

## UNIVERSITY OF TOURISM, TECHNOLOGY AND BUSINESS STUDIES

P.O.Box 350, Kigali-Rwanda

Tel: +250-788466441, +250-788306692, +250-788306203

Email: info@utb.ac.rw www.utb.ac.rw

## **BACHELOR OF BUSINESS INFORMATION TECHNOLOGY**

**Lecture Notes on:** 

Principles of Risk Management & Insurance

By:

Rwubahuka Jean Claude

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#### **Risk and Its Treatment**

#### Overview

With this chapter you begin your study of risk management and insurance. This chapter provides a working definition of risk and a discussion of the various types of risk. Some risks that we face are uncertain losses caused by perils. Hazards are conditions that increase the chance that a loss will occur. Our concern in this course primarily will be pure risks—risks in which the possible outcomes are loss and no loss. As an individual, you face personal risks, property risks, and liability risks. There are a number of methods for handling risk: avoidance, retention, loss control, noninsurance transfers, and insurance.

## Chapter 2

#### The Insurance Mechanism

#### **Overview**

Insurance is an important method of transferring pure loss exposures to an entity better positioned to handle these risks. But what is insurance and how does insurance work? This chapter analyzes the insurance mechanism. You will learn the important characteristics of insurance and what conditions must be present for a risk to be privately insurable. This chapter also provides an overview of private and government insurance. Private insurance can be divided into two divisions: property and liability insurance and life and health insurance. Government insurance programs are designed to insure risks that may not be insurable by a private insurance company. Although insurance provides many benefits to society, there are some costs associated with the use of insurance. These costs and benefits are discussed at the conclusion of this chapter.

### **Fundamentals of Risk Management**

#### Overview

You've probably practiced personal risk management without even realizing it. You may have decided to purchase auto insurance (risk transfer), decided not to drive on an icy road (risk avoidance), decided to use your seat belt (loss control) and your physical damage insurance may have a deductible (risk retention). Just as individuals practice risk management, so do small businesses, universities, municipalities, and corporations. This chapter provides an introduction to risk management in general and a discussion of personal risk management in particular. After defining risk management and discussing the objectives of risk management, the risk management process is examined. The risk management process consists of: identifying loss exposures, analyzing the loss exposures, and selecting appropriate techniques for treating the loss exposures, and implementing and monitoring the risk management program.

## Chapter 4

#### **Additional Topics in Risk Management**

#### Overview

In the previous chapter, you were introduced to the field of risk management and personal risk management. This second chapter on risk management covers some advanced risk management topics. The chapter discusses the evolution of corporate risk management to include financial risks and all risks facing the business. The impact of the underwriting cycle, insurance industry consolidation, and the securitization of risk are discussed, as well as loss forecasting, financial analysis in risk management decision-making, and the application of some other risk management tools.

## **Legal Principles in Insurance**

#### Overview

Insurance contracts are complex documents embodying years of industry tradition, case law, and general practices. This chapter examines the legal environment of insurance contracts, including: fundamental legal principles, requirements to form an insurance contract, legal characteristics of insurance contracts, and insurance law as it applies to agency. Although you may have been introduced to some of these concepts in a business law course, there are unique aspects of insurance contracts that you should know.

## Chapter 6

#### **Analysis of Insurance Contracts**

#### Overview

In this chapter we turn our attention to insurance contracts. Even though many different insurance contracts are offered, there are certain elements that are common to all insurance contracts. This chapter examines the basic parts of an insurance contract, endorsements and riders, deductibles, coinsurance, and loss settlement when more than one insurance policy covers a loss. The material presented in this chapter will be of great assistance to you as you begin to examine individual insurance contracts. In addition to the "usual" exercises, a problem set and a review of coinsurance are provided.

## The Liability Risk

#### Overview

This chapter begins a block of material on property and liability risks, and the personal and business insurance coverages designed to address these risks. In this first chapter, we consider the liability risk. The number of lawsuits and the magnitude of settlements have increased significantly over time. In this chapter we examine the basis for most of these lawsuits, negligence. The elements of a negligent act are discussed as well as legal defenses in cases where negligence is alleged. Next, applications of the law of negligence are presented; and several problem related to liability are discussed. Finally, defects in the present civil justice system and tort reform ideas are discussed.

## **Chapter 8**

#### **Homeowners Insurance: Section I Coverages**

#### Overview

With this chapter we begin our study of property and liability insurance contracts. The first coverage we will examine is a popular personal lines coverage, homeowners insurance. Homeowners insurance is called a "package policy" because it combines more than one line of coverage in a single contract. A variety of homeowners forms are available, providing coverage for homeowners, renters, and condominium owners. Because of its widespread use, we will examine the Insurance Services Office (ISO) Homeowners 3 contract in greater detail. Section I of the homeowners policy provides coverage for damage to the dwelling, damage to other structures, losses to personal property, and loss of use coverage if an insured peril makes the property unusable. Section II of the homeowners policy (covered in Chapter 9) provides personal liability insurance and medical payments to others coverage.

**Homeowners Insurance: Section II Coverages** 

#### Overview

This chapter examines Section II of the ISO Homeowners insurance contracts. Section I of the Homeowners 3 policy was examined in the previous chapter. While there are variations in the Section I coverages for the various forms, Section II is identical in each form. Section II provides personal liability insurance that will respond to liability claims. Section II also includes medical payments to others coverage. As both of these coverages are provided on an all-risk basis, the exclusions applicable to these coverages are examined. Some additional coverages provided under Section II are discussed, as well as some endorsements that can be added to your homeowners policy to broaden the coverage. The chapter closes with some important suggestions to follow when shopping for homeowners insurance. The appendix to Chapter 9 provides tips on how to save money when buying homeowners insurance.

## Chapter 10

## Auto Insurance in Rwanda

#### Overview

If you hit a pedestrian, another car, a large animal or bird, or another object while driving your car, damage is likely to result. You could injure or kill someone and damage his or her property. You could also injure yourself and your passengers and damage your own vehicle. Fortunately, automobile insurance is available to cover these losses. Like homeowners insurance, automobile insurance is a package policy designed to provide coverage for several types of losses. In this chapter we examine the provisions of the Personal Auto Policy (PAP). The PAP provides coverage for bodily injury and property damage liability, physical damage protection, medical payments coverage, uninsured motorists protection, and a number of other coverages.

#### **Chapter 11 Auto Insurance in Rwanda (continued)**

#### Overview

Compensating innocent motorists who have been injured in auto accidents is an important issue for society. Private insurers are not anxious to insure high-risk drivers. But it is in society's interest that all motorists are financially responsible. This chapter examines a number of issues relating to auto insurance and society. Four major topics are addressed. First, approaches that are used to compensate innocent automobile accident victims are discussed, including no-fault insurance as an alternative to the traditional tort-based system. Second, methods of providing automobile insurance to high-risk drivers are examined. Third, factors affecting the cost of automobile insurance are discussed. Finally, some suggestions to follow when shopping for automobile insurance are offered.

## Chapter 12

## Other Property and Liability Insurance Coverages

#### Overview

This chapter examines a wide range of personal property and liability insurance coverages. It opens with a discussion of coverage for dwellings that don't qualify for coverage under the homeowners program and for situations where less coverage than that provided by a homeowners policy is desired. Next, coverage for mobilehomes and special coverage for personal property are examined. As homeowners and dwelling forms usually exclude boats exceeding certain length and horsepower limits, coverage is needed for recreational boats. This coverage can be provided through the boatowners package form and yacht insurance.

In addition to private insurers, the federal government is involved in providing property coverages. Federal flood insurance and FAIR plans are discussed in this chapter. The chapter concludes with a discussion of title insurance and personal umbrella policies. Title insurance protects the insured from defects in clear title to property. The personal umbrella policy is designed to provide protection against catastrophic liability claims and to fill gaps in underlying liability coverages.

#### **Commercial Property Insurance Coverages**

#### Overview

Business enterprises make a large investment in property—plant, equipment, vehicles, inventory, furniture, and other property. This property may remain at a fixed location or may be moved between several locations. The business also may take possession of a customer's property temporarily. Obviously, the business suffers a loss if its property is damaged or destroyed. In addition to direct physical damage to property, businesses can also incur indirect (consequential) losses if physical damage renders property unusable. This loss is a combination of continuing expenses and lost profits. This chapter discusses a wide range of commercial property insurance coverages. Coverages examined include: the commercial package policy (CPP), business income insurance, inland and ocean marine insurance, the business owners policy (BOP), and a variety of other property coverage forms. Commercial property insurance is an important part of a business entity's risk management program.

## Chapter 14

#### **Commercial Liability Insurance Coverages**

#### Overview

Property risks have a common characteristic—the amount of the loss is capped by the value of the property lost and any indirect loss. Unlike commercial property risks, liability exposures are not limited in amount. In this chapter we turn our attention to business liability risks and their treatment. Business enterprises and professionals face a wide variety of liability exposures developing out of premises and operations, products and completed operations, contractual liability, contingent liability, errors and omissions, and other exposures. A number of commercial liability insurance coverages have been developed to address these risks, including commercial general liability insurance, workers compensation and employers liability insurance, business auto coverage, commercial umbrella policies, professional liability insurance, and other liability coverages. A thorough understanding of commercial liability loss exposures and insurance coverages is required for a successful risk management program.

## **Crime Insurance Coverages and Surety Bonds**

#### Overview

In addition to the property and liability risks faced by businesses, losses can also occur as a result of crime. Losses attributable to crime take many forms, including burglary, employee theft, arson, shoplifting, embezzlement, robbery, and other types of crime. In response to the need for coverage of such losses, the Insurance Services Office (ISO) has developed a number of crime insurance forms that are discussed in this chapter. This chapter also examines surety bonds. These bonds provide monetary compensation if a bonded party fails to perform a promised obligation. A variety of surety bonds, each designed for a special purpose, are discussed.

## Chapter 16

#### **Fundamentals of Life Insurance**

#### Overview

This chapter begins a block of material on several important personal risks: premature death, poor health, and excessive longevity. This chapter examines premature death and the financial services products designed to address this risk. We will consider the economic impact of premature death upon various types of families, methods of determining how much life insurance to purchase, and the various life insurance products available to address this important personal risk, including: term insurance, whole life insurance, universal life insurance, variable life insurance, and some other life insurance products.

#### Chapter 17

#### **Contract Provisions in Life Insurance**

#### Overview

Given the nature of the risk insured, the possible lengthy duration of the contract, the

breadth of coverage provided, and the investment nature of some life insurance products; life insurance contracts are remarkable documents. To protect the interests of insurers, policyowners, insureds, and third-party beneficiaries, numerous contractual provisions have been developed and incorporated into life insurance contracts over the years. This chapter examines these important contractual provisions. Life insurance contracts also offer optional methods of using dividends (dividend options), using the cash value if the policy is surrendered (nonforfeiture options), and receiving policy proceeds upon the death of the insured (settlement options). A thorough understanding of life insurance contractual provisions is necessary for policyowners, insureds, and beneficiaries to maximize the benefits offered by these contracts.

## Chapter 18

#### **Life Insurance Purchase Decisions**

#### Overview

Would you purchase a major appliance, new home, or a new car without shopping around first? Many of the same consumers who would answer this question "of course not" purchase life insurance without considering the true cost of the coverage. Even though life insurers are pricing the same risk, there are significant variations in the cost of life insurance. In addition to cost, there are a number of other important considerations in purchasing life insurance. This chapter discusses the fundamentals of life insurance purchasing. Major topics covered include: methods of determining the cost of life insurance, methods of determining the rate of return on the cash value, taxation of life insurance, and suggestions to follow when purchasing life insurance. The appendix at the end of the chapter explains how life insurance premiums are calculated. A problem set is included with the usual exercises.

#### Chapter 19

#### Retirement Products: Annuities and Individual Retirement Accounts

#### Overview

Thus far we have examined life insurance in great detail. Life insurance companies also market a product that addresses another important personal risk. That personal risk is the risk of outliving the income and assets that you have accumulated. The

product that addresses this personal risk is called a life annuity. Life annuities provide periodic income to an individual for as long as he or she is living. These products help many retirees to achieve economic security. In addition to annuities, individuals have another retirement savings vehicle available to them. An individual may establish a tax-advantaged savings plan called an individual retirement account (IRA). In this chapter we will examine the characteristics of individual annuities and IRAs (traditional and Roth). Group retirement plans and retirement plans for the self-employed are discussed in Chapter 22.

Chapter 20

**Individual Health Insurance Coverages** 

Overview

In this chapter we examine individual health insurance coverage. After a discussion of major problems with the present health care system, the various forms of individual health insurance are examined. The most important individual health coverages include: major medical insurance, health savings accounts, long-term care insurance, and disability-income insurance. Next, important policy provisions found in individual health insurance coverage are examined. Finally, a number of important guidelines are discussed for purchasing individual health insurance coverage.

Chapter 21

**Employee Benefits: Group Life and Health Insurance Coverages** 

Overview

This chapter and the next chapter are devoted to employee benefits. Employee benefits are often taken for granted and you may be surprised by the magnitude of these plans.

In this chapter, we examine group life and health insurance coverages. As an introduction, group insurance underwriting principles and eligibility requirements are discussed. Next, group life and health insurance coverages are examined, as well as group health insurance providers, managed care plans, and group health insurance policy provisions.

**Employee Benefits: Qualified Retirement Plans** 

Overview

People spend a longer period of their lives in retirement. The early retirement trend combined with increasing life expectancy makes income during retirement a critical concern. There are three primary sources of retirement income: Social Security oldage benefits, income generated from personal investments and savings, and private retirement plans. This chapter examines the basic features of private retirement plans, the distinctions between defined benefit plans and defined contribution plans, the

funding instruments used to finance retirement plans, and the features of several types

of retirement plans.

Chapter 23

Social Insurance Programs in Rwanda

Overview

"A multitude of errors in thinking surround our social insurance programs." -

George E. Rejda\*

These "errors in thinking" are unfortunate, given the importance of social insurance programs. These programs, which are enacted to solve complex social problems, provide a base of economic security to the population. In this chapter we examine social insurance programs. As an introduction, we examine why social insurance programs are needed and basic characteristics of social insurance programs. Next, we

examine the provisions and issues relating to social insurance programs.

Chapter 24

**Types of Private Insurers and Marketing Systems** 

Overview

There are a number of types of insurance organizations: mutual companies, stock

companies, fraternals, etc. There are also a variety of insurance marketing systems. The individual marketing insurance may be an independent agent, an exclusive agent, a direct writer, or a general agent. Coverage also may be purchased through an employer-based group plan or in response to phone or mail solicitation. The prospective purchaser might enlist the services of an insurance broker to purchase insurance. In this chapter, we examine the types of private insurers, distinctions between agents and brokers, and types of marketing systems employed by property and liability insurers and life and health insurers.

#### Chapter 25

#### **Functional Operations of Private Insurers**

#### Overview

Up until now, your contact with individuals who work in the insurance industry has most likely been with sales and claims personnel. Both of these important operations require interaction with the general public and these functions are performed away from the company's headquarters. Have you ever seen an insurance company home office or regional office? In case you haven't, these buildings tend to be very large structures. Insurance companies need this space because there are many other vital operations that go on "behind the scenes." In addition to discussing the claims and marketing operations of insurance companies, this chapter discusses other important functional areas of insurance companies, including: rate- making, underwriting, reinsurance, investments, loss control, and a number of other functions. There are many interesting job opportunities available in the insurance industry. A reinsurance settlement problem set is included for this chapter.

#### Chapter 26

#### **Financial Operations of Private Insurers**

#### Overview

This chapter examines the financial operations of insurance companies. In the first portion of the chapter, two important financial statements, the balance sheet and the income and expense statement, are discussed. Important entries on these financial statements are examined, as well as profitability measures. The remainder of the chapter is devoted to rate making. After a discussion of business and regulatory rate

making objectives, rate making methods used in the property and casualty insurance industry are examined. Life insurance ratemaking is covered in the appendix to Chapter 18.

## Chapter 27

## Government Regulation of Private Insurers in Rwanda

## References

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- 3. Social Insurance and Economic Security, 5th Edition. Prentice Hall, 1994, Englewood Cliffs, NJ, Pg 21.

## **Risk and Its Treatment**

- Definitions of Risk
- Chance of Loss
- Peril and Hazard
- Classification of Risk
- Major Personal Risks and Commercial Risks
- Burden of Risk on Society
- Techniques for Managing Risk

#### **Different Definitions of Risk**

- Chance of loss: The probability that an event will occur
- Objective Probability vs. Subjective Probability
  - Objective probability refers to the long-run relative frequency of an event based on the assumptions of an infinite number of observations and of no change in the underlying conditions
  - Subjective probability is the individual's personal estimate of the chance of loss

## Chance of Loss vs. Objective Risk

- Chance of loss is the probability that an event that causes a loss will occur.
- Objective risk is the relative variation of actual loss from expected loss

The chance of loss may be identical for two different groups, but objective risk may be quite different!

City	# homes	Average # fires	Range	Chance of Fire	Objective Risk
Philadelphia	10,000	100	75 – 125	1%	25%
Los Angeles	10,000	100	90 - 110	1%	10%

#### Peril and Hazard

- A peril is defined as the cause of the loss
  - In an auto accident, the collision is the peril
- A hazard is a condition that increases the chance of loss
  - A <u>physical hazard</u> is a physical condition that increases the frequency or severity of loss
  - Moral hazard is dishonesty or character defects in an individual that increase the frequency or severity of loss
  - Attitudinal Hazard (Morale Hazard) is carelessness or indifference to a loss, which increases the frequency or severity of a loss

 <u>Legal Hazard</u> refers to characteristics of the legal system or regulatory environment that increase the frequency or severity of loss

#### **Classification of Risk**

- Pure and Speculative Risk
  - A <u>pure risk</u> is a situation in which there are only the possibilities of loss or no loss (earthquake)
  - A <u>speculative risk</u> is a situation in which either profit or loss is possible (gambling)
- Diversifiable Risk and Nondiversifiable Risk
  - A <u>diversifiable risk</u> affects only individuals or small groups (car theft). It is also called nonsystematic or particular risk.
  - A <u>nondiversifiable risk</u> affects the entire economy or large numbers of persons or groups within the economy (hurricane). It is also called systematic risk or fundamental risk.
  - Government assistance may be necessary to insure nondiversifiable risks.
- Enterprise risk encompasses all major risks faced by a business firm, which include: pure risk, speculative risk, strategic risk, operational risk, and financial risk
  - Strategic Risk refers to uncertainty regarding the firm's financial goals and objectives.
  - Operational risk results from the firm's business operations.
  - <u>Financial Risk</u> refers to the uncertainty of loss because of adverse changes in commodity prices, interest rates, foreign exchange rates, and the value of money.
- Enterprise Risk Management combines into a single unified treatment program all major risks faced by the firm:
  - Pure risk
  - Speculative risk
  - Strategic risk
  - Operational risk
  - Financial risk
- As long as all risks are not perfectly correlated, the firm can offset one risk against another, thus reducing the firm's overall risk.
- Treatment of financial risks requires the use of complex hedging techniques, financial derivatives, futures contracts and other financial instruments.

#### **Major Personal Risks**

- <u>Personal risks</u> are risks that directly affect and individual or family. They involve the possibility of a loss or reduction in income, extra expenses or depletion of financial assets, due to:
  - Premature death of family head
  - Insufficient income during retirement
  - Poor health (catastrophic medical bills and loss of earned income)
  - Involuntary unemployment
- <u>Property risks</u> involve the possibility of losses associated with the destruction or theft of property

- Direct loss vs. indirect loss
  - A <u>direct loss</u> is a financial loss that results from the physical damage, destruction, or theft of the property, such as fire damage to a home
  - An <u>indirect or consequential loss</u> is a financial loss that results indirectly from the occurrence of a direct physical damage or theft loss, e.g., the additional living expenses after a fire
- <u>Liability risks</u> involve the possibility of being held legally liable for bodily injury or property damage to someone else
  - There is no maximum upper limit with respect to the amount of the loss
  - A lien can be placed on your income and financial assets
  - Legal defense costs can be enormous

## **Major Commercial Risks**

- Firms face a variety of pure risks that can have serious financial consequences if a loss occurs:
  - Property risks, such as damage to buildings, furniture and office equipment
  - <u>Liability risks</u>, such as suits for defective products, pollution, and sexual harassment
  - Loss of business income, when the firm must shut down for some time after a physical damage loss
  - Other risks to firms include crime exposures, human resource exposures, foreign loss exposures, intangible property exposures, and government exposures

## **Burden of Risk on Society**

- The presence of risk results in three major burdens on society:
  - In the absence of insurance, individuals and business firms would have to maintain large emergency funds to pay for unexpected losses
  - The risk of a liability lawsuit may discourage innovation, depriving society of certain goods and services
  - Risk causes worry and fear

## **Techniques for Managing Risk**

- <u>Risk Control</u> refers to techniques that reduce the frequency or severity of losses:
  - Avoidance
  - Loss prevention refers to activities to reduce the frequency of losses
  - Loss reduction refers to activities to reduce the severity of losses
- <u>Risk Financing</u> refers to techniques that provide for payment of losses after they occur:
  - Retention means that an individual or business firm retains part or all of the losses that can result from a given risk.
  - Active retention means that an individual is aware of the risk and deliberately plans to retain all or part of it

- Passive retention means risks may be unknowingly retained because of ignorance, indifference, or laziness
- Self Insurance is a special form of planned retention by which part or all of a given loss exposure is retained by the firm
- A Noninsurance transfer transfers a risk to another party.
  - A transfer of risk by contract, such as through a service contract or a hold-harmless clause in a contract
  - Hedging is a technique for transferring the risk of unfavorable price fluctuations to a speculator by purchasing and selling futures contracts on an organized exchange
  - <u>Incorporation</u> of a business firm transfers to the creditors the risk of having
- For most people, <u>insurance</u> is the most practical method for handling major risks
  - Risk transfer is used because a pure risk is transferred to the insurer.
  - The pooling technique is used to spread the losses of the few over the entire group
  - The risk may be reduced by application of the law of large numbers

#### The Insurance Mechanism

## **Review questions**

1.

Which of the following risks are considered insurable risks?

I. Static Risks

II. Dynamic Risks

III. Speculative Risks

IV. Pure Risks

V. Inflation Risk

A. I and IV only

B. II and IV only

C. I, IV, and V

D. I, II, III, IV, and V

Answer: A

Only pure risks are insurable. Static risks are a type of pure risk that tends to occur with regularity- they can be insured against. Dynamic, Inflation, and Speculative risks are all uninsurable.

Question 2:

Which of the following is an element of insurable risk?

A. The loss must be unexpected or accidental

B. The loss must be catastrophic

C. The loss produced by the risk cannot be measurable

D. The loss must be damage related

Answer: A

The loss must be unexpected or accidental to be an insurable risk. It cannot be catastrophic and it must be measurable and definitive.

#### **Chapter 2 Topics**

- Definition and Basic Characteristics of Insurance
- Characteristics of An Ideally Insurable Risk
- Adverse Selection and Insurance
- Insurance and Gambling Compared
- Insurance and Hedging Compared
- Benefits and Costs of Insurance to Society

#### **Definition of Insurance**

Commission on Insurance Terminology of the American Risk and Insurance Association : "Insurance is the <u>pooling</u> of <u>fortuitous losses</u> by <u>transfer of such risks</u> to insurers, who agree to <u>indemnify</u> insureds for such losses, to provide other pecuniary benefits on their occurrence, or to render services connected with the risk."

#### **Basic Characteristics of Insurance**

Based on the insurance definition, an insurance plan typically includes the following characteristics:

- ➤ 1-Pooling of losses
- > 2-Payment of fortuitous losses
- > 3-Risk transfer
- ➤ 4-Indemnification

## 1-Pooling of losses(sharing of losses)

Pooling involves spreading losses incurred by the few over the entire group.

- Risk reduction is based on the <u>Law of Large Numbers</u>.
- According to the Law of Large Numbers, the greater the number of exposures, the more closely will the actual results approach the probable results that are expected from an infinite number of exposures.
- Example of Pooling:
  - Two business owners own identical buildings valued at \$50,000
  - There is a 10 percent chance each building will be destroyed by a peril in any year
  - Loss to either building is an independent event
  - Expected value and standard deviation of the loss for each owner is:

$$Expected loss = 0.90 * \$0 + 0.10 * \$50,000 = \$5,000$$

Standard deviation = 
$$\sqrt{0.90(0-\$5,000)^2 + 0.10(\$50,000-\$5,000)^2}$$
  
= \$15,000

- Example, continued:
  - If the owners instead pool (combine) their loss exposures, and each agrees to pay an equal share of any loss that might occur:

$$Expected loss = 0.81*\$0 + 0.09*\$25,000 + 0.09*\$25,000 + 0.01*\$50,000$$

Standard deviation = 
$$\sqrt{0.81(0-\$5,000)^2 + (2)(0.09)(\$25,000-\$5,000)^2 + 0.01(\$50,000-\$5,000)^2}$$
  
=  $\$10,607$ 

 As additional individuals are added to the pool, the standard deviation continues to decline while the expected value of the loss remains unchanged

## 2-Payment of Fortuitous Losses

Fortuitous Losses or accidental losses

Insurance company pays for an "accidental" losses and they must be "unforeseen" and "unexpected". This kind of loss is called fortuitous loss.

Example: a person may slip on an icy sidewalk and break a leg. The loss would be fortuitous.

Law of large number is based on the assumption that losses are accidental and occur randomly. Therefore, Insurance policies don't pay for intentional losses.

#### 3-Risk Transfer

Risk transfer means that a pure risk is transferred from insured to the insurer, who is in a stronger financial position than the insured.

Pure risks such as the risk of premature death, poor health, disability, destruction and theft of property, and personal liability lawsuit.

#### 4-Indemnification

The insurer puts the insured back to the same financial position prior to the occurrence of loss.

Example: If your home burns in a fire, a homeowner policy will indemnify you or restore you to your previous position.

• If you hit somebody with your car and you are liable for his bodily injury, insurer indemnifies the person by using the auto liability insurance.

## Characteristics of an Ideally Insurable Risk

Private insurers only insure pure risks but not all pure risks are insurable. A pure risk ideally should have certain characteristics to be insurable.

- ➤ Large number of exposure units.
- > Loss must be accidental and unintentional.
- Loss must be determinable and measurable.
- Loss should not be catastrophic.
- Chance of loss must be calculable.
- Premium must be economically feasible.

#### **Large Number of Exposure Units**

The should be large number of similar but not necessarily identical exposure units that are subjected to the same peril or group of perils.

Example: Large number of houses in a city can be insured through property insurance on houses.

<u>Accurate prediction of losses</u> based on the law of large number is the purpose of first requirement.

#### **Accidental and Unintentional Loss**

The loss should be unintentional and unexpected by the insured and outside the insured 's control.

## If the cause of loss is intentionally, the insurer does not pay for the loss.

- > Two reasons why the second requirement is necessary:
- 1-If the intentional loss paid by insurer, moral hazard would be increased substantially and the premiums would rise consequently (fake accident, fraudulent claim, inflating the amount of a claim, Intentionally burning the unsold merchandise).
- 2-The loss should be accidental because the law of large number is <u>based on the random occurrence of events</u> whereby the intentional loss is not a random event. Therefore, the aim of law of large number is violated due to the prediction of future experience may be highly inaccurate.

#### **Determinable and Measurable Loss**

➤ The loss should be both determinable and measurable meaning that time, place and amount of loss should be distinguishable.

Example: In life insurance policies usually the time and the cause of death can be determinable and the death benefit is usually the face amount of life insurance policy.

The basic purpose of third requirements is to enable an insurer to determine if the loss is covered under the policy, and if it is covered, how much should be paid.

Example:

Shanon had an expensive fur coat that is insured under homeowners policy. It makes a great deal of difference to insurer if a thief breaks into her home and steals the coat, or the coat is missing because her husband gave it for drycleaning and forgot to tell her.

The loss is covered in the first example but not in the second.

#### **No Catastrophic Loss**

- ➤ Catastrophic losses periodically result from floods, hurricanes, tornadoes, earthquakes, forest fires, and other natural disasters or acts of terrorism.
- ➤ The loss should not be catastrophic meaning that a <u>large number of</u> exposure units should not incur losses at the same time.
- ➤ Pooling techniques does not work if most or all of the exposure units in a certain class <u>simultaneously</u> incur a loss(losses of the few are no longer spread over the entire group).

#### **Calculable Chance of Loss**

Chance of loss should be calculable.

The average severity and average frequency of future losses must be calculable by the insurer.

➤ Why chance of loss should be calculable?

If chance of loss is calculable, the proper premium can be charged to pay all claims and expenses and yield a profit during the policy period.

➤ The chance of loss for catastrophic event cannot be accurately estimated. Why?

Catastrophic loss such as floods, wars, and cyclical unemployment <u>occur on an irregular basis</u> and <u>prediction of severity and frequency of losses</u> is difficult.

## **Economically Feasible Premiums**

➤ The premium should be economically feasible meaning that the insured must be able to afford the premium and indeed the premium must be substantially less than the face value.

## Based on these requirements:

- ➤ Most personal, property and liability risks can be insured.
- ➤ Market risks, financial risks, production risks and political risks are difficult to insure.

#### **Exhibit 2.1** Risk of Fire as an Insurable Risk

Requirements	Does the risk of fire satisfy the requirements?		
Large number of exposure units	Yes. Numerous exposure units are present.		
Accidental and unintentional loss	Yes. With the exception of arson, most fire losses are accidental arunintentional.		
<ol> <li>Determinable and measurable loss</li> </ol>	Yes. If there is disagreement over the amount paid, a property insurance policy has provisions for resolving disputes.		
4. No catastrophic loss	Yes. Although catastrophic fires have occurred, all exposure units normally do not burn at the same time.		
5. Calculable chance of loss	Yes. Chance of fire can be calculated, and the average severity of a fire loss can be estimated in advance.		
6. Economically feasible premium	Yes. Premium rate per \$100 of fire insurance is relatively low.		

## **Exhibit 2.2** Risk of Unemployment as an Insurable Risk

Requirements	Does the risk of unemployment satisfy the requirements?		
Large number of     exposure units	Not completely. Although there are a large number of employees, predicting unemployment is often difficult because of the different types of unemployment and different types of labor.		
<ol><li>Accidental and unintentional loss</li></ol>	Not always. Some unemployment is due to individuals who voluntarily quit their jobs.		
3. Determinable and measurable loss	Not completely. The level of unemployment can be determined, but the measurement of loss may be difficult. Most unemployment is involuntary because of layoffs or because workers have completed temporary jobs. However, some unemployment is voluntary; workers voluntarily change jobs because of higher wages, a change in careers, family obligations, relocation to another state, or other reasons.		
4. No catastrophic loss	No. A severe national recession or depressed local business conditions in a town or city could result in a catastrophic loss.		
5. Calculable chance of loss	Not completely. The different types of unemployment in specific occupations can make it difficult for actuaries to estimate the chance of loss accurately.		
6. Economically feasible premium	Not completely. Adverse selection, moral hazard, policy design, and the potential for a catastrophic loss could make the insurance too expensive to purchase. Some plans, however, will pay unemployment benefits in certain cases where the unemployment is involuntary, and the loss payments are relatively small, such as waiver of life insurance premiums for six months, or payment of credit card minimum payments for a limited period.		

### **Adverse Selection and Insurance**

- <u>Adverse selection</u> is the tendency of persons with a higher-than-average chance of loss to seek insurance at standard rates.
- If not <u>controlled by underwriting</u>, adverse selection results in higherthan-expected loss levels.
- Adverse selection can be controlled by:
  - careful <u>underwriting</u> (selection and classification of applicants for insurance)
  - policy provisions (e.g., suicide clause in life insurance)

## What does underwriting mean?

- Underwriting is the process of selecting and classifying applicants for insurance.
- > Those applicants that met the underwriting standards are <u>insured at</u> standard rates,but

those applicants that have higher-than-average chance of loss, the insurer denies to provide insurance for them or they have to pay extra premium.

The problem of adverse selection arises when <u>applicants with a higher-than-average</u> chance of loss succeed in obtaining the coverage at standard or average rates.

## **Insurance vs. Gambling**

#### <u>Insurance</u>

- Insurance is a technique for handing an already existing pure risk
- Insurance is always socially productive:
   both parties have a
  - both parties have a common interest in the prevention of a loss

#### **Gambling**

- Gambling creates a new speculative risk
- Gambling is not socially productive
  - The winner's gain comes at the expense of the loser

# Insurance vs. Hedging Insurance

- Risk is transferred by a contract
- Insurance involves the transfer of pure (insurable) risks
- Insurance can reduce the objective risk of an insurer
  - through the Law of Large Numbers

## **Hedging**

- Risk is transferred by a contract
- Hedging involves risks that are typically uninsurable
- Hedging does not result in reduced risk

## **Benefits of Insurance to Society**

- 1- Indemnification of loss
- 2- Reduction of worry and fear
- 3- Source of investment funds
- 4-Loss prevention

5-Enhancement of credit

## > 1-Indemnification of loss

Indemnification permits individuals and families to be restored to their former financial position after a loss occurs.

➤ Indemnification to business firms also permits firms to remain in business and employees to keep their jobs.

## **2-Reduction of worry and fear**

If a person has any insurance coverage one of the benefit of insurance is that worry and fear are reduced.

## Example:

-If family head has life insurance coverage, those who are financially dependent are less likely to worry about the financial security in the event of premature death.

-Owners of auto insurance policy or any other type of property insurance enjoy greater peace of mind because they know they are covered if a loss occurs.

#### > 3-Source of Investment funds

The insurance industry is an important source of funds for capital investment and accumulation.

- Premiums are collected in advance of the loss, and funds not needed to pay immediate losses and expenses can be loaded to business firms.
- Funds typically are invested in shopping centers, hospitals, factories, housing developments, and new machinery and equipment.

#### > 4- Loss Prevention

Insurance companies are actively involved in numerous loss-prevention activities and also employ a wide variety of loss-prevention personnel, including safety engineers and specialists in fire prevention, occupational safety and health, and products liability.

- ☐ Examples of loss-prevention activities that property and casualty insurers strongly support:
- Highway safety and reduction of automobile deaths
- Fire prevention
- Prevention of auto thefts
- Prevention of defective products that could injure the user

Society benefits because both types of direct and indirect losses are reduced by loss-prevention activities.

#### > 5- Enhancement of Credit

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 paid.

#### Example:

➤ When a house is purchased, the lending institution requires property insurance on the house before the mortgage is granted. The property insurance protects the lender's financial interest if the property is damaged or destroyed.

If a new car is purchased and financed by a bank or other lending institution, auto insurance policy may be required before the loan is made.

## **Costs of Insurance to society**

- ☐ The major costs of insurance include:
- 1- Cost of doing business
- 2-Fradulent claims
- 3-Inflated claims

## > 1- Cost of doing business

Insurers consume scarce economic resources land, labor, capital, and business enterprise in providing insurance to society.

#### > 2-Fraudulent claims

Submission of fraudulent claims is another cost of insurance. Examples of fraudulent claims :

- ➤ 1- Auto accidents are faked or staged to collect benefits.
- ➤ 2- Phony burglaries, thefts, or acts of vandalism are reported to insurers.
- > 3- False health insurance claims are submitted to collect benefits.

## > 3- Inflated claims

Submission of inflated claims is another cost of insurance.

Although the loss is not intentionally caused by the insured, the dollar amount of the claim may exceed the actual financial loss.

#### **Examples:**

- ✓ Insureds exaggerate the amount and value of property stolen from a home or business.
- ✓ Disabled persons often malinger to collect disability-income benefits for a longer duration.

#### **INSIGHT 2-1**

# **Shocking Examples of Insurance Fraudulent Sinister seniors**

Two elderly women befriended two homeless men in Los Angeles and took out \$3 million of life insurance on the men, naming themselves as beneficiaries. Helen Golay and Olga Rutterschmidt then had cars run down and kill the two men. Both women received life without parole.

#### **Swallowing glass to shake down insurers**

Ron Evano swallowed broken glass to shake down insurers and business firms by lying that he found the glass in food and drinks that he consumed. He received a prison sentence of 63 months and must make restitution of more than \$340,000.

# **Chapter 3 Introduction to Risk Management**

## **Topics**

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

## Meaning of Risk Management

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

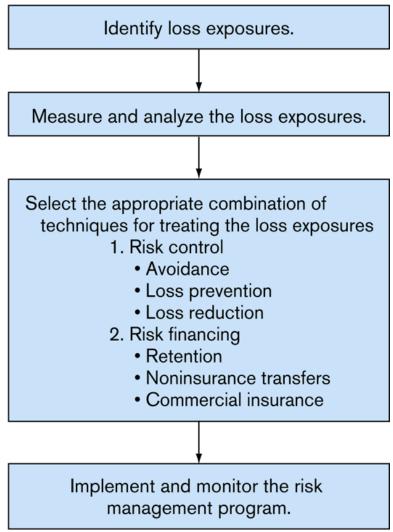
#### **Objectives of Risk Management**

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

#### **Risk Management Process**

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

Exhibit 3.1 Steps in the Risk Management Process



## **Identifying Loss Exposures**

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

#### **Measure and Analyze Loss Exposures**

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

# Select the Appropriate Combination of Techniques for Treating the Loss Exposures

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

# Select the Appropriate Combination of Techniques for Treating the Loss Exposures

Loss prevention refers to measures that reduce the frequency of a particular loss

• e.g., installing safety features on hazardous products

Loss reduction refers to measures that reduce the severity of a loss after is occurs

• e.g., installing an automatic sprinkler system

Risk financing refers to techniques that provide for the funding of losses

- Methods of risk financing include:
  - 1. Retention
  - 2. Non-insurance Transfers
  - 3. Commercial Insurance

## **Risk Financing Methods: Retention**

- <u>Retention</u> means that the firm retains part or all of the losses that can result from a given loss
  - Retention is effectively used when:
    - No other method of treatment is available
    - The worst possible loss is not serious
    - Losses are highly predictable

- The <u>retention level</u> is the dollar amount of losses that the firm will retain
  - A financially strong firm can have a higher retention level than a financially weak firm
  - The maximum retention may be calculated as a percentage of the firm's net working capital
- A risk manager has several methods for paying retained losses:
  - Current net income: losses are treated as current expenses
  - Unfunded reserve: losses are deducted from a bookkeeping account
  - Funded reserve: losses are deducted from a liquid fund
  - Credit line: funds are borrowed to pay losses as they occur
- A <u>captive insurer</u> is an insurer owned by a parent firm for the purpose of insuring the parent firm's loss exposures
  - A single-parent captive is owned by only one parent
  - An association or group captive is an insurer owned by several parents
  - Many captives are located in the Caribbean because the regulatory environment is favorable
  - Captives are formed for several reasons, including:
    - The parent firm may have difficulty obtaining insurance
    - To take advantage of a favorable regulatory environment
    - Costs may be lower than purchasing commercial insurance
    - A captive insurer has easier access to a reinsurer
    - A captive insurer can become a source of profit
  - Premiums paid to a captive may be tax-deductible under certain conditions
- Self-insurance is a special form of planned retention
  - Part or all of a given loss exposure is retained by the firm
  - Another name for self-insurance is self-funding
  - Widely used for workers compensation and group health benefits
- A <u>risk retention group</u> is a group captive that can write any type of liability coverage except employer liability, workers compensation, and personal lines
  - Federal regulation allows employers, trade groups, governmental units, and other parties to form risk retention groups
  - They are exempt from many state insurance laws

#### Advantages

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

#### Disadvantages

- Possible higher losses
- Possible higher expenses
- Possible higher taxes

**Risk Financing Methods: Non-insurance Transfers** 

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

#### Advantages

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

#### Disadvantages

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

## **Risk Financing Methods: Insurance**

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

#### Advantages

- Firm is indemnified for losses
- Uncertainty is reduced
- Insurers may provide other risk management services
- Premiums are taxdeductible

#### Disadvantages

- Premiums may be costly
  - Opportunity cost should be considered
- Negotiation of contracts takes time and effort
  - The risk manager may become lax in exercising loss control

#### **Exhibit 3.2** Risk Management Matrix

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

## Market Conditions and the Selection of Risk Management Techniques

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

#### **Implement and Monitor the Risk Management Program**

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

#### Implement and Monitor the Risk Management Program

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

## **Benefits of Risk Management**

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

#### **Personal Risk Management**

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

## **Chapter 4 Additional Topics in Insurance**

# **Topics**

- The Changing Scope of Risk Management
- Enterprise Risk Management
- Insurance Market Dynamics
- Loss Forecasting
- Financial Analysis in Risk Management Decision Making
- Other Risk Management Tools

## The Changing Scope of Risk Management

- Today, the risk manager's job:
  - Involves more than simply purchasing insurance
  - Is not limited in scope to pure risks
- The risk manager may be using:
  - Financial risk management
  - Enterprise risk management
- <u>Financial Risk Management</u> refers to the identification, analysis, and treatment of speculative financial risks:
  - Commodity price risk is the risk of losing money if the price of a commodity changes
  - Interest rate risk is the risk of loss caused by adverse interest rate movements
  - Currency exchange rate risk is the risk of loss of value caused by changes in the rate at which one nation's currency may be converted to another nation's currency
- Financial risks can be managed with capital market instruments

## **Exhibit 4.1** Managing Financial Risk—Two Examples

#### 1. Hedging a Commodity Price Risk Using Futures Contracts

A corn grower estimates in May that his production will total 20,000 bushels of corn, with the harvest completed by December. Checking the price of futures contracts, he notices that the price of December corn is \$2.90 per bushel. He would like to hedge the risk that the price of corn will be lower at harvest time and can do so by the appropriate use of futures contracts. Because corn futures contracts are traded in 5000 bushel units, he would sell four contracts in May totaling 20,000 bushels in the futures market. In December, he would buy back four contracts to offset his futures position. As demonstrated below, it doesn't matter whether the price of corn has increased or decreased by December. By using futures contracts and ignoring transaction expenses, he has locked in total revenue of \$58,000.

If the market price of corn drops to \$2.50 per bushel in December:			
Revenue from sale of corn	$20,000 \times \$2.50$	=	\$50,000
Sale of four contracts at \$2.90 in May	58,000		
Purchase of four contracts at \$2.50 in December	50,000		
Gain on futures transaction			8,000
Total revenue			\$58,000
If the market price of corn increases to \$3.00 per bushel in December:			
Revenue from sale of corn	$20,000 \times \$3.00$	=	\$60,000
Sale of four contracts at \$2.90 in May	58,000		
Purchase of four contracts at \$3.00 in December	60,000		
Loss on futures transaction			(2,000)
Total revenue			\$58,000

- An <u>integrated risk management program</u> is a risk treatment technique that combines coverage for pure and speculative risks in the same contract
- A <u>double-trigger option</u> is a provision that provides for payment only if two specified losses occur
- Some organizations have created a Chief Risk Officer (CRO) position
  - The <u>chief risk officer</u> is responsible for the treatment of pure and speculative risks faced by the organization

## **Enterprise Risk Management**

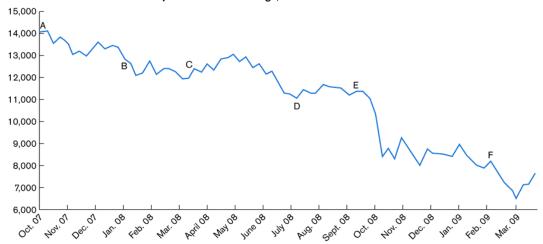
- Enterprise Risk Management (ERM) is a comprehensive risk management program that addresses the organization's pure, speculative, strategic, and operational risks
  - Strategic risk refers to uncertainty regarding an organization's goals and objectives
  - Operational risks are risks that develop out of business operations, such as product manufacturing
  - As long as risks are not positively correlated, the combination of these risks in a single program reduces overall risk
  - Nearly half of all US firms have adopted some type of ERM program
  - Barriers to the implementation of ERM include organizational, culture and turf battles

## The Financial Crisis and Enterprise Risk Management

- The US stock market dropped by more than fifty percent between October 2007 and March 2009
  - The meltdown raises questions about the use of ERM
  - Only 18 percent of executives surveyed said they had a wellformulated and fully-implemented ERM program

#### Exhibit 4.2 Timeline of Events Related to the Financial Crisis

#### Dow Jones Industrial Average, October 2007-March 2009



- A Citigroup posts a surprise 57% drop in third quarter earnings, fueled by \$6.5 billion subprime-related write-downs and losses. The CEO resigns November 2007.
- **B** Bank of America pays \$4 billion for Countrywide Financial after the mortgage lender fails because of risky loans to poor credit risks. UBS announces \$4 billion of write-downs, pushing total subprime-related write-downs to \$18.4 billion.
- C Bear Stearns sold to U.S. investment bank JP Morgan Chase for about \$2 per share (the price is later revised to \$10 per share).
- **D** U.S. banking regulators seize IndyMac Bancorp Inc. as the largest publicly traded U.S. mortgage lender collapses as depositors withdrew over \$1.3 billion over 11 days; the Federal Reserve effectively take over mortgage finance agencies Fannie Mae and Freddie Mac to support the U.S. housing market.
- E Wall Street's worst day since markets reopened after the 9/11 attacks; Lehman Brothers is largest U.S. bankruptcy; Merrill Lynch taken over by Bank of America; American International Group (AIG), once the world's largest insurer, searches for capital because of losses on its mortgage-related securities; central banks inject billions of dollars into money markets to ease tensions and prevent the global financial system from freezing; AIG shares drop almost 50 percent; the Fed announces plan for \$85 billion AIG rescue loan in return for an 80 percent stake in the company; Britain's Barclays buys parts of Lehman's assets for \$1.75 billion; Shares in Goldman Sachs and Morgan Stanley fall sharply; SEC curbs short-selling rules; details emerge about the U.S. government plan for \$700 billion bailout for firms burdened by bad mortgage debt; Goldman Sachs and Morgan Stanley are transformed into bank holding companies.
- **F** JP Morgan Chase and Citigroup announce a temporary stoppage of residential foreclosures. The moratoriums will remain in effect until March 6 for JP Morgan and March 12 for Citigroup; S&P 500 Index closes at a level not seen since December 1996, and closes the two-month period beginning January 1, 2009, with the worst two-month opening to a year in history, losing 18.62 percent.

#### The Financial Crisis and Enterprise Risk Management

- AIG mentions an active ERM program in its 2007 10-K Report
  - Riskiness of the Financial Products Division was not fully appreciated
    - The division was issuing credit default swaps
    - A <u>credit default swap</u> is an agreement in which the risk of default of a financial instrument is transferred from the owner of the financial instrument to the issuer of the swap
    - The default rate on mortgages soared and the company did not have the capital to cover guarantees
- The lessons learned by risk managers from the financial crisis will influence ERM in the future

## **Insurance Market Dynamics**

- Decisions about whether to retain or transfer risks are influenced by conditions in the insurance marketplace
- The <u>Underwriting Cycle</u> refers to the cyclical pattern of underwriting stringency, premium levels, and profitability
  - <u>"Hard" market</u>: tight standards, high premiums, unfavorable insurance terms, more retention
  - "Soft" market: loose standards, low premiums, favorable insurance terms, less retention
  - One indicator of the status of the cycle is the combined ratio:
- Many factors affect property and liability insurance pricing and underwriting decisions:
  - Insurance industry capacity refers to the relative level of surplus
    - <u>Surplus</u> is the difference between an insurer's assets and its liabilities
    - Capacity can be affected by a <u>clash loss</u>, which occurs when several lines of insurance simultaneously experience large losses
  - Investment returns may be used to offset underwriting losses, allowing insurers to set lower premium rates
- The trend toward consolidation in the financial services industry is continuing
  - Consolidation refers to the combining of businesses through acquisitions or mergers
    - Due to mergers, the market is populated by fewer, but larger independent insurance organizations
    - There are also fewer large national insurance brokerages
      - An <u>insurance broker</u> is an intermediary who represents insurance purchasers
  - Cross-Industry Consolidation: the boundaries between insurance companies and other financial institutions have been struck down
    - Financial Services Modernization Act of 1999
    - Some financial services companies are diversifying their operations by expanding into new sectors

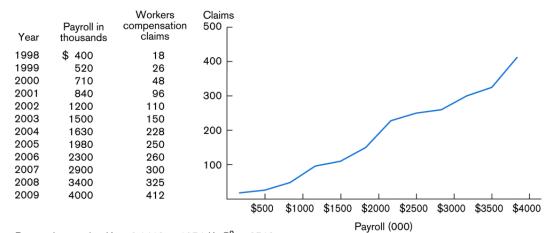
#### **Capital Market Risk Financing Alternatives**

- Insurers are making increasing use of capital markets to assist in financing risk
  - Securitization of risk means that insurable risk is transferred to the capital markets through creation of a financial instrument:
    - A <u>catastrophe bond</u> permits the issue to skip or defer scheduled payments if a catastrophic loss occurs
  - An <u>insurance option</u> is an option that derives value from specific insurance losses or from an index of values.
    - A <u>weather option</u> provides a payment if a specified weather contingency (e.g., high temperature) occurs
  - The impact of risk securitization is an increase in capacity for insurers and reinsurers
    - It provides access to the capital of many investors

## **Loss Forecasting**

- The risk manager can predict losses using several different techniques:
  - Probability analysis
  - Regression analysis
  - Forecasting based on loss distribution
- Of course, there is no guarantee that losses will follow past loss trends
- Probability analysis: the risk manager can assign probabilities to individual and joint events
  - The probability of an event is equal to the number of events likely to occur (X) divided by the number of exposure units (N)
    - May be calculated with past loss data
  - Two events are considered <u>independent events</u> if the occurrence of one event does not affect the occurrence of the other event
  - Two events are considered <u>dependent events</u> if the occurrence of one event affects the occurrence of the other
  - Events are <u>mutually exclusive</u> if the occurrence of one event precludes the occurrence of the second event
- Regression analysis characterizes the relationship between two or more variables and then uses this characterization to predict values of a variable
  - For example, the number of physical damage claims for a fleet of vehicles is a function of the size of the fleet and the number of miles driven each year

**Exhibit 4.5** Relationship Between Payroll and Number of Workers Compensation Claims



Regression results: Y = -6.1413 + .1074 X,  $R^2 = .9519$ 

Predicted number of claims next year, if the payroll is \$4.8 million:

 $Y = -6.1413 + (.1074 \times 4800)$ 

Y = 509.38

- A loss distribution is a probability distribution of losses that could occur
  - Useful for forecasting if the history of losses tends to follow a specified distribution, and the sample size is large
  - The risk manager needs to know the parameters of the loss distribution, such as the mean and standard deviation
  - The normal distribution is widely used for loss forecasting

## Financial Analysis in Risk Management Decision Making

- The <u>time value of money</u> must be considered when decisions involve cash flows over time
  - Considers the interest-earning capacity of money
  - A present value is converted to a future value through <u>compounding</u>
  - A future value is converted to a present value through discounting
- Risk managers use the time value of money when:
  - Analyzing insurance bids
  - Making loss control investment decisions
    - The <u>net present value</u> is the sum of the present values of the future cash flows minus the cost of the project
    - The <u>internal rate of return</u> on a project is the average annual rate of return provided by investing in the project

## **Other Risk Management Tools**

- A <u>risk management information system</u> (RMIS) is a computerized database that permits the risk manager to store and analyze risk management data
  - The database may include listing of properties, insurance policies, loss records, and status of legal claims
  - Data can be used to predict and attempt to control future loss levels
- Risk Management Intranets and Web Sites
  - An <u>intranet</u> is a web site with search capabilities designed for a limited, internal audience
- A <u>risk map</u> is a grid detailing the potential frequency and severity of risks faced by the organization
  - Each risk must be analyzed before placing it on the map
- <u>Value at risk (VAR) analysis</u> involves calculating the worst probable loss likely to occur in a given time period under regular market conditions at some level of confidence
  - The VAR is determined using historical data or running a computer simulation
  - Often applied to a portfolio of assets
  - Can be used to evaluate the solvency of insurers
- <u>Catastrophe modeling</u> is a computer-assisted method of estimating losses that could occur as a result of a catastrophic event
  - Model inputs include seismic data, historical losses, and values exposed to losses (e.g., building characteristics)
  - Models are used by insurers, brokers, and large companies with exposure to catastrophic loss.

## **Chapter 5 Fundamental Legal Principles of Insurance**

- 1-Principle of Indemnity;
- 2-Principle of Insurable Interest;
- 3-Principle of Subrogation;
- 4-Principle of Utmost Good Faith.
  - ❖ Principle of Indemnity: Insurer pays no more than the actual loss.
- -The insured shouldn't profit from a loss.
- -Most of property & liability ins. are contracts of indemnity.
- -Often, the amount paid would be less than the actual loss because of deductible & other provisions.
  - Purposes of Principle of Indemnity:
- -Prevent the insured from profiting from a loss.
- -Reduce moral hazard.

Actual Cash Value (ACV): means value of damage @ time of loss. The courts use 3 methods to determine ACV: replacement cost less depreciation, fair market price & broad evidence rule.

a) Replacement Cost Less Depreciation

 $(RCLD) = Original\ Cost + Inflation - Depreciation$ 

or: Today's Price – Depreciation.

b) Fair Market Price (FMP): price of a similar product. Sometimes ACV based on FMP < ACV based on RCLD.

Ex: Home's value @ time of building \$100,000.

Expected life 40 yrs.

ACV based on RCLD after 10 years = \$75,000.

ACV based on FMP = \$60,000 because of recession & bad location. Then: FMP < RCLD.

c) Broad Evidence Rule (BER): takes into account all factors that affect the value including: RCLD, FMP, Location, PV of Income, Opinions of Appraisers, ...etc. Remark:

In property ins.: insurer applies ACV.

In liability ins.: insurer pays up to the limit of the policy.

In life ins.: insurer pays the face value of the policy.

In business income ins.: insurer pays the loss of profits + continuing expenses.

- **Exceptions to Principle of Indemnity:**
- a) Valued Policy: pays the face amount if a total loss occurs (used to insure antiques, fine arts, ...etc).

The amount is determined @ time of ins. because it is difficult to determine it @ time of loss.

The principle of indemnity is violated because the amount paid may exceeds the ACV.

b)valued Policy Laws (VPL): applied to real property & pays the face amount if total loss occurs from specified perils.

Ex: ACV of a house at time of ins. \$100,000.

ACV of a house at time of loss \$75,000.

Insurer pays \$100,000.

The cause behind VPL is to protect the insured from argument with insurer if the agent overinsured to get high commission (inflation reduces the importance of this policy).

The problem now is underinsurance because it results in: less prem. for the insurer & less protection for the insured.

c)Replacement Cost Ins. (RCI): means no deduction for depreciation.

Ex: a house 5 yrs old & useful life of 20 years with RC \$200,000 damaged by fire.

- -Under the ACV the insured receives \$150,000
- -Under the RC the insured receives \$200,000.

Then, the principle of indemnity is violated.

d)Life Ins.: it is difficult to apply to human being because the ACV rule is meaningless & impossible to determine it's value.

Also, you buy ins. because you need a specific amount for your dependents in case of death.

Principle of Insurable Interest: insured must lose financially if a loss occurs (car accident, home fire.)

## Purposes of Insurable interest:

a)To prevent gambling: if you can buy ins. to other's car or life, then you hope for a loss (death) to occur, this against public interest.

b)To reduce moral hazard: w/out insurable interest, you could buy ins. on other's property & cause the loss to gain. If you lose from the loss, you try to prevent it from happening.

Then, insurable interest reduces moral hazard.

- c)To measure the loss: insurer pay your loss (it is your insurable interest). Insurable interest supports principle of indemnity.
  - **❖** Types of Insurable Interest in Property Ins.:
- 1-Ownership: (your car), potential liability (dry cleaning firm).
- 2-Creditors (mortgage: property serves as collateral for loan).
- 3-Contractual rights: (purchasing goods that you doesn't receive, you can ins. it because you lose your profit in case of accident).
  - ❖ Types of Insurable Interest in Life Ins.:
- 1-You own your life; so, choose any one as a beneficiary w/out insurable interest.

But, You can't purchase ins. on the life of others w/out

insurable interest.

- 2-Close family ties (wife, husband, son, father, grandfather, grandson but not cousin) meets insurable interest.
- 3-Pecuniary interest satisfies insurable interest (key person, sales persons, partner in a Co.).
  - ❖ When must Insurable Interest exist?
- 1)In Property Ins.: (a) time of loss for 2 reasons:
- a)If financial interest doesn't exist @ time of loss then, financial loss wouldn't occurs. Ex: if you sell your car, in case of loss before you cancel or transfer ins. to the buyer, none of you get indemnity.
- b)Future insurable interest.

Ex: you may buy cargo ins. for return trip. Later, goods shipped & loss occurred, you collect indemnity because insurable interest existed @ time of loss in spite of you didn't have it when you bought ins.

2)<u>In life Ins.</u>: @ time of buying ins.: because life ins. is a valued contract (not an indemnity).

If the wife has ins. on her husband's life & divorced, she collects the proceeds if he died.

Priciple of Subrogation: insurer has the right to substitute the insured toward negligent party to claim indemnity for the covered loss.

Ex: red traffic for A & green for B. A hit B so, B can get his loss from his insurer & his insurer collect from A (or his insurer) up to what he paid to B. Also, B can collect directly from A only.

The insurer can't subrogate if he didn't pay to B.

## Purposes of Subrogation:

- 1-Prevent insured to benefit from his loss (can't collect twice from the insurer & the responsible).
- 2-Hold the guilty responsible for loss.
- 3-Reduce ins. cost (insurer collects part of loss).
  - Importance of Subrogation:

1-Insurer is entitled to collect what he paid to the insured from the guilty or his insurer, the insured must be fully reimbursed (because underinsurance or deductible) & the insurer gets the rest up to what he paid.

2-The insured can't waive the right to sue the negligent party or he loses his right toward insurer.

Ex: if you admitted fault in an accident or attempted to settle it with negligent driver w/out the insurer consent, you lose your right.

3-The insurer can waives its subrogation's right if the landlord agrees to release tenant from fire liability at time of contract.

So, in case of fire insurer pays to landlord & couldn't

recover from the tenant.

Also, insurer may decide not to exercise subrogation because legal expenses exceeds recovery.

- 4-Subrogation doesn't apply to life & health ins.
- 5-Insurer can't subrogate against its insured (this against purpose of purchasing ins.).
  - ❖ Priciple of Utmost Good Faith (UGF): means higher degree of honesty is imposed on both parties specially the applicant than other contracts.

The principle of UGF is supported by 3 legal doctrines: representations, concealment & warranty.

- a)<u>Representations</u>: statements made by applicant for ins. Your answer about your age, family's health history called representations.
  - ❖ Importance of Representation: ins. contract is <u>voidable</u> at insurer's option if representation is: material, false & relied on by insurer.
  - ❖ 1-Material: means if the insurer knew the true facts @ time of ins., it wouldn't issue the policy or issued it in different terms.
  - ❖ 2-False: mean statement isn't true or misleading.
  - ❖ 3-Reliance: insurers rely on misrepresentation in issuing the policy @ specific premium.

- Ex: Ali stated in the application he hasn't visited a doctor within the last 5 yrs. But, he did & 2 month later he had a lung cancer surgery & died.
- ❖ Insurer didn't pay (misrepresentation).

If an applicant stated an opinion or belief that turns out to be wrong, insurer must prove that insured intended to deceive it

Ex: do you have high blood pressure?

Also, an innocent misrepresentation of a material fact if relied on by insurer makes the contract voidable.

b)Concealment: intentional failure to reveal material fact & make the contract voidable @ the insurer option (as misrepresentation) but he has to prove 2 things:

1-The concealed fact was known by the insured to be material.

2-The insured intended to defraud the insurer.

Ex: Ali Hasan applied for life ins., 6 months later he murdered.

His name in ID was Ali Hasanain. Insurer denied paying as he had concealed a material fact (because his true ID has a criminal record).

Then, he breached the principle of UGF.

c) Warranty: a statement of fact or a promise made by applicant & must be true if the insurer is to be liable under the contract.

Ex: Insured promised that burglary & rubbery alarm system will be working & on at all times.

Remark: insure can rely on warranty if breach of warranty contribute to loss.

## Requirements of Ins. Contract:

- 1-Offer & acceptance.
- 2-Consideration.
- 3-Competent parties.
- 4-Legal purpose.

1-Offer & Acceptance: invitation from agent, offer from applicant & acceptance from insurer.

In Property & Liability Ins.: offer can be oral or written.

When applicant fill out the application & pays (or promise) 1st prem., this constitute offer & agent accept it by binder (temporary contract).

In Life Ins.: offer must be written & accompanied by 1st prem.

Insurer (not agent) accepts it & issue conditional receipt.

Ins. becomes valid from this time or time of medical exam which is later.

2-Consideration: value each party pays.

Insured consideration: pays (or promises) 1st prem. & abide by conditions. Insurer consideration: pays loss (or ins. amount), loss control service & defends insured.

3-<u>Competent Parties</u>: parties must have legal capacity to inter into a binding contract: Insured must not be: insane, minor or intoxicated.

Insurer must be licensed.

4-Legal Purpose: not to be illegal or immoral (seizure of drug or heroin).

## Legal Characteristics of Ins. Contract:

- 1-Aleatory.
- 2-Unilateral.
- 3-Conditional.
- 4-Personal.
- 5-Adhesion
- 1-<u>Aleatory Contract</u>: amount exchanged not equal. Insured pays prem. many yrs & get nothing & insurer gets one prem. & pays huge amount.

Other contacts are commutative (values exchanged are equal).

2-<u>Unilateral Contract</u>: one party makes a legally enforceable promise (insurer has to pay loss & deliver services).

After 1st prem., insured isn't legally forced to pay prem. or comply with policy's provisions.

Other contracts are bilateral (each party can enforce other party to perform his obligation).

3-<u>Conditional Contract:</u> insurer's obligations depend on fulfillment of insured obligations.

Ex: loss notice within 10 days or no payment.

4-<u>Personal Contract:</u> insurer insure property for specific person not the property itself, so, it has to meet underwriting standard.

In Property Ins.: insured can't assign ins. w/out insurer consent (if he sells it).

In life Ins.: insured can assign ins. w/out insurer consent but just notification is required.

5-Adhesion Contract: insured accepts all conditions or leave it (he can change some if insurer agrees through endorsement).

So, if the policy is ambiguous, insured gets the benefits of doubt under reasonable expectation principle.

- ❖ Law & Ins Agent:
- 1-No presumption of agency relationship: agent must have material evidence (business card, business ID, application) or insurer wouldn't hold responsible.
- 2-Agent must have authority to represent the principal.
- 3-Principal is responsible of agent's acts within the scope of their authority.
  - ❖ Waiver: is exemption of legal right.

Ex: you didn't answer question in application & policy issued, so, insurer can't deny claims

❖ Estoppel: if you didn't pay prem. on time & called your agent & he said: you have 10 days grace period. If loss occurs, insurer can't deny loss.

## **Chapter 6 Analysis of Insurance Contracts**

## **Topics**

- Basic parts of an insurance contract
- Definition of the "Insured"
- Endorsements and Riders
- Deductibles
- Coinsurance
- Other-insurance provisions

#### **Basic Parts of an Insurance Contract**

- <u>Declarations</u> are statements that provide information about the particular property or activity to be insured
  - Usually the first page of the policy
  - In property insurance, it contains name of the insured, location of property, period of protection, amount of insurance, premium and deductible information
- Insurance contracts typically contain a page or section of <u>definitions</u>
  - For example, the insured is referred to as "you"
- The <u>insuring agreement</u> summarizes the major promises of the insurer
  - The two basic forms of an insuring agreement in property insurance are:
    - <u>Named perils policy</u>, where only those perils specifically named in the policy are covered
    - "All-risks" policy, where all losses are covered except those losses specifically excluded
      - May also be called an <u>open-perils policy</u> or <u>special</u> coverage policy
      - Insurers have generally deleted the word "all" from policies
    - "All-risks" coverage has fewer gaps, and the burden of proof is placed on the insurer to deny a claim
- Insurance contracts contain three major types of exclusions
  - Excluded perils, e.g., flood, intentional act
  - Excluded losses, e.g., a professional liability loss is excluded in the homeowners policy
  - Excluded property, e.g., pets are not covered as personal property in the homeowners policy

<u>Conditions</u> are provisions in the policy that qualify or place limitations on the insurer's promise to perform

- If policy conditions are not met, insurer can refuse to pay the claim
- Insurance policies contain a variety of miscellaneous provisions
- e.g., cancellation, subrogation, grace period, misstatement of age

#### Why are Exclusions Necessary?

- Some perils are not commercially insurable
  - e.g., catastrophic losses due to war
- Extraordinary hazards are present
  - e.g., using the automobile for a taxi
- Coverage is provided by other contracts
  - e.g., use of auto excluded on homeowners policy
- Moral hazard problems
  - e.g., coverage of money limited to \$200 in homeowners policy
- Attitudinal hazard problems
  - e.g., individuals are forced to bear losses that result from their own carelessness
- Coverage not needed by typical insureds
  - e.g., homeowners policy does not cover aircraft

#### Definition of an "Insured"

- An insurance contract must identify the persons or parties who are insured under the policy
  - The <u>named insured</u> is the person or persons named in the declarations section of the policy
  - The <u>first named insured</u> has certain additional rights and responsibilities that do not apply to other named insureds
  - A policy may cover other parties even though they are not specifically named
    - e.g., the homeowners policy covers resident relatives under age 24 who are full-time students away from home
  - Additional insureds may be added using an endorsement

#### **Endorsements and Riders**

- In property and liability insurance, an <u>endorsement</u> is a written provision that adds to, deletes from, or modifies the provisions in the original contract
  - e.g., an earthquake endorsement to a homeowners policy
- In life and health insurance, a <u>rider</u> is a provision that amends or changes the original policy
  - e.g., a waiver-of-premium rider on a life insurance policy

#### **Deductibles**

- A <u>deductible</u> is a provision by which a specified amount is subtracted from the total loss payment that otherwise would be payable
- The purpose of a deductible is to:
  - Eliminate small claims that are expensive to handle and process
  - Reduce premiums paid by the insured
    - Under the <u>large loss principle</u>, insurance should pay for high severity losses; small losses can be budgeted out of the person's income
  - Reduce moral hazard and attitudinal hazard
- With a <u>straight deductible</u>, the insured must pay a certain amount before the insurer makes a loss payment

- e.g., an auto insurance deductible
- An <u>aggregate deductible</u> means that all losses that occur during a specified time period are accumulated to satisfy the deductible amount

#### **Deductibles in Health Insurance**

- A <u>calendar-year deductible</u> is a type of aggregate deductible that is found in basic medical expense and major medical insurance contracts
- A <u>corridor deductible</u> is a deductible that can be used to integrate a basic medical expense plan with a supplemental major medical expense plan
- An <u>elimination (waiting) period</u> is a stated period of time at the beginning of a loss during which no insurance benefits are paid

#### Coinsurance

- A <u>coinsurance clause</u> in a property insurance contract encourages the insured to insure the property to a stated percentage of its insurable value
  - If the coinsurance requirement is not met at the time of the loss, the insured must share in the loss as a coinsurer

 $\frac{Amount\ of\ insurance\ carried}{Amount\ of\ insurance\ required} x\ Loss = Amount\ of\ recovery$ 

- The purpose of coinsurance is to achieve equity in rating
  - A property owner wishing to insure for a total loss would pay an inequitable premium if other property owners only insure for partial losses
  - If the coinsurance requirement is met, the insured receives a rate discount, and the policyowner who is underinsured is penalized through application of the coinsurance formula

#### Exhibit 10.1 Insurance to Full Value

Assume that 2000 buildings are valued at \$200,000 each and are insured to full value for a total of \$400 million of fire insurance. The following fire losses occur:

2 total losses = \$ 400,000 30 partial losses at \$20,000 each =  $\frac{$ 600,000}{$1,000,000}$ Pure premium rate =  $\frac{$1,000,000}{$400,000,000}$ 

= 25 cents per \$100 of insurance

## Exhibit 10.2 Insurance to Half Value

Assume that 2000 buildings are valued at \$200,000 each and are insured to half value for a total of \$200 million of fire insurance. The following fire losses occur:

2 total losses (\$400,000)

Insurer pays only = \$200,000 30 partial losses at \$20,000 each =  $\frac{$600,000}{$800,000}$ Total fire losses paid by insurer =  $\frac{$800,000}{$200,000,000}$ 

> = 40 cents per \$100 of insurance

## **Coinsurance in Health Insurance**

- Health insurance policies frequently contain a percentage participation clause
  - The clause requires the insured to pay a certain percentage of covered medical expenses in excess of the deductible
  - The purpose is to reduce premiums and prevent overutilization of policy benefits

## **Other-insurance Provisions**

- The purpose of <u>other-insurance provisions</u> is to prevent profiting from insurance and violation of the principle of indemnity
  - Under a <u>pro rata liability</u> provision, each insurer's share of the loss is based on the proportion that its insurance bears to the total amount of insurance on the property
  - Under contribution by equal shares, each insurer shares equally in the loss until the share paid by each insurer equals the lowest limit of liability under any policy, or until the full amount of the loss is paid

**Exhibit 10.3** Pro Rata Liability Example

Company A	$\frac{\$300,000}{\$500,000}$ or $.60 \times \$100,000 = \$$ 60,000
Company B	$\frac{\$100,000}{\$500,000}$ or $.20 \times \$100,000 = \$20,000$
Company C	$\frac{\$100,000}{\$500,000}$ or $.20 \times \$100,000 = \underline{\$20,000}$
	Total loss payment = \$100,000

**Exhibit 10.4** Contribution by Equal Shares (Example 1)

Amount of Loss = \$150,000				
	Amount of Insurance	Contribution by Equal Shares	Total Paid	
Company A	\$100,000	\$50,000	\$50,000	
Company B	\$200,000	\$50,000	\$50,000	
Company C	\$300,000	\$50,000	\$50,000	

**Exhibit 10.5** Contribution by Equal Shares (Example 2)

Amount of Loss = $$500,000$				
	Amount of Insurance	Contribution by Equal Shares	Total Paid	
Company A	\$100,000	\$100,000	\$100,000	
Company B	\$200,000	\$100,000 + \$100,000	\$200,000	
Company C	\$300,000	\$100,000 + \$100,000	\$200,000	

#### **Other-insurance Provisions**

- Under a <u>primary and excess insurance</u> provision, the primary insurer pays first, and the excess insurer pays only after the policy limits under the primary policy are exhausted
- The <u>coordination of benefits provision</u> in group health insurance is designed to prevent overinsurance and the duplication of benefits if one person is covered under more than one group health insurance plan
  - e.g., two employed spouses are insured as dependents under each other's group health insurance plan.

# **Chapter 7 The Liability Risk**

#### **Topics**

- Basis of legal liability
- Law of Negligence
- Current tort liability problems

## Basis of Legal Liability

- A <u>legal wrong</u> is a violation of a person's legal rights, or a failure to perform a legal duty owed to a certain person or to society as a whole
- Legal wrongs include:
  - Crime
  - Breach of contract
  - Tort
- A <u>tort</u> is a legal wrong for which the court allows a remedy in the form of money damages
- The person who is injured (<u>plaintiff</u>) by the action of another (<u>tortfeasor</u>) can sue for damages
- Torts fall into three categories:
  - Intentional, e.g., fraud, assault
  - Strict liability: liability is imposed regardless of negligence or fault
  - Negligence

## Law of Negligence

- <u>Negligence</u> is the failure to exercise the standard of care required by law to protect others from an unreasonable risk of harm
  - The standard of care is not the same for each wrongful act. It is based on the care required of a reasonably prudent person
- Elements Negligence
  - Existence of a legal duty to use reasonable care
  - Failure to perform that duty
  - Damage or injury to the claimant
  - Proximate cause relationship between the negligent act and the infliction of damages
- A proximate cause relationship requires an unbroken chain of events
- The law allows for the following types of damages:

- Compensatory damages compensate the victim for losses actually incurred. They include:
  - Special damages, e.g., medical expenses
  - General damages, e.g., pain and suffering
- Punitive damages are designed to punish people and organizations so that others are deterred from committing the same wrongful act
- The ability to collect damages for negligence depends on state law
- Under a <u>contributory negligence law</u>, the injured person cannot collect damages if his or her care falls below the standard of care required for his or her protection
  - Under strict application of common law, the injured cannot collect damages if his or her conduct contributed in any way to the injury
- Under a <u>comparative negligence law</u>, the financial burden of the injury is shared by both parties according to their respective degrees of fault
  - Under the pure rule, you can collect damages even if you are negligent, but your reward is reduced in proportion to your fault
  - Under the 49 percent rule, you can collect damages only if your negligence is less than the negligence of the other party
  - Under the 50 percent rule, you can recover reduced damages only if your negligence is not greater than the negligence of the other party
- Some legal defenses can defeat a claim for damages:
  - The <u>last clear chance rule</u> 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
  - Under the <u>assumption of risk doctrine</u>, a person who understands and recognizes the danger inherent in a particular activity cannot recover damages in the event of an injury

#### Imputed Negligence

- Under certain conditions, the negligence of one person can be attributed to another
  - e.g., the negligent act of an employee can be imputed to the employer
- Under a <u>vicarious liability law</u>, a motorist's negligence is imputed to the vehicle's owner
- Under the <u>family purpose doctrine</u>, the owner of an auto can be held liable for negligent acts committed by family members
- Under a <u>dram shop law</u>, a business that sells liquor can be held liable for damages that may result from the sale of liquor

## Res Ipsa Loquitur

- Under this doctrine, the very fact that the injury or damage occurs establishes a presumption of negligence on behalf of the defendant
  - Means, "the thing speaks for itself"
  - e.g., a dentist extracts the wrong tooth
- Three requirements must be met for res ipsa loquitur to apply:

- The event is one that normally does not occur in the absence of negligence
- The defendant has exclusive control over the instrumentality causing the accident
- The injured party has not contributed to the accident in any way

## Applications of Negligence Law

- The standard of care owed to others depends upon the situation
  - A <u>trespasser</u> is a person who enters or remains on the owner's property without the owner's consent
    - The duty to refrain from injuring a trespasser is sometimes referred to as the *duty of slight care*
  - A <u>licensee</u> is a person who enters the premises with the occupant's expressed or implied permission
    - E.g., a door-to-door salesperson
    - The property owner must warn the licensee of unsafe conditions or activities which are apparent
  - An <u>invitee</u> is a person who is invited onto the premises for the benefit of the occupant
    - The occupant has an obligation to inspect the premises and eliminate any dangerous conditions
- An <u>attractive nuisance</u> is a hazardous condition that can attract and injure children
  - The occupants of land are liable for the injuries of children who may be attracted by some dangerous condition, feature or article
  - e.g., a building contractor leaves the keys in a tractor, and a child is injured while driving it
- Today, governmental entities can be sued in almost every aspect of governmental activity
  - The doctrine of sovereign immunity has been modified over time
  - A governmental unit can be held liable if it is negligent in the performance of a <u>proprietary function</u>, e.g., the operation of water plants
  - Immunity from lawsuits for governmental functions, such as the planning of a sewer system, has been eroded
- Charitable institutions are no longer immune from lawsuits, especially with respect to commercial activities
- Under the doctrine of <u>respondent superior</u>, an employer can be held liable for the negligent acts of employees while they are acting on the employer's behalf
  - The worker must be an employee
  - The employee must be acting within the scope of employment when the negligent act occurred
- A parent can be held liable if a child uses a dangerous weapon to injure someone
- Most states have laws that hold parents liable for willful and malicious acts of children that result in property damage to others
- Owners of wild animals are held strictly liable for injuries to others

## **Current Tort Liability Problems**

- Recently, risk managers, business firms, physicians and liability insurers have been troubled by:
  - A defective tort liability system
  - A medical malpractice crisis
  - Corporate fraud and lax corporate governance
  - An increase in asbestos law suits
- Defects in the present tort liability system include:
  - Rising tort liability costs
  - Inefficiency in compensating injured victims
  - Uncertainty of legal outcomes
  - Higher jury awards
  - Long delays in settling lawsuits

#### Tort Reform in the States

- State tort reforms include:
  - Capping noneconomic damages, such as pain and suffering
  - Reinstating the state-of-the-art defense for product liability cases
  - Restricting punitive damages awards
  - Modifying the collateral source rule
    - Under the collateral source rule, the defendant cannot introduce any evidence that shows the injured party has received compensation from other collateral sources
  - Modifying the joint and several liability rule
    - Under this rule, several people may be responsible for the injury, but a defendant who is only slightly responsible may be required to pay the full amount of damages
  - Alternative dispute resolution (ADR), a technique for resolving a legal dispute without litigation
    - In <u>arbitration</u>, the parties to a dispute agree to be bound by the decision of an independent third party
    - In <u>mediation</u>, a neutral third party tries to arrange a settlement without resorting to litigation
  - Restrictions on obesity lawsuits

#### Medical Malpractice Crisis

- Medical malpractice occurs when a negligent act or omission by a physician or other health care professional results in injury or harm to the patient
- Indicators of the crisis include:
  - Malpractice insurance premiums have soared
  - Many physicians have abandoned high-risk areas, such as neurosurgery
  - Malpractice insurers have incurred heavy underwriting losses; some have withdrawn from the market
  - Some physicians have formed physician-owned insurance companies

- The crisis is due to many factors, including:
  - Many malpractice suits are due to medical errors by health care providers, especially errors in hospitals that result in the death of patients
  - Insurers have experienced significant underwriting losses
    - The medical malpractice combined ratio was 109.2 in 2004, indicating an underwriting loss
      - The <u>combined ratio</u> is the percentage of each premium dollar an insurer spends on claims and expenses
  - People are more litigious than in the past
- Measures taken to help solve the crisis include:
  - Caps on noneconomic damages
  - Arbitration panels to resolve disputes between physicians and patients
  - Limitations on attorney fees
  - Shorter period for filing suits
  - More effective medical review boards
  - Training programs to reduce medical errors
  - Emphasis on risk management, e.g., through practice standards

## Chapter 8 Homeowners insurance, Section I

#### **Topics**

- Homeowners Insurance Basics
- Analysis of Homeowners 3 Policy

#### **Homeowners Insurance Basics**

- Homeowners insurance forms, drafted by the Insurance Services Office (ISO) are widely used in the US
  - They are designed for the owner-occupants of family dwellings
  - A policy can be used to cover the dwelling, other structures, personal property, additional living expenses, personal liability claims, and medical payments to others
  - Six forms are available

## Exhibit 1 Comparison of ISO Homeowners Coverages

HO-5 (comprehensive form)	HO-6 (unit-owners form)	HO-8 (modified coverage form)
	Section I Coverages	
Minimum varies by company.	\$5000 minimum.	Minimum varies by company.
10% of A	Included in Coverage A	10% of A
50% of A	Minimum amount varies.	50% of A
30% of A	50% of C	10% of A
Dwelling and other structures	Same perils as HO-2 for	Fire or lightning
are covered against risk of	personal property.	Windstorm or hail
direct physical loss to property. All direct physical losses are		Explosion
covered except those losses		Riot or civil commotion
specifically excluded.		Aircraft
Personal property is covered		Vehicles
against risk of direct physical		Smoke
loss to property. All direct		Vandalism or malicious mischiel
physical losses are covered		Theft (applies only to loss on
except those losses		the residence premises up to
specifically excluded.		a maximum of \$1000)
		Volcanic eruption
	Section II Coverages <sup>a</sup>	
\$100,000	\$100,000	\$100,000
\$1000 per person	\$1000 per person	\$1000 per person

Minimum amounts can be increased

- The following persons are considered "insureds" under the policy:
  - Named insured and spouse
  - Resident relatives
  - Other persons under age 21
  - Full-time student away from home
  - Section II coverage also includes:
    - Any person legally responsible for covered animals or watercraft
    - With respect to a motor vehicle covered by the policy (e.g., a riding mower), persons employed by the named insured

- Coverage A covers the dwelling on the residence premises and any structure attached to the dwelling
  - Materials intended for construction are included
  - The coverage specifically excludes land
- Coverage B insures other structures on the residence premises
  - Includes a detached garage, tool shed, etc
  - Structures that are rented out or used for a business are excluded
  - The amount of coverage is based on the amount of insurance on the dwelling (Coverage A)
- Coverage C insures personal property owned or used by an insured
  - Personal property is covered anywhere in the world
  - The amount of coverage is 50% of the insurance on the dwelling, which can be increased if desired
  - Personal property is covered both on and off the premises
  - Coverage for personal property at another residence, such as a vacation home, is limited to 10% of Coverage C or \$1000, whichever is greater
  - Certain types of personal property have maximum dollar limits on the amount paid for any loss
- The dwelling and other structures are insured against risk of direct physical losses
  - All direct physical losses are covered unless specifically excluded
  - Personal property is insured on a named-perils basis
    - A direct physical loss is covered if it is caused by one of the perils listed in the policy
      - Named perils include fire, windstorm or hail, explosion, riot or civil commotion, aircraft, vehicles, smoke, vandalism, theft, etc.
    - The peril must be the <u>proximate cause</u> of the loss
- The policy excludes:
  - Concurrent causation losses
    - If a single loss is caused by two or more perils that occur concurrently or in any sequence, and one peril is covered under the policy and the other peril is excluded, the entire loss is excluded
  - Any loss due to an ordinance or law, except as described in the Additional Coverages
  - Property damage from earth movement
  - Property damage from certain water losses
  - Losses due to power failure
  - Losses due to neglect
  - Property damage due to war or nuclear hazard
  - Any intentional loss
- The insurer's liability for a loss is limited to the insured's insurable interest at the time of loss
- The insured must perform certain duties after a loss occurs:
  - Give prompt notice to insurer
  - Protect the property from further damage
  - Prepare an inventory of damaged personal property
  - Exhibit damaged personal property

- File a proof of loss with 60 days after the insurer's request
- Losses to personal property are paid on the basis of actual cash value
  - If the insured purchases a replacement cost endorsement, there is no deduction for depreciation
- After giving notice to the insured, the insurer has the right to repair or replace any part of damaged property with like property
- Losses to the dwelling and other structures are paid on the basis of replacement cost with no deduction for depreciation
  - If the dwelling is insured for at least 80% of replacement cost at the time of loss, partial losses are paid in full
    - Replacement cost is the amount necessary to repair or replace the dwelling with material of like kind and quality at current prices
  - If the dwelling is insured for less than 80% of the replacement cost, the insured receives the larger of
    - the actual cash value of that part of the building damaged
- If other insurance covers a Section I loss, the insurer will only pay the proportion of the loss that is limit of liability bears to the total amount of insurance covering the loss
  - For example, the HO policy is excess over any amount payable under a home warranty or service agreement
- The insurer is generally required to make a loss payment directly to the named insured
- The mortgage clause is designed to protect the mortgagee's insurable interest
  - If the mortgagee is named in the policy, 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
- Concealment or misrepresentation of any material facts, fraudulent conduct, and false statement relating to the insurance will void insurance coverage
- Some conditions apply to both Section I and Section II coverages. These include:
  - A liberalization clause to address issues with broadening coverage
  - A waiver or change of policy provisions
    - Must be in writing
  - Terms and conditions for cancellation
  - Terms for nonrenewal of the policy
  - Assignment of the policy to another party
    - Insurer must give written consent
  - A subrogation clause to address recoveries from third parties
  - Extension of policy terms to a legal representative upon the death of the named insured or spouse

## Chapter 9 Homeowners insurance, Section II

#### **Topics**

- Personal liability insurance
- Endorsements to a Homeowners Policy
- Cost of Homeowners Insurance

## Personal liability insurance

- <u>Personal liability</u> insurance protects the named insured and family members against legal liability arising out of their personal acts
  - The insurer pays amount for which the insured is found legally liable, up to the policy limits
  - The insurer also pays defense costs
  - The coverage is found in Section II of the Homeowners policy

#### Section II Coverages

- Coverage E protects the insured when a claim or suit for damages is brought because of bodily injury or property damage allegedly caused by an insured's negligence
  - The coverage is broad and based on legal liability
  - The policy contains a per-occurrence limit
- An <u>occurrence</u> is defined as an accident which results in bodily injury or property damage during the policy period
  - The insurer provides a legal defense, even if the suit is frivolous or fraudulent
- Coverage F is a mini-accident policy
  - Medical payments to others pays the reasonable medical expenses of another person who is accidentally injured while on an insured location, or by the activities of an insured, resident employee, or animal owned by or in the care of an insured
  - The insured is not required to be legally liable
  - Coverage does not apply to the insured or regular residents of the household, other than a residence employee
  - Coverage applies even if the injury occurs away from an insured location

#### Section II Exclusions

- Some exclusions apply to both Coverage E and Coverage F:
  - Expected or intentional injury
  - Business activities, with some exceptions
  - Professional services
  - Liability arising out of the use of:

- A motor vehicle, with some exceptions
- An aircraft
- A hovercraft
- Certain watercraft, for certain reasons
- Some exclusions that apply to both Coverage E and Coverage F (continued):
  - Uninsured locations
  - War or other hostile military acts
  - Communicable diseases
  - Sexual molestation, corporal punishment, or physical or mental abuse
  - Controlled substances
- Several exclusions apply only to Coverage E:
  - Contractual liability
  - Property owned by the insured
  - Property in the care of the insured, with some exceptions
  - Workers compensation
  - Liability for a nuclear incident
  - Bodily injury to an insured
- Several exclusions apply only to Coverage F:
  - Injury to a resident employee off an insured location
  - Workers compensation
  - Injuries that result from nuclear energy
  - Persons regularly residing on the insured location

## Section II Additional Coverages

- The homeowners policy automatically includes several additional coverages:
  - <u>Claims expenses</u> (e.g., court costs, attorney fees) are covered in addition to the policy limits for liability damages
  - The insurer pays any <u>first-aid expenses</u> incurred for bodily injury covered under the policy
    - Includes cost of an ambulance
  - Damage to property of others pays up to \$1000 per occurrence for property damage caused by an insured
    - The purpose of the coverage is to preserve personal friendships
    - The coverage contains a number of exclusions
  - Certain loss assessments are covered up to \$1000

## Endorsements to the Homeowners Policy

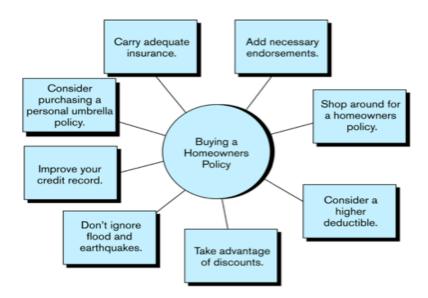
- Property owners with special needs can purchase a variety of endorsements:
  - An <u>inflation-guard endorsement</u> provides for an annual pro rata increase in the limits of insurance in the Section I coverages
  - An <u>earthquake coverage endorsement</u> covers earthquakes, landslides, volcanic eruption, and earth movement
  - When a <u>personal property replacement cost loss settlement</u> <u>endorsement</u> is added to the policy, claims are paid on the basis of replacement cost with no deduction for depreciation
  - When a <u>scheduled personal property endorsement (with agreed value loss settlement)</u> is added to the policy, the insurer agrees to pay the stated amount for a scheduled item if a total loss occurs

- A <u>personal injury endorsement</u> is used to extend liability coverage to legal liability arising out of personal injury, e.g., false arrest, slander
- The <u>watercraft endorsement</u> covers watercraft that are otherwise excluded under the policy
- A <u>home business insurance coverage endorsement</u> covers both business property and legal liability arising out of a home-based business
- One new endorsement provides coverage for identity theft

#### Cost of Homeowners Insurance

- Major rating and underwriting factors include:
  - Type of construction
  - Location of home
  - Fire protection class
    - depends on the quality of the public fire department, accessibility to the fire department, water supply, and fire hydrants
  - Construction costs
  - Type of policy
  - Deductible amount
  - Insurance score
    - A credit-based score that is highly predictive of future claim costs
  - Insurers also use reports that reveal the prior claim history of a home
    - A Comprehensive Loss Underwriting Exchange (CLUE) report shows up to five years of information on property claims, including the date of loss, type of loss, and amounts paid
    - The use of CLUE reports is controversial

Exhibit 9.4 Tips for Buying a Homeowners Policy



# **Chapter 10 Auto Insurance**

- o Personal Auto Policy (PAP)
- o Insuring Motorcycles and Other Vehicles
- <u>Eligible vehicles include</u>:
  - A four-wheeled motor vehicle owned or leased by the insured for at least six consecutive months
  - A pick-up or van with a gross vehicle weight rating of 10,000 pounds or less
- Autos covered by the policy include:
  - Any auto shown in the declarations
  - A newly acquired auto
  - A trailer owned by the named insured
  - A temporary substitute vehicle, which is a nonowned auto or trailer used temporarily because of mechanical breakdown, repair, servicing, loss, or destruction of a covered vehicle
- The PAP consists of a declarations page, a definition page, and the following six parts:

Part A: Liability coverage

Part B: Medical payment coverage

Part C: Uninsured Motorists coverage

Part D: Coverage for damage to your auto

Part E: Duties after an accident or loss

Part F: General provisions

#### O PART A

Liability coverage (Part A) is the most important part of the PAP

- It protects a covered person against a suit or claim arising out of the ownership or operation of a covered vehicle
- The coverage is usually written in <u>split limits</u>, where the amounts of insurance for <u>bodily injury liability</u> and <u>property damage liability</u> are stated separately

## Liability coverage applies to:

- The named insured and any resident family member
- Any person using the named insured's covered auto
- Any person or organization legally responsible for any insured's use of a covered auto on behalf of that person or organization
- Any person or organization legally responsible for the named insured's or family members' use of any auto or trailer (other than a covered auto or one owned by the person or organization)
- The insurer also agrees to provide defense and pay all legal defense costs for claims covered by the policy
- The policy also allows for certain supplementary payments including:
- The cost of a bail bond
- Premiums on appeals bonds
- Interest accruing after a judgment
- Exclusions to the coverage include:

- Intentional injury or damage
- Property owned or transported
- Property rented, used, or in the insured's care
- Bodily injury to an employee
- Use as a public livery or conveyance
- Vehicles used in the auto business
- Vehicles with fewer than four wheels
- Vehicle furnished for the insured's regular use

#### **Part B: Medical Payments**

- <u>Medical payments coverage</u> covers all reasonable medical and funeral expenses incurred by an insured in an accident
- The named insured and family members are covered:
  - While occupying any motor vehicle, or
  - As pedestrians when struck by a motor vehicle
- Other persons occupying a covered auto are covered
  - But not covered in a nonowned vehicle
- Covers medical services rendered within three years from the date of the accident
- Coverage is not based on fault
- Exclusions to the coverage include injuries sustained:
  - While occupying a vehicle with fewer than four wheels
  - While operating the vehicle as a public livery or conveyance
  - When the vehicle is used as a residence
  - When the vehicle is used without a reasonable belief of permission
  - When the vehicle is competing in a race
- If more than one auto policy covers a loss:
  - The insurer pays its pro rata share of the loss for an owned vehicle
  - The insurance coverage is excess over any other insurance for a nonowned vehicle

#### **Part C: Uninsured Motorists Coverage**

- An uninsured motorist is someone who is irresponsible and drive without liability insurance.
- According to Insurance Research Council(IRC) one in six drivers may be driving without liability insurance by 2010(Exhibit 10.1)
- Uninsured motorists coverage pays for the bodily injury caused by an uninsured motorist, by a hit-and-run driver, or by a negligent driver whose insurance company is insolvent
  - In some states, property damage is also covered
  - The uninsured motorist must be legally liable

# **Insuring Agreement for Uninsured Motorist Coverage (Part C)**

The insurer agrees to pay compensatory damages that an insured is entitled to receive from an uninsured motor vehicle included in medical bills, lost wages, and compensation for a permanent disfigurement resulting from the accident.

> Important points must be emphasized with respect to this coverage:

- 1-The coverage applies only if the uninsured motorist is not liable, the insurer will not pay for the bodily injury.
  - > 2- The insurer's maximum limit of liability for any single accident is the amount shown in the declarations.
  - ➤ 3- The claim is subject to arbitration if the insured and insurer disagree over the amount of damages or whether the insured is entitled to receive any damages.
  - ➤ Some states also include coverage for property damage from an uninsured law. In these states, if an uninsured driver runs a red light and smashes into your car, the property damage to the car would be covered under the uninsured motorist coverage.
  - ➤ The property damage if it is paid in some states under the uninsured driver coverage is subject to a deductible.

#### **Uninsured Vehicles**

Four Groups of vehicles are considered to be uninsured vehicles:

- ➤ 1- An uninsured vehicles is a motor vehicle or trailer for which no bodily injury liability insurance policy applies at the time of the accident.
- ➤ 2-A bodily injury liability policy may be in force on

a vehicle. However, the amount of insurance on that vehicle may be less than the amount required by the state's financial responsibility law in the state where the named insured's covered auto is garaged.

- > 3- A hit-and-run vehicle is also considered to be an uninsured vehicle.
- ➤ 4- Another uninsured vehicle is one to which a bodily injury liability policy applies at the time of the accident, but the insurer denies coverage or becomes insolvent.

#### Part D: Coverage for Damage to Your Auto

- Under the <u>coverage for damage to your auto</u>, the insurer agrees to pay for any direct and accidental loss to a covered auto or any nonowned auto
- A <u>collision</u> is defined as the upset of your covered auto or nonowned auto or its impact with another vehicle or object
- Collision losses are paid regardless of fault
- An other-than-collision loss is a loss due to the following perils:
  - Missiles or falling objects
  - Hail, water, flood, fire, windstorm
  - Riot or civil commotion
  - Malicious mischief or vandalism
  - Contact with a bird or animal
  - Theft
  - Glass breakage
  - Explosion or earthquake
- A nonowned auto is also covered under the Part D coverages
  - A <u>nonowned auto</u> is a private passenger auto, pickup, van, or trailer <u>not</u> owned by or furnished or made available for regular use of the named <u>insured or family member</u>, while it is in the custody of or being operated by the named insured or family member.

• Part D coverages do not apply to nonowned car (borrowed) vehicle if the vehicle is driven on a regular basis or is furnished or made available for your regular use.

#### Part E: Duties After an Accident or Loss

- After an accident, the insured is required to perform certain duties, such as:
  - Promptly notify the insurance company or agent
  - Cooperate with the insurer in the investigation
  - Send the insurer copies of any legal notices received in connection with an accident
  - Take a physical exam, if required
- The police must be notified if a hit-and-run driver is involved
- The insurer is allowed to inspect your vehicle if you are seeking coverage under Part D
- The insurer can deny coverage only if failure to comply is prejudicial to the insurer

#### **Part F: General Provisions**

- All states restrict the insurer's right to cancel or nonrenew coverage
- <u>Cancellation</u> provision: The named insured can cancel at any time by returning the policy to the insurer or providing written notice. If a policy has been in force for more than 60 days, the insurer can cancel only if:
  - The premium has not been paid
  - The driver's license of any insured has been suspended, or
  - The policy was obtained through material misrepresentation
- <u>Nonrenewal</u>: if an insurer decides to discontinue coverage, the insured must be given notice at least 20 days before the end of the policy period
- <u>Automatic termination</u>: a policy is automatically terminated if the insured decline's the insurer's offer to renew
- The PAP provides coverage in the US, US territories, Puerto Rico, and Canada

## **Insuring Motorcycles and Other Vehicles**

- A <u>miscellaneous-type vehicle endorsement</u> can be added to the PAP to insure motorcycles, mopeds, motorscooters, golf carts, motor homes, dune buggies, etc.
  - Does not cover snowmobiles
  - The liability coverage does not apply to a nonowned vehicle
  - A passenger hazard exclusion can be elected, which excludes liability for bodily injury to any passenger on a motorcycle

# Assignment: Discuss the status of Autoinsurance in Rwanda

## **Chapter 11 Auto Insurance and society**

## Topics

- Approaches for Compensating Auto Accident Victims
- Auto Insurance for High Risk Drivers
- Cost of Auto Insurance
- Shopping for Auto Insurance

## Approaches for Compensating Auto Accident Victims

- Many accident victims are unable to recover damages
  - The negligent driver may be uninsured or underinsured
- States use a number of approaches to protect accident victims from irresponsible or reckless drivers
- A <u>financial responsibility</u> law requires motorists to furnish proof of financial responsibility up to certain minimum dollar limits
  - Proof is required:
    - 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 DUI
- Evidence of financial responsibility can be provided in several ways:
  - Producing evidence of an auto liability insurance policy with at least certain minimum limits
  - Posting a bond
  - Depositing the amount required by law
  - Showing that the person is a qualified self-insurer
- Financial responsibility laws provide only limited protection against irresponsible motorists
  - There is no guarantee that all accident victim will be paid
    - The victim may not be paid if injured by an uninsured driver, hit-and-run driver, or driver of a stolen car
  - State laws require only minimum liability limits, which are relatively low
- A <u>compulsory insurance law</u> requires motorists to carry at least a minimum amount of liability insurance before the vehicle can be licensed or registered
  - Some argue that the law provides greater protection against uninsured drivers because motorists must provide evidence of financial responsibility before an accident occurs
  - Critics cite: mandatory insurance does not reduce the number of uninsured drivers
    - There is no correlation between compulsory insurance laws and the number of uninsured vehicles on the highway
  - Computer reporting systems to track uninsured motorists have not been effective
- <u>Low-cost auto insurance</u> provides minimum amounts of liability insurance at reduced rates to motorists who cannot afford regular insurance
  - Goal is to reduce the number of uninsured drivers

- A pilot program in California does not appear to be effective
  - Many drivers still find auto insurance to be too expensive
- Several states have enacted "no pay, no play" laws which prohibit uninsured motorists from suing negligent drivers for noneconomic damages

#### No-fault Auto Insurance

- <u>No-fault auto insurance</u> is another method for compensating injured accident victims
- About half of the states have no-fault auto insurance laws in effect
  - After an auto accident involving bodily injury, each party collects from his or her own insurer regardless of fault
  - Enacted because of dissatisfaction and defects in the traditional tort liability system
- No-fault plans vary among the states:
  - Under a <u>pure no-fault plan</u>, accident victims cannot sue at all, regardless of the amount of the claim
    - No states have enacted a pure no-fault plan
  - Under a modified no-fault plan, victims have a limited right to sue:
    - In some states, an injured driver may sue if the bodily injury claim exceeds a certain monetary threshold
    - In some states, an injured driver may sue if the bodily injury claim exceeds a <u>verbal threshold</u>, e.g., if the injury involves death, dismemberment, disfigurement, or permanent loss of a bodily member or function
  - An <u>add-on plan</u> pays benefits to an accident victim without regard to fault, and the injured person has the right to sue the negligent driver who caused the accident
    - Not a true no-fault plan
  - Under a <u>choice no-fault plan</u>, motorists can elect to be covered under the state's no-fault law and pay lower premiums
    - Or, they can retain the right to sue under the tort liability system and pay higher premiums
- No-fault benefits are provided by adding an endorsement to an auto insurance policy
  - Benefits are restricted to the injured person's economic loss, which includes:
    - Medical expenses
    - Loss of earnings
    - Essential services expenses, e.g., housework
    - Funeral expenses
    - Survivors' loss benefits, i.e., periodic payments to a surviving spouse and dependent children
  - In some states, insurers must also offer <u>optional no-fault benefits</u> above the prescribed minimums
- The right to sue varies across states with no-fault or add-on plans
  - All states permit a lawsuit in the event of a serious injury
- No-fault laws cover only bodily injury and not property damage
  - Except in Michigan

- Motorists are allowed to sue the negligent driver for property damage
  - Cases are usually small and resolved quickly
- Arguments in support of no-fault laws include:
  - Difficulty in determining fault
  - Inequity in claim payments
    - Serious claims may be underpaid
  - High transactions costs and attorney fees
    - Less than half of all tort dollars reach injured victims
  - Fraudulent and inflated claims
    - When pain and suffering awards are based on a multiple of medical expenses and wage loss, claimants have a powerful incentive to inflate their claims
  - Delay in payments
    - Many claims are not paid promptly because of the time consumed by investigation, negotiation, and waiting for a court date
- Arguments against no-fault laws include:
  - Defects of present system are exaggerated
  - Savings from no-fault are exaggerated
  - Court delays are confined to a few large cities
  - Safe drivers may be penalized by no-fault
    - The rating system may inequitably allocate accident costs to the drivers who are not at fault, thus raising their premiums
  - No-fault provides no payment for pain and suffering
  - The present tort liability system should be improved, not junked
- Some states have repealed their no-fault laws because relatively low monetary thresholds have increased the number of lawsuits
- A study by the Institute for Civil Justice found that no-fault plans:
  - reduce attorney fees and claim processing costs
  - match the compensation received for an injury more closely with the economic loss sustained
  - generally pay benefits more quickly
- The study concluded that savings from a no-fault plan depend on the provisions in the plan

## Auto Insurance for High Risk Drivers

- A few states have established a joint underwriting association (JUA), in which auto insurers in the state participate in providing coverage to high-risk drivers through a common pool
  - Each insurer pays its pro rata share of pool losses and expenses
  - The JUA designs the policies and sets the rates
  - Underwriting losses are proportionately shared by the companies based on premiums written in the state
  - A limited number of insurers are designated as servicing insurers, but all insurers participate in the pool
- A few states have established a <u>reinsurance facility (or pool)</u> for placing highrisk drivers
  - Insurers must accept all applicants

- If the applicant is considered a high-risk driver, the insurer has the option of placing the driver in the reinsurance pool
- Underwriting losses are shared by all auto insurers in the state
- The Maryland Automobile Insurance Fund is a state fund that provides insurance to high-risk drivers who have been canceled or refused insurance by private insurers
- Specialty insurers are insurers that specialize in insuring motorists with poor driving records

#### Cost of Auto Insurance

- Auto insurance rates have increased in recent years due to:
  - Rising medical and higher motor vehicle repair costs
  - Soaring jury awards in liability cases
  - Insurance fraud and abuse
- Insurers use a variety of factors to establish auto insurance premiums, including:
  - Territory
  - Age, gender, and marital status
  - Use of the auto
  - Driver education
  - Number and types of cars
    - A <u>multicar discount</u> is available if the insured owns two or more cars
  - Good student discount
  - Individual driving record
    - Many insurers offer a safe driver plan for drivers with clean records
  - An <u>insurance score</u>, based on an applicant's credit record

Tips for Buying Auto Insurance



## **Chapter 12 Other Property and Liability Insurance**

- ISO Dwelling Program
- Mobile Home Insurance
- Inland Marine Floaters
- Watercraft Insurance
- Government Property Insurance Programs
- Title Insurance
- Personal Umbrella Policy
- Homeowners insurance forms, drafted by the Insurance Services Office (ISO) are widely used in the US
  - They are designed for the owner-occupants of family dwellings
  - A policy can be used to cover the dwelling, other structures, personal property, additional living expenses, personal liability claims, and medical payments to others
  - Six forms are availables
- HO-2 (broad form): covers the dwelling, other structures, and personal property on a named perils basis
- HO-3 (special form): covers the dwelling and other structures on a risk-of-direct-physical loss basis.
  - All direct physical losses are covered except those losses specifically excluded.
  - Personal property is covered on a named perils basis
- HO-4 (contents broad form): covers a tenant's personal property on a named perils basis
- 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
- HO-6 (unit owners form): covers personal property on a named perils basis.
  - A minimum of \$5,000 of insurance is also provided on the condominium unit that covers improvements and additions
- HO-8 (modified coverage form): designed for older homes.
  - Dwelling and other structures are based on the amount required to repair or replace using common construction materials and methods

## **Analysis of the Homeowner Policy**

- The following persons are considered "insureds" under the policy:
  - Named insured and spouse
  - Resident relatives
  - Other persons under age 21
  - Full-time student away from home

## **Inland Marine Floaters**

- An <u>inland marine floater</u> provides broad coverage on property frequently moved from one location to another and on property used in transportation and communications
  - Coverage can be tailored to the specific type of personal property to be insured

<u>Example:</u> Personal property such as jewelry, coins, or stamps can be insured under a personal articles floater.

> Desired amounts of insurance can be selected.

Homeowners policy has several limits on personal property

Example: \$200 limit on money and coins, a \$1500 limit on stamp collections, and a \$2500 limit for the theft of silverware or goldware.

➤ Broader coverage can be obtained

Example: A personal articles floater insures against risks of direct physical loss to covered property( all direct physical losses except losses specifically excluded).

- Most floaters cover insured property anywhere in the world
- > Inland marine floaters are often written without a deductible

#### **Watercraft Insurance**

- A <u>boatowners package policy</u> combines physical damage insurance on the boat, medical expense insurance, liability insurance, and other coverages into one policy
  - Physical damage is covered on an "open perils" basis
  - The insured is covered for property damage and bodily injury liability arising out of negligent use of the boat
  - The policy also includes medical expense coverage and may include uninsured boaters coverage
- Yacht insurance is designed for larger boats
  - Policies are not standard, but have many common features
  - Hull coverage insures the yacht and its equipment for property damage on an "all risks" or "open perils" basis
  - The policy includes liability coverage, medical expense coverage, and uninsured boaters coverage

#### **Government Property Insurance Programs**

- Some government insurance programs are necessary because certain perils are difficult to insure privately
  - Coverage may not be available or may not be affordable

# **National Flood Insurance Program**

- Federal law requires individuals to purchase flood insurance if they have federal guaranteed financing to build, buy, refinance, or repair structures located in special hazard flood areas
- Buildings and their contents can be covered by flood insurance if the community agrees to adopt and enforce sound flood control and land use measures
- A flood hazard boundary map shows the general areas of flood losses

 Residents can purchase limited amounts of insurance at subsidized rates under the emergency portion of the program

#### **Title Insurance**

- Consumer advocates argue that the title insurance market has several major defects, including:
  - Homeowners do not shop around for title insurance
  - Home buyers are over-charged for title insurance
  - The title insurance market is flawed by reverse competition
  - Kickbacks to real estate agents, lenders, and builders are widespread

## Personal Umbrella Policy

- The <u>personal umbrella policy</u> provides protection against a catastrophic lawsuit or judgment
- Certain minimum amounts of liability insurance must be carried on the underlying contracts
- Coverage is broad and includes protection against certain losses not covered by the underlying contracts
- A <u>self-insured retention</u> must be satisfied for losses covered by the umbrella policy but not by any underlying contract
- Insurers can use a standard Personal Umbrella Policy developed by the ISO
  - The policy pays for damages in excess of the <u>retained limit</u> for bodily injury, property damage, or personal injury for which the insured is legally liable
  - The policy covers some additional expenses including legal defense costs
  - Exclusions include liability for expected or intentional injury, certain personal injury losses, business liability, and professional services

# **Chapter 13 Commercial Property Insurance**

#### **Topics**

- ISO Commercial Property Program
- Building and Personal Property Coverage Form
- Causes-of-Loss Form
- Reporting Forms
- Business Income Insurance
- Other Commercial Property Coverages
- Transportation Insurance
- Businessowners Policy
- Business firms can purchase a commercial package policy (CPP)
  - The <u>package policy</u> is tailored to meet the specific needs of the business
  - The policy combines two or more coverages into a single policy
    - Advantages include: fewer gaps in coverage, lower premiums, and convenience
  - The policy contains:
    - Common policy declarations
    - Common policy conditions, e.g., cancellation terms
    - Coverage parts, e.g., commercial property, crime

#### Building and Personal Property Coverage Form

- The <u>building and personal property coverage form</u> is a commercial property coverage part that is widely used to cover a direct physical damage loss to commercial buildings and personal property
  - The form covers the buildings described in the declarations, including fixtures and permanently installed machinery and equipment
  - Business personal property, such as furniture and computers, is covered
    - Includes the insured's interest in improvements and betterments as a tenant
  - Personal property of others in the care, custody, or control of the named insured is also covered
  - Additional coverages include debris removal, the cost of preserving property, fire department charges, and the cost to replace data destroyed by a covered loss
  - Under certain conditions, the insurance can be extended to cover other property, such as the personal effects of employees, newly acquired property, and property off the premises
    - The declarations page must show a coinsurance requirement of 80% or greater or a value-reporting period symbol
  - A standard deductible of \$250 applies to each occurrence
  - If applicable, the coinsurance requirement must be met to avoid a penalty

 The policy can be endorsed to cover losses on an agreed value or replacement cost basis, or to add an inflation guard

### Causes-of-Loss Forms

- A <u>causes-of-loss form</u> must be added to the policy to have a complete contract
  - The form specifies the covered perils for the business and personal property coverage
  - The <u>causes-of-loss basic form</u> provides coverage for 11 basic causes of loss:
  - The <u>causes-of-loss broad form</u> includes all causes of loss covered by the basic form plus:
    - Falling objects
    - Weight of snow, ice, or sleet
    - Water damage
    - Also, collapse is covered for certain causes, such as hidden decay
  - The <u>causes-of-loss special form</u> insures against "risks of direct physical loss" unless specifically excluded
    - Also, personal property in transit is covered for certain causes of loss
    - Coverage also includes glass damage

#### **Business Income Insurance**

- <u>Business income insurance</u> is designed to cover the loss of business income, expenses that continue during the shutdown period, and extra expenses because of loss from a covered peril
  - One form is the business income (and extra expense) coverage form
    - This form covers the loss of business income due to suspension of operations during a period of restoration
      - Suspension must result from a covered direct physical loss
    - Extra expenses, such as relocation costs, are also covered
    - An extended business income provision covers the reduction in earnings for a limited period after the business reopens
    - Business income is defined as the net profit or loss before income taxes that would have been earned, and continuing normal operating expenses, including payroll
- The <u>extra expense coverage form</u> is a separate form that can be used to cover the extra expenses incurred by the firm in continuing operations during a period of restoration
  - Can be used by firms that must continue to operate after a loss occurs, such as a newspaper
  - The form does not cover loss of business income
  - Expenses to continue operations are covered, subject to certain limits
- An endorsement can be added to a business income policy to cover the loss of business income from dependent properties
  - Used when a business depends on a single supplier for raw materials, or relies on a single customer to purchase its products
  - The loss of income must result from direct damage to property of the dependent property

- Types of dependent properties include:
  - Contributing location
  - Recipient location
  - Manufacturing location
  - Leader location

## Other Commercial Property Coverages

- Some firms have certain needs that require more specialized property coverage
- A <u>builders risk coverage form</u> can be used to insure buildings under construction
  - Covers the insurable interest of a general contractor, subcontractor, or building owner
  - A builders risk reporting form can be attached as an endorsement
    - Requires the builder to report monthly on the value of the building under construction
    - As the building progresses, the amount of insurance on the building is increased, and premiums are adjusted based on the values reported by the builder
- A <u>condominium association coverage form</u> is used to cover a condominium building
  - Coverage includes the association's personal property, such as exercise room equipment
  - Coverage also includes personal property in the association's care, such as leased lawn mowers
- Businesses that own units in a condominium building can purchase a condominium commercial unit-owners coverage form
  - Not used for residential condominium units
  - The form covers the business property of the unit owner, such as furniture, fixtures and improvements, machinery and equipment
  - The form also covers the personal property of others in the care, custody, or control of the unit owner
- The <u>equipment breakdown coverage form</u> can be used to cover losses due to the accidental breakdown of covered equipment, such as steam boilers, refrigeration equipment, and computer equipment
  - These losses are not covered under the causes-of-loss forms
- <u>Difference in Conditions (DIC) insurance</u> is an "all-risks" policy that covers other perils not insured by basic property insurance contracts
  - The coverage fills gaps in commercial property coverage
  - The coverage can be used to insure unusual and catastrophic exposures that are not covered by the underlying contracts
  - A substantial deductible must be satisfied for losses not covered by the underlying contracts

#### Transportation Insurance

- Ocean marine insurance provides protection for goods transported over water
  - It is one of the oldest forms of transportation insurance
- Ocean marine insurance comes in several different forms:

- <u>Hull insurance</u> covers physical damage to the ship or vessel
  - A <u>collision liability clause (running down clause)</u> covers the owner's legal liability if the ship collides with another vessel or damages its cargo
- <u>Cargo insurance</u> covers the shipper of the goods if the goods are damaged or lost
  - Regular shipments can be covered with an open-cargo policy
    - This coverage requires the shipper to report periodically the shipments that are made
- Protection and indemnity (P&I) insurance is usually written as a separate contract that provides comprehensive liability insurance for property damage or bodily injury to third parties
  - Coverage includes liability for damages caused by the ship to piers and docks, and for illness or injury to passengers and crew
- Freight insurance indemnifies the ship owner for the loss of earnings if the goods are damaged or lost and are not delivered
- Ocean marine insurance is based on certain fundamental concepts, or <u>implied</u> warranties:
  - The owner implicitly warrants that the vessel is seaworthy
  - The ship cannot deviate from its original course
    - The ship can only deviate to avoid an accident, or to save the life of an individual on board, or rescue persons from another vessel
  - The purpose of the voyage is legal
- The ocean marine policy provides broad coverage for perils of the sea, such as bad weather, high waves, collision, sinking, and stranding
  - Includes losses from fire, pirates, and jettison (to save the ship)
  - The policy can be written on an "all-risks" basis
    - Common exclusions are losses due to delay and war
- A particular average is a loss that falls entirely on a particular interest
  - Under the <u>free-of-particular average (FPA) clause</u>, partial losses are not covered unless the loss is caused by certain perils, such as stranding or sinking
    - The insurer pays the full amount of a loss only if it exceeds a certain percentage specified in the FPA
- A <u>general average</u> is a loss that falls on all parties to the voyage, incurred for the common good
  - Each party must pay its share of the loss based on the proportion that its interest bears to the total value in the venture
  - Conditions for a general average loss include imminent peril, voluntary sacrifice, preservation of at least part of the value
    - All parties claiming contributions must be free of fault
- Inland marine contracts are classified as either filed or nonfiled forms
  - Filed forms are filed with the state insurance department, and are typically used in situations where there are a large number of potential insureds
    - Forms under the ISO simplified commercial inland marine program include, for example:
      - Accounts receivable coverage

- Camera and musical instrument dealers coverage
- Film coverage form
- Mail coverage form
- Signs coverage form
- Theatrical property coverage form
- Nonfiled inland marine forms are used to meet specialized needs
  - An <u>annual transit policy</u> can be used to cover the shipment of goods on public trucks, railroads, and coastal vessels
    - Both incoming and outgoing shipments can be insured on a named perils or "all-risks" basis
  - A trip transit policy is used by firms to cover a single shipment
  - A <u>business floater</u> covers property that frequently moves from one location to another, such as contractors equipment and garments in the process of manufacturing

# **Businessowners Policy**

- A <u>businessowners policy (BOP)</u> is a package policy specifically designed for small- to medium-sized retail stores, office buildings, apartment buildings, and similar firms
  - The ISO BOP provides both property and liability coverage in one policy
  - Businesses are ineligible if their loss exposures are outside those contemplated for the average small- to medium-sized firm
    - e.g., auto repair shops and bowling alleys
  - Property losses are covered on an "all-risks" basis
    - Coverage includes buildings described in the declarations, fixtures, permanently installed machinery and equipment
  - Business personal property, including property in the insured's care, is also covered
    - A peak season provision provides for a temporary increase of 25% of the amount of insurance when inventory values are at their peak
  - Some addition coverages include debris removal, collapse, and interruption of computer operations

# **Chapter 14 Commercial Liability Insurance**

#### **Topics**

- General Liability Loss Exposures
- Commercial General Liability Policy
- Employment-related Practices Liability Insurance
- Workers Compensation insurance
- Commercial Auto Insurance
- Aircraft Insurance
- Commercial Umbrella Policy
- Business owners policy
- Professional Liability Insurance
- Directors and Officers Liability Insurance

## **General Liability Loss Exposures**

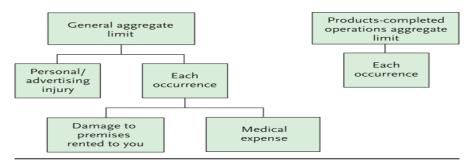
- <u>General liability</u> refers to legal liability arising out of business operations other than auto or aviation accidents and employee injuries
- A commercial firm typically purchases a commercial general liability (CGL) policy or a business owners policy (BOP) to cover its general liability loss exposures
- Some important liability exposures include:
  - <u>Premises and operations liability</u>, arising out of the ownership and maintenance of the premises where the firm does business
  - Products liability, arising out of the manufacturing and sale of products
  - Completed operations liability, arising out of faulty work performed away from the premises after the work or operation is completed
  - <u>Contractual liability</u>, arising out of the assumption of legal liability through a written or oral contract
  - <u>Contingent liability</u>, arising out of work done by independent contractors

### **Commercial General Liability Policy**

- The <u>commercial general liability policy (CGL)</u> is widely used by firms to cover their general liability loss exposures
  - An <u>occurrence policy</u> covers liability claims arising out of occurrences that take place during the policy period
  - A <u>claims-made policy</u> covers only claims that are first reported during the policy period or extended reporting period, provided that the event occurred after the retroactive date, if any, stated in the policy
  - The CGL policy can be written alone or included in a commercial package policy
- Section I includes Coverages A-C
- Coverage A: Bodily Injury and Property Damage Liability
  - The insurer agrees to pay on behalf of the insured all sums up to the policy limits that the insured is legally obligated to pay because of bodily injury or property damage

- The bodily injury or property damage must be caused by an occurrence, i.e., an accident, including continuous or repeated exposure to substantially the same general harmful conditions
- Coverage includes defense costs, and the insurer has the right to investigate a claim or suit and settle it at its discretion
- Coverage A contains a lengthy list of exclusions, including:
  - Expected or intended injuries or damages
  - Liquor liability
  - Workers compensation and employers liability
  - Mobile equipment
  - Recall of products
  - Personal and advertising injury
  - Electronic data
- Coverage A includes fire legal liability coverage
  - Covers liability for fire damage to premises rented to the named insured or temporarily occupied by the named insured with the permission of the owner
  - A separate limit of coverage applies
  - Other damage to property rented by the insured is NOT covered
- Coverage B: Personal and Advertising Liability
  - The insurer agrees to pay those sums that the insured is legally liable to pay as damages because of personal and advertising injury
- The policy covers legal liability resulting from:
  - False arrest
- Malicious prosecution
- Slander
- Wrongful eviction or entry
- violation of privacy Copyright infringement
- Coverage C: Medical Payments
  - The insurer will 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
  - Expenses must be incurred within one year of the accident
  - Payments are made without regard to legal liability
- Insureds also include persons not named in the policy:
  - Volunteer workers acting for the organization
  - Employees acting within the scope of employment
  - Any person or organization acting as a real estate manager
  - A legal representative if the named insured should die
  - Any newly acquired or formed organization, other than a partnership, joint venture or LLC

## Illustration of the CGL Limits of Insurance



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- The ISO <u>claims-made policy</u> is similar to the occurrence policy with the major exceptions of:
  - Payment of claims is on a claims-made basis
  - The policy contains an extended reporting period provision
  - The <u>basic extended reporting period</u>, with two separate reporting "tails" is automatically provided in certain circumstances (e.g., cancellation)
- Under the ISO employment-related practices liability insurance coverage, the insurer agrees to pay damages resulting from a "wrongful act" arising out of:
  - Demotion or failure to promote
  - Wrongful termination
  - Negligent hiring or supervision
  - Retaliatory action against employees
  - Coercing an employee to commit an unlawful act
  - Work related harassment
  - Employment-related libel
  - Other work-related abuse
- Workers compensation insurance provides medical care, cash benefits, survivor benefits, and rehabilitation services to workers who are injured or die from job-related accidents or disease
  - Benefits are paid on the principle of <u>liability without fault</u>: the employer is held absolutely liable for job-related accidents and diseases regardless of fault

## **Workers Compensation Insurance**

- Under Part One, the insurer agrees to pay all workers compensation benefits and other benefits that the employer must legally provide to covered employees who have a job-related injury or an occupational disease
  - There are no policy limits. The insurer pays all benefits required by state law
  - The employer must reimburse the insurer for any payments that exceed regular benefits in certain cases, e.g., willful misconduct by the employer
- Under Part Two, the insurer agrees to pay those sums that the insured is legally liable to pay as damages for worker injuries that are not compensable under Part One
  - This coverage is needed in some states where workers compensation is not required for smaller employers
  - Also, an employee may sue for injury caused by an accident at the job site, but the injury is not considered work related
- Part Three provides other-states insurance
  - The employer is covered for workers compensation claims arising in states not listed on the information page (declarations page)
  - Part One covers claims arising in any states listed on the information page
  - Part Three coverage applies only if one or more states are listed on the information page
- Workers compensation insurance provides economic security to workers who are disabled by a job-related accident or disease

 Weekly cash benefits are paid during the period of disability; medical care is unlimited and rehabilitation and survivor services are available

#### **Commercial Auto Insurance**

- The ISO <u>business auto coverage form</u> is used to insure commercial auto exposures
  - There are ten numerical classifications or "symbols" for covered autos
  - Coverage of newly acquired autos depends on the symbols selected
  - The form includes liability and physical damage coverage
  - It includes limited liability for pollution losses
  - Options for physical damage coverage include comprehensive, specified cause-of-loss, and collision
  - Coverage for towing and labor costs can be added
- The garage coverage form is a specialized form for auto dealers
  - The insurer will pay all sums that an insured must legally pay as damages because of bodily injury or property damage caused by an accident in the course of garage operations
  - Garage operations includes garage business locations, autos covered under the form, and all operations necessary or incidental to a garage business
  - Damage to property of others in the insured's care, custody, or control are excluded unless garagekeepers legal liability coverage is also purchased

### **Aircraft Insurance**

- Most states apply the common-law rules of negligence to aviation accidents
  - Some states have absolute or strict liability laws that hold the owners or operators of aircraft absolutely liable for aviation accidents
  - Absolute liability is imposed on commercial airlines for aviation accidents that occur during international flights
- <u>Aircraft insurance</u> is highly specialized coverage and is underwritten by a small number of insurer organizations
- Major airlines generally buy a minimum of \$2 billion of liability coverage on their jets

#### Aircraft Insurance for Private Business and Pleasure Aircraft

- Aircraft insurers offer policies for private business and pleasure aircraft
  - Policies include coverage for property damage and bodily injury arising out of the ownership or use of the insured aircraft, medical expense coverage, and physical damage coverage for damage to the aircraft
- Liability coverages include:
  - Bodily injury liability excluding passengers
  - Passenger bodily injury liability
  - Property damage liability
- Physical damage insurance provides coverage for direct damage to the aircraft
- Three forms are available:
  - "All-risks" basis
  - "All-risks" basis, not in flight

- "All-risks" basis, not in motion
- The medical expense coverage pays reasonable medical expenses for passenger injuries
  - Crew members are generally excluded
- A <u>commercial umbrella policy</u> can protect a business against catastrophic liability judgments
- The ISO commercial umbrella policy pays the ultimate net loss in excess of the retained limit for bodily injury, property damage, and personal and advertising injury to which the insurance applies
  - The <u>ultimate net loss</u> is the total sum the insured is legally obligated to pay as damages
  - The <u>retained limit</u> refers to (1) the available limits of underlying insurance listed in the declarations, or (2) the self-insurance retention, whichever applies

## **Commercial Umbrella Policy**

- Insureds are required to carry certain minimum amounts of liability coverage before the umbrella insurer will pay any claims
- The form contains a lengthy list of exclusions for bodily injury and property damage liability, including:
  - Expected or intentional injury
  - Liquor liability
  - Liability arising out of professional services
- The form also contains a list of exclusions for personal injury and advertising liability

## **Businessowners Policy**

- The ISO <u>businessowners policy (BOP)</u> includes liability coverage that is similar to the CGL form
- The BOP coverage includes:
  - Business liability
  - Medical expenses
  - Legal defense
- Although the BOP excludes professional liability, some professional liability endorsements are available for certain businesses

### **Professional Liability Insurance**

- Professional liability insurance is available for certain business professionals to provide protection against a lawsuit involving a substantial error or omission
- The physicians, surgeons, and dentists liability coverage form covers these professionals for acts of malpractice or omission resulting in harm or injury to patients
  - The injury must result from a medical incident
  - The policy also covers the physician for liability arising out of negligent acts of an employee

 Current forms permit the insurer to settle a claim without the physician's or surgeon's consent

#### **Directors and Officers Insurance**

- A <u>directors and officers (D&O) liability policy</u> provides financial protection for the directors and officers and the corporation if they are sued for mismanagement of the company's affairs
  - Typically, the policy agrees to pay damages on behalf of directors, officers, and employees because of a wrongful act
  - D&O policies are written on a claims-made basis
- D&O policies generally include:
  - Payment of damages on behalf of insured persons because of a wrongful act
  - Reimbursement for losses resulting from the company's obligation to reimburse directors and officers for suits alleging wrongful acts
  - Entity coverage, which covers the corporation if it is named as a defendant in a suit against the directors and officers
- Common exclusions include bodily injury and property damage, libel and slander, personal profit, and illegal discrimination

## **Chapter 15 Crime Insurance and Surety Bonds**

## **Topics**

- ISO Commercial Crime Insurance Program
- Commercial Crime Coverage Form
- Financial Institution Bonds
- Surety Bonds

### **ISO Commercial Crime Insurance Program**

- Crime insurance coverage can be added to a commercial package policy (CPP), or purchased separately
  - There are five basic crime coverage forms, and each can be written in one of two versions:
    - The <u>discovery version</u> covers a loss that is discovered during the policy period or within 60 days after the policy expires even though the loss may have occurred before the policy's inception date
    - The <u>loss-sustained version</u> covers a loss that occurs during the policy period, and the loss is discovered during the policy period or within one year after the policy expires

# ISO Commercial Crime Coverage Forms and Policies

- Commercial Crime Coverage Form (discovery version and loss-sustained version)
- Commercial Crime Policy (discovery version and losssustained version)
- Government Crime Coverage Form (discovery version and loss-sustained version)
- Government Crime Policy (discovery version and losssustained version)
- Employee Theft and Forgery Policy (discovery version and loss-sustained version)

### **Commercial Crime Coverage Form**

- Most property crimes against businesses are due to:
  - Robbery: the unlawful taking of property from the care and custody of a person by someone who (1) has caused or threatens to cause that person bodily harm, or (2) has committed an obviously unlawful act witnessed by that person
  - Burglary: 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: the unlawful taking of property from within a locked safe or vault by someone who unlawfully enters the safe or vault as evidenced by marks of forcible entry upon the exterior
- Theft: the unlawful taking of property to the deprivation of the insured
  - Includes robbery, burglary, shoplifting, employee theft and forgery
- The <u>commercial crime coverage form (loss sustained version)</u> is used by private firms and nonprofit organizations
  - Firms can select from among eight insuring agreements
  - Employee theft coverage pays for the loss of money, securities, and other property that results directly from theft committed by an employee
    - Includes the theft of other property, besides money and securities, but not computer programs or data
  - Forgery or alteration coverage pays for a loss that results directly from forgery or from the alteration of checks drawn by the insured or the insured's agent
    - Also includes drafts, promissory notes, or similar instruments
    - The coverage does not apply to losses that result from the acceptance of forged documents
  - Inside the premises theft of money and securities pays for the loss of money and securities inside the premises that result directly from theft committed by a person present inside the premises, or for disappearance, or destruction
    - Coverage also applies to damage to the premises or a vault if related to the actual or attempted theft
  - Inside the premises robbery or safe burglary of other property pays for the loss or damage to other property inside the premises by the actual or attempted robbery of a custodian, or by safe burglary inside the premises
    - Burglary loss of other property that is not stored in a safe is not covered. These losses can be covered by an <u>inside the premises</u>
       robbery or burglary of other property agreement
  - The <u>outside the premises</u> 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
    - The coverage also includes losses due to the actual or attempted robbery of other property outside the premises
  - The <u>computer fraud</u> agreement covers the loss of money, securities, and other property if a computer is used to transfer property fraudulently from inside the premises to a person or place outside the premises
  - The <u>funds transfer fraud</u> agreement covers the loss of funds that result directly from fraudulent instructions that direct a financial institution to transfer or pay funds from the insured's account
  - The money orders and counterfeit paper currency coverage pays for losses resulting directly from the good-faith acceptance of counterfeit currency
    - Includes money orders that are not paid upon presentation
- Exclusions in the commercial crime coverage form include:

- Dishonest acts or theft committed by the named insured, partners, or members
- Knowledge of dishonest acts of employees prior to the policy period
- Indirect loss
- Inventory shortages (applies to employee theft only)
  - There is no coverage for any loss if proof of loss depends on an inventory computation or on a profit and loss computation
- The discovery version form is especially valuable for a business firm that has been in business for several years but is uninsured for employee theft losses
  - New coverage written on a discovery version would cover any losses that occurred years earlier but were only discovered during the current policy period
  - If the underwriter suspects that large undiscovered losses might exist prior to the policy's inception date, a <u>retroactive date endorsement</u> can be added to the policy
    - The endorsement limits coverage to only those losses that occur after the retroactive date and are discovered during the current policy period
- A provision for <u>loss sustained during prior insurance</u> covers 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 enables a business to change insurers without penalty
  - There must not be a break in coverage
- Coverage under the employee theft agreement terminates as to any employee once the insured has knowledge that the employee has committed a theft or dishonest act

#### **Financial Institution Bonds**

- Financial institutions, such as commercial banks and credit unions, use some type of financial institution bond to deal with crime exposures
  - In this context, the word "bond" is synonymous with "insurance policy"
- One widely used form is Financial Institution Bond, Standard Form No. 24
  - The bond contains seven insuring agreements
  - The basic bond coverage includes agreements A, B, C, and F
  - Agreement 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
    - Excludes losses due to trading or loan transactions
  - Agreement B On premises coverage covers loss of property on the premises for a broad list of perils, including robbery, burglary, misplacement, mysterious unexplainable disappearance, and theft
  - Agreement C In-transit coverage covers losses to property in-transit for a broad list of perils
    - The property must be in the custody of a messenger or transportation company
  - Agreement D Forgery or alteration coverage covers loss from forgery or alteration of most negotiable instruments

- Agreement E Securities coverage covers losses to the insured because securities accepted in good faith have been forged, altered, lost or stolen
- Agreement F Counterfeit currency coverage covers loss to the insured from counterfeit money
- Agreement G Fraudulent mortgages coverage covers loss that results directly from having accepted or acted upon any mortgage on real property that proves defective because of a fraudulent signature

## **Surety Bonds**

- A <u>surety bond</u> is a bond that usually provides monetary compensation if the bonded party fails to perform certain promised acts
- The parties to a surety bond include:
  - The <u>principal</u> is the party who agrees to perform certain acts or fulfill certain obligations
  - The <u>obligee</u> is the party who receives the proceeds of the bond if the principal fails to perform
  - The <u>surety</u> is the party who agrees to answer for the debt, default, or obligation of the principal
- Surety bonds are similar to insurance contracts in that both provide protection against specified losses

## Comparison of Insurance and Surety Bonds

Insurance	Surety Bonds	
There are two parties to an insurance contract.	1. There are three parties to a surety bond.	
The insurer expects to pay losses. The premium reflects expected loss costs.	<ol><li>The surety theoretically expects no losses to occur.</li><li>The premium is viewed as a service fee, by which the surety's credit is substituted for that of the principal.</li></ol>	
<ol><li>The insurer normally does not have the right to recover a loss payment from the insured.</li></ol>	<ol><li>The surety has the legal right to recover a loss payment from the defaulting principal.</li></ol>	
<ol> <li>Insurance is designed to cover unintentional losses that ideally are outside of the insured's control.</li> </ol>	<ol> <li>The surety guarantees the principal's character, honesty, integrity, and ability to perform. These qualities are within the principal's control.</li> </ol>	

### **Types of Surety Bonds**

- A <u>contract bond</u> guarantees that the principal will fulfill all contractual obligation
- A <u>license and permit bond</u> guarantees that the principal will comply with all laws and regulations that govern his or her activities
- A <u>public official bond</u> guarantees that public officials will faithfully perform their duties for the protection of the public
- A <u>judicial bond</u> guarantees that the principal will fulfill certain obligations specified by law

# Comparison of Five Contract Bonds

Type of Bond	Obligee	Principal	Guarantee
1. Bid Bond	Property owner or party requesting bids	Firm or party submitting the bid	Party whose bid is accepted will sign a contract and furnish a performance bond
2. Performance Bond	Property owner or party having work done	Contractor doing the work	Work will be completed according to contract specifications
3. Payment Bond	Property owner or party having work done	Contractor doing the work	Bills for labor and materials will be paid when due
4. Maintenance Bond	Party having work done	Contractor doing the work	Faulty work of principal will be corrected, or defective materials replaced
5. Completion Bond	Lending institution or lessor	Contractor doing the work	Guarantees completion of the building or improvement

## **Chapter 16 Fundamentals of Life Insurance**

## **Topics**

- **O** Premature Death
- Amount of Life Insurance to Own
- O Types of Life Insurance
- O Variations of Whole Life Insurance
- Other Types of Life Insurance

#### Premature Death

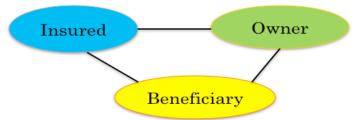
- Premature death can be defined as the death of a family head with outstanding unfulfilled financial obligation
  - Can cause serious financial problems for the surviving family members
  - The deceased's future earnings are lost forever
  - Additional expenses are incurred, e.g., funeral expenses and estate settlement costs
  - Some families will experience a reduction in their standard of living
  - Noneconomic costs are incurred, e.g., grief, loss of the parental rule model.
- Life expectancy has increased significantly over the past century
  - Thus, the economic problem of premature death has declined
  - Millions of Americans still die annually from heart disease, cancer and stroke
- The purchase of life insurance is financially justified if the insured has earned income and others are dependent on those earnings for financial support

### Life Insurance Participants

Insured, owner, and beneficiary are three parties of life insurance.

- ✓ Insured: the person whose death causes the insurer to pay the claim .
- ✓ Owner: the person who may exercise the rights created by the contract.
- ✓ <u>Beneficiary:</u> the person receiving the proceeds when the insured dies. A person, a trust, an estate, or a business may be a beneficiary.

### Three Parties of Life Insurance Contract



• One person may be both insured and owner, or owner and beneficiary but a person cannot be both insured and beneficiary.

#### Example:

- ✓ You buy life insurance for yourself(both owner and insured are one person).
- ✓ You buy a life insurance for your husband/wife

(both owner and beneficiary are one person).

- ✓ If you are insured and anything happens to you, you can not be the beneficiary of your own life insurance (beneficiary and insured can no be the same person).
- Three approaches can be used to estimate the amount of life insurance to own 1- Human life value approach
- 2- Needs approach
- 3- Capital retention approach
- The human life value approach
  - The amount needed depends on the insured's <u>human life value</u>, which is the present value of the family's share of the deceased breadwinner's future earnings

#### Amount of Life Insurance to Own

• To calculate the amount needed <u>under the human life value approach</u>:

**First**: Estimate the individual's average annual earnings over his or her productive lifetime

**Second**: Deduct taxes, insurance premiums and self-maintenance costs

**Third:** Using a reasonable discount rate, determine the present value of the family's share of earnings for the number of years until retirement

# Types of Life Insurance

- Life insurance policies can be classified in two general categories:
  - Term insurance provide temporary protection
  - Whole life insurance or Cash-value life insurance

has a savings component and builds cash values

• There are many variations of both types available today

#### Term Life Insurance

- Under a term insurance policy, protection is temporary; protection expires at the end of the policy period, unless renewed
- Most term policies are renewable for additional periods
  - Premiums increase at each renewal
  - To minimize adverse selection, many insurers have an age limitation beyond which renewal is not allowed
- Most term policies are <u>convertible</u>, which means the policy can be exchanged for a cash-value policy without evidence of insurability
  - Under the <u>attained-age method</u>, the premium charged for the new policy is based on the insured's attained age at the time of conversion
  - Under the <u>original-age method</u>, the premium charged for the new policy is based on the insured's original age when the term insurance was first purchased

Whole Life Insurance

• Whole life insurance is a cash-value policy that provides lifetime protection

- The death benefit amount is paid to a designated beneficiary when the insured dies, regardless of when the death occurs.
- Why whole life insurance premiums initially are larger than term life insurance?

Because claims are a certainty with whole life policies, the insurer must collect enough premiums to pay the early death claims.

#### > Traditional whole life insurance

- ✓ Ordinary life insurance
- ✓ Endowment life insurance
- > Modern variations of whole life insurance
- ✓ Variable life insurance
- ✓ Universal life insurance
- ✓ Variable universal life insurance
- ✓ Limited-payment life insurance

## Traditional Types of Whole Life Insurance

- ✓ **Ordinary life insurance** characteristics:
- ➤ 1- Ordinary life insurance is a level-premium policy that provides <u>lifetime</u> <u>protection</u> to age 100.
  - The excess premiums paid during the early years are used to supplement the inadequate premiums paid during the later years of the policy.
  - The insurer's <u>legal reserve</u> is a liability that must be offset by sufficient financial assets
- Endowment insurance pays the face amount of insurance to beneficiary if the insured dies within a specified period. If the insured is still alive at the end of the period, the face amount is paid to the policyholder
- Endowment insurance accounts for less than one percent of the life insurance in force

### Modern Types of Whole Life Insurance

- O <u>Variable life insurance</u> is a fixed-premium policy in which the death benefit and cash values vary according to the investment experience of a separate account maintained by the insurer
  - The premium is level
  - The entire reserve is held in a separate account and is invested in common stocks or other investments
  - Cash-surrender values are not guaranteed
  - Insurers do not guarantee a minimum cash value; however they do guarantee a minimum death benefit.
- O <u>Universal life insurance</u> is a flexible premium policy that provides lifetime protection under a contract that separates the protection and saving components.
  - Except the first premium, the policyholder decides the amount and frequency of premium payments

• The protection and saving components are unbundled or separated. An annual statement sent to the policy owner shows the premiums paid, death benefit, and value of the cash-value account.

#### Uses and Limitation of Universal Life Insurance

## ✓ Advantages :

- Unbundling or separation of protection and saving components
- Considerable flexibility
  - Cash withdrawals are permitted
  - Policies receive favorable tax treatment

## ✓ Disadvantages include:

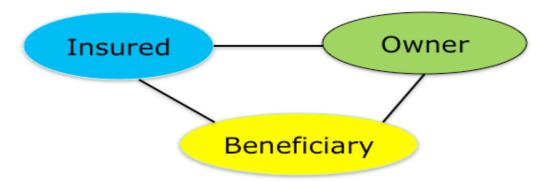
- Insurers advertise misleading rates of return
- Cash-value and premium-payment projections can be misleading and invalid
- Insurers can increase the mortality charge
- A policy may lapse because some policy owners do not have a firm commitment to pay premiums
- Variable universal life insurance is similar to universal life insurance with two exceptions:
  - The cash values can be invested in the wide variety of investments.
  - The policy does not guarantee a minimum interest rate or minimum cash value and the policy owner bears the investment risk.

## **Chapter 17 Life Insurance Contractual Provisions**

## **Topics**

- Life Insurance Contractual Provisions
- Additional Life Insurance Benefits

#### **Three Parties of Life Insurance Contract**



One person may be both insured and owner, or owner and beneficiary but a person cannot be both insured and beneficiary.

## Example:

- ✓ You buy life insurance for yourself (both owner and insured are one person).
- ✓ You buy a life insurance for your husband/wife

(Both owner and beneficiary are one person).

✓ If you are insured and anything happens to you, you can not be the beneficiary of your own life insurance (beneficiary and insured can no be the same person).

#### **Life Insurance Contractual Provisions**

- Under the <u>ownership clause</u>, the policyowner possesses all contractual rights in the policy while the insured is living
  - Rights include naming beneficiaries and surrendering the policy for its cash value
  - The policyholder can <u>designate</u> a new owner by filing an appropriate form

## Revocable Beneficiary Vs. Irrevocable Beneficiary

## Revocable Beneficiary

If the owner has the right to change the beneficiary after the first choice .The revocable beneficiary has no rights in the policy while the insured in alive.

# Irrevocable Beneficiary

If the owner cannot change the name of beneficiary. The irrevocable beneficiary has a vested interest in the death benefit and can prevent the owner from taking any action reducing the beneficiary's interest.

### **Beneficiary Designation**

Owner's of a policy should identify the beneficiary clearly.

A designation such as "my wife" or "my children" can lead to litigation in cases of multiple marriages, children born of different marriages, or illegitimate children.

"my wife, Marie Antoinette," or, "all the children born of my marriage to Marie Antoinette, share and share alike."

Primary and contingent beneficiaries

If the first beneficiary predeceases the insured the second, third, etc. are entitled to receive the death benefit.

Example of beneficiary designation

"Proceeds to my wife (Cathy T.Gate). If my wife predeceases me, then to my children(Tom, Dick, and Harry Grate) – share and share alike .If both my wife and my children predecease me, then to American Red Cross."

The insurers can use the court system to resolve legal issues when there is frequent beneficiary changes or unclear beneficiary designations. This is called "interpleader".

Example: Cases of ambiguity such as terrorist attack of September 11,2001, or Hurricane Katrina where the order of death, or even the fact of death of a missing person might arise.

#### **Contractual Provisions in Life Insurance**

- The law requires that approved policies <u>satisfy</u> at <u>least the minimum</u> <u>provisions of the law</u>. The format and wording of life insurance policies sold in New York by different insurers may differ from one another. However, the following provisions appear in life insurance contracts issued in New York:
- 1- Entire-contract provision
- 2- Incontestable clause
- 3- Suicide clause
- 4- Grace period
- 5- Reinstatement clause
- 6- Misstatement-of-age provision

## **Dividend Options**

- If a policy pays dividends it is a participating policy
  - Otherwise it is a <u>nonparticipating policy</u>

#### **Life Insurance Contractual Provisions**

- The <u>entire-contract clause</u> states that the life insurance policy and attached application constitute the entire contract between the parties
  - Prevents the insurer from making amendments without the policyholder's knowledge
- The <u>incontestable clause</u> states that the insurer cannot contest the policy after it has been in force two years during the insured's lifetime
  - Protects the beneficiary if the insurer tries to deny payment of the claim years after the policy was first issued
  - The insurer has two years to detect fraud
- The <u>suicide clause</u> states that if the insured commits suicide <u>within two years</u> <u>after</u> the policy is issued, the face amount of insurance will not be paid; there is only a refund of the premiums paid.
- A life insurance policy contains a grace period during which the policyholder has a period of 31 days to pay an overdue premium.

### *Grace period*

If the insured forgets to pay the premium or decides to end the contract, the **grace period** provides him or her a period of 31 days to pay the premium without forfeiting any contractual rights.

- ➤ If the policyholder dies during the grace period, the insurer will pay the proceeds, minus the overdue to the beneficiary.
- ➤ If the policyholder dose not pay the premium before the end of the 31 days provided by the grace period; however, the policy is said to have lapsed.
- ➤ What is a lapsed policy?

In a lapsed policy the insured voluntarily has given up the life insurance contract.

➤ When insureds let a policy lapse, it means they have become displeased with their purchase or perhaps cannot afford to pay the premium.

#### **Life Insurance Contractual Provisions**

- The reinstatement provision permits the owner to reinstate a lapsed policy
- To reinstate a lapsed policy, the following requirements must be met:
  - Evidence of insurability is required
  - All overdue premiums plus interest are paid
  - Any policy loans are repaid or reinstated
  - The policy was not surrendered for its cash value
- The policy must be reinstated within a certain period
- Although it may require a large outlay of cash, it may be cheaper to reinstate a lapsed policy than to purchase a new policy

## Misstatement-of-age Provision

- Age is a key factor in underwriting and pricing the insurance.
- Misstatement of age either intentionally or by mistake, causes rating errors.

Misstatement-of-age provision allows the insurer to adjust the face amount of insurance to reflect the insured's true age, rather than allowing the insurer to void a policy if a misstatement is discovered.

Example: If the age of insured is reported to be three years less than it actually was, the benefits would reduced from \$100,000 to \$92,000 or whatever amount of insurance would purchase at the insured 's true age.

### **Additional Life Insurance Benefits**

- Other benefits can be added to a life insurance policy for an additional premium
- Under a <u>waiver-of-premium provision</u>, if the insured becomes totally disabled, all premiums coming due during the period of disability are waived
- The <u>accidental death benefit rider</u> doubles the face amount of life insurance if death occurs as a result of an accident
- The <u>accelerated death benefits rider</u> allows insureds who are terminally ill to collect part or all of their life insurance benefits before they die

### **Chapter 18 Buying Life Insurance**

## **Topics**

- Determining the Cost of Life Insurance
- Rate of Return on Saving Component
- Taxation of Life Insurance
- Shopping for Life Insurance

# Determining the Cost of Life Insurance

- The cost of a life insurance policy is the difference between what you pay and what you get back
- When determining the cost of life insurance, four major factors must be considered:
  - 1. Annual premiums
  - 2. Cash values
  - 3. Dividends
  - 4. Time value of money
- Under the <u>traditional net cost method</u>, the cash value and expected dividends are subtracted from annual premiums to obtain a net cost per year figure
  - This method does not consider the time value of money
- The <u>interest-adjusted cost method</u> is more accurate because it considers the time value of money
- Interest-adjusted cost indices come in two forms:
  - The <u>surrender cost index</u> is useful if the owner expects to surrender the policy after some time period
  - The <u>net payment cost index</u> is useful if the owner expects to keep the policy in force
- Interest-adjusted cost indices can be used to compare policies across insurers
  - There is a wide variation in costs indices across insurers it pays to shop around!
  - Most consumers use premiums as a basis for comparison, but agents will supply cost indices
- The Life Insurance Policy Illustration Model Act requires insurers to present certain information to applicants for life insurance
  - The goal is to reduce misunderstanding of policy values by policyowners, and reduce deceptive sales practices by agents
  - A narrative summary describes the basic characteristics of the policy
  - A numeric summary shows the premium outlay, value of the accumulation account, cash surrender values and death benefit
  - The act also prohibits certain sales practices and requires the insurer to provide an annual report

### Rate of Return on Saving Component

- The annual rate of return earned on the savings component of a policy is an important consideration if you intend to invest over a long period of time
- The <u>Linton yield</u> is the average annual rate of return on a cash value policy if it is held for a specified number of years

 Current information is not readily available to consumers, so the method has limited use

### Taxation of Life Insurance

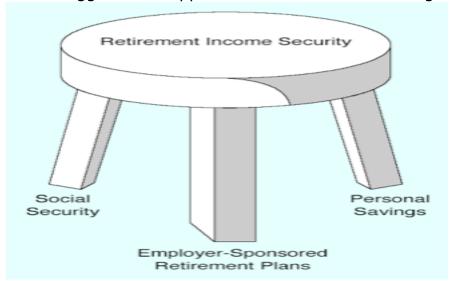
- Life insurance proceeds paid in a lump sum to a designated beneficiary are generally received income-tax free
  - The interest component of periodic payments is taxable as ordinary income
  - Premiums are generally not deductible
  - Dividends are not taxable, but interest on dividends retained is taxable
  - If a policy is surrendered for its cash value, any gain is taxable as ordinary income
- Proceeds from a life insurance policy are included in the gross estate of the insured for federal estate-tax purposes if:
  - the insured has any ownership interest
  - they are payable to the estate
- The proceeds may be removed from the gross estate if the policyowner makes an absolute assignment of the policy to someone else
  - The policyowner must make the assignment more than three years before death
- A federal estate tax is payable if the decedent's taxable estate exceeds certain limits
  - A tentative tax on the taxable estate value is calculated
    - The gross estate includes property you own, one-half of the value of property owned jointly with your spouse, life insurance death proceeds in which you have ownership interest
    - The gross estate may be reduced by certain deductions, such as a marital deduction, in determining the taxable estate
    - The taxable estate may be reduced or eliminated by a tax credit called a unified credit
  - The amount of property exempt from taxation will increase in the future
  - Federal estate taxes are scheduled to expire in 2010
    - Tax will be reinstated in 2011 unless Congress acts

Shopping For Life Insurance



## **Chapter 19 Retirement Planning and Annuities**

Three-Legged Stool Approach to Retirement Planning



- If investment earnings alone will not provide sufficient retirement income
  - Periodic withdrawals from the principal will be required
  - Under such circumstances, individuals living to advanced ages may outlive their income sources
    - Results in the need for a systematic means for liquidating resources
    - Together with a means for protecting against the risk of living beyond one's financial resources
      - A product that can be arranged to meet these needs is known as an annuity
- An annuity is a contract that provides for the liquidation of a sum of money through a series of payments during a specified period of time
  - Often the period coincides with the lifetime of one or more persons
  - The person receiving the payments (the annuitant) is protected against the risk of outliving his or her financial resources

#### Structure of Annuities

- Are structured so that annuitants' payments are composed of both interest earnings and a partial liquidation of principal
- For contracts guaranteeing payments for as long as an annuitant is alive
  - Each payment consists not only of interest and principal but also of a third element called the survivorship benefit

## How are Annuity Premiums Paid?

- An annuity can be purchased with one lump-sum payment
  - Called a single-premium annuity
- Or it can be purchased in installments over a period of years
  - Called an annual-premium annuity
- Considerable latitude is allowed regarding the timing and amount of premiums

- The installment arrangement is a flexible-premium annuity
- The size of the eventual annuity benefit is a function of the accumulated premium dollars at the time the annuitant decides to begin collecting benefits
- Many of the life insurance settlement options discussed in Chapter 16 are, in essence, single-premium annuities
  - The life insurance proceeds are used as the single premium to purchase a particular income stream described in the policy

# When Do Benefits Begin?

- Benefits can begin as soon as the annuity is purchased
  - And continue at specified intervals thereafter
    - Called an immediate annuity
- Deferred annuity
  - Benefits are deferred until some future time
  - The particular time when benefits are to begin may or may not be specified ahead of time
    - If such a time is designated, changes usually can be made if desired

## **Annuity Certain**

- An annuity that is payable for a specified period of time
  - Without regard to the life or death of the annuitant
- For example, benefits might be payable for exactly ten years
  - If the annuitant dies before all payments have been made
    - The remaining benefits continue to be paid to either the annuitant's heirs or a secondary person named in the annuity contract
    - An annuity certain has no survivorship benefit
      - Payments consists entirely of interest earnings and liquidation of principal

### Straight Life Annuity

- Pays benefits only during the lifetime of the annuitant
- If the annuitant dies the day after purchasing the annuity
  - There is no obligation for the insurer to return any of the purchase price
  - Rather, the money is used to provide the survivorship element of the payments made to those persons still living and collecting benefits
- The older an annuitant is when benefits begin under a straight life annuity
  - The greater is the size of each periodic payment
  - Older persons can be expected to die before collecting as many annuity payments as their younger counterparts

### Temporary Life Annuity

Rarely used

- Pays benefits until the expiration of a specified period of years or until the annuitant dies
  - Whichever comes first
- A temporary life annuity can be considered the opposite of a period-certain life annuity

#### Is the Contract Fixed or Variable?

- Fixed annuity
  - An annuity that has a benefit expressed in terms of a stated dollar amount based on a guaranteed rate of return
  - In practice, the actual benefit paid under a fixed annuity may vary over time
    - If interest earnings, expenses, and/or mortality experience are better than what was assumed in computing the annuity premium
- Market value-adjusted annuity
  - Sometimes referred to as the modified guaranteed annuity
  - Can be used with fixed deferred annuities to provide relatively higher minimal interest rate guarantees during the first several years after a contract is issued but before benefits begin

#### Is the Contract Fixed or Variable?

- Variable annuity
  - Benefit associated with a variable annuity is expressed in terms of annuity units
  - The value of each annuity unit fluctuates with the performance of a specified portfolio of investments
    - This causes the annuity income to fluctuate as well
  - General objective is to provide the annuitant with an income that fluctuates in dollar value
    - But remains reasonably constant in terms of purchasing power
    - To be successful, the investment portfolio underlying the variable annuity must increase in value when general price levels increase
      - In past years, variable annuities were invested almost exclusively in common stocks; however, today many different investment choices are available

### **Taxation of Annuity Benefits**

- In determining the income tax payable on annuity benefits
  - It would be unfair to tax the entire amount of benefits paid
    - Because each payment consist partly of a return of an individual's principal
- The general approach currently required is to exclude a portion of each annuity payment from federal income taxes

- Until the sum of all of the excluded amounts equals exactly the original purchase price of the annuity
  - After that time, the entire amount of each annuity payment becomes fully taxable

## **Taxation of Annuity Benefits**

- The amount of each benefit that can be excluded from taxes is computed according to rules specified by the IRS
  - Publishes tables for use in computing the probable number of years that a person can be expected to live and thus continue to receive annuity benefits
- Exclusion ratio
  - Fraction of each payment that can be excluded from income taxation

## Tax Issues Before Benefits Begin

- In recognition of their role as longer-term savings vehicles
  - Annuities usually do not produce taxable income for their owners until income benefits begin
- Some annuities are participating and may pay dividends to their owners
  - If the owner of a deferred annuity receives a dividend before benefits begin
    - The dividend is considered to be a return of premium and is not subject to income taxation
  - If the dividend is received after annuity benefits begin
    - Dividends serve to increase the size of the periodic benefit and are taxed accordingly
- One situation that may result in taxable income for an annuitant before benefits become payable
  - If the owner of a deferred annuity makes a partial withdrawal of funds
    - The withdrawal is treated as taxable income to the extent that the annuity value exceeds the total premiums paid
  - This rule was enacted to reduce the possibility that annuities might be used as short-term, temporary tax shelters
- The tax law also says for withdrawals that occur before age 59.5 a penalty tax of 10% may be added to the regular income tax payable on the withdrawal
- Withdrawals associated with some circumstances are exempt from the additional penalty tax
  - Such as death, disability, etc.
- The exemptions are few enough to cause many potential buyers of deferred annuities to think twice before committing the funds to such contracts at young ages
  - Unless an individual seriously intends to use the funds accumulating in a deferred annuity to help provide income during retirement
    - Alternative savings vehicles may be the better choice

## **Chapter 20 Individual Health Insurance Coverages**

## **Topics**

- Health Care Problems in the US/Rwanda
- Individual Health Insurance Coverages
- Hospital-Surgical Insurance
- Major Medical Insurance
- Health Savings Accounts
- Long-term Care Insurance
- Disability-Income Insurance
- Individual Medical Expense Contractual Provisions
- Shopping for Health Insurance

## Health Care Problems

- Problem 1: Rising Health Care Expenditures
  - Health care expenditures in the US have increased substantially over time and are outstripping the growth in the economy
  - Group health insurance premiums are rising faster than the rate of inflation
  - Factors affecting health care costs include:
    - Rising outpatient and inpatient costs
    - Rising cost of prescription drugs
    - Rising cost of physician services
- Problem 2: Many people do not have health insurance coverage
  - Groups with large number of uninsured include:
    - Foreign born
    - Hispanics, Blacks, and Asians
    - Young adults
    - Low income households
  - Many people are uninsured because the coverage is not affordable
  - Some people are denied coverage, or do not believe health insurance is needed
  - Many low income people who are eligible for Medicaid are not aware they are eligible
- Problem 3: Uneven Quality of Medical Care
  - The quality of medical care varies widely
  - There is a "quality gap" in the US; many people do not receive the most effective care
  - Many doctors are not following the recommended guidelines in treating common ailments
- Problem 4: Waste and Inefficiency
  - The administrative costs of delivering health insurance benefits are excessively high

### Individual Health Insurance Coverages

- Individual medical expense plans are purchased by:
  - People who are not employed
  - Retired workers
  - College students
- Common forms of individual coverage include:
  - Hospital-surgical insurance
  - Major medical insurance
  - Health savings accounts
  - Long-term care insurance
  - Disability-income insurance

## Hospital-Surgical Insurance

- <u>Hospital-surgical insurance</u> plans cover routine medical expenses
  - Not designed to cover catastrophic losses
  - Maximum benefits per illness and lifetime aggregate limits are low
  - Most policies cover:
    - Hospital inpatient expenses
    - Miscellaneous hospital expenses, e.g., x-rays
    - Surgical expenses, covered two ways:
      - A scheduled approach, with a maximum per procedure
      - On the basis of <u>reasonable and customary charges</u>
    - Outpatient services, e.g., emergency treatment
    - Physicians' visits for nonsurgical treatment
  - These plans are not widely used

#### Major Medical Insurance

- <u>Major medical insurance</u> is designed to pay a high proportion of the covered expenses of a catastrophic illness or injury
- Plans are characterized by:
  - Broad coverage of reasonable medical expenses
  - High maximum limits
  - A <u>benefit period</u>, or length of time for which benefits are paid after a deductible is satisfied
  - A deductible (typically calendar year)
    - A <u>calendar-year deductible</u> is an aggregate deductible that has to be satisfied only once during the calendar year
    - A <u>family deductible</u> specifies that medical expenses for all family members are accumulated to satisfy the deductible
    - Under a <u>common-accident provision</u>, only one deductible has to be satisfied if two or more family members are injured in a common accident
  - A <u>coinsurance provision</u> requires the insured to pay a certain percentage (typically 20-25 %) of eligible medical expenses in excess of the deductible
    - Purpose is to reduce premiums and prevent overutilization of policy benefits
  - The insured's total out-of-pocket spending is limited by a <u>stop-loss</u> <u>limit</u>, after which the insurer pays 100% of eligible expenses

- Common exclusions include cosmetic surgery and expenses covered by workers compensation
- Plans may have <u>internal limits</u> for some types of expenses
- Some plans have incorporated elements of managed care

## **Health Savings Accounts**

- A <u>health savings account</u> (HSA) is a tax exempt account established exclusively for the purpose of paying qualified medical expenses
  - The beneficiary must be covered under a high-deductible health plan to cover catastrophic medical bills
  - The account holder can withdraw money from the HSA tax-free for medical costs
  - Contributions and annual out-of-pocket expenses are subject to maximum limits
  - An HSA investment account in a qualified plan received favorable tax treatment
    - Participants pay premiums with before-tax dollars
    - Investment earnings accumulate tax-free
  - Proponents argue that HSAs can help keep health care costs down because consumers will be more sensitive to costs, will avoid unnecessary services, and will shop around
  - Critics argue that HSAs will encourage insureds to forego preventative care

# Long Term Care Insurance

- In a qualified plan, a <u>benefit trigger</u> must be met to receive benefits.
   Either,
  - The insured is unable to perform a certain number of <u>activities</u> of daily living (ADLs), or
  - The insured needs substantial supervision to be protected against threats to health and safety because of a severe cognitive impairment
- Since inflation can erode the real purchasing power of the daily benefit, some plans offer automatic benefit increases
- Policies are guaranteed renewable
- Coverage is expensive
- Most insurers offer optional nonforfeiture benefits, which provide benefits if the insured lapses the policy
  - Under a return of premium benefit, the policyholder receives a cash payment
  - Under a shortened benefit period option, coverage continues but the benefit period or maximum dollar amount is reduced
- Long-term insurance that meets certain requirements receives favorable income tax treatment
  - Premiums are deductible under certain conditions
  - Per diem benefits are subject to daily limits

## Disability-Income Insurance

- The financial impact of total disability on present savings, assets, and ability to earn an income can be devastating
- <u>Disability-income insurance</u> provides income payments when the insured is unable to work because of sickness or injury
  - Income payments are typically limited to 60-80% of gross earnings
- The four most common definitions of total disability are:
  - Inability to perform all duties of the insured's occupation
  - Inability to perform the duties of any occupation for which the insured is reasonably fitted by education, training, and experience
  - Inability to perform the duties of any gainful occupation
  - Loss-of-income test, i.e., your income is reduced as a result of sickness or accident
  - Most insurers use a combination of 1 & 2
  - Partial disability is defined as the inability of the insured to perform one or more important duties of his or her occupation
  - Some policies offer partial disability benefits
    - Usually, partial disability benefits must follow total disability
    - The partial disability benefits are paid at a reduced rate for a shorter period
  - Residual disability means a pro rata disability benefit is paid to an insured whose earned income is reduced because of an accident or sickness
    - The typical provision has a time and duties test that considers both income and occupation
  - The benefit period is the length of time that disability payments are payable after the elimination period is met
    - Most disabilities have durations of less than two years
  - Individual policies normally contain an elimination period, during which time benefits are not paid
    - The typical elimination period is 30 days
  - A waiver-of-premium provision allows for future premiums to be waived as long as the insured remains disabled
  - Policies typically include a rehabilitation provision

### Individual Medical Expense Contractual Provisions

- Some common contractual provisions address the renewability of the policy
  - Under an <u>optionally renewable policy</u>, the insurer has the right to terminate a policy on any anniversary date
  - A "<u>nonrenewable for stated reasons only</u>" provision allows the insurer to terminate coverage only for certain reasons
  - A guaranteed renewable policy is one in which the insurer guarantees to renew the policy to some stated age
    - Premiums can be increased for the underwriting class
  - Under a <u>noncancellable policy</u>, the insurer guarantees renewal of the policy to some stated age
    - Premiums cannot be increased during that period
- To control adverse selection, individual policies usually contain some type of preexisting-conditions clause

- The clause limits coverage for a physical or mental condition for which the insured received treatment prior to the effective date of the policy
- Some states limit these exclusion periods, e.g., for 12 months
- Some contractual provisions address claims:
  - Under a notice of claims provision, the insured must give written notice to the insurer within 20 days after a covered loss occurs
  - Under a claim forms provision, the insurer is required to send the insured a claim form within 15 days
  - Under the proof-of-loss provision, the insured must send written proof of loss to the insurer within 90 days
- The grace period is a 31-day period after the premium due date to pay an overdue premium
- The <u>reinstatement provision</u> permits the insured to reinstate a lapsed policy, subject to payment of premiums and a 10-day waiting period for sickness
- The <u>time limit on certain defenses</u> states that after the policy has been in force for two years, the insurer cannot void the policy or deny a claim on the basis of misstatements in the application, except for fraudulent misstatements

## Guidelines for Health Insurance Shoppers



## **Chapter 21 Employee Benefits: Group Life and Health Insurance**

## **Topics**

- Group Insurance
- Group Life Insurance Plans
- Group Medical Expense Insurance
- Traditional Indemnity Plans
- Managed Care Plans
- Consumer-driven Health Plans
- Group Medical Expense Contractual Provisions
- Group Dental Insurance
- Group Disability Income Insurance
- Cafeteria Plans

## Group Insurance

- Group insurance differs from individual insurance in several ways:
  - Many people are covered under one contract
  - Coverage costs less than comparable insurance purchased individually
  - Individual evidence of insurability is usually not required
  - Experience rating is used
- Group insurers observe certain underwriting principles:
  - The group should not be formed for the sole purpose of obtaining insurance
  - There should be a flow of persons through the group
  - Benefits should be automatically determined by a formula
  - A minimum percentage of employees must participate
  - Individual members should not pay the entire cost
  - The plan should be easy to administer
- Eligibility for group status depends on company policy and state law
  - Usually a minimum size is required
- Employees must meet certain participation requirements:
  - Be a full time employee
  - Satisfy a probationary period
  - Apply for coverage during the eligibility period
    - During the <u>eligibility period</u>, the employee can sign up for coverage without furnishing evidence of insurability
  - Be actively at work when the coverage begins

# Group Life Insurance Plans

- The most important form of group insurance is group term life insurance
  - Provides low-cost protection to employees
  - Coverage is yearly renewable term
  - Amount of coverage is typically 1-5 times the employee's annual salary
  - Coverage usually ends when the employee leaves the company
    - Can convert to an individual cash value policy

- Many group life insurance plans also provide group accidental death and dismemberment (AD&D) insurance
  - Pays additional benefits if the employee dies in an accident or incurs certain types of bodily injuries
  - Some plans offer voluntary accidental death and dismemberment insurance
    - Employees pay the full cost
- Some employers make available group universal life insurance for their employees

### Group Medical Expense Insurance

- <u>Group medical expense insurance</u> pays the cost of hospital care, physicians' and surgeons' fees, and related medical expenses
  - Insurance is available through:
    - Commercial insurers
    - Blue Cross and Blue Shield Plans
    - Managed Care organizations
    - Self-insured plans by employers
- Commercial life & health insurers sell medical expense coverage and also sponsor managed care plans
- Blue Cross and Blue Shield plans sell individual, family and group coverages
  - Blue Cross plans cover hospital expenses
  - Blue Shield plans cover physicians' and surgeons' fees
  - Major medical is also available
  - In most states, plans operate as non-profit organizations
    - Some have converted to a for-profit status to raise capital
  - Managed care plans offer medical expense benefits in a cost effective manner
  - Plans emphasize cost control and services are monitored
  - Most organizations are for-profit
  - A managed care organization typically sponsors a <u>health maintenance</u> organization (HMO)
    - Comprehensive services are provided for a fixed, prepaid fee

## Group Medical Expense Insurance

- A large percentage of employers self-insure the health insurance benefits provided to their employees
  - Self insurance means the employer pays part or all of the cost of providing health insurance to the employees
  - Plans are usually established with stop-loss insurance
    - A commercial insurer will pay claims that exceed a certain limit
  - Some employers have an <u>administrative services only</u> (ASO) contract with a commercial insurer
    - The commercial insurer only provides administrative services, such as claim processing and record keeping
  - Self-insured plans are exempt from state laws that require insured plans to offer certain state-mandated benefits

### **Traditional Indemnity Plans**

- Under a traditional indemnity plan:
  - Physicians are paid a fee for each covered service
  - Insureds have freedom in selecting their own physician
  - Plans pay indemnity benefits for covered services up to certain limits
  - Cost-containment has not been heavily stressed
- These plans have declined in importance over time
- Some plans have implemented cost-containment provisions
- Common types include basic medical expense insurance and major medical insurance
- <u>Basic medical expense insurance</u> is a generic name for group plans that provide only basic benefits
  - Covers routine medical expenses
  - Not designed to cover a catastrophic loss
  - Coverage includes:
    - Hospital expense insurance
      - Plans pay room and board or service benefits
    - Surgical expense insurance
      - Newer plans typically pay <u>reasonable and customary</u> <u>charges</u>
    - Physicians' visits other than for surgery
    - Miscellaneous benefits, such as diagnostic x-rays
- <u>Major medical insurance</u> is designed to pay a high proportion of the covered expenses of a catastrophic illness or injury
  - Can be written as a supplement to a basic medical expense plan, or combined with a basic plan to form comprehensive coverage
  - Supplemental major medical insurance is designed to supplement the benefits provided by a basic plan and typically has:
    - High lifetime limits
    - A coinsurance provision, with a stop-loss limit
    - A <u>corridor deductible</u>, which applies only to eligible medical expenses not covered by the basic plan
  - Comprehensive major medical insurance is a combination of basic benefits and major medical insurance in one policy, and typically has:
    - High lifetime limits
    - A coinsurance provision
    - A calendar-year deductible
    - A plan may contain a family deductible provision

### Managed Care Plans

- <u>Managed care</u> is a generic name for medical expense plans that provide covered services to the members in a cost-effective manner
  - An employee's choice of physicians and hospitals may be limited
  - Cost control and cost reduction are heavily emphasized
  - Utilization review is done at all levels
  - The quality of care provided by physicians is monitored

- Health care providers share in the financial results through risk-sharing techniques
- Preventive care and healthy lifestyles are emphasized A <u>preferred</u> <u>provider organization</u> (PPO) is a plan that contracts with health care providers to provide medical services to members at reduced fees
- PPO providers typically do not provide care on a prepaid basis, but are paid on a fee-for-service basis
- Patients are not required to use a preferred provider, but the deductible and co-payments are lower if they do
- Most PPOs do not use a gatekeeper physician, and employees do not have to get permission from a primary care physician to see a specialist
- A <u>health maintenance organization</u> (HMO) is an organized system of health care that provides comprehensive services to its members for a fixed, prepaid fee
  - Basic characteristics include:
    - The HMO enters into agreements with hospitals and physicians to provide medical services
    - The HMO has general managerial control over the various services provided
    - Most services are covered in full, with few maximum limits
    - Choice of providers is limited
    - A gatekeeper physician controls access to specialty care
    - Providers may receive a <u>capitation fee</u>, which is a fixed annual payment for each plan member regardless of the frequency or type of service provided
- A <u>point-of-service plan</u> (POS) is typically structured as an HMO, but members are allowed to go outside the network for medical care
  - If patients see providers who are in the network, they pay little or nothing out of pocket
  - Deductibles and co-payments are higher if patients see providers outside the network
- Managed care plans generally have lower hospital and surgical utilization rates than traditional indemnity plans
  - Emphasis on cost control has reduced the rate of increase in health benefit costs for employers
- Managed care plans are criticized for:
  - Reducing the quality of care, because there is heavy emphasis on cost control
  - Delaying care, because gatekeepers do not promptly refer patients to specialists
  - Restricting physicians' freedom to treat patients, thus compromising the doctor-patient relationship
- Current developments include:
  - Declining enrollments in HMOs, while enrollments in PPOs continue to increase
  - Increased cost sharing, through higher premiums, deductibles, coinsurance, and co-payments

#### Group Dental Insurance

- Group dental insurance helps pay the cost of normal dental care
  - Also covers damage to teeth from an accident
  - Covers x-rays, cleaning, fillings, extractions, etc.
  - Some plans cover orthodontia
  - Encourages insureds to see their dentists on a regular basis
  - Coinsurance requirements vary depending on the type of service provided
  - Maximum limits on benefits and waiting periods for certain types of services are used to control costs
  - A predetermination-of-benefits provision informs the employee of the amount that the insurer will pay for a service before the service is performed

### Group Disability-Income Insurance

- <u>Group disability-income insurance</u> pays weekly or monthly cash payments to employees who are disabled from accidents or illness
- Under a short-term plan, benefit payments range from 13 weeks to two years
  - Most cover only <u>nonoccupational disability</u>, which means that an accident or illness must occur off the job
  - Employee must be totally disabled to qualify
- Under a long-term plan, the benefit period ranges from 2 years to age 65
  - For the first two years, you are considered disabled if you are unable to perform all of the duties of your own occupation. After two years, you are still considered disabled if you are unable to work in any occupation for which you are reasonably fitted by education, training, and experience
  - Plans typically cover occupational and nonoccupational disability
  - If the disabled worker is receiving Social Security or other disability benefits, the payments are reduced to discourage malingering

#### Cafeteria Plans

- A <u>cafeteria plan</u> allows employees to select those benefits that best meet their specific needs
  - In many plans, the employer gives each employee a certain number of dollars or credits to spend on benefits, or take as cash
  - Many plans allow employees to make their premium contributions with before-tax dollars
  - Many plans include a <u>flexible spending account</u> which is an arrangement that permits employees to pay for certain unreimbursed medical expenses with before-tax dollars

## **Chapter 22 Retirement Plans - Employee Benefits**

### <u>Topics</u>

- Fundamentals of Private Retirement Plans
- Defined-Benefit Plans
- Defined-Contribution Plans
- Profit-sharing Plans
- Keogh Plans for the Self-Employed
- Simplified Employee Pension
- Simple Retirement Plans
- Funding Agency and Funding Instruments
- Problems and Issues in Tax-deferred Retirement Plans

#### **Fundamentals of Private Retirement Plans**

- Private retirement plans have an enormous social and economic impact
  - The Employee Retirement Income Security Act of 1974 (ERISA) established minimum standards
  - The <u>Pension Protection Act of 2006</u> increases the funding obligation of employers
  - Employers' contributions are deductible, to certain limits
  - Investment earnings on the plan assets accumulate on a tax-deferred basis
  - Private plans that meet certain requirements are called <u>qualified plans</u> and receive favorable income tax treatment
- A qualified plan must benefit workers in general and not only <u>highly</u> compensated employees
- Certain minimum coverage requirements must be satisfied
  - Under the <u>ratio-percentage test</u>, the percentage of non-highly compensated employees covered under the plan must be at least 70% of the percentage of highly compensated employees who are covered
  - Under the <u>average benefits test</u>, the average benefit for non-highly compensated employees must be at least 70% of the average benefit provided to all highly compensated employees

#### **Fundamentals of Private Retirement Plans**

- Most plans have a minimum age and service requirement that must be met
  - All eligible employees who have attained age 21 and have completed one year of service must be allowed to participate in the plan
  - Normal retirement age is the age that a worker can retire and receive a full, unreduced pension benefit (usually 65 years)
  - An <u>early retirement age</u> is the earliest age that workers can retire and receive a retirement benefit
  - The <u>deferred retirement age</u> is any age beyond the normal retirement age

- Vesting refers to the employee's right to the employer's contributions or benefits attributable to the contributions if employment terminates prior to retirement
- A qualified defined-benefit plan must meet a minimum vesting standard
  - Under <u>cliff vesting</u>, the worker must be 100% vested after 5 years of service
  - Under graded vesting, the worker must be 20% vested by the 3<sup>rd</sup> year of service, and the minimum vesting increases another 20% for each year until the worker is 100% vested at year 7
- Faster vesting is required for qualified defined-contribution plans to encourage greater employee participation
  - Employer contributions must be 100% vested after 3 years
  - The worker must be 20% vested by the 2<sup>rd</sup> year of service, and the minimum vesting increases another 20% for each year until the worker is 100% vested at year 6
- Funds withdrawn from a qualified plan before age 59½ are subject to a 10% early distribution penalty
  - There are some exceptions to this rule, for example if the distribution is made because the employee has a qualifying disability
- Pension contributions cannot remain in the plan indefinitely
  - Distributions must start no later than April 1<sup>st</sup> of the calendar year following the year in which the individual attains age 70½
  - This rule does not apply to certain IRAs
- Many qualified private pension plans are integrated with Social Security
  - Integration provides a method for increasing pension benefits for highly compensated employees without increasing the cost of providing benefits to lower-paid employees
  - Employers must follow complex integration rules, such as the <u>excess</u> method.

#### **Fundamentals of Private Retirement Plans**

- A <u>top-heavy plan</u> is a retirement plan in which more than 60% of the plan assets are in accounts attributed to key employees
  - To retain its qualified status, a special rapid vesting schedule must be used for nonkey employees
  - Certain minimum benefits or contributions must be provided for nonkey employees

## **Types of Qualified Retirement Plans**

- A wide variety of qualified plans are available today to meet the specific needs of employers
- The two basic types of plans are
  - Defined-benefit plans
  - Defined-contribution plans
- Different rules apply to each type of plan

#### **Defined-Benefit Plans**

- In a <u>defined-benefit plan</u>, the retirement benefit is known, but the contributions will vary depending on the amount needed to fund the desired benefit
  - The amount can be based on <u>career-average earnings</u> or on a <u>final average pay</u>, which generally is an average of the last 3-5 years earnings
  - A firm may give an employee past-service credits for prior service
- Retirement benefits in defined-benefit plans are based on formulas
  - Under a <u>unit-benefit formula</u>, both earnings and years of service are considered
  - Some plans pay a <u>flat percentage</u> of annual earnings, while some pay a <u>flat amount</u> for each year of service
  - Some plans pay a flat amount for each employee, regardless of earnings or years of service
- The <u>Pension Benefit Guaranty Corporation</u> (PBGC) is a federal corporation that guarantees the payment of vested benefits to certain limits if a private pension plan is terminated
  - For plans terminated in 2012, the maximum guaranteed pension at age 65 is \$4653.41 per month
- Many traditional defined benefits plans are substantially underfunded at the present time
- A <u>cash-balance plan</u> 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, participant's accounts are credited with a <u>pay credit</u> and an interest credit
  - The employer bears the investment risks and realizes any investment gains
  - Many employers have converted traditional defined-benefit plans into cash-balance plans to hold down pension costs

#### **Defined-Contribution Plans**

- In a <u>defined-contribution plan</u>, the contribution rate is fixed but the actual retirement benefit is variable
  - For example, a <u>money purchase plan</u> is an arrangement in which each participant has an individual account, and the employer's contribution is a fixed percentage of the participant's compensation

#### **Defined-Contribution Plans**

- Most newly installed qualified retirement plans are defined-contribution plans
  - Cost to employer is lower because they do not grant past-service credits
- Disadvantages to the employee include:
  - Employees can only estimate their retirement benefits
  - Investment losses are borne by the employee
  - Some employees do not understand the factors to consider in choosing investments

## **Profit-Sharing Plans**

- A <u>profit-sharing plan</u> is a defined-contribution plan in which the employer's contributions are typically based on the firm's profits
  - There is no requirement that the employer must actually earn a profit to contribute to the plan
  - Funds are distributed to the employees at retirement, death, disability, or termination of employment (only the vested portion), or after a fixed number of years
  - For 2012, the maximum employer tax-deductible contribution is limited to 25% of the employee's compensation or \$50,000, whichever is less
  - There is a 10% tax penalty for early withdrawal

### **Keogh Plans for the Self-Employed**

- Retirement plans for the owners of unincorporated business firms are commonly called <u>Keogh plans</u>
  - Contributions to the plan are income-tax deductible, up to certain limits
  - Investment income accumulates on a tax-deferred basis
  - Amounts deposited and investment earnings are not taxed until the funds are distributed
- A <u>simplified employee pension</u> (SEP) is a retirement plan in which the employer contributes to an IRA established for each eligible employee
  - Annual contribution limits are substantially higher
  - One type, called a <u>SEP-IRA</u>, must cover all workers who are at least age 21 and have worked for at least three of the past five years
  - There is full and immediate vesting of all employer contributions under the plan
  - Employees cannot contribute to the plan

#### **SIMPLE Retirement Plans**

- A <u>Savings Incentive Match Plan for Employees (SIMPLE)</u> plan is limited to employers that employ 100 or fewer employees and do not maintain another qualified plan
  - Smaller employers are exempt from most nondiscrimination and administrative rules that apply to qualified plans
  - Can be structured as an IRA or 401(k) plan
  - For 2012, eligible employees can elect to contribute up to 100% of compensation up to a maximum of \$11,500
  - Employers can contribute in one of two ways: through a matching option or a nonelective contribution option

## **Funding Agency and Funding Instruments**

- A <u>funding agency</u> is a financial institution that provides for the accumulation or administration of the funds that will be used to pay pension benefits
  - A <u>trust-fund plan</u> is administered by a commercial bank or individual trustee
  - An insured plan is administered by a life insurer

- A <u>split-funded plan</u> is administered by both
- A <u>funding instrument</u> is a trust agreement or insurance contract that states the terms under which the funding agency will accumulate, administer, and disburse the pension funds
- Under a <u>trust-fund plan</u>, all contributions are deposited with a trustee, who invests the funds according to the trust agreement
  - The trustee does not guarantee the adequacy of the fund, the principal itself, or interest rates
- A <u>separate investment account</u> is a group pension product with a life insurance company
  - The plan administrator can invest in one or more of the separate accounts offered by the insurer
  - Pension contributions can be invested in stock funds, bond funds, or similar investments
- 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
  - They are sometimes used to fund the fixed-income option in a definedcontribution retirement plan
  - Most GICs make annuity options available at retirement

#### Problems and Issues in Tax-deferred Retirement Plans

- Several serious problems exist among current tax-deferred retirement plans
  - Inadequate 401(k) account balances
  - Incomplete coverage of the labor force
  - Lower benefits for women
  - Limited protection against inflation
  - Workers spending lump-sum pension distributions
  - Investment mistakes by participants that jeopardize economic security

#### **Chapter 23 Social Insurance**

### **Topics**

- Social Insurance Basics
- Old-Age, Survivors, and Disability Insurance (OASDI)
- Medicare
- Unemployment Insurance
- Workers Compensation

#### Reasons for Social Insurance

- Social insurance programs are necessary for several reasons:
  - To help solve complex social problems
  - To provide coverage for perils that are difficult to insure privately
  - To provide a base of economic security to the population

#### Basic Characteristics of Social Insurance

- Social insurance programs have certain characteristics that distinguish them from other government insurance programs:
  - Most programs are compulsory
    - This makes it easier to provide a floor of income to the population
    - It also reduces adverse selection
  - Programs are designed to provide a floor of income
  - Programs pay benefits based largely on social adequacy rather than individual equity
    - The benefits are heavily weighted in favor of certain groups, such as low-income persons, large families, and retirees
  - Benefits are loosely related to the workers' earnings
  - Programs, benefits, and benefit formulas are prescribed by law
  - A formal means test is not required
    - A means test involves disclosing income and assets
  - Full funding of benefits is unnecessary
    - For example, it is not necessary to fully fund Social Security because workers will always enter the program and support it
  - Programs are designed to be financially self-supporting
    - Programs should be almost completely financed from the earmarked contributions of covered employees

Old-Age, Survivors, and Disability Insurance (OASDI)

- Commonly known as <u>Social Security</u>, OASDI is the most important social insurance program in the US
  - Enacted in 1935, it covers more than 9 out of 10 workers
- Groups covered under the Social Security Program include:
  - Employees in private firms
  - Federal civilian employees
  - State and local government employees
  - Employees of nonprofit organizations
  - Self-employed persons who earn \$400/year or more
  - Domestic employees in private homes who earn \$1500/year or more (in 2006)
  - Miscellaneous other groups, including ministers, US military personnel, and railroad workers
- A worker becomes eligible for benefits by attaining an insured status:
  - To attain a fully insured status, a worker must have 40 credits
    - In 2006, a credit is earned for each \$970 of covered earnings
    - A maximum of 4 credits can be earned each year
  - You are currently insured if you have earned at least 6 credits in the past 13 calendar quarters
  - The number of credits required to be disability insured depends on the age when you become disabled
  - Eligibility for certain benefits depends on insured status:
    - Fully insured: retirement and survivor benefits
    - Currently insured: survivor benefits
    - Disability insured: disability benefits

OASDI: Retirement Benefits

- Social security retirement benefits are an important source of income for most retired workers
  - Full retirement age for unreduced benefits is age 65, but will gradually increase to 67
  - Workers and their spouses can retire at age 62 with actuarially reduced benefits
    - More than half of the OASDI beneficiaries apply for retirement benefits before the full retirement age
  - Monthly retirement benefits can be paid to retired workers and their dependents

OASDI: Survivor Benefits

- Survivor benefits can be paid to the dependents of a deceased worker who is either fully or currently insured
  - The benefits provide a substantial amount of financial protection to families
    - For the average family, the benefits are equal to a \$354,000 life insurance policy
- Survivor benefits can be paid to the dependents of a deceased worker who is either fully or currently insured
  - The benefits provide a substantial amount of financial protection to families

• For the average family, the benefits are equal to a \$354,000 life insurance policy

## OASDI: Disability Benefits

- Disability benefits can be paid to disabled workers who meet certain eligibility requirements
  - The benefits provide protection against the loss of income during a long-term disability
    - For the average family, disability payments are equivalent to a private disability insurance policy worth over \$233,000
  - The worker must meet a five-month waiting period, and satisfy the definition of disability
    - The worker must have a physical or mental condition that prevents him or her from doing any substantial gainful activity and is expected to last at least 12 months or is expected to result in death

# Long-range OASDI Actuarial Deficit

- The present program is running an annual surplus, but the OASDI trust funds will experience serious financial problems in the future
  - Projected OASDI tax income will begin to fall short of outlays in 2017
  - The program can be actuarially balanced over the next 75 years in various ways, including:
    - An immediate increase of 16% in payroll tax revenues
    - An immediate reduction in benefits of 13%
    - Using general revenues of the federal government to pay benefits
    - Or, some combination of these options
  - One proposal would create <u>voluntary personal retirement accounts</u>, allowing workers to divert two full percentage points from the OASDI payroll tax into voluntary personal retirement accounts

#### Medicare

- Medicare covers the medical expenses of most persons age 65 and older
- The program also includes prescription drug plans and health care plans of private insurers
- Beneficiaries can select among an array of plans including:
  - The original Medicare plan
  - Medicare Advantage plans
  - Other Medicare health plans
  - Medicare prescription drug plans
- Under the original Medicare plan:
  - Beneficiaries can elect any provider that accepts Medicare patients
  - Medicare pays its share of the bill, and the beneficiary pays the balance
- The original program provides benefits in two parts:
  - Hospital Insurance (Part A) provides coverage for inpatient hospital stays and other services including skilled nursing facility care, home health care, hospice care, and blood transfusions
    - Hospitals are reimbursed for inpatient services under a prospective payment system

- A flat amount is paid for each service based on its diagnosis-related group (DRG)
- Medical Insurance (Part B) is a voluntary program that covers physicians' fees and related medical services
  - Covered services include physician services, clinical laboratory services, home health care, outpatient hospital services, and blood
  - Beneficiaries must pay a monthly premium for the benefits
    - Currently beneficiaries with annual incomes under certain levels pay 25% of the cost of the program, and the federal government pays the rest
    - A means test will be applied beginning in 2007
  - The beneficiary must meet an annual Part B deductible
  - The program pays 80% of the Medicare-approved amount for most physician services, outpatient therapy, preventive services and durable medical equipment
  - Payments to physicians are made on an assigned or nonassigned basis
- Medicare beneficiaries have other choices for coverage besides the Advantage Plans
  - Under a Medicare Cost plan, members receive care from primary care doctors and hospitals that are part of the network
    - Services obtained outside the network are covered under the original Medicare plan, but members must pay the Part A and Part B coinsurance and deductibles
  - A PACE program combines medical, social, and long-term care services for the frail elderly

## **Unemployment Insurance**

- The federal and state governments provide unemployment insurance
  - Programs pay weekly cash benefits to workers who are involuntarily unemployed
  - Cash benefits are paid during periods of <u>short-term involuntary</u> unemployment
  - Applicants are encouraged through local employment offices to seek employment
  - Unemployment benefits help stabilize the economy during recessionary periods
- Most private firms, state and local governments, and nonprofit organizations are covered for unemployment benefits
  - Private firms are subject to the federal unemployment tax
- To be eligible, an unemployed worker must:
  - Have qualifying wages and employment during the base year
  - Be able and available for work
  - Be actively seeking work
  - Be free from disqualification
  - Serve a one-week waiting period
- Benefits paid depend on the worker's past wages, within certain limits

- Most states use a formula and pay a fraction of the worker's high quarter wages
- The maximum duration of regular benefits is limited to 26 weeks in most states
  - Under the <u>extended-benefits program</u>, an additional 13 weeks of benefits is paid during periods of high unemployment
- Programs are financed largely by payroll taxes paid by employers on the covered wages of employees
  - For 2006, covered employers paid a federal payroll tax of 6.2% on the first \$7000 of annual wages
  - Experience rating is also used, by which firms with favorable employment records pay reduced tax rates
- State unemployment insurance programs face numerous problems:
  - Only a small proportion of the total unemployed receive benefits
    - Reasons include tighter eligibility requirements
  - Many states have low trust fund balances for paying benefits
  - A high percentage of claimants exhaust their benefits during business recessions

#### **Workers Compensation**

- Workers compensation is a social insurance program that provides medical care, cash benefits, and rehabilitation services to workers who are disabled from job-related accidents or disease
- Under the common law of industrial accidents (1837), workers injured on the job had to sue their employers and prove negligence before they could collect damages
  - Under the <u>contributory negligence doctrine</u>, injured workers could not collect damages if they contributed in any way to the injury
  - Under the <u>fellow-servant doctrine</u>, the injured worker could not collect damages if the injury resulted from the negligence of a fellow worker
  - Under the <u>assumption-of-risk doctrine</u>, the injured worker could not collect if he or she had advanced knowledge of the dangers of the occupation
- Objectives of state workers compensation laws include:
  - To provide broad coverage of employees for job-related accidents and disease
  - To provide substantial protection against the loss of income
  - To provide sufficient medical care and rehabilitation services to injured workers
  - To encourage firms to reduce job-related accidents
  - To reduce litigation
- Workers compensation laws provide four benefits:
  - Medical care generally is covered in full with no limitations
  - Disability-income benefits can be paid after the disabled worker satisfies a waiting period
  - Death benefits can be paid to eligible survivors if the worker dies as a result of a job-related accident or disease
  - All states provide rehabilitation services to restore disabled workers to productive employment
- State workers compensation programs face numerous problems:

- Insurers face the continued risk of terrorist attacks
- Claim costs continue to increase due to the rising cost of medical care
- Attorney involvement in workers compensation claims increases claims costs by 12-15 percent
  - Court decisions have eroded the <u>exclusive remedy doctrine</u>, which states that workers compensation benefits should be the sole and exclusive remedy for injured workers

# **Chapter 24 Types of Insurers and Marketing Systems**

#### **Topics**

- Overview of Private Insurance in the Financial Services Industry
- Types of Private Insurers
- Agents and Brokers
- Types of Marketing Systems
- Group Insurance Marketing

#### **Overview of Private Insurance in the Financial Services Industry**

- The financial services industry consists of:
  - Commercial banks
  - Savings and loan institutions
  - Credit unions
  - Life and health insurers
  - Property and casualty insurers
  - Mutual Funds
  - Securities brokers and dealers
  - Private and state pension funds
  - Government-related financial institutions
- Changes in the financial services industry include:
  - Consolidation means that the number of firms has declined due to mergers and acquisitions
  - Convergence means that financial institutions now sell a wide variety of financial products that earlier were outside their core business area

#### **Types of Private Insurers**

- Insurers can be classified by their organizational form:
  - Stock insurers
  - Mutual insurers
  - Reciprocal exchanges
  - Lloyd's of London
  - Blue Cross and Blue Shield Plans
  - Health maintenance organizations (HMOs)
  - Other types of private insurers
- A stock insurer is a corporation owned by stockholders
  - Objective: earn profit for stockholders by increasing the value of stock and paying dividends
  - Stockholders elect board of directors
  - Stockholders bear all losses
  - Insurer cannot issue an assessable policy
- A mutual insurer is a corporation owned by the policyowners
  - Policyowners elect board of directors, who have effective management
  - Policyholders may receive dividends or rate reductions
  - There are three main types of mutual insurers:
    - An <u>advance premium mutual</u> is owned by the policyowners; there are no stockholders, and the insurer does not issue assessable policies

- An <u>assessment mutual</u> has the right to assess policyowners an additional amount if the insurer's financial operations are unfavorable
- A <u>fraternal insurer</u> is a mutual insurer that provides life and health insurance to members of a social or religious organization
- The corporate structure of mutual insurers is changing due to:
  - An increase in company mergers
  - <u>Demutualization</u>, whereby a mutual company is converted into a stock insurer by a pure conversion, merger, or bulk reinsurance
  - The creation of mutual holding companies
  - A <u>holding company</u> is a company that directly or indirectly controls an authorized insurer
- <u>Lloyd's of London</u> is not an insurer, but a society of members who underwrite insurance in syndicates
  - Membership includes corporations, individual members (called Names), and limited partnerships
  - New individual members now have limited legal liability
  - Corporations with limited legal liability and limited liability partnerships can also join Lloyd's of London
  - Members must meet stringent financial requirements
  - Lloyd's is licensed only in a small number of jurisdictions in the U.S.
- A <u>reciprocal exchange</u> can be defined as an unincorporated organization in which insurance is exchanged among the members (called subscribers)
  - Insurance is exchanged among the members; each member of the reciprocal insures the other members
  - It is managed by an attorney-in-fact
  - Most reciprocals are relatively small and specialize in a limited number of lines of insurance

### **Types of Private Insurers**

- <u>Blue Cross and Blue Shield Plans</u> are generally organized as nonprofit, community oriented plans
  - Blue Cross plans provide coverage for hospital services
  - Blue Shield plans provide coverage for physicians' and surgeons' fees
  - Most plans have merged into one entity
  - Many sponsor HMOs and PPOs
  - Some plans have converted to a for-profit status to raise capital and become more competitive
- A <u>Health Maintenance Organization</u> (HMO) provides comprehensive health care services to its members
  - Broad health care services are provided for a fixed prepaid fee
  - Cost control is emphasized
  - Choice of health care providers may be restricted
  - Less costly forms of treatment are often provided
- A <u>captive insurer</u> is an insurer owned by a parent firm for the purposes of insuring the parent firm's loss exposures
  - A single parent, or pure, captive is an insurer owned by one parent

- An association captive is owned by several parents
- <u>Savings Bank Life Insurance</u> refers to life insurance that is sold by mutual savings banks, over the phone or through Web sites

### **Agents and Brokers**

- An <u>agent</u> is someone who legally represents the principal and has the authority to act on the principal's behalf
- Authority may be:
  - Expressed
  - Implied
  - Apparent
- The principal is legally responsible for all acts of an agent when the agent is acting within the scope of authority
- A property and casualty agent has the power to bind the insurer
  - A <u>binder</u> provides temporary insurance until the policy is actually written
- A life insurance agent normally does not have the authority to bind the insurer
  - The applicant for life insurance must be approved by the insurer before the insurance becomes effective
- A broker is someone who legally represents the insured, and:
  - solicits applications and attempts to place coverage with an appropriate insurer
  - is paid a commission from the insurers where the business is placed
  - does not have the authority to bind the insurer
- A <u>surplus lines broker</u> is licensed to place business with a nonadmitted insurer
  - Surplus lines refer to any type of insurance for which there is no available market within the state, and coverage must be placed with a nonadmitted insurer

#### **Life Insurance Marketing**

- The majority of life insurance policies and annuities sold today are through personal selling distribution systems
  - Commissioned agents solicit and sell life insurance products to prospective insureds
  - <u>Career, or affiliated, agents</u> are full-time agents who usually represent one insurer and are paid on a commission basis.
  - In a <u>multiple line exclusive agency system</u>, agents who sell primarily property and casualty insurance also sell individual life and health insurance products.
  - Independent property and casualty agents are independent contractors who represent several insurers and sell primarily property and casualty insurance
  - A personal-producing general agent (PPGA) is an independent agent who places substantial amounts of business with one insurer and has a special financial arrangement with that insurer
  - Brokers are independent agents who do not have an exclusive contract with any single insurer
- Many insurers today use commercial banks and other financial institutions as a distribution system

- A <u>direct response system</u> is a marketing system by which insurance products are sold directly to consumers without a face-to-face meeting with an agent
  - Acquisition costs can be held down, but complex products are difficult to sell this way
- Other forms of life insurance distribution include:
  - Worksite marketing
  - Stock brokers
  - Financial planners

## **Property and Casualty Insurance Marketing**

- The <u>independent agency</u> is a business firm that usually represents several unrelated insurers
  - Agents are paid a commission based on the amount of business produced, which vary by the line of insurance
  - The agency owns the expirations or renewal rights to the business; it may bill the policyholders and collect premiums, but most insurers use direct billing
  - Agents may be authorized to adjust small claims and may provide loss control services to their insureds
- Under the <u>exclusive agency system</u>, the agent represents only one insurer or group of insurers under common ownership
  - Agents do not usually own the expirations or renewal rights to the policies
  - Agents are generally paid a lower commission rate on renewal business than on new business
  - Exclusive agency insurers provide strong support services to new agents

## **Marketing Systems in Property and Liability Insurance**

- A <u>direct writer</u> is an insurer in which the salesperson is an employee of the insurer, not an independent contractor.
  - Employees are usually compensated on a "salary plus" arrangement
- A <u>direct response</u> insurer sells directly to the consumer by television or some other media
- Many property and casualty insurers use multiple distribution systems

#### **Group Insurance Marketing**

- Many insurers use group marketing methods to sell individual insurance policies to:
  - Employer groups
  - Labor unions
  - Trade associations
- Products are sold through group representatives, employees who receive a salary and incentive payments based on sales.
- Some property and liability insurers use <u>mass merchandising</u> plans to market their insurance
- Employees typically pay for insurance by payroll deduction.

## **Chapter 25 Insurance Company Operations**

### **Topics**

- Rate making
- Underwriting
- Production
- Claim settlement
- Reinsurance
- Investments
- Rate making refers to the pricing of insurance
  - Total premiums charged must be adequate for paying all claims and expenses during the policy period
  - Rates and premiums are determined by an actuary, using the company's past loss experience and industry statistics
- <u>Underwriting</u> refers to the process of selecting, classifying, and pricing applicants for insurance
  - The objective is to produce a profitable book of business
- A <u>statement of underwriting policy</u> establishes policies that are consistent with the company's objectives, such as
  - Acceptable classes of business
  - Amounts of insurance that can be written
- A <u>line underwriter</u> makes daily decisions concerning the acceptance or rejection of business
- There are three important principles of underwriting:
  - The underwriter must select prospective insureds according to the company's underwriting standards
  - Underwriting should achieve a proper balance within each rate classification
    - In <u>class underwriting</u>, exposure units with similar lossproducing characteristics are grouped together and charged the same rate
  - Underwriting should maintain equity among the policyholders
- Underwriting starts with the agent in the field
- Information for underwriting comes from:
  - The application
  - The agent's report
  - An inspection report
  - Physical inspection
  - A physical examination and attending physician's report
  - MIB report
- After reviewing the information, the underwriter can:
  - Accept the application
  - Accept the application subject to restrictions or modifications
  - Reject the application
- <u>Production</u> refers to the sales and marketing activities of insurers
  - Agents are often referred to as producers
  - Life insurers have an agency or sales department

- Property and liability insurers have marketing departments
- An agent should be a competent professional with a high degree of technical knowledge in a particular area of insurance and who also places the needs of his or her clients first

#### Claim Settlement

- The objectives of claims settlement include:
  - Verification of a covered loss
  - Fair and prompt payment of claims
  - Personal assistance to the insured
- Some laws prohibit unfair claims practices, such as:
  - Refusing to pay claims without conducting a reasonable investigation
  - Not attempting to provide prompt, fair, and equitable settlements
  - Offering lower settlements to compel insureds to institute lawsuits to recover amounts due
- The claim process begins with a notice of loss
- Next, the claim is investigated
  - A <u>claims adjustor</u> determines if a covered loss has occurred and the amount of the loss
- The adjustor may require a proof of loss before the claim is paid
- The adjustor decides if the claim should be paid or denied
  - Policy provisions address how disputes may be resolved

#### Reinsurance

- Reinsurance is an arrangement by which the primary insurer that initially writes the insurance transfers to another insurer part or all of the potential losses associated with such insurance
  - The primary insurer is the ceding company
  - The insurer that accepts the insurance from the ceding company is the reinsurer
  - The <u>retention limit</u> is the amount of insurance retained by the ceding company
  - The amount of insurance ceded to the reinsurer is known as a cession
- Reinsurance is used to:
  - Increase underwriting capacity
  - Stabilize profits
  - Reduce the unearned premium reserve
    - The <u>unearned premium reserve</u> represents the unearned portion of gross premiums on all outstanding policies at the time of valuation
  - Provide protection against a catastrophic loss
  - Retire from business or from a line of insurance or territory
  - Obtain underwriting advice on a line for which the insurer has little experience
- There are two principal forms of reinsurance:
  - Facultative reinsurance is an optional, case-by-case method that is used when the ceding company receives an application for insurance that exceeds its retention limit

- Treaty reinsurance means the primary insurer has agreed to cede insurance to the reinsurer, and the reinsurer has agreed to accept the business
  - Under a <u>quota-share treaty</u>, the ceding insurer and the reinsurer agree to share premiums and losses based on some proportion
  - Under a <u>surplus-share treaty</u>, the reinsurer agrees to accept insurance in excess of the ceding insurer's retention limit, up to some maximum amount
  - An excess-of-loss treaty is designed for catastrophic protection
  - A <u>reinsurance pool</u> is an organization of insurers that underwrites insurance on a joint basis

#### Reinsurance Alternatives

- Some insurers use the capital markets as an alternative to traditional reinsurance
- <u>Securitization of risk</u> means that an insurable risk is transferred to the capital markets through the creation of a financial instrument, such as a futures contract
- <u>Catastrophe bonds</u> are corporate bonds that permit the issuer of the bond to skip or reduce the interest payments if a catastrophic loss occurs

#### Investments

- Because premiums are paid in advance, they can be invested until needed to pay claims and expenses
- Investment income is extremely important in reducing the cost of insurance to policyowners and offsetting unfavorable underwriting experience
- Life insurance contracts are long-term; thus, safety of principal is a primary consideration
- In contrast to life insurance, property insurance contracts are short-term in nature, and claim payments can vary widely depending on catastrophic losses, inflation, medical costs, etc

#### Other Insurance Company Functions

- The <u>electronic data processing</u> area maintains information on premiums, claims, loss ratios, investments, and underwriting results
- The <u>accounting</u> department prepares financial statements and develops budgets
- In the <u>legal</u> department, attorneys are used in advanced underwriting and estate planning
- Property and liability insurers provide numerous <u>loss control</u> services

# **Chapter 26 Financial Operations of Insurers**

## **Topics**

- Property and Casualty Insurers
  - Financial Statements
  - Measuring Financial Performance
- Life Insurance Companies
  - Financial Statements
  - Measuring Financial Performance
- Ratemaking in Property and Casualty Insurance
- Ratemaking in Life Insurance

## Financial Statements of Property and Casualty Insurers

• <u>Balance Sheet</u>: a summary of what a company owns (assets) and what it owes (liabilities)

Total Assets = Total Liabilities + Owners' Equity

**Exhibit 7.1** ABC Insurance Company

ABC Insurance Company Balance Sheet December 31, 2006					
Assets:		Liabilities:			
Bonds	\$250,000,000	Loss Reserves	\$120,000,000		
Common Stock	80,000,000	Unearned Premiums	101,000,000		
Real Estate	20,000,000	Loss Adjustment Expenses	14,000,000		
Cash & Short-term Investments	12,000,000	Commissions Payable	9,000,000		
Mortgage-backed Securities	30,000,000	Other Liabilities	11,000,000		
Total Invested Assets	\$392,000,000	Total Liabilities	255,000,000		
Premiums Receivable	29,600,000	Surplus and Capital			
Data Processing Equipment	400,000	Paid-in Surplus	16,000,000		
Other Assets	18,000,000	Unassigned Surplus	169,000,000		
Total Admitted Assets	\$440,000,000	Total Liabilities and Surplus	\$440,000,000		

# Financial Statements of Property and Casualty Insurers

- The primary assets for an insurance company are financial assets
- Insurers' liabilities include required reserves
- A loss reserve is an estimated amount for:
  - Claims reported and adjusted, but not yet paid
  - Claims reported and filed, but not yet adjusted
  - Claims incurred but not yet reported to the company
- Case reserves are loss reserves that are established for each individual claim
  - Methods for determining case reserves include:
    - The judgment method: a claim reserve is established for each individual claim
    - The average value method: an average value is assigned to each claim

- The tabular method: loss reserves are determined for certain claims for which the amounts paid depend on data derived from mortality, morbidity, and remarriage tables
- The <u>loss ratio method</u> establishes aggregate loss reserves for a specific coverage line
  - A formula based on the expected loss ratio is used to estimate the loss reserve
- The <u>incurred-but-not-reported (IBNR) reserve</u> is a reserve that must be established for claims that have already occurred but that have not yet been reported
- The <u>unearned premium reserve</u> is a liability item that represents the unearned portion of gross premiums on all outstanding policies at the time of valuation
  - Its purpose is to pay for losses that occur during the policy period
  - It is also needed so that refunds can be paid to policyholders that cancel their coverage
  - It also serves as the basis for determining the amount that must be paid to a reinsurer for carrying reinsured polices
  - The <u>annual pro rata method</u> is one method of calculating the reserve

### Financial Statements of Property and Casualty Insurers

- <u>Policyholders' surplus</u> is the difference between an insurance company's assets and liabilities
  - The stronger a company's surplus position, the greater is the security for its policyholders
- The <u>income and expense statement</u> summarizes revenues and expenses paid over a specified period of time
- The two principal sources of revenue are premiums and investment income
  - Earned premiums are those premiums for which the service for which the premiums were paid (insurance protection) has been rendered
- Expenses include the cost of adjusting claims, paying the insured losses that occurred, commissions to agents, premium taxes, and general insurance expenses
- The <u>loss ratio</u> is the ratio of incurred losses and loss adjustment expenses to  $\frac{Loss \, Ratio}{Premiums \, Earned} = \frac{Incurred \, Losses + Loss \, Adjustment \, Expenses}{Premiums \, Earned}$
- The <u>expense ratio</u> is equal to the company's underwriting expenses divided by *Underwriting Expenses*

 $Expense\ Ratio = \frac{Underwriting\ Expenses}{Premiums\ Written}$  written premiums

• The <u>combined ratio</u> is the sum of the loss ratio and the expense ratio. A positive ratio indicates an underwriting loss

### Measuring the Performance of Property and Casualty Insurers

• The <u>investment income ratio</u> compares net investment income to earned premiums

 $Investment\ Income\ Ratio = \frac{Net\ Investment\ Income}{Earned\ Premiums}$ 

- The <u>overall operating ratio</u> is equal to the combined ratio minus the investment income ratio
  - This ratio measures the company's total performance (underwriting and investments)

#### Financial Statements of Life Insurers

- The balance sheet
  - The assets of a life insurer have a longer duration, on average, than those of property and casualty insurers
  - Because many life insurance policies have a savings element, life insurers keep an interest-bearing asset called "contract loans" or "policy loans"
  - A life insurance company may have separate accounts for assets backing interest-sensitive products, such as variable annuities
- <u>Policy reserves</u> are a liability item on the balance sheet that must be offset by assets equal to that amount
  - State laws specify the minimum basis for calculating policy reserves
- The <u>reserve for amounts held on deposit</u> is a liability representing funds that are owed to policyholders and to beneficiaries
- The <u>asset valuation reserve</u> is a statutory accounting account designed to absorb asset value fluctuations not caused by changing interest rates
- Policyholders' surplus is less volatile in the life insurance industry than in the property and casualty insurance industry
- Benefit payments, including death benefits paid to beneficiaries and annuity benefits paid to annuitants, are the life insurer's major expense
- A life insurer's <u>net gain from operations</u> equals total revenues less total expenses, policyowner dividends, and federal income taxes

#### Ratemaking in Property and Casualty Insurance

- A rate is the price per unit of insurance.
- An <u>exposure unit</u> is the unit of measurement used in insurance pricing, e.g., a car-year
- The <u>pure premium</u> is the portion of the rate needed to pay losses and loss adjustment expenses
- <u>Loading</u> is the amount that must be added to the pure premium for other expenses, profit, and a margin for contingencies
- The gross rate consists of the pure premium and a loading element
- The gross premium paid by the insured consists of the gross rate multiplied by the number of exposure units
- There are three basic rate making methods in property and casualty insurance:
  - <u>Judgment rating</u> means that each exposure is individually evaluated, and the rate is determined largely by the judgment of the underwriter
  - <u>Class rating</u> means that exposures with similar characteristics are placed in the same underwriting class, and each is charged the same rate
  - Class rates are determined using two basic methods:

- Under the <u>pure premium method</u>, the pure premium can be determined by dividing the dollar amount of incurred losses and loss-adjustment expenses by the number of exposure units
- Under the <u>loss ratio method</u>, the actual loss ratio is compared with the expected loss ratio, and the rate is adjusted accordingly
- Merit rating is a rating plan by which class rates are adjusted upward or downward based on individual loss experience
  - Under a <u>schedule rating</u> plan, each exposure is individually rated
    - A basis rate is determined for each exposure, which is then modified by debits or credits depending on the physical characteristics of the exposure
    - Commonly used in commercial property insurance
  - Under <u>experience rating</u>, the class or manual rate is adjusted upward or downward based on past loss experience
    - The insurer's past loss experience is used to determine the premium for the next policy period
  - Under a <u>retrospective rating</u> plan, the insured's loss experience during the current policy period determines the actual premium paid for that period
    - A provisional premium is paid at the beginning of the policy period; the final premium is calculated at the end of the policy period
    - Commonly used in workers compensation insurance

#### Ratemaking in Life Insurance

- Life insurance actuaries use a mortality table or individual company experience to determine the probability of death at each attained age
- The annual expected value of death claims equals the probability of death times the amount the insurer must pay if death occurs

Exhibit 7.2 ABC Insurance Company

ABC Insurance Company Income and Expense Statement January 1, 2006–December 31, 2006					
Revenues:					
Premiums Written*	\$206,000,000				
Premiums Earned		\$205,000,000			
Investment Income:					
Interest	14,000,000				
Dividends	2,400,000				
Rental Income	600,000				
Gain on Sale of Securities	1,000,000				
Total Investment Income		18,000,000			
Total Revenues			\$223,000,000		
Expenses:					
Net Losses Incurred	133,600,000				
Loss Adjustment Expenses	14,000,000				
Total Losses and Loss Adj. Expens	ses	147,600,000			
Commissions	18,000,000				
Premium Taxes	5,050,000				
General Insurance Expenses	41,590,000				
Total Underwriting Expenses		64,640,000			
Total Expenses			212,240,000		
Net Income Before Taxes			10,760,000		
Federal Income Tax			3,260,000		
Net Income			7,500,000		

<sup>\*</sup>Premiums written reflect coverage put in force during the accounting period.

### **Chapter 27 Government Regulation of Insurance**

### **Topics**

- Reasons for Insurance Regulation
- Historical Development of Insurance Regulation
- Methods for Regulating Insurers
- What Areas are Regulated?
- State versus Federal Regulation
- Current Problems and Issues in Insurance Regulation

#### Reasons for Insurance Regulation

- Maintain insurer solvency
- Compensate for inadequate consumer knowledge
- Ensure reasonable rates
- Make insurance available

#### Methods of Regulating Insurers

- The three principal methods of regulating insurers are:
  - Legislation, through both state and federal laws
  - Court decisions, e.g., interpreting policy provisions
  - State insurance departments
    - Every state has an insurance commissioner, who administers state insurance laws
    - The <u>National Association of Insurance Commissioners</u> meets periodically to discuss industry problems and draft model laws

#### What Areas Are Regulated?

- All states have requirements for the formation and licensing of insurers
  - Licensing includes minimum capital and surplus requirements
  - A domestic insurer is domiciled in the state
  - A <u>foreign insurer</u> is an out-of-state insurer that is chartered by another state, but licensed to operate in the state
  - An <u>alien insurer</u> is an insurer that is chartered by a foreign country, but is licensed to operate in the state
- Insurers are subject to financial regulations designed to maintain solvency
  - Assets must be sufficient to offset liabilities
    - <u>Admitted assets</u> are assets that an insurer can show on its statutory balance sheet in determining its financial condition
  - States have regulations that address the calculation of reserves
- An insurer's surplus position is carefully monitored by state regulators What Areas Are Regulated?
  - Life and health insurers must meet certain risk-based capital standards

- A <u>risk-based capital</u> (RBC) standard means that insurers must have a certain amount of capital, depending on the riskiness of their investments and insurance operations
- An insurer's RBC depends on:
  - Asset risk
  - Underwriting risk
  - Interest rate risk
  - Business risk
- A comparison of the company's total adjusted capital to the amount of required risk-based capital determines whether company or regulatory action is required
- The purpose of investment regulations is to prevent insurers from making unsound investments that could threaten the company's solvency and harm the policyowners
  - Laws generally place a limit on the proportion of assets in a specific asset category, such as real estate
- Many states limit the amount of surplus a participating life insurer can accumulate, rather than pay as dividends
- Each insurer must file an annual report with the state insurance department in the states where it does business
- The state insurance department assumes control of insurance companies that they determine to be financially impaired
  - All states have guaranty funds that provide for the payment of unpaid claims of insolvent property and casualty insurers
  - States have guaranty laws and guaranty associations that pay the claims of policyowners of insolvent life and health insurers
  - The <u>assessment method</u> is the major method used to raise the necessary funds to pay unpaid claims
- Rate regulation takes a variety of forms across states
  - Forms of rate regulation for property and casualty insurance include:
    - Prior approval law
    - Modified prior approval law
    - File-and-Use law
    - Use-and-File law
    - Flex Rating law
    - State made rates
    - Open Competition
  - Many states exempt insurers from filing rates for large commercial accounts
  - Life insurance rates are not directly regulated by the states
- State insurance commissioners have the authority to approve or disapprove new policy forms before the contracts are sold to the public
- Sales practices are regulated by the laws concerning the licensing of agents and brokers
  - All states require agents and brokers to be licensed
  - Insurance laws prohibit a variety of unfair trade practices, such as misrepresentation, twisting, and rebating

- <u>Twisting</u> is the inducement of a policyowner to drop an existing policy and replace it with a new one that provides little or no economic benefit to the client
- Rebating is the practice of giving an individual a premium reduction or some other financial advantage not stated in the policy as an inducement to purchase the policy

#### State versus Federal Regulation

- Advantages of state regulation include:
  - Greater responsiveness to local needs
  - Promotion of uniform laws
  - Greater opportunity for innovation
  - Unknown consequences of federal regulation
  - Decentralization of political power
- Shortcomings of state regulation include:
  - Inadequate protection against insolvency
  - Inadequate protection of consumers
  - Improvements needed in handling complaints
  - Inadequate market conduct examinations
  - Insurance availability
  - Regulators may be overly responsive to the insurance industry

# Current Problems and Issues in Insurance Regulation

- Insolvency of insurers continues to be an important regulatory concern
  - Reasons for insolvencies include:
    - Inadequate rates
    - Inadequate reserves for claims
    - Rapid growth and inadequate surplus
    - Problems with affiliates
    - Overstatement of assets
    - Alleged fraud
    - Failure of reinsurers to pay claims
    - Mismanagement
    - Catastrophic losses
- An increasing number of insurers are using a <u>credit-based insurance score</u> for underwriting
  - Proponents argue:
    - There is a high correlation between an applicant's credit record and future claims experience
    - Underwriting and rating can be more objective and consistent
  - Critics argue:
    - The use of credit data in underwriting or rating discriminates against certain groups
    - Credit reports often contain errors that can harm insurance applicants
    - Credit-based scoring is socially unacceptable

Assignment: Apply the topic on Rwanda.

End./.

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