waiting period if she is totally disabled. Under some policies, a retroactive refund of the premiums paid during the first six months would be paid.

f. The proceeds can be made payable to a guardian or trust on behalf of the mentally disabled son. The proceeds can be paid in cash or under the fixed amount or fixed period option.

g. Under the reinstatement clause, a lapsed policy can be reinstated. Evidence of insurability must be provided, all overdue premiums plus interest must be paid, and any policy loans must be repaid or reinstated through payment of past-due interest.

h. The cash value can be used to purchase a reduced paid-up policy. Dividends can also be used to pay up the policy by retirement; however, this must be done several years prior to retirement so that the accumulated dividends and policy cash values are sufficient to provide for a paid-up policy at retirement. Also, under the extended term insurance nonforfeiture option, the face amount of insurance can be extended into the future for a certain number of years and days. The cash value is used as a net single premium to extend the face amount of the policy into the future as term insurance for a limited period.

i. The policy can be surrendered for its cash value, or the cash value can be borrowed under the policy loan provision. The cash can be used to help meet her basic needs.

j. The death claim must be paid, since the two-year contestable period has expired.

■ Answers to Review Questions

1. (a) The *suicide clause* states that if the insured commits suicide within two years after the policy is issued, the face amount of insurance is not paid. There is only a refund of the premiums paid.
   (b) The *grace period* allows the policyholder a period of 31 days to pay an overdue premium. Universal life and other flexible premium policies have a longer grace period, such as 61 days. The insurance remains in force during the grace period.
   (c) The *reinstatement clause* allows the policyholder to reinstate a lapsed policy. Certain requirements must be fulfilled (see Answer 3(a)).

2. (a) The *incontestable clause* states that the company cannot contest the policy after it has been in force two years during the insured's lifetime.
   (b) The purpose of the incontestable clause is to protect the beneficiary from financial hardship if the company tries to deny payment of the claim on the grounds of material misrepresentation or concealment years after the policy was first issued.

3. (a) To reinstate a lapsed policy, the following requirements must be met:
   (1) Evidence of insurability must be furnished.
   (2) All overdue premiums plus interest must be paid from their respective due dates.
   (3) All policy loans must be repaid or reinstated through payment of past-due interest.
   (4) The policy must not have been surrendered for its cash value.
   (5) The policy must be reinstated within three or five years.
   (b) The advantages are lower premiums based on the insured's original age, acquisition expenses do not have to be paid a second time, cash values and dividends are higher, and the suicide and incontestable clause may have already expired.
   The major disadvantage is that a substantial cash outlay may be required because of the premiums and interest that must be paid. Also, reinstating an older policy may be more expensive because newer policies may have lower premiums; it may cost less to purchase a new policy even though the insured is older when the new purchase is made.

4. (a) A *primary beneficiary* is the party who is first entitled to receive the policy proceeds upon the insured's death. A *contingent beneficiary* is entitled to the proceeds if the primary beneficiary dies before receiving the guaranteed number of payments under an installment settlement option.
   (b) A *revocable beneficiary* designation means that the policyholder can change the beneficiary without the beneficiary's consent. An *irrevocable beneficiary* designation is one that cannot be changed without the beneficiary's consent.
   (c) A *specific beneficiary* means the beneficiary is specifically named and identified. In contrast, under a *class beneficiary*, a specific person is not named but is a member of a group designated as beneficiary, such as "children of the insured."

5. (a) Under an absolute assignment, all ownership rights in the policy are transferred to a new owner. For example, the policyholder may wish to donate a life insurance policy to a church by an absolute assignment; the church is the new owner of the policy.
   (b) Under a collateral assignment, the policyholder assigns a cash value policy to a creditor as collateral for the loan. Under this type of assignment, only certain rights are transferred to the creditor to protect its interest, and the policyholder retains the remaining rights.

6. The policy loan provision allows the policyholder to borrow the cash value at a specified rate of interest stated in the policy. If the insured dies with the loan outstanding, the face amount of insurance is reduced.
   (a) The policyholder must pay interest on the loan to offset the loss of interest income to the insurer. If the loan had not been granted, the insurer could have earned interest on the funds.
   (b) The major advantage of a policy loan is the relatively low rate of interest paid as compared with interest on credit cards. Also, there is no credit check and the policyholder has complete financial flexibility in determining the amount and frequency of loan repayments.

   The major disadvantage is that the policyholder is not legally required to repay the loan, and the policy could lapse if the total indebtedness exceeds the available cash value. Also, the face amount of insurance is reduced if the insured dies with the loan outstanding.

7. (a) Dividends are paid from three principal sources: (1) the difference between expected and actual mortality experience, (2) excess interest earnings on the assets required to maintain legal reserves, and (3) the difference between expected and actual operating expenses.
   (b) There are several ways in which dividends can be taken: (1) cash, (2) reduction of premiums, (3) accumulate at interest, (4) paid-up additions, and (5) term insurance in some policies.
   (c) No. Because the operating experience of the insurer cannot be guaranteed, dividends cannot be guaranteed.

8. (a) If a cash value policy is purchased, the policyholder pays more than is actuarially necessary for the life insurance protection. Thus if the insurance is no longer needed, the policyholder should get something back. This payment to a withdrawing policyholder is known as a cash surrender value. The cash values during the early policy years are relatively small, but over a long period, the cash values can be sizable. The policy can be surrendered for its cash value, at which time all benefits under the policy cease.
   (b) Under the reduced paid-up option, the cash surrender value is applied as a net single premium to purchase a reduced paid-up policy. The reduced paid-up policy is the same as the original policy, but the face amount is reduced.
   (c) Under the extended term insurance option, the net cash surrender value is used as a net single premium to extend the full face amount of the policy (less any indebtedness) into the future for a certain number of years and days. In effect, the cash value is used to purchase a paid-up term insurance policy equal to the original face amount (less any indebtedness) for a limited period.

9. (a) Under the interest option, the policy proceeds are retained by the insurer, and interest is paid periodically to the beneficiary. Insurers typically guarantee a minimum interest rate on the policy proceeds retained under the interest option.
   (b) Under the fixed-period (income for elected period) option, the policy proceeds are paid to a beneficiary over some fixed period of time. Both principal and interest are systematically liquidated under this option.
   (c) Under the fixed-amount (income of elected amount) option, a fixed amount is periodically paid to the beneficiary. The payments are made until both principal and interest are exhausted.

(d) The policy proceeds can be paid under a life income option. The major life income options are life income only with no-refund feature, life income with guaranteed period, life income with guaranteed total amount, and joint-and-survivor income option.

10. In many current waiver-of-premium provisions, total disability means that because of disease or bodily injury, the insured cannot do any of the essential duties of his or her job or of any job for which he or she is suited based on education, training, or experience. If the insured can perform some but not all of these acts and duties, the disability is not considered to be total, and premiums will not be waived. If the insured is a minor and is attending school, premiums are waived if the minor is unable to go to school.

    Another definition of total disability found in some policies is more liberal. Total disability is initially defined in terms of one's own occupation. For the first two years, total disability means the insured cannot work in the occupation that he or she had at the time the disability occurred. After the initial period expires, the definition becomes stricter. The insured is considered totally disabled only if he or she cannot work in an occupation for which he or she is qualified by education, training, and experience.

■ Answers to Application Questions

1. (a) The dividend could be used to reduce future premiums. As a result, annual premium payments will be reduced.
   (b) The dividend could be used to purchase paid-up additions to the policy. As a result, the total amount of insurance would increase.
   (c) Dividends can be used to purchase paid-up additions, or the dividends could be accumulated under the dividends accumulation option. As a result, Richard would have additional cash at retirement.
   (d) The dividends could be used to convert the policy into a paid-up contract by the time of retirement. The dividends could be used to purchase paid-up additions or to accumulate under the dividends accumulation option. The policy becomes paid-up whenever the reserve value under the basic contract plus the reserve value of the paid-up additions or deposits equal the net single premium for a paid-up-policy at the insured's attained age.
   (e) The dividends should be used to purchase paid-up additions. Interest earnings credited to the legal reserve under the paid-up addition are not taxed as current interest to the policyholder. The dividend accumulations option should not be used if tax considerations are important. Although the dividends are not taxable, the interest earnings on the dividend are taxed as ordinary income.

2. (a) The proceeds could be paid under the fixed period or fixed amount settlement option until the son attains age 18.
   (b) Premiums would be waived under the waiver-of-premium provision if Kathy satisfies the definition of disability stated in the policy. In older policies, the first six months of premiums paid would be refunded.
   (c) The cash value could be placed under the life income option with 10 years of guaranteed payments. She will receive income for life with at least 10 years of guaranteed payments.
   (d) Under the accelerated death benefits rider, part or all of the death proceeds can be paid to Kathy while she is still alive. She can use the funds to pay her medical bills and other obligations.
   (e) She can exercise the guaranteed purchase option, which allows her to obtain additional life insurance without evidence of insurability. The first option could be exercised three years after the policy is purchased.

3. The insurer must pay the death claim, because the two-year contestable period has already expired. Jim concealed the fact that he had a serious heart ailment. The insurance company had two years to discover this material concealment. Since the heart ailment was discovered after the contestable period had expired, the company must pay the claim.

4. (a) Under this provision, if the insured becomes totally disabled from bodily injury or disease before some stated age, all premiums coming due during the period of disability are waived. A six-month waiting period must also be satisfied. Some policies have a shorter waiting period. The insured must also satisfy the definition of total disability stated in the policy, and he or she must furnish proof of disability satisfactory to the company. There is a retroactive refund of premiums paid by the insured during the first six months of disability if premiums are being waived under the contract. Some newer policies do not provide for the retroactive refund of premiums. The purpose of the waiver-of-premium provision is to relieve the insured of premium payments during the period of total disability.

   (b) Under the guaranteed purchase option, the insured can purchase additional amounts of life insurance at specified times in the future without evidence of insurability. The purpose of the option is to guarantee the insured's future insurability.

   (c) The double indemnity rider doubles the face amount of insurance if death occurs as a result of an accident within 90 days of the accident. The purpose is to pay an additional benefit if death results from an accidental bodily injury. From an economic viewpoint, the double indemnity benefit cannot be justified because the human life value is not doubled if death occurs as a result of an accident, and most insureds will die as a result of disease.

   (d) A cost-of-living rider allows the policyholder the right to purchase one-year term insurance equal to the percentage increase in the Consumer Price Index with no evidence of insurability. The purpose is to protect the real purchasing power of the death proceeds.

   (e) The accelerated benefits rider pays part or all of the life insurance death benefit to a terminally ill insured before death occurs. The purpose is to pay part of the benefits to a terminally ill insured while he or she is still alive to help pay for medical bills and other expenses.

Chapter 13
Buying Life Insurance

■ Teaching Note

This chapter is a relatively short but important chapter. The various methods for determining the cost of life insurance should be reviewed briefly. Students could be assigned the case application question, which illustrates the traditional net cost method and the interest-adjusted cost method. Emphasize the wide variation in cost among life insurers. In addition to cost, emphasize the importance of selecting a financially sound insurer. Finally, students should understand how to shop for life insurance.

■ Outline

I. Determining the Cost of Life Insurance

A. Traditional Net Cost Method—major defect is that the time value of money is not considered

B. Interest Adjusted Method
  1. Surrender cost index—computed on the assumption that the policy is surrendered after a certain time period
  2. Net payment cost index—assumes that the policy is not surrendered

C. Substantial Cost Variation among Insurers

D. Obtaining Cost Information
  1. Sources: Web sites, certain toll-free price quoting services, and life insurance agents
  2. Shop for a policy, not a company; compare only similar plans; ignore small differences in cost; use the cost index only to buy a new policy; do not base type of policy purchased solely on a cost index; consider other factors besides cost

II. Rates of Return on Saving Component

A. Linton Yield

B. Yearly Rate of Return Method

III. Taxation of Life Insurance

A. Federal Income Tax

B. Federal Estate Tax

IV. Shopping for Life Insurance

A. Determine whether you need life insurance

B. Estimate the amount of insurance needed

C. Decide on the best types of insurance for you

D. Decide whether you want a policy that pays dividends
   1. Nonparticipating policy—guaranteed net cost and lower initial outlay
   2. Participating policy—may be a better buy in the long run if interest rates remain high

E. Shop around for a low-cost policy

F. Consider the financial strength of the insurer

G. Deal with a competent agent

V. Appendix—Calculation of Life Insurance Premiums

■ Answers to Case Application

a.

Total premiums for 20 years	$4,600
Subtract dividends for 20 years	1,613
Net premiums for 20 years	$2,987
Subtract the cash value at the end of 20 years	$3,620
Insurance cost for 20 years	–$ 633
Net cost per year (–$633/20) =	–$31.65
Net cost per $1000 per year (–$31.65/10)	–$ 3.17

b.

Total premiums for 20 years each accumulated at 5%	$ 7,985
Subtract dividends for 20 years, each accumulated at 5%	2,352
Net premiums for 20 years	$ 5,633
Subtract the cash value at the end of 20 years	3,620
Insurance cost for 20 years	$ 2,013
Amount to which $1 deposited annually will accumulate to in 20 years at 5%	$34.719
For the interest-adjusted cost per year, divide $2013 by $34.719	$ 57.98
For the cost per $1000 per year, divide $57.98 by 10	$ 5.80

c.

Total premiums for 20 years, each accumulated at 5%	$ 7,985
Subtract dividends for 20 years, each accumulated at 5%	2,352
Insurance cost for 20 years	$ 5,633
Amount to which $1 deposited annually will accumulate to in 20 years at 5%	$34.719
For the interest-adjusted cost per year, divide $5633 by $34.719	$162.25
For the cost per $1000 per year, divide $162.25 by 10	$ 16.22

■ Answers to Review Questions

1. The most glaring defect is that the traditional net cost method did not consider the time value of money. Interest that the policyholder could have earned on the premiums by investing them elsewhere was not considered. As a result, the true cost of insurance was understated.

2. (a) The interest-adjusted cost method is a more accurate cost method since the time value of money is taken into consideration by the application of an interest factor to each element of cost.
   (b) The surrender cost index is based on the assumption that the insured will surrender the policy at the end of some time period. Under this method, the annual premiums and dividends are accumulated at 5 percent interest. The cash value at the end of the period is then subtracted from the net premiums, which results in an interest-adjusted cost for the time period under consideration. The final step is to convert the interest-adjusted cost for the entire period into an annual cost. This is done by dividing the interest-adjusted cost by the annuity due factor of $34.719, which is the amount to which $1 deposited annually will accumulate to in 20 years at 5 percent.
   (c) The net payment cost index is useful if the insured intends to keep the policy in force and cash values are of secondary importance. The net payment cost index measures the relative cost of a policy if death occurs at the end of some specified time period, such as 10 or 20 years. The net payment cost index is calculated in a manner similar to the surrender index except that the cash value is not subtracted.

3. The negative returns during the early years can be explained by the heavy first-year acquisition and administrative expenses incurred when the policy is first sold. In recognition of the first-year load, cash value policies generally have little or no cash value at the end of the first year, and the cash values are relatively low during the first few years of the policy.

4. The Linton yield is the average annual rate of return on a cash value policy if it is held for a specified number of years. It is based on the assumption that a cash value policy is a combination of insurance protection and a savings fund. To determine the average annual rate of return for a given period, that part of the annual premium that is deposited into the savings fund must be determined. This can be done by subtracting the cost of the insurance protection for that year from the annual premium (less any dividend). The balance of the premium is the amount that can be deposited into the savings fund. Thus, the average annual rate of return is the compound interest rate that is required to make the savings deposits equal the guaranteed cash value in the policy at the end of a specified period.

5. The yearly rate of return is based on a formula developed by Joseph M. Belth (see text for formula). Based on assumed benchmark prices per $1000 of protection for the various ages, the yearly rate of return on the saving component in a cash value policy can be calculated.

6. (a) Life insurance premiums paid in a lump sum to a designated beneficiary generally are received income tax free by the beneficiary.
   (b) Dividends on life insurance policies generally are received income-tax free. However, interest on dividends retained under the dividend accumulations option is taxable to the policyholder.
   (c) The annual increase in a cash value policy is income-tax free. However, if the policy is surrendered for its cash value, any gain is taxable as ordinary income.
   (d) Life insurance proceeds paid in a lump sum to a designated beneficiary are generally received income-tax free by the beneficiary. If the proceeds are liquidated under a settlement option, the principal is received income-tax free, but the interest is taxable as ordinary income.

7. If the insured has any incidents of ownership in the policy at the time of death, the entire proceeds are included in the gross estate of the deceased for federal estate-tax purposes. A federal estate is payable if the decedent's taxable estate exceeds certain limits.

8. The following rules should be followed when shopping for life insurance:
   (a) Determine whether you need life insurance
   (b) Estimate the amount of life insurance needed
   (c) Decide on the best type of insurance for you
   (d) Decide whether you want a policy that pays dividends
   (e) Shop around for a low-cost policy
   (f) Consider the financial strength of the insurer
   (g) Deal with a competent agent

9. The policy illustration contains a narrative summary that describes the basic characteristics of the policy, the elements of the policy that are not guaranteed, federal tax guidelines, and interest-adjusted cost data. The policy illustration also has a numeric summary that shows the premium outlay, value of the accumulation account, cash surrender values, and the death benefit. Three policy values must be provided based on (1) the current interest rate credited to the policy, (2) the guaranteed minimum interest rate under the policy, and (3) midpoint interest. The illustration also shows the number of years the insurance protection will remain in force under the three sets of interest assumptions.

10. A low-load policy is a policy that life insurers sell directly to the public by using telephone representatives or fee-only financial planners. The loading for expenses is lower than under policies sold by regular agents. The major advantage is that marketing expenses account for only 10 to 25 percent of the first year's premium rather than 90 to 125 percent on policies sold by agents.

■ Answers to Application Questions

1. (a) Traditional net cost calculation:

Total premiums for 20 years (20 × 248.60)	$4,972.00
Less dividends for 20 years	–814.00
Net premiums for 20 years	4,158.00
Less cash value after 20 years	4,314.00
Insurance cost for 20 years	–156.00
Net cost per year (–156./20)	–7.80
Net cost per thousand per year (–7.80/20)	**–0.39**

The traditional net cost is negative 39 cents per thousand dollars of coverage per year.

(b) Surrender cost index calculation:

Future value of the premiums	$8,631.00
Less future value of the dividends	–1,163.00
Net premiums for 20 years	7,468.00
Less cash value after 20 years	–4,314.00
Insurance cost for 20 years	3,154.00
Interest-adjusted cost per year ($3,154.00/34.719)	90.84
Cost per thousand per year (90.84/20)	**4.54**

The surrender cost index is $4.54 per thousand per year.

(c) Net payment cost index calculation:

Future value of the premiums	$8,631.00
Less future value of the dividends	–1,163.00
Net premiums for 20 years	7,468.00
Interest-adjusted cost per year: ($7,468.00/34.719)	215.10
Cost per thousand per year (215.10/20)	**10.76**

The net payment cost index is $10.76 per thousand per year.

2. (a) Traditional net cost calculation:

Total premiums for 20 years	$45,600.00
Less dividends for 20 years	15,624.00
Net premiums for 20 years	29,976.00
Less cash value after 20 years	35,260.00
Insurance cost for 20 years	–5284.00
Net cost per year (–5,284/20)	–264.20
Net cost per thousand per year (–264.20/100)	**–2.64**

The traditional net cost is a negative $2.64 per thousand per year.

(b) Surrender cost index calculation:

Future value of the premiums	$79,159.00
Less future value of the dividends	24,400.00
Net premiums for 20 years	54,759.00
Less cash value after 20 years	35,260.00
Insurance cost for 20 years	19,499.00
Interest-adjusted cost per year (19,499.00/34.719)	561.62
Cost per thousand per year (561.62/100)	**5.62**

The surrender cost index is $5.62 per thousand per year.

(c) Net payment cost index calculation:

Future value of the premiums	$79,159.00
Less future value of the dividends	24,400.00
Net premiums for 20 years	54,759.00
Interest-adjusted cost per year (54,759.00/34.719)	1577.21
Cost per thousand per year (1577.21/100)	**15.77**

The net payment cost index is $15.77 per thousand per year.

3. John needs to consider the state of his health and the cost of obtaining the new policy. Based on his poor physical condition, he may be rated up. John should also consider that a new incontestable clause and suicide clause will apply to the new policy. He will also have to pay the acquisition costs and loading a second time. Without proper cost information, the replacement policy may be more expensive than his present policy.

4. (a) The lump sum payment of $50,000 is not taxable income. Death proceeds payable to a stated beneficiary are normally not taxable.
   (b) The cash value increase of $380 is not taxable income.
   (c) Life insurance premiums generally are not income-tax deductible.
   (d) The dividend is largely a refund of a redundant premium. The $120 dividend is not taxable income.

■ Answer to Case Application in the Appendix to Chapter 13

a. Calculating the NSP for a Five-Year Term Insurance Policy, Male, Age 30

Age	Amount of Insurance		Probability of Death		Present Value of $1 at 5½%		Cost of Insurance	
30	$1000	×	$\frac{11,173}{9,800,822}$	×	0.9479	=	$1.08	(Year 1)
31	$1000	×	$\frac{11,062}{9,800,822}$	×	0.8985	=	1.01	(Year 2)
32	$1000	×	$\frac{11,050}{9,800,822}$	×	0.8516	=	0.96	(Year 3)
33	$1000	×	$\frac{11,233}{9,800,822}$	×	0.8072	=	0.93	(Year 4)
34	$1000	×	$\frac{11,512}{9,800,822}$	×	0.7651	=	0.90	(Year 5)
					NSP	=	$4.88	

b. The net annual level premium (NALP) is determined by dividing the net single premium (NSP) by the present value of a life annuity due (PVLAD) of $1 for the premium paying period.

Age 30	$1 due immediately						=	$1.00
Age 31	$\frac{9{,}789{,}650}{9{,}800{,}822}$	×	$1	×	0.9479		=	0.95
Age 32	$\frac{9{,}778{,}587}{9{,}800{,}822}$	×	$1	×	0.8985		=	0.90
Age 33	$\frac{9{,}767{,}537}{9{,}800{,}822}$	×	$1	×	0.8516		=	0.85
Age 34	$\frac{9{,}756{,}305}{9{,}800{,}822}$	×	$1	×	0.8072		=	0.80
					PVLAD of $1		=	$4.50

$$NALP = \frac{NSP}{\text{PVLAD of \$1}} = \frac{\$4.88}{4.50} = \$1.08$$

c. No. A loading for expenses must be added to determine the gross premium.

Chapter 14
Annuities and Individual Retirement Accounts

■ Teaching Note

This chapter is divided into two parts. The first part discusses the basic characteristics of individual annuities. Concepts to stress are the annuity principle and the different types of annuities. For ease of understanding, the text classifies annuities into three categories: (1) fixed annuity, (2) variable annuity, and (3) equity-indexed annuity.

The second part of the chapter discusses the different types of IRAs. Point out to the students the financial advantages of starting a Roth IRA while still in college even though they may be unable to make the maximum annual IRA contribution. Small contributions over a long period can produce substantial ending values.

■ Outline

I. Individual Annuities

A. Annuity Principle

B. Types of Annuities

1. Fixed annuity
   a. Payment of benefits
   b. Annuity settlement options
2. Variable annuity
   a. Basic characteristics
   b. Guaranteed death benefit
   c. Fees and expenses
   d. Investment performance
3. Equity-indexed annuity
   a. Participation rate
   b. Maximum cap note or cap
   c. Indexing method
   d. Guaranteed minimum value

II. Taxation of Individual Annuities

III. Individual Retirement Accounts

A. Traditional IRA

1. Eligibility requirements

2. Annual contribution limits
3. Income tax deduction of traditional IRA contributions
4. Special phase-out rule for spouses
5. Withdrawal of funds
6. Taxation of distributions
7. Establishing a traditional IRA
8. IRA investments
9. IRA rollover account

B. Roth IRA
1. Income limits
2. Conversion to a Roth IRA
3. Adequacy of IRA funds

■ Answers to Case Application 1

a. James should purchase a flexible premium deferred annuity, which allows changes in the amount and frequency of payments. The flexible premium annuity can be either a fixed annuity or a variable annuity.

b. Nancy should purchase a fixed annuity and select a life income annuity option that guarantees her a lifetime income regardless of how long she lives. Depending on her needs and objectives, the life income option can be selected with a certain number of guaranteed payments.

c. Jennifer should select a life annuity income option with either an installment refund feature or a cash refund feature. Under the installment refund option, if the annuitant dies before receiving total income payments equal to the purchase price of the annuity, the payments continue to a designated beneficiary until they equal the purchase price. Under the cash refund option, if the annuitant dies before receiving total payments equal to the purchase price of the annuity, the balance is paid in a lump sum to the beneficiary.

d. Fred should purchase a variable annuity, which is designed to provide an inflation hedge after retirement.

e. Mary should purchase a fixed annuity. She should select the life income annuity option with no refund feature. This option provides a life income to the annuitant only while the annuitant is alive. No additional payments are made after the annuitant dies. A life income option with no refund pays the highest amount of periodic income payments because it has no refund feature.

f. Kathy should purchase an equity-indexed annuity. An equity-indexed annuity is a fixed, deferred annuity that allows the annuity owner to participate in the growth of the stock market and also provides downside protection against the loss of principal and prior interest if the annuity is held to term.

■ Answers to Case Application 2

a. Yes. The couple's combined income of $65,000 is under the income threshold for a fully deductible IRA contribution for a married couple ($92,000 in 2012.).

b. Yes, Allison can establish and deduct the contributions to a traditional IRA. The couple's combined income of $65,000 is under the income threshold for a fully deductible IRA contribution for a married couple ($92,000 in 2012).

c. Both Scott and Allison can establish a Roth IRA. The couple's modified adjusted gross income of $130,000 is below the income threshold for a full contribution to a Roth IRA for a married couple filing jointly ($173,000 in 2012).

d. Yes. A special rule applies to a spouse who is not an active participant in an employer-sponsored retirement plan, but the other spouse is an active participant. For 2012, Allison can contribute and deduct $5,000 because the couple's combined income is below the income limit for a full deduction under the special rule ($173,000 in 2012).

e. If certain requirements are met, all distributions from a Roth IRA are received free of income taxes. The minimum distribution rules at age 70 1/2 do not apply to a Roth IRA. In addition, the income limits for a Roth IRA are substantially higher than for a traditional IRA. Finally, unlike a traditional IRA, contributions can be made to a Roth IRA after age 70 1/2.

■ Answers to Review Questions

1. Life insurance provides protection against dying too soon before financial assets can be accumulated; annuities are designed to provide protection against excessive longevity and the exhaustion of one's savings while still alive.

2. A fixed annuity pays periodic income payments that are guaranteed and fixed in amount. During the accumulation period, investment income accumulates income-tax free. At retirement, the accumulated funds can be paid out under one of the annuity settlement options.

3. Annuity settlement options typically include the cash option, life annuity with no refund feature, life annuity with guaranteed payments, installment refund or cash refund option, and a joint-and-survivor annuity.

4. A variable annuity provides an inflation hedge by maintaining the real purchasing power of the periodic payments during retirement. During the accumulation period, premiums are invested and accumulation units are acquired. At retirement, the accumulation units are converted into annuity units. The number of annuity units remains constant, but the value of the annuity unit changes periodically depending on the value of the subaccount in which the premiums are invested. As a result, the amount of monthly income changes periodically based on the value of the subaccount.

5. An equity-indexed annuity is a fixed, deferred annuity that allows the annuity owner to participate in the growth of the stock market and also provides downside protection against the loss of principal and prior interest earnings if the annuity is held to term. The interest credited to the annuity is based on a stock market index, typically Standard & Poor's 500 Composite Stock Index (S&P 500). The annuity is credited with part of the gain in the index, which does not include reinvestment of dividends. Participation rates generally range from 30 percent to 100 percent of the gain in the stock index.

6. A traditional IRA has two eligibility requirements. First, the participant must have taxable compensation during the year, which can include wages and salaries, bonuses, commissions, and self-employment income. Second, the participant must be under age 70 1/2.

7. For 2012, the maximum annual contribution is $5000 or 100 percent of earned compensation, whichever is less. Older workers age 50 and over can contribute an additional $1000, or a maximum of $6000.

8. A traditional IRA is an IRA that allows workers to deduct part or all of their IRA contributions. The deduction is limited to workers whose taxable compensation is below certain annual thresholds, or to those who are not active participants in an employer-sponsored retirement plan. The investment income accumulates income-tax free on a tax-deferred basis, and the distributions are taxed as ordinary income.

9. The annual contributions to a Roth IRA are not income-tax deductible. However, the investment income accumulates income-tax free, and qualified distributions are not taxable if certain requirements are met. A qualified distribution is any distribution that (1) is made after a five-year period beginning with the first tax year for which a Roth contribution is made, and (2) is made for any of the following reasons:
   - The individual is age 59 1/2 or older.
   - The individual is disabled.
   - The distribution is paid to a beneficiary or to the estate after the individual's death.
   - The distribution is used to pay qualified first-time homebuyer expenses (maximum of $10,000).

10. A rollover is a tax-free distribution of cash or other property from one retirement plan, which is then deposited into another retirement plan. The amount you roll over is tax free but generally becomes taxable when the new plan pays out that amount to you or to your beneficiary. For example, if you quit your job and receive a lump sum distribution from your employer's qualified retirement plan, the funds can be deposited into a special IRA rollover account. If you receive the funds directly, the employer must deduct 20 percent for federal income taxes. However, the tax is deferred if the employer transfers the funds directly into the IRA rollover account.

■ Answers to Application Questions

1. (a) The insurer determines how the premiums are invested in a fixed annuity. As such, the investment risk falls on the insurer. The annuity owner determines how the premiums are invested in a variable annuity. The annuity owner has a choice of investment portfolios in which the premiums are invested, such as a growth stock fund, bond fund, or international fund. The investment risk falls on the annuity owner.

   (b) The income payments in a fixed annuity are guaranteed and fixed and generally do not change. The income payments in a variable annuity change periodically depending on the value of the annuity units.

   (c) In a fixed annuity, the death benefit prior to retirement is usually the gross premiums paid without interest, or the cash value of the contract if larger. In a variable annuity, the death benefit is the amount invested in the contract, or the value of the account at the time of death, whichever is larger. Some variable annuities pay enhanced death benefits, such as periodically adjusting the value of the account to lock in investment gains.

2. (a) An equity-indexed annuity and variable annuity have certain similarities. Both are designed to provide life income to annuitants, both provide for death benefits prior to retirement, and both provide for participation in stock market gains.

(b) An equity-indexed annuity and variable annuity are dissimilar in several respects. The equity-indexed annuity is technically a fixed annuity, whereas the variable annuity provides variable benefits. The equity-indexed annuity typically limits the extent to which the annuity owner participates in any stock market gains, which does not include reinvested dividends. The variable annuity permits the annuity owner to participate fully in stock market gains if the premiums are invested in common stocks.

3. Mario must report taxable income of $6000. Part of each annuity payment is nontaxable, and the other part is taxable. An exclusion ratio must be calculated to determine the nontaxable and taxable portions of the annuity payments. The exclusion ratio is determined by dividing the investment in the contract by the expected return:

$$\frac{\text{Investment in the contract}}{\text{Expected return}} = \text{Exclusion ratio}$$

Investment in the contract is $120,000. Expected return is $240,000 ($20 \times 12 \times \$1000$). The exclusion ratio is 0.50 ($120,000/$240,000). The amount of taxable income is $6000 ($0.50 \times \$12,000$).

4. (a) Yes. Because Travis does not participate in an employer-sponsored retirement plan, he is eligible to establish a traditional tax-deductible IRA.

(b) Yes. For 2012, single taxpayers with modified adjusted gross incomes of $110,000 or less are eligible to establish a Roth IRA and make a full IRA contribution. Maximum annual IRA contributions are phased out for single taxpayers with modified adjusted gross incomes between $110,000 and $125,000. Because Travis has a salary of $55,000, he can establish a Roth IRA.

5. (a) Contributions to a traditional IRA are income-tax deductible up to the maximum annual limit if the worker's modified adjusted gross income is below certain annual thresholds, or if the worker is not an active participant in an employer-sponsored retirement plan. The full deduction is gradually phased out as a worker's modified adjusted gross income increases. Taxpayers with incomes that exceed the phase-out limits can contribute to a traditional IRA but cannot deduct their contributions. Annual contributions to a Roth IRA are not income-tax deductible.

Distributions from a traditional IRA are taxed as ordinary income except for any nondeductible IRA contributions, which are received income-tax free. With certain exceptions, distributions from a traditional IRA before age 59 1/2 are considered to be premature distributions, and a 10 percent penalty tax must be paid on the amount of the distribution included in gross income. Distributions from a Roth IRA at retirement generally are received income-tax free if certain requirements are met.

(b) For 2012, a fully deductible traditional IRA is limited to single taxpayers with modified adjusted gross incomes of $58,000 or less ($92,000 or less for married couples filing jointly).

The full IRA deduction is gradually phased out as modified adjusted gross income increases. For 2012, the phase-out range is $58,000 to $68,000 for single taxpayers and $92,000 to $112,000 for married taxpayers filing jointly.

For 2012, the maximum annual IRA contribution to a Roth IRA is limited to single taxpayers with modified adjusted gross incomes of $110,000 or less and to married couples filing jointly with modified adjusted gross incomes of $173,000 or less. Maximum contributions to a Roth IRA are phased out for single taxpayers with modified adjusted gross incomes between $ $110,000 and $125,000, and for married couples filing jointly with modified adjusted gross incomes between $173,000 and $183,000. The income limits are indexed for inflation.

(c) Both the traditional IRA and Roth IRA permit the contributions to be invested in a variety of investments, including certificates of deposit, mutual funds, and individual stocks and bonds. Contributions can also be invested in U.S. gold and silver coins, certain platinum coins, or gold, silver, palladium, or platinum bullion. However, the contributions cannot be invested in insurance contracts or collectibles.

(d) A special rule applies to married couples in situations where one spouse is not an active participant in an employer-sponsored retirement plan but the other spouse is an active participant. As a result, most homemakers can make a fully deductible contribution to a traditional IRA even though the other spouse is covered under a retirement plan at work. For 2012, eligibility for a full deduction is limited to married couples with modified adjusted gross incomes of $173,000 or less. The deduction is phased out for married couples with modified adjusted gross incomes between $173,000 and $183,000. The income limits are indexed for inflation.

Chapter 15
Health-Care Reform; Individual Health Insurance Coverages

■ Teaching Note

This chapter is the first of two chapters dealing with private health insurance. Chapter 15 is limited primarily to health-care reform, the Affordable Care Act, and important individual health insurance coverages. Chapter 16 discusses group health insurance coverages. Although most people are covered under group insurance plans, individual plans are still important for individuals and families who are not covered by group health insurance.

This chapter is divided into three major parts. The first part discusses the major health-care problems in the United States and the need for health-care reform. The second part examines the major provisions of the new Affordable Care Act that was enacted to reform the present health-care delivery system. The final part discusses several individual health insurance coverages including individual medical expense insurance, health savings accounts, long-term care insurance, and disability-income insurance.

■ Outline

I. Health Care Problems in the United States

A. Rising health-care expenditures

B. Large number of uninsured in the population

C. Uneven quality of medical care

D. Considerable waste and inefficiency

E. Defects in financing health care

F. Abusive insurer practices

II. Health Care Reform

III. Basic Provisions of the Affordable Care Act

A. Individual Mandate

B. Health Insurance Reforms

C. Essential Health Benefits

D. Affordable Insurance Exchanges

E. Premium Credits to Eligible Individuals and Families

F. Employer Requirements

G. Premium Subsidies to Small Employers

H. Early Retirement Reinsurance Program

I. Expansion of Medicaid

J. Preexisting Condition Insurance Plan

K. Improving Quality and Lowering Costs

L. Cost and Financing

IV. Individual Medical Expense Insurance

A. Major medical benefits

B. Broad range of benefits

C. Calendar-year deductible

D. Coinsurance and copayments

E. Annual out-of-pocket limits

F. Exclusions

V. Medical Expense Insurance and Managed Care Plans

VI. Health Savings Accounts (HSAs)

A. Eligibility requirements

B. High-deductible health plan

C. Contribution limits

D. Favorable tax treatment

E. Rationale for HSAs

VII. Long-Term Care Insurance—becoming more important as the population ages

A. Chance of entering a nursing home

B. Basic characteristics

a. Types of policies
b. Choice of benefits
c. Elimination period
d. Eligibility for benefits (benefit triggers)
e. Inflation protection
f. Guaranteed renewable policy
g. Expensive coverage
h. Nonforfeiture benefits

i. Taxation of long-term care insurance

VIII. Disability-Income Insurance

A. Meaning of total disability
  a. Definitions of total disability
  b. Partial disability
  c. Residual disability

B. Benefit period

C. Elimination period

D. Waiver of premium

E. Rehabilitation provision

F. Accidental death, dismemberment, and loss-of-sight benefits

G. Optional disability-income benefits

VIX. Individual Medical Expense Contractual Provisions

A. Renewal Provisions

B. Preexisting Conditions Clause

C. Notice of Ten-Day Right to Examine Policy

D. Claims

E. Grace Period

F. Reinstatement

G. Time Limit on Certain Defenses

■ Answers to Case Application

a. Since Lori cannot work as a nurse, she meets the definition of total disability. After a 90-day elimination period, she would receive $2800 monthly for the remainder of the period of disability.

b. The policy contains a residual disability benefit. Since Lori's earnings are reduced 50 percent, she would receive a pro rata disability income benefit, or $1400 monthly.

c. After two years of benefit payments, the second part of the definition of disability becomes operational. A job as a lab technician is reasonably consistent with Lori's education, training, and experience. Lori would be considered capable of working as a lab technician. Thus disability benefits would not be payable.

d. Since Lori has a guaranteed renewable policy, it cannot be cancelled. Lori alone cannot be singled out for a premium increase. However, premiums for the underwriting class in which Lori is placed could be increased if premiums for the class are inadequate.

■ Answers to Review Questions

1. The major health-care problems in the United States are rising health-care expenditures, large numbers of uninsured in the population, uneven quality of medical care, considerable waste and inefficiency, defects in financing health care, and abusive insurer practices.

2. Provisions in the Affordable Care Act that will affect individuals and families include the following:
   - Individual mandate. Beginning in 2014, most citizens in the United States and legal residents must have qualifying health insurance or pay a financial penalty.
   - Preexisting conditions exclusions prohibited. Children under age 19 with a preexisting condition cannot be denied coverage or rated up because of a preexisting condition. Beginning in 2014, adults cannot be denied coverage or rated up because of a preexisting condition.
   - Retention of coverage until age 26. The new law allows young adults to remain on their parents' policy until age 26.
   - Guaranteed access to health insurance. Effective January 1, 2014, policies in the individual and small group markets will be able to purchase qualifying health insurance from a state Affordable Insurance Exchange. The insurance will be sold on a guaranteed issue basis and is guaranteed renewable. Applicants cannot be denied coverage or rated up because of their health.
   - Premium credits to eligible individuals and families. Refundable premium tax credits are available to eligible individuals and families with incomes between 133 percent and 400 percent of the federal poverty level, which will enables them to purchase qualified health insurance through a state Affordable Insurance Exchange. The tax credits are based on income and are designed to limit the amount spent on health insurance from 2 percent to a maximum of 9.5 percent of income, which makes the insurance affordable.
   - Preexisting Condition Insurance Plan. The new law created a temporary high-risk program, which provides affordable and subsidized health insurance to individuals with preexisting conditions until the Affordable Insurance Exchanges begin operating in 2014. The program is called the Preexisting Condition Insurance Plan (PCIP) and is funded entirely by the federal government.

3. (a) A typical individual medical insurance plan has certain basic characteristics:
   (1) Major medical benefits
   (2) Broad range of benefits
   (3) Calendar year deductible
   (4) Coinsurance and copayments
   (5) Annual out-of-pocket limits
   (6) Exclusions

   (b) A deductible is used to eliminate small claims and reduce administrative expenses. As a result, premiums are lower, and the policy is more affordable. The purposes of coinsurance are to reduce premiums and prevent over utilization of policy benefits.

4. Federal legislation allows all eligible persons under age 65 to establish health savings accounts and receive favorable income tax treatment. A health savings account (HSA) is a tax-exempt or custodial account established exclusively for the purpose of paying qualified medical expenses of the account beneficiary who is covered under a high-deductible health insurance plan. Health savings accounts have two components: (1) a high deductible health insurance policy that covers catastrophic medical bills, and (2) an investment account from which the account holder can withdraw money tax-free to pay for medical costs.

5. Long-term care insurance has the following characteristics:
   - The policies typically are guaranteed renewable.
   - The types of policies include (1) a facility-only policy that provides care in a nursing facility, assisted living facility, or other facility, (2) a home health-care policy that provides benefits to patients in their homes, and (3) a comprehensive policy that covers care in a nursing home, assisted living facility, and hospice, and also makes available optional benefits for home health care and adult care.
   - Purchasers have a choice of benefits, such as daily benefits of $150, $200, $250, or even higher.
   - Elimination periods range from zero to 365 days; common elimination periods are 30, 60, 100, or 180 days.
   - To be eligible for benefits, the insured must meet one of two benefit triggers. The first trigger is that the insured is unable to perform a certain number of activities of daily living (ADLs). The second trigger is that the insured needs substantial supervision because of a severe cognitive impairment.
   - Some type of inflation protection is frequently made available as an optional benefit.
   - Coverage is expensive, especially at the older ages.
   - Nonforfeiture benefits may be available if the policy lapses. Examples are a return of part of the premiums paid or a shortened benefit period.
   - Long-term care plans receive favorable income tax treatment if certain conditions are met.
   - Some states have long-term care partnership programs. People who purchase qualified partnership policies from private insurers must first rely on benefits from their private policies before they are eligible for coverage under the state's Medicaid program.

6. (a) The definition of total disability is stated in the policy. There are several definitions of total disability:
   (1) Inability to perform all duties of the insured's own occupation
   (2) Most insurers today use a modified own occupation definition of total disability. Because of injury or sickness, you are unable to perform the material and substantial duties of your own occupation, and are not engaged in any other occupation.
   (3) Inability to perform the duties of any occupation for which the insured is reasonably fitted by education, training, and experience
   (4) Inability to perform the duties of any gainful occupation
   (5) Loss-of-income test in some companies

   Some individual disability income policies have a two-part definition. For some initial period of disability, such as two to five years, total disability is defined in terms of your own occupation. After the initial period of disability expires, the any occupation definition of disability is applied.

   (b) (1) Residual disability means that a pro rata disability benefit is paid to an insured whose earned income is reduced because of an accident or sickness.

(2) The benefit period is the length of time that disability benefits are payable after the elimination period is met.
(3) An elimination period is a waiting period during which time benefits are not paid. Insurers offer a range of benefit periods, such as 30, 60, 90, 180, or 365 days.
(4) Most policies include a waiver-of-premium provision. The insured must meet the definition of disability stated in the policy. If the insured is totally disabled for 90 days, future premiums will be waived as long as the insured remains disabled.

7. Several optional benefits include a cost-of-living rider, an option to purchase additional insurance, a Social Security rider, and a return-of-premium rider.

8. (a) *Guaranteed renewable*. Under this type of policy, the insurer guarantees to renew the policy to some stated age. The policy cannot be canceled, and renewal of the policy is at the insured's sole discretion. However, the insurer has the right to increase premium rates for the underwriting class in which the insured is placed.

   (b) *Noncancellable*. Under a noncancellable policy**,** the insurer cannot change, cancel, or refuse to renew the policy as long as premiums are paid on time. In addition, the insurer cannot change the premiums or rate structure specified in the policy.

   (c) *Conditionally renewable*. Under a conditionally renewable policy**,** the policyholder can renew the policy until a specified age; however, the insurer has the right to decline renewal under conditions specified in the contract.

9. A preexisting condition is a physical or mental condition of the insured that existed prior to issuance of the policy. A typical clause states that the preexisting conditions are not covered until the policy has been in force for a specified period, such as one or two years, unless the condition is disclosed in the application and is not excluded by a rider. However, the new Affordable Care Act now prohibits the use of preexisting conditions to deny or limit coverage for children under age 19. For adults, the ban on preexisting conditions will become effective January 1, 2014.

10. After the policy has been in force two years, or three years in some states, the company cannot void the policy or deny a claim on the basis of a preexisting condition or misstatements in the application, except for fraudulent misstatements. However, as stated earlier, the Affordable Care Act prohibits insurers from rescinding coverage unless there is fraud or an individual makes an intentional misrepresentation of a material fact. This provision applies to both individual and group coverages.

■ Answers to Application Questions

1. (a) Total covered medical expenses are $17,400. Mark must pay a deductible of $1000. He must also pay 25 percent of the amount exceeding the deductible up to the maximum annual out-of-pocket limit. Because of the annual out-of-pocket limit, Mark pays only $2000 plus the deductible of $1000. As such, the insurer pays $14,400.
   (b) As noted above, Mark pays $2000 plus the deductible. The policy does not cover the loss of earnings.
   (c) Yes. Care outside the network is covered. However, the policyholder must pay substantially higher deductible and coinsurance charges.

2. (a) Because Jeff cannot work at his job, he meets the definition of total disability stated in the policy. After satisfying the elimination period, he will receive disability benefits of $2000 monthly for three months, or $6000.

   (b) The policy contains a residual disability benefit, which pays a pro rata disability benefit if earned income is reduced because of an accident or sickness. Because Jeff earns only $1500 monthly, he has experienced a 50 percent reduction in earnings. As such, he can receive a prorated disability benefit, or $1000 monthly.

3. No. Under the Affordable Care Act, insurers are prohibited from denying claims or excluding coverage for children under age 19 with preexisting conditions.

4. Under the Affordable Care Act, insurers must allow young adults to remain on their parents' policies until age 26. As such, Brandon will be covered.

Chapter 16
Employee Benefits: Group Life and Health Insurance

■ Teaching Note

This is an important chapter to stress in a beginning course, since employee benefits are an important source of protection to most people. In particular, group health insurance should receive major emphasis because most people are covered for health insurance through a group. In this chapter, we limit our discussion to group life insurance and group health insurance plans. Retirement plans are covered in Chapter 17.

Important topics discussed in this chapter include group life insurance, group medical expense insurance, group dental insurance, group disability-income plans, and the impact of the new Affordable Care Act on group health insurance coverages. It is also worthwhile to discuss the major characteristics of managed care plans, such as health maintenance organizations (HMOs) and preferred provider organizations (PPOs), because a large number of workers and their families are covered by such plans. Finally, if time permits, a brief discussion of cafeteria plans is worthwhile.

■ Outline

I. Meaning of Employee Benefits

II. Fundamentals of Group Insurance

A. Differences between Group Insurance and Individual Insurance
   1. Coverage of many persons under one contract
   2. Low-cost protection from reduced marketing and administrative expenses
   3. Individual evidence of insurability usually not required
   4. Experience rating for larger groups

B. Basic Underwriting Principles
   1. Insurance incidental to the group
   2. Flow of persons through the group
   3. Automatic determination of benefits
   4. Minimum participation requirements
   5. Third-party sharing of cost
   6. Simple and efficient administration

III. Eligibility Requirements in Group Insurance

A. Eligible Groups

1. Types of groups are regulated by state law: individual employers; multiple employers; unions; debtors of a common creditor; miscellaneous groups
2. Size requirements: traditionally, this size was 10 members, but some insurers now insure groups with as few as two or three members.

B. Eligibility Requirements

1. Be a full-time employee
2. Satisfy a probationary period
3. Apply for insurance during the eligibility period
4. For life insurance, be actively at work when insurance becomes effective

IV. Group Life Insurance

A. Group Term Life Insurance

1. Characteristics: low-cost coverage; yearly renewable term insurance; convertible within 31 days after leaving group
2. Types of group term coverage—basic amount of term insurance, supplemental term insurance, portable term insurance option in some plans
3. Major advantages: low cost; evidence of insurability usually not required; employer contributions
4. Disadvantages: prohibitively expensive for older workers to convert; no savings for retirement; temporary protection

B. Group Universal Life Insurance—universal life products are sold on a group basis

C. Group Accidental Death and Dismemberment (AD&D) Insurance—pays additional benefits if the employee dies in an accident or incurs certain types of bodily injury

D. Worksite Marketing—insurance agents conduct sales interviews on site with employees interested in purchasing individual life insurance or annuities

V. Group Medical Expense Insurance

A. Group Medical Expense Providers

1. Commercial insurers
2. Blue Cross and Blue Shield plans
3. Managed care organizations
4. Self-insured plans by employers

B. Traditional Indemnity Plans

1. Physicians were paid a fee for each covered service and were reimbursed on the basis of reasonable and customary charges up to some maximum limit.
2. These plans generally have declined in relative importance because of the growth of managed care plans.

C. Managed Care Plans—generic name for medical expense plans that provide covered services to the members in a cost-effective manner; heavy emphasis on controlling costs
   1. Health maintenance organization (HMO)
      (a) An organized system of health care that provides comprehensive medical services to its members on a prepaid basis
      (b) Broad comprehensive services provided
         i. Selection of physicians and health-care providers generally limited to providers who belong to the network
         ii. Payment of fixed premiums and cost-sharing provisions
         iii. Heavy emphasis on controlling costs
         iv. Types of HMOs include staff model, group model, network model, and an individual practice association plan.
   2. Preferred provider organization (PPO)—a plan that contracts with health-care providers to provide medical services to members at discounted fees.
      (a) To encourage patients to use PPO providers, deductibles and coinsurance charges are reduced.
      (b) Providers are paid on a fee-for-service basis. Fees charged are negotiated fees that are typically below the provider's regular fee.
      (c) Members can receive care outside the PPO network but must pay higher deductible and coinsurance charges.
      (d) If a network provider's actual charge exceeds the negotiated fee, the provider absorbs the excess amount.
      (e) PPOs generally do not have a gatekeeper physician, and employees do not have to get permission from a primary care physician to see a specialist.
   3. Point-of-service (POS) plan—a hybrid plan that combines the characteristics of an HMO and PPO
      (a) Designed to preserve freedom of choice for the members
      (b) If members receive care from network providers, they pay substantially lower out-of-pocket expenses. If members elect to receive care outside the network, the care is covered, but they must pay substantially higher deductibles and coinsurance charges.

VI. Key Features of Group Medical Expense Insurance

A. Comprehensive benefits

B. Calendar year deductible

C. Coinsurance requirements

D. Copayments

E. Annual maximum limit on out-of-pocket expenses

F. No cost sharing for certain preventive services

G. Certain services not covered

VII. Affordable Care Act and Group Medical Expense Insurance—certain provisions in the new law have a direct impact on group medical expense plans.

A. Retention of coverage until age 26

B. Lifetime limits prohibited and annual limits prohibited in 2014

C. Preexisting conditions prohibited

D. Small employer tax credits

E. No cost sharing for certain preventive services

F. Required minimum medical loss ratio

G. Grandfather plans—generally can remain the same but must meet certain Affordable Care Act requirements

H. Flexible spending account limits

I. Out-of-network claim payments for emergency room visits

J. Uniform coverage documents; health plans must describe the coverage in a uniform format

K. Certain employer W-2 reporting obligations

VIII. Consumer Directed Health Plans— a generic term for a plan that combines a high-deductible health insurance plan with a health savings account (HSA) or health reimbursement arrangement (HRA)

A. An annual deductible is substantially higher than deductibles in traditional medical expense plans and generally range from at least $1200 to $5000 or some higher amount.

B. For 2012, the minimum annual deductible must be at least $1200 for individual coverage and $2400 for family coverage.

C. Some plans also contain a coinsurance requirement, such as 20, 25, or 30 percent.

D. Employer contributions to an HSA are not taxable; employee contributions are made with before-tax dollars; investment earnings accumulate income-tax free; and distributions from the HSA account are free from taxation if used to pay for qualified medical expenses

E. A high-deductible plan can also be combined with a health reimbursement arrangement (HRA). This is an employer-funded plan with favorable tax advantages, which reimburses employees for medical expenses not covered by the employer's standard insurance plan.

IX. Recent Developments in Employer-Sponsored Health Plans

X. Group Medical Expense Contractual Provisions

A. Preexisting conditions

B. Coordination of benefits

C. Continuation of group health insurance

XI. Group Dental Insurance

A. Employers have a choice of dental plans with various benefits, deductibles, and coinsurance requirements.

B. The majority of dental plans are managed care plans, such PPO dental plans or HMO dental plans. Dentists are reimbursed based on negotiated fees.

C. A covered employee must satisfy a calendar-year deductible. If the employee elects family coverage, the plan may have a family deductible.

D. The employee must also meet a coinsurance requirement and pay a certain percentage of charges in excess of the deductible.

E. Dental services are typically grouped into different levels, with varying coinsurance requirements.

F. To encourage regular dental visits, some plans do not impose any coinsurance requirement for one or two routine annual dental examinations. Fillings and oral surgery may be paid only at a rate of 80 percent. The cost of orthodontia or dentures may be paid at a lower rate of 50 percent.

G. Most plans have a maximum limit on benefits paid during the calendar year, such as $1000, or $2000. Additional dental services are not covered for the remainder of the calendar year.

H. Plans typically have a predetermination-of-benefits provision. If the cost of dental treatment exceeds a certain amount, such as $300, the dentist submits a plan of treatment to the insurer.

I. To control costs, certain dental services are not covered, such as medical services not medically necessary.

XII. Group Disability-Income Insurance

A. Short-term plans—characterized by benefits paid only for a short period, such as 13 to 26 weeks; short elimination period; nonoccupational coverage; benefits based on a percentage of earnings; and relatively few exclusions.

B. Long-term plans—characterized by benefit periods that may run to age 65 or longer, coverage for both occupational and nonoccupational disability, a dual definition of disability typically used, monthly payments, a waiting period of three to six months, and may have a provision for the accrual of pension benefits and cost-of-living benefits.

XIII. Cafeteria Plans

A. Instead of a single benefits package that applies to all employees, cafeteria plans allow employees to select among the various benefits to meet individual or family needs.

B. Employees receive a certain number of dollars or credits to purchase the desired employee benefits that will meet individual or family needs.

■ Answers to Case Application

a. The major types of managed care plans include health maintenance organizations (HMOs), preferred provider organizations (PPOs), and point-of-service (POS) plans. An HMO is a managed care plan that provides broad comprehensive medical services to its members on a prepaid basis. Traditional HMOs typically limit the choice of health-care providers to providers who are part of the HMO network. However, some HMOs allow employees to use health-care providers outside of the plan network by the payment of higher out-of-pocket fees. In addition, cost control and cost reduction are heavily emphasized, utilization review is done at all levels, and the quality of care provided by physicians is monitored and evaluated.

A preferred provider organization (PPO) is a managed care plan that contracts with health-care providers to provide medical services to the members at reduced fees. Health-care providers are reimbursed on a fee-for-service basis based on negotiated fees. If actual fees charged exceed the negotiated fees, patients do not pay the additional charge. Plan members are free to use any health-care provider of their choice. However, employees have a strong financial incentive to use a preferred provider because the deductible and coinsurance charges are reduced.

Finally, a point-of-service (POS) plan allows members the option to go outside the network for medical care. If members see health-care providers who are part of the network, they pay reduced out-of-pocket expenses. However, if members receive care from providers outside the network, they must pay substantially higher deductibles and coinsurance charges.

b. See answer to (a) above.

c. Additional group health insurance benefits will depend on the amount Karen has available for employee benefits. If sufficient funds are available, a group short- or long-term disability income plan could be offered, which would provide income benefits during a period of disability. A group dental insurance plan might also be considered.

d. Karen could install a consumer-directed health plan to hold down costs. A consumer-directed health plan (CDHP) is a generic term for a plan that combines a high-deductible health plan with a health savings account (HSA) or health reimbursement arrangement (HRA). These plans are designed to make employees more sensitive to health-care costs, to provide a financial incentive to avoid unnecessary care, and to seek out low-cost providers.

■ Answers to Review Questions

1. Certain underwriting principles are followed in group insurance to obtain favorable loss experience:
   (a) Insurance must be incidental to the group.
   (b) There should be a flow of persons through the group.
   (c) The benefits should be automatically determined by some formula that precludes individual selection of insurance amounts.
   (d) A minimum percentage of eligible employees should participate in the plan.
   (e) There should be a third-party sharing of costs.
   (f) There should be simple and efficient administration.

2. Most groups today are eligible for group insurance benefits. An individual employee typically must meet the following eligibility requirements:
   (a) Be a full-time employee
   (b) Satisfy a probationary period
   (c) Apply for insurance before or during the eligibility period
   (d) For group life insurance, be actively at work when the insurance becomes effective

3. (a) Group term life insurance is yearly renewable term insurance. The amount of insurance is typically one to five times the worker's salary. If the employee quits or is laid off, he or she has the right to convert to an individual cash-value policy within 31 days without evidence of insurability.

   Employers typically provide a basic amount of life insurance to covered employees. In addition, supplemental life insurance generally is also available. Under a supplemental plan, covered employees can purchase additional amounts of life insurance without evidence of insurability up to certain limits. If the additional insurance requested exceeds these limits, the employee must provide evidence of insurability.

Finally, some group plans have a portable term insurance option. Under this plan, employees can take their term coverage with them if they leave the group and are no longer eligible for group insurance.

(b) Group accidental death and dismemberment (AD&D) insurance pays additional benefits if the employee dies in an accident or incurs certain types of bodily injury. The AD&D benefit is some multiple of the group life insurance benefit, such as one or two times the insurance on the employee's life. The full AD&D benefit, called the principal sum, is paid if the employee dies in an accident. A percentage of the principal sum is paid for certain types of dismemberment.

(c) Some employers make group universal life insurance available to employees. These plans are similar to individual universal life insurance policies, but have important differences. Plan design varies by insurer (see text). The insurance is issued on a guaranteed basis up to certain limits with no evidence of insurability. The employee pays premiums by payroll deduction. Employees have flexibility in the payment of premiums and can make loans and withdrawals. In addition, employees have the option of continuing the insurance after retirement.

(d) Many group insurance plans have worksite marketing programs. Under this system, individual producers contact business firms, and, with the approval of the firm, conduct sales interviews on site with employees interested in purchasing individual life insurance or annuities.

4. (a) Blue Cross and Blue Shield plans are medical expense plans that cover hospital expenses, physician's and surgeon's fees, ancillary charges, and other medical expenses. In the majority of states, Blue Cross and Blue Shield plans are nonprofit organizations that receive favorable tax treatment and are regulated under special legislation.

   (b) Under ERISA, self-insured plans generally are not subject to state regulation, and a national employer does not have to comply with separate state laws. Also, costs may be reduced or increase less rapidly because of the savings in state premium taxes, commissions, and the insurer's profit. In addition, the employer retains part or all of the funds needed to pay claims and earns interest until the claims are paid. Finally, self-insured plans generally are exempt from state laws that require insured plans to offer certain state-mandated benefits.

5. (a) (1) The major types of managed care plans include health maintenance organizations (HMOs), preferred provider organizations (PPOs), and point-of-service (POS) plans. An HMO is a managed care plan that provides broad comprehensive medical services to its members on a prepaid basis. Traditional HMOs typically limit the choice of health-care providers to providers who are part of the HMO network. However, some HMOs allow employees to use health-care providers outside of the plan network by the payment of higher out-of-pocket fees. In addition, cost control and cost reduction are heavily emphasized, utilization review is done at all levels, and the quality of care provided by physicians is monitored and evaluated.

   (2) A preferred provider organization (PPO) is a managed care plan that contracts with health-care providers to provide medical services to the members at reduced fees. Health-care providers are reimbursed on a fee-for-service basis based on negotiated fees. If actual fees charged exceed the negotiated fees, patients do not pay the additional charge. Plan members are free to use any health-care provider of their choice. However, employees have a strong financial incentive to use a preferred provider because the deductible and coinsurance charges are reduced.

   (3) A point-of-service (POS) plan allows members the option to go outside the network for medical care. If members see health-care providers who are part of the network, they pay reduced out-of- pocket expenses. However, if members receive care from providers outside the network, they must pay substantially higher deductibles and coinsurance charges.

(b) Key features of group medical expense insurance include the following:
- Comprehensive benefits
- Calendar-year deductible
- Coinsurance requirements
- Copayments
- Annual maximum limit on out-of-pocket expenses
- No cost sharing for certain preventive services
- Certain services not covered

6. A consumer-directed health plan is a generic term for a plan that combines a high-deductible health plan with a health savings account (HSA) or health reimbursement arrangement (HRA). These plans are designed to make employees more sensitive to health-care costs, to provide a financial incentive to avoid unnecessary care, and to seek out low-cost providers.

7. Major provisions of the Affordable Care Act that affect individuals, families, and employers include the following:
   - *Retention of coverage until age 26.* Insurers must allow young adults to remain on their parents' policies until age 26.
   - *Lifetime limits and annual limits prohibited.* Insurers are prohibited from imposing lifetime limits on benefits. Beginning in 2014, annual limits on benefits are also prohibited. Prior to that time, annual limits cannot be less than the amounts determined by the secretary of Health and Human Services.
   - *Preexisting conditions prohibited.* Preexisting condition exclusions or limitations are prohibited for children under age 19. The ban on preexisting conditions exclusions for adults becomes effective in 2014.
   - *Small employer tax credits.* Tax credits are available to small employers that have fewer than 25 full-time equivalent employees and pay average annual wages of less than $50,000.
   - *No cost sharing for certain preventive services.* Certain routine and preventive services are not subject to cost-sharing provisions.
   - *Required minimum medical loss ratio.* Insurers must meet a minimum medical loss ratio of 85 percent for plans in the large group market and 80 percent for plans in the individual and small group markets.
   - *Grandfathered plans.* These plans generally can remain the same and are subject only to certain provisions of the Affordable Care Act.
   - *Flexible spending account limits.* Contributions to a flexible spending account for unreimbursed medical expenses, such as deductibles, coinsurance, copayments, and certain other expenses, are limited to $2500 yearly (indexed for inflation).

8. (a) Group medical insurance plans typically contain a coordination-of-benefits provision, which specifies the order of payment when an insured is covered under two or more group health insurance plans. Total recovery under all plans is limited to 100 percent of all covered expenses. The purpose is to prevent overinsurance and duplication of benefits if an insured is covered by more than one plan.

The coordination-of-benefit provisions in most group plans are based on complex rules developed by the National Association of Insurance Commissioners (NAIC). The following summarizes the major provisions based on the NAIC rules:

- Coverage as an employee is usually primary to coverage as a dependent.
- With respect to dependent children, if the parents are married or are not separated, the plan of the parent whose birthday occurs first during the year is primary; the plan of the parent with the later birthday is secondary.
- If the parents of dependent children are not married, or are separated (regardless of whether they have ever been married), or are divorced, and if there is no court decree specifying who is responsible for the child's health-care expenses, the following rules apply:

  —The plan of the parent who is awarded custody pays first.

  —The plan of the stepparent who is the spouse of the parent awarded custody pays second.

  —The plan of the parent without custody pays third.

  —The plan of the stepparent who is the spouse of the parent without custody pays last.

(b) Employees often quit their jobs, are laid off, or are fired. If a qualifying event occurs that results in a loss of coverage, employees and covered dependents can elect to remain in the employer's plan for a limited period under the Consolidated Omnibus Budget Reconciliation Act of 1985 (also known as COBRA). The COBRA law applies to firms with 20 or more employees. A qualifying event includes termination of employment for any reason (except gross misconduct), divorce or legal separation, death of the employee, and attainment of a maximum age by dependent children. If the worker loses his or her job or no longer works the required number of hours, the terminated worker and covered dependents can elect to remain in the employer's plan for up to 18 months. However, they must pay 102 percent of the group rate. If the worker dies or is divorced or legally separated or has a child who is no longer eligible for coverage, covered dependents have the right to remain in the group plan for up to three years.

9. The basic characteristics of group dental insurance plans include the following:
   - Employers have a choice of dental plans with various benefits, deductibles, and coinsurance requirements.
   - A small number of plans are indemnity plans (also called fee-for-service plans). Dentists are reimbursed on the basis of their reasonable and customary charges subject to any limitations on benefits stated in the plan. However, the majority of dental plans today are managed-care plans, such PPO dental plans or HMO dental plans. Dentists are reimbursed based on negotiated fees.
   - A covered employee must satisfy an individual deductible each calendar year. If the employee elects family coverage, a family deductible must be met.
   - After the calendar deductible is met, the employee must meet a coinsurance requirement and pay a certain percentage of charges in excess of the deductible. Dental services are typically grouped into different levels, with varying coinsurance requirements.
   - Most plans have a maximum limit on benefits paid during the calendar year, such as $1000, or $2000. After maximum benefits are paid, additional dental services are not covered for the remainder of the calendar year.
   - Under predetermination-of-benefits provision, if the cost of dental treatment exceeds a certain amount, such as $300, the dentist submits a plan of treatment to the insurer. The insurer reviews the treatment plan and determines the amount that will be paid.

10. (a) Group short-term disability income plans typically have the following characteristics:
    - Benefits typically paid from 13 weeks to 26 weeks
    - Short elimination period (e.g., one to seven days)

- Benefits based on a percentage of earnings
- Only nonoccupational disability covered
- Relatively few exclusions

(b) Group long-term disability-income plans typically have the following characteristics:

- Benefits paid to age 65 or later
- Dual definition of disability typically used
- Elimination waiting period of three to six months
- Both occupational and nonoccupational disabilities covered
- Workers compensation and Social Security offset
- Accrual of pension benefit
- Cost-of-living adjustment

11. Cafeteria plans allow employees to select those employee benefits that best meet their specific needs. Employees are typically given a certain number of dollars or credits that can be spent on the different benefits or taken as cash. Many cafeteria plans also make available an optional flexible spending account (also called a reimbursement account) by which the employee agrees to a voluntary reduction in salary. The amount of salary reduced is then used to pay for any plan benefits or covered expenses. Because the worker’s salary is reduced, the taxes deducted are less, and spendable income is increased.

■ Answers to Application Questions

1. (a) Group term insurance provides temporary insurance. Unless the employee converts the group term insurance, it expires 31 days after the employee leaves the group. However, some group plans have a portability option that allows employees to keep their term insurance to some stated age if they terminate their employment. In contrast, group universal life insurance is a cash-value policy that is designed to provide lifetime protection. Group universal life insurance can be continued even after the employee terminates his or her employment.

   (b) After termination of employment, the employee has 31 days in which to convert group term insurance to a permanent plan of insurance. Otherwise, the term insurance expires after 31 days. In addition, as noted above, some group plans have a portable term insurance option that allows employees to continue their term insurance protection if they lose their eligibility for group coverage, such as termination of employment or retirement. Under this plan, employees can take their term coverage with them if they are no longer eligible for group insurance. Group universal life insurance can be continued after the employee terminates his or her employment by remitting premiums directly to the insurer.

   (c) In a group term insurance plan, the employer’s contributions are used to pay part or all of the group term insurance premiums. In contrast, premiums for group universal life insurance are paid entirely by the employee.

2. (a) Margo has covered medical expenses of $31,000 . She must satisfy the $1000 calendar year deductible. However, because of the annual limit on out-of-pocket expenses, Margo will have to pay only an additional $3000 out of pocket for medical expenses before the annual limit is reached. Thus, she must pay $3000 plus the calendar-year deductible of $1000 for her medical expenses. However, if Margo’s plan allows the annual deductible amount ($1000) to count toward the annual out-of-pocket expense limit, she would pay only $3000 rather than $4000 Finally, the loss of $4000 in earned income is not covered under a PPO plan.

(b) Yes. Margo can receive medical care outside of the network, but she will have to pay a substantially higher deductible and coinsurance payments.

3. Tax credits are available to small employers that have fewer than 25 full-time equivalent employees and pay average annual wages of less than $50,000. The tax credits will help Doug pay the insurance premiums for his employees.

4. Ken can get health insurance under the Preexisiting Condition Insurance Plan (PCIP). When the Affordable Care Act becomes operational in 2014, he can obtain health insurance with no evidence of insurability from a state Affordable Insurance Exchange.

5. (a) The employee's plan is primary, so Jane's plan pays first. John's plan pays any covered excess expenses.
   (b) The son is covered under both plans. However, the birthday rule applies here. Jane's birthday occurs first in the year, so her plan is primary. John's plan is excess.
   (c) If a court order states that one parent must provide health insurance on a dependent and the plan of that parent has actual knowledge of the terms of the court order, that plan is primary. Assuming that John's plan has knowledge of the court order, his plan is primary, and Jane's plan is excess.

6. (a) The majority of short-term plans cover only nonoccupational disability. Disability is typically defined in terms of the worker's own occupation. The worker is considered totally disabled if he or she is unable to perform all of the duties of his or her own occupation. In contrast, long-term plans typically cover both occupational and nonoccupational disability. A dual definition of disability is typically used. For the first two years, the worker is considered disabled if he or she is unable to perform all of the duties of his or her own occupation. After two years, the worker is still considered disabled if he or she is unable to work in any occupation that reasonably fits the worker's education, training, and experience.
   (b) Short-term plans commonly have a short elimination period of one to seven days, while accidents are covered from the first day of disability. Long-term plans typically have longer elimination periods of three to six months before benefits are payable.
   (c) Short-term plans pay disability income benefits for relatively short periods, generally from 13 to 26 weeks. Long-term plans pay disability income benefits for longer periods, which typically range from two years to age 65 or even for life.
   (d) Long-term plans take into consideration the availability of other disability income benefits. If the disabled worker is also receiving OASDI disability income or workers compensation benefits, the long-term disability benefit is reduced accordingly.

   Consideration of other disability benefits is less common in short-term plans than in long-term plans. Since the majority of short-term plans cover only nonoccupational injuries, it is not necessary to coordinate such plans with workers compensation benefits for injuries that occur on the job. In addition, coordination of short-term benefits with OASDI disability benefits is necessary only if the maximum benefit period exceeds the full five-month waiting period under OASDI.

Chapter 17
Employee Benefits: Retirement Plans

■ Teaching Note

The extent to which this chapter is covered in a beginning course will depend on class time and instructor interest. Because many colleges have a separate course in employee benefits, some instructors spend only a minimum amount of time on the subject. Others prefer to discuss only selected aspects of retirement plans. However, since most beginning students of risk management and insurance take only the introductory course, some time should be spent in discussing the importance of a Section 401(k) plan as a supplement to Social Security benefits.

■ Outline

I. Fundamentals of Private Pension Plans

A. Basic Features of Private Pension Plans

1. Favorable income tax treatment
2. Minimum coverage requirements
3. Minimum age and service requirements
4. Retirement ages
5. Vesting provisions
6. Limits on contributions and benefits
7. Early distribution penalty
8. Minimum distribution requirements
9. Integration with Social Security
10. Top-heavy plans

II. Types of Qualified Retirement Plans

A. Defined Benefit Plans

1. Traditional defined-benefit plans
2. Limits on benefits
3. Defined benefit formulas
4. Pension Benefit Guaranty Corporation
5. Advantages of defined-benefit plans
6. Disadvantages of defined-benefit plans
7. Cash balance plans

B. Defined-Contribution Plans

1. Money purchase plans
2. Section 401(k) plans

3. Section 403(b) plans
4. Profit-sharing plans
5. Keogh plans for the self-employed
6. Simplified employee pension (SEP)
7. SIMPLE retirement plans

III. Funding Agency and Funding Instruments

A. Trust Fund Plan

B. Separate Investment Account

C. Guaranteed Investment Contract (GIC)

IV. Problems and Issues in Tax-Deferred Retirement Plans

A. Inadequate 401(k) account balances

B. Incomplete coverage of the labor force

C. Lower benefits for women

D. Limited protection against inflation

E. Spending lump-sum pension distributions

F. Investment mistakes by participants that jeopardize economic security

■ Answers to Case Application

a. A Section 401(k) plan has several advantages to an employee. The employer can use the plan to attract high-quality employees. Contributions by the employer are income-tax deductible. The plan may allow the contributions to be invested in company stock. Employees like the plan because the employer typically matches part or all of their contributions.

A Section 401(k) plan has several disadvantages. Meeting the actual deferral percentage test may limit the annual amount that highly compensated employees can contribute. Some employees who receive cash distributions when they terminate their employment spend the money instead of saving it for retirement. Finally, the burden of any investment loss falls on the employee.

A SEP-IRA has several advantages. SEP plans are popular with smaller employers because the amount of required paperwork is minimal. The annual contribution limits are substantially higher than a traditional IRA plan.

A SEP-IRA has several disadvantages to employers. The employer must cover all employees who are at least age 21, have worked for the employer in at least three of the immediately preceding five years, and have received at least $550 (indexed limit for 2012) from the employer in compensation during the tax year. In addition, there is full and immediate vesting of all employer contributions, which may increase the employer's cost for short-service employees.

b. James should still try to make the maximum contribution. For each dollar contributed, the employer contributes 50 cents. In effect, James has an immediate return of 50 percent on each dollar contributed. The investment earnings also accumulate income-tax free. Maximum annual contributions will provide a higher standard of living after retirement.

c. No. The plan must include all employees who are at least age 21 and have at least one year of service. Susan meets these requirements and must be allowed to participate.

■ Answers to Review Questions

1. (a) The employer's contributions are tax deductible up to certain limits as ordinary business expenses. In addition, the employer's contributions are not taxed as income to the employee.
   (b) As noted above, employer contributions are not considered taxable income to the employee. Also, investment earnings on plan assets are not taxed as current income but accumulate on a tax-deferred basis. Finally, the pension benefits attributable to the employer's contributions are not taxed until the employee retires or receives the funds.

2. To reduce discrimination in favor of highly compensated employees, a qualified retirement plan must meet certain minimum coverage requirements. Under the ratio percentage test, the plan must benefit a percentage of non-highly compensated employees that is at least 70 percent of the highly compensated employees covered by the plan. For example, if the retirement plan covers 100 percent of the highly compensated employees, it must also cover at least 70 percent of the non-highly compensated employees.

3. (a) The early retirement age is the earliest age that workers can retire and receive a retirement benefit. In a defined benefit plan, the retirement benefit is actuarially reduced for early retirement.
   (b) The normal retirement age is the age that the worker can retire and receive full, unreduced pension benefits. Age 65 is the normal retirement age in most plans.
   (c) The deferred retirement age is any age beyond the normal retirement age. Employees who continue working beyond the normal retirement age continue to accrue benefits under the plan.

4. (a) A defined benefit plan is a plan in which the retirement benefit is known in advance, but the contributions vary depending on the amount needed to fund the desired benefit. Such plans typically pay benefits based on a unit-benefit formula that considers both earnings and years of participation in the plan.
   (b) A cash balance plan is a defined benefit plan in which the benefits are defined in terms of a hypothetical account balance; actual retirement benefits will depend on the value of the participant's account at retirement. Each year, the participant's account is credited with a pay credit, such as 4 percent of compensation, and an interest credit, such as 5 percent of the account balance. The amount of retirement benefits depends on the value of the account at retirement.

5. (a) A defined contribution plan is a retirement plan in which the contribution rate is fixed but the actual retirement benefit varies, depending on the worker's age of entry into the plan, contribution rate, investment returns, and age of normal retirement.
   (b) A money purchase plan is a plan in which each participant has an individual account, and the employer's contribution is a fixed percentage of the employee's compensation. For example, the plan formula may specify an annual contribution by the employer of 10 percent of base pay. If the plan is contributory, both the employer and employee may contribute at the same rate, such as 5 percent.

6. (a) A Section 401(k) allows participants the option of putting money into the plan or receiving the funds as cash. For 2012, participants under age 50 can elect to have their annual salaries reduced up to a maximum of $17,000. For 2012, participants age 50 and older can contribute an additional $5500. The amount of salary deferred is then invested in the employer's Section 401(k) plan. In addition, employees typically have a choice of investing the contributions into several investment accounts. Finally, to avoid discrimination in favor of highly compensated employees, the plan must satisfy an actual deferral percentage test.

   (b) A Roth 401(k) plan is a retirement plan in which contributions are made with after-tax dollars, and qualified distributions at retirement are received income-tax free.

   (c) A Section 403(b) plan is a retirement plan for employees of public educational systems and tax-exempt groups, such as hospitals, nonprofit organizations, and churches. These plans are also called tax-sheltered annuities (TSAs). Eligible employees can voluntarily elect to reduce their salaries by a fixed amount, which is then invested in the plan. Employers may make a matching contribution, such as 50 percent for each dollar contributed by the employee by salary reduction. For 2012, the maximum salary reduction for workers under age 50 is $17,000. Employees age 50 and older can make an additional catch-up contribution of $5500.

7. A profit sharing plan is a defined contribution plan in which the employer's contributions are typically based on the firm's profits. The profit sharing contributions can be discretionary or they can be based on a formula. There are annual limits, however, on the amount that can be contributed into an employee's account. For 2012, the maximum annual employer contribution is limited to 25 percent of the employee's compensation or $50,000, whichever is lower.

8. Persons with self-employment income can establish a qualified retirement plan and receive favorable income-tax treatment. The same rules that apply to qualified corporate pension plans generally apply to retirement plans for the self-employed.

   For 2012, the maximum annual contribution to a defined contribution plan by a self-employed individual is limited to 20 percent of net earnings (after certain adjustments) or $50,000, whichever is lower. Older employees age 50 and over can make additional catch-up contributions. 50,000.

   For 2012, if the plan is a defined benefit plan, a self-employed individual can fund for a maximum annual benefit equal to 100 percent of average compensation for the three highest consecutive years of compensation, or $200,000, whichever is lower. This latter figure is indexed for inflation.

9. A simplified employee pension (SEP) is a retirement plan in which the employer contributes to an IRA established for each eligible employee. For 2012, the maximum annual tax-deductible employer contribution to a SEP-IRA is limited to 25 percent of the employee's compensation, or $50,000, whichever is less. The paperwork requirements of the plan are minimal.

10. (a) The SIMPLE retirement plan is limited to employers that employ 100 or fewer eligible employees and do not maintain another qualified plan. Small employers are exempt from most nondiscrimination and administrative rules that apply to qualified plans.

    For 2012, eligible employees can elect to make before-tax contributions (expressed as a percentage and not a flat amount) to an IRA of up to $11,500. Participants age 50 and older can elect to contribute an additional $2500. The employer has the option of either matching the employee's contributions on a dollar-for-dollar basis up to 3 percent of salary, or making a non-elective contribution of 2 percent of salary for all eligible employees.

(b) Tax-deferred retirement plans have a number of current problems and issues, which include the following:

- Inadequate 401(k) account balances
- Incomplete coverage of the labor force
- Lower benefits for women
- Limited protection against inflation
- Spending lump-sum pension distributions
- Investment mistakes by participants that jeopardize economic security

■ Answers to Application Questions

1. (a) All employees who are at least age 21 and have completed one year of service must be allowed to participate in the plan. Two years of service can be required if the plan has 100 percent immediate vesting upon entry into the plan.

(b) Defined benefit plans must meet certain minimum vesting standards. Under the cliff vesting rule, the worker must be 100 percent vested after five years of service. Under the graded vesting rule, the employee must be 20 percent vested after three years, 40 percent after four years, 60 percent after five years, 80 percent after six years, and 100 percent after seven years.

However, for qualified defined contribution plans or profit sharing plans, the time period for acquiring a fully vested status is shorter. Employer contributions must be (1) 100 percent vested after three years or (2) 20 percent vested after two years of service, increasing 20 percent for each year of service until full vesting is attained after six years.

(c) For 2012, under a defined contribution plan, the maximum annual addition that can be made to an employee's account is limited to 100 percent of compensation, or $50,000, whichever is lower.

For 2012, under a defined benefit plan, the maximum annual benefit is limited to 100 percent of average compensation for the three highest consecutive years, or $200,000, whichever is lower. This limit is indexed.

(d) A 10 percent penalty tax applies to funds withdrawn from a qualified plan before age 59 1/2. The 10 percent penalty tax applies to the amount included in gross income. However, there are exceptions to this rule. The early distribution penalty does not apply to any of the following distributions:

- Made to a beneficiary or to the employee's estate on or after the death of the employee
- Made because the employee has a qualifying disability
- Made as part of a series of substantially equal payments beginning after separation from service, and paid at least annually over the employee's life expectancy, or over the joint lives or joint life expectancy of the employee and designated beneficiary
- Made to an employee after attaining age 55 and separation from service
- Made to an alternate payee under a qualified domestic relations order
- Made to an employee for medical care up to the amount allowable as a medical expense deduction (determined without regard to the itemizing of deductions)
- Made because of an IRS levy
- Made as a qualified reservist distribution

2. Ron's annual pension benefit is $31,500; his monthly benefit is $2,625.

$$(\$70,000 \times 1.5\% \times 30) = \$31,500$$
$$\$31,500/12 = \$2625$$

3. (a) The maximum annual contribution by a self-employed individual into a defined-contribution Keogh plan is limited to 20 percent of net earnings (after certain adjustments). Brandon can make a maximum contribution of $16,000 (20% × $80,000).

   (b) No. Brandon's brother does not meet the minimum age and service requirements that employers can impose under a qualified retirement plan. Employees must be at least age 21 and have one year of covered service before they can participate in the plan. Brandon's brother is only age 20 and has been employed only for one month. As such, Brandon does not have to include him in the Keogh plan.

4. (a) A funding agency is a financial institution that provides for the accumulation or administration of the funds that will be used to pay pension benefits.

   (b) (1) Under a trust fund plan, all pension contributions are deposited with a trustee who invests the funds according to the trust agreement between the employer and trustee. Annuities are not usually purchased when the employees retire, and the pension benefits are paid directly out of the fund. The trustee does not guarantee the adequacy of the fund, nor are there any guarantees of principal and interest rates.

   (2) A guaranteed investment contract (GIC) is an arrangement in which the insurer guarantees the interest rate for a number of years on a lump-sum deposit. The insurer also guarantees the principal against loss. GICs are popular with employers because of interest rate guarantees and protection against the loss of principal. GICs are sometimes used to fund the fixed income option in a defined contribution retirement plan, such as a 401(k) plan. In addition, most GICs make annuity options or other payment options available, but the employer is not required to use these options.

Chapter 18
Social Insurance

■ Teaching Note

Social insurance is an area to which a full semester's course could be devoted. Thus, the main problem is to decide the amount of detail for which students are responsible. As the lecture outline indicates, the chapter is divided into several parts. The first part discusses the reasons for social insurance programs and their characteristics.

The second part of the chapter discusses OASDI and Medicare. Some aspects of the program are subject to annual change, such as the premium for Part B of Medicare and the indexing of monthly cash benefits. It is worthwhile to spend some time on the financial problems of Social Security and Medicare.

Other areas discussed in the chapter are unemployment insurance and workers compensation. The material can be made more relevant to students by discussing the programs in your state. Avoid unnecessary and excessive detail and simply stress fundamentals.

■ Outline

I. Social Insurance

A. Reasons for Social Insurance
   1. To help solve social problems
   2. To provide coverage for perils that are difficult to insure privately
   3. To provide a base of economic security

B. Basic Characteristics of Social Insurance
   1. Compulsory programs
   2. Floor of income
   3. Emphasis on social adequacy rather than individual equity
   4. Benefits loosely related to earnings
   5. Benefits prescribed by law
   6. No means test
   7. Full funding unnecessary
   8. Financially self-supporting

II. Old Age, Survivors, and Disability Insurance (OASDI)

A. Covered Occupations

B. Determination of Insured Status
   1. Fully insured
   2. Currently insured
   3. Disability insured

C. Types of Benefits
   1. Retirement benefits—paid as monthly income to people who are fully insured and are at least age 62
      a. Full retirement age
      b. Early retirement age
      c. Monthly retirement benefits
      d. Delayed retirement credit
      e. Automatic cost-of-living adjustment
      f. Earnings test
   2. Survivor benefits—paid to the dependents of a fully or currently insured deceased worker
   3. Disability benefits—must be disability insured, meet a five-month waiting period, be unable to perform any substantially gainful activity, and have a condition that is expected to last at least 12 months or result in death
   4. Taxation of OASDI benefits
   5. Financing Social Security benefits

D. Medicare benefits—available to most people age 65 or older, people who need kidney dialysis treatment or a kidney transplant, and disabled people under age 65 who have been entitled to OASDI disability benefits for at least 24 months
   1. The Original Medicare Plan
      a. Hospital Insurance (Medicare Part A)
      b. Medical Insurance (Medicare Part B)
      c. Financing of Medicare
      d. Medicare financial crisis
   2. Medicare Advantage Plans (Part C)
      a. Health maintenance organizations (HMOs)
      b. Preferred provider organizations (PPOs)
      c. Private fee-for-service plans (PFFS)
      d. Special needs plans (SNP)
      e. Medical savings accounts (MSA)
   3. Other Medicare Health Plans
   4. Medicare Prescription Drug Plans (Part D)
      a. Cost of prescription drug coverage
      b. Financial help for low-income beneficiaries
      c. Other provisions
   5. Medigap Insurance

III. Problems and Issues

A. Long-Range OASDI Actuarial Deficit

B. Medicare Financial Crisis

IV. Impact of the Affordable Care Act on Medicare

V. Unemployment Insurance

A. Objectives of Unemployment Insurance

1. Provide cash income during short-term involuntary unemployment
2. Help unemployed workers find jobs
3. Encourage employers to stabilize employment
4. Help stabilize the economy by maintaining purchasing power

B. Coverage

1. Private firms
2. State and local governments
3. Agricultural firms under certain conditions
4. Domestic employment under certain conditions

C. Eligibility Requirements

1. Earn qualifying wages and employment
2. Be able to work and available for work
3. Actively seek work
4. Meet a one-week waiting period in most states

D. Benefits

1. Benefit amount—varies with the worker's past wages, within certain minimum and maximum amounts that vary by state
2. Duration of benefits—regular benefits paid for a maximum of 26 weeks in virtually all jurisdictions
3. Extended benefits—up to 13 weeks of additional benefits in states with high unemployment
4. Emergency Unemployment Compensation—temporary emergency programs that provided additional weeks of benefits to unemployed workers who have exhausted their regular state benefits.

E. Financing

1. Employers pay a payroll tax
2. Tax revenues go into a federal trust fund
3. Experience rating gives firms with favorable records lower tax rates

F. Problems and Issues

1. Small proportion receiving benefits
2. Inadequate financing
3. High exhaustion rates during recessions

VI. Workers Compensation

A. Development of Workers Compensation

1. Common law stage
2. Employer liability laws
3. Workers compensation laws

B. Objectives of Workers Compensation
   1. Broad coverage of employees for occupational injury and disease
   2. Substantial protection against the loss of income
   3. Sufficient medical care and rehabilitation services
   4. Encouragement of safety
   5. Reduction in litigation

C. Types of Laws (virtually all states have compulsory laws)

D. Employer's Options in Complying with the Law
   1. Buy a workers compensation policy from a private insurer
   2. Qualify as a self-insurer
   3. Buy insurance from a competitive or monopolistic state fund

E. Covered Occupations
   1. Most occupations covered
   2. Exemptions in some states: small employers
   3. Excluded occupations or less than complete coverage: farm workers, domestic workers, and casual workers

F. Eligibility Requirements
   1. Work in a covered occupation
   2. Injury or disease must be job-related

G. Types of Benefits
   1. Unlimited medical care
   2. Disability income benefits
   3. Death benefits
   4. Rehabilitation services

H. Second Injury Funds in Some States

I. Problems and Issues
   1. Rising share of medical costs to total benefits
   2. Fraud and abuse
   3. Workers compensation costs and an aging work force

■ Answers to Case Application

a. Surviving family members are eligible to receive OASDI survivor benefits. A death benefit of $255 would be paid. Kathy would also be eligible to receive monthly cash survivor benefits until her son reaches age 16. However, because her earnings exceed the annual exempt amount allowed under the earnings test, she will lose her monthly survivor benefits. Survivor benefits, however, will be paid to the son until he reaches age 18.

b. Because Kathy is capable of performing substantial gainful work, she would not be eligible to receive OASDI disability benefits.

c. After a waiting period of five full months, Kathy would be eligible to receive disability income benefits under the OASDI program. Because she has a job-related disability, she is also eligible for workers compensation disability income benefits.

d. Age 62 is below the full retirement age. If Sam's earnings exceed the maximum annual exempt amount, he will lose $1 in benefits for each $2 of earnings above the exempt amount. As a result of the earnings test, Sam may be forced to hold down his earnings in order to avoid a reduction in benefits. The earnings test does not apply to workers who attain the full retirement age.

e. Because Sam quit his job voluntarily to find another job, he would be temporarily disqualified for unemployment insurance benefits.

■ Answers to Review Questions

1. Social insurance programs are necessary for several reasons. First, they are enacted into law to help solve a complex social problem. The problem may be so serious that direct government intervention is necessary. Second, social insurance programs are necessary because certain perils are difficult to insure privately, such as the peril of unemployment. Finally, these programs are necessary to provide a base of economic security to the population. Social insurance programs provide a layer of financial security to most persons against the long-term financial consequences of premature death, old age, occupational and nonoccupational disability, and unemployment.

2. Social insurance programs are compulsory insurance programs with certain characteristics that distinguish them from other government insurance programs. Social insurance programs have the following characteristics:
   (a) Compulsory programs
   (b) Floor of income
   (c) Emphasis on social adequacy rather than individual equity
   (d) Benefits related to earnings
   (e) Benefits prescribed by law
   (f) No means test
   (g) Full funding unnecessary
   (h) Financially self-supporting

3. (a) To be eligible for retirement benefits, you must be *fully insured*. You are fully insured for retirement benefits if you have 40 credits.
   (b) You are *currently insured* if you have earned at least six credits during the last 13 calendar quarters ending with the quarter of death, disability, or entitlement to retirement benefits.
   (c) To be disability insured, you must meet two work tests: (1) a recent work test and (2) a duration of work test. The number of credits required to meet the *recent work test* depends on your age when you become disabled. The following rules apply:
   - If you become disabled before age 24, you need 1½ years of work (six credits) in the three years before you became disabled.
   - For ages 24 through 30, you need credits for half of the time between age 21 and the time you became disabled. For example, a worker disabled at age 27 needs credit for three years of work out of the past six years.
   - If you become disabled at age 31 or older, you need at least five years of work out of the past 10 years immediately before you became disabled.

- A *duration of work test must* also be satisfied. The following table shows how many credits you would need at selected ages to meet the duration of work test:

If you become disabled:	*Then you generally need:*
Before age 28	1.5 years of work
30	2 years
34	3 years
38	4 years
42	5 years
44	5.5 years
46	6 years
48	6.5 years
50	7 years
52	7.5 years
54	8 years
56	8.5 years
58	9 years
60	9.5 years

4. (a) A retired worker can receive full unreduced monthly retirement benefits at the full retirement age. Reduced benefits are payable as early as age 62. Benefits can also be paid to a spouse of a retired worker age 62 or older, to unmarried children under age 18, to unmarried disabled children disabled before age 22, and to a spouse caring for dependent children under age 16. The benefits are automatically adjusted each year for changes in the cost of living.

   (b) Monthly survivor benefits can be paid to the dependents of a deceased worker. Benefits can be paid to unmarried children under age 18, to unmarried disabled children disabled before age 22, to a surviving spouse caring for children under age 16, to a surviving spouse age 60 or older; to a disabled widow or widower, ages 50 through 59, and to dependents of parents age 62 or older. A lump sum death benefit of $255 can also be paid.

   (c) A disabled worker who meets the eligibility requirements can receive monthly disability benefits. Benefits can also be paid to the spouse of a disabled worker caring for children under age 16, to unmarried children under age 18, and to unmarried disabled children disabled before age 22.

5. The worker must have a physical or mental condition that prevents any substantial gainful work and is expected to last at least 12 months or result in death. Benefits are paid after a full five-month waiting period.

6. (a) (1) Hospital Insurance (Medicare Part A) provides inpatient hospital care, inpatient care in a skilled nursing facility, home health care services, and hospice care.

   (2) Medical Insurance (Medicare Part B) provides for the payment of physicians, services, outpatient hospital services, home health care services, and other medical and health care services.

   (b) The Medicare Advantage program provides alternatives to Part A and Part B of Medicare. At the beginning of 2012, Medicare beneficiaries had the following choices:

   a. Health maintenance organizations (HMOs)

   b. Preferred provider organizations (PPOs)

   c. Private fee-for-service plans (PFFS)

   d. Special needs plans (SNP)

   e. Medical savings accounts (MSA)

(c) Beneficiaries covered under the original Medicare plan can obtain prescription coverage by joining a stand-alone Medicare Prescription Drug Plan that covers only prescription drugs. Alternatively, beneficiaries can join a Medicare Advantage Plan or other Medicare health plan that provides prescription drug coverage. Beneficiaries covered for prescription drugs under the group plans of former employers or labor unions can elect to remain in their present plan. All plans, however, must offer coverage at least as good as the standard coverage, which Medicare has set.

7. Unemployment insurance programs have the following objectives:
   (a) To provide cash income to unemployed workers during periods of involuntary unemployment
   (b) To help unemployed workers find jobs
   (c) To encourage employers to stabilize employment
   (d) To help stabilize the economy

8. An unemployed worker generally must meet the following eligibility requirements in most states:
   (a) Earn qualifying wages during his or her base period, and work a certain number of weeks or calendar quarters, or some combination of both
   (b) Be able to work and available for work
   (c) Actively seek work
   (d) Meet a waiting period

9. Workers compensation laws have the following basic objectives:
   (a) Broad coverage of employees for occupational injury and disease
   (b) Substantial protection against the loss of income
   (c) Sufficient medical care and rehabilitation services
   (d) Encouragement of safety
   (e) Reduction in litigation

10. (a) Unlimited medical care
   (b) Disability-income benefits based on the degree of disability
   (c) Death benefits to eligible surviving family members
   (d) Rehabilitation services

■ Answers to Application Questions

2. To be eligible for retirement benefits you must be at least age 62 and be fully insured. You are fully insured if you have 40 credits or quarters of coverage.
   (a) Eligible. The worker's unmarried disabled son is eligible for benefits based on the retired worker's earnings record. The unmarried son became disabled prior to age 22.
   (b) Eligible. A spouse of a retired worker is eligible for benefits if she or he is at least age 62 and is married to the retired worker for least one year. In this case, the spouse is age 63. We can also assume the spouse has been married to the retired worker for at least one year because she was caring earlier for an unmarried child under age 18.
   (c) Eligible. The spouse of a retired worker is eligible for benefits if she or he is caring for an unmarried child under age 16. Although the spouse is age 45, she is caring for the 12-year-old daughter of the retired worker and is eligible for benefits.

(d) Not eligible. A divorced spouse must be at least age 62 and must be married to the retired worker for at least 10 years. In this case, the divorced spouse is age 55 and was married to the retired for only six years.

3. Survivor benefits can be paid to the dependents of a deceased worker who is either currently or fully insured. For certain survivor benefits, a fully insured status is required.
   (a) Eligible. Survivor benefits can be paid to a surviving spouse who is caring for an unmarried child under age 16.
   (b) Not eligible. Survivor benefits paid to an unmarried child cease when the child attains age 18. In this case, the son is age 19.
   (c) Not eligible. The surviving spouse who has no children under age 16 in her care must be age 60 or older to receive survivor benefits. One exception is that survivor benefits can be paid to a disabled widow or widower, ages 50 through 59, if certain conditions are met.
   (d) Eligible. A surviving spouse age 60 is eligible for survivor benefits based on the deceased worker's earnings if the worker is fully insured at the time of death. In this example, we assume the deceased worker is fully insured at the time of death.

4. A disabled worker must be disability insured, meet a full five-month waiting period, and satisfy the definition of disability under the law.
   (a) Not eligible. Although the worker is disability insured, he or she must meet a full five-month waiting period. The disability must also be expected to last at least 12 months or result in death. In this case, the worker is expected to return to work in three months and would not be eligible.
   (b) Eligible. The spouse of a disabled worker who is caring for a dependent child under age 16 is eligible for benefits based on the disabled worker's earnings.
   (c) Eligible. Disability benefits based on the disabled worker's earnings record can be paid to unmarried children under age 18. In this case, the daughter is age 16 and is eligible for benefits.
   (d) Not eligible. The professor is capable of performing substantial gainful work in the national economy and would not be eligible for benefits.
   (e) Eligible. The disability is expected to last at least one year. After a full five-month waiting period, disability benefits can be paid to the worker with a crushed foot.

5. Covered under Medicare Part A. Part A covers inpatient hospital stays of up to 90 days during a benefit period.
   (a) Not covered. Medicare beneficiaries must be at least age 65 to be eligible for benefits.
   (b) Not covered under Part A or Part B. Part A will cover care in a skilled nursing facility for up to 100 days in a benefit period. Long-term care, however, is not covered. The patient has been in a nursing home for more than two years.
   (c) Not covered. The Medicare program does not cover hearing aids.
   (d) Covered. Home health-care services, including speech therapy, are covered under both Part A and Part B.
   (e) Hospital expenses for the surgery are covered under Part A. Part B covers physicians' services, including surgery.
   (f) Not covered. The spouse must be at least age 65 to be eligible for Medicare benefits. There is an exception, however, for a disabled person under age 65 who has been entitled to receive OASDI disability benefits for at least 24 months.

6. (a) Unemployment insurance is designed to cover short-term involuntary unemployment. Unemployment insurance programs pay weekly benefits only to workers who are involuntarily unemployed through no fault of their own. If workers voluntarily quit their jobs without good cause, they will be initially disqualified for benefits.
   (b) The applicant for unemployment benefits can be disqualified from receiving benefits for several reasons, such as voluntarily quitting his or her job without good cause, being discharged for misconduct, or refusing suitable work.
   (c) Several reasons explain, at least in part, for the low recipiency rate. The states have adopted tighter eligibility requirements and more restrictive policy changes; many unemployed are temporarily denied benefits because of the initial waiting period; many unemployed are reentrants or new entrants into the labor force and have not earned qualifying wages; some work in noncovered occupations; others are disqualified for various reasons; many remain unemployed after they exhaust their benefits; and many unemployed fail to file for benefits.

7. (a) Workers compensation is based on the fundamental principle of liability without fault. The employer is held absolutely liable for the occupational injuries or disease suffered by the workers, regardless of who is at fault. Disabled workers are paid for their injuries according to a schedule of benefits established by law. They are not required to sue their employers to collect benefits. The laws provide for the prompt payment of benefits to disabled workers regardless of fault and with a minimum of legal formality.
   (b) Employers can purchase a workers compensation policy. In some states, employers can purchase coverage from a competitive or monopolistic state fund. Finally, many employers self-insure their workers compensation loss exposures.
   (c) Two principal eligibility requirements must be met to receive workers compensation benefits. First, the disabled person must work in a covered occupation. Second, the worker must have a job-related accident or disease.

Chapter 19
The Liability Risk

■ Teaching Note

This chapter is important since it discusses the liability loss exposure. Stress the points that theoretically there is no maximum upper limit to the size of a liability suit, that attorney fees can be enormous, and that a person's income and assets can be attached to satisfy a liability judgment.

The meaning of negligence and the elements of negligence should be heavily stressed. It is also worthwhile to spend some time discussing the legal defenses that can be used if one is sued. Also, spend some class time discussing some current public policy liability issues, such as medical malpractice. Finally, this chapter can be concluded by discussing defects now found in our legal system and some tort reform proposals.

■ Outline

I. Basis of Legal Liability

A. Types of Legal Wrongs
  1. A *legal wrong* is defined as the failure to perform a legal duty.
  2. Types of legal wrongs include crimes, breach of contract, and torts.

B. Types of Torts
  1. Intentional—such as libel, slander, assault, and false arrest
  2. Strict liability (absolute liability)—liability is imposed regardless of negligence or fault
  3. Negligence

II. Law of Negligence

A. Negligence Defined—failure to exercise the standard of care required by law to protect others from harm

B. Elements of Negligence
  1. Existence of a legal duty to protect others from harm
  2. Failure to perform that duty
  3. Damage or injury to the plaintiff
  4. Proximate cause relationship between the negligent act and the infliction of damages

C. Defenses Against Negligence
  1. Contributory negligence
  2. Comparative negligence
  3. Last clear chance rule
  4. Assumption of risk

D. Imputed Negligence—negligence of one person can be imputed to another
   1. If there is an employer-employee relationship
   2. If a vicarious liability law applies
   3. If there is a joint business venture
   4. If a dram shop law applies

E. *Res Ipsa Loquitur*
   1. Definition—this term means the thing speaks for itself.
   2. Four elements must be present for it to apply: (a) the event must be such that it would not have occurred unless someone was careless; (b) the defendant has superior knowledge of the cause of the accident; (c) the instrumentality causing the accident must be in the exclusive control of the defendant; and (d) the injured party has not contributed to the accident in any way.

III. Specific Applications of the Law of Negligence

A. Ownership of Property
   1. Degree of care required for trespasser, licensee, or invitee
   2. Attractive nuisance doctrine—a condition that can attract and injure children

B. Ownership and Operation of Automobiles
   1. The negligent owner and operator of the vehicle can be held liable for bodily injury or property damage caused to another.
   2. Where the owner is not the operator, the general rule is that the owner is not liable for the negligence of the operator. Exceptions include the family purpose doctrine, or if an agency relationship exists.

C. Government Liability
   1. Government entities can be sued if a proprietary function is involved.
   2. With respect to government functions, immunity from lawsuits has been eroded.

D. Charitable Institutions—immunity has been eroded both by court decisions and by legislation

E. Employer and Employee Relationships
   1. Must be an employee
   2. Must be acting within the scope of employment

F. Parents and Children
   1. Under the common law, parents usually were not liable for a child's tort.
   2. Today, parents can be held liable if a child is given a dangerous instrument or if a child is acting as an agent for the parent. Under the family purpose doctrine, parents can be held liable if a car is operated by a minor child, and state laws have been passed that make parents liable for deliberate property damage by the children.

G. Animals
   1. Strict liability applies to injuries caused by wild animals, even though they have been domesticated.
   2. For domestic pets, the majority of states hold a dog owner liable based on strict liability for injury to another even if the pet is not vicious.

IV. Current Tort Liability Problems

A. Defective Tort Liability System
   1. Raising tort liability costs
   2. Inefficiency in compensating injured accident victims
   3. Uncertainty of legal outcomes
   4. Higher jury awards
   5. Long delay in settling lawsuits
   6. Tort reform

B. Medical Malpractice
   1. Reasons for medical malpractice problem
   2. Reducing medical malpractice costs

C. The Financial Sector

■ Answers to Case Application

a. There are four elements of negligence:

(1) Existence of a legal duty to use reasonable care. Michael has a legal duty to protect others from harm. This also includes a legal duty toward Ed. Michael should have been aware of Ed's presence and should not have fired into the bush without first determining Ed's location. The first requirement is met.

(2) Failure to perform that duty. Michael quickly fired the rifle into the bush without first determining if Ed or a deer caused the movement. It appears that Michael did not take the necessary precautions to protect Ed from harm. The second requirement is met.

(3) Damages or injury to the claimant. Since Ed was injured, this requirement is met.

(4) Proximate cause relationship. There must be an unbroken chain of events between the negligent act and infliction of damages. In this case, Michael's actions were the proximate cause of loss.

The four requirements of a negligent act are satisfied, and Michael is guilty of negligence.

b. Under the contributory negligence doctrine, if a person contributes to his or her injury, the injured person cannot collect damages. Ed should be aware of the dangers in hunting. Since he contributed to his own injury, he should not collect. Michael will have to show, however, that Ed is guilty of contributory negligence.

c. Yes. The damage award would be reduced. Under the comparative negligence doctrine, if an injured person contributed to the injury, he or she can still collect damages but the damage award will be reduced.

d. Michael would be considered a trespasser since he did not obtain permission to hunt on the farmer's land. In general, a trespasser takes the property as he or she finds it. The farmer has no legal obligation to warn Michael of the marshy pond and is not liable for damages.

■ Answers to Review Questions

1. (a) *Negligence* is defined as the failure to exercise the standard of care required by law to protect others from harm.

   (b) There are four elements of negligence:
   - Existence of a legal duty to use reasonable care

- Failure to perform that duty
- Damages or injury to the claimant
- Proximate cause relationship

2. *Strict liability* means that liability is imposed regardless of negligence or fault. Because the potential harm is so great, an individual may be held liable for the harm or injury to another even though negligence cannot be proven. Another name for strict liability is absolute liability.

3. (a) *Compensatory damages* are awards that compensate injured victims for losses actually incurred. Compensatory damages include both special damages and general damages. *Special damages* are awards for losses that can be determined and documented, such as medical bills and lost wages. *General damages* are awards that cannot be specifically measured or itemized, such as pain and suffering, disfigurement, or loss of the companionship of a spouse.
   (b) *Punitive damages* are designed to punish people or organizations so that others are deterred from committing the same wrongful act.

4. (a) Under a *contributory negligence law,* if the injured person contributed in any way to the accident, he or she cannot collect damages.
   (b) Under a *comparative negligence law,* the injured person could collect, but the damage award would be reduced.
   (c) Under the *last chance rule,* the plaintiff who is endangered by his or her own negligence can still recover damages from the defendant if the defendant has a last clear chance to avoid the accident but fails to do so.
   (d) Under the *assumption of risk doctrine,* a person who understands and recognizes the danger inherent in a particular activity cannot recover damages in the event of injury.

5. Under certain conditions, the negligence of one person can be imputed to another. Imputed negligence may arise from an employer–employee relationship, vicarious liability law, family-purpose doctrine, joint business venture, or a dram shop law.

6. Under this doctrine, the very fact that the event occurs is a presumption of proof that the defendant is negligent. The accident or injury normally would not have occurred if someone had not been careless.

7. (a) The property owner owes the least degree of care to a trespasser; if the trespasser is injured, the property owner usually has no liability. In the case of a licensee, a higher degree of care is owed. The licensee must be warned of any dangerous condition or activity on the premises that may not be readily apparent to the licensee. The highest degree of care is owed to an invitee. In addition to warning the invitee of any dangerous conditions, the occupant has the obligation to inspect the premises and to eliminate any dangerous condition revealed by the inspection. Many states have abolished either partly or completely the preceding common-law classifications.
   (b) An *attractive nuisance* is a condition that one has created that can attract and injure children. A high degree of care is imposed on property owners to protect children from harm. If children are injured because of an attractive nuisance, the owner can be held liable.

(c) All states clearly require the owner of an automobile to exercise a high degree of care to protect others from harm while operating the automobile. In addition, the general rule is that the owner is not liable for the negligent acts of operators, but there are several exceptions. The owner is liable for an operator's negligence if an agency relationship exists. The owner can be held liable for damages caused by the driver's negligence under a vicarious liability law. Finally, permissive use statutes impose liability on the owner of an automobile for the negligence of anyone who is operating the automobile with the owner's consent.

(d) In the past, governmental units and charitable institutions generally were immune from legal liability. Governmental units today can be sued if the negligence arises out of a proprietary function. Also, tort claim acts have been enacted that permit an individual to sue a governmental unit for damages. Charitable institutions can be held liable for negligence arising out of fund-raising or money-making activities.

(e) Under the doctrine of *respondeat superior*, employers can be held liable for the negligent acts of employees who are acting on behalf of the employer. The employer is held liable when both the worker's status legally is that of an employee, and the employee is engaged in furthering the employer's business.

(f) Under the common law, parents usually were not responsible for their children's torts. Today, parents can be held liable under certain conditions. The parents can be held liable if the children are acting as agents for the parents, or if a child has a dangerous weapon and the parents fail to take it away from the child. Also, under the family-purpose doctrine, the parents can be held liable for the negligent operation of an automobile by a minor child. Finally, numerous states have passed laws that hold the parents liable for the willful and intentional acts of children that result in property damage to others.

(g) Owners of wild or dangerous animals can be held liable for injuries to others based on the doctrine of strict liability, even if the animals are domesticated. With respect to domestic pets, the majority of states hold the owner liable based on strict liability for injury to another even if the domestic pet is not vicious.

8. (a) Major defects in the tort liability system include rising tort liability costs, inefficiency in compensating injured accident victims, uncertainty of legal outcomes, higher liability awards, and long delays in settling lawsuits.

   (b) Some tort reform proposals include capping noneconomic damages such as pain and suffering, reinstating the state-of-the art defense, restricting punitive damage awards, modifying the collateral source rule, modifying the joint and several liability rule, and using alternative dispute resolution (ADR) techniques.

9. (a) The medical malpractice problem is due to several factors. These include medical errors by health-care providers, increased willingness of patients to sue physicians, exploitation of malpractice suits by the media, loss of the intimate relationship between physicians and patients, willingness of physicians and medical experts to testify against other physicians, increased tendency for attorneys to file malpractice suits because of potentially high fees, and a growing resentment against managed care firms.

   (b) Health-care providers are now using a number of newer methods to reduce medical malpractice costs.

   - Many hospitals are adopting policies that require them to forsake charges for treatment that involve medical errors called "never events."
   - Many states have passed laws that allow physicians to apologize for their medical errors without allowing the admission to be used against them in court.

- Prompt disclosure of medical errors and open communication between patients and health-care providers can lead to fewer lawsuits, quicker settlements, and reduced litigation costs. Many states mandate the reporting of medical errors.
- Remedial action would be taken against the small percentage of problem physicians who have several judgments against them, such as mandatory training programs to reduce medical errors.
- Emphasize risk management principles to reduce malpractice claims.

10. The financial sector continues to be a problem area. In the 1990s, several large corporations used dishonest or aggressive accounting practices to inflate stated earnings and profits, while other companies concealed or misstated accounting transactions. When earnings were revised downward, stockholders lost millions of dollars. Because of class action suits by angry stockholders, employees, and investors, several large corporations were forced into bankruptcy. In addition, boards of directors have been sued because of lax corporate governance and inadequate oversight of management.

    More recently, during the severe economic downturn between 2008 and 2011, many large corporations had defective financial risk management programs in which major financial risks were poorly assessed and managed. As a result, large corporations lost billions of dollars because of improper management of financial loss exposures.

    In addition, promises of high investment returns enticed some investors to place money with fraudulent organizations. For example, Bernard Madoff was convicted in 2009 of defrauding investors of billions of dollars in a Ponzi scheme. The scam triggered lawsuits from numerous defrauded investors.

■ Answers to Application Questions

1. (a) (1) Existence of a legal duty. Smith Construction has an obligation to protect others from harm, including harm from the machinery used in construction.
   (2) Failure to perform that duty. Since the machines are an attractive nuisance that can injure children, Smith Construction failed to perform the duty required by law to protect others from harm. From examination of the facts, it appears that reasonable measures to prevent access to the construction equipment were not taken.
   (3) Damages or injury to the claimant. This requirement is met, since Fred was injured.
   (4) Proximate cause relationship. This requirement may not be met. The brakes on the tractor were released, which caused the tractor to roll down the hill. The tractor would have remained in the same position if the brakes had not been released. Fred's actions could be viewed as a new intervening cause.
   (b) There are three legal classes: (1) trespassers, (2) licensees, and (3) invitees. Fred technically is a trespasser, but because of his age he would be considered an invitee in many jurisdictions.
   (c) The attractive nuisance doctrine would apply here. Smith Construction could be held legally liable for the injury to Fred under this doctrine.
2. (a) (1) The injured motorist would have to establish the following requirements:
   (i) Existence of a legal duty
   (ii) Failure to perform that duty
   (iii) Damages or injury to the claimant
   (iv) Proximate cause relationship

The motorist would have to show that Emily was responsible for the accident and that the four elements of negligence were satisfied. From the facts given, it cannot be determined conclusively that Emily is guilty of negligence.

(2) Under the doctrine of *respondeat superior,* an employer can be held liable for the negligent acts of employees who are acting on the employer's behalf. Also, under a vicarious liability law, the employer can be held responsible for the negligent acts of an employee while operating an automobile. Emily's negligence could be imputed to Parkway Distributors, who is responsible for Emily's actions while she is acting on the company's behalf.

(b) Tom could be held legally liable for the accident caused by Megan. The owner of an automobile could be held liable for the driver's negligence if an agency relationship exists. A court may rule that Megan was acting as an agent on behalf of Tom. Tom could also be held liable under a vicarious liability law in which the negligence of the driver of an automobile is imputed to its owner. Finally, under a permissive use statute, the owner of an automobile could be held liable for the negligence of a driver who is operating the automobile with the owner's permission.

3. (a) Andrew must show that Whirlwind Mowers is guilty of negligence. He must establish the following:

(1) Existence of a legal duty. This requirement is met, since there is a legal duty not to produce a product that could harm someone.

(2) Failure to exercise that duty. This requirement appears to be met. The blade flew off, which means that the product is defective and harmful. Since Whirlwind Mowers did not produce a safe product, the company failed in its duty to protect its customers from harm.

(3) Damages or injury. Since Andrew is injured, this requirement is met.

(4) Proximate cause relationship. This requirement is met, since the proximate cause of loss is a mower blade that flew off and injured Andrew. From examination of the facts, Whirlwind Mowers appears to be guilty of negligence.

(b) Under the doctrine of *res ipsa loquitur,* the very fact that the event occurs is sufficient proof that the defendant is negligent. The accident or injury would not have occurred if someone had not been careless. In this case, Andrew would not have been injured if the lawn mower had been manufactured properly. The injury would not have occurred if the blade had not torn lose from the machine.

(c) Andrew may receive an award for *special damages* that compensate the claimant for determinable and itemized losses, such as medical expenses, the loss of earnings, and damage to property. Andrew may also be awarded *general damages* for losses that cannot be specifically itemized, such as pain and suffering, disfigurement, and the loss of future earnings. Finally, *punitive damages* may be awarded where the objective is to punish Whirlwind Mowers so that others are deterred from committing the same wrongful act.

4. Under a pure comparative negligence law, you can collect damages for your injury even if you are negligent, but your damage award is reduced proportionately. Mathew has actual damages of $50,000. Because he is 40 percent at fault, his damage award is reduced 40 percent. Mathew will collect $30,000 for his injury.

5. Dr. Jones is presumed negligent under the doctrine of *res ipsa loquitor:* "the thing speaks for itself." The fact that the incision was made on the wrong knee is grounds for recovery under this doctrine. The surgeon had exclusive control over the surgical procedure, the patient did not contribute to the error in any way, and arthroscopic surgery on the wrong knee normally does not occur unless negligence is involved.

6. The legal doctrine that applies in this case is the last clear chance rule. This rule states that a plaintiff who is endangered by his or her own negligence can still recover damages from the defendant if the defendant has a last clear chance to avoid the accident but fails to do so. If Sarah can prove that the motorist had a last clear chance to avoid hitting her, the motorist would be guilty of negligence.

7. The legal rule that applies is the collateral source rule. Under this rule, the defendant cannot introduce any evidence that shows the injured party has received compensation from other collateral sources. The defendant’s attorney asked Elizabeth if her injuries were paid for by the company’s group health insurance plan. The judge ruled that the question was improper.

8. Arbitration is an alternative to a costly and lengthy trial. Arbitration is a technique by which parties in a dispute agree to be bound by the decision of an independent third party. If Daniel and the chemical company agree to resolve the dispute by arbitration, both parties would be bound by the arbitrator’s decision.

Chapter 20
Homeowners Insurance, Section I

■ Teaching Note

This chapter discusses the homeowners program by the Insurance Services Office (ISO). In 2010, ISO released a new homeowners policy for use beginning in 2011. This chapter is limited to the Section I coverages in the homeowner policies. The following chapter discusses the Section II coverages in the homeowner policies. Homeowners 3 is emphasized since it is a widely used and popular form. The sample HO-3 policy in the Appendix to the text can be used to illustrate the major coverages and provisions.

Instructors differ in their approach to the homeowners policy. Some instructors discuss the basic coverages without getting into too much detail. Others prefer to discuss in detail the various losses that are covered or excluded under a homeowners policy.

■ Outline

I. Homeowners Insurance

A. Eligible Dwellings

B. Overview of Homeowners Policies

1. HO-2 (broad form) covers the dwelling, other structures, and personal property on a named perils basis.
2. HO-3 (special form) covers the dwelling and other structures against direct physical loss. All direct physical losses are covered except those losses specifically excluded. Personal property, however, is covered on a named perils basis.
3. HO-4 (contents broad form) covers a tenant’s personal property on a named perils basis. Up to 10 percent of the insurance on personal property can be applied to any building additions or alterations by the insured.
4. HO-5 (comprehensive form) provides open perils coverage (“all-risks coverage”) on the dwelling, other structures, and personal property. All direct physical losses are covered except those losses specifically excluded.
5. HO-6 (Unit-Owners Form) covers personal property on a named perils basis. A minimum of $5000 of insurance is also provided on the condominium unit that covers improvements and additions and certain other types of property.
6. HO-8 (Modified Coverage Form) is specifically designed for older homes.

C. Determination of Policy Amounts

1. Once the insured has selected the amount of insurance on the dwelling (Coverage A), all other Section I coverages are percentages of Coverage A.
2. Section II—minimum liability limits are the same for all the homeowners policies.

II. Analysis of Homeowners 3 Policy (Special Form)

A. Persons Insured

1. Named insured and household residents who are relatives
2. Other persons under age 21 in the care of the named insured or in the care of a household resident who is a relative
3. Full-time resident students under age 24 who are relatives and attending school away from home, or under age 21 and in the care of the named insured or the care of a household resident who is your relative,

B. Section I—Property Coverages

1. Coverage A—Dwelling. Covers the dwelling and attached structures, as well as materials and supplies used to construct, repair, or alter the dwelling or other structures.
2. Coverage B—Other Structures. Other structures include a detached garage, tool shed, or horse stable. The amount of insurance is 10 percent of Coverage A.
3. Coverage C—Personal Property. Personal property is covered anywhere in the world. The amount of insurance under Coverage C is 50 percent of Coverage A, which can be increased if desired. However, if personal property is usually located at another residence, such as a cabin or vacation home, the off-premises coverage is limited to 10 percent of Coverage C, or $1000, whichever is greater. Special limits apply to items that are particularly subject to theft.
4. Coverage D—Loss of Use. The Coverage D amount is 30 percent of Coverage A. Three benefits are provided: additional living expenses, fair rental value, and prohibited use.
5. Additional coverages include cost of debris removal; repairs needed to prevent further damage; limited coverage of trees, shrubs, plants, and lawns; up to $500 for a fire department service charge; loss of credit cards, electronic fund transfer cards, forgery of checks, and counterfeit money up to $500; broad coverage of property removed from premises threatened by a covered peril for up to 30 days; loss assessment charge up to $1000; certain collapse losses; coverage for glass or safety glazing material; coverage for landlord's furnishings up to $2500; limited coverage for increased construction costs because of some ordinance or law; and coverage of grave markers up to $5000.

C. Deductible—a deductible of at least $250 applies to each covered loss. The deductible can be increased with a reduction in premiums. In states that are vulnerable to catastrophes, insurers may use percentage deductibles rather than dollar deductibles to limit their exposure to catastrophe losses from natural disasters.

D. Perils Insured Against in HO-3, Section I

1. Under Coverages A and B, all direct physical losses are covered except certain losses specifically excluded.
2. Under Coverage C, personal property is covered only for certain named perils.

E. Certain exclusions apply to the dwelling and other structures (Coverage A and Coverage B).

1. Collapse, except collapse losses covered under "additional coverages."
2. Freezing of plumbing, heating, air conditioning, or automatic fire protection sprinkler system unless heat is maintained or the water supply is shut off and drained. However, if the building has an automatic sprinkler system, the insured must continue the water supply and maintain heat in the building.
3. Damage to pavements, patios, swimming pools, and similar structures from ice, water pressure, freezing, and thawing.
4. Theft of materials and supplies from a dwelling under construction.

5. Vandalism, malicious mischief, and glass breakage if the dwelling is vacant for more than 60 consecutive days immediately before the loss.
6. Mold, fungus, or dry rot losses.
7. Other exclusions
    - Wear and tear, marring, deterioration
    - Mechanical breakdown, latent defect, inherent vice (tendency of property to decompose)
    - Smog, rust or other corrosion, or dry rot
    - Smoke from agricultural smudging or industrial operations
    - Discharge, seepage, or release or escape of pollutants unless the discharge or release is caused by a Coverage C peril
    - Settling, cracking, shrinking, bulging, or expansion of pavements, patios, foundations, walls, floors, roofs, or ceilings
    - Animals owned or kept by an insured
    - Birds, rodents, or insects
    - Nesting or infestation, or discharge or release of waste or secretions by animals

F. Section I Exclusions. Certain additional exclusions apply to the dwelling, other structures, and personal property (Coverages A, B, and C).

- Concurrent causation losses
- Ordinance or law
- Earth movement
- Water damage, such as flood, sewer back-up, and seepage
- Power failure off the residence premises
- Neglect of the insured to save and preserve the property after a loss
- War
- Nuclear hazard
- Intentional loss
- Government action
- Weather conditions that otherwise are excluded
- Failure to act by any person, group, or government body
- Faulty, inadequate, or defective planning and design

G. Section I Conditions include the following:

1. Duties after a loss—include giving immediate notice, protecting the property from further loss or damage, and preparing an inventory of damaged personal property. The insured may also be required to exhibit the damaged property and file proof of loss within 60 days after the insurer's request.
2. Loss settlement—for personal property, the basis of payment is actual cash value. For dwellings and other structures, the basis of payment is replacement cost provided the insured carries insurance at least equal to 80 percent of the replacement cost of the dwelling. If not, the insured will receive the larger of the actual cash value or an amount determined by a special formula.
3. Loss to a pair or set
4. Appraisal clause
5. Other insurance and service agreement
6. Suit against the insurer

7. Insurer's option to repair or replace the damaged property with like property
8. Loss payment—paid to named insured
9. No abandonment of property
10. Mortgage clause—protects the mortgagee's interest
11. Policy period
12. Concealment or fraud

H. Section I and II Conditions

1. Liberalization clause
2. Waiver or change of policy provisions
3. Cancellation
4. Nonrenewal of the policy
5. Assignment of the policy
6. Subrogation
7. Death of named insured or spouse

■ Answers to Case Application

a. No, the present coverages are inadequate. The following changes should be made.

- Insurance on the home should be increased to at least $200,000 to comply with the replacement cost provision. An extended replacement cost or guaranteed cost endorsement could be added, which requires the home to be insured to $250,000.
- Jewelry is covered only for a maximum of $1500 if the jewelry is stolen. The jewelry should be scheduled and specifically insured to its full value.
- The homeowners policy provides only limited coverage on boats. The boat should be specifically insured under a separate "all-risks" boat insurance policy.
- A personal property replacement cost endorsement could be added that provides replacement cost coverage on personal property.

b. The insured will receive the higher of (1) the actual cash value of $10,000 or (2) an amount based on the following formula:

$$\frac{\text{Amount of insurance carried}}{80\% \times \text{ replacement cost}} \times \text{ loss}$$

$$\frac{\$150{,}000}{80\% \times \$250{,}000} \times \$16{,}000 = \$12{,}000$$

The insurer will pay $12,000.

c. Unless a replacement cost provision is added to the policy, personal property is indemnified on the basis of actual cash value. Ignoring any deductible, the actual cash value of the stolen property ($4000) would be paid. Because of the limits on certain types of property, only $200 would be paid for the theft of the coin collection.

d. The dispute is settled under the *appraisal provision* that appears in the Section I conditions. Jack and Jane would select their own appraiser. The insurer would select its appraiser. The two appraisers would then select an umpire. If the appraisers cannot agree on an umpire, a judge in a court of record will appoint one. If the appraisers disagree on the amount of the loss, their differences are submitted to the umpire. An agreement by any two of the three is then binding on all parties.

e. Business personal property used in a home business on the premises is covered up to $2500.

■ Answers to Review Questions

1. HO-2 is a named-perils policy that insures the dwelling, other structures, and personal property against loss from certain named perils; it can be used by homeowners who desire basic coverage on the home and personal property. HO-3 is a special form that covers the dwelling and other structures against all direct physical losses except certain losses specifically excluded. Personal property is covered only for certain named perils. HO-3 is designed for homeowners who desire broader coverage than that provided by HO-2. HO-4 covers the personal property of renters and also provides personal liability insurance; it is designed for renters. HO-5 covers the dwelling, other structures, and personal property on an open-perils ("all-risks") basis. HO-5 is designed for insureds who want broader coverage on both the dwelling and personal property. HO-6 is designed for condominium owners. HO-8 is designed for insureds who have older homes with a replacement cost exceeding market value.

2. Persons insured include (1) the named insured and household residents who are relatives, (2) other persons under age 21 in the care of the named insured or in the care of a household resident who is a relative, and (3) full-time resident students under age 24 who are relatives and attending school away from home, or under age 21 and in the care of the named insured, or the care of a household resident who is your relative.

3. (a) Coverage A covers the dwelling, attached structures, and materials and supplies used to construct, repair, or alter the dwelling or other structure. An example of a covered loss is damage to the roof because of a windstorm or tornado.
   (b) Coverage B covers other structures, such as a detached garage, tool shed, or horse stable. The amount of insurance is 10 percent of Coverage A. An example of a covered loss is damage to the detached garage because of a fire.
   (c) Coverage C covers personal property anywhere in the world. The amount of insurance under Coverage C is 50 percent of Coverage A, which can be increased if desired. If personal property is usually located at another residence, such as a cabin or vacation home, the off-premises coverage is limited to 10 percent of Coverage C, or $1000, whichever is greater. Special limits apply to items that are particularly subject to theft. An example of a covered loss is the theft of a camera from a motel room while the insured is on vacation.
   (d) Coverage D covers the loss of use. The Coverage D amount is 30 percent of Coverage A. Three benefits are provided—additional living expenses, fair rental value, and prohibited use. For example, if the insured must rent a temporary apartment for three months while his or her home is being repaired because of a fire, the additional living expenses would be covered under this provision.
   (e) Additional coverages include the cost of debris removal; repairs to prevent further damage; limited coverage of trees, shrubs, plants, and lawns; unauthorized use of credit cards and fund transfer cards; broad coverage of property removed from the premises threatened by a covered peril for up to 30 days; loss assessment charge up to $1000; certain collapse losses; coverage for glass or safety glazing material; coverage for landlord's furnishings up to $2500; limited coverage for increased construction costs because of some ordinance or law; and coverage of grave markers up to $5000.

   An example of a covered loss is the cost of removing debris after a tornado occurs.

4. (1) The special limits of liability on certain types of property are as follows:
   (a) $200 on money, bank notes, bullion, gold, silver, platinum, coins, medals, stored value cards, and smart cards
   (b) $1500 on securities, valuable papers, manuscripts, passports, tickets, and stamp collections
   (c) $1500 on watercraft of all types
   (d) $1500 on trailers not used with watercraft
   (e) $1500 for theft of jewelry, watches, furs, and precious and semiprecious stones
   (f) $2500 for theft of firearms and related equipment
   (g) $2500 for theft of silverware, goldware, platinumware, and pewterware
   (h) $2500 on property on the residence premises used primarily for business
   (i) $1500 on property away from the premises used primarily for business
   (j) $1500 on portable electronic equipment in or upon a motor vehicle
   (k) $250 on antennas, tapes, wires, records, disks, and other media used with electronic equipment in or upon a motor vehicle

   (2) Because of moral hazard and loss-adjustment problems and a desire by the insurer to limit its liability, certain types of property have maximum dollar limits on the amount paid for any loss.
5. (a) This means that all direct physical losses are covered except certain losses specifically excluded.

   (b) Under Coverage C, personal property is covered for fire or lightning, windstorm or hail, explosion, riot or civil commotion, aircraft vehicles, smoke, vandalism or malicious mischief, theft, falling objects, weight of ice, snow, or sleet, accidental discharge or overflow of water or steam, sudden and accidental tearing apart, cracking, burning, or bulging of a steam, hot water, air conditioning, or automatic fire protective sprinkler system, or household appliance, sudden and accidental damage from an artificially generated electrical current, and volcanic eruption.

6. The major exclusions that apply to the dwelling and other structures are collapse, except certain collapse losses; freezing of plumbing, heating, air conditioning, or automatic fire protection sprinkler system unless heat is maintained; damage to pavements, patios, swimming pools, and similar structures from ice, water pressure, freezing, and thawing; theft of materials and supplies from a dwelling under construction; vandalism, malicious mischief, and glass breakage if the dwelling is vacant for more than 60 consecutive days immediately before the loss; wear and tear; inherent vice; smog; smoke from agricultural smudging; release or escape of pollutants unless caused by a Coverage C peril; settling, cracking, shrinking or bulging of pavements, foundations, walls, floors and roofs; animals owned or kept by an insured; and certain additional exclusions.

   Certain types of personal property are also excluded, including articles separately described and specifically insured; animals, birds, and fish; motor vehicles and motorized land conveyances, aircraft and parts; hovercraft and parts; property of roomers, boarders, and other tenants; property rented or held for rental to others off the residence premises; and business records.

   Certain other exclusions apply to the dwelling, other structures, and personal property. They include losses from an ordinance or law; earth movement; certain types of water damage; power failure away from the premises; neglect of the insured to protect the property; war, nuclear hazard; intentional loss; governmental action; weather conditions that are otherwise excluded; failure to act by any person, group, or government body; and faulty, inadequate, or defective planning and design.

7. The conditions section imposes certain duties on the insured after a loss occurs. The insured must give immediate notice of the loss; the property must be protected from further damage; the insured must prepare an inventory of the damaged personal property, and may be required to show the damaged

property to the insurer as often as is reasonably required, and the insured may be required to file a proof of loss at the insurer's request within 60 days.

8. (a) Covered losses to the dwelling and other structures are paid on the basis of replacement cost with no deduction for deprecation if certain conditions are fulfilled. If the insured carries insurance at least equal to 80 percent of the replacement cost at the time of loss, full replacement cost is paid with no deduction for depreciation.

   If the insurance carried is less than 80 percent of the replacement cost, the insured receives the larger of the following amounts:

   (i) Actual cash value of that part of the building damaged, or

   (ii) $\dfrac{\text{Amount of insurance carried}}{80\% \times \text{replacement cost}} \times \text{loss} = \text{Amount paid}$

   (b) An illustration of the replacement cost provision can be found in Chapter 20 in the text.

9. (a) The extended replacement cost endorsement pays an additional 20 percent or more above the policy limits, depending on the insurer. The insured agrees to insure the home to full replacement cost and must also notify the insurer if alterations increase the value of the dwelling.

   (b) Under a guaranteed replacement cost policy, the insured agrees to insure the home to 100 percent of its estimated replacement cost rather than 80 percent. If a total loss occurs, the insurer agrees to replace the home exactly as it was before the loss even if the replacement cost exceeds the amount of insurance stated in the policy.

10. Under the mortgage clause, the mortgagee is entitled to receive a loss payment from the insurer to the extent of its interest regardless of any policy violation by the insured. Even if the insured violates a policy provision, the insurer must make a loss payment to the mortgagee. Thus, the mortgagee's insurable interest is protected.

■ Answers to Application Questions

1. Heather does not carry insurance at least equal to 80 percent of the replacement cost of the dwelling. As a result, she will receive the higher of either the actual cash value of the loss or an amount based on the replacement cost formula when the amount of insurance carried is less than 80 percent of the replacement cost. The actual cash value of the loss is $10,000.

$$\frac{\$280,000}{80\% \times \$400,000} \times \$20,000 = \$17,500$$

   Thus Heather will receive $17,500 for the loss.

2. Michelle will be paid the actual cash value. Replacement cost is $3800. Depreciation is $950 because the destroyed television is 25 percent depreciated. Michelle will receive $2850.

$$\begin{aligned} ACV &= \text{Replacement cost less depreciation} \\ &= \$3800 - \$950 \\ &= \$2850 \end{aligned}$$

3. (a) $80,000. The amount of insurance carried ($240,000) is 80 percent of replacement cost ($300,000). Because the 80 percent rule is met, the full amount of the loss is paid.

(b) Nothing is paid. The mortgage payment is a normal living expense that would have to be paid even if the fire had not occurred.

(c) \$6000. This is an additional living expense above normal living expenses. The cost of the motel room is covered for 60 days.

(d) \$2400. The additional cost of meals is covered. The average cost of meals in the motel restaurant is \$60, while normal food costs at home average \$20 daily. Thus the additional living expense of \$40 is covered for 60 days.

(e) \$400. The storage fee is an additional living expense, which is paid for two months while the home is being rebuilt.

4. (a) Covered. Wall-to-wall carpeting is part of the dwelling. Since the loss is not excluded, it is covered.

(b) Not covered. Damage from water that backs up through sewers or drains is excluded.

(c) The dwelling is covered for windstorm. Animals are excluded under personal property.

(d) Not covered. Smoke damage from agricultural smudging or industrial operations is excluded.

(e) Covered. However, there is a \$1500 limit on the theft of jewelry, \$200 limit on cash and a \$1500 limit on tickets.

(f) Covered. Since the loss is not excluded, it is covered. Glass breakage is covered.

(g) Covered. Vehicle damage to the dwelling is covered.

(h) Covered. The additional living expense is covered under Coverage D. The fire loss to the dwelling is covered under Coverage A.

(i) Covered. As long as the son had been in the room any time during the 60-day period before the loss, the theft is covered.

(j) Not covered. Trees, plants, shrubs, and lawns are covered only for a specified number of named perils. Snow damage to the lawn is not a covered peril.

(k) The windstorm loss of the elm tree is not covered. Windstorm is not a listed peril with respect to trees, plants, and shrubs.

(l) The loss is covered.

(m) Not covered. Earthquake damage is specifically excluded.

(n) Covered. Water seepage from an appliance is covered.

5. (a) The insured will receive the higher of either the actual cash value or an amount based on the replacement cost formula when the amount of insurance carried is less than 80 percent of the replacement cost. Actual cash value is \$10,000.

$$\frac{\$120{,}000}{80\% \times \$200{,}000} \times \$16{,}000 = \$12{,}000$$

Thus James will receive \$12,000 for the loss.

(b) Covered. The drapes are damaged from a covered peril. However, unless a replacement cost endorsement is added to the policy, personal property is covered on an actual cash value basis. Ignoring any deductible, \$400 would be paid.

(c) Covered. The household contents are covered for their actual cash value of \$2000. The explosion is a covered peril with respect to personal property. However, the replacement cost provision does not apply to personal property unless a replacement cost endorsement is added to the policy.

6. No. The homeowners policy does not provide complete coverage for valuable jewelry since there is a $1500 limit on the theft peril. She should have the ring appraised and insured for a specific amount of insurance. A personal articles floater can be purchased, or this coverage can be added as an endorsement to the homeowners policy. The ring should be scheduled and specifically insured.

7. (a) Covered. However, the loss is covered only for $1500 because of the $1500 limit on stamps. The stamp collection should be scheduled and specifically insured for its actual value.
   (b) Covered. Personal property is covered against loss by vandalism. The $1000 loss is covered.
   (c) Not covered. Damage to boats from windstorm or hail is covered only while inside a fully enclosed building. The boat should be insured under an "all-risks" boat insurance policy that provides broader coverage.

8. Technically, under the standard mortgage clause, payment would be made to the mortgagee (First Federal). As a practical matter, the check for the loss payment would be made payable to both parties. Both the insured and First Federal would endorse the check, which would then be used to restore the property.

Chapter 21
Homeowners Insurance, Section II

■ Teaching Note

This chapter continues the discussion of the homeowners policy by an analysis of the Section II coverages in the homeowners policy by the Insurance Services Office. Once again, instructors will differ in their approach to teaching the material in this chapter. Some instructors prefer to discuss the Section II personal liability coverages in a general way without getting into too much detail. Others prefer to discuss the various losses that are covered or excluded under a homeowners policy in greater detail.

■ Outline

I. Personal Liability Insurance

A. Insuring Agreements of Section II

1. Coverage E—personal liability—has a single limit of $100,000 per occurrence, which can be increased by payment of an additional premium. Coverage applies to any claim or suit for damages because of bodily injury or property damage caused by an insured’s personal activities.
2. Coverage F—medical payments to others—pays up to $1000 for medical bills of another person who is accidentally injured while on an insured location, by the activities of an insured, by a residence employee, or by an animal owned by or cared for by an insured. This limit can be increased.

B. Section II Exclusions

1. Coverages E and F do not apply to motor vehicle liability; watercraft liability with certain exceptions; aircraft liability; hovercraft liability; expected or intentional injury; business activities; rendering or failure to render professional services; uninsured locations; war; communicable disease; sexual molestation, corporal punishment, or physical or mental abuse; and controlled substances.
2. Coverage E (personal liability) also excludes certain contractual liability exposures, damage to property owned by an insured, damage to property in the care of an insured, workers compensation claims, nuclear energy liability, and bodily injury to an insured.
3. Coverage F (medical payments to others) excludes injury to a resident employee off an insured location and not in the course of employment, workers compensation and nuclear energy claims, and injury to persons regularly residing on an insured location. Coverage F also does not cover the named insured and resident family members.

C. Additional Coverages

1. Claim expenses are paid in addition to the policy limits and include attorney fees and court costs, premiums for any bond required in a suit, reasonable expenses incurred at the company’s request, and loss of earnings up to $250 daily.
2. First-aid expenses.

3. Damage to property of others up to $1000 per occurrence caused by an insured.
4. Loss assessment charge up to $1000.

II. Endorsements to a Homeowners Policy

A. Inflation Guard Endorsement

B. Earthquake Endorsement

C. Personal Property Replacement Cost Loss Settlement Endorsement

D. Scheduled Personal Property Endorsement (with agreed-value loss settlement)

E. Personal Injury Endorsement

F. Home Business Insurance Coverage Endorsement

G. Identity Theft

III. Cost of Homeowners Insurance

A. Construction

B. Location

C. Fire-protection class

D. Construction costs

E. Type of policy

F. Deductible amount

G. Insurance score

H. Loss history report

IV. Suggestions for Buying a Homeowners Policy

A. Carry adequate insurance

B. Add necessary endorsements

C. Shop around for a homeowners policy

D. Consider a higher property insurance deductible

E. Take advantage of discounts

F. Don’t ignore floods and earthquakes

G. Improve your credit record

H. Consider purchasing a personal umbrella policy

■ Answers to Case Application

a. To deal with the problem of possible inflation on property values, an *inflation guard endorsement* should be added to the policy. The couple also owns a 30-foot sailboat. Since the homeowners policy excludes coverage on sailboats 26 feet or more in length, a *watercraft endorsement* could be added to cover this exposure. A *personal injury endorsement* could also be added to cover libel, slander, defamation of character, and similar exposures. A *scheduled personal property endorsement* could be added to cover the valuable stamp collection. A *personal property replacement cost loss settlement endorsement* could be added to cover personal property on a replacement cost basis.

b. The inflation guard endorsement periodically increases the amount of insurance under the various coverages as property values increase during a period of inflation. The watercraft endorsement would cover certain watercraft that are otherwise excluded under Section II. The personal injury endorsement would broaden the liability coverage to include personal injury loss exposures. In addition, an unendorsed homeowners policy provides only a maximum of $1500 on stamps; this limit can be increased by adding a scheduled personal property endorsement to the policy. The personal property replacement cost loss settlement endorsement would cover personal property on a replacement cost basis rather than actual cash value.

c. (1) The two claims are considered to arise out of one occurrence. The total amount paid is $100,000, which is the maximum liability limit under an unendorsed HO policy.
   (2) The loss is not covered. Business pursuits are specifically excluded.
   (3) The loss is covered under Damage to the Property to Others. The amount paid is $475.

■ Answers to Review Questions

1. An occurrence is defined as an accident, including continuous or repeated exposure to substantially the same general harmful conditions, which results in bodily injury or property damage during the policy period. An occurrence can be a sudden accident or a gradual series of incidents that occur over time.

2. Personal liability insurance (Coverage E) protects the insured against a claim or suit for damages because of bodily injury or property damage caused by the insured's negligence. The company will defend the insured and pay out those sums that the insured is legally obligated to pay up to the policy limits.

3. (a) Medical payments to others coverage (Coverage F) pays the reasonable medical expenses of another person who may be accidentally injured while on an insured location, or by the activities of an insured, or by an animal owned by or in the care of an insured. It is not necessary to prove negligence and establish legal liability before medical expenses are paid.
   (b) Medical payments to others coverage applies only to other persons who may be injured on the premises, by the activities of an insured, or by an animal owned by an insured. The coverage does not apply to the named insured and regular residents of the household other than residence employees.

4. Insured locations include the residence premises described in the declarations, other residences acquired during the policy period, a residence where the insured is temporarily residing, vacant land other than farmland, cemetery or burial plots, and occasional rental of a premise for other than business purposes.

5. Coverages E and F do not apply to motor vehicle liability, watercraft liability for larger watercraft, aircraft liability, hovercraft liability, expected or intentional injury, business activities, rendering or failure to render professional services, uninsured locations, war, communicable disease, sexual molestation, corporal punishment, or physical or mental abuse, and controlled substances.

   Coverage E (personal liability) also excludes contractual liability, damage to property owned by an insured, damage to property in the care of an insured, workers compensation claims, nuclear energy liability, and bodily injury to an insured.

   Coverage F (medical payments to others) excludes injury to a residence employee off an insured location and not in the course of employment, workers compensation and nuclear energy claims, and injury to persons regularly residing on an insured location. Coverage F also does not cover the named insured and resident family members.

6. Damage to the property of others pays up to $1000 per occurrence for property damage caused by an insured. The damaged property is valued on the basis of replacement cost. The insured is not required to be legally liable for coverage to apply. The loss is paid even when there is no legal obligation to do so.

7. (a) An earthquake endorsement can be added that covers earthquakes, landslides, volcanic eruption, and earth movement. A single earthquake is defined as all earthquake shocks that occur within a 72-hour period. A deductible must be satisfied.
   (b) The inflation guard endorsement provides for an annual pro rata increase in the limits of insurance under Coverages A, B, C, and D. The percentage increase is selected by the insured, such as 4 percent or 6 percent. The specified annual percentage increase is prorated throughout the policy year.
   (c) A personal property replacement cost loss settlement endorsement can be added to a homeowners policy. Claims are paid on the basis of replacement cost with no deduction for depreciation. The endorsement applies to personal property, awnings, carpets, domestic appliances, and outdoor equipment.
   (d) Under the scheduled personal property endorsement (with agreed valued loss settlement), the insurer agrees to pay the stated amount of insurance for a scheduled item if a total loss occurs. The endorsement insures property against direct physical loss, which means the property is insured on an open-perils (“all-risks”) basis. All direct physical losses to scheduled property are covered except those losses specifically excluded.
   (e) An identity theft endorsement can be added to a homeowners policy. The endorsement reimburses crime victims for the cost of restoring their identity and cleaning up their credit report.

8. The cost of a homeowners policy is determined by several factors. They include the type of construction, location of the dwelling, quality of fire protection, construction costs, age of the home, type of homeowners policy purchased, size of the deductible, and the choice of insurer from which the policy is purchased. The applicant’s credit-based insurance score is also important for rating purposes.

9. (a) An applicant's credit record is used to determine an insurance score. An insurance score is a credit-based score that is highly predictive of future claim costs.
   (b) The insurance score is used for purposes of rating and underwriting. Insurers claim there is a strong and statistically significant relationship between insurance scores and underwriting experience. Insureds as a group with poor credit and low insurance scores generally file more homeowner claims than insureds with good credit and higher insurance scores.

10. Suggestions for buying a homeowners policy include the following:
   (a) Carry adequate insurance
   (b) Add necessary endorsements
   (c) Shop around for a homeowners policy
   (d) Consider a higher deductible
   (e) Take advantage of discounts
   (f) Don't ignore floods and earthquakes
   (g) Improve your credit record
   (h) Consider purchasing a personal umbrella policy

■ Answers to Application Questions

1. (a) Covered. A suit or claim because of animals is covered.
   (b) Covered. The medical expenses of the injured player would be covered under Coverage F.
   (c) Covered. Persons injured on the premises are covered. The medical expenses are covered under Coverage F, and if a lawsuit ensues, there is coverage under Coverage E.
   (d) Covered. The child's medical expenses are covered under Coverage F.
   (e) Not covered. Medical expenses incurred by the named insured and resident household members (other than a residence employee) are not covered.
   (f) Not covered. Liability arising out of the negligent operation of an automobile is excluded.
   (g) Covered. Property damage to others is covered up to $1000 without having to prove negligence. If the damage is deliberately caused by someone age 13 or older, the coverage does not apply.
   (h) Not covered. Business activities are excluded.
   (i) Covered. This is covered under fire legal liability and is an exception to the care, custody, and control exclusion.
   (j) Not covered under Section II. The theft, however, is covered under Section I.

2. (a) Not covered. Professional liability is specifically excluded.
   (b) Not covered. The married son is no longer a resident of the household since he is married and lives in his own apartment.

3. (a) Under Damage to the Property of Others, $500 would be paid for the accidental damage to the couch.
   (b) Covered. A snowmobile rented and used away from the premises is covered. However, a maximum of $100,000 would be paid.

4. (a) Not covered. This is a business loss exposure that is excluded. Coverage can be obtained by purchasing a commercial general liability policy.
   (b) Not covered if the boat is owned by the insured. Sailing vessels 26 feet or more in length are excluded. Coverage can be obtained by adding a watercraft endorsement to the policy. However, there would be coverage if the sailboat is not owned or rented by an insured, such as borrowing the sailboat from a friend.
   (c) Not covered. This is a personal injury loss exposure. Coverage can be obtained by adding an appropriate endorsement to a homeowners policy or by purchasing a personal umbrella policy.

5. (a) Not covered. This is a business liability loss, which is excluded under a homeowners policy.
   (b) Not covered. Medical payments to others coverage applies only to other persons, not to an insured. The medical bills of Lois are not covered under her homeowners policy.
   (c) Covered. Jennifer, age 22, is a resident family member who is attending college. She is an insured under Jerry's homeowners policy. The suit is covered.
   (d) Covered. The neighbor's medical expenses are covered under medical payments to others coverage. The ensuing lawsuit is covered under personal liability insurance.
   (e) Covered. Personal liability insurance applies to a golf cart used for golfing purposes or on a golfing facility. However, the maximum amount paid is $100,000.

Chapter 22
Auto Insurance

■ Teaching Note

The relevance of this chapter should be readily apparent to students. Most students drive, many of whom have been involved in auto accidents. Thus it should be easy for instructors to motivate students. In particular, students probably will show keen interest in the provisions that govern the driving of non-owned vehicles, since most students frequently drive cars that are owned by other parties.

In discussing this chapter, several points should be stressed. First, point out that the social and economic costs of auto accidents are substantial, especially the cost of auto accidents caused by drunk drivers. Second, it should be pointed out that some leading auto insurers have their own forms that differ slightly from the personal auto policy drafted by the Insurance Services Office. Point out that the material in the chapter can be mastered more easily if the students spend some time answering the Application Questions.

■ Outline

I. 2005 Personal Automobile Policy (PAP)

A. Part A—Liability Coverage

1. Insuring agreement—insurer promises to pay damages for which an insured person is legally liable, to defend the insured, and to pay the costs of defense. The current PAP is usually written with split limits, but it can be written with a single limit that applies to both bodily injury and property damage.
2. Covered autos—coverage applies to include any vehicle listed in the declarations, newly acquired vehicles, trailers owned by the insured, and temporary substitute autos.
3. Insured persons—insured persons include the named insured and spouse, resident family members, any person using the named insured's covered auto with permission, and any person or organization for liability arising out of an insured person's use of a covered auto on behalf of that person or organization.
4. Supplementary payments—in addition to the policy limits, the company will pay for a bail bond up to $250, premiums on appeal and release of attachment bonds, interest on the judgment, loss of earnings up to $200 daily when the insured must attend a hearing or trial, and other reasonable expenses incurred at the insurer's request.
5. Exclusions—some important exclusions are intentional injury, property owned or transported, property rented to or in the insured's care, workers compensation claims, using the vehicle as a public or livery conveyance, vehicles used in the auto business, other business vehicles, using a vehicle without a reasonable belief of permission, nuclear energy exclusion, and using vehicles with fewer than four wheels. In addition, vehicles furnished or available for the insured's regular use or that of a family member are excluded. Finally, liability coverage does not apply to vehicles inside a racing facility and used for racing purposes.

6. Out-of-state coverage—policy automatically adjusts to comply with the financial responsibility or "no-fault" law of another state.
7. Other insurance—if two auto policies cover a loss to an owned automobile, each company pays its pro rata share of the loss. If the insured is driving someone else's car and has an accident, the insurance on the borrowed car is primary and the insured's policy is excess.

B. Medical Payments Coverage

1. All reasonable medical and funeral expenses incurred within three years of the date of the accident are paid.
2. Insured persons are the named insured and family members while occupying a motor vehicle or when struck by a motor vehicle while walking. Also covered are other persons while occupying a covered auto.
3. Exclusions—some important exclusions include injuries sustained while occupying a vehicle with fewer than four wheels, using the vehicle as a public or livery conveyance, using the vehicle as a residence, work injuries covered by workers compensation, vehicles furnished or made available for the named insured or family member's regular use, using a vehicle without a reasonable belief of permission, and racing vehicles.

C. Uninsured Motorists Coverage

1. Insuring agreement—coverage applies when the other person is at fault and has no liability insurance.
2. Insured person—named insured and family members, other persons while occupying a covered auto, and anyone who is legally entitled to recover from the person or organization responsible for the accident.
3. Uninsured vehicles—vehicles with no applicable bodily injury liability coverage, vehicles with coverage less than the amount of insurance required by the state's financial responsibility or compulsory insurance law, hit-and-run vehicles, and vehicles where the bonding or insurance company is insolvent.
4. Exclusions—no uninsured motorists coverage on the vehicle; settling a claim without the insurer's consent, which prejudices the insurer's right to recover a loss payment; using the vehicle as a public or livery conveyance; using a vehicle without a reasonable belief of permission; no benefits to a workers compensation insurer or self-insurer; and no payments for punitive damages.
5. Other insurance—the familiar pro rata approach is used for an owned vehicle. Coverage is excess on a non-owned vehicle.
6. Underinsured Motorists (UM) coverage—allows you to recover from your insurer when the other driver's liability insurance limit is less than your actual damages.

D. Coverage for Damage to Your Auto (Part D)

1. Insuring agreement—coverage has two parts: Collision Loss as defined in the contract and Other-than-Collision Loss for certain listed perils.
2. Transportation expenses—pays up to $20 daily (maximum of $600) for temporary transportation expenses because of loss to a covered auto.
3. Exclusions include use of the vehicle as a public or livery conveyance; ordinary wear and tear; radioactive contamination or war; certain electronic equipment unless permanently installed; tapes, records, and disks; government destruction or confiscation; loss to a trailer, camper body, or motor home not shown in the declarations; using a non-owned auto without a reasonable belief of permission; radar detection equipment; custom furnishings or equipment; non-owned auto used in the automobile business; using the vehicle in a racing

facility; and loss to a rental car if a state law or rental agreement precludes the rental company from recovering from the insured.

4. Limit of liability and payment of loss—company will pay the lesser of actual cash value or the cost to repair or replace less any applicable deductible. Loss to a non-owned trailer is limited to $1500.
5. Other sources of recovery—for a covered auto, each company pays in proportion that its limit of liability bears to the total of all applicable limits. For a non-owned auto, any physical damage insurance on the borrowed car is primary and your physical damage insurance is excess.

E. Your Duties after an Accident or Loss

1. You must notify your insurer promptly.
2. You must cooperate with your insurer in the investigation of the accident and defense of any claim that might arise from it.
3. If sued, you must immediately forward copies of the legal papers to your insurer.
4. You must release medical information to your insurer to allow your injuries to be evaluated, and submit to a physical examination.
5. Under the UM coverage, you must notify the insurer if a hit-and-run driver is involved. If you sue the other driver, you must send copies of the papers to your insurer.
6. You must take reasonable steps to prevent further damage to your car and allow the insurer to inspect the damage before it is repaired.

F. General Provisions

1. Policy period and territory—the PAP covers you only in the United States, its territories and possessions, Puerto Rico, or Canada.
2. Termination—insured may cancel at any time. The insurer also has the right of cancellation under certain conditions: (1) when the policy has been in force for less than 60 days, the insurer must give 10 days' notice of cancellation, and (2) when the policy has been in force for more than 60 days, the insurer may cancel only if the premium is not paid, or the insured's driver's license has been suspended or revoked, or the policy was obtained by a material misrepresentation. If the insurer decides not to renew the policy, at least 20 days notice of nonrenewal must be given.

■ Answers to Case Application

a. The major coverages under the PAP consist of the following:

- Part A—Liability Coverage
- Part B—Medical Payments Coverage
- Part C—Uninsured Motorists Coverage
- Part D—Coverage for Damage to Your Auto

b. Liability coverage (Part A) is the most important coverage that Kim should buy since it would cover her for legal liability arising out of the negligent operation of an automobile. Since many motorists drive without liability insurance, the uninsured motorists coverage should also be purchased. Medical payments coverage could be purchased if she consistently drives with other passengers in her car or if she has no individual or group health insurance that would cover her in an accident.

c. Coverage for damage to your auto (Part D) should not be purchased. Kim is driving an older automobile with a limited market value, which should not be insured for physical damage losses. She can retain the entire exposure.

d. (1) Danielle is covered under Kim's policy. Kim's PAP will pay the liability claim up to the policy limits.
   (2) The loss is covered. Because driving under the influence of alcohol is a serious offense, Kim's insurer will probably refuse to renew her policy or will substantially increase the premium.
   (3) The loss is not covered. Using a vehicle as a taxi or public livery conveyance is specifically excluded.
   (4) The loss is not covered under Kim's policy. The PAP does not cover non-owned vehicles driven on a regular basis or made regularly available for use.
   (5) The loss is not covered. The PAP provides coverage only in the United States, its territories and possessions, Puerto Rico, and Canada.

e. The PAP does not cover motorcycles. However, coverage can be obtained by adding the miscellaneous-type vehicle endorsement to the policy.

■ Answers to Review Questions

1. (a) Under liability coverage, the insurer agrees to pay damages for which an insured is legally liable arising out of an auto accident. The insurer also agrees to defend the insured and pay the legal defense costs. For example, if you carelessly run a red light and injure someone, you are covered for any suit or claim arising out of the incident.
   (b) Medical payments coverage pays all reasonable medical and funeral expenses incurred by an insured for services rendered within three years from the date of the accident. For example, if you are involved in an auto accident and have a broken arm, your medical expenses will be paid under medical payments coverage up to the limit of the policy.
   (c) The uninsured motorists coverage pays for the bodily injury of a covered person (and property damage in some states) caused by an uninsured motorist, by a hit-and-run driver, or by a driver whose insurer is insolvent. For example, if you are injured by a negligent driver with no liability insurance, you can collect for your injury under the uninsured motorists coverage.
   (d) Coverage for damage to your auto pays for any direct or accidental physical damage loss to a covered auto less any deductible. A collision loss or other-than-collision loss is covered only if the declarations page indicates that such coverages are in effect. For example, if you lose control of your car on an icy highway and it overturns, the physical damage to the car is covered under collision insurance.

2. A covered auto is any auto shown in the declarations, a newly acquired auto, a trailer owned by the named insured, and a temporary substitute vehicle.
3. Insured persons include the named insured and spouse, resident family members, other persons using a covered auto if there is a reasonable belief that permission to use the auto exists, and any person or organization legally responsible for the acts of an insured person.

4. The following supplementary payments can be paid under the liability section of the PAP:
   (a) Premiums on a bail bond up to $250
   (b) Premiums on an appeal bond
   (c) Interest accruing after a judgment

   (d) Loss of earnings up to $200 daily because of attendance at a hearing or trial
   (e) Other reasonable expenses incurred at the insurer's request

5. (a) Liability coverage excludes liability arising out of intentional injury or damage, property owned or transported by an insured, property rented to or in the insured's care, workers compensation claims, using the vehicle as a public or livery conveyance, vehicles used in the automobile business, other business vehicles, using a vehicle without a reasonable belief of permission, nuclear energy exclusion, vehicles with fewer than four wheels, vehicles furnished or made available for the named insured's or family member's regular use, and using the vehicle as a racing vehicle inside a racing facility.
   (b) Medical payments coverage excludes injuries sustained while occupying a vehicle with fewer than four wheels, using the vehicle as a public or livery conveyance, using the vehicle as a residence, work injuries covered by workers compensation, vehicles furnished or made available for the named insured or family member's regular use, using a vehicle without a reasonable belief of permission, and racing vehicles.

6. Uninsured motorists coverage pays for the bodily injury of a covered person (and property damage in some states) caused by an uninsured motorist, by a hit-and-run driver, or by a driver whose insurer is insolvent.

   The major features of the uninsured motorists coverage are as follows:
   (a) Coverage applies only if the uninsured motorist is legally liable.
   (b) Some states include coverage for property damage from an uninsured motorist in their uninsured motorists law.
   (c) The maximum amount paid for any single accident is the amount shown in the declarations.
   (d) The claim is subject to arbitration if the covered person and insurer disagree over the amount of damages.

7. (a) Collision is defined as the upset of your covered auto or nonowned auto or its impact with another vehicle or object.
   (b) Other-than-a-collision loss refers to a physical damage loss to a covered vehicle other than by a collision. To distinguish between collision and other-than-collision losses, certain losses are considered to be other-than-collision losses. These losses include damage to the car from missiles or falling objects; fire; theft or larceny; explosion or earthquake; windstorm, hail, water, or flood; malicious mischief or vandalism; riot or civil commotion; contact with a bird or animal; and glass breakage.
   (c) Exclusions under Part D include using the vehicle as a public or livery conveyance; damage from wear and tear, freezing, and mechanical or electrical breakdown; radioactive contamination or war; certain electronic equipment unless permanently installed in a covered auto or nonowned auto; tapes, records, and disks; government destruction or confiscation; loss to a trailer, camper body, or motor home not shown in the declarations; using a nonowned auto without a reasonable belief of permission; radar detection equipment; custom furnishings or equipment; nonowned auto used in the automobile business; using the vehicle in a racing facility; and loss to a rental car if a state law or rental agreement precludes the rental company from collecting from the insured.

8. (a) A nonowned auto is a private passenger auto, pickup, van, or trailer not owned by or furnished or made available for the regular use of the named insured or family member while such vehicle is in the custody of, or is being operated by, the named insured or family member.

(b) No. You can occasionally drive another person's car, and your PAP will cover you. However, if you drive the car on a regular basis, or it is made available for your regular use, your PAP coverage does not apply.

9. Certain duties are imposed on the insured after an accident occurs. The insurer must be notified promptly. The insured must cooperate with the insurer in the investigation and settlement of a claim and send to the insurer copies of any legal paper or notices received in connection with the accident. Certain other duties are also required.

10. The PAP will not provide coverage in all foreign countries. The PAP provides coverage only in the United States, its territories or possessions, Puerto Rico, and Canada.

■ Answers to Application Questions

1. (a) Covered. Fred is covered as a member of the family. The maximum amount paid would be $100,000.
   (b) Covered. Damage to the other car is covered under property damage liability for $15,000. Collision coverage, if any, on the friend's car would be primary, and Fred's policy would be excess. If there is no collision coverage on the friend's car, Fred's policy would be primary and would pay $4750.
   (c) If the boyfriend can establish a reasonable belief that permission would have been granted, he would have coverage under Fred's policy, and $50,000 would be paid if he were legally liable.
   (d) Covered. Property damage to the house in the amount of $30,000 would be paid. The amount paid for damage to the family car is $7750. The wife's medical expenses in the amount of $5000 are also paid.
   (e) Covered. Under the uninsured motorists coverage, Fred would recover $15,000.
   (f) Not covered. The mechanic is not covered under Fred's policy. If a person is employed or engaged in the automobile business, liability arising out of operation of vehicles in the automobile business is excluded. However, the exclusion does not apply to the operation of any covered auto by the named insured, family member, or partner.
   (g) Covered. This loss is covered under Part D (coverage for damage to your auto). Loss caused by contact with a bird or animal is considered to be other-than-a-collision loss. The amount paid would be $2400.
   (h) The broken window is covered as other-than-a-collision loss; the amount paid is $300. The theft of the camera and golf clubs is not covered under the PAP.
   (i) Covered. This is considered to be a collision loss. The amount paid is $1750.
   (j) Not covered. Liability coverage for commercial vehicles and large trucks used in a business, such as a large cement truck, is excluded under the liability section of the PAP.
   (k) Covered. From the facts, it appears that the girlfriend can establish a reasonable belief that permission to drive the automobile would have been given. However, the amount paid would be only $100,000.
   (l) Not covered. The theft of compact discs (CDs) from a car is not covered even if the car is locked. Coverage can be obtained by adding an endorsement to the policy.
   (m) Covered. The PAP covers liability arising out of non-owned golf carts. Thus the loss is covered.

2. (a) Since Jason is a passenger in a covered auto, his medical expenses would be covered under Karen's PAP.
   (b) Scott is covered for the property damage to Gray's car. Any person using a covered auto is covered under the named insured's policy if there is a reasonable belief that permission to use the automobile exists. Karen is also covered under her PAP for the suit.
   (c) The spouse of the named insured is covered under the PAP. Thus, the husband is insured under Karen's policy. The liability coverage also extends to the occasional use of a non-owned automobile. However, the liability insurance on the friend's car would apply first, and Karen's insurance is excess. Thus if the husband is legally liable for damage to the bicycle, the friend's policy would pay the claim. If the friend has no liability insurance, then Karen's policy is primary and would pay the claim.
   (d) Not covered. Intentional property damage or bodily injury is excluded under the PAP.

3. (a) The loss is covered. However, the liability insurance on the rental car is primary, and Janet's insurance is excess. The insurance on the rental car pays $30,000 and Janet's insurance pays the remaining $70,000. The rental agency does not carry collision insurance on the rental car. Thus Janet's collision insurance is primary and will pay $14,750.
   (b) The collision insurance applies to a borrowed vehicle on an excess basis. However, the insurance on the friend's car is primary. The friend's collision insurance, therefore, pays $4500 for the physical damage loss to the car. The remaining $500 is submitted to Janet's insurer. However, since she has a $250 deductible, her insurer pays only $250.
   (c) The loss is not covered. The loss is excluded since a company car is furnished and made available for Janet's use on a regular basis. Adding the extended nonowned coverage endorsement to her policy can cover the company car.
   (d) The towing charges of $60 are covered. The cost of replacing the battery is not covered. Only labor performed at the scene of the breakdown is covered.

4. (a) The normal rule with respect to liability insurance is that liability insurance on the borrowed vehicle is primary, and any other insurance is excess insurance. Thus, the neighbor's policy will pay first as primary coverage, and Michael's policy will be excess insurance.
   (b) In this case, the neighbor's collision insurance is primary and pays for the physical damage loss to the pickup, less any deductible. Michael's collision coverage applies as excess insurance.

5. The physical damage loss of $8000 to the parked car is covered under the liability section of Pablo's PAP policy. If a newly acquired vehicle replaces an automobile shown in the declarations, it is automatically insured for all coverages provided on the previous auto. However, if the insured wants physical damage insurance on the replacement car (Coverage for Damage to Your Auto), the insured must request coverage from the company within 14 days. Thus, Pablo's PAP will cover the collision loss to the new Ford if he notifies the company within 14 days of acquisition that he wants physical damage insurance on the vehicle. The amount paid is $4750.

6. Mary's policy is primary and pays the policy limit of $300,000. James is an insured under his mother's policy, which pays the remaining $100,000.

7. Patrick ran a red light and is legally liable for the property damage to the van and bodily injuries to the passengers. The liability coverage (Part A) pays a maximum of $90,000 as illustrated by the following:

Property damage to the van	$15,000
Bodily injury to Passenger A	$15,000
Bodily injury to Passenger B	$50,000 (limit per person under the policy)
Bodily injury to Passenger C	$10,000

The liability coverage under Patrick's policy will not cover his medical bills, lost earnings, or physical damage to his car. If he has Medical Payments Coverage, his medical bills would be covered up to the policy limits. If he has Coverage for Damage to Your Auto, the physical damage loss would be covered less any deductible.

Chapter 23
Auto Insurance and Society

■ Teaching Note

This chapter is important because it analyzes the impact of the automobile problem upon society and the various methods of compensating accident victims for their injuries. Presenting this material should be easy, since most students drive and some have been involved in auto accidents.

The chapter begins by discussing the automobile as a social problem. Mention that millions of motorists are killed or injured annually, and society then has the problem of compensating them for their injuries. The various approaches for compensating accident victims should be briefly discussed, including financial responsibility and compulsory insurance laws, unsatisfied judgments funds, uninsured motorists coverage, and no-fault auto insurance.

Society also has the problem of providing auto insurance to irresponsible drivers, such as drunk drivers, high-risk drivers, and drivers who habitually break traffic laws. The various methods for providing auto insurance to problem drivers should be briefly discussed, including automobile insurance plans, joint underwriting associations (JUAs), reinsurance facilities, the Maryland Automobile Insurance Fund, and specialty automobile insurers.

Finally, students may ask why auto insurance is so expensive. The major rating factors should be briefly discussed.

■ Outline

I. Approaches for Compensating Automobile Accident Victims

A. Financial Responsibility Laws

1. A financial responsibility law is one that does not require proof of financial responsibility until after the driver has his or her first accident or until after conviction for certain offenses, such as drunk driving or reckless driving.
2. Drivers demonstrate financial responsibility by having an insurance policy whose liability limits comply with the law, by posting a bond, or by depositing collateral.
3. Defects of financial responsibility laws—there is no guarantee that all accident victims will be paid, and accident victims may not be fully indemnified for their injuries.

B. Compulsory Insurance Laws

1. Such laws require evidence of insurance before an automobile can be registered or licensed.
2. The major advantage is that an innocent accident victim has some protection against an irresponsible driver. However, studies conclude that compulsory insurance laws generally are ineffective in reducing the percentage of uninsured drivers.

C. Unsatisfied Judgment Funds
   1. Five states have funds from which a person who has successfully sued the wrongdoer but cannot collect may recover for his or her bodily injury.

D. Uninsured Motorists Coverage—the injured person's insurer agrees to pay the accident victim who has a bodily injury (or property damage is some states) caused by an uninsured motorist, by a hit-and-run driver, or by a negligent driver whose insurer is insolvent.
   1. The advantages are that motorists have some protection against uninsured drivers, and claim settlement is faster and more efficient than a tort liability lawsuit.
   2. However, the uninsured motorist's coverage has several disadvantages. Unless higher limits are purchased, the maximum paid is limited to the state's financial responsibility or compulsory insurance requirement. Thus, the accident victim may not be fully indemnified for the loss. Also, the injured person must establish that the uninsured motorist is legally liable for the accident. Finally, property damage is not covered in many states.

E. Low-Cost Auto Insurance—a small number of states have low-cost auto insurance plans that provide minimum amounts of liability insurance at reduced rates to motorists who cannot afford regular insurance or have few financial assets to protect.

F. "No Pay, No Play" Laws—Some states have enacted "no pay, no play" laws that prohibit uninsured drivers from suing negligent drivers for noneconomic damages, such as compensation for pain and suffering.

II. No-Fault Auto Insurance

A. Definition of No-Fault Insurance—after an auto accident involving a bodily injury, each party collects from his or her own insurer regardless of fault.

B. Types of No-Fault Plans
   1. Pure no-fault plan—accident victims cannot sue at all, regardless of the amount of the claim. No state has enacted a pure no-fault law.
   2. Modified no-fault plan—an injured person has the right to sue a negligent driver only if the bodily injury claim exceeds the dollar or verbal threshold.
   3. Add-on plan—pays benefits to an accident victim without regard to fault, but the injured person still has the right to sue the negligent driver who caused the accident.
   4. Choice no-fault plan—motorists can elect the no-fault plan with lower premiums, or with higher premiums can retain the right to sue under the tort liability system.

C. Basic Characteristics of No-Fault Laws
   1. The majority of states with no-fault laws have modified plans. Three states have choice no-fault plans.
   2. No-fault benefits are as follows:
      a. Medical expenses
      b. Loss of earnings
      c. Essential services expenses
      d. Funeral expenses
      e. Survivors' loss benefits
   3. Right to sue—restrictions are placed on the right to sue in modified no-fault plans.
   4. Exclusion of property damage under no-fault laws.

D. Arguments for No-Fault Insurance
   1. It is often difficult to determine fault in auto accidents.
   2. There are inequities in claim payments.
   3. Present tort system incurs high transactions costs and attorney fees.
   4. Present system is flawed because of fraudulent and inflated claims.
   5. Under the present system, there is often a delay in payments.

E. Arguments against No-Fault Laws
   1. Defects of the negligence system are exaggerated.
   2. Claims of efficiency and premium savings are exaggerated.
   3. Court delays are not universal.
   4. Safe drivers may be penalized.
   5. There is no payment for pain and suffering.
   6. The present tort liability system needs only to be reformed.

F. Evaluation of No-Fault Laws
   1. No-fault plans reduce transactions costs (attorney fees and claim processing costs).
   2. No-fault plans match the compensation received from an injury more closely with the economic loss sustained.
   3. No-fault plans eliminate compensation for noneconomic loss, such as pain and suffering, for injured people below the threshold with less serious injuries.
   4. No-fault plans generally pay benefits more quickly.
   5. No-fault plans can yield substantial savings over the traditional system, or such plans can increase costs depending on plan design.
   6. On the negative side, fraudulent claims have been a problem in several states.

III. Auto Insurance for High-Risk Drivers

A. Automobile Insurance Plan
   1. All auto insurers in the state are assigned their proportionate share of high-risk drivers.
   2. Advantages: Automobile insurance plans provide a source of insurance and there is less stigma associated with them than the earlier assigned risk plans.
   3. Major limitations: Despite higher premiums paid by high-risk drivers, automobile insurance plans have incurred substantial underwriting losses, good drivers are subsidizing the substandard drivers, high premiums cause many high-risk drivers to go uninsured, some drivers who are “clean risks” may be placed in the plan, and the driver does not have a choice of insurers.

B. Joint Underwriting Association (JUA)
   1. Companies pool high-risk business, and each company pays its pro rata share of pool losses and expenses.
   2. A limited number of insurance companies are designated as servicing insurers to administer the JUA business.

C. Reinsurance Facility
   1. The insurer has the option of placing a high-risk applicant in the reinsurance facility.
   2. A motorist can pick the company and agent, and no stigma is attached because the driver does not know whether he or she has been transferred to the reinsurance facility.

D. Maryland Automobile Insurance Fund
   1. Provides auto insurance to state motorists who cannot obtain insurance in the voluntary markets.
   2. Exists because of the high proportion of drivers who were placed in the assigned risk plan, high rates charged by private insurers, and difficulties in obtaining insurance by high-risk drivers.

E. Specialty Auto Insurers—premiums are substantially higher than premiums paid in the standard market, and the coverage limits are less; actual premium paid is based on the driver's record.

IV. Cost of Automobile Insurance

A. Major Rating Factors
   1. Territory
   2. Age, gender, and marital status
   3. Use of the auto
   4. Driver education
   5. Good student discount
   6. Number and type of cars
   7. Individual driving record
   8. Insurance score

B. Shopping for Automobile Insurance
   1. Carry adequate liability insurance
   2. Carry higher deductibles
   3. Drop collision insurance on older vehicles
   4. Shop around for auto insurance
   5. Take advantage of discounts
   6. Improve your driving record
   7. Maintain good credit

■ Answers to Case Application

a. The major rating factors include territory; age, gender, and marital status; use of the automobile; driver education credit; good student discount; number and type of automobiles; driving record; and the applicant's insurance score.

b. No. The $100 deductible is relatively expensive when compared with other deductibles. For example, if Paige selects the $100 deductible instead of the $250 deductible, the premium for six months will increase from $566 to $630. Thus she must pay an additional $64 for an additional $150 of insurance, which is an expensive increment of collision insurance. If she selects the $100 deductible instead of the $1000 deductible, the premiums for six months will increase from $368 to $630. She would pay an additional $262 for an additional $900 of collision insurance.

c. No. Her future income and assets will increase after she graduates from college. Her future income and assets could be attached to satisfy a judgment against her if the judgment exceeds the minimum liability limits. As a result of being underinsured, her future income and assets could be attached to satisfy the judgment.

d. No. The financial consequences of a bodily injury caused by the uninsured driver could exceed the uninsured motorists coverage limit. Thus, she would not be fully indemnified for her injury. For example, if the uninsured motorists coverage limit is only $25,000 and her actual injuries are $100,000, she would not be fully indemnified for the loss.

e. Premiums can be reduced by increasing the deductible for a collision and other-than-collision loss, by dropping collision insurance on an older vehicle, by shopping around for auto insurance and comparing prices carefully, by taking advantage of any available discounts, by improving your driving record, and by maintaining good credit.

■ Answers To Review Questions

1. (a) Proof of financial responsibility is typically required under the following circumstances:
   - After an accident involving bodily injury or property damage over a certain amount
   - Upon failure to pay a final judgment resulting from an auto accident
   - Following a conviction for certain offenses, such as drunk driving or reckless driving

   Motorists can meet the financial responsibility law requirements by carrying auto liability insurance limits equal to a certain minimum amount; by posting a bond, money, or securities; or by showing that the person is a qualified self-insurer.

   (b) Compulsory insurance laws require the owners and operators of automobiles to carry at least a minimum amount of liability insurance before the vehicle can be registered or licensed.

2. (a) Five states have unsatisfied judgment funds to compensate accident victims who have exhausted all other means of recovery. The accident victim must obtain a judgment against the negligent driver who caused the accident and must show that the judgment cannot be collected.

   (b) Funding varies by the state. Funds can be obtained by charging a fee to each motorist, by assessments against insurers in the state, and by surcharging drivers with convictions for moving vehicle violations.

3. (a) Many drivers are uninsured because of the high cost of auto insurance. A small number of states have low-cost auto insurance plans that provide minimum amounts of liability insurance at reduced rates to motorists who cannot afford regular insurance or have few financial assets to protect.

   (b) Some states have enacted “no pay, no play” laws that prohibit uninsured drivers from suing negligent drivers for noneconomic damages, such as compensation for pain and suffering. This approach deals with uninsured drivers. An uninsured driver who is injured in an auto accident caused by a negligent driver is prohibited from suing the negligent driver for noneconomic damages.

4. (a) No-fault auto insurance means that after an accident has occurred, each party collects from his or her own insurer, regardless of who is at fault.

   (b) A monetary threshold is a dollar amount in a no-fault law; if a bodily injury claim is below the threshold amount, an injured motorist would not be permitted to sue but would instead collect from his or her insurer.

   A verbal threshold means that a suit for damages is allowed only in serious cases, such as those involving death, dismemberment, disfigurement, or permanent loss of a bodily member or function.

(c) There are four types of no-fault plans:
   (1) Pure no-fault—lawsuits are not permitted, regardless of the size of the loss.
   (2) Modified no-fault—a lawsuit is allowed only if the claim exceeds a certain dollar threshold or meets a verbal threshold.
   (3) Add-on plan—additional benefits are paid, but there is no restriction on the right to sue.
   (4) Choice no-fault—motorists can elect to be covered under no-fault or the tort liability system.

(d) The arguments for no-fault automobile insurance laws are summarized as follows:
   (1) Difficulty of determining fault
   (2) Inequities in claim payments
   (3) High transactions costs and attorney fees
   (4) Fraudulent and excessive claims
   (5) Delay in payments

   The arguments against no-fault automobile insurance laws are summarized as follows:
   (1) The defects of the negligence system are exaggerated.
   (2) Claims of efficiency and premium savings are exaggerated.
   (3) Court delays are not universal.
   (4) Safe drivers may be penalized.
   (5) There is no payment for pain and suffering.
   (6) The tort liability system needs only to be reformed.

5. Automobile insurance plans are designed specifically for persons who are unable to obtain coverage in the voluntary markets. Insurers doing business in the state are assigned their proportionate share of high-risk drivers based on the amount of liability insurance premiums written in the state. Persons applying for insurance must show that they have tried but were unsuccessful in obtaining insurance. The amount of insurance provided is at least equal to the state's financial responsibility law requirement. Other coverages may be available. The premiums paid are substantially higher than insurance obtained in the voluntary markets.

   The purpose of an automobile insurance plan is to provide auto liability insurance to persons who are unable to get protection in the voluntary markets.

6. Some states have established joint underwriting associations to make insurance available to high-risk drivers. The JUA is an organization of all insurers operating in the state. All underwriting losses are shared proportionately by insurers on the basis of premiums written in the state. The JUA designs the policy and sets the rates charged. Each agent or broker is assigned a servicing company that provides claim services to the policyholders. Although only a limited number of larger insurers provide policyholder services, all insurers writing insurance in the state share in the underwriting losses.

7. Some states have established a reinsurance facility for high-risk drivers. Under this arrangement, a company must accept all applicants, both good and bad. If the applicant is a high-risk driver, he or she can be placed in the reinsurance facility or pool. The applicant for insurance is not aware of this transfer. The original company services the policy. All insurers in the state pay their share of the underwriting losses.

8. Specialty auto insurers are insurers that specialize in insuring drivers with poor driving records. Premiums are substantially higher than premiums paid in the standard market. The actual premium paid is based on the individual's driving record. In addition, the medical payments coverage limit is relatively low, and collision insurance is sold with a high deductible.

9. (a) The premium charged for automobile insurance is a function of numerous variables, including territory, age, gender, marital status, use of automobile, driver education, good student discount, number and types of automobiles, the insured's driving record, and the applicant's credit-based insurance score.
   (b) An important rating factor is an insurance score based on the applicant's credit record. An insurance score is a credit-based score that proponents claim is highly predictable of future claim costs. Drivers as a group with poor credit tend to file relatively more claims than drivers with good credit and tend to have relatively poorer loss experience. Auto insurers believe that the use of credit in underwriting enables insurers to underwrite applicants at rates that reflect their specific risk.

10. Consumer experts suggest several rules to follow when shopping for automobile insurance:
   (a) Carry adequate liability insurance
   (b) Carry higher deductibles on collision and comprehensive insurance
   (c) Drop collision insurance on an older vehicle
   (d) Shop around for insurance
   (e) Take advantage of discounts
   (f) Improve your driving record
   (g) Maintain good credit

■ Answers to Application Questions

1. (a) Financial responsibility and compulsory insurance laws do not guarantee adequate compensation to innocent accident victims because the required minimum amounts may not meet the full need of accident victims. Also, accident victims are not guaranteed payment in all cases because injuries may result from hit-and-run drivers, out-of-state drivers, uninsured motorists, drivers who have let their insurance lapse, drivers of stolen automobiles, and vehicles that are fraudulently registered.
   (b) Research studies suggest that compulsory liability insurance laws do not reduce the number of uninsured drivers, auto losses, or insurance premiums. Despite compulsory insurance laws, substantial numbers of motorists continue to operate vehicles without liability insurance.

2. (a) The advantages are that motorists have some protection against uninsured drivers, and claim settlement is faster and more efficient than a tort liability lawsuit.
   (b) However, the uninsured motorists coverage has several defects. Unless higher limits are purchased, the maximum paid is limited to the state's financial responsibility or compulsory insurance requirement; thus, the accident victim may not be fully indemnified for the loss. Also, the injured person must establish that the uninsured motorist is legally liable for the accident. Finally, property damage is not covered in many states.

3. (a) Typical no-fault benefits include payments for the following: (1) medical expenses, (2) loss of earnings, (3) essential services expenses, (4) funeral expenses, and (5) survivors' loss benefit.
   (b) See answer to Review Question 4(d).
   (c) See answer to Review Question 4(d).
   (d) Research studies concerning the effectiveness of no-fault laws present the following conclusions:
      (1) No-fault plans reduce transactions costs (attorney fees and claim processing costs).

(2) No-fault plans match the compensation received for an injury more closely with the economic loss sustained.
(3) No-fault plans eliminate compensation for noneconomic loss for injured people below the threshold with less serious injuries.
(4) No-fault plans generally pay benefits faster.
(5) No-fault plans can yield substantial savings over the traditional system, or such plans can increase costs depending on plan design.
(6) On the negative side, fraudulent claims have been a problem in a number of states.

4. (a) See answer to Review Question 5.
(b) The major eligibility requirement is that persons who apply for insurance in an automobile insurance plan must show that they have tried but were unsuccessful in obtaining auto liability insurance in the voluntary markets.
(c) Motorists who are unable to get insurance in the voluntary markets can apply for coverage through the automobile insurance plan. Automobile insurers in the state are assigned their proportionate share of high-risk drivers based on the amount of liability insurance premiums written in the state.
(d) Automobile insurance plans have several disadvantages. Despite higher premiums, automobile insurance plans have incurred substantial underwriting losses. Thus good drivers in the voluntary markets are subsidizing the substandard drivers. In addition, high premiums may cause many high-risk drivers to go uninsured. Finally, some drivers who are "clean risks" with no driving convictions may be placed in the plans.

Chapter 24
Other Property and Liability Insurance Coverages

■ Teaching Note

This chapter discusses some additional coverages that are important in developing a sound personal insurance program. First, the ISO Dwelling program should be easily grasped by most students because of prior knowledge of the homeowners policy. Also, insurance on mobile homes should be easily understood by most students because of the similarity of its format with homeowners insurance.

The personal articles floater can be discussed by pointing out the various limitations on certain types of valuable property under the homeowners policy.

Some discussion of the various coverages on pleasure boats is desirable in view of the popularity and widespread ownership of watercraft in the United States. In addition, government insurance programs are discussed in this chapter. It is important to point out that federal flood insurance was enacted into law because of the difficulty in privately insuring the peril of flood; other government insurance programs such as FAIR plans were enacted into law in response to social and economic conditions that required government intervention in the economy.

If title insurance is discussed, it is worthwhile to point out that the title insurance premium is paid only once, and that the period of protection runs indefinitely in the future.

Finally, the personal umbrella policy is also discussed in this chapter. It is worthwhile to spend some class time on the major characteristics of this important coverage. Point out how the personal umbrella policy supplements the liability coverages under a homeowners policy and personal auto policy in a desirable way.

■ Outline

I. ISO Dwelling Program

A. Nature and Purpose—for dwellings ineligible for coverage under a homeowners policy and for insureds who want a less costly policy

II. Dwelling Property I (Basic Form)

A. Basic Divisions of Coverage

1. Coverage A—dwelling.
2. Coverage B—other structures.
3. Coverage C—personal property. Personal property away from premises is also covered up to 10 percent of the insurance under Coverage C.
4. Coverage D—fair rental value is covered.
5. Coverage E—additional living expense (can be added as an endorsement).

B. Perils insured against—the basic form can be used to cover fire or lighting, internal explosion, windstorm or hail, explosion, riot or civil commotion, aircraft, vehicles, smoke, volcanic eruption, vandalism, or malicious mischief.

III. Dwelling Property 2 (Broad Form)

A. Provides broader coverage than the basic form.

B. Perils Insured Against
   1. All basic form perils, plus
   2. Additional new perils

IV. Dwelling Property 3 (Special Form)

A. Insured Perils
   1. For the dwelling and other structures, all direct physical losses are covered except for those losses otherwise excluded.
   2. For personal property, named-perils coverage is provided (same as Dwelling Property 2).

V. Insurance on Mobilehomes

A. Endorsement Added to Homeowners 2 or 3

B. Eligibility Requirements
   1. Must be at least 10 feet wide and 40 feet long.
   2. Must be designated for year-round living.

C. Coverages
   1. Coverage A insures the mobile home on a replacement cost basis.
   2. Coverage B insures other structures.
   3. Coverage C insures unscheduled personal property.
   4. Coverage D provides for loss-of-use coverage.
   5. Coverages E and F provide comprehensive personal liability insurance and are identical to the coverages provided in the homeowner contracts.

VI. Inland Marine Floaters

A. Basic Characteristics of Inland Marine Floaters
   1. Coverage can be tailored to the specific type of property to be insured.
   2. Desired amount of insurance can be selected.
   3. Broader and more comprehensive coverage can be obtained.
   4. Most floaters cover insured property anywhere in the world.
   5. Inland marine floaters are often written without a deductible.

B. Personal Articles Floater (PAF)
   1. Basic characteristics. Several optional classes of personal property are covered against direct physical loss. All direct physical losses are covered except those losses specifically excluded.
   2. Types of covered property
      a. Jewelry—carefully underwritten due to moral hazard
      b. Furs—each item is listed with a specific amount of insurance
      c. Cameras—each item is described and valued

d. Musical instruments—extra premium is charged for instruments played for pay
e. Silverware—coverage can be written to cover silverware and goldware
f. Golfing equipment—includes clubs, bags, and carts
g. Fine arts
h. Stamp and coin collections

C. Scheduled Personal Property Endorsement—a personal articles floater can be added to the homeowners policy by this endorsement.

VII. Watercraft Insurance

A. Boatowners Package Policy
1. Physical damage coverage on the boat, equipment, motor, and trailer
2. Liability insurance coverage
3. Medical expense coverage
4. Uninsured boater's coverage (optional)

B. Yacht Insurance
1. Coverage is designed for cabin cruisers, inboard motorboats, and larger sailing vessels.
2. Property damage coverage on the boat, machinery, and equipment
3. Liability coverage
4. Medical payments coverage
5. Uninsured boater's coverage
6. Other coverages

VIII. Government Property Insurance Programs

A. Federal Flood Insurance
1. Under the write-your-own program, private insurers write flood insurance under their own names, collect the premium, and receive an expense allowance for policies written and claims paid. The federal government is responsible for underwriting losses.
2. Eligibility requirements
3. Amounts of insurance
4. Definition of flood

B. FAIR Plans
1. Purpose is to make basic property insurance available to urban property owners unable to obtain coverage in the normal markets.
2. The building must meet certain underwriting standards before it is insured. If the building is substandard, the property owner must make certain improvements that reduce the risk of fire, theft, or water damage.
3. Central placement facility or pool assigns approved applicants to participating insurers.

IX. Title Insurance—protects the owner of property or the lender of money for the purchase of property against any unknown defects in the title to the property. Title insurance has certain characteristics:

- The policy provides protection against title defects that have occurred in the past, prior to the effective date of the policy.

- The policy is written by the insurer based on the assumption that no losses will occur. Any known title defects or facts that have a bearing on the title are listed in the policy and excluded from coverage.
- The premium is paid only once when the policy is issued. The policy term runs indefinitely into the future. As long as the title defect occurred before the issue date of the policy, any insured loss is covered, no matter when it is discovered in the future.
- If a loss occurs, the insured is indemnified in dollar amounts up to the policy limits.

X. Personal Umbrella Policy

A. Major Features
1. Excess liability insurance that pays only when the underlying insurance has been exhausted or a sizable retention has been sustained.
2. Underlying contracts must be carried equal to certain minimum amounts.
3. Coverage is available in large amounts ($1–$10 million) for a reasonable cost.
4. Self-insurance retention must be met for losses covered by the umbrella policy but not covered by any underlying contract.

B. Exclusions under the ISO personal umbrella policy include the following:
1. Expected or intentional injury
2. Certain personal injury losses
3. Rental of the premises with certain exceptions
4. Business liability
5. Professional services
6. Aircraft, watercraft, and recreational vehicles unless coverage is provided by underlying insurance
7. Using an auto, recreational motor vehicle, or watercraft without a reasonable belief of permission to do so
8. Vehicles used in racing
9. Communicable disease, sexual molestation, or use of a controlled substance
10. Serving on a board of directors, except for nonprofit organizations
11. Property in the insured's care, custody, or control to the extent the insured is required by contract to provide insurance for such property; fire legal liability is an exception

■ Answers to Case Application

a. The major loss exposures include the following:
- Damage to the house and personal property from fire, lightning, other perils
- Damage to the house and its contents from the peril of flood
- Liability arising out of personal activities and the ownership of two dogs
- Liability arising out of the operation of the small boat
- Extra expenses if the house should become uninhabitable because of a covered loss

b. HO-3 insures the dwelling and other structures against direct physical loss to property; all losses are covered except those losses specifically excluded. Losses to the dwelling and other structures are indemnified on the basis of replacement cost. HO-3 also provides personal liability insurance in the same policy. DP-1 is a more limited policy and provides coverage only for a limited number of named perils. DP-1 also requires an endorsement to be covered for theft and personal liability insurance. Finally, DP-3 insures the dwelling and other structures against direct physical loss to property. Like HO-3, all losses are covered except those losses specifically excluded. However, coverage for theft and personal liability insurance requires an endorsement to the policy.

c. HO-3 would cover all physical damage losses to the dwelling except those losses specifically excluded. Personal property, however, would be covered on a named-perils basis. HO-3 would also cover legal liability arising out of personal activities, the German Shepherd dogs, and the small boat up to the policy limits. Extra living expenses would also be covered if a loss occurs. However, damage from flood is specifically excluded.

   DP-3 would cover all losses to the dwelling and other structures except those losses specifically excluded. The liability exposures would not be covered unless an endorsement is added to the policy. Any damage from flood would not be covered. DP-3 would also cover additional living expenses from a covered loss.

   DP-1 provides coverage only for a limited number of perils. The liability exposures would not be covered unless an endorsement is added to the policy. Any flood damage would not be covered.

d. Yes. The liability exposures listed in (a) above and other personal liability exposures would not be covered without personal liability insurance. Thus, the personal liability supplement should be added to the DP-3 policy by an endorsement.

e. Yes. Flood damage is not covered under HO-3, DP-1, or DP-3. Since the river overflows periodically, flood insurance is desirable.

■ Answers To Review Questions

1. (a) Dwelling Property 1 is a *basic form* that provides coverage for a limited number of perils. The coverages provided are similar to the homeowners policy coverages.
   (b) Dwelling Property 2 is a *broad form* that includes all perils covered under the basic form and adds additional perils.
   (c) Dwelling Property 3 is a *special form* that provides coverage on the dwelling and other structures for all direct physical losses except for those losses specifically excluded. Personal property is covered on a named-perils basis.

2. Certain endorsements can be added to a dwelling policy to broaden the coverage provided. The personal liability supplement can be added that provides personal liability insurance similar to the liability coverages found in the homeowners policy.

3. Inland marine floaters have certain characteristics. Coverage can be tailored to the specific type of property to be insured; desired amounts of insurance can be selected; broader and more comprehensive coverage can be obtained; most floaters cover insured property anywhere in the world; and inland marine floaters can be written without a deductible.

4. First, valuable jewelry can be insured under a personal articles floater. If the jewelry is stolen, the homeowners policy would pay a maximum of $1500. Higher amounts of insurance may be desired. Second, fine arts, antiques, rare paintings, and similar property can be valued and specifically insured under a personal articles floater. The amount of insurance listed in the schedule for that item is the amount paid for a total loss. Finally, a valuable stamp collection can be specifically insured under a personal article floater; the homeowners policy would pay a maximum of $1500 for a covered loss; higher amounts of insurance may be desired.

5. A boatowners policy is generally written on an open perils (“all risks”) basis. All direct physical damage losses to the boat are covered except certain losses that are excluded. Liability insurance is also included that covers property damage and bodily injury liability arising out of the negligent operation of the boat. Medical payments coverage is also provided. Uninsured boaters coverage is optional.

6. The flood peril is difficult to insure privately because of the problems of a catastrophic loss, high premiums, and adverse selection.

7. (a) Under the regular program, maximum coverage on single-family and two- to four-family dwellings is limited to $250,000 on the building and $100,000 on the contents. Commercial structures can be insured up to a limit of $500,000 on the building and $500,000 on the contents. Private insurers sell the coverage, adjust losses, and pay claims. If the insurers’ losses are not covered by premiums and investment income, they are reimbursed by the federal government.
   (b) A flood is a partial or complete inundation of two or more acres of normally dry land or two or more properties (at least one of which is the insured’s property) from the overflow of inland or tidal water, from unusual and rapid accumulation or runoff of surface water from any source, or from mudflows. For example, damage caused by an overflow of rivers, streams, high waves, or severe storms would be covered. The accumulation or runoff of surface water can come from any source, including heavy rain, melting snow, or melting ice.
   (c) With certain exceptions, there is a 30-day waiting period for new applications and for endorsements to increase the amount of insurance on existing policies. Without a waiting period, property owners in flood zones could delay purchasing insurance until a flood is imminent, which would result in adverse selection against the program.

8. The basic purpose of a FAIR plan is to make property insurance available to property owners who are unable to obtain coverage in the normal markets.

9. Title insurance provides protection against title defects that have occurred in the past, prior to the effective date of the policy. The policy is written by the insurer based on the assumption that no losses will occur; title defects are listed in the policy and are excluded from coverage. In addition, the premium is paid only once, and the policy term runs indefinitely in the future. If a loss occurs, the insured is indemnified in dollar amounts up to the policy limits.

10. The personal umbrella policy provides excess liability insurance over basic underlying insurance contracts; coverage is broad and includes protection against certain losses not covered by the underlying contracts; a self-insured retention must be met for certain losses that are covered by the umbrella policy but not by any underlying contract; and the umbrella policy is reasonable in cost.

■ Answers to Application Questions

1. (a) Dwelling Property 1 covers the loss of the dwelling on the basis of actual cash value. Ignoring any deductible, $20,000 would be paid.
   (b) The loss of rents is covered. The amount paid is $2700.
   (c) Not covered. The tenant’s personal property is not covered under the policy.

2. (a) Covered. Windstorm is a covered peril.
   (b) Covered. Built-in furniture that is a permanent part of the mobile home is covered.

(c) Covered. Coverage C provides coverage on personal property.

(d) Coverage D provides coverage for additional living expenses.

3. (a) Covered. This is a physical damage loss to the boat and is covered.

(b) Covered. Occupants in the boat are covered for their medical expenses if they are injured in a boating accident.

(c) Covered. Theft of equipment is a covered loss.

(d) Covered. If Morgan is sued because of negligence, the policy provides liability coverage. She should have made certain that the child was wearing a life jacket.

4. (a) The loss is covered. If Dan is legally liable, the homeowners policy would pay $300,000 and the personal umbrella policy would pay $700,000.

(b) The loss is covered. The personal umbrella policy excludes legal liability of officers and directors of corporations, but the exclusion does not apply to nonprofit organizations, such as the YMCA. The homeowners policy would pay $300,000 and the umbrella policy would pay the remaining $200,000.

(c) The loss is covered. False arrest falls within the definition of personal injury. Since the homeowners policy was not endorsed to cover personal injury, the personal umbrella policy would cover the claim less the amount of the self-insured retention. The umbrella policy would pay $99,750. The homeowners policy pays nothing.

(d) The loss is not paid by the umbrella policy since it is within the underlying limits of the personal auto policy. The personal auto policy pays $200,000.

5. (a) The loss is covered under the homeowners policy under personal liability insurance. The amount paid is $25,000.

(b) Lori is negligent, and both policies cover the loss. The auto policy is primary, and each child is paid $250,000. At that point the liability limits under the auto policy are exhausted. The umbrella policy is excess insurance, and each child is paid an additional $100,000.

(c) Defamation of character is a personal injury exposure that is not covered by the homeowners policy without an endorsement. The homeowners policy pays nothing. However, the umbrella policy provides coverage for personal injury. Because the loss is covered by the umbrella policy but not by any underlying policy, Lori must satisfy the self-insured retention of $250. The umbrella policy pays $24,750.

(d) The homeowners policy excludes business liability losses and pays nothing. The umbrella policy excludes acts or omissions of an insured as an officer or member of the board of directors. Lori's bank is a for-profit organization, and the loss is excluded by the umbrella policy.

Chapter 25
Commercial Property Insurance

■ Teaching Note

This chapter is based largely on the commercial lines program developed by the Insurance Services Office. Because a considerable amount of material is condensed into this chapter, it ordinarily will take two class periods to cover. Some instructors prefer to skip this chapter entirely, since commercial property insurance is typically covered in an advanced course in property and casualty insurance. However, if you include this chapter in your course, be selective. Emphasize only basic concepts and avoid unnecessary detail.

The chapter begins with an overview of the commercial lines program by the Insurance Services Office. Discussion is based on the Insurance Services Office (ISO) commercial property program.

Note that "business interruption insurance" is now referred to as "business income insurance." In addition, boiler and machinery coverage is also called "equipment breakdown coverage" in the ISO program.

The discussion of inland marine coverages is based largely on the forms developed by the Insurance Services Office. It is not necessary to discuss each inland marine form in detail. One suggestion is to mention only a few inland marine coverages and give an illustration of how each can be used to meet the special needs of a business firm. Once again, avoid unnecessary detail.

■ Outline

I. Overview of Commercial Package Policy

A. Policy Format

B. Common Policy Declarations

C. Common Policy Conditions

D. Coverage Forms
1. Building and personal property coverage form
2. Business income and extra expense coverage form
3. Commercial crime coverage form
4. Inland marine coverage form(s)
5. Equipment breakdown protection coverage form
6. Commercial general liability coverage form
7. Business auto coverage form

II. Building and Personal Property Coverage Form

A. Covered Property
1. Building

2. Building personal property
3. Personal property of others
4. Additional coverages (debris removal, preservation of property, fire department service charge, pollutant cleanup and removal, increased cost of construction, and electronic data)
5. Extensions of coverage (newly acquired property, personal effects and property of others, valuable papers and records, property off the premises, outdoor property, and nonowned detached trailers)

B. Other Provisions

1. Deductible
2. Coinsurance
3. Optional coverages (agreed value option, inflation guard option, replacement cost option, extension of replacement cost to personal property of others)

III. Causes-of-Loss Forms

A. Causes-of-Loss-Basic Form (Certain basic causes of loss are covered.)

B. Causes-of-Loss-Broad Form

1. This form includes all causes of loss covered by the basic form plus falling objects; weight of snow, ice, or sleet; and water damage.
2. Collapse is also covered under certain conditions.

C. Causes-of-Loss-Special Form

1. This form insures against direct physical loss to covered property. This means that all direct physical damage losses are covered unless specifically excluded.
2. Burden of proof falls on the insurer to show that a loss is not covered because of an exclusion or limitation.

IV. Reporting Forms—if the insured underreports the value of the business personal property, recovery is limited to the proportion that the last value reported bears to the true value that should have been reported.

V. Business Income Insurance

A. Business Income (and Extra Expense) Coverage Form

1. The form covers the net profit or loss (before taxes) that would have been earned and continuing normal operating expenses, including payroll.
2. Extra expenses incurred as a result of a loss are also covered.
3. Additional coverages include the loss of income and extra expenses because of the action of a civil authority, alternations and new buildings, extended business income, and interruption of computer operations.
4. Coinsurance
5. Optional coverages

B. Extra Expense Coverage Form

1. The form covers the extra expenses incurred by a firm to continue operations following a loss.
2. Profits are not covered since the firm is still operating.

C. Business Income from Dependent Properties
   1. Contributing location
   2. Recipient location
   3. Manufacturing location
   4. Leader location

VI. Other Commercial Property Coverages

A. Builders Risk Insurance

B. Condominium Association Coverage Form

C. Condominium Commercial Unit-Owners Coverage Form

D. Equipment Breakdown Insurance

E. Difference in Conditions (DIC) Insurance

VII. Transportation Insurance

A. Ocean Marine Insurance
   1. Interests insured
      a. Hull insurance
      b. Cargo insurance
      c. Protection and indemnity (P&I) insurance
      d. Freight insurance
   2. Implied warranties seaworthy vessel, legal purpose, and no deviation from planned course.
   3. Perils covered: fire, perils of the sea, enemies, pirates, thieves, jettison, and similar perils. Policies may also be written on an open perils ("all risks") basis.
   4. Exclusions—losses due to delay, war, inherent vice, strikes, riots, civil commotion, and other exclusions.
   5. Particular average and general average.

B. Inland Marine Insurance
   1. Nationwide definition
   2. Major classes of marine insurance
      a. Domestic goods in transit
      b. Property held by bailees
      c. Mobile equipment and property
      d. Property of certain dealers
      e. Instrumentalities of transportation and communication

C. Inland Marine Forms
   1. Accounts receivable coverage form
   2. Camera and musical instruments dealer coverage form
   3. Commercial articles coverage form
   4. Equipment dealers coverage form
   5. Film coverage form
   6. Floor plan coverage form

7. Jewelers block coverage form
8. Mail coverage form
9. Physicians and surgeons equipment coverage form
10. Signs coverage form
11. Theatrical property coverage form
12. Valuable papers and records coverage form

D. Other Inland Marine Forms
1. Shipment of goods
2. Bailee forms
3. Business floaters
4. Means of transportation and communication

VIII. Businessowners Policy (BOP)

A. Eligible Firms

B. BOP Coverages
1. Buildings
2. Business personal property
3. Covered causes of loss
4. Additional coverages
5. Optional coverages
6. Deductible
7. Business liability insurance

■ Answers to Case Application

a. The major loss exposures to the tennis shop include the following:
- Loss to the tennis shop from a fire, lightning, tornado, or other peril
- Loss to business personal property, such as office equipment and business computer
- Loss to the inventory of tennis equipment on hand
- Loss of business income and extra expenses if the business is forced to shut down because of a loss
- Employee dishonesty losses
- Commercial liability loss exposures

b. Yes. A peak season provision provides for a temporary increase of 25 percent of the amount of insurance when inventory values are at their peak.

c. The loss exposures can be covered by adding coverage for employee dishonesty to the policy.

d. The loss of business income is covered as an additional coverage under the BOP policy.

e. The loss is covered. Exterior building glass is covered under business personal property if the named insured is a tenant and no limit of insurance is shown in the declarations.

■ Answers to Review Questions

1. (a) A package policy is one that combines two or more property and liability insurance coverages into a single policy.
   (b) The advantages are fewer gaps in coverage, relatively lower premiums because individual policies are not purchased, savings in insurer expenses that can be passed on to policyholders, and the convenience of a single policy.

2. (a) The causes-of-loss basic form provides coverage for fire, lightning, explosion, windstorm or hail, smoke, aircraft or vehicles, riot or civil commotion, vandalism, sprinkler leakage, sinkhole collapse, and volcanic action.
   (b) The causes-of-loss broad form includes all causes of loss covered by the basic form plus several additional causes, including falling objects, weight of snow, ice, or sleet, and water damage. The broad form also covers collapse of a building as an additional coverage if the building collapses from certain specified causes.
   (c) The causes-of-loss special form insures against direct physical loss to covered property. All direct physical damage losses to insured property are covered unless specifically excluded or limited in the form itself.

3. (a) The building and personal property coverage form is used to insure commercial property. Covered property includes (1) the building, (2) business personal property of the insured, and (3) personal property of others in the care, custody, and control of the insured.
   (b) Additional coverages include debris removal, preservation of property, fire department service charge, pollutant cleanup and removal, increased cost of construction, and the cost to repair or replace electronic data.
   (c) Optional coverages are an agreed value clause, inflation guard endorsement, and replacement cost coverage.

4. (a) The business income and extra expense coverage form covers the loss of business income due to the suspension of operations during the period of restoration. Business income is defined as the net profit or loss that would have been earned if the loss did not occur and the normal operating expenses that continue during the period of suspension.
   (b) The business income form also covers extra expenses. Extra expenses are the necessary expenses incurred by the firm during the period of restoration that would not have been incurred if the loss had not taken place, such as the cost of relocating temporarily to another location, increased rent at another location, and the rental of substitute equipment.

5. (a) Builders risk insurance is used to insure buildings under construction. The form can be used to cover the insurable interest of a general contractor, subcontractor, or building owner. Under the builders risk coverage form, insurance is purchased equal to the full value of the completed building. Because the building is initially overinsured, the rate charged is adjusted to reflect the average value exposed. If desired, a builders risk reporting form can be attached as an endorsement, which requires the builder to report monthly the value of the building under construction.
   (b) The condominium association coverage form covers the condominium building and equipment used to maintain the building, business personal property of the condominium association, and personal property of others in the condominium association's care, custody, and control.

The condominium commercial unit-owners coverage form is designed for business or professional firms that own individual units in a commercial condominium. The form covers business personal property of the unit owner and personal property of others.

(c) Equipment breakdown insurance covers losses due to the accidental breakdown of covered equipment, such as steam boilers, air conditioning and refrigeration equipment, and turbines and engines.

(d) Difference in conditions (DIC) insurance is an open perils (“all-risks”) policy that covers other perils not insured by basic property insurance contracts. It is a separate contract that supplements the coverage provided by the underlying contract. As such, it excludes perils that are covered by the underlying contracts.

6. (a) Hull insurance covers the physical damage to the ship or vessel. It is similar to automobile physical damage insurance.

   (b) Cargo insurance protects the shipper of the goods against financial loss if the goods are damaged or lost.

   (c) Liability insurance is provided by protection and indemnity insurance.

   (d) Freight insurance indemnifies the shipowner for the loss of earnings if the ship is damaged or lost and the goods are not delivered.

7. (a) A particular average is a loss that falls entirely on a particular interest. A general average is a loss incurred for the common good that is shared by all parties to the venture. Each party pays its share of the loss based on the proportion that its interest bears to the total value in the venture.

   (b) Four conditions must be satisfied to have a general average loss: (1) necessary, (2) voluntary, (3) successful, and (4) free from fault.

8. Commercial property that can be insured by inland marine contracts are the following:

   (a) Domestic goods in transit
   (b) Property held by bailees
   (c) Mobile equipment and property
   (d) Property of certain dealers
   (e) Means of transportation and communication

9. (a) The accounts receivable coverage form indemnifies the firm if it is unable to collect outstanding customer balances because of damage or destruction of the records.

   (b) The valuable papers and records coverage form covers loss to valuable papers and records. The form covers the cost of reconstructing the damaged or destroyed records.

   (c) A bailees customers policy can be used to cover loss or damage to the property of others regardless of legal liability. It is designed for firms that hold the property of others that have high value, such as fur coats. A covered loss is paid regardless of legal liability, and the goodwill of customers is maintained.

10. (a) The BOP covers the buildings described in the declarations, including completed additions, fixtures and outdoor fixtures, and permanently installed machinery and equipment. The limit of insurance on the building is automatically increased each year by a stated percentage shown in the declarations.

    (b) Business personal property is also covered. It includes property owned by the named insured used in the business, property of others in the insured’s care, custody, and control, tenant’s improvements and betterments, and leased personal property for which the named insured has a contractual responsibility to insure.

(c) The BOP drafted by the ISO insures property against direct physical loss. All direct physical losses are covered unless specifically excluded or limited in the form itself. If desired, the BOP can be issued on a named-perils basis by an endorsement to the policy.

(d) The BOP includes several additional coverages that might be needed by the typical business owner:

- Debris removal
- Preservation of covered property after a loss occurs
- Fire department service charge
- Collapse
- Water damage, other liquids, powder, or molten material damage
- Business income, extended business income, and extra expense
- Pollutant clean-up and removal
- Loss of business income and extra expense because of action by a civil authority
- Money orders and counterfeit money ($1000 maximum)
- Forgery and alteration losses ($2500 maximum)
- Increased cost of construction because of an ordinance or law ($10,000 maximum for each described building insured on a replacement cost basis)
- Business income from dependent properties ($5000 maximum)
- Glass expenses incurred to put up temporary plates or board up openings if repair or replacement of damaged glass is delayed
- Fire extinguisher systems recharge expense ($5000 maximum in any one occurrence)
- Replacing or restoring electronic data destroyed or corrupted by a covered cause of loss ($10,000 maximum)
- Interruption of computer operations ($10,000 maximum)
- Limited coverage for "fungi," and wet or dry rot ($15,000 maximum)

■ Answers to Application Questions

1. (a) The causes-of-loss broad form provides coverage for fires. The building is covered property, and damage to the building from a fire is covered.

   (b) Covered property does not include money or securities. Thus, the loss is not covered.

   (c) A business computer and fax machine are covered as business personal property. Vandalism is a covered cause of loss under the causes-of-loss broad form. Thus the loss is covered.

   (d) Property of others in the insured's care, custody, or control is covered property. A tornado is a covered cause of loss. The loss is covered.

2. (a) Covered. Explosion is a covered cause of loss, and the damage to the building is covered.

   (b) Covered. This is an extra expense that is covered under the equipment breakdown protection coverage form.

   (c) Not covered. This is a workers compensation loss and would be covered under a workers compensation policy.

   (d) Covered. Sprinkler leakage is a covered cause of loss. The stock of batteries is covered.

3. $40,000. The business income loss is the difference between expected net income if the loss did not occur and actual net income following the loss. During the shutdown period there were no

revenues, and Ashley had continuing expenses of $10,000. As a result, the store experienced a net loss of $10,000. Actual net income must be subtracted from expected net income to determine the business income loss. In this case, the business income loss is $40,000, calculated as $30,000 – (–10,000). The loss payment covers the net income that would have been earned if the loss had not occurred and the continuing expenses during the shutdown period.

4. (a) The extra expense coverage form can be used to cover the extra expenses incurred by the newspaper to continue operating after a covered loss. The additional expenses to continue operating would be covered.

   (b) This is a business income from dependent properties loss exposure, which involves a leader location. A leader location is a location that attracts customers to the insured's place of business. If the theater or department store should have a covered cause of loss, business at the book store would fall off. An appropriate endorsement can be added to a business income policy that covers the loss of income at the insured location that results from direct damage to property at other locations.

5. (a) Damage to the Mary Queen is covered under the hull insurance policy.

   (b) Damage to the freighter would be covered under the running-down clause, which covers the owner's legal liability if the ship causes damage to another ship or to its cargo.

   (c) Not covered. The running-down clause does not cover legal liability arising out of injury or death to other persons, damages to piers and docks, and personal injury or death of crew members.

6. A general average loss is a loss incurred for the common good and is shared by all parties to the venture. Each party must pay its share of the loss based on the proportion that its interest bears to the total value in the venture. The total value of all interests is $8 million. Ocean Transfer's interest is $4 million, or 50 percent of the total. Therefore, Ocean Transfer must absorb 50 percent of the $800,000 loss, or $400,000.

7. If the insured underreports the value of business personal property, including inventories at a location, and a loss occurs at that location, recovery is limited to the proportion that the last value reported bears to the correct value that should have been reported. The insured reported only $200,000, when the actual value at that location was $400,000. Therefore, only 50 percent of the $500,000 loss will be paid, or $250,000.

8. Loss exposures that can be covered by the BOP include the following:
   - Damage to the building and inventory from a fire, lightning, or other covered cause of loss
   - Damage to computers, desks, equipment, and other business personal property from a covered cause of loss
   - Damage to property of others in the insured's care, custody, and control
   - Loss of business income from a covered cause of loss
   - Damage to outdoor signs as an optional coverage
   - Losses from employee dishonesty as an optional coverage
   - Theft of money and securities as an optional coverage
   - Lawsuits arising out of injuries to customers injured on the premises
   - Lawsuits arising out of injuries to customers because of defective products

Chapter 26
Commercial Liability Insurance

■ Teaching Note

This chapter builds on the preceding chapter. Some instructors prefer to omit this chapter in an introductory course, since commercial liability insurance is covered in an advanced course in property and casualty insurance. If this chapter is included in your course, you should be selective. It is worthwhile to discuss the general liability loss exposures that firms face. Finally, a brief discussion of the commercial umbrella policy is worthwhile.

■ Outline

I. General Liability Loss Exposures

A. Premises and Operations
1. Liability because of ownership and maintenance of premises
2. Liability because of operations, either on or off premises

B. Products Liability

C. Completed Operations
1. Typical insureds: plumbers, electricians, refrigerator and air-conditioning system repairpersons
2. Provides coverage for losses that occur after the work is completed

D. Contractual Liability

E. Contingent Liability

F. Other Liability Exposures
1. Liability arising out of ownership or use of autos, aircraft, or watercraft
2. Occupational injury or disease to employees
3. Suits by employees alleging sexual harassment, discrimination, failure to hire or promote, and other employment-related practices
4. Professional liability
5. Directors and officers liability

II. Commercial General Liability (CGL) Policy

A. Overview of the CGL Occurrence Policy

B. Section I—Coverages
1. Coverage A—bodily injury and property damage liability
2. Coverage B—personal and advertising injury liability

   3. Coverage C—medical payments
   4. Supplementary payments—Coverages A and B

C. Section II—Who Is an Insured?

D. Section III—Limits of Insurance

E. Section IV—Commercial General Liability Conditions

F. Section V—Definitions

III. Overview of CGL Claims-Made Policy

A. Meaning of "Claims Made"

B. Rationale for Claims-Made Policies ("long-tail" problem)

C. Retroactive Date

D. Extended Reporting Periods

IV. Employment-Related Practices Liability Insurance

A. Insuring Agreement

B. Co-Payment Provision

C. Legal Defense

D. Exclusions

V. Workers Compensation and Employers Liability Insurance

A. Part One—Workers Compensation Insurance

B. Part Two—Employers Liability Insurance

C. Part Three—Other States Insurance

D. Voluntary Compensation Coverage

VI. Commercial Auto Insurance

A. Business Auto Coverage Form
   1. Liability insurance: various classifications of covered autos
   2. Physical damage coverage: comprehensive coverage, specified causes-of-loss coverage, collision coverage, and towing and labor costs

B. Nonownership Liability Coverage

C. Garage Coverage Form—major coverages include liability coverage, garagekeepers coverage, and physical damage coverage

VII. Aircraft Insurance

A. Aviation Insurers (written by a relatively small number of aviation pools)

B. Aviation Insurance for Private Business and Pleasure Aircraft
   1. Liability coverages

2. Medical expenses coverage
3. Physical damage coverage (can be written on an "all-risks" basis, or "all-risks" basis, not in flight, or "all-risks" basis, not in motion)

VIII. Commercial Umbrella Policy

A. Basic Features
1. Excess liability insurance
2. Required underlying coverages
3. Liability coverages: bodily injury and property damage liability; personal injury and advertising injury
4. Self-insured retention (SIR) for losses not covered by any underlying insurance but covered by the umbrella policy

B. Exclusions

IX. Liability Insurance—Businessowners Policy

A. Business Liability Coverage

B. Medical Expenses Coverage

C. Legal Defense Costs

D. Exclusions

X. Professional Liability Insurance

A. Physicians, Surgeons, and Dentists Professional Liability Insurance
1. There are two insuring agreements.
2. Liability is not restricted to accidental acts of the physician or surgeon.
3. There is a maximum limit per medical incident and an aggregate limit for each coverage.
4. Current forms permit the insurer to settle without the insured's consent.
5. An extended reporting period can be added.
6. Professional liability insurance is not a substitute for general liability insurance.

B. Errors and Omissions Insurance

XI. Directors and Officers Liability Insurance

A. Insuring Agreement

B. Exclusions

■ Answers to Case Application

1. (a) The CGL policy would provide a legal defense and pay the legal costs of defending the Lastovica Corporation. The legal costs would be in addition to the amount of damages the insurer must pay because of the insured's negligence.

   (b) Smith Corporation could argue that Lastovica Construction is an independent contractor. As a general rule, business firms are not legally liable for work done by independent contractors (with some exceptions).

(c) Yes. Under a workers compensation law, Lastovica Construction is responsible for the payment of Bill's medical bills and part of his lost wages.

2. The loss is covered. The incident occurred during the policy period and was first reported within 60 days after the policy expired. Since the incident was first reported during the extended reporting period, coverage applies.

■ Answers to Review Questions

1. General liability refers to the legal liability of business firms arising out of business operations other than liability for automobile or aviation accidents or employee injuries. The most important general liability loss exposures are as follows:
   (a) Premises and operations
   (b) Products liability
   (c) Completed operations
   (d) Contractual liability
   (e) Contingent liability

2. (a) *Products liability* refers to the legal liability of manufacturers, wholesalers, and retailers to persons who are injured or incur property damage from defective products.
   (b) *Completed operations* refer to liability arising out of faulty work performed away from the premises after the work is completed.
   (c) *Contractual liability* means that the individual or business firm agrees to assume the legal liability of another party by a written or oral contract.
   (d) *Contingent liability* means that the firm can be held liable for work done by independent contractors. A firm can be held liable for work performed by independent contractors when (1) the activity is illegal; (2) it is a situation that does not permit delegation of authority; or (3) the work is inherently dangerous.

3. A general liability policy provides coverage for both products liability and completed operations. Both products liability and completed operations loss exposures are included in a definition called "products-completed operations hazard." This term refers to bodily injury and property damage liability losses that occur away from the premises and arise out of the insured's product or work after the insured has relinquished possession of the product, or the work has been completed. For example, assume that a gas water heater is improperly installed and explodes one month later. The loss is covered under the products-completed operations hazard.

4. (a) The insurer agrees to pay on behalf of the insured all sums the insured is legally obligated to pay up to the policy limits because of bodily injury or property damage to which the insurance applies. The bodily injury or property damage must be caused by an occurrence. An occurrence is an accident, including continuous or repeated exposure to substantially the same general harmful condition.
   (b) Under this coverage, the insurer agrees to pay those sums that the insured is legally obligated to pay as damages because of personal and advertising injury. This term is defined in the policy and includes false arrest, detention, or imprisonment; malicious prosecution; wrongful eviction or entry; oral or written publication that slanders or libels; oral or written publication that violates a person's right to privacy; using another's advertising idea in your ad; and infringing upon another's copyright or slogan or image.

(c) Medical payments cover the medical expenses of persons who are injured in an accident on the premises or on ways next to the premises, or as a result of the insured's operations. The medical expenses must be incurred within one year of the accident and are paid without regard to legal liability.

5. An occurrence policy is one that covers claims arising out of occurrences that take place during the policy period, regardless of when the claim is made. In contrast, the claims-made policy only covers claims that are first reported during the policy period, provided the event occurred after the retroactive date (if any) stated in the policy.

6. (a) Under Part One, the insurer agrees to pay all workers compensation benefits that the employer must legally provide to covered employees who are occupationally disabled.
   (b) Part Two is the employers liability section of the policy. Under this section, employers are covered against lawsuits by employees who are injured in the course of employment, and the injury is not compensable under the state's workers compensation law.

   Part Two is needed for several reasons. A few states do not require workers compensation coverage unless the employer has a certain number of employees, such as three or more. Part two protects the employer if an injured employee sues for damages. Also, an injury that occurs on the job may not be considered work-related, and therefore it is not covered under the state's workers compensation law. In addition, the occupation may not be covered under the state's workers compensation law. Part Two protects the employer if an occupationally injured employee sues for damages.
   (c) Employers may have employees who might be covered under a workers compensation law of another state. Other states' insurance covers such employees if the states are shown on the declaration page of the policy. In such cases, if the employer begins work in any of the states listed and is not insured for such work, the policy applies as if that state were listed in the policy for workers compensation purposes. Thus, the employer has coverage for any workers compensation benefits that it may have to make under that state's workers compensation law.

7. (a) The business auto coverage form can be used by business firms to insure liability loss exposures from automobiles. The employer can select those automobiles to be covered under the policy. In addition, the firm has a choice of physical damage coverages that can be used to insure covered autos against damage or loss. Nonownership liability exposures can also be covered under the policy, which covers the firm if employees should injure someone while driving their cars on company business.
   (b) The garage coverage form includes liability insurance, garagekeepers insurance, and physical damage insurance. Garagekeepers insurance covers the garage owner's liability for damage to customers' automobiles while they are in the garage owner's care for service or repairs.

8. (a) Physical damage insurance provides coverage for direct physical damage to the aircraft. The insured has a choice of physical damage coverages:
   - *"All-risks" basis*. All physical damage losses to the aircraft are covered except those losses specifically excluded.
   - *"All-risks" basis, not in flight*. The aircraft is covered on an "all-risks" basis only when it is on the ground and not in flight.
   - *"All-risks" basis, not in motion*. The aircraft is covered on an "all-risks" basis only when it is standing still.

(b) Liability coverage pays for bodily injury or property damage arising out of the insured's ownership, maintenance, or use of the insured aircraft. Coverage also applies to bodily injury arising out of the premises where the aircraft is stored.

9. (a) The coverages provided are Coverage A—Bodily Injury and Property Damage Liability, and Coverage B—Personal and Advertising Injury Liability. The insurance is excess insurance that applies after the minimum underlying limits are exhausted.

(b) Insureds are required to carry certain minimum amounts of liability insurance before the umbrella insurer will pay any claims. The following minimum limits are typically required:

- Commercial General Liability Insurance
  —\$1 million (each occurrence)
  —\$2 million (general aggregate limit)
  —\$2 million (products and completed-operations aggregate)
- Business auto liability insurance—\$1 million (combined single limit)
- Employers liability insurance
  —\$500,000 (bodily injury per accident)
  —\$500,000 (bodily injury by disease per employee)
  —\$500,000 (disease aggregate)

(c) If the loss is not covered by any underlying insurance but is covered by the umbrella policy, the insured must satisfy a self-insured retention (SIR), which is similar to a deductible. The SIR can range from \$500 for small firms to \$1 million or more for large corporations.

10. The major features of a physicians, surgeons, and dentists professional liability insurance policy, are as follows:

(a) There are two insuring agreements.
(b) Liability is not restricted only to accidental acts of the physician or surgeon.
(c) There is a maximum limit per medical incident and an aggregate limit for each coverage.
(d) Current forms permit the insurer to settle without the insured's consent.
(e) An extended reporting period can be added.
(f) Professional liability insurance is not a substitute for general liability insurance.

11. The first insuring agreement covers the personal liability of directors and officers. The policy agrees to pay damages because of a wrongful act. Insured persons include directors, officers, and employees.

The second insuring agreement pays on behalf of the corporation. The coverage reimburses the corporation for loss resulting from the company's obligation to reimburse directors and officers to the extent required or permitted by law for suits alleging wrongful acts by such directors and officers.

Some policies also provide entity coverage, which covers the corporation if it is named a defendant in a covered suit alleging wrongful acts by directors and officers.

■ Answers to Application Questions

1. (a) The false detention of the customer is covered under personal and advertising injury liability. Although the claim was reported after the policy expired, the incident occurred during the policy period and is covered under an occurrence policy.

(b) The property damage is covered under property damage liability.

(c) The loss is covered under personal and advertising injury liability.

(d) The loss is covered. The commercial general liability policy covers liability arising out of completed operations. Completed operations refers to liability arising out of faulty work performed away from the premises after the work or operations are completed.
(e) The medical expenses are covered under medical payments coverage. If Ben were sued for the injury caused by the employee, he would be covered under bodily injury liability.

2. (a) If Jill is legally liable for the explosion, the medical expenses of the customers would be covered in full under bodily injury liability. If she is not legally liable for the loss, the policy would pay a maximum of $5000 to each injured customer under medical payments coverage.
(b) The loss is covered as a fire legal liability loss.
(c) The loss is covered. If Jill is negligent, the amount paid is $200,000.

3. (a) Both Allison and the employee are covered for the bodily injury to the customer. Under the Businessowners Policy, the definition of the insured also includes employees while acting within the scope of their duties.
(b) Covered. The medical expenses are covered under Medical Payments (Coverage C) up to the policy limits. If a lawsuit results from the injury, the company is covered for the bodily injury to the customer under Bodily Injury and Property Damage Liability (Coverage A).
(c) Covered. Personal injury is covered under the Businessowners Policy, which includes defamation of character and false arrest.
(d) Not covered. Although the policy provides products liability coverage, damage or loss to the product itself is not covered.

4. (a) The physician is covered for the negligent act of the nurse. Unless the nurse is named as an insured under the physician's policy, the nurse has no coverage under the physician's policy.
(b) The surgeon is covered for a lawsuit or claim arising out of the setting of a broken arm. This is a professional act that is covered under the policy.
(c) The loss is not covered under the physician's professional liability policy because it does not involve a professional act. A general liability policy is needed to cover this type of loss exposure.

5. The business auto policy pays the policy limit of $1 million. The umbrella policy pays the remaining $4 million of the judgment.

6. This is a completed operations loss exposure. Completed operations is a term that refers to liability rising out of faulty work performed away from the premises after the work or operation is completed. Contractors, plumbers, electricians, and similar firms can be held liable for bodily injuries and property damage to others after their work is completed. When the work is in progress, it is part of the operations exposure. However, after the work is completed, it is a completed operations exposure. For example, an electrical contractor can be held liable for faulty wiring at a customer's home that later results in a fire.

7. The business auto coverage form would cover this loss exposure. The appropriate symbol must be selected to designate the classification of autos to be covered. If an employee injures another motorist while delivering pizzas, Fast Pizza would be covered for any suit.

Chapter 27
Crime Insurance and Surety Bonds

■ Teaching Note

Some instructors who emphasize personal lines of insurance may wish to skip this chapter, since commercial crime insurance is typically covered in an advanced course in property and casualty insurance. If you cover this chapter in your course, avoid unnecessary detail. A brief discussion of the meaning of robbery, burglary, safe burglary, and theft can be useful. In addition, a brief discussion of how business firms can select the appropriate crime coverages to meet their particular loss exposures is also worthwhile.

The first part of this chapter discusses the commercial crime insurance program by the Insurance Services Office (ISO). Primary emphasis is on the commercial crime coverage form.

The second part of the chapter discusses surety bonds. Students should know who the parties to bond are and how surety bonds differ from insurance. Once again, avoid unnecessary detail. One approach is to consider some loss exposures and show how a particular surety bond can meet this exposure, such as the failure of a construction firm to complete a building on time.

■ Outline

I. ISO Commercial Crime Insurance Program

A. There are five basic crime coverage forms and policies:
1. Commercial crime coverage form
2. Commercial crime policy
3. Government crime coverage form
4. Government crime policy
5. Employee theft and forgery policy

B. Each coverage form or policy is written in two versions—a discovery version and a loss sustained version.

II. Commercial Crime Coverage Form (Loss Sustained Form)

A. Basic Definitions
1. Robbery
2. Safe burglary
3. Theft

B. Insuring Agreements
1. Employee theft
2. Forgery or alteration
3. Inside the premises—theft of money and securities

4. Inside the premises—robbery or safe burglary of other property
5. Outside the premises
6. Computer fraud
7. Funds transfer fraud
8. Money orders and counterfeit paper currency

C. Exclusions

1. Dishonest acts or theft committed by the named insured, partners, or members
2. Knowledge of dishonest acts of employees prior to policy period
3. Dishonest acts or theft by employees, managers, directors, trustees, or representatives
4. Confidential information
5. Indirect loss
6. Inventory shortages (applies to the employee theft insuring agreement)
7. Trading losses

D. Policy Conditions (several important conditions)

1. Discovery form—covers losses discovered during the policy period or within 60 days after the policy expiration date, regardless of when the loss occurred
2. Loss-sustained form—covers losses that occur during the policy period and are discovered during the policy period or within one year after the policy expires
3. Loss sustained during prior insurance not issued by us or any affiliate—under this provision, the current policy provides coverage for a loss that occurred during the term of the prior policy but was discovered only after the discovery period under the prior policy had expired.
4. Termination as to any employee—the employee theft insuring agreement terminates as to any employee once the insured has knowledge that the employee has committed a theft or dishonest act.

III. Financial Institution Bonds—designed for commercial banks and other financial institutions. A number of insuring agreements are available.

A. Fidelity Coverage

B. On-Premises Coverage

C. In-Transit Coverage

D. Forgery or Alteration Coverage

E. Securities Coverage

F. Counterfeit Money

G. Fraudulent Mortgages

IV. Surety Bonds

A. Parties to a Bond

1. Principal—the party who agrees to perform certain acts or fulfill certain obligations
2. Obligee—the party who benefits from the bond if the principal fails to perform
3. Surety—the party who agrees to answer for the debt, default, or obligation of another

B. Comparison of Surety Bonds with Insurance
   1. There are three parties to a bond instead of two.
   2. The surety theoretically expects no losses to occur.
   3. Surety has the right to recover a loss payment from the principal.
   4. Surety guarantees the principal's ability to perform.

C. Types of Surety Bonds
   1. Contract bonds—guarantee that the principal will fulfill all contractual obligations
   2. Performance bonds—the owner is guaranteed that work will be completed according to the contract specifications.
   3. License and permit bonds— guarantees that the party bonded will comply with all laws and regulations that govern the party's activities
   4. Public official bonds—guarantees that public officials will faithfully perform their duties for the protection of the public, such as a state treasurer handling public funds
   5. Judicial bonds—guarantees the party bonded will fulfill certain obligations specified by law, such as a fiduciary bond for the executor of an estate
   6. Miscellaneous surety bonds

■ Answers to Case Application

a. Outside the premises—insuring agreement would cover the loss.

b. Inside the premises—theft of money and securities insuring agreement would cover the loss. Coverage would also apply to damage to the locked safe.

c. Inside the premises—theft of money and securities insuring agreement would cover the loss.

d. The employee theft insuring agreement would cover the loss.

e. The computer fraud insuring agreement would cover the loss.

■ Answers to Review Questions

1. *Robbery* is the unlawful taking of property from a person by someone who has caused or threatens to cause that person bodily harm or has committed an obviously unlawful act witnessed by that person. *Burglary* is typically defined as the unlawful taking of property from inside the premises by a person who unlawfully enters or leaves the premises, as evidenced by marks of forcible entry or exit. *Safe burglary* is the unlawful taking of property from within a locked safe or vault by a person unlawfully entering the safe as evidenced by marks of forcible entry upon its exterior, or from a safe or vault from inside the premises. *Theft* is the unlawful taking of money, securities, or other property to the deprivation of the insured.

2. (a) Employee theft pays for the loss of money, securities, and other property that results directly from theft committed by an employee. The theft is covered even if the employee cannot be identified, or if the employee is acting alone or in collusion with other persons.
   (b) Forgery or alteration pays for a loss that results directly from forgery or from the alteration of checks, drafts, promissory notes, or similar instruments made or drawn by the insured or

insured's agent. The coverage applies only to forgery or alteration of the insured's checks or instruments and not to losses that result from the acceptance of forged checks or the instruments of others.

(c) This coverage pays for the loss of money and securities inside the premises or banking premises that result directly from theft, disappearance, or destruction. Coverage also applies to damage to the premises or its exterior from the actual or attempted theft of money if the insured owns the premises or is liable for damage to it. In addition, coverage applies to damage to a locked safe, vault, cash register, or cash box because of actual or attempted theft or unlawful entry.

(d) This coverage pays for the loss or damage of other property inside the premises by the actual or attempted robbery of a custodian, or by safe burglary inside the premises.

(e) This agreement covers the theft, disappearance, or destruction of money and securities outside the premises while in the custody of a messenger or an armored-car company.

3. (a) The discovery form covers losses discovered during the policy period or within 60 days after the policy expiration date, regardless of when the loss occurred. The loss sustained form covers losses that occur during the policy period and are discovered during the policy period or within one year after the policy expires.

   (b) An underwriter may believe that large undiscovered losses might exist prior to the policy's inception date. To deal with adverse selection, a retroactive date endorsement could be added to the policy, which covers losses that occur only after the retroactive date and are discovered during the current policy period. If the retroactive date is the same as the policy's inception date, losses that occurred prior to the policy's inception date would not be covered.

4. The crime coverage form contains the following exclusions:
   - Dishonest acts or theft committed by the named insured, partners, or members
   - Knowledge of dishonest acts of employees prior to policy period
   - Dishonest acts or theft by employees, managers, directors, trustees, or representatives
   - Confidential information
   - Indirect loss
   - Inventory shortages (applies to the employee theft insuring agreement)
   - Trading losses

5. This provision states that the employee theft insuring agreement terminates as to any employee once the insured has knowledge that the employee has committed a theft or dishonest act. Once the insured becomes aware of the theft or dishonest act committed by the employee either before or after the worker is employed, employee theft coverage on that worker is terminated.

6. Under this provision, the current policy provides coverage for a loss that occurred during the term of the prior policy but was discovered only after the discovery period under the prior policy had expired.

   This provision is important because it enables an employer to change insurers without penalty. The provision applies only if there is no break in the continuity of coverage under both policies. Another requirement is that the loss is one that would have been covered by the current policy if it had been in force when the loss occurred.

7. (a) Fidelity coverage covers losses that result directly from the dishonest or fraudulent acts of employees acting alone or in collusion with others, with the active and conscious purpose of causing the insured to sustain such loss.

(b) This provision covers the loss of property on the premises from robbery, burglary, misplacement, mysterious unexplained disappearance, theft, and a number of additional perils. Loss or damage to furnishings, fixtures, and office equipment as a result of the robbery or burglary is also covered.

(c) This provision covers in-transit losses, which include losses from robbery, larceny, theft, misplacement, unexplainable disappearance, and other specified perils. The property must be in the custody of a messenger or in the custody of a transportation company.

(d) This is an optional provision that covers loss from forgery or alteration of most negotiable instruments and certain financial instruments specified in the bond.

8. There are three parties to a surety bond:
   (a) Principal—the party who agrees to perform certain acts or fulfill certain obligations
   (b) Obligee—the party who benefits from the bond if the principal fails to perform
   (c) Surety—the party who agrees to answer for the debt, default, or obligation of another

9. Insurance contracts and surety bonds differ in the following respects:
   (a) There are two parties to an insurance contract; there are three parties to a surety bond.
   (b) The insurer expects to pay losses; the surety theoretically expects no losses to occur.
   (c) The insurer normally does not have the right to recover a loss payment from the insured; the surety has the right to recover from a defaulting principal.
   (d) Insurance is designed to cover losses outside the insured's control; the surety guarantees character, honesty, integrity, and ability to perform, which are within the insured's control.

10. A *performance bond* can be used to guarantee the performance of a construction firm. A *public official bond* can be used to guarantee the performance of a public official, such as a city treasurer. A *bail bond* guarantees that the person bonded will appear in court at the appointed time.

■ Answers to Application Questions

1. (a) The loss is covered. The outside the premises insuring agreement covers the theft of money while in the custody of a messenger. Patrick is considered a messenger, and the loss is covered.
   (b) The loss is covered under the employee theft insuring agreement. The theft of money by an employee is a covered loss.
   (c) The loss is not covered. Employee theft is not covered if proof of loss depends on an inventory computation.
   (d) The loss of money and damage to the safe are covered under the inside the premises—theft of money and securities insuring agreement. Damage to the interior of the premises is also covered if the insured owns the premises or is liable for damage to it.
   (e) The loss of business income is not covered. A business income loss is an indirect loss that is excluded under the commercial crime coverage form.
   (f) This incident is considered a robbery because the robber has threatened the employee with bodily harm. The loss of money is covered under the inside the premises—theft of money and securities insuring agreement.
   (g) The loss is not covered. The money orders and counterfeit paper currency insuring agreement is not part of the coverages in force.

2. (a) The insurer would pay $20,000. The crime coverage form is a discovery form. The discovery form covers losses that are discovered during the policy period or within 60 days after the policy's expiration date, regardless of when the loss occurs. The embezzlement loss of $20,000 is covered even though it occurred prior to the policy's inception date.

   (b) The answer would be different. The loss sustained form covers losses that occur during the policy period and are discovered during the policy period or within one year after the policy expires. Because the loss occurred prior to the policy's inception date, it is not covered.

3. The employee theft insuring agreement covers the $5000 loss. However, Vera is not covered for any future loss. Once the employer becomes aware of a loss committed by a covered employee, coverage on the dishonest employee is terminated.

4. (a) Vasquez Construction is the principal. The bonding company that provides the performance bond on Vasquez Construction is the surety. The school board awarding the contract to Vasquez Construction is the obligee.

   (b) Under a performance bond, the surety guarantees that the work will be completed according to plans and specifications. If Vasquez Construction fails to complete the building according to the terms of the contract, the surety is responsible for completion of the project and extra expenses of hiring another contractor.

   (c) Yes. Under a surety bond, the surety has the legal right to recover a loss payment from the defaulting principal.