

SECTION A
CHAPTER NOTES AND ANSWERS TO
END-OF-CHAPTER QUESTIONS

SECTION I

RISK AND INSURANCE

This first section of the book introduces the student to the basic principles of insurance. Chapters 1, 2, 3, and 4 deal with the subjects of risk, insurance, and risk management. The discussion of risk management is divided into two chapters, the first providing a general overview of risk management and the second deals with risk management decisions and specific risk management applications.

Chapters 5, 7 and 8 treat institutional aspects of insurance, describing the various types of insurers, the manner in which they operate, their distribution systems, and some of the unique functions of insurers.

Chapter 6 describes the regulation of the insurance industry. It traces the historical development of insurance regulation and describes current regulatory practices. It also discusses the issues related to the debate over state versus federal regulation.

Chapter 9 discusses the law of contracts and other important legal principles associated with private insurance contracts.

In our opinion, the critical chapters in this section are Chapters 1, 2, 3, 4, 5, 6 and 9. We believe that the material in these seven chapters should be covered in every course. The remaining two chapters may be covered as time permits. We consider Chapters 7 to be next in order of importance, and rank Chapter 8 last.

CHAPTER 1

THE PROBLEM OF RISK

General Comments on the Chapter

A discussion of risk—the basic problem with which insurance deals—logically precedes the discussion of insurance itself. This chapter introduces the concept of risk, defines it, and discusses the distinctions that can be drawn among the different classifications of risk.

The definition of risk used in the text evolved over a period of many years, and grew out of a personal dissatisfaction with the definitions used in other books. It has always seemed to us that the definition of risk in an insurance course should immediately suggest to the reader the basic problem insurance is designed to solve, and that risk should not be a concept treated in the first chapter and then forgotten for the remainder of the book.

Most people immediately recognize a situation in which a loss may occur as the basic reason for buying insurance. In simplest terms, risk is defined as a *condition* in which a possibility of loss exists. More specifically, risk is "...a *condition* in which there is a possibility of an adverse deviation from a desired outcome that is expected or hoped for." Defining risk as "a condition" seems to us to be both semantically and intuitively appropriate. It delineates the essence of the thing being defined and helps to emphasize the notion that risk is a state of the world created by a combination of circumstances. In addition, it more or less coincides with the intuitive notion of risk. Risk can exist (as a condition of the real world) even when the danger is not perceived and when there is no uncertainty. Uncertainty can exist in situations where there is no risk (that is, where the possibility of loss does not exist).

In addition to establishing a formal definition of risk, the chapter stresses the distinctions among the various subclassifications into which risk may be divided. We believe that the most important of these are the "fundamental-particular" and the "pure-speculative" distinctions. The discussion of fundamental and particular risk is a convenient time to consider terrorism risk and the merits of the federal terrorism reinsurance program that was created following the terrorist attack on the World Trade Center. Some time should also be spent in distinguishing among the terms "risk," "peril," and "hazard," and in differentiating among the classes of hazard.

This edition includes a discussion of "systemic risk," reflecting the increased attention given to the concept in the aftermath of the recent financial crisis. The focus of this course is not on systemic risk, its cause, and the regulatory response, but it seems reasonable for students to have some exposure to the concept. In our experience, students are interested in learning about the financial crisis and its onset. Thus, the instructor may choose to take a brief detour to discuss AIG and its role in the crisis. A simple explanation in video form is provided at <http://www.youtube.com/watch?v=DdEI6PkGZK8>. Alternatively, the instructor may prefer to defer the discussion to chapter 6, when the regulatory response is also presented. Because the video refers to credit default swaps as insurance, this is also an opportunity to discuss the differences between insurance and credit default swaps, and the fact that AIG's difficulty was not its traditional insurance business. This discussion is likely to be more clear to students after they have completed chapter 3, The Insurance Device.

The evolving nature of risk can often be illustrated with current events. Cyber risk is one area that is often in the news (As this is being written, Target is in the news for a cyber security loss, in which the credit and debit card information of up to 40 million customers was stolen in late November and early December 2013. The case is an excellent example of both cyber risk and reputational risk.)

The section entitled The Burden of Risk explains why risk is a problem and briefly notes some of the detrimental aspects of risk. In discussing the burden of risk, we stress the dual-faceted nature of the burden; first, the costs associated with the losses that will actually occur, and second, the costs associated with the uncertainty regarding who and what will suffer loss. The uncertainty associated with risk creates the need to accumulate a reserve for contingencies (which involves an opportunity cost), deters capital accumulation, increases the cost of capital, and results in anxiety and worry.

Important Concepts to be Stressed

The most important concepts in the chapter, and the principles that we believe should be stressed in the lecture are:

- The definition of risk as a state of the real world
- The degree of risk
- Risk distinguished from peril and hazard
- Classification of hazards as physical, moral, and morale
- The distinction between static and dynamic risks
- The distinction between fundamental and particular risk
- The distinction between pure and speculative risk
- The concept of systemic risk
- Classifications of pure risk
- The burden of risk
- The increasing frequency and severity of losses

Answers to Questions for Review

1. Risk is defined as a condition in which there is the possibility of an adverse deviation from a desired outcome that is expected or hoped for. In simpler terms, it is the possibility of loss. Risk is a state of the real world in which a possibility of loss exists, while uncertainty is a state of mind characterized by doubt or a lack of knowledge about the outcome of an event. Risk can exist (as a state of the real world) even when the danger is not perceived and where there is therefore no uncertainty. Uncertainty can exist where there is no risk. See pages 2-3.

2. Risk may be subclassified as dynamic or static, fundamental or particular, pure or speculative, and systemic or nonsystemic. The distinguishing characteristics of each class are discussed in pages 6 and 7 of the text. Dynamic risks are those that arise from changes in the economy; static risks would exist even in the absence of economic change. Fundamental risks are those that are impersonal in origin and consequences—they are generally beyond the control of the individual. Particular risks are personal in origin and consequence, and are generally considered to be the individual's own responsibility. Pure risks are those in which there is a chance of loss or no loss only. Speculative risks involve the chance of loss or gain. Systemic risks affect an entire system and could cause cascading effects that disrupt other institutions.

3. The distinction between fundamental and particular risk is important because whether a risk is fundamental or particular may determine how society will choose to deal with it. Fundamental risks cannot usually be prevented, especially by the individual, and to the extent that they are beyond the control of the individual and affect large segments of the population, there may be a feeling that such risks are appropriate to the realm of social insurance or some other government program. However, it is also true that some fundamental risks may be dealt with through private insurance. Particular risks are usually more suited to treatment through private insurance, and are generally thought to be the individual's own responsibility.

4. The existence of risk may be a deterrent to economic activity and capital accumulation. Investors will undertake new risks only if the return on the investment is sufficiently high to compensate for both the dynamic and static risks. The cost of capital is higher in situations in which the risk is greater, and the consumer must pay the higher cost of the goods and services or they will not be forthcoming. See page 8 of the text.

5. The four types of risks facing the individual or organization and an example of each include *Personal risks* (death, sickness, or disability); *Property risks* (damage to or destruction of property and the loss of use of property that has been damaged); *Liability risks* (liability suits arising out of the use of automobiles or otherwise); Risks resulting from *human failure* (default of a debtor or failure of a contractor to complete a project contracted for). See pages 7-8 of the text.

6. As the text points out on page 8, whether we define risk as the possibility of loss, uncertainty, or the probability that results will differ from what is expected, the greatest burden in connection with risk is that some losses will actually occur. Losses constitute a detrimental aspect of risk from the perspective of both the individual and society, since we lose want-satisfying goods. In addition, for the individual, there is the cost of preparing for the possible losses and the worry that generally accompanies risk. For society, risk may have a deterrent effect on economic growth by retarding capital accumulation. Risk increases the cost of capital, and the consumer must pay the higher cost of the goods and services or they will not be forthcoming.

7. Perils are causes of loss, and examples would include fire, wind, earthquake, flood, sickness, and death. A hazard is a condition that increases the probability of loss from a peril. Examples would include faulty wiring, careless driving, sickness, improper storage of flammables, and so on.

8. Hazards have traditionally been classified as physical, moral, and morale. Physical hazards include conditions such as faulty housekeeping, defective wiring, storage of flammables, obesity, and road conditions. Moral hazard is a dishonest tendency, and examples of moral hazard include businesses that are losing money, obsolete inventory that is overinsured, and similar temptations to defraud an insurer. Morale hazard is reflected in a careless attitude that may accompany the existence of insurance, or the inflated losses that occur simply because the loss is insured. For example, the tendency on the part of those with health insurance to spend more time in the hospital per illness than those without health insurance.

The classification of hazards "is "physical, moral, and morale," is not exhaustive. For example, it has been suggested that we should add a fourth type of hazard, the "*legal hazard*." Clearly, statutes, court decisions, and the legal environment are additional factors that can influence the probability of loss.

9. The number of risk increases over time because with changes in technology, new causes of loss and new hazards emerge. (See pages 8-10.) The text cites the transition from muscle, wind and waterpower to steam to electric to nuclear power and the increase range of perils as an illustration of this phenomenon. The development of new legal theories and rights also create risks, as has the transition to the information age. Cyber risk, in particular, is an increasingly important problem for individuals and society.

10. Earthquake - peril; sickness - both a peril and a hazard; worry - hazard, careless act - hazard; economic depression - hazard. The principal focus in discussing this question should be on the distinguishing characteristics of perils and hazards. A peril causes financial loss; a hazard increases the likelihood that a loss may occur from a peril. Thus, sickness is a peril that can cause loss of income, but it is also a hazard that can increase the likelihood of death. Careless acts and economic depressions are hazards that create the chance that economic loss may result from a lawsuit or from unemployment respectively.

Answers to Questions for Discussion

1. Students' answers will vary, depending on the concept of risk that they hold. For those who define risk as uncertainty, there is clearly uncertainty in this situation, and the uncertainty with respect to the outcome of a past event constitutes risk to the same extent as would uncertainty regarding the outcome of a future event. Conversely, for the students who accept the text's definition of risk (as a condition in which the possibility of loss exists) risk does not exist in this situation because the outcome for both Tom and Tim is certain.

2. Mike's statement is true. For the individual, the possibility that the house may be destroyed by fire is a pure risk, because the possible outcomes include only fire or no fire. For the insurer that engages in the business of accepting the risks of individuals in return for a premium payment, the single exposure unit and the aggregate of all of the houses insured constitutes speculative risk.

3. In the case of gambling, as in the case of other speculative risks, the possibility of gain is the balancing factor. The gambler may also find the possibility of losing distasteful, but he or she incurs that possibility because it carries with it the possibility of a gain that is attractive. In addition, some would argue that it is not necessarily true that all people find risk distasteful; for some people it may be a delightful experience. One could conclude, however, that all forms of pure risk are distasteful, whereas risks of a speculative nature find favor among many people, and it is the possibility of gain that accounts for this difference.

4. Students answers will differ, but in general they should follow the pattern suggested by the four-fold classification discussed on pages 7-8 of the text (personal risks, property risks, liability risks and risks arising out of human failure).

5. Students answers may differ, but it may be expected that the students would find the 5% chance of losing \$1,000 more distasteful than 50% chance of losing \$100. This question provides an opportunity to discuss the concept of marginal utility, and also the critical role of severity in determining the importance of risks.

CHAPTER 2

INTRODUCTION TO RISK MANAGEMENT

General Comments on the Chapter

Prior to the ninth edition of the book, we deferred the discussion of risk management until the third chapter, after a discussion of insurance and how it works was introduced in the second chapter. We thought that an understanding of insurance and how it operates provided useful background for understanding why risk management represented an important break with the past. After 30 years, we came to share the opinion of those who prefer to introduce risk management before turning to the subject of insurance.

Although this text is intended to focus primarily on pure risk, the increasing popularity of enterprise risk management cannot be ignored. The text distinguishes between enterprise risk management, financial risk management, and traditional risk management. Concepts such as market risk, credit risk, liquidity risk, and operational risk are discussed briefly. Finally, the text's definition of risk management is no longer limited to the management of pure risks, but encompasses management of all risks. Note, however, that we maintain a focus on the management of pure risk in the remainder of the book. For example, the discussion of the role of the risk manager toward the end of the chapter focuses on traditional risk management – the management of pure risk.

In discussing the evolution of risk management, the text follows the conventional explanation that risk management evolved from the field of corporate insurance buying, but goes further and attempts to explain *why* risk management emerged when it did. We believe that the appearance of risk management as an academic discipline owes much to the introduction of operations research and management science into the business college curriculum. The evolution of risk management was not inevitable, but required some external stimulus. Prior to the introduction of decision theory and the spread of its effect to other disciplines, little attention was devoted to the quality of risk management decisions. The insurance manager's job was to buy insurance, and he or she would rarely be criticized for doing so. The real threat to an insurance buyer's career was the uninsured loss and insurance buyers protected themselves as well as the corporation by buying more, rather than less insurance. Although some may disagree with the emphasis on the changes in decision making generally as the basis for risk management, we find no other explanation for the emergence of our discipline.

In discussing the tools (techniques) of risk management, we have used the traditional terminology in classifying risk management techniques as risk control, which focuses on minimizing the risk of loss to which the organization is exposed, and risk financing, which concentrates on arranging the availability of funds to meet the losses that do occur. Although some instructors may prefer one of the more detailed approaches to classifying risk control and risk financing techniques, we have adopted the following classification system

Risk Control

Avoidance
Reduction

Risk Financing

Retention
Transfer

In this scheme, risk sharing is viewed as a special case of risk transfer, in which the risk is transferred from the individual from the group. (It may also be a form of risk retention, depending on the success of the risk sharing arrangement).

The final section of the chapter is a brief discussion of the risk management process. Although most of the material in this section is similar to standard treatments of this subject, there are some differences. One is the addition of "Determination of Objectives" as the first step in the risk management process. We believe that this focus on planning and objectives adds a managerial emphasis that is otherwise lacking.

Another area that we prefer to address early in the course is what we have termed in the text the two misconceptions about risk management. The first is that the risk management concept is applicable principally to large organizations. The second is that the risk management approach to dealing with pure risks seeks to minimize the role of insurance. The first misconception—that risk management is concerned exclusively with the problems of giant organizations—arose because much of the early literature in the field came from insurance buyers in giant organizations and addressed the problems with which they were concerned. With respect to the notion that insurance seeks to minimize the role of insurance, the argument is semantic. In the sense that insurance is a last resort, it can be argued that risk management does relegate insurance to a different role than previously. On the other hand, there are cases in which insurance is the most effective and suitable tool for addressing risk.

Important Concepts to be Stressed

The most important concepts in the chapter, and the principles that we believe should be stressed in the lecture are:

- The development of risk management
- The distinctions between enterprise risk management, financial risk management, and traditional risk management
- The revision of business college curricula and decision theory
- Decision theory, risk financing and risk control as elements of risk management
- The distinction between risk management and insurance management
- The steps in the risk management process
- The nonprofessional risk manager
- Risk management and the Individual

Answers to Questions for Review

1. The three specialties that are merged in risk management are decision theory, risk financing, and risk control. Decision theory has its roots in operations research and management science. The risk-financing specialty came from the disciplines of finance and insurance, and the risk control specialty represents the merger of traditional safety management and loss prevention, as developed by the insurance industry, and systems safety from the military and aerospace industry. See page 15.

2. The two broad approaches to dealing with risk recognized by modern risk management theory are risk control and risk financing. Risk control focuses on minimizing the risk of loss to which the firm is exposed, and includes the techniques of Avoidance and Reduction. Risk

financing concentrates on arranging the availability of funds to meet losses arising from the risks that remain after the application of risk control techniques, and includes the tools of Retention and Transfer. See pages 17-20.

3. The four basic techniques available to the risk manager for dealing with the risks are avoidance, reduction, retention, and transfer. Avoidance and reduction are risk control techniques, while retention and transfer are risk financing techniques. Risks are reduced to the extent possible through avoidance and reduction; what remains after risk control efforts are implemented must be financed. The choices are retention or transfer, collectively exhaustive and mutually exclusive. What is not transferred is, by definition, retained. See pages 17-20.

As noted in footnote 12 on page 20, some writers include a fifth technique, sharing. We believe that risk sharing is actually a special variation of risk transfer (and sometimes retention). In risk sharing, risk is transferred from the individual to a group, where it is shared, but it is transfer from the perspective of the transferor. For the members of the group collectively, sharing is actually a form of retention.

4. The change in philosophy that marked the transition from insurance management to risk management occurred when the attitude toward insurance changed. For the insurance manager, insurance had always been the standard accepted approach to dealing with risks. The insurance manager viewed insurance as the accepted norm or standard approach to dealing with risk, and retention was viewed as an exception to this standard. The insurance manager contemplates his or her insurance program and asks "are there any risks that I should retain?" "How much will I save in insurance costs if I retain them?" In viewing loss prevention measures, the insurance manager asks, "How much will this measure reduce my insurance costs?" "How long will it take for a new sprinkler system to pay for itself in reduced fire insurance premiums?" Rather than asking, "which risks should I retain?" the risk manager asks, "which risks must I insure?" The difference is obviously one of emphasis. The insurance-management philosophy views insurance as the accepted norm, and retention or non-insurance must be justified by a premium reduction that is, in some sense or another, "big enough." The risk manager, in contrast, views insurance as simply one of several approaches to dealing with pure risks. Under the risk management philosophy, it is insurance that must be justified. Since the cost of insurance must generally exceed the average losses of those who are insured, the risk manager believes that insurance is a last resort, and should be used only when necessary.

5. The six steps in the risk management process are: (1) Determination of objectives, (2) Identification of risks, (3) Evaluation of risks, (4) Consideration of alternatives and selection of the risk treatment device, (5) Implementation of the decision, and (6) Evaluation and review. See page 24.

6. Risk management evolved from insurance management. The primary motivation for the creation of insurance departments and insurance managers was the increasing cost of insurance. The evolution of decision theory and operations research led to a more widespread acceptance of the scientific approach to decision making and especially decision making under conditions of uncertainty. Prior to the development of the decision-theory models, there was a tendency to judge decisions under conditions of uncertainty based on whether the decision turned out to be *right* or *wrong* in some after-the-fact sense. Decision theory provides a basis for judging the goodness or badness of decisions before the outcome is known.

The transition from *insurance management* to *risk management* occurred over a period of time, and paralleled the development of the academic discipline of risk management. It is not clear whether the academic discipline led or followed, because developments in the corporate sector and the academic world appear to have occurred simultaneously. It is an exaggeration to suggest that risk management originated in the academic world. It grew from a merger of engineering applications in the military and aerospace programs, financial theory, and insurance. Many of the concepts of modern risk management that originated in academic halls, however, were taken over and applied in the corporate world. See pages 13-15.

7. The actual responsibility of the risk manager varies depending on the organization. Some risk managers have overall responsibility for all risk control and risk financing activities, including the firm's employee benefit plan. In other cases, various parts of the risk control function, for example, may be assigned to a director of safety or a security director. Most risk managers are located in the finance department, but some may be found in a personnel or production division. There is a trend toward risk managers reporting to an executive vice president or even president. Page 22 - 23.

8. As noted in the text, the terms "insurance manager" and "risk manager" are often used interchangeably, without a great deal of attention to the actual role of the individual. One feature that distinguishes risk management from insurance management is the type of risks that each addresses. Because risk management evolved from insurance management, it is concerned *primarily* with *insurable* risk. Although the major focus of most risk managers is on insurable risks, the more appropriate realm of risk management is *pure* risk. In other words, the risk manager cannot ignore those pure risks that are not insurable. The text cites shoplifting losses as a type of loss that is rarely insurable, but with which the risk manager should be concerned. Risk management is, therefore, broader than insurance management, in that it deals with both insurable and uninsurable risks.

Risk management also differs from insurance management in philosophy. Insurance management involves techniques other than insurance, but in general these other techniques are considered primarily as alternatives to insurance. Under the risk management philosophy, insurance is viewed as simply one of several approaches for dealing with the pure risks the firm faces. Whereas the insurance manager views insurance as the accepted norm or standard approach to dealing with risk, and retention is viewed as an exception to this standard. The risk manager, in contrast, views insurance as simply one of several approaches to dealing with pure risks. Rather than asking, "which risks should I retain?" the risk manager asks, "which risks must I insure?" The difference is one of emphasis. The insurance-management philosophy views insurance as the accepted norm, and retention or non-insurance must be justified by a premium reduction that is, in some sense or another, "big enough." Under the risk management philosophy, it is insurance that must be justified. See pages 20-21.

9. The two common misconceptions about risk management are the notion that risk management is concerned primarily with the risks of giant industrial organizations and that there is an anti-insurance bias in the risk management philosophy. See page 23.

The first misconception—that risk management is concerned primarily with the risks of giant organizations probably developed because much of the literature in the field came from practicing risk managers. These authors naturally wrote about the problems with which they were concerned, such as self-insurance plans, captive insurers, and other techniques that do apply primarily to giant

organizations. In fact, the risk management philosophy and approach applies to organizations of all sizes and to individuals as well for that matter.

The second misconception about risk management--that it is anti-insurance in its orientation and that it seeks to minimize the role of insurance in dealing with risk--also stems from risk management literature. Again, many writers from the academic world have sought to avoid writing about insurance in their discussions of risk management. In an effort to avoid writing insurance books and teaching insurance courses, some academics in the insurance field relegated insurance to a subordinate role in the risk management process, and focused instead other approaches to dealing with risk, such as risk control, risk retention, risk avoidance, and captive insurance companies.

Contrary to the popular notion, the essence of risk management is not on the retention of exposures. Rather it is on dealing with risks by whatever mechanism is most appropriate, and in many instances, commercial insurance will be the only acceptable approach. While the risk management philosophy suggests that there are some risks that should be retained, it also dictates that there are some risks that must be transferred, and insurance plays a central role in the risk management process.

10. The term risk management is increasingly used to describe the management of speculative risk, particularly by persons in the field of finance. Financial risk management involves management of financial risks as market risk, credit risk, and interest rate risk. Enterprise risk management is broader, and would bring together the management of all risks—financial, operational, including traditionally insured hazards, and strategic—into a single portfolio. Traditional risk management is responsible primarily for managing pure risks (or operational risks). See pages 15-16.

Note that ideally, the traditional risk manager should be involved in decisions relating to the overall operation of the organization for the purpose of evaluating various courses of action from the pure risk perspective. For example, the decision to manufacture a new product line or move into a new area of operations will inevitably involve new pure risks. The decisions relating to these strategies should include appropriate consideration of these pure risks, ideally before the decision is made.

Answers to Questions for Discussion

1. The areas in which a risk manager should be knowledgeable are reflected in the techniques for dealing with risk; risk control and risk financing. It would seem that a well-rounded risk manager should have some knowledge regarding loss prevention and control techniques. Similarly, one would expect a risk manager to have a good understanding of risk financing options, with a solid understanding of insurance and how it works. Because risk management is basically a problem in decision-making, the risk manager also needs to understand decision theory.

Because risk management encompasses so many fields, it is obviously difficult for one to be an expert in everything related to risk management. Most risk managers tended to be specialists in one particular phase of risk management (e.g., insurance or loss prevention) or generalists without expertise in any of the specific sub-disciplines of risk management. Although the study of risk management does not attempt to create experts in all risk-management fields, it does address the interrelationships of the techniques of risk management. More importantly, it creates a conceptual

framework that assists in the choice among risk management alternatives. In short, the emphasis in the study of risk management is on *management* in the decision making sense. Persons trained in risk management are uniquely equipped for organizing, planning, leading, and controlling the risk management functions of the organization.

2. Although the question asks for the student's opinion, hopefully students will argue for a centralized approach to dealing with risks. Centralized risk management can produce economies of scale by consolidating insurance purchases when risks are transferred. In addition, there is likely to be a greater consistency in the approaches to dealing with risk in a centralized program. Finally, centralized risk management can facilitate pooling of risks for retention purposes. Students may suggest some advantages that could arise under a decentralized risk management program, but they will generally be slight compared with the advantages of a centralized approach.

3. Students who are taking their first course in the risk management and insurance sequence may not yet agree on the importance of the discipline in the overall education of business students. Most surveys of students who have completed the course indicate that students believe that the subject should be compulsory. Although the other functions in Henri Fayol's classification of business functions have all received the approbation of inclusion in the AACSB common body of knowledge, risk management remains an optional elective.

4. Risk management can contribute directly to profit by controlling the cost of dealing with risk. In the terminology of responsibility accounting, the risk management division is a cost center, not a profit center, but by reducing the cost of dealing with risk, risk management can contribute directly to profit. The optimum combination of risk management techniques minimizes the net cost of pure risks to the firm. Reducing the cost of losses contributes directly to profits by reducing expenses for a given amount of revenue. To the extent that the risk management function allows the firm to engage in certain speculative risks by minimizing the impact of pure risks associated with such speculative risks, it also contributes directly to profit.

5. As noted in the text, a growing number of writers have argued that the traditional focus on pure risks is too narrow, and that the firm should have someone focused on enterprise risks, including both pure and speculative risks. This trend is particularly evident in industries such as banking and insurance, where financial risk is significant.

On the other hand, many risk managers (perhaps even most risk managers) feel sufficiently challenged by their responsibilities relating to the traditional classes of pure risk. Ironically, there are many organizations in which the risk manager's responsibility does not include all aspects of the management of pure risk. Often, responsibility for risk control lies elsewhere in the organization, and the risk manager's responsibility is limited to the risk financing function, with only incidental responsibility for risk control. Rather than expanding the risk manager's responsibility to include speculative risks, it may be more reasonable that risk managers pursue an expansion of their duties to include risk control. An important question is whether anyone else in the organization is interested in having the risk manager branch out into the management of market and credit risk.

CHAPTER 3 THE INSURANCE DEVICE

General Comments on the Chapter

This chapter introduces the student to the insurance mechanism and the manner in which it operates. It defines insurance from the viewpoint of both the individual and from the viewpoint of society, and stresses the notion that the essence of insurance is the transfer of risk and the sharing of the losses that do occur on some equitable basis. The discussion of the law of large numbers and probability theory is very basic, and even those students with little or no statistical background should have little trouble with it.

In discussing the requirement of a large number of insureds, we point out that the large number does not relate only to predictability. The law of large numbers is important in achieving predictability but predictability is important only when the insurance is to be conducted on an advance premium basis. In post-loss assessment programs the requirement of a large number of exposures still applies, since there must be a large number of insureds who do not suffer loss who will pay the losses of the few who do suffer loss.

The section entitled *Insurance: Transfer or Pooling* (page 41) addresses the question whether the essence of insurance is transfer or pooling. The discussion points out that transfer is the essential feature of insurance, and that while pooling is an important technique available to the transferee, it is not an essential feature of the insurance mechanism.

The brief discussion of "self-insurance" points out the semantic difficulties inherent in the concept, and at the same time provides a workable definition for this widely used term. Although the term "self-insurance" poses certain semantic difficulties and conflicts with the usual definitions of insurance, the term has found widespread acceptance and those who use it know precisely what they mean. The term is widely used in state statutes (e.g., most state workers compensation laws permit "self-insurance,") and in insurance contracts (such as umbrella policies which refer to the "self-insured" retention).

The final section of the chapter provides an overview of the forms that insurance can take. The major distinction is, of course, the distinction between social insurance and private or voluntary insurance. We have added a third class, Public Guarantee Insurance Program to encompass a residual class of insurance plans that do not fit precisely into the private insurance or social insurance classes.

With respect to the distinction between private insurance and social insurance, the definition of social insurance proposed by the Committee of Terminology quoted in the text remains the best catalogue of the distinguishing characteristics of social insurance.

With respect to what we have termed "private" or "voluntary" insurance, neither term in itself is wholly satisfactory or completely defines the class of insurance contemplated. Private insurance is usually—but not always voluntary, and voluntary insurance is usually—but again not always—sold by private insurers. In addition to distinguishing between social and private insurance, the chapter also gives a bird's eye overview of the fields of private insurance, subdividing the field into

the three areas of life insurance, accident and health insurance, and property and liability insurance.

The third classification, "Public Guarantee Insurance Programs," fills what we consider to have been a previous void in the classification system. Programs like the FDIC, the Securities Investor Protection Corporation and the Pension Benefit Guarantee Corporation are clearly an application of the insurance principle, yet they do not fit conveniently under the traditional headings of social insurance or private insurance. They represent quasi-government plans that use the insurance mechanism to meet a specific security need. Generally, there is no contract and those who become entitled to receive benefits gain this entitlement as a matter of law rather than by contract.

Because this chapter introduces the topic of social insurance, there is a temptation to address some of the problems facing the social security system here. It seemed more reasonable, however, to defer this discussion until Chapter 11, where the Old-Age, Survivors, Disability and Health Insurance (OASDHI) program is discussed in greater detail.

Important Concepts to be Stressed

The most important concepts in the chapter and the principles that we believe should be stressed in the lecture are:

- The definition of insurance from the viewpoint of the individual
- The definition of insurance from the viewpoint of society
- Probability theory and the law of large numbers in insurance
- The dual application of the law of large numbers
- The desirable elements of an insurable risk
- Randomness and adverse selection
- The economic contributions of insurance
- The concept of "self-insurance"
- The distinction between private insurance and social insurance
- Public guarantee insurance programs

Answers to Questions for Review

1. The elements of an insurable risk are (1) a large number of homogeneous exposure units (2) the loss produced must be definite (3) the loss should be fortuitous (4) the loss should not be catastrophic—i.e., it should be unlikely that all exposure units will suffer loss at the same time. See pages 42-43.

2. The dual application of the law of large numbers requires a large enough sample for the insurer to make a good estimate of the probability, and a sufficient number of exposure units insured to permit the probability to work itself out. Inherent in this concept is the idea that there must be many exposures that do not suffer loss who make contributions to pay for the losses of the few who do. See page 40.

3. An increase in the number of observations in a sampling technique has no effect on the underlying probability of the event. It should, however, increase the accuracy of our estimate of the probability. As the number of exposures in the sample is increased, the standard deviation will decrease, reflecting the increased confidence in our estimate of the probability.

4. The two fundamental functions involved in the operation of the insurance mechanism are the transfer of the risk from the individual to the insurer or the group, and the sharing of losses on some equitable basis. These functions reduce or eliminate uncertainty for the individual, and provide a basis for spreading the impact of losses. As noted in the text (page 41), the *essential* feature of insurance is risk transfer. Pooling is an important technique available to the transferee, but it is not a requisite, and insurance transactions can occur in which the risk that is transferred is unique, and in which there is no pooling. Although insurance *generally* involves the reduction of risk in the aggregate, which is achieved by pooling, insurance transactions need not involve pooling.

5. In the case of the individual, insurance substitutes certainty for uncertainty by the substitution of the small certain cost (premium) for the large uncertain loss that would exist in the absence of the insurance. The uncertainty regarding whether or not a loss will occur is not diminished, but uncertainty regarding financial loss is eliminated for the individual.

6. Examples of uninsurable risks might include war (catastrophe), damage caused by termites (not definite in time), and speculative risks (insurance would be self-defeating by reducing or eliminating the potential gain). What is important in this question is *why* the risks are uninsurable. Generally, it will be because the risk does not meet one of the desirable elements of an insurable risk.

7. There are two costs to society that result from the existence of insurance. The first is the amount of loss that is caused by the existence of insurance. To the extent that individuals intentionally cause losses so they may collect under an insurance policy, society suffers losses that would not occur in the absence of insurance. The second cost of insurance to society is the cost of operating the insurance industry. The resources devoted to the operation of insurance companies and ancillary insurance-related services consume resources.

The chief contributions of insurance are in reducing uncertainty regarding the impact of financial loss and the function of spreading the losses that do occur. By reducing uncertainty and providing a mechanism for the sharing of losses, insurance brings peace of mind to the members of society and makes costs more certain. In addition, it provides for more optimal utilization of capital. See pages 41- 42.

8. The specific conditions of a social insurance plan that distinguish it from private or voluntary insurance are those specified in the definition of social insurance proposed by the Commission on Terminology of the American Risk and Insurance Association. There are eight conditions listed on page 48 of the text. The most important of these, in our opinion, are the lack of equity and the compulsory nature.

9. The three general categories into which private insurance may be divided are life insurance, health insurance, and property and liability insurance.

10. The fundamental difference between suretyship and insurance is in the relationship among the parties and the surety's attitude toward losses. See page 47. In insurance, the insurer assumes the obligation to indemnify the insured in the event of a loss. In the field of suretyship, the surety is analogous to the co-signer of a note, binding itself with the principal for some obligation. If the principal is unable to perform, the surety is obligated, but retains the right to subrogate against the principal.

Losses are expected in insurance, and the underwriter may consider marginal risks at an increased rate. In the case of surety bonds, losses are not expected. Indeed, the underwriting process is designed to weed out those applicants that are likely to fail in performing the activity for which they seek a bond. The distinction is sometimes made between suretyship as a three-party contract and insurance as a two-party contract, but this is a minor distinction in comparison with the difference based on the attitude toward losses.

Answers to Questions for Discussion

1. Although strike insurance has sometimes been available through trade groups and company associations (such is, for example, the railroads and the airline companies), traditionally strike insurance has not been considered feasible by commercial insurers. However, during the baseball players strike in the summer of 1981, Lloyds of London paid the owners of the teams \$100,000 for every game missed, under a \$50 million strike insurance policy. The contract was challenged in the courts by the umpire's association but was upheld. The issues raised at that time are the same as those that have been suggested as reasons that strike insurance is not commercially available: the occurrence of the event is within the control of both the strikers and the employers, and the willingness of the employer to acquiesce to the demands of the workers or to resist those demands is affected by the existence of insurance.

2. An agreement by members of the class to "chip-in" and pay a part of the loss suffered by a class member would be a form of pure assessment mutual insurance. Students will very likely express an unwillingness to participate in such a scheme. Some will express dissatisfaction with the size of the group, but more often they will express doubts about the security of the arrangement; some members of the group might not pay their share when a loss does take place. This question can be very useful in illustrating the defects of a post-loss assessment arrangement and the need to collect premiums in advance. This logically leads to the importance of statistical probability as a tool of ratemaking.

3. Plans have been developed from time to time that propose to protect stock purchasers against a decline in the value of stock and the loss it involves. With respect to the desirable elements of an insurable risk, there are several defects. Predictability would be poor. Although the loss is definite, it is not really beyond the control of the insured, since the price at which the stock is sold is to some extent within the individual's control. Furthermore, catastrophe hazard exists. Most important, however, the risk is a speculative one, and insurance to protect against loss resulting from speculative risk would be self-defeating. To the extent that the possibility of loss were reduced, the possibility of gain would also be reduced. Persons who wish to avoid the risks associated with investment in stock may do so by investing in some other vehicle.

4. The law of large numbers indicates that the larger the number of exposure units, the more closely will actual results coincide with the underlying probability. This implies that the larger the insurance company, the more accurate should be its estimate of the underlying probability and the smaller should be the deviation from its predictions. The more accurate the predictions the smaller should be the margin for contingencies. It may be noted that insurance companies cooperate to achieve accuracy by combining their experience through rating bureaus.

5. To the extent that the failure of the FSLIC illustrated anything about public guarantee insurance programs, it is that there is a catastrophe exposure in insuring depository institutions. Students may observe that two of the desirable elements of an insurable risk may have been in part responsible for the failure of this public guarantee insurance program. The first is that the loss must be fortuitous. Many of the losses that triggered the widespread failures were clearly within the control of S&L's management. The second element of an insurable risk that was not achieved is the requirement that the loss should not be catastrophic—that is, of a type that could happen to a large number of insureds simultaneously.

CHAPTER 4

RISK MANAGEMENT APPLICATIONS

General Comments on the Chapter

Having introduced students to the concept of risk management in Chapter 2 and to insurance in Chapter 3, this chapter turns to the question of how insurance can be used in meeting risk management objectives and when it is an inappropriate approach to dealing with risk. The chapter begins with a discussion of the ways in which risk management decisions should be made. As discussed below, the chapter examines some of the decision-making processes that have been suggested and discusses the advantages and disadvantages of each.

After discussing some of the approaches to risk management decisions that have been used (or that have been suggested), the chapter concludes that two of the strategies suggested in decision theory—expected value and minimax regret—offer the greatest promise for risk management. The chapter explains that the expected value strategy will always suggest retention, while the minimax strategy will always suggest transfer. The problem, then, is to decide when each strategy should be used. The answer, we believe, is implicit in Mehr and Hedges three rules of risk management. When the exposure represents “more than you can afford to lose,” the minimax strategy is appropriate. When the loss is not more than one can afford, “consider the odds” and “don’t risk a lot for a little” suggest the expected value strategy.

As an interesting aside, many years ago, the senior author received a cordial letter from a long-time colleague at another institution offering suggestions for a revision of this text. Among other things, he suggested that we eliminate the discussion of Mehr and Hedges’ three rules of risk management, pointing out that they had dropped these rules in the revision of their text. Thirty years later, we continue to believe that the three rules were an inspiration and that their indisputable simplicity masked their wisdom.

Important Concept to Be Stressed

- Risk management decisions
- Decision theory as basis for risk management decisions
- Expected value concepts
- Pascal’s wager and minimax regret
- The rules of risk management
- Common errors in buying insurance
- Need for a plan
- Priority ranking for insurance coverages
- The cost of financing risk’
- Selecting the agent and the company
- Alternatives to commercial insurance – self insurance
- Alternatives to commercial insurance – captives
- The Risk Retention Act of 1986

Answers to Questions for Review

1. The two strategies that may be employed in risk management decisions are the expected value strategy and minimax regret. Hopefully, students will recognize that both the expected value model and a minimax strategy have application in risk management decisions. While the *expected value* strategy will always suggest retention as the preferred approach, a *minimax* strategy will always suggest transfer. The obvious key, then, is to determine the situations in which each strategy should be applied. The rules of risk management help to resolve the dilemma of which strategy to adopt by specifying when each approach should be used. The first rule of risk management—don't risk more than you can afford to lose—suggests the minimax strategy when the potential loss is unbearable. When the potential loss is not more than one can afford, the other two rules—consider the odds and don't risk a lot for a little—support use of the expected value strategy. Expected value is useful when probabilities are known and when one of the possible outcomes is not a catastrophe loss. The minimax strategy is appropriate when the exposure involves *more than the organization can afford to lose*. See pages 55-57.

2. The reasons that we believe it is difficult or inappropriate to use utility theory, cost-benefit analysis and expected value in making risk management decisions are outlined on pages 55 and 56 of the text. First, with respect to utility theory, we have always understood utility theory as a theory to explain why people make the decisions that they do. It was never intended to be normative or to indicate what decisions people should make. In fact, we believe that one of the functions of an introductory course in insurance is to change the students' utility functions with respect to insurance.

The issues with respect to both cost-benefit analysis and expected value is more practical than theoretical. Often, information is not available on the costs or benefits or a risk transfer or risk retention decision at the time that it is made. Measuring benefits in the case of risk control may involve attempting to measure what will not happen (losses). Finally, with respect to expected value, except in the case of very large organizations, the decision maker will rarely have the dependable type of statistics required to formulate dependable probability estimates.

3. Severity dictates whether or not a risk should be retained. If the potential severity is more than the organization can afford, retention is not feasible. Frequency determines whether or not the risk is economically insurable. The higher the probability of loss, the higher the expected value of loss and the higher the cost of transfer.

4. The three rules of risk management are described on pages 57 through 59 of the text. The first (and most important) of the three rules is "Don't risk more than you can afford to lose." Although it does not necessarily tell us *what* should be done about a given risk, it does tell us which risks about which *something* must be done; those with the potential for catastrophe losses. Since these losses should not be retained, the first rule suggests that such risks should be avoided, reduced, or transferred.

The second rule, consider the odds, suggests that risks characterized by a high frequency (high probability) should probably not be insured, mainly because of the high cost of transferring risks with a high loss frequency.

Finally, the third rule, don't risk a lot for a little, dictates that there should be a reasonable relationship between the cost of transferring risk and the value that accrues to the transferor. It provides the guidance in two directions. First, risks should not be retained when the possible loss is large (a lot) relative to the premiums saved through retention (a little). On the other hand, there are instances in which the premium that is required to insure a risk is disproportionately high relative to the risk transferred. In these cases, the premiums represent "a lot" while the possible loss is "a little."

5. The priority ranking for insurance expenditures described in the text ranks risks as *critical*, *important*, and *unimportant*, with insurance coverages designed to protect against these risks classified as *essential*, *important*, and *optional*. See pages 60-61.

1. **Essential** insurance coverages include those that are designed to protect against loss exposures that could result in bankruptcy. Insurance coverage required by law is also essential.
2. **Important** insurance coverages include those that protect against loss exposures that would force the insured to borrow or resort to credit.
3. **Optional** insurance coverages include those that protect against losses that could be met out of existing assets or current income.

6. Risk retention groups are group owned captives, organized to provide liability insurance to their owners. The principal thrust of the Risk Retention Act was to exempt risk retention groups from certain requirements of state regulation. Once a risk retention group is organized under the laws of one state, it may then write insurance in other states, and is subject to minimal regulation by the states other than its domicile.

An insurance purchasing group is not an insurer. It does not retain risk. Instead, it purchases insurance for its members, generally on a group basis. As in the case of risk retention groups, insurance purchasing groups are regulated primarily in the state in which they are organized. Initially, it was argued that insurers selling to members of a purchasing group were not required to be licensed in the state in which the members are located. Some insurers selling to purchasing groups also maintained that they were not subject to regulation by states with respect to rates and policy forms. These positions were challenged by several commissioners, and the courts have supported the commissioners. See pages 68-69.

7. Humanitarian considerations and legal requirements sometimes dictate that loss prevention and control measures go beyond the optimal marginal cost-marginal benefit point. For example, federal legislation in the form of the Occupational Safety and Health Act, requires employers to incur expenses for job safety loss prevention and control measures that might not be justified on a pure cost-benefit basis. Similarly, building codes may require building owners to incur construction costs that would not be incurred in the absence of legal requirements. See page 59.

8. Financing losses refers to the provision that is made to provide the financial resources that will be needed to replace or repair property, to replace income, or to compensate persons when a loss occurs. The arrangement may involve simply paying for the losses out of current income or existing assets, by earmarking funds, or by the purchase of insurance. The cost of financing losses is the amount of funds that is paid for the losses that occur.

Financing risk refers to the cost of providing for losses that may or may not occur. To the extent that losses can be predicted with precision, there is no cost other than the cost of losses. For losses that may or may not occur, there may not be a cost for losses, but there is a cost of risk—the cost of providing for the possibility of uncertain losses. The cost of risk for retained risks is the opportunity cost on the funds that must be earmarked and that cannot be used for other purposes. The cost of risk for insured losses is included as a part of the premium paid to the insurer. See page 62.

9. The reasons for self-insurance are the potential cost savings that can be achieved. Briefly summarized, the advantages are discussed in the text (page 66) are that:

- Self-insurance avoids certain expenses associated with the traditional commercial insurance market. These include, among other things, insurer overhead and profit, agents' commissions, and the premium taxes paid by insurers. Although there will be some expenses associated with the operation of the self-insurance program, they will be lower than those incurred in the purchase of insurance from a commercial insurer. The two most noteworthy savings are in acquisition cost and premium taxes.
- In addition to the potential for expense saving, the organization may believe that its loss experience is significantly better than the average experience upon which rates are made, or that the rating system does not accurately reflect the hazards associated with the exposure.
- A self-insurer can capture the investment income that arises as a result of the long delays in some lines of insurance between the time that a loss occurs and the time it is paid. Some insurance buyers believe that the investment income from loss reserves is not adequately reflected in rates, and that they can reduce the cost of their insurance by capturing these investable funds through self-insurance.
- Self-insurers can avoid the social load in insurance rates that results from statutory mandates that insurers cover certain exposures in which premiums are less than the losses for those insured. These include the insurer's share of losses under assigned risk plans, FAIR plans, and joint underwriting associations.

The potential disadvantages of self-insurance are identified on page 67. The potential disadvantages and the way(s) in which these disadvantages can be reduced or eliminated are:

- The possibility that self-insurance can leave the organization exposed to catastrophic loss. This disadvantage can be eliminated if the self-insurer purchases reinsurance for potentially catastrophic losses, much in the same way as do insurers.
- The possibility that there may be a greater variation in losses from year to year, resulting in the loss of the tax deduction in losses where there are no profits from which to deduct losses. Provisions of the tax code relating to loss carry-back and carry forward provide some reduction in this potential disadvantage.
- The possibility of adverse employee and public relations arising out of the loss adjustment process. There may be advantages to the organization in having its employee benefit claims handled by an insurer (as opposed to the staff of the employer organization).

- The loss of ancillary insurer services, such as loss prevention services and claim handling. This potential disadvantage can be addressed by purchasing services unbundled from the insurer and by retaining a third-party administrator to handle claims.

10. A pure captive is an insurance company established by a non-insurance organization solely for the purpose of underwriting risks of the parent and its affiliates. Some pure captives have broadened into writing business of others, and eventually move from captives to ordinary insurance subsidiaries.

An association or group captive is an insurance company established by a group of companies to underwrite their own collective risks. Group captives are sometimes referred to as "trade association insurance companies" (TAICs) and also as "risk retention groups."

Answers to Questions for Discussion

1. The principles and rules of risk management are violated for a number of reasons. One of the most obvious is that the insurance consumer does not have sufficient knowledge about the available alternatives and does not devote much time and effort to the purchase of insurance. Insurance industry practices in contract development and advertising may also contribute. Still another explanation might be that the principles and rules of risk management are not just common sense. For example, one may get a lot of argument from some consumers regarding protection against small losses, or insuring against the events that are most likely to occur. While these positions may be shown to be illogical, it does point out that for many people the converse is not simply common sense.

2. The statement "don't risk more than you can afford to lose" and the statement "those who need insurance most are those that can least afford it" are definitely related. For the individual with modest income and wealth, the point at which he or she cannot afford a loss occurs at a low level. It is at this point, then, that he should purchase insurance, but with little wealth, these people can rarely afford to buy the insurance needed. The statement that "insurance should be considered as a "last resort" may also be related, in the sense that the alternatives available to people without much money are limited. They can rarely afford to assume risks of great magnitude, and are forced into the "last resort" quickly. From a somewhat different perspective, it can be argued that those who have little in the way of material goods have little to lose. The rule "don't risk more than you can afford to lose" is meaningless to those who have nothing to lose.

3. The observation that "the cause of a loss is less important than its effect" suggests, among other things, that in dealing with risk, the potential severity of a loss is more important than the probability that the loss will or will not occur. It might be noted in passing that the insurance industry has traditionally focused on the cause of loss (e.g., fire insurance, windstorm, explosion, and so on). These are causes of loss. The effects of loss are \$1,000 losses, \$10,000 losses, and million dollar losses. What is important is not what causes the loss, but the magnitude of the loss. A million dollar loss is a million dollar loss whether it is caused by fire, by explosion, or by an earthquake or flood. The individual or organization that needs protection against million dollar losses needs protection against such losses from

any cause. There is little consolation after an uninsured loss has occurred in the fact that the probability or likelihood of the loss was low.

Because insurance contracts focus on the cause of losses (usually), insurance buyers are sometimes misled into thinking of their exposures in these terms. Named peril contracts provide protection against specifically designated causes of loss, but leave the individual unprotected against loss from those causes that are not named. The observation that “the cause of a loss is less important than its effect,” therefore, suggests that one should obtain coverage against the widest range of perils possible.

4. Analysis of the cost of risk may suggest that insurance is appropriate in a situation where the amount exposed to loss is not “more than you can afford.” Even in situations where the amount of loss could conceivably be retained without exposing the organization to bankruptcy or severe financial loss, the cost of retaining reserves to fund losses that do occur may be greater than the cost of insurance. This is particularly the case where there is great variability in losses over time. If the expected loss is low (because the probability is low) and the maximum possible loss is high (but still within the organization’s ability to absorb), the cost of insurance may be less than the cost of retaining idle funds (the cost of risk).

5. The issue here is in evaluating decisions made under conditions of uncertainty. Such decisions cannot be judged based on hindsight. They must be judged in the light of the information that was available at the time the decision was made. The decision is good or bad based on some standard that can be applied *a priori*—before the fact, not after. Hopefully, students will conclude that the appropriate standard is what could have happened, viewed from an *a priori* perspective, not what did happen in the *a posteriori* context.

The risk manager is wrong, of course. The fact that a loss did not occur is not an indication that the decision was a good one at all. One cannot evaluate decisions made under conditions of uncertainty in light of what happens after the decision is made. The decision must be evaluated in light of the information that existed at the time it was made. The decision was a bad one, but luckily it was not costly.

The principle of the “goodness” or “badness” of decisions made under conditions of uncertainty is one with enormous relevance to the subject of risk management. We always address this concept in class, explaining the distinction between “good” decision and “bad” decisions. We use the simple example on the next page as a means of explaining the issue and have had considerable success with it. Students come to agree that one can make bad decisions and, by luck, the decision was “right.” In contrast, sometimes one makes a good decision but it turns out to be “wrong.” The bottom line is that if one consistently makes the best decision possible in light of the information available, it will turn out “right” more often than it turns out “wrong.”

GOOD DECISIONS AND BAD DECISIONS

Suppose that you and I wager a dollar on the flip of a coin. As you flip the coin, you say, “call it” and I say “heads.” Is my choice of heads a good decision or a bad decision? Knowing what I knew about the probabilities—that heads is as likely as tails—the decision is as good a decision as I can make. (Tails would, of course, have been an equally good decision.) Now suppose that as a result of the toss, the coin ended up tails and I lose my dollar. I made a good decision, but the outcome was not what I had hoped it would be. Now let us change the scenario. Suppose that I offer to wager \$50,000 on the flip of the same coin (\$50,000 which, by the way, I don’t have). You accept and flip the coin. The outcome in this case is, as I predicted, a head (and I win your \$50,000). One can argue that this second decision was a bad one, even though the outcome was favorable. There is an incongruity between decisions that are good or bad and those that turn out right or wrong.

CHAPTER 5

THE PRIVATE INSURANCE INDUSTRY

General Comments on the Chapter

This chapter is largely descriptive, focusing on the structure of the private insurance industry, the distinctions among the various types of insurers, the different distribution systems, and the manner in which various types of insurers operate. It provides useful insights into the operation of the industry and helps the students to recognize the various alternatives available in the market place. The chapter also describes some of the cooperative programs within the industry, such as the shared markets, underwriting syndicates, and advisory organizations.

Some students find the historical material at the beginning of the chapter boring, but an equal number find it fascinating. We believe that it adds an important perspective. Although the importance of the earlier monoline organization of the insurance industry in the United States and the multiple-line transition will be dealt with again in later chapters, the introduction of this phenomenon at this point helps to explain the current structure of the industry.

The chapter closes with a discussion of competition in insurance. The discussion begins with a brief overview of the number of competitors and the changes in market share that have occurred over time and ends with a summary of the number of insurer insolvencies in life insurance and property and liability insurance since 1980.

Within the broad framework of the chapter, there are opportunities for some interesting digressions into such areas as the formation of new insurers, the changing market shares of the direct writers and companies operating through the American agency system, and the extent to which the industry is or is not competitive.

Although the relative emphasis that different instructors will want to place on the subject matter of this chapter may differ, we have found that the most effective approach is to permit the students to explore the practical advantages of mutual versus stock insurers, and companies operating through the American agency system and direct writers. This also provides a point of departure for discussing employment opportunities in the insurance field, and the differences between life insurance sales and sales in the property and liability field. Finally, many students are fascinated by the operational aspects of Lloyds of London, and embellishments on the chapter discussion of Lloyds seems to be a welcome addition by many students.

One of the subjects mentioned in the text—demutualization—has become the focal point of a fierce debate over policyholder rights. The debate stems in large part from a truism stated in the text; that policyholders “own” a mutual insurance company. While it seems indisputable that policyholders own a mutual insurance company, the ownership is qualified in its nature. As stated in the text at page 68, there are no vested rights of ownership for policyholders except in the case of liquidation. The “ownership” is transitory, in the sense that it is acquired and lost without any investment on the part of the policyholder. It is unique in the sense that the thing “owned” (the mutual insurer) has the discretion of eliminating the interest of individual owners (by cancellation or nonrenewal of their policies).

Important Concepts to be Stressed

The most important concepts in the chapter, and the principles that we believe should be stressed in the lecture are:

- A brief history of insurance
- The original monoline organization of the industry
- The multiple-line transition and its implications
- Various approaches to classifying insurers
- The agent's role in distribution
- Differences in distribution systems
- Insurance company groups of fleets
- Voluntary underwriting syndicates
- Distressed risk pools, joint underwriting associations
- Cooperative initiatives in the insurance industry
- Competition in the insurance industry
- The insurance cycle and insolvencies as a result of competition

Answers to Questions for Review

1. Students should have little difficulty in identifying the classes of insurers that are listed on page 75 (stock, mutual, reciprocals, Lloyds associations, health expense associations, and government insurers). The distinguishing features of each of the types of insurers are discussed in pages 75-79.
2. An insurance agent is a representative of the insurance company. He or she operates on behalf of the company in soliciting insurance. As an agent of the insurer, the agent acts on behalf of the insurer, creating and sometimes modifying insurance contracts. The agent in property and liability insurance has the power to bind the company to a risk, and in so doing, create a contract of insurance. Brokers, in contrast, are representatives of the insured or applicant for insurance. Although they are compensated by the insurer (or by the agent), they are legally representatives of the insured. See page 80-81.
3. The fact that independent agents are said to "own their expirations" simply means that the decision regarding the renewal of a policy rests with the agent rather than with the insurer. When a policy *expires*, the agent may place the renewal of the policy with some other insurer. Although there are several implications of this, the most important one is that the power to replace the business prevents the insurer from paying a reduced commission to the agent at renewal. See page 82.
4. Health Maintenance Organizations generally operate on a group prepaid practice basis, under which the insureds or subscribers pay an annual fee in return for which they receive health services. HMO's differ from the other insurers discussed in the chapter; in addition to providing for the transfer and sharing of risk, they also serve as deliverers of health care. Although there is a tendency to think of health maintenance organizations as health care providers—which is the case—they are also insurers. The capitation approach to charging for their services represents a transfer and pooling of risks, which in effect makes them insurers. See page 78.

5. The principal difference in the powers of a life insurance agent and a property and liability agent is the power of the property and liability agent to bind the company to a contract. Life agents may solicit and deliver contracts of insurance, but cannot bind the company.

6. The general method of operation of Lloyd's of London is outlined on page 77. The analogy between Lloyds and the New York Stock Exchange is not completely valid, but it expresses the general nature of the organization. The widespread publicity Lloyd's has gained stems to a large extent from the unusual and unique exposures it sometimes insures. However, these represent a small portion of the total business. In addition, the long history of operations adds a certain mystique to the organization.

7. The costs that are common to all insurers are listed on page 88. They include the payment of losses, loss adjustment expense, cost of production or sales expense, administrative expenses, taxes, and profits or additions to surplus. Payment of losses can, of course, be an area of considerable difference. Lower costs in the payment of losses can be achieved through selective underwriting. Lower commissions can reduce acquisition costs, and internal efficiencies (such as, for example, automation) can reduce administrative costs. Finally, profits and additions to surplus can be a cause of differences in price. As a general rule, the greatest differences in the costs of property and liability insurers are in the area of loss costs, reflecting the different underwriting standards. The greatest differences in the costs of life insurers, in contrast, are in the expense elements of the premium.

8. Two insurers can charge significantly different premiums for identical coverage because their costs may be different. Each of the areas of cost listed above can vary between insurers even though the coverage itself may be identical. See pages 88-89. In the property and liability field, what sometimes appear to be identical products are really distinctly different products. As explained in the footnote on page 88, the individual who is insured is, in a sense, the insurance product. Although the coverage may be identical between two insurers, the risk assumed can differ significantly with the class of applicants to whom the coverage is offered.

9. Advisory organizations (formerly known as rating bureaus when they were actually owned by insurance companies) compute trended loss costs, based on loss statistics furnished to the organization by its member companies. The advisory organization then files these rates with the state regulatory authorities on behalf of insurers that will use the loss costs in constructing final rates. In a few areas, advisory organizations still compute final rates. Advisory organizations are found only in the property and liability fields. See pages 85-86.

10. Government programs that operate as monopolies, that compete with private insurers and that operate as monopolies are found at both the state and federal levels.

- The National Flood Insurance Program is an example of a cooperative effort between the federal government and private insurers.
- The Wisconsin State Life Insurance Fund, the Maryland Automobile Insurance Fund, and state workers compensation funds in several states compete with private insurers.
- In 2013, four states had monopolistic workers compensation funds (ND, Ohio, Oregon, and Wyoming).

Answers to Questions for Discussion

1. There is no right or wrong answer. Insurers form cooperative organizations to achieve efficiency through elimination of duplicative efforts. Rating bureaus, for example, were originally formed to permit companies to combine loss experience for the purpose of increasing the precision of loss projections. Cynics may feel that rating bureaus constitute a form of price fixing that is detrimental to the public. This should not be surprising in view of the fact that this attitude is held by many consumerists who have been critical of the insurance industry. At the same time, the cooperative organizations identified in the text (rating or advisory organizations, distressed and residual risk pools, educational organizations, and insurance trade associations) have generally produced economies and on balance have been a positive force.

2. Since the insurance rate is based on an average, when the better than average exposure units are removed from the total, the average loss of the remaining exposures is higher. Thus, when an insurer is successful in selective underwriting and gains a better class of business, the remaining business by definition has a worse loss experience and a higher average loss per exposure unit than before.

3. An individual can purchase insurance with or without the services of an agent. If the consumer elects to purchase coverage from an agent, he or she has a right to expect a "value added" by the agent. In general, the service provided by the agent is advice. The advice that the agent provides deals with four principal areas: coverages, costs, companies, and claims.

4. Students' answers will differ and the personal orientation of individual students will influence the direction of the discussion. To the extent that a government insurer receives a subsidy from the general revenues, it has an unfair competitive advantage. Some students may argue that government insurers may be necessary in order to provide insurance to persons that private insurers are unwilling to insure, but the concept of *competition* implies that private insurers are willing to write the exposures for which both the government and private insurers are competing.

5. There is no correct answer, and students' opinions will vary. The important point is that students realize that the mandatory participation pools do involve a subsidy to those insureds in such pools. The key question is really whether it makes any difference if high-risk individuals are subsidized through insurance or through the tax structure. Considerations that may be introduced include such considerations as the element of regressiveness in each

approach and the manner in which a subsidy might be granted through the tax system. For example, the government might act as an insurer, providing insurance below cost, or “insurance stamps,” similar to “food stamps” might be used.

Additional Question for Discussion

The text notes that pricing in the property and liability insurance field is often based on cooperation, through the pooling of loss statistics. It also suggests that the industry is characterized by price competition. If loss costs—which represent a major component in the price—are identical for a group of insurers and their expenses are similar, how can there be price competition?

Critics of the insurance industry are fond of referring to it as a “cartelized” industry. Although this criticism has been muted somewhat by the shift by advisory organizations (rating bureaus) to the system in which they compute loss costs rather than final rates, some critics continue to argue that the industry engages in price fixing.

In fact, the insurance industry has none of the characteristics of a cartelized industry. The market price is not stabilized, nor is it higher than the competitive level. For insurance buyers, there is a wide range of alternatives, generally with differing prices. Even when advisory organizations computed final rates, concerted rate making was permitted, but not required. Companies that charge the same rate or premium for coverage could and do compete with each other on a price basis. Although concerted rate making is being phased out, the issue of concerted pricing deserves comment.

Although competition in the property and liability field has been studied by numerous scholars, many have missed a simple feature of the way in which price competition takes place in insurance. Insurers engage in price competition in two ways, one of which is unique to the field of insurance. The first approach is the traditional one, in which each competing firm attempts to reduce its costs in order to offer a price that meets or is lower than the prices offered by its competitors. Here, the price is a function of cost.

The second approach to competition is based on the underwriting process, and arises from the fact that in the insurance transaction, the buyer is, in a sense, also the product. The fact that individuals differ with respect to the hazards they bring to the insurer means that an insurer can adjust its costs by selectivity of the underwriting process. In those situations in which the price the insurer may charge has been fixed (by bureau membership or rate control, for example), the insurer can adjust its costs to meet the price. Here, for the individual insurer, price is not a function of cost. Price is set by some outside entity and cost becomes a function of price. Individual companies, for example, may have expenses that differ from those used by the bureau in setting a standard rate. Those companies whose expenses are lower than the average (on which the bureau rate is based) can be less selective in their underwriting, accepting applicants that would otherwise be rejected. Those companies whose expenses are higher than average must be more selective in their underwriting. In other words, the insurer adjusts its costs to meet the price, rather than adjusting the price to the level of costs.

CHAPTER 6

REGULATION OF THE INSURANCE INDUSTRY

General Comments on the Chapter

The first four pages of the chapter represent an expanded discussion of the "why" of insurance regulation. We have added a somewhat more detailed treatment of the theoretical economic bases for regulation in general, and for insurance specifically. The material on the distinction between the market failure theory of regulation and the public choice theory is, in our opinion, a useful framework within which to discuss the changing goals of regulation.

Insurance regulation is a subject marked by considerable controversy and while much of the material in this chapter is descriptive, a number of controversial issues are discussed. While we have attempted to present a middle of the road treatment of the areas that are subject to disagreement, our personal bias may show through. The major point we have attempted to stress throughout the chapter is that the principal goal of regulation should be the protection of the public, and that the function of insurance regulation is to promote the welfare of the public by maintaining sound insurance companies that offer fair contracts at fair prices.

The discussion of the history of insurance regulation establishes the legal precedents that are the basis for our current regulatory system, and helps to explain the "threat" of federal regulation. With respect to the issue of federal versus state regulation, we have noted that there are widely differing attitudes on this subject within the industry itself, and that this subject, like so many others in the area of regulation, is one upon which reasonable people may disagree. In particular, we have attempted to stress the point that the various advocates of the repeal of McCarran-Ferguson often see the outcome of repeal in different terms. One can imagine the industry operating without the antitrust exemption, and if repeal of McCarran-Ferguson resulted in an antitrust environment for insurers, they could undoubtedly cope with the situation. It is the possibility that a rigid system of federal regulation would replace the state system that many in the industry fear.

The subject of rate regulation is one that is often perplexing to students, because of the variety of approaches. In our lectures we try to stress the point that these different approaches to rate regulation reflect differing opinions of regulators and legislators as to which approach is superior. There are as many advocates of the prior approval system as there are supporters of the open competition approach. Some lawmakers believe that under the open competition system, insurers would take advantage of the absence of a prior approval system to increase rates. Other authorities oppose the open competition approach for precisely the opposite reason, fearing that the unbridled competition that might result would be destructive.

The Chapter Appendix, *The Availability/Affordability Debate*, was added in the sixth edition. It summarizes in once place the discussion of the issues relating to availability and affordability that were scattered in other sections of the book in earlier editions. In addition, it discusses California's Proposition 103. Given the passage of time since enactment of Proposition 103, many students will be unfamiliar with it. When it was passed in 1988, however, it rocked the insurance industry, and the philosophy embodied in Proposition 103 carries lessons about the political environment in which the insurance industry insurance

operates. We believe that the availability/affordability debate and Proposition 103 are important topics, but some instructors may elect not to cover the material in the appendix.

The 11th edition includes a brief overview of the NAIC's Solvency Modernization Initiative, with expanded discussion of group supervision, regulatory oversight of enterprise risk management, and reinsurance modernization. It also includes a section on international developments in regulation and supervision. Given the expansion of internationally active insurance groups, the importance of international standards and of coordination in their regulation and supervision is likely to continue to grow. Chapter 34 contains additional material on international developments.

Important Concepts to be Stressed

The most important concepts in the chapter, and the principles that we believe should be stressed in the lecture are:

- Historical precedents of the current regulatory system
- The major areas regulated by the states
- Regulation of insurer insolvencies and the NAIC's Solvency Modernization Initiative
- Approaches to regulation of insurance rates
- Federal versus state regulation
- Availability/Affordability
- Proposition 103
- The relevance of international standards

Answers to Questions for Review

1. Insurance is regulated for two reasons. First, it is considered to be a business that is vested in the public interest. Insurers are fiduciaries, which hold vast sums of money to which their customers have a legal claim. In addition, the influence of insurer operations is pervasive. When an insurer fails, not only do the owners of the firm suffer, but members of the public who have purchased insurance from the company or who have claims against the company also suffer. At the same time, the field is highly technical with a product that is not easily understood by the public. All of these characteristics support regulation of the industry on the "vested in the public interest" basis. The second reason for regulation of the industry is the "destructive competition" rationale, which argues that in the absence of regulation, the natural tendency in the industry would be toward cutthroat price competition. Although the first of the two reasons for regulation has not been challenged, the destructive competition rationale has been questioned recently.

2. The term "vested in the public interest" simply means that the business is one in which persons other than the owners of the business firm have an interest in the solvency and performance of the organizations that make up the industry. Performance of the firms within the industry has a direct bearing on the general well being of the population.

3. The landmark decisions and statutes are *Paul vs. Virginia*, the *South-Eastern Underwriters Association Case*, and *Public Law 15*. These and their relevance to the current situation are discussed in pages 99-100. *Paul v. Virginia* took the position that insurance is

not interstate commerce and left regulation to the states for 75 years. The SUEA case reversed this decision, making insurance subject to federal regulation. Public Law 15, the McCarran-Ferguson Act provides a conditional exemption from federal regulation, but allows the federal government to regulate the industry to the extent that it is not regulated by the states; thus the significance of the perpetual proposals to repeal McCarran-Ferguson.

4. Public Law 15 reaffirmed the right of the federal government to regulate insurance, but declared a moratorium on regulation until January of 1948, at which time the federal government was to regulate the industry to the extent that it was not being regulated adequately by the states. (In addition, it reserved to the federal government regulation with respect to boycott, intimidation, and coercion.) See page 101.

5. The four principal approaches to rate regulation in the property and liability field are prior approval, no filing (open competition), file and use, and informational filing. These systems are discussed on pages 110-112. (The term file and use encompasses a wide range of systems. This section also discusses flex rating, under which a range is established within which rates may fluctuate. Changes beyond the established limits require approval of the insurance department.

6. Statutory requirements with respect to insurance rates require that the rates must be adequate, not excessive, and not unfairly discriminatory. See page 109. There are differences among the states in the ways in which these requirements are enforced.

7. A domestic company is one with its home office in the state. Thus, Principal Life Insurance Company of Des Moines, Iowa, is a domestic company in the state of Iowa. It is a foreign company in other states. An alien insurer is a company that is domiciled in a foreign country (e.g., Lloyds). See pages 101-102. These classes of insurers were discussed in Chapter 5, but students are likely to appreciate the relevance of the distinction in the context of regulation of insurance.

8. State insolvency funds are discussed on page 106. Separate funds apply to life insurers and property and liability insurers, and all insurers operating in the state are assessed their proportionate share of the losses that would otherwise fall on the public in the event of an insurer insolvency. One of the important features of these insolvency funds is that they apply only to admitted insurers. Insurance placed under the state excess and surplus line laws of the states is not covered by the insolvency funds.

9. Those who favor federal regulation argue that state regulation has been inadequate and that federal regulation would bring a desired uniformity. Finally, they argue that the business is interstate in nature and that regulation should be under one uniform system. Those who favor retention of the state system argue that individual states are more familiar with local problems and more responsive to local needs. They also argue that a federal system would be superimposed on the state system and that to the extent it is desirable, uniformity can be achieved through the NAIC. See pages 113-115.

10. Those who oppose a change from a prior approval approach to an open competition law sometimes use two diametrically opposed arguments. Some opponents argue that insurers would take advantage of the absence of a prior approval requirement to increase their rates.

Others argue that the absence of prior approval would lead to ruinous cutthroat competition. Those who favor the change to open competition argue that the prior approval system results in restrictions in the market when rates are inadequate, and that competition would be a more effective regulator. Competing companies would prevent unreasonably high rates, and managers of the companies would be expected to avoid unreasonably low rates. See page 112.

Answers to Questions for Discussion

1. Students opinions will vary. Those who favor an elective office may argue that this approach makes the commissioner more responsive to the wants and needs of the public. Others may feel that the position should be appointive. There is no correct answer.

2. Agents and brokers are presumably required to pass an examination to demonstrate that they understand the contracts that they will be selling to the public. In view of the fact that the difficulty of the exams varies from state to state, and that the question calls for an opinion, there is no correct answer to the "too hard or too easy" part. However, it might be interesting to compare the educational requirements imposed by the state to become say, a hairdresser, with those required to become an agent or broker.

3. In 1977, a Task Force of the U.S. Department of Justice that had been established to study competition within the insurance industry, took the position that anti-rebate laws represent an unnecessary and undesirable restriction on competition. In the same year, a consumerist group affiliated with Ralph Nader raised this issue in a suit to repeal the Florida anti-rebating law. The Florida Supreme Court declared the Florida anti-rebate law unconstitutional. A California court, on the other hand, upheld the California anti-rebate law in 1986. (Proposition 103 repealed the anti-rebate law, but it seems doubtful that this was a key factor in the voters' decision on Proposition 103).

While the arguments of those opposed to the anti-rebating laws have a basic appeal, like so many complex issues, there are two sides to the question. Anti-rebating laws were originally conceived as a necessary adjunct to the anti-discrimination laws and the prior approval system of rate regulation. The Department of Justice Task Force viewed the repeal of anti-rebate laws as a necessary complement to the change to a competitive system of rate regulation, which it favored. But even if one favors the competitive approach to rate regulation (and many authorities do not) it does not necessarily follow that the repeal of the anti-rebating laws would be beneficial to all consumers. Experience seems to indicate that when rebates are permitted in other fields, it has generally been the larger buyers who receive the greatest concessions. Repeal of the anti-rebate laws could lead to unfair discrimination at the agency level, as well as the elimination of smaller competitors. Finally, the argument that open competition laws must be supplemented by repeal of the antirebating laws seems to indicate a distrust in the effectiveness of competition. The rationale of competition as a regulator is based on the assumption that competitive pressures will force costs to the point of greatest efficiency. Yet commissions are simply one of the costs of an insurer, and the argument that antirebating laws must be repealed implies that competition will not really force insurers to reduce these costs to the least-cost point of efficiency.

There is no correct answer, and student's attitudes will differ. Since regulators (and even professors) cannot agree on the answer to this question, we should not be surprised if students cannot. However, the students should illustrate an understanding of the basic issues involved.

4. As noted in the text, the goal of regulation is to restrict the actions of firms in an industry, forcing them to behave in a way that will produce results as near as possible to those that would occur in a competitive market. Inevitably, this means that regulation does infringe on the right of management to make business decisions. In the end, a regulated firm comes to have two masters; the managers of the firm and the regulators. Pricing decisions made by managers are scrutinized by the regulators. If they are consistent with the goals of regulation, they are permitted to stand. If not, they are overruled. The real argument, then, is whether "competition can be depended upon to keep rates from being excessive, and good management will keep them from being inadequate." While one can probably agree with the first half of the statement (that competition will keep rates from being excessive), it is not clear that the second part of the observation is true. Not all insurers are equally well managed, and individual competitors do not set the market price. If one believes that the natural tendency in insurance is toward cutthroat price competition, regulation is required to protect consumers.

5. Hopefully, students will cite as the major factors that should be considered the effectiveness and efficiency of each approach in achieving the goals of regulation. Much of the discussion for and against federal regulation or state regulation focuses on the preferences of insurance companies and state regulators (that is, those who are regulated and the regulators). The advantages and disadvantages that are important are those that relate to the consumer.

CHAPTER 7

FUNCTIONS OF INSURERS

General Comments on the Chapter

Many instructors may feel that much of the material in this chapter is too technical or unnecessary for a beginning course. We have attempted to describe the functions of insurers in a summary fashion and believe that this material can be handled in one lecture. However, when course time permits, it can easily be expanded to two lectures.

We have attempted to avoid overwhelming the students, while at the same time providing some insight. Although various forms of individual rates (judgment rating, schedule rating, experience rating and retrospective rating) are briefly noted, the discussion is non-technical and should not cause students difficulty. In addition, we have briefly explained the process by which rate levels are adjusted and added some personal observations on the accuracy of ratemaking procedures. Like the discussion of ratemaking, the discussion of underwriting and loss adjustment are brief and non-technical. However, like much of the material in Chapter 5, some of the details of these functions help to fill in gaps in the students' understanding of the manner in which insurance operates.

In the tenth edition, we expanded the discussion of the use of credit scores in insurance underwriting and rating. In this edition, we have added a discussion of predictive analytics, of which credit scoring is one example. With developments in information technology, insurer access to information about applicants will continue to grow, and the debate over the use of credit information is likely to be repeated in other areas. This area offers an opportunity to explore the tension between an individual's desire for privacy and the insurer's adverse selection problem.

Important Concepts to be Stressed

The most important concepts in the chapter, and the principles that we believe should be stressed in the lecture are:

- Terminology related to ratemaking (e.g., rate, pure premium, etc)
- The distinction between class rating and individual rating
- Approaches to individual rating
- The fallacy of actuarial precision
- The nature and purpose of underwriting
- Restrictions on post-selection underwriting
- The loss adjustment process and bases for claim denial
- Percentage composition of insurers' investment portfolio

Answers to Questions for Review

1. The text defines underwriting as “the process of selecting and classifying exposures.” Although the steps in the underwriting process are not specifically listed in the text, students

should be able to identify the steps that are involved in the process from the discussion. These steps include the formulation of the company's underwriting policy, receipt of the application from the insured, gathering the information for evaluation of the risk, and acceptance or rejection of the applicant. See pages 133-135.

2. The sources of information available to the underwriter include the application from the insured, information submitted by the agent, investigations, information from external agencies, and physical inspections or examinations. The importance of each source varies with the type of insurance, but all of the sources are important for different reasons outlined on page 135. Multiple sources are necessary because losses may arise from a wide variety of causes and no single source of information can provide as complete a picture of the risk as do the multiple sources.

3. The term "sales prevention department" is sometimes used by the marketing department in reference to the underwriting department. The natural conflict between underwriting and production should be self-evident to the students but the extent of the conflict may not be.

4. Pricing the insurance product is more difficult than pricing in other fields because costs are not known (and will not be known until the contract has expired) and because pricing is subject to government regulation. Illustrations of the manner in which the inherent uncertainty in pricing insurance is compounded by the legal environment can be drawn from the court decisions concerning asbestosis and other latent injuries (discussed in chapter 32).

5. A rate is the cost per unit of insurance. The premium is the cost of a policy, and is derived by multiplying the rate by the number of units of protection purchased or some other rating base. The rate may be the price per unit of coverage (e.g., per \$100 in fire insurance or per \$1,000 in life insurance) or it may be applied to some other measure that is assumed to be an appropriate measure of exposure (e.g., payroll in workers compensation or receipts in product liability).

6. The steps in the loss adjustment process are notice of loss, investigation, proof of loss and payment or denial of the claim. The details of the steps vary with the type of insurance. See pages 138-139.

7. Retrospective rating plans are a type of "cost-plus" contract in which the insured's actual losses during the policy period determine the cost of the protection. The retrospective plans were originally conceived as an alternative to self-insurance. They are used by insured's with better than average anticipated losses to reduce insurance costs, by firms that might otherwise self-insure in order to obtain the services of insurers in administration and to provide a stop-loss. They are also sometimes used by insurers as a means of writing exposures that might have a higher than average loss experience.

8. A claim may be denied because the policy was not in effect at the time of the loss (inception or expiration), the insured may have violated a policy provision, a condition may have caused suspension of the coverage, the property damaged or destroyed may not meet the definition of insured property, or the peril causing the loss is not included in the insuring agreement.

9. Various types of adjusters used by property and liability insurers include agents, staff adjusters, bureau adjusters, and independent adjusters. It may be noted that the list does not include public adjusters, who represent the insured in the loss adjustment process.

10. An independent adjuster contracts services directly to an insurance company, and differs from staff adjusters and bureau adjusters used by insurers in adjusting their claims in the sense that they are "independent" contractors. A public adjuster on the other hand represents the insured in the adjustment process—not the company.

Answers to Questions for Discussion

1. Students may have strong feelings with respect to the right of an insurer to cancel a policy in mid-term. Although there is no "correct" answer to this question, many students will take the position that it is almost "immoral" for an insurer to cancel a policy—because of the difficulties that cancellations may create for the cancelled buyer, and because they may have had personal experiences in which they were cancelled "for no reason at all..." as the saying goes.

2. As in the case of the preceding question, students are likely to have strong opinions. Those students who feel that there is something immoral about an insurer canceling a policy or refusing to renew will obviously favor legislation restricting such rights. These legislative restrictions represent an interference with the right of the insurer's management to make decisions affecting the profitability of the firm, and to this extent some students may oppose them. In addition, it may also be noted that restrictions on post-selection underwriting make insurers increasingly selective in the initial underwriting process.

3. The problem of adverse selection might be solved by requiring flood insurance as a mandatory part of the fire policy, but this could create problems for property owners in flood prone areas. If insurers retained the right of selection, it may be assumed that they would be unwilling to write fire insurance on properties located in the flood prone areas.

4. Loss adjustment in the life insurance area is the simplest. There are no partial losses, and determination of the amount of loss is not required. Because the policies are cash payment policies, the face amount of the policy is payable in the event of loss. In property insurance, which would seem to be the next step up in terms of difficulty, the loss settlement process frequently involves estimating the value of the property in order to determine the amount of the loss. Here the adjuster would probably require some training in the fields of construction, accounting, law, and of course, would need to be well versed in the provisions of the insurance contracts involved. In liability insurance the loss settlement process is most complicated of all. In attempting to settle a loss without litigation, the adjuster becomes involved in the questions of negligence, the extent of damages, and the coverage provided by the policy. The liability adjuster needs much of the same training that the property insurance adjuster needs, and in addition should probably have some training in tort law, economics, and perhaps medicine. Like the property adjuster, he or she would, of course, also need to be well versed in the contracts of insurance involved.

5. In most industries, management has a much better notion of its costs than is the case in insurance, and even though a firm may be subject to increasing costs over time, the costs are generally known before the product is sold. In the case of insurance, the costs are not known

until well after the product has been sold. On the other hand, insurers do have some notion of the amount of loss costs through the statistical procedures in the rate making process. Other costs such as commissions, administrative expenses, and premium taxes are known in advance.

CHAPTER 8

FINANCIAL ASPECTS OF INSURER OPERATIONS

General Comments on the Chapter

Some students—particularly those with no previous accounting background—may find this chapter difficult, but those students who have any background in accounting should have little difficulty. We have attempted to present a discussion that is as non-technical as possible, in keeping with the nature of a principles course. A number of the minor points have been relegated to the footnotes.

The chapter may be dealt with in some depth or, if the instructor prefers, covered in a cursory manner, hitting the chapter highlights and ignoring some of the more technical points. One of the important points that should be made in either case, is the influence of statutory accounting requirements on policyholders' surplus. The influence of increasing premium volume on statutory profit and upon surplus, and the impact of changes in the market value of stocks are important in understanding the cycles within the industry and the periodic tightening of the market for insurance coverages.

The material on reinsurance may be more involved than some instructors feel is necessary, in which case this section can be covered briefly, focusing on the general nature and functions of reinsurance without exploring the notion of the different forms that it may take. We believe that it is important for students to understand that reinsurance performs two functions; the technical function of spreading risk and protecting against catastrophe losses, and the financial function of surplus relief.

Immediately following the discussion of reinsurance, we have added a discussion of the recent evolution of securitization, including catastrophe bonds, catastrophe futures and options, and other insurance-linked securities. Like reinsurance, these insurance derivatives are designed to transfer a part of an insurer's underwriting risk to another party. Unlike reinsurance, they involve financing from outside the insurance industry. These external sources of capital are tapped by the various approaches to securitizing insurance risk, with the securities marketed to investors who are willing to speculate on the loss experience of insurers.

The subject of insurance cycles and cash flow underwriting was introduced in Chapter 5. Once the students have examined the principles of statutory accounting, the role of reserves in the insurer investment equation becomes clearer, and they can understand that cash-flow underwriting is not the insane and mindless practice as which it is sometimes characterized. Insurers price their commercial line products to maximize total profit, including income from both underwriting operations and investments. Underwriting losses are, in effect, the price insurers pay for investable funds. When interest rates are high, the combined ratio is also high, as insurers compete for premium dollars that can be invested in their leveraged portfolios. In this sense, cash-flow underwriting is merely an application of the marginal revenue-marginal cost strategy. Although insurers may consistently lost money in their underwriting operations, if investment income exceeds the underwriting losses, the insurers achieve an overall profit from operations.

Important Concepts to be Stressed

The most important concepts in the chapter, and the principles that we believe should be stressed in the lecture are:

- The distinction between statutory accounting and GAAP
- Valuation of insurers' assets
- The NAIC Codification Project
- The concept of earned premiums and unearned premium reserve
- Statutory profit or loss
- The combined ratio
- The surplus drain of property and liability insurers
- The surplus drain of life insurers
- Nature and functions of reinsurance
- Insurance-linked securities
- State premium taxes and federal income taxes

Answers to Questions for Review

1. The fact that insurance is conducted on an advance payment basis makes reserves necessary. The insured pays a premium for protection to be received over a period of time, and the unearned premium reserve recognizes the liability of the company for the protection not yet provided. Loss reserves simply recognize the liability of the company for losses that have taken place but that have not yet been paid.

2. The life insurance policy reserve is more analogous to the unearned premium reserve, in the sense that it represents an overpayment or a payment for protection not yet received.

3. The unearned premium reserve is the balance sheet item through which an insurer recognizes its obligation for the protection its insureds have paid for, but which has not yet been provided. It is called the "reinsurance reserve" because it represents an amount that would be required to transfer the insurance in force to another insurer if the primary insurer wished to do so. The most widely used method of calculating the unearned premium reserve is the monthly pro rata basis, under which one-twenty-fourth of the premium for an annual policy is considered earned in the month in which it is written and the other 23/24 is the unearned premium reserve. One-twelfth is earned each month through the twelfth month, and one-twenty-fourth is earned in the thirteenth month.

4. A reserve is redundant when it is in excess of the actual obligation that it represents. The unearned premium reserve in property and liability insurance is redundant because expenses have already been paid, but the reserve is established in the full amount of the premium. Life insurance policy reserves are also redundant in the sense that interest and mortality statistics on which they are based are conservatively estimated.

5. Earned premiums during 2007 were \$22,000,000. Earned premiums equal premiums written plus or minus the change in the unearned premium reserve. If the unearned premium reserve remained at \$20,000,000 during the year, the entire \$25,000,000 written would have been earned. Since the unearned premium reserve increased by \$3,000,000, premiums earned were less than premiums written by the amount of \$3,000,000.

6. Incurred losses during the year 2007 were \$6,000,000. The company paid out \$7,000,000 in losses, but reduced its obligation for unpaid losses by \$1,000,000. This means that \$1,000,000 of the paid losses represented payment of obligations outstanding at the beginning of the year, making the losses incurred \$6,000,000.

7. Statutory profit or loss equals premiums earned less losses incurred and expenses incurred. Premiums earned \$8,000,000 (\$10,000,000 written less \$2,000,000 increase in the unearned premium reserve). Losses incurred \$5,000,000 (\$6,000,000 losses paid, minus \$1,000,000 reduction in the loss reserves).

Beginning UP Reserve 12/2006	9,000,000	
Add written premiums	<u>10,000,000</u>	
Total UPR and Written Premiums		19,000,000
Deduct Ending UP Reserve		<u>-11,000,000</u>
Premiums earned		\$8,000,000
Incurred losses	\$5,000,000	
Incurred expenses	<u>\$4,000,000</u>	
Total deductions		- \$9,000,000
Statutory underwriting loss		- \$1,000,000

It may be noted that adjustments are required to convert statutory profit to taxable income, as discussed in the section of the chapter that deals with taxation of insurers..

8. Reinsurance performs a technical function of spreading risk, and a financial function of reducing the surplus drain. In its role of "insurance for insurance companies," reinsurance protects the direct writer against catastrophe losses. In addition, it permits the transfer of excess capacity from one insurer to another, by permitting the direct writer to transfer its unearned premium reserve obligation to the reinsurer. The assets of the ceding company are reduced by less than its liabilities are reduced, thereby increasing surplus. See page 150. Facultative reinsurance is individually negotiated reinsurance. Treaty reinsurance may be either facultative or automatic. In either case, the terms under which the transfer of risk takes place are agreed upon in advance. Under a facultative treaty, the direct writer need not cede and the reinsurer need not accept the risk. Under an automatic treaty, the cession and acceptance are automatic. See page 153.

9. TRA-86 introduced new rules for determining the taxable income of property and liability insurers, designed to reduce the influence on taxable income that results from the mismatching of revenues and expenses under statutory accounting. With respect to the unearned premium reserve, TRA-86 provides that only 80% of the increase in unearned premium reserve in a given year is deductible in computing taxable income.

The redundancy in loss reserve stems from the delay between the time that a loss is incurred and the reserve is established, and the time at which the loss is actually paid. The present value of the future claim payments is less than the amount established as the reserve. TRA-86 requires insurers to discount deductions for increases in loss reserves, based on a loss payment pattern developed by the IRS. See pages 159-160.

10. One approach to estimating the true underwriting profit or loss of a property and liability insurer is the combined ratio. Although the combined ratio combines the ratio of incurred losses to earned premiums with incurred expenses to written premiums, it provides a rough indication of profitability. The second approach is to adjust the statutory underwriting profit or loss to reflect the equity in the unearned premium reserve (the fact that prepaid expenses are not reflected in the statutory computation). See page 150.

Answers to Questions for Discussion

1. Statutory accounting is ultra-conservative in the matching of revenues and expenses. Insurers may count income only as it is earned, but must charge off the expenses associated with that income when they are incurred. Also, the distinction between admitted and nonadmitted assets is also ultra-conservative. Other areas that may be considered to be conservative include the reserve for incurred but not reported losses and the Asset Valuation Reserve and Interest Maintenance Reserve (page 151). The principle of conservatism is violated in the valuation of stocks—which are carried at market value, rather than at the lower of cost or market value, and in the valuation of bonds—which are carried at amortized value rather than at the lower of cost or market value.

2. The NAIC's defense of statutory accounting stems from the statutory tradition of conservative accounting for insurers which predates most other accounting standards. Because regulators are responsible for monitoring the solvency of insurers, they believe that the states should control the standards that are used to measure the financial strength of insurers. Because insurance is vested in the public interest, it seems reasonable that different (higher) standards be applied to the accounting practices of insurers. The objectives of statutory accounting are different from those of GAAP. Most of the statutory standards evolved in response to specific solvency issues that are not addressed by GAAP.

3. The loss ratio or expense ratio as a measure of an insurer's efficiency is one of the most confusing concepts in the insurance area. A high or low loss ratio in itself does not indicate efficiency of operation. The loss ratio must be considered in relationship to the expense ratio, the pure premium, and the gross premium that the insured pays. If the pure premium of two insurers is identical for a given line of insurance, and if the combined ratio of neither insurer exceeds 100, a high loss ratio is preferred. Consider two companies, each with a pure premium for a given coverage of \$30. Company A has an anticipated expense ratio of 40 (and a permissible loss ratio of .60) while Company B has an anticipated expense ratio of 25 (and a permissible loss ratio of .75). Company A will charge \$50 for the coverage ($\$30/.60$) while Company B will charge \$40 ($\$30/.75$). But the pure premium of the two companies may not be identical, and therein lies the possibility of confusion. A company writing a poorer class of business (with a higher pure premium per exposure unit) might have the same loss ratio as another insurer, but charge a substantially higher gross premium.

4. The surplus of a property and liability insurer is affected by many factors and movement of the surplus in itself does not indicate profitability. For example, changes in the value of common stocks held by the insurer will affect surplus. Statutory underwriting profit or loss as well as actual underwriting profit and loss will affect surplus. The same is true to a lesser extent for life insurers. The smaller percentage of assets held in the form of common

stocks reduces the influence of changes in the stock market on the surplus of a life insurer, but the distortions inherent in the statutory accounting requirements require proper interpretation of movements in surplus. See pages 149-150.

5. To the extent that a decline in stock values acts to reduce surplus of insurers, the ability of the companies to write new business is limited. Because stocks are carried on insurers' balance sheets at market value, changes in stock prices produce direct changes in insurers' surplus. Since the amount of business an insurer may write is a function of surplus, these changes directly affect industry capacity. Although there is no *official* relationship that is universally accepted, most regulators use the relationship between policyholders surplus and premiums written as a financial indicator. The standards for the Insurance Regulatory Information System (IRIS) tests consider a ratio of more than \$3 in written premiums for every \$1 in surplus to be unfavorable.

CHAPTER 9

THE LEGAL FRAMEWORK

General Comments on the Chapter

There is a large amount of material in this chapter, and some instructors may want to spend two class sessions on it. In addition to the fact that a large number of topics are discussed, several of them are critical in understanding the operation of insurance as a legal mechanism. Among the more important, we consider the discussion of the principle of indemnity and the requirements of "utmost good faith" to be paramount. The many aspects of these two areas, and the numerous personal applications of each usually require a considerable span of classroom time.

With respect to the principle of indemnity, we stress the four basic concepts that are used in enforcing the principle (insurable interest, insurable value, the treatment of duplicate insurance, and subrogation). In addition, we generally spend some time on the exceptions to the principle (valued policy laws, valued policies and cash payment policies, replacement cost insurance, and life and health insurance). Most students are quick to grasp the concept of indemnity and examples of the contractual provisions and legal principles that help to enforce it can add to the basic understanding.

When dealing with the concepts of concealment, misrepresentation, and breach of warranty, we use examples related to automobile insurance, one of the areas of insurance in which virtually all students have some experience. Some of the cases cited in the text are useful in this area.

Important Concepts to be Stressed

The most important concepts in the chapter and the principles that we believe should be stressed in the lecture are:

- Applications of the law of contracts to insurance
- The nature of voidable contracts
- The principle of indemnity and associated concepts
- Insurance as a personal contract
- Insurance as a unilateral contract
- Insurance as a conditional contract
- Insurance as a contract of adhesion
- Insurance as a contract of utmost good faith
- Insurance as an aleatory contract
- Concealment, misrepresentation and warranties
- The doctrines of waiver and estoppel
- The doctrine of reasonable expectation

Answers to Questions for Review

1. Exceptions to the principle of indemnity in the field of property insurance include replacement cost coverage, valued policies, and valued policy laws. Replacement cost coverage, which permits the insured to collect the full cost of repair or replacement of damaged property violates the principle of indemnity in that it permits the insured to collect for the value of new property when depreciated property is destroyed. It is permitted because in many instances the involuntary conversion of a depreciated asset into cash through loss recovery under an insurance policy works a definite hardship on the insured. He or she is required to incur the full cost of repair, even though the property may have been depreciated. Although the result is sometimes a violation of the principle of indemnity, valued policies are intended to simplify the loss settlement process through the device of agreement on the value of the property at the time that the policy is written. This is desirable when it would be difficult to determine or agree on the value of the property after a loss. As the text points out, valued policy laws are ill-advised statutes that violate the principle of indemnity on the probable premise that the insured should be entitled to collect the amount of insurance for which he has paid, regardless of the amount of his actual loss.

In addition to these exceptions in the field of property insurance the principle of indemnity is enforced on a modified basis in the fields of life and health insurance. The reason here is the recognition that it is not possible to put the individual back in the same position after a loss as he was in before. In addition, there is less likelihood that the insured will intentionally cause a loss in order to profit.

2. This is a surprisingly common situation. One possibility is, of course, that the father obtains the multi-car discount by insuring two cars under common ownership in the same insurer. A more likely explanation is that a misrepresentation of a material fact has been made, and that the son, who in reality is the owner and principal operator of the automobile, has been listed as an incidental operator. In this all too common situation, the insurer could deny liability if the misrepresentation became known at the time of a loss.

3. Because insurance policies are contracts of adhesion, as opposed to negotiated contracts, courts tend to construe ambiguity against the party that has drawn the contract. See page 173.

4. The principle of indemnity expresses the notion that insurance is intended to put the insured back in approximately the same position after a loss as before the loss; the insured should not profit from the existence of insurance. The manner in which the concepts of insurable interest, actual cash value, and pro rata apportionment enforce the principle of indemnity is discussed in pages 167-171.

5. In most areas of insurance other than ocean marine insurance, a misrepresentation or concealment must be made with fraudulent intent before it will provide grounds for avoidance. In some jurisdictions, a misrepresented or concealed fact must also contribute to the loss. In addition, statutory modifications of the principles related to warranties have also been made. See pages 174-176.

6. A fact is material if it would have changed the underwriting basis of the contract if known to the insurer. In other words, if the insurer would have declined to issue the policy, or would have issued it only at a different rate, the fact is material.

7. Because insurance contracts are aleatory—that is, subject to chance and with different dollar amounts payable by the parties—there is an opportunity for one party (the insured) to profit at the expense of the other. For this reason, insurance contracts are also contracts of utmost good faith. See page 173.

8. The insurance contract is conditional in the sense that the promises of the insurer are conditional upon the insured's compliance with the various policy provisions. It is unilateral in the sense that only one of the parties makes legally binding commitments. The insurer may deny liability if the insured fails to comply with a policy provision, but the insured is not legally bound to comply in the same sense that the insurer is. See page 172.

9. The principle application of the principle of indemnity with respect to life insurance is found in the area of insurable interest. A person taking out a life insurance policy on the life of another must have an insurable interest, and in many instances the amount of the coverage that may be purchased is limited to the extent of that insurable interest (e.g., life insurance on the life of a debtor carried by a creditor).

A New York state law permits qualified charities to be named as beneficiaries of life insurance. This legislation was enacted in response to a private letter ruling issued by the IRS to a New York taxpayer in 1991, disallowing income tax, gift tax, and estate tax deductions related to the intended gift of a life insurance policy to a charity. The basis of the denial was an IRS interpretation that the charity lacked an insurable interest in the life of the donor under New York law. New York (and several other states) amended their insurable interest statutes to acknowledge the existence of an insurable interest between charities and their prospective donors. Where the IRS erred is in ignoring the established principle that an individual has an unlimited insurable interest in his or her own life, which may be assigned freely. Actually, New York law was silent on the question of naming anyone without an insurable interest as a beneficiary at the inception of the policy. Because few insurers are likely to issue a policy to a charity without the consent of the insured, little has really changed, except the specific recognition of an insurable interest for tax purposes.

10. The four basic sections of an insurance contract are the declarations, insuring agreement, exclusions, and conditions. See page 178.

Answers to Questions for Discussion

1. The fundamental objection to the sale of life insurance where no insurable interest exists is that such circumstances might lead to the murder of the insured person, but there are other considerations as well. Although not all students will agree, wagering on the survival of a human being will probably strike most students as an insensitive and objectionable practice, even when there is no danger of murder.

2. A statement in the declarations section of the Personal Auto Policy states "The Auto(s) or Trailer(s) described in this policy is principally garaged at the above address unless otherwise stated." This question presents an opportunity to discuss the application of the doctrine of warranties and also the doctrine of misrepresentation. Regardless of whether or not the statement is a warranty, the place of garaging is unquestionably a material fact. The case cited in footnote 11 on page 175 serves as a reference to the attitude of one court on this point.

3. The denial of coverage for the additional \$20,000 might be made on one of two bases: first, that the house was already on fire at the time that Rosie requested that the coverage be bound, or that it was threatened by fire at that time, and that the failure to disclose this information represents an intentional concealment. Additionally, even if the contract was not voided on the basis of concealment, the insurer might argue that the loss had already occurred (or was in the process of taking place) when the contract was modified, and that the loss did not therefore take place during the policy period. The courts would probably hold the company liable for the original \$60,000 in coverage.

4. By permitting the insurance company to recover from the negligent party, the total amount paid out in losses is reduced by the amount of recovery. This reduction in the net losses of insurers reduces the premiums that the public must pay and shifts the cost of the losses to the negligent party responsible.

5. The question of whether an insurer should be permitted to avoid a contract or deny coverage for a loss when the misrepresented fact or facts did not contribute to the loss is one on which there can be some disagreements, as evidenced by the statutes that require that the misrepresentation involve a contributing factor. As the text points out, statutes of this type seem to place a premium on dishonesty; the insured may still collect, even though he or she has misrepresented a material fact. A reasonable analogy can be made to penalties in a football game: should a touchdown be called back because of a "clip" only in those instances in which the clip contributed to the success of the play?

THE DISPUTE OVER THE WORLD TRADE CENTER COVERAGE

A good example of the important role played by the courts in interpreting insurance policies can be found in the litigation surrounding the insurance coverage for the World Trade Center. As students may recall, the twin WTC towers were attacked on September 11, 2001, 16 minutes apart. The towers were covered under a single limit per occurrence of \$3.55 billion. This coverage had been negotiated just two months earlier, when Larry Silverstein, a NY developer, had signed a 99-year lease on the World Trade Center. The program was complicated, with over 20 insurers providing various layers of coverage. Unfortunately, the final policy language had not yet been delivered to Silverstein when the attacks occurred.

Following the attacks, Silverstein and the insurance companies engaged in nearly 6 years of litigation over the amount of recovery Silverstein was entitled to. The key area of dispute was whether the attacks constituted one occurrence or two. If the courts found there to be one occurrence, the insurers only owed \$3.55 billion. On the other hand, if the courts found there to be two occurrences, the cost increased to \$7.1 billion.

Ironically, one of the reasons the coverage had not been finalized by the time of the attacks was a disagreement over what definition of “occurrence” should be used in the coverage. Silverstein had retained Willis Group Holdings, Ltd., a large broker to arrange the coverage, and Willis had circulated its own policy form, known as WilProp 2000, to the various insurers for their agreement. The form contained a broad definition of occurrence (“all losses or damage that are attributable directly or indirectly to one cause or to one series of similar causes”). Willis believed the broad definition was favorable to its clients because it minimized the number of deductibles an insured would have to pay. Several insurers objected to the definition, however, and Travelers proposed an alternative policy that did not contain a definition of occurrence.

As a result of the dispute, the final policy language had not yet been established by September 11. The insurers had issued binders, however, and the binders provided a general outline of coverage. Three of the insurers referred to the WilProp form in their binders.

In 2003, the Second Circuit Court ruled that those three insurance companies were liable for only one occurrence, based on their having agreed to provide coverage under the WilProp 2000 form prior to 9/11 and the unambiguous definition of occurrence in that form. The court also found that the Travelers policy was ambiguous, and it ruled that the question of whether there was one occurrence or two must be decided by a jury. Litigation with the remaining carriers continued for several years.

In May 2004, a jury found that 10 additional insurers were bound by the WilProp form and thus obligated for only one occurrence. In December 2004, a jury found that the remaining 9 insurers were obligated to pay for two events. In October 2006, the U.S. Court of Appeals upheld the jury verdicts. Finally, in May 2007, more than five years after the terrorist attacks, the litigation was settled. In total, the insurers paid out \$4.55 billion.

SECTION II

LIFE AND HEALTH INSURANCE

Section II of the book deals with the fields of income protection, and although the principal emphasis is on private insurance coverages, it also treats social insurance coverages such as the Old-Age, Survivors', Disability and Health Insurance program, workers compensation, and unemployment compensation.

Section II or Section III may be taken up following Section I, and although either section may be covered first, we prefer to cover the life and health insurance area first because many students in the course are often contemplating the purchase of life insurance (or will be approached shortly by life insurance salespersons). The earlier this section can be covered, the less will be the likelihood that some of our students will make one of those costly mistakes often associated with the purchase of life insurance.

The first chapter in Section II focuses on the identification and measurement of personal risks. It begins with a general overview of each of the personal risks and then discusses the process used to measure their magnitude. Needs resulting from premature death are examined first, since this is the one with which students tend to be the most familiar. Later chapters provide information on programs that might be used to meet these needs, including various social insurance and private insurance.

In addition to the traditional material on managing the risk of premature death and disabilities, we have included a chapter on Managing the Retirement Risk (Chapter 19). We believe that the inclusion of this topic is consistent with the risk management theme we have attempted to use throughout the book. Given the problems facing the Social Security system, the subject of retirement planning becomes increasingly important and we believe that the discussion of retirement planning is a valuable addition to the text. To expedite the discussion of retirement planning, we treat the subjects of annuities and qualified retirement plans in a single chapter, Chapter 18. We also discuss qualified retirement plans from the perspective of the employer (in Chapter 23, which deals with employee benefits). In a sense, Chapters 17 and 18 view qualified retirement plans from the perspective of the employee, while chapter 23 views them from the employer's perspective.

CHAPTER 10

MANAGING PERSONAL RISKS

General Comments on the Chapter

Before turning to a discussion of the measures that may be used to address the personal risks facing an individual, it seems logical to discuss those risks. This first chapter in the section on Life and Health Insurance begins with a general discussion of personal risks, identifying the four perils that can cause financial loss to one's income-earning ability: death, disability, old-age and the expenses associated with medical care. The primary focus in the chapter is on the approaches that may be used to determine the magnitude of the income-loss exposure. The human life value concept is noted, but the major emphasis is on the needs approach.

The chapter introduces the concept of present value and discounting, notions that are used throughout Section II. Presumably, most students will be familiar with these concepts from courses in economics and finance, but the review is short and will serve those students who have not been exposed to these concepts.

Important Concepts to be Stressed

The most important concepts in this chapter, and the principles that we believe should be stressed in the lecture are:

- Exposures to income
- The human life value
- Time value of money
- Present value and discounting
- The needs approach to measuring income loss
- Life styles and needs
- Fund for last expenses
- Emergency funds
- Mortgage payment funds
- Educational Funds
- Dependency period income
- Blackout period
- Estate liquidity need
- Estate planning
- Risk of inadequate accumulation for retirement
- Risk of outliving the accumulation
- Needs analysis for the disability risk

Answers to Questions for Review

1. The human life value approach focuses on the income that would be lost in the event of the wage earner's death. The needs approach focuses on the allocation of that income and the various needs for which it would provide. In a sense, the needs approach is simply the other side of the human life value approach.

2. The human life value approach is not concerned with the question of whether or not the loss would cause financial deprivation to anyone. For example, persons with high income and no dependents might need a smaller amount of life insurance than a person with low income and many dependents.

3. The single individual without dependents usually has little need for death protection. Unless there are parents (or others) who are dependent on a single person, there is no need for a flow of income to replace the income that might stop. Enough life insurance to cover any indebtedness and a fund for last expenses really constitutes the extent of the need. The main reason for buying life insurance at this stage of life is to guarantee insurability.

The life insurance needs of a childless couple is also usually modest, particularly if both are employed. When both spouses are employed outside the home, the need for death protection on the part of either is usually limited to an amount to meet any indebtedness and to cover final expenses. Again, the main reason for buying life insurance is to guarantee insurability.

The life insurance needs of persons with children, whether married or single, is generally greater than the need of individuals or couples without children. When one parent works outside the home and the other acts as homemaker, the principal focus will be on insurance for the income-producing partner. When funds are available, coverage should also be provided to offset the financial burden that would result from the death of the homemaking spouse. In the case of a single parent with children, the situation is essentially the same as for the family with a single working spouse, but without the "cushion" of a potentially employable surviving spouse.

4. The needs that are generally considered in determining the amount of insurance required for a family are discussed on page 189. The chart on this page distinguishes between cash needs and income needs as follows:

Cash Needs	Income Needs
Fund for last expenses and debt Emergency funds Mortgage payment funds Educational funds	Funds for readjustment Dependency period income Life income for spouse

5. Resources (other than life insurance) that may be available in the case of premature death include social security benefits, income produced by other family members, and personal savings. Depending on the circumstances of death, funds may also be available from workers compensation.

6. A life annuity provides periodic payments for the annuitant's entire lifetime through a reverse application of the life insurance principle, by making payments over the annuitant's life expectancy. Some people who reach age 65 will die before they reach 66. Others will live to be 100. Those who live longer than average will offset those who live for a shorter period than average, and those who die early will forfeit money to those who die later. Every payment the annuitant receives is part interest and part principal. In addition, each payment is part survivorship benefit, in that it is composed in part of the funds of group members who have died.

7. The most important resources that may be available at retirement are social security benefits and employer-provided retirement (pension) benefits. These must usually be supplemented with personal savings.

8. If the breadwinner of the family dies, the family's income stops; if he or she is disabled, not only does the income stop but expenses remain the same and usually increase. Because a disabled person--by definition--is one whose ability to work is impaired, he or she must depend on sources other than employment for income. Other members of the family may have to quit work to care for the disabled person (or someone may need to be hired to care for him or her). Further, while the absence of dependents may eliminate the need for life insurance, it does not eliminate the need for disability income protection, since the disabled person will need income during a period of disability. Finally, the chance of loss from disability is greater at most ages than the chance of death.

9. The fact that insurers will generally provide disability income coverage only until age 65 may be addressed by treating the disability need after age 65 as a part of the retirement need. The disability income protection program should provide sufficient income to permit the disabled individual to continue accumulation of his or her retirement program on the same basis as if the disability had not taken place. If the individual has a retirement program to which he or she makes regular contributions, the disability income program should permit continued contributions to the program in the event of disability.

10. A disabled person may receive benefits under OASDI or under workers compensation. Also, he or she may have employer-provided sick leave and possibly group disability coverage. Other resources include income of family members and personal savings. Finally, the person may have disability income insurance.

Answers to Questions for Discussion

1. Although it can be argued that the increase in the number of two income families has increased the need for life insurance (since there is a greater amount of income to be protected), the converse may also be true. The existence of the second income will undoubtedly increase the need for life insurance when a lifestyle based on that income would have to be maintained in the event of death of one of the income earners. On the other hand, the unemployed or unemployable widow is a fading phenomenon. When both spouses have income and there are no other dependents, the need for life insurance is probably less than when only one spouse has income. While there is no correct answer, the question can generate an interesting discussion.

2. There is no correct answer and students' opinions may differ widely. Certainly the need for insurance on the homemaker (usually the wife and mother) comes after the need for income to replace that which would be lost at the death of the income-earning spouse, but it comes ahead of the need for insurance on the children. The services provided by the homemaker might have to be replaced, but the cost of maintenance would cease. The increase in expenses could probably be met more easily by a surviving income-earning partner than the loss of income could be met by the surviving homemaker. On the other hand, social security benefits would not be payable upon the death of the homemaker who is not employed outside the home, while these benefits would be available at the death of the income-earning spouse.

3. The widow may have difficulty in finding employment after the children have been raised, because of age and lack of experience. If the widow has qualifications that make her employment prospects good, and especially if there are no children, it may not be necessary to provide the lifetime income.

4. Hopefully, students will agree with the statement. The discussion on page 183 stresses the notion that death does not automatically result in financial loss. The individual who dies does not suffer financial loss; the financial loss—to the extent that it occurs—will affect creditors of the individual or persons who are dependent on the income earner. Creditors will suffer financial loss if debts exceed the assets owned by the individual at the time of death. Other persons will suffer financial loss if they were dependent on the individual for support.

5. When assets exceed the individual's debts and there is no one dependent on the individual for support, there is no financial loss. Students will recognize that many of them are currently in situations in which death would not cause financial loss to anyone. This does not necessarily mean that they have no need for life insurance. For many students, the principal reason for purchasing life insurance is to guarantee their insurability. Although no one may be dependent on them at this particular time, the situation could change in the future. A second situation in which the loss of income earning ability may not be significant is in the case of a two-income couple without children (double income-no kids). When both partners are employed and either would be able to continue a satisfactory life style, life insurance may not be a necessity.

CHAPTER 11

SOCIAL INSURANCE PROGRAMS

General Comments on the Chapter

This chapter examines the Social Security (OASDI) system and workers compensation. Although both subjects are interesting topics in their own right as social insurance coverages, our purpose in this chapter is to relate them to personal risk management and to provide the student with a basic understanding of these coverages as a floor of protection for the personal risks facing the individual. We have moved the material on these social insurance coverages to the second chapter in this section, immediately following the chapter that introduces personal risks, because the benefits under the programs represent the security base upon which an income protection plan may be built.

The subject of Social Security has historically been the single most frustrating topic with which writers of insurance texts must deal. The constant changes make it virtually impossible to provide students with an up-to-date discussion of the system and its benefits. The internet has emerged as a solution to this problem. The Social Security Administration home page (<http://www.ssa.gov>) is an invaluable resource that is both easy to use and enormously productive.

With respect to Social Security, there are two purposes that can be achieved in this chapter. The first is to familiarize the students with the benefit structure of the OASDI system, which is a critical element of the needs analysis process discussed in chapter 10. In addition, the chapter can serve the broader and more general purpose of helping the student to appreciate some of the current difficulties facing the system. The financing of social security is an important social and political issue, as well as an economic one, and we have attempted to stress these aspects in addition to the practical applications.

This discussion of workers compensation laws and insurance is designed to provide the student with an appreciation of the protection the individual enjoys under workers compensation laws for the financial loss associated with occupational disabilities. In teaching the subject of workers compensation, it is useful to use the law of the state in which the students are located as the basis for classroom discussion. After discussing the general nature of the program, it is interesting to discuss the local law and compare its provisions with the generalities discussed in the chapter. This helps the student to gain a further insight into the text discussion, and provides the additional information about the local law. As in the case of the Social Security system, information on state workers compensation laws may be available on the World-Wide Web. One source of information about the laws of individual states is at [Workerscompensation.com](http://www.workerscompensation.com) (the URL is <http://www.workerscompensation.com/>). In addition, the Cornell University law school page is a useful source of general information on workers compensation (http://www.law.cornell.edu/topics/workplace_safety.html).

Important Concepts to be Stressed

The most important concepts in this chapter and the principles that we believe should be stressed in the lecture are:

- Eligibility and qualification for OASDHI
- Categories of benefits and benefit levels
- Conditions causing a loss of benefits
- Financial aspects of the system
- The future of OASDHI
- The historical background of workers compensation laws
- The rationale of the workers compensation system
- Benefits under the workers compensation laws
- Provisions of the local workers compensation law

Answers to Questions for Review

1. The four classes of benefits available under OASDHI are old-age benefits, survivor benefits, disability benefits, and health care benefits under Medicare. These benefits are described briefly on page 205 and in more detail in pages 207-209.

2. Benefit levels are automatically adjusted with increases in the Consumer Price Index, as explained on page 205. These automatic adjustments replace congressionally legislated increases, which were originally the rule. Congress could, if it chose to do so, legislate an increase for a particular year. The automatic increases in benefit levels are financed through increases in the tax base, as explained on page 206.

3. To become fully insured, a worker must have worked 40 quarters in covered employment, or have one quarter in covered employment for every year since 1950 or the year in which the worker became 21. Once a worker is fully insured, he or she remains fully insured and is entitled to retirement benefits at the retirement age. See page 206.

4. A fully insured worker is entitled to retirement benefits. A currently insured worker is covered for survivors' benefits. A currently insured worker who is not fully insured may also be covered for disability benefits, provided he or she meets the special disability benefit qualification requirements. See Table 11.1 on page 210.

5. Benefits payable to the survivors of a deceased worker who was only currently insured would include the children's benefit and the benefit to the surviving spouse with children in his or her care. In addition, the lump sum benefit would also be payable. It does indeed make a difference whether the deceased worker was fully or currently insured. Retirement benefits to a widow or widower, and the benefit to dependent parents are payable only if the worker was fully insured. See Table 11.1 on page 210.

6. Persons entitled to social security benefits can become ineligible for a variety of reasons. The different occurrences that can cause a loss of benefits are discussed on pages 210-211. Among the more important are the loss of benefits by children upon attainment of age 18 or 19, and disqualifying income.

7. A "children's benefit" is payable to the child of a retired or disabled worker or, to a surviving child of a deceased worker. A child may be an unmarried child under age 18, an unmarried child over 18 who is disabled providing the disability commenced before age 18, and an unmarried child under age 19 who is a full-time student in a secondary school. See page 208.

8. The common law obligations and common law defenses under the system of employers liability are discussed on pages 216-217. The employer was obliged to provide a reasonably safe place to work, reasonably safe tools, sane and sober fellow employees, set up safety rules and enforce them, and warn the workers of any dangers that they could not be expected to know about. The common law defenses include the principle of contributory negligence, the fellow servant doctrine, and the assumption of risk doctrine.

The common law obligations and the common law defenses are both used today. They both apply in the case of those occupations not covered by worker compensation. In addition, under the workers' compensation laws of most states, the common law obligations apply if the employer fails to purchase insurance as required by the law. However, the employer may not use the common law defenses.

In the discussion of workers compensation, the text begins by tracing the history of employers liability under common law. It may be useful to reemphasize the distinction between common law and statutory law. Common law consists of *unwritten* law in the form of past court decisions and is contrasted with statutory or *written* law, which consists of statutes and codes enacted by legislatures. Common law is unwritten in the sense that it can be found only in the various decisions of the courts. The common law of this country is based to a large extent on English common law. The term *common* was originally applied to distinguish those doctrines that were common to all of England from that applied only on a local basis.

9. The five general principles of workers' compensation are outlined in pages 217-218. They are:

- Negligence Is No Longer a Factor in Determining Liability
- Indemnity Is Partial but Final
- Compensation is in the form of Periodic Payments
- The Cost of the Program Is Made a Cost of Production
- Insurance Is Required

10. There are usually seven classes of benefits payable to the injured worker or his or her dependents under the workers compensation laws, as summarized in pages 219-221. The seven classes of benefits are:

- Medical expenses.
- Total temporary disability.
- Partial temporary disability.
- Total permanent disability.
- Partial permanent disability.
- Survivors' death benefits.
- Rehabilitation benefits.

Answers to Questions for Discussion

1. There is no correct answer but some authorities have argued that the Social Security Act has made people more aware of the need for retirement income and death protection, and that the floor of protection which social security involves actually encourages people to attempt to supplement it with additional funds. In the absence of social security the funds needed for retirement income and death protection would be greater, but the amount of life insurance that would be required to meet the total need might discourage attempts to do so.

2. There is no correct answer, but there are many who still believe that the system faces staggering difficulties. Recent changes may have corrected the imbalance between income and outgo, but the changing ratio of workers to beneficiaries continues as a threat to the system. The real question is how much can and will the working population be willing to transfer to the nonworking beneficiaries of the system. Students may recommend a change in the method of financing (for example, financing all or part of the cost out of general revenues) or they may suggest a reduction in benefit levels or an increase in the retirement age.

3. The designation of the OASDHI system as the greatest chain letter in history refers to the practice of financing present benefits through the promise of future benefits. For a more complete discussion of this point of view, see Milton and Rose Friedman, *Free to Choose* (Harcourt Brace Janovich: New York, 1980, pages 102-107).

4. Some of the implications of the investment of Social Security Trust Funds in U.S. government securities are discussed on page 214. As noted in this discussion, in effect the federal government is borrowing money from the trust funds to cover current operations and issuing IOUs to the funds. Eventually, these IOUs will have to be redeemed. As demographics change and the balances in the trust funds are depleted, the government will have to increase revenues to redeem the bonds, which will be necessary to make the required payments to beneficiaries. The matter is one that should be of considerable concern to current college students. Although the viability of the Social Security system when they reach retirement is a matter of concern, an even greater concern should be the obligation they will bear during their working years in meeting the liabilities that have already been incurred under the system.

5. As noted in the text, the 1997 Commission could not agree on a single proposal. While the report is somewhat dated, at a high level, the Commission's three proposals still reflect the breadth of options available for future reform. An overview of the report, with a brief summary of the three options can be found at:

<http://www.ssa.gov/history/reports/adccouncil/report/toc.htm>

There is no correct answer to the question, and students may find all three of the proposals deficient in some sense. The Maintenance of Benefits Proposal would maintain the present benefit and tax structure essentially as is, with some changes to improve the program's fiscal condition. This proposal also recommends "a study of the possibility" of investing a part of the Trust Funds in corporate securities, presumably by the Social Security Administration. Option 3, the Personal Security Accounts Proposal suggested the greatest degree of privatization. Option 2, Publicly Held Individual Accounts, would provide for an additional

layer of mandatory savings held by the federal government, with some individual discretion in how the funds are invested. All three of the proposals by the 1997 Commission included a significant (12.2% to 12.9%) increase in taxes to fund the system—increases that students would be responsible for paying.

Additional Questions for Discussion

It has long been recognized that the social security system redistributes income in favor of those in lower income brackets. Less well recognized are those aspects of the program that discriminate in favor of the rich. In what ways are those in lower income brackets discriminated against under the social security system?

The first and most obvious form of discrimination against those in lower income brackets is the regressive social security tax. Because the tax is levied on income only up to the specified maximum, it falls most heavily on those whose income falls below that maximum. Persons with income exceeding the maximum taxable wage base pay a smaller percentage of their income than do persons whose income is less than or equal to the base.

A second form of discrimination arises from the fact that the poor generally begin working earlier and therefore begin paying the tax earlier than young people who, for example, attend college.

A third form of discrimination against those in lower income brackets arises from the fact that social security benefits are reduced on account of the beneficiary's earned income, but not because of investment income, rental income, or pension benefits. This means that the individual who must work to supplement the social security benefit will lose a part of his or her benefit, while their wealthier counterparts who were able to save during their working years can receive investment income without loss of benefits.

A final form of discrimination was eliminated by the changes of 1981. Prior to the 1981 changes, the children's benefit was payable to children attending school until age 22. Since children in lower income brackets do not as often have the opportunity to attend college, the benefit structure with respect to this benefit also favored the rich.

CHAPTER 12

INTRODUCTION TO LIFE INSURANCE

General Comments on the Chapter

This first chapter on life insurance provides an introductory overview of the field, explaining in summary fashion the distinction between the traditional types of policies (such as term life insurance, whole life, limited pay whole life, and endowment) and the innovations of the recent past (variable life, adjustable life, and universal life). Although the innovative types of life insurance are usually of greater interest to students than the traditional forms, we believe that an understanding of the traditional forms of coverage serves as an important base for discussing the innovative forms. We therefore resist the urge to jump into a discussion of the newer forms until they have at least been exposed to term and whole life contracts. We then follow with the discussion of adjustable life, variable life, and universal life. Introducing the student to both the traditional forms of coverage and the newer contracts at the outset provides a convenient means of addressing student interest, and permits the subject to be treated in whatever detail the instructor chooses.

The chapter also discusses the tax treatment of life insurance generally. The tax treatment of modified endowment contracts is deferred until chapter 16, where single premium whole life is discussed.

The various approaches to marketing life insurance are also discussed. In addition to the major fields of individual life, group life, and credit life insurance, the chapter includes a brief discussion of savings bank life insurance, fraternal life insurance, veteran's life insurance, and the Wisconsin State fund.

Users of previous editions may notice two changes in this edition. First, industrial life insurance is no longer treated separately, since it has become a relatively insignificant part of the U.S. life insurance market. Second, the discussion of adjustable life insurance has been changed to recognize that, since the development of universal life, adjustable life is no longer an important type of coverage in the market.

Important Concepts to be Stressed

The most important concepts in this chapter, and the principles that we believe should be stressed in the lecture are:

- Identifying and measuring risks of loss to income
- The risk of loss from premature death
- The time of inception of the life insurance contract
- The distinction between traditional and innovative life insurance forms
- Distinguishing characteristics of term, whole life, and endowment
- The savings-protection elements of cash value life insurance
- Participating and non-participating life insurance
- Variable life, universal life, and adjustable life
- Tax treatment of life insurance contracts

- Individual, group, and credit life insurance

Answers to Questions for Review

1. Term insurance provides protection for a specified term—a stated number of years. If the insured person survives the term period, the policy expires without value. Cash value policies, in contrast, combine savings and protection. The savings element arises from the overpayment of premiums during the early years of the contract. Cash value policies include whole life, endowment life insurance, universal life, and variable life. See pages 225-226.

2. The statement that term insurance is *pure protection* refers to the absence of cash values or a saving element in term insurance. Whereas cash value policies combine protection with savings, term insurance generally provides protection only and is therefore referred to as pure protection. See pages 225-228.

3. The reserve does not reach a peak and then decline because the overpayment of those insureds who die is forfeited to the surviving members of the group. The aggregate reserve for all insureds reaches a peak and then diminishes, but the diminishing reserve is shared among a decreasing number of participants. See pages 227-228.

4. The amount payable in the event of an insured's death consists of part of the saving element (which increases over time) and in part of the protection, which decreases with the increasing saving element. See pages 227-228.

5. Life insurance policies receive favorable tax treatment in two ways. First, the amounts payable to a beneficiary at the death of the insured are usually excluded from taxable income. In addition, the savings element in cash value life insurance policies accumulates on a tax-deferred basis, and is not taxable until actually withdrawn. In computing the taxable gain on the policy's cash value, the entire premium paid by the owner is considered as part of the basis. This overstates the contribution to the investment element (since it ignores the cost of the death protection) and understates the taxable gain. See pages 228-229.

6. The *renewable* term policy is one under which the insured has the right to renew the policy at expiration without providing evidence of insurability. A *convertible* term policy is one that may be converted to permanent insurance without evidence of insurability. Finally, a *nonparticipating* policy is one on which no dividends are payable. The premium is calculated with a smaller margin for deviations from expected mortality and investment income and the insurer bears the risk of these deviations. See pages 230-231 and 234.

7. The distinguishing features of these forms are discussed on pages 231-233. Universal life is based on the concept of an accumulating investment element, the return on which is used to pay the cost of the life insurance element. Within limits, the premiums and face amount may be varied. The investment portion of the policy is usually invested in money market funds, T bills, or some similar instrument. In the case of variable life, the premium is fixed but the cash value and face of the policy are variable, usually based on the performance of an underlying portfolio of investments. Finally, in the case of variable universal life,

premiums are flexible, and the cash value varies over time depending on the performance of the assets in which the cash value is invested.

8. Participating life insurance contracts are policies that "participate" in the divisible surplus of the company through dividends. Premiums for participating policies are usually higher than non-participating policies because the insurer provides a greater margin for contingencies in the premium, a part of which will be returned to the insured if not needed. See page 234.

9. The three classes of life insurance based on marketing approach are individual life, group life, and credit life. The distinguishing characteristics of each are discussed in pages 234-237.

10. The primary difference between individual and group life insurance is with respect to marketing, but there are other differences as well. Individual life insurance policies are sold to individuals, and are individually underwritten. Group life insurance policies are sold to employers or other group sponsors and the underwriting process focuses on the group, as opposed to the individual. Group life insurance rates are generally lower than individual rates because the marketing expense is lower. It should be noted, however, that while group rates are generally lower than individual rates, because the group rate is an average for a population that will usually include both old and young persons, a group rate may actually be higher than the individual rate for a youthful person.

Answers to Questions for Discussion

1. The extent to which the proceeds of a life insurance policy are exempt from the claims of the creditors of a beneficiary vary from jurisdiction to jurisdiction. The students should recognize the distinction in the exemption from claims of the creditors of the deceased insured and exemption from claims of the creditors of the beneficiary. The exemptions can be justified on the grounds that the obligation of the insured individual to dependent beneficiaries is even more fundamental than the obligation to creditors. Students may, of course, disagree with the fairness of such exemptions.

2. Because the question asks for an opinion, there is no right or wrong answer and students may agree or disagree with the idea that the tax treatment of life insurance provides it with an unfair advantage when compared with competing investment products. There is little question that the tax treatment gives life insurance certain advantages as an investment. Whether that advantage is "unfair" depends on the point of view. Proponents of the current tax treatment argue that it is aimed at a worthwhile societal goal, encouraging individuals to protect their families from the risk of premature death. They also argue that the cash value is an indivisible part of a life insurance policy. Since an individual who withdraws the entire cash value also loses his or her death protection, the funds are not currently accessible without penalty. It may be noted that most of those who have complained about the "fairness" of the tax advantages granted to life insurance have come from the ranks of those who sell the competing products.

3. Again, the question asks for an opinion and there is no correct answer. Some observers argue that equity demands that lapsing policyholders recoup their overpayment of premium

when they terminate. Others argue that a company must charge a higher premium for a policy that pays nonforfeiture benefits than for one that doesn't, and insureds should be permitted to make their own decisions. It is interesting to note that the standards for tax-qualified long-term care insurance established by the Health Insurance Portability and Accountability Act (HIPAA) specifically prohibits cash refunds (other than at the death of the insured or complete termination of the policy). Nonforfeiture values and policy dividends may be used only to reduce future premiums or increase future benefits. The provisions with respect to cash refunds under long-term care policies stem from the fact that the premiums for such coverage will be tax deductible.

4. As the text notes, the initial premiums for participating life insurance policies tend to be higher than for nonparticipating policies. This is justified on the basis that they can return any excess to the policyholder in the form of dividend payments. In that sense, it seems clear that at least part of the policyholder dividend is a return of overpayment of premium. Since mutual companies are owned by their policyholders, however, some observers have argued that policyholder dividends of mutual insurers also include a return on the ownership interest, akin to shareholder returns. Congress adopted this view when it revised the federal income tax treatment of life insurance companies in the Deficit Reduction Act of 1984. The DRA created Section 809 of the Internal Revenue Code, which limited the ability of mutual companies to deduct policyholder dividends. The amount of the reduction was a function of the differential earnings rate between stock and mutual insurers. Section 809 was repealed in 2004.

5. There is a greater potential for adverse selection in the renewability option than in the convertibility option, for the same reasons there is a greater potential for adverse selection in term insurance than in whole life insurance. An individual with greater than average risk of death is more likely to renew his or her term insurance than to convert to a form of permanent insurance at a higher premium. Of course, when the individual nears the end of the time at which renewal is permitted, he or she would be more likely convert than to let the policy terminate.

Additional Questions for Discussion

An individual purchases a \$100,000 whole life policy on which he pays the first year premium of \$1,020 and dies during the year. He could have purchased the same amount of term life insurance for \$250. What happens to the \$770 "overpayment" in this case?

The "overpayment" is forfeit to the remaining participants. Forfeiture of cash values--the overpayment during the early years of the contract--help to offset the underpayment by other persons who purchase permanent insurance and survive. The overpayment during the early years of a whole life contract by an individual insured is not sufficient to offset the underpayment in later years, but the forfeiture of the overpayment by those who die make up the deficiency of those who survive.

CHAPTER 13

THE ACTUARIAL BASIS OF LIFE INSURANCE

General Comments on the Chapter

Students sometimes find this a tedious and boring chapter, primarily we suppose, because for some reason many never quite realize exactly what the point of the chapter is. It is easy to get bogged down in mathematical computations without ever achieving the insight in the actuarial differences among contracts that was intended. A purely mechanical presentation of the material is boring, but if students can be brought to a recognition of the concepts involved, their appreciation of the differences among the various forms of life insurance will be greatly enhanced. Because only a portion of the students will experience the blinding flash of understanding desired, some instructors may prefer to delete this chapter. If the chapter is deleted, we suggest that the material on benefit certain and benefit uncertain contracts contained on pages 249-250 be integrated into the lecture dealing with chapter 12, along with the chart on page 248.

The basic notion that we have tried to illustrate in this chapter is that the differences in cost among the various policies is based on the differences in the present value of future claims, which determine the net single premium, and the period over which this net single premium is paid. In illustrating this concept, we use the net single premium for a 5-year term policy and the net single premium for a whole life contract. After illustrating the computation of the premium for a one-year term policy, we turn to the net single premium for the 5-year term policy, and from the 5-year term policy to the whole life contract.

Important Concepts to be Stressed

The most important concepts in this chapter, and the principles that we believe should be stressed in the lecture are:

- The three primary elements in life insurance ratemaking
- The general nature of the mortality table
- The net single premium for 5-year term and 5-year endowment
- The net single premium for a whole life contract
- The annuity due and the level premium concept
- Benefit certain and benefit uncertain contracts

Answers to Questions for Review

1. The primary elements in life insurance ratemaking are interest, mortality, and the loading. Interest and mortality are used in computing the net premium. The loading is added to the net premium to derive the gross premium.
2. There are at least three ways that insurers attempt to guard against adverse deviations from mortality and interest estimates. First, the estimates themselves are conservative. Second, insurers invest in long term securities with rates of return that are guaranteed far into the future. Finally, the company attempts to guard against adverse deviations in the mortality

estimates through underwriting requirements, which attempt to eliminate or reduce adverse selection.

3. Simply dividing the 5-year net single premium by 5 ignores the mortality losses that would be involved. If the insurance company collects \$4.87, it has the full \$4.87 to invest and pay losses that occur in each of the five years. Dividing \$4.87 by five and then charging \$.98 each year would result in insufficient funds to pay the losses during the five year period, for some of the insureds would die after paying the first year premium of \$.98, others would die after paying the second year premium, and so on. In addition, the \$4.87 premium assumes that the insurance company will have a part of the funds invested for longer than one year.

4. Present value refers to the time value of money, and indicates the amount needed now, which, invested at some specified rate of interest, will accumulate to a specified amount at some time in the future. Ignoring the concept of present value, the net single premium for a whole life policy would be \$1,000 per \$1,000 of face amount, since the insurer will be required to pay the face amount to all insureds who die or who persist until age 100.

5. The reserves on the two policies will be equal at the end of 20 years. At this point, neither policy will have any further premiums due, and the reserve on each will equal the present value of future claims.

6. The amount at risk facing the insurer on a whole life policy is said to be constantly reducing because the investment element (the overpayment by the insured) is increasing, thereby reducing the insurer's amount at risk. See page 248.

7. The terminal reserve will be higher than the initial reserve or the mean reserve (except in the case of some long-term term policies on which the reserve diminishes). The reserve that is most important for regulatory purposes is the mean reserve. Page 247.

8. A policy is paid up when all of the premiums due have been paid. A policy is mature when the face amount is payable to the insured-beneficiary. See page 248-250.

9. Benefit certain contracts are those on which the face amount will eventually be payable if the insured persists in paying the premiums. They are cash value policies. Benefit-uncertain contracts are those in which the insurer may or may not be required to make payment, depending on whether or not the insured dies. See pages 249-250.

10. Calculation of the rates per \$1000

a. One year term rate:

Age	Number Dying	Claims	Discount Rate	Discounted Claims	Net Premium
21	10	\$10,000	.90	9,000	\$9,000/1,000 = \$ 9
22	20	20,000	.80	18,000	18,000/990 = 18.18
23	30	30,000	.70	27,000	27,000/970 = 27.83
24	40	40,000	.60	36,000	36,000/940 = 38.29
25	50	50,000	.50	45,000	45,000/900 = 50.00

b. Five year term rate:

Age	Number Dying	Claims	Discount Rate	Discounted Claims	Net Premium
21	10	10,000	.90	9,000	
22	20	20,000	.80	16,000	
23	30	30,000	.70	21,000	
24	40	40,000	.60	24,000	
25	50	50,000	.50	25,000	
				95,000	95,000/1000 = \$ 95.00

c. Five Year Endowment

Age	Dying	Claims	Discount Rate	Discounted Claims	Net Premium
21	10	10,000	.90	9,000	
22	20	20,000	.80	16,000	
23	30	30,000	.70	21,000	
24	40	40,000	.60	24,000	
25	50	900,000	.50	450,000	
				520,000	\$520,000/1000 = \$520

d. Five year annuity due

Age	Number Alive	Claims	Discount Rate	Discounted Claims	Net Premium
21	1,000	\$1,000	1.00	1,000	
22	990	990	.90	891	
23	970	970	.80	776	
24	940	940	.70	658	
25	900	900	.60	540	
				3,865	\$3,865/1,000 = \$3.865

Annual premium 5-year endowment:

$$\begin{array}{rcl} 3.865: \$1 & = & \$520: X \\ X & = & \$134.50 \end{array}$$

Answers to Questions for Discussion

1. This is a common misconception, but one that is frequently used in marketing life insurance to younger people. Perceptive students will disagree with the statement. Although the rate per \$ 1,000 is lower at younger ages, the premiums must be paid for a longer period of time. The accumulated premiums paid for the longer period of time will more than offset the difference in rates at younger and older ages. Although there are several legitimate arguments in favor of purchasing insurance at younger ages, obtaining a lower rate per \$1,000 is not one of them.

2. The twenty pay life policies will show the greater mortality saving. The premium computation for both groups of policies begins with the net single premium. The net single premium for the 20 pay life policies is then converted into a series of annual installments through the use of a 20-year annuity due. Actuarially, the sums are the same. In the case of the single premium policies, if mortality is less than anticipated, the insurer will have funds that would otherwise have been paid out for a longer period of time than anticipated, and investment income will be greater than anticipated. This will also be true in the case of the 20 pay life policies, but in addition, those insured under the 20 pay life policies who live longer than anticipated will continue to pay premiums for a longer period of time than originally anticipated.

3. As the text points out, there is a legitimate question as to whether or not the life contingency is an insurable risk at advanced ages. The second rule of risk management discussed in chapter 3 (Consider the Odds) indicates that the worst buys in insurance are those in which the probability of loss is quite high. Exposures in which the probability of loss is 53% would not be considered insurable at a reasonable rate if it were not for the fact that the premiums are spread out over a long period of time and reduced through the magic of compound interest.

4. The statement is false. The lower the interest assumption used in the computation, the higher must be the reserve at any point in time, other things being equal. The reserve equals the present value of future benefits minus the present value of future premiums.

For the purpose of illustration, consider two policies, both of which are paid up at age 65. One policy has a 3% interest assumption and the other has a 4% interest assumption. Since the cash value of each policy will equal the face of the policy at the same time (i.e., at age 100), the policy with the lower interest assumption must have the higher cash value, so that the reserve, together with the interest, will equal the face of the policy at the same time as the reserve on the policy with the higher interest assumption. Put somewhat differently, the greater the interest that will be earned on the reserve, the lower that reserve need be to accumulate to the face of the policy at age 100.

5. Since most insurers start with approximately the same mortality data, and invest in approximately the same types of investments, the greatest differences in cost among life insurers are probably attributable to the third factor, loading. The differences in loading among various companies may stem from differences in commission schedules, differences in administrative cost, and differences in company profit.

CHAPTER 14

THE LIFE INSURANCE CONTRACT - GENERAL PROVISIONS

General Comments on the Chapter

This is the first of two chapters dealing with the life insurance policy. It treats those policy provisions that are used in all policies (that is, in both cash value and term policies, participating and nonparticipating). Those provisions that appear only in cash value policies and participating policies are discussed in the next chapter along with the optional endorsements that may be added to policies.

The companion website – www.wiley.com/college/vaughan -- contains a sample whole life policy and a sample universal life policy. The discussion of the various provisions is self-explanatory, but it is generally helpful if the students can examine the provisions in an actual policy. All of the provisions discussed are important in their own right, and it is difficult to specify any parts of the chapter that are more important than others. Generally, however, the greatest amount of time will be required in connection with the policy settlement options, and particularly with the life income options. It should be noted that the provisions in the sample contracts reflect the approaches by two particular companies and the policy of other insurers may differ in some areas.

In view of the fact that this is the first of many chapters dealing with the specifics of insurance contract policy provisions, it might be well to emphasize to the students that the intent is that they learn how to read and interpret the policy provisions rather than remember them verbatim.

Important Concepts to be Stressed

The most important concepts in this chapter and the principles that we believe should be stressed in the lecture are:

- Various types of beneficiary designation
- The incontestability clause
- The misstatement of age clause
- The grace period
- The reinstatement provision
- The suicide clause
- Aviation exclusions and the war clause
- Settlement options
- Taxation of policy proceeds under various options

Answers to Questions for Review

1. Actually, it can be argued that each of the provisions listed in the question benefits both parties, *albeit* in different ways.

- ◆ (a) The entire contract provision is primarily for the benefit of the insured. It states that the policy and the application constitute the entire contract. More important, it specifies that in the absence of fraud, all statements in the application shall be deemed to be representations and not warranties, thereby requiring the insurer to prove the materiality of any misrepresentation. It might also be argued that the provision is of some benefit to the company since it informs the insured that only an officer or registrar of the company is authorized to alter the policy or waive any of the company's rights or requirements.
- ◆ (b) The incontestability clause is clearly designed for the benefit of the insured, providing that the insurer must avoid the contract during the first two years if it is ever going to do so. The provision does provide the limited benefit to the insurer of the right to avoid the contract during those two years.
- ◆ (c) The suicide provision benefits the insured since suicide is excluded only during the first two years, and benefits the company since suicide is excluded during those two years.
- ◆ (d) The misstatement of age provision benefits the insured in that such misstatements do not void the contract, but merely adjust the amount of insurance. It also benefits the insurer in that it provides some protection against misstatement.

2. The "insured" is the person's whose life is the subject of insurance--that is, whose death is the contingency insured against. The beneficiary is the person designated to receive the policy proceeds, and the owner is the person who has the property rights under the policy, including the right to borrow the cash value, to change the beneficiary, and to exercise other policy options. Each might be a different party, for example, in the case of a fringe benefit program where the employer is the owner of the policy, the employee is the insured, and the employee's spouse is the beneficiary.

3. The direct beneficiary is the individual designated to receive the policy proceeds upon death of the insured or maturity of the policy. A contingent beneficiary is a "secondary" beneficiary who receives the policy proceeds if the primary or direct beneficiary has died. An irrevocable beneficiary may not be changed by the owner-insured, while a revocable beneficiary is subject to change. See pages 255.

4. Under the straight life income, the policy proceeds are paid as an annuity, but only for the lifetime of the beneficiary. Payments cease when the beneficiary dies. Under the life income with ten years certain, payments continue for the lifetime of the beneficiary, but at least ten years. If the beneficiary dies within the ten-year certain period, payments will continue for the remainder of the ten years. If the beneficiary survives the ten-year period, payments continue for the remainder of the beneficiary's lifetime. Under the life income with installment refund, payments are made for the lifetime of the beneficiary, and continue after the beneficiary's death if the total policy proceeds have not been paid out by that time. See pages 260.

5. The settlement options are discussed in pages 258-262. Most students will have no difficulty in describing the options. The exception--if one exists--will be the life income option, and especially the life income with period certain option. It may be contrasted with the installment for a fixed period for clarification. Installments for a fixed period of ten years, for example, cease at the end of the ten years. Under a life income with 10 years certain, payments are made for 10 years, and then continue for the remainder of the beneficiary's lifetime.

6. A person designated as an irrevocable beneficiary has a vested interest in the contract. The owner cannot borrow, cash the policy in, or assign the policy without the consent of the irrevocable beneficiary. In a sense, the contract becomes joint property of the owner and the beneficiary. See pages 255-256.

7. The taxation of life insurance proceeds payable under the policy settlement options is discussed on page 262. Although life insurance proceeds payable as death benefits are not generally taxable, the interest income credited to proceeds left with the insurer are taxable. Because part of each installment under the installment income options or under a life income option consists of interest, this part of the installment will be taxable. When proceeds are payable under a life income option, the taxable interest is computed based on gender neutral mortality tables developed by the IRS.

8. Reinstatement is the right to "reinstate" or make effective again a contract that has been permitted to lapse. The requirements that must be met in order to reinstate include evidence of insurability, reinstatement of any indebtedness, and payment of back premiums with interest. As noted in footnote 7 on page 258, reinstatement may trigger a new contestable period.

9. It makes no difference whether or not the incontestable clause has expired. The misstatement of age provision provides a contractual exception to the common law principles relating to misrepresentation. The misstatement of age clause overrides the incontestability clause by specifically providing for adjustment of benefits as the sole remedy for misstatement of age.

10. Again, as we have repeatedly noted, there is nothing really mysterious about the insurer's agreement to pay for as long as the beneficiary lives and also agree to pay out at least the face amount of the policy. In calculating the benefits payable under these options, the mortality gains that normally play an important part in the computation of an annuity are not considered. The annuity payments under both the cash refund and the installment refund are calculated so as to provide benefits sufficiently low that they can be paid out of the face of the policy and interest income for the life expectancy of the insured. Persons who die before receiving the full amount of the proceeds do not increase the benefits of those who remain as is the case under a straight annuity.

Answers to Questions for Discussion

1. As the text points out on page 256, the courts justify the incontestable clause on the grounds that they are not condoning fraud, but that the social advantages outweigh the undesirable consequences. In addition, if the insured has died, it may be virtually impossible to determine the original facts.

2. Decisions made under conditions of uncertainty cannot be evaluated and judged to have been "good" or "bad" in light of what happened. The beneficiary might have lived for many years, and have received annuity payments far in excess of the face amount of the policy.
3. The conservative interest rates used in computing the settlement options under life insurance contracts are necessary because of the very long period for which guarantees must be made. An individual purchasing a policy at age 25 may be insured for say, 60 years, and the beneficiary to whom the installments are payable might live for another 50 or 60 years. Under participating policy, the payments will reflect actual investment earnings and mortality gains. Under nonparticipating policies, the insurer realizes the gains on proceeds left with the insurer.
4. The possibility of adverse selection exists under the settlement options in the sense that annuities are subject to adverse selection. Those beneficiaries who are in poor health will select a lump-sum payment, or a life income with refund provision. On the other hand, those who anticipate a long life will select a straight life income.
5. Policy provisions that might be noted include the incontestability clause, the grace period clause. Although Smith concealed the previous heart attack, the contestable period has passed and the company cannot deny liability on the basis of the failure to divulge this information. Failure to pay the premium activated the grace period clause. The company will be liable for the face amount of the policy, minus the premium due that had not been paid.

Additional Questions for Discussion

It always makes sense to understate your age when buying life insurance," says Mary. "If the insurer discovers the misstatement, you still get as much insurance for your premium as if you had told the truth. If the misstatement is not discovered, you get a bargain." Is Mary right or wrong?

Although Mary's position is technically correct from a legal perspective, it is also clearly dishonest. The misstatement of age clause is an exception to the incontestable clause and provides for adjustment in the face amount of insurance rather than invalidation of the coverage. Mary's attitude raises the entire subject of ethics in dealing with insurers. One can argue that the principal flaw in an attitude such as that indicated by Mary's statement is not so much in what it does to the insurance company, but in what it does to the individual.

This question can serve as the point of departure for a discussion of ethics in dealing with insurers. It may be useful to explore the question of who bears the losses that are incurred by insurers as a result of fraud by insureds. Although it should not make a difference, students are likely to take a more negative view of fraudulent practices that cost other consumers than those that affect impersonal corporate insurers.

The AACSB requirement for integration of a treatment of ethics in business courses has prompted many instructors to examine practices in the corporate sector in which ethics may be challenged. It is something of an irony that much of the discussion of ethics in insurance courses has focused on insurer practices. It would seem that a more relevant test is how students react to situations in which they are ethically challenged as consumers of the insurance product.

CHAPTER 15

THE LIFE INSURANCE CONTRACT - OTHER PROVISIONS

General Comments on the Chapter

This chapter continues the discussion of the life insurance contract begun in chapter 14. It treats those policy provisions that are found only in cash value policies and participating contracts, and the provisions that may be included in policies at the option of the insured. The principal provisions discussed include the nonforfeiture options, the dividend options, the disability waiver of premium provisions, and the guaranteed insurability option.

In our experience, students are able to grasp certain concepts more easily when they examine the actual provisions in a sample contract. For example, in the case of the nonforfeiture options, it is helpful to illustrate the various options available at a given year in the contract's life through reference to the contract in the companion website – www.wiley.com/college/vaughan. With respect to the universal life policy provisions, the sample contract in the appendix may be used to illustrate the manner in which the death benefit options apply, surrender charges, and the guaranteed cost of insurance provisions.

Important Concepts to be Stressed

The most important concepts in this chapter and the principles that we believe should be stressed in the lecture are:

- Cash value as a nonforfeiture option
- Reduced paid up insurance as a nonforfeiture option
- Extended term insurance as a nonforfeiture option
- Policy loan provisions
- The automatic premium loan provision
- Dividend options
- The disability waiver of premium provision
- The accidental death benefit
- The guaranteed insurability option
- Cost of living riders
- Universal life policy provisions

Answers to Questions for Review

1. The insurer will be liable for the face amount of the policy, but not for the payment under the accidental death benefit. The suicide clause period has expired, but suicide is not covered under accidental death.
2. The automatic premium loan provision stipulates that any premium due will be borrowed from the existing cash value of the policy. Although the grace period provides for continuance of the policy for 31 days, at the end of this time the policy would lapse and the automatic nonforfeiture option becomes effective. The provision creates a loan against the

cash value and the policy continues in force as if the premium had been paid. This avoids the lapse of the policy, which could require evidence of insurability for reinstatement.

3. The non-forfeiture options are discussed in the text on pages 264-267. The cash value option would be advisable in preference to the other two only when the need for insurance no longer exists, or when the need for cash exceeds the need for insurance. The extended term option would be used in preference to the other two when the insured wishes to continue the maximum coverage possible without additional premiums. One such situation might be in the case of a terminal illness. The reduced paid up amount option would be used in preference to the other two when the insured wished to continue insurance on a permanent basis without further premiums, as for example, at retirement.

4. Dividends themselves are not taxable, since they represent the return of an overpayment, and taxes were paid on the income that was used to pay the premiums on which the dividends will be based. However, interest paid on accumulated dividends is subject to taxation, the same as interest paid on any savings or accumulation.

5. Students may agree or disagree with the sentiment, but policy loans clearly reduce the amount of protection under the policy, thereby reducing the payment that will be made to the "widows and orphans." If the loan is not repaid, the net effect is not from the policy proceeds.

6. The beneficiary will receive the face amount of the policy, minus the amount of the policy loan. The policy's cash value represents a part of the death benefit payable by the insurer and the loan against this cash value reduces the death payment.

7. The four standard dividend options are to take the dividends in cash, apply the dividend to current premiums, leave the dividends to accumulate, or purchase paid up additions to the policy. The "fifth dividend option" available from some companies permits the use of dividends to purchase one year term protection.

8. The term "permanent" was originally intended to mean that the disability was likely to last for the remainder of the individual's lifetime. However, a disability that has lasted continuously for a specified period of time (typically six months) is presumed to be permanent under most contracts. The term "total" is usually defined as the inability of the insured to engage in an occupation; his own occupation for the first two years, and any occupation for which he or she is suited by training and education thereafter. However, policies may differ. See pages 270-271.

9. When the cash value of the paid-up additions and the cash value of the basic policy equal the net single premium for the basic policy, the policy may be converted to a paid up one. The insured surrenders the paid-up additions and the basic policy becomes paid up. Thus, the past dividends are not lost and can be applied to the prepayment of the policy.

10. The two approaches commonly used to adjust death benefits under universal life policies in order to avoid tax disqualification are discussed on pages 275-276. Under the first approach, the policy includes a provision maintaining the required corridor between the cash value and the face amount of protection. Under the second approach, increases in the cash value in excess of the guaranteed minimum are payable as a death benefit.

Answers to Questions for Discussion

1. (a) The disability waiver of premium provision should be considered essential. At the time of disablement the insured will probably want to continue his or her life insurance. The disability waiver of premium provision guarantees that he will be able to do so. Including the disability waiver of premium provision should, however, be viewed as only a part of the solution to the disability exposure.

(b) The guaranteed insurability option may be important to younger individuals who want to insure their insurability. It represents an attractive means of guaranteeing the right to purchase insurance for a limited period of time into the future.

2. Hopefully, recalling the discussion in chapter 4, students will feel that the double indemnity provision violates the principles of good risk management. It places emphasis on the cause of the loss, rather than on the effect. If the insured has need for protection against the financial loss associated with death, the amount of protection needed does not vary with the cause of death. Students may argue that persons who travel extensively, or who are engaged in dangerous occupations might find the double indemnity provision appealing, and some may feel that it is attractive to persons with a speculative bent.

3. The first and most obvious benefit of the disability waiver of premium provision is that it permits the insured to continue his or her insurance at a time when it might otherwise be impossible. In addition, when used with cash value life insurance, it can permit the insured to continue contributions to his or her retirement program without interruption on account of disability. Although premiums are waived only until age 65, the waiver of premiums to this age permits the continued accumulation of cash values that may be used to fund retirement.

4. Insurers assumed a specified rate of return on investments in the premium computation, and when the insured borrows the cash value of his or her policy, the funds are no longer available for investment in other fields. There is an opportunity cost to the company that must be offset by charging the insured for the policy loan. If policyholders did not pay interest on policy loans, initial premiums would of necessity be higher.

5. We personally feel that the contract would be marketable, and that it would fill a legitimate need. A young person without dependents or financial responsibilities might purchase a contract guaranteeing his or her right to purchase a specified amount of insurance in the future, without being required to purchase any form of coverage immediately. The product would eliminate one of the major sales arguments often made to younger persons who do not yet have a need for substantial amounts of life insurance; that insurance should be purchased to protect one's insurability. A contract that guaranteed the right to purchase insurance in the future might eliminate the need for many persons to purchase life insurance at all.

CHAPTER 16

SPECIAL LIFE INSURANCE POLICY FORMS

General Comments on the Chapter

This chapter should help the student to appreciate the differences among the wide variety of policies that are often offered to them by life insurance sales representatives who work the college campuses. The "standard" specialized contracts discussed in the chapter (i.e., the family income policy, modified whole life, and so on) may be covered rather quickly without slighting any of them. If time is not a serious constraint, two lectures can be devoted to the material in this chapter.

The advent of universal life has created waves of new contracts, some of which are built on the universal life concept and some of which are designed to compete with universal life. Indeterminate premium policies and interest sensitive whole life policies are typical of this latter class. The interest-sensitive contracts and the dividend allocation strategies of insurers provide a useful backdrop for discussing the competitive pressures on insurers and equity between older policyholders and new policy holders in dividend allocation formulas.

This chapter revisits the discussion of the tax treatment of life insurance. Although we introduced the subject in Chapter 12, we deferred the discussion of the special rules applicable to modified endowment contracts until this chapter, where some of the more specialized contracts—such as single premium whole life—that may qualify as MEC's are treated.

Important Concepts to be Stressed

The most important concepts in the chapter, and the principles that we believe should be stressed in the lecture are:

- Specialized policies as combinations of the three basic forms
- Mortgage Redemption Policy
- Joint Mortgage Protection Policy
- Survivorship Whole Life
- Family Income Policy and the Family Income Rider
- Family Protection Policy
- Return of Premium and Return of Cash Value Policies
- Modified Whole Life and Graded Premium Life
- Single Premium Life
- Tax treatment of modified endowment contracts
- Juvenile policies
- Indeterminate Premium Policies
- Interest Sensitive Policies
- Variable Universal Life
- Low-load and no-load life insurance
- Advantages and disadvantages of specialized policy forms

Answers to Questions for Review

1. The family income policy provides for the payment of the specified monthly income and then for the payment of the face amount of the basic policy. It is an integrated package in which the monthly payments during the income period come in part from the term insurance and in part from interest on the base amount of coverage. The family income rider is attached to some form of permanent insurance and provides sufficient protection to pay the monthly income without the interest on the base policy. The rate for the family income rider plus a base policy will be higher than for a family income policy. See pages 281-281.
2. There are two contracts discussed in the text that address the needs associated with mortgages; the mortgage redemption policy and the joint mortgage protection policy. The distinguishing feature of both is that the amount of insurance declines at a rate that approximates the unpaid balance on a home mortgage. The joint mortgage protection policy is written on two lives and is payable at the death of the first partner to die. It is a solution to the exposure that arises when a two-income couple incur a mortgage on which either survivor would have difficulty meeting the obligation. See page 280.
3. The family income policy promises to pay some monthly benefit in addition to the face of a permanent policy, if the insured dies during the "family income period." The term insurance makes provision for the payment of some stipulated amount per month from the date of the insured's death until some specific date in the future. The sum payable per month is typically 1% of the amount of permanent insurance, although many companies offer other options. The normal family income period is 20 years although other options such as 10 or 15 years are also available. If the insured outlives the period specified as the family income period, the decreasing term portion of the policy ceases. The insured then has the basic amount of permanent insurance on which premiums continue to be paid.
4. The family protection policy is a package or group approach to insuring all family members. It typically provides cash value life insurance on the wage earner and term insurance on the other members of the family. Coverage on the spouse is usually term to age 65, with term to age 18 or 21 on the children. See pages 281-282.
5. Survivorship whole life or the "second-to-die" policy is a contract that insures two lives with the promise to pay only at the second death. Survivorship life developed in response to the unlimited marital deduction under the federal estate tax law, under which an individual may leave his or her entire estate to a spouse without estate-tax liability. Although the bequest of an individual's estate to his or her spouse avoids the estate tax, a tax will be payable upon the death of the beneficiary spouse, resulting in a potentially immense tax liability if the couple have a large estate. Because survivorship life is not payable until the second death, the premium is significantly lower than the cost of separate policies on the two individuals. See page 280.
6. The high interest rate environment of the late 1970s and early 1980s caused many insureds to question the competitiveness of cash value life insurance as a savings vehicle. Universal life insurance and other interest-sensitive life insurance forms allow insureds to participate in current investment returns. See pages 285-286.

7. The premiums on indeterminate premium policies are adjusted periodically to reflect current assumptions for mortality, expenses, and investment income. The premium level is subject to a guaranteed maximum typically set by policy provisions. See pages 285-286.

8. Unlike traditional forms of life insurance, single premium life does not usually have a front-end "load." Although a commission is, of course, paid to the agent, the amount of the commission is not deducted from the premium in creating the policy's cash value. Instead, the policy is subject to a surrender charge, generally in the range of 5 to 10%, which is levied if the policy is cashed in during a specified period of time, usually 7 to 10 years. The surrender charge diminishes and eventually disappears after 7 to 10 years. See page 284.

9. The principal uses of juvenile life insurance today is to guarantee the insurability of a child. At one time, juvenile life insurance was frequently used to provide funds for college under educational endowment policies (essentially 20 year endowment policies). These contracts no longer qualify as life insurance under the Code definition and have consequently lost their appeal as investment instruments.

10. The difference between the investment generation method and the traditional portfolio average method of dividend allocation is explained on page 286. Under the investment generation method, excess investment income is allocated to policies grouped by time of issue or according to the times at which premiums are deposited. It tends to favor newer policyholders over old. The portfolio average method allocates excess earnings to old and new policies at a single rate, regardless of when premiums were paid. See page 286.

Answers to Questions for Discussion

1. There is no correct answer. The policy combinations that students may develop are limited only by their imagination.

2. It is the opinion of the authors that these contracts were developed purely for competitive reasons. Many of the contracts currently being marketed have been designed to provide sales personnel with a selling point different from that of competitors. The opinions of the students regarding these policies will probably vary, but in general it is hoped that they will conclude that the policies are not designed to fill any specific need that might exist, but rather to appeal to the consumer as a type of "special deal."

3. The students answers to this question should reflect an understanding of the interest sensitive policies and the dilemma such policies have posed for insurance buyers. When interest rates are high, interest sensitive policies general significant dividends, which may be used to pay future premiums; hence the concept of "vanishing premium policies," in which high interest earning will eventually pay future premiums, causing the premium to vanish. Vanishing premium policies were based on the assumption that the high interest payable in the 1980s would continue indefinitely into the future. Presumably, students will conclude that insurers should be precluded from making projections that are unrealistic. As will be noted in the next chapter, the NAIC responded to the abuses in policy illustrations by adopting a model law that establishes standards for policy illustrations of the type suggested.

4. This question requires students to think through the uses of life insurance for protection and savings, with the relative importance of those objectives changing over time. In essence, the policy is calling for life insurance protection on both spouses during the child-raising years, with an accumulation of cash values for a spouse alive at retirement. Separate whole life policies purchased on each parent could meet that objective. Alternatively, the student may recognize the desire to limit premiums during the early child-rearing years and suggest a policy with relatively low premiums in the early years and higher premiums after the child-rearing years to provide the cash value accumulation in the later years. This flexibility could be provided in a universal life policy.

5. Hopefully, students will feel that the travel accident policy represents a poor form of protection, for the reasons discussed in connection with the second question for discussion in chapter 15. The premium paid for the travel accident policy might be used to purchase as much decreasing term protection as possible.

CHAPTER 17

BUYING LIFE INSURANCE

General Comments on the Chapter

In Chapter 10, we began the discussion of buying life insurance by providing students with the tools to answer the question “How much life insurance should I buy?” This chapter discusses the factors to consider in deciding the type of life insurance to purchase and the company from which to purchase it.

In discussing the subject of term versus cash value life insurance, we have attempted to present an unbiased treatment, but we recognize that some readers will disagree with the position we have taken. In those instances in which the instructor's viewpoint differs from that expressed in the text, classroom discussion should provide ample opportunity for expression of the disagreement.

In addition to the term versus cash value controversy, the chapter also explains the interest-adjusted method of comparing life insurance contracts and cites sources in which information on adjusted costs may be found. We have also repeated a portion of the material from chapter 3 on the selection of insurers. Although Best's ratings were previously discussed, it seemed like a good idea to remind the students of this source again at this point in the course.

One area not discussed in the text that always provides an interesting classroom subject is the subject of financing the purchase of life insurance through the use of notes. One of the ironic aspects of this practice is that many students purchase cash value life insurance through the use of notes "in order to start a saving program." The fact that they are borrowing money at 10 or 12 percent to invest in an instrument that pays perhaps 6 or 7 percent seems to elude some students, and a discussion of this area may serve to help some students to avoid costly mistakes.

Important Concepts to be Stressed

The most important concepts in this chapter and the principles that we believe should be stressed in the lecture are:

- The choice between amount of life insurance and type of policy
- Advantages and disadvantages of life insurance as an investment
- Factors to be considered in the selection of a life insurer
- The interest adjusted method of comparing life policies
- The NAIC Life Insurance Illustration Model Regulation
- The NAIC Model Replacement Regulation
- Industry Reform Initiatives
- Shopping for Universal Life Insurance
- Section 1035 Exchanges

Answers to Questions for Review

1. The three basic decisions are "how much?" "what kind?" and "from which company?" Factors to be considered in determining "how much?" include the needs of dependents and the availability of other sources of protection. "What kind?" is an investment decision, and should be based on the same considerations that would apply in the case of any other investment--safety of principal, rate of return, protection against inflation, and so on. Factors to be considered in selecting the company include the financial stability of the company, the forms of coverage available, and the cost.

2. Factors to be considered in selection of a life insurer are financial strength and integrity, the types of policies available, and the cost. Financial strength and integrity obviously come first, and most students will probably agree that cost ranks second. Because there is a certain amount of flexibility in the programming process, various types of contracts may be substituted for each other.

3. The traditional net cost system can be misleading to the consumer because it ignores the time value of money. See page 295.

4. The most common objections to term insurance are that it is "temporary," that "you have to die to collect," and that "you never get anything back." None of the objections are valid for the reasons explained on pages 290-291.

5. The major tax advantage enjoyed by cash value life insurance is the fact that the increase in the cash value is not taxed during the period of accumulation, and that in computing the taxable gain, the individual is permitted to deduct total premiums paid as the basis in the investment. The "tax-free" build-up is shared by other forms of investment in which unrealized gains accumulate, but the fact that the cost of protection is deducted in computing the taxable gain represents a significant advantage.

The principal disadvantage of life insurance as an investment has historically been that it is subject to a front-end expense load. No-load and low-load life insurance products address this disadvantage. Another disadvantage is that it involves mortality costs that are not incurred in other investments. When there is no need for death protection, this is a major disadvantage.

6. Evaluating a universal life product is more difficult than evaluating traditional whole life products because of the greater number of variables that must be considered, and because the variables may vary over time. Premium payments may differ from year to year. The cost of protection may also vary over time, subject to a specified maximum, as may the loadings and other charges.

The interest adjusted indexes make comparison of whole life contracts relatively simple. While there are no published indexes for universal life policies, Joe Belth's model, in which the individual must perform the computations, provides one method for evaluating universal life and adjustable life policies.

7. The three factors are interest, mortality, and loading. In a universal life policy, the actual interest rate credited to the policy is determined by the insurer according to the terms of

the policy, and subject to a minimum guaranteed in the policy. (In variable universal life insurance, the account value increases or decreases with the performance of the underlying investments.) Mortality charges are also set periodically, subject to guaranteed maximums. The mechanism for recognizing the loading varies widely across companies, and may be a combination of front-end loads, back-end loads, and an annual expense charge.

8. The NAIC Life Insurance Illustrations Model Regulation (pages 308-309) originated in response to alleged deceptive sales practices based on policy illustrations that occurred primarily during the period cited in the question. The Model Regulation, which has been adopted in about half the states, establishes specific standards for policy illustrations. The most important are those that require that the policy be illustrated on three separate bases: the policy guarantees, assumptions based on the *disciplined current scale*, and a mid-point between the two. The disciplined current scale is an actuarial standard reflecting non-guaranteed elements that are reasonable based on the actual recent historical experience of the insurer. During the 1980s, some insurers, to improve their illustrations, included assumptions about improving mortality and policy lapse rates. Under the new model regulation, illustrations must reflect the most recently available experience on the policies of the type illustrated, but may not include any projected or assumed improvements in experience.

9. The taxation of life insurance policy exchanges is discussed in pages 303-304. These exchanges are referred to as Section 1035 Exchanges or *rollovers*. Under the provisions of the Internal Revenue Code after which these exchanges are named, three types of tax-deferred exchanges are allowed:

- The exchange of a life insurance policy for another life insurance policy or for an endowment or annuity contract
- The exchange of an endowment for an annuity or for another endowment under which payments will begin not later than they would have begun under the original contract
- The exchange of one annuity contract for another annuity contract

Because death proceeds from life insurance contracts are exempt from the federal income tax and benefits under endowments or annuities are taxable, the Code does not allow tax-deferred exchanges that would convert policies under which the proceeds will be taxable into those in which the proceeds would not be taxable.

10. The basis for the statement that differences in premiums do not mean differences in cost lies in the fact that the purchase of life insurance may involve a combined purchase of protection and saving. In the case of cash value policies, the premium paid by the insured does not represent a true cost, since a part of the payment goes toward the accumulation of the cash value. The cash value of policies with different premiums may increase at different rates. In addition, the premiums may be reduced by dividends, making the “cost” of the policy significantly different from the premiums paid.

Answers to Questions for Discussion

1. Students with even a modest exposure to economics will recognize that personal income is divided into consumption and savings; what is not consumed is saved. The cost of

the protection element in a life insurance program is a part of consumption expenditures. The additions to the saving or investment element are a part of savings.

2. The assumptions embodied in the advice are that: (1) the individual in question will purchase an adequate amount of term insurance to provide adequate protection against premature death; (2) the difference between the term insurance and some form of permanent insurance will be systematically invested; and (3) the net return realized on the difference, when invested in some form of equity or alternative form of investment, will be greater than it would have been invested in life insurance.

The student's opinion with respect to the advice will vary, depending on personal orientation toward inflation, the manner in which the instructor has treated the material, and perhaps on other factors as well.

3. The generally recognized features of life insurance as an investment include: (a) the compulsion involved; (b) the safety of principal; and (c) favorable tax treatment. The accumulation under life insurance contracts is not taxed until after it is received. It may be pointed out that there are many investments that receive the same or more favorable tax treatment. For example, if one purchases land, the appreciation in value is not taxed until it is realized; the same is true with respect to the appreciation on common stocks. Another advantage is that the cost of the insurance protection is included in the taxpayers basis in computing the taxable gain.

4. Students opinions will differ. Except in unusual circumstances, the practice is undesirable. The argument that "insurance is cheaper when purchased at younger ages" is erroneous in that it ignores the payments that will be made in order to obtain the lower rate. The logic of borrowing at 10% to invest at 5% is too ludicrous to merit much in the way of comment. Yet many students do in fact finance the purchase of life insurance through notes "to start an investment program."

5. The threat that one may become uninsurable forces some people who do not need life insurance to purchase coverage to guarantee that they will have it at a later time when they may need it. One of the principal reasons suggested for the purchase of juvenile life insurance is to guarantee the child's insurability. Insurers should be able to calculate the premium for a stand-alone guaranteed insurability option, which would grant the insured the right to purchase a specific amount of life insurance at some time in the future. A product of this type should be enormously appealing to young people, such as those of college age. Student responses on whether such a product would be marketable should be interesting.

CHAPTER 18

ANNUITIES AND PENSIONS

General Comments on the Chapter

Because there is a similarity in the operation of annuities and pensions, and because they are designed to meet the same risk, we can see definite advantages in combining their discussion. Also, because they treat a risk that is fundamentally different from that addressed by life insurance, we believe that it makes sense to address them separately from the discussion of life insurance.

Pensions can be viewed from two perspectives; from that of the employee and that of the employer. In this chapter, we address the employee's perspective. The employer's side of the subject is addressed in Chapter 23.

The requirements applying to qualified pension plans are complicated and ever-changing. In the 10th edition, the chapter has been reorganized modestly to highlight key points such as the differences between defined benefit and defined contribution plans from the perspective of the employee. Some of the detail, such as the discussion of maximum benefits and contributions, has been consolidated in one place. Some other details (e.g., permitted disparity and top-heavy requirements) have been eliminated.

Important Concepts to be Stressed

The most important concepts in this chapter and the principles that we believe should be stressed in the lecture are:

- Classifications into which annuities may be divided
- Income taxation of annuities
- Federal estate tax and annuities
- Single-premium deferred annuity
- Market-value adjusted annuities
- Two-tier annuity
- Index annuities
- Reversionary or survivorship annuity
- Variable annuity
- General nature of qualified retirement plans
- ERISA
- Types of qualified plans
- Vesting requirements
- Maximum contributions and benefits under different plans
- Other benefits under qualified plans
- Distribution requirements and taxation
- Individual retirement accounts

Answers to Questions for Review

1. The reference to "upside-down life insurance" refers to the reverse application of the law of large numbers used in annuities, as compared with life insurance. Under the annuity principle, the law of averages operates to permit a lifetime guaranteed income to each annuitant. Some people who reach age 65 will die before they reach 66. Others will live to be 100. Those who live longer than average will offset those who live for a shorter period than average, and those who die early will forfeit money to those who die later. Every payment the annuitant receives is part interest and part principal. In addition, each payment is part survivorship benefit, in that it includes part of the funds of group members who have died. See pages 307-308.

2. Annuities may be classified in various ways. Traditionally, annuities have been classified according to the following distinctions:

- Individual versus group
- Fixed dollar versus variable
- Immediate versus deferred
- Single premium versus installment
- Single life versus joint life
- Pure life annuity versus annuity certain

The distinctions among these various classes is discussed in pages 309-310.

3. The variable annuity was designed as a means of coping with the impact of inflation on individuals' attempts to save for retirement. Under a fixed dollar annuity, premiums paid by the annuitant are converted into a lifetime pay-out, and the annuitant is guaranteed a fixed number of dollars monthly or annually for life. While the number of dollars payable is guaranteed, those dollars may have reduced purchasing power. Under a *variable annuity*, premiums are invested in common stocks or other investments and maintained in separate accounts by insurers. The underlying philosophy of the variable annuity is that while the value of the dollar will vary over time, the value of a diversified portfolio of common stocks will change in the same direction as the price level. Variable annuities may be variable during the accumulation period and fixed during the pay-out period or variable during both the accumulation period and the pay-out period. See pages 312-314.

4. As in the case of life insurance, investment income earned on annuities during the accumulation period is not taxable until distributed. Distributions are taxed to the extent that payments exceed the investment in the contract. Also, a 10 percent premature penalty is imposed on "early withdrawals" from annuities. A *premature withdrawal* from an annuity is any distribution made prior to the time the annuitant reaches age 59½. The penalty on premature distributions does not apply if the contract holder becomes disabled or if the distribution is over the life of the annuitant. The formula under which the gain on annuities is taxed is discussed on pages 310-311.

If the contract holder dies after annuity payments have begun but before the entire interest has been distributed, the remaining portion of the annuity must be distributed at least as rapidly as the original method of distribution and will be taxable to the beneficiary. If the contract holder dies before the annuity starting date, the entire interest must be distributed

within five years after the date of death or be annuitized within one year, unless the beneficiary of the annuity is a spouse. For a spousal annuity, the annuity contract may be continued (and the tax on the earnings deferred) until distribution of the benefits to or the death of the spouse.

5. The joint-and-last survivor annuity is computed based on two lives and continues for the life of both annuitants. It is contrasted with a joint-life annuity, under which payments cease at the death of the first annuitant to die. The survivorship or reversionary annuity is a seldom-used form, but in certain circumstances, it meets a special need far better than does any other form of life insurance. Basically, the reversionary policy is life insurance on one person, with benefits in an amount required to provide a lifetime annuity to another person. If the beneficiary dies before the insured, the policy expires without value. The survivorship annuity is ideally suited to providing income protection for a dependent parent. See pages 309-310 and 312.

6. A defined contribution works exactly as the name implies; the contribution of the employer is fixed by formula, and the retirement benefits to which the worker is entitled is the amount that the contribution will provide together with the investment earnings. Under a defined benefit formula, the benefit to which the employee is entitled is fixed by formula, and the employer makes contributions needed to provide the specified benefit. A variable annuity would, of necessity, be of the defined contribution type. See page 318.

7. The term vesting refers to the right of a covered employee to retain a claim to the benefits accrued even though his or her employment terminates before retirement. The minimum vesting standards for qualified plans is found in Table 18-2. See page 323.

8. The limits on benefits and contributions are intended to limit the tax advantages received by the highest-income individuals and the resulting impact on federal revenues. Permitted disparity rules permit employers to provide higher benefits at higher compensation levels, reflecting the fact that Social Security benefits replace a lower percentage of income as wages increase. See pages 23-324.

9. The key difference between a traditional IRA and a Roth IRA is the tax treatment. With a traditional IRA, the tax on deductible contributions and investment income on both deductible and nondeductible contributions is not eliminated. It is merely deferred until distribution. With a Roth IRA, contributions are nondeductible. However, all earnings accumulate tax-free, and there are no taxes due when the funds are withdrawn for retirement. See pages 329-330.

10. Death benefits prior to retirement are optional except in the case of contributory plans, where the employee's own contribution is always payable as a death benefit. ERISA requires that all pension plans provide an option for a joint-and-survivor annuity to employees who have been married for one year prior to retirement. With respect to disability, some plans consider disability to be a form of early retirement and pay a reduced benefit. Other plans provide continued contributions into the retirement program. The most generous approach is to treat the disabled worker as retired, paying the benefit to which he or she would have been entitled upon normal retirement age.

Answers to Questions for Discussion

1. The *single premium deferred annuity* (SPDA) enjoys the same tax treatment (and is subject to the same tax penalties) as other annuities. Earnings on the annuity accumulate tax-free until distributed. Although there are other investments that receive favorable tax treatment, many pay a lower rate of return. The underlying portfolio in an annuity (fixed or variable) can be constructed without sacrificing return to achieve favorable tax treatment. If the bonus funds will not be needed immediately, the SPDA can provide favorable tax treatment not otherwise available. Even if the funds are withdrawn before age 59½, the investment gain resulting from tax deferral may exceed the 10% premature withdrawal penalty.

Assuming that this athlete is say, 25 years old, the \$500,000 invested in a SPDA might be expected to earn as much as 7 to 8% during the accumulation period, meaning that the investment might be expected to double every 10 years. By the time the athlete is 35, it will have increased to \$1 million; when he is 45 it will be \$2 million; \$4 million at age 55 and \$8 million when he retires at age 65.

2. There is no correct answer, and this question illustrates the difficult decision faced by consumers in selecting among the alternative annuity forms offered by life insurers. It also illustrates the principle of adverse selection. Typically, individuals that believe they will outlive the 20-year certain period will select the straight life annuity. On the other hand, those that have ancestors with short life spans are more likely to elect the period certain. Ignoring adverse selection considerations, students should recognize that one alternative is not a “better deal” than the other. Mathematically, they are equivalent, and the lower monthly payment under the 20-year certain option compensates for the guarantee that payments will continue if the beneficiary dies before payments have been made for the 20-year guarantee period. Typically, the straight life annuity will make the most sense for an individual preparing to retire. One notable exception is where another person is dependent upon the annuitant. In essence, a life annuity with period certain is simply a combination of a straight life annuity with decreasing term insurance. If an individual has a need for a form of decreasing term, it makes sense. Otherwise, it probably does not.

3. The student would presumably be interested in the nature of the plan (defined benefit or defined contribution) and the amount of the contribution or the benefit, but in addition he or she should also be interested in such aspects as the vesting schedule, the provision for death, and the provision in the plan for disabilities.

4. Carl’s expectations are not likely to be fulfilled, mainly because it ignores the requirements of the *Internal Revenue Code* regarding minimum distributions from a qualified plan. The accumulated principal upon which Carl has based his expectation represents an accumulation of untaxed contributions to his retirement program, plus the untaxed earnings on those contributions. Because neither the contributions that created the accumulation nor the investment income on those accumulating contributions have been taxed, the *Internal Revenue Code* requires that the accumulation be distributed and taxed as income to the participant. The requirements in this respect are specific and inflexible. Although distribution can be delayed until April 1 of the year following the year in which the participant reaches age 70½ (or even later if the individual is still working), at that time the accumulated funds must be paid out over a period that does not exceed the life expectancy of

the participant or the combined life expectancy of the participant and his or her beneficiary. IRS tables are used to calculate life expectancies. Failure to meet the *Internal Revenue Code* requirements regarding minimum distributions can result in a penalty tax equal to 50% of the amount by which the required minimum distribution exceeds the distribution that is actually made. Although Carl can defer distribution of his principal until age 70½, the distribution must then be distributed over a shorter life expectancy and probably taxed at a higher marginal tax rate. The distribution of investment income only will not meet the *Internal Revenue Code* requirements for distribution from a qualified pension.

5. The most significant difference between defined benefit and defined contribution plans is that the employee bears the investment risk in defined contribution plans. If investment income is less than anticipated, the employee's retirement income may be less than anticipated. Second, with 401(k) plans, employees individually elect whether to defer part of their current salary to make contributions to the plan. This places a responsibility on the employee to plan for retirement. Unfortunately, many employees fail to participate in their 401(k) plans, even when an employer matching contribution is provided. The provisions for automatic enrollment contained in the Pension Protection Act of 2006 are intended to address this problem. Together, the shifting of investment risk to employees and the need for employees to personally plan for retirement have led to increased concern about whether future retirees will have adequate incomes during retirement. See pages 319, 321-322.

CHAPTER 19

MANAGING THE RETIREMENT RISK

General Comments on the Chapter

The focus of this chapter is on the retirement risk. The steps in identifying and measuring the retirement risk were introduced in chapter 9 and are reviewed here. The mechanisms that may be used to address the risk are organized into three groups: Social Security, employer retirement plans, and personal savings arrangements, including annuities. Social Security is reviewed only briefly, since the details were previously covered in chapter 10. Most of the chapter is devoted to a discussion of qualified retirement plans and annuities. There is a considerable amount of material in this chapter, and while it can be covered in a single lecture or perhaps two, it can easily be expanded with the addition of some of the supplementary materials that are available. There is a large amount of useful material on the Internet, and the National Senior Citizens Law Center (<http://www.nslc.org>) provides a useful starting place.

The general nature of corporate pensions is discussed, together with sufficient detail to familiarize students with the characteristics of the different approaches to pension design. We have attempted to summarize the principal requirements imposed by these laws without becoming overly technical. The intent is to familiarize the student with the basic features of corporate pensions and other tax-qualified retirement plans, and to at least note the ways in which insurance products may be used in funding such programs.

Important Concepts to be Stressed

The most important concepts in this chapter and the principles that we believe should be stressed in the lecture are:

- Tax advantages associated with private pension plans
- Qualification and participation requirements
- Top-heavy plans
- Benefit formulas
- The funding and vesting requirements of ERISA
- The distinction among various pension funding media
- Operational aspects of Keogh Plans and IRA's
- Annuities and the retirement risk
- Life insurance as an investment for retirement

Answers to Questions for Review

1. The retirement risk arises from uncertainty concerning the time of death. It is influenced by both physiological and cultural hazards. Our current population tends to live longer after retirement than any previous generation. In addition to the fact that people are living longer, they are retiring earlier. See page 334.
2. The two risks associated with retirement are first, that the individual will not have accumulated sufficient assets by the time retirement arrives to afford an adequate standard of living, and second, that the assets that have been accumulated will not last for the remainder of the individual's lifetime. Although the two risks may seem to students to be one and the same, they are in fact different. Even if sufficient assets have been accumulated to provide an adequate standard of living after retirement, uncertainty concerning the life expectancy raises a problem regarding the portion of the accumulation that should be consumed each year so that the accumulation will last for the individual's entire lifetime.
3. The three steps in the retirement planning process are listed on page 334-335. They include the following:
 - The first step is to estimate the future income need. This requires predicting the income needs that will exist after retirement, and then identifying the sources that will be available to meet these needs.
 - The second is to determine how the funds required to meet the needs defined in the first step will be accumulated. This involves designing and implementing a plan to accumulate assets to fund the difference between the resources that will be needed and the resources that will be available to provide the required retirement income.
 - The final step is to plan the manner in which the accumulation will be consumed. This requires consideration of the period over which the retirement accumulation will be consumed and the provision that should be made for a spouse.
4. There are three broad sources of funding for the retirement need; social security, qualified pensions and profit sharing plans, and private savings. These three sources of funding were traditionally referred to as the "three legs" to the retirement chair. More recently, a fourth source of funds has been recognized – earnings from continued employment, and the term "four pillars" is now used. See pages 335-337.
5. The distinction between the capital retention and capital liquidation strategy lies in the difference in the accumulation one is able to achieve by retirement age. Under the capital retention strategy, there must be sufficient assets to provide the required income without invading the principal. Under a capital liquidation strategy, the principal and investment income are both consumed over the individual's lifetime. The choice between the two strategies will depend on (1) the amount the individual is able to accumulate and (2) the intensity of one's desire to leave assets to survivors. (The strategy is also influenced by the *Internal Revenue Code* rules relating to required distributions). Page 342.
6. For most persons, the accumulated principal in a retirement program (that is, a pension, an IRA, or an annuity) will include an accumulation of untaxed contributions to the retirement

program, plus the untaxed earnings on those contributions. Because neither the contributions that created the accumulation nor the investment income on those accumulating contributions have been taxed, the *Internal Revenue Code* requires that the accumulation be distributed and taxed as income to the participant. Except for persons who are still working, distribution must commence no later than April 1 of the year following the year in which the participant reaches age 70½. At this time, the accumulated funds must be paid out over a period that does not exceed the life expectancy of the participant or the combined life expectancy of the participant and his or her beneficiary.

7. Under the minimum distribution option, the insurer calculates and distributes the minimum income required each year to avoid the confiscatory (50%) tax on less than the minimum distributions required by the *Internal Revenue Code*. This allows the individual to preserve the principal while still meeting the withdrawal provisions of the Code.

8. Under the graded payment method, the annuity payments include the guaranteed interest and principal, but only a part of the excess interest. The remainder of the excess interest is reinvested to purchase additional annuity benefits for each year in the future. As additional purchases are made, the payments in future years are augmented by the proceeds from the additional annuities. In effect, the annuitant sacrifices current income for increased income in the future. Page 344.

9. The pension maximization strategy stems from the ERISA requirement that pension participants accept a joint and survivor benefit unless the participant's spouse affirmatively rejects the option. The pension maximization strategy consists of electing a single life annuity and using a part of the higher monthly benefit to purchase life insurance on the annuitant. The amount of insurance should be sufficient to provide a lifetime annuity to the spouse equal to the survivorship benefit he or she would receive under the joint and survivor option. Under the right conditions—when the premium for insurance on the annuitant spouse is less than the after-tax difference in the benefits—pension maximization can increase total benefits to a couple. However, pension maximization may not work if one waits until retirement and hopes that the difference in income will be adequate to purchase the required insurance and add dollars to the budget. This is where the permanent insurance purchased years before becomes a significant asset. If the individual owns permanent life insurance, purchased well before retirement, he or she has a choice at the time of retirement. See pages 345-346.

10. The first adjustment is an allowance for inflation, since income needs may be expected to increase over the individual's retirement period. In addition to the allowance for inflation, a second adjustment is required to reflect the incidence of taxes on postretirement income. See page 338-339.

Questions for Discussion

1. The underlying motivation for the capital conservation strategy is the desire to leave capital to one's heirs. In fact, some elderly people live frugally so they can leave assets to their children (who sometimes are much better off financially than the parents). Obviously, students' attitudes toward the capital retention strategy will differ, and may depend on their personal situation.

2. Although it might seem that the individual can achieve the same results as that produced by a graded payment method of distribution by putting a part of the standard withdrawal away to be drawn upon in future years, the result will not be the same. As in the case of annuities generally, the individual cannot use the law of averages and the mortality gains that will be realized by survivors during the later years under the graded payment distribution will be lost by the individual who elects the standard distribution.

3. Investing in tax-exempt bonds will not generally produce the same results as investing in a variable annuity or a fixed dollar annuity that invests in bonds that are not tax exempt. In general, the market considered the tax-exempt nature of the income under these bonds, and this market reaction is reflected in the interest on such bonds. A major advantage of an annuity as an investment is the fact that the underlying portfolio need not consider the taxation of instruments in which funds are invested.

4. Students' answers will vary. A number of alternatives are available, with different risk and return characteristics, different degrees of protection from inflation, and different tax treatments. Some diversified combination of various alternatives seems a logical approach. Cash value life insurance is not likely to be a cost-effective means of saving for retirement unless the insured also has a need for death protection. The principal advantage of using life insurance as an investment is that it permits one to meet two complementary exposures with a single medium. The risk of premature death and the retirement risk are complementary in the sense that funds accumulated for retirement will not be needed if the individual dies prematurely, but if the individual survives, the proceeds of life insurance policies designed to protect against premature death will not be needed. A person who needs life insurance protection may find that cash value life insurance is an attractive investment vehicle. The principal advantage of life insurance as an investment rests on its ability to simultaneously provide protection for these diametric yet complementary exposures.

The principal disadvantage of life insurance as an investment is the relatively low rate unless the policy is continued until retirement. The front-end load under most cash value policies makes the return negative during the early years of the contract and very low until the policy has been in effect for a period of time. The low rate of return is partially offset by the favorable tax treatment. The fact that the cost of death protection is included as a part of the basis in computing the taxable gain is a definite advantage, but only for persons who actually need to purchase life insurance.

5. The question of whether Social Security benefits should be considered in retirement planning is one that is subject to disagreement. Although the system is clearly in trouble, it seems doubtful that it will ever be abandoned. The more likely solutions include an increase in the retirement age and perhaps increased taxation of Social Security benefits. Either of these solutions would seem to suggest increased dependence on other sources of income for retirement.

CHAPTER 20

HEALTH INSURANCE - DISABILITY INCOME INSURANCE

General Comments on the Chapter

This chapter and the following one were combined in a single chapter in the first edition of the book. Suggestions of many users indicated that a separation of the discussion of disability income coverage from health expense coverage was desirable. The separation permits a more in-depth discussion of each area, while maintaining a reasonable length to the chapters.

Because there is no "standard" disability income policy, we have stressed the principal areas of variations in contracts, and the primary emphasis in the chapter is on the different definitions of "disability," injury, and "sickness" that may be used. In addition, health insurance renewability provisions are noted in some detail. The Uniform Provisions at the end of the chapter have been revised to reflect the current NAIC model. It should be made clear to the students that these provisions apply not only to the disability income contracts discussed in chapter 20, but are also included in individual health insurance contracts covering medical expenses, which are discussed in chapters 21 and 22.

Important Concepts to be Stressed

The most important concepts in this chapter and the principles that we believe should be stressed in the lecture are:

- Types of insurers and methods of marketing disability coverage
- Long term - short term disability coverage
- The need for disability income coverage
- Sources of protection other than private insurance
- Perils insured: accident and sickness
- Occupational and non-occupational coverage
- Definitions of disability
- Exclusions
- Residual and Partial disability benefits
- Elimination periods
- Renewability provisions
- Mandatory uniform provisions
- Optional uniform provisions

Answers to Questions for Review

1. Disability income insurance is marketed on both a group and individual basis. See page 349.

2. Workers compensation and OASDHI provide protection against loss of earnings. However, workers compensation covers only occupational disabilities, and OASDI covers only those who meet certain eligibility requirements. See pages 349-350.

3. Although the text cites four definitions of disability that may be found in disability income contracts, the three most common definitions are

- The inability of the insured to engage in his or her own occupation
- The inability of the insured to engage in his or her own occupation and not working in any gainful [or reasonable] employment
- The inability of the insured to engage in any occupation.

The most liberal, of course, is the one that defines disability as the inability of the insured to engage in his or her own occupation, and the narrowest, as the inability to engage in any occupation. Short-term disability coverage almost universally uses the *any* occupation definition. Although the *own-occupation* definition provides the broadest coverage, unfavorable loss experience with this definition has caused many insurers to shift to *modified-own occupation* (listed second above). The modified own occupation definition is becoming increasingly common and for most insurers, represents the current standard. The definition of as the inability of the insured to engage in any reasonable occupation for which he or she is or might easily become qualified has lost ground to the *modified own occupation* definition.

The most restrictive definition listed in the text – the inability to engage in any occupation – is rarely used by commercial insurers, but it is similar to the definition used to determine eligibility for Social Security disability benefits. The Social Security definition – an ability to engage in any substantially gainful employment – was discussed in chapter 11.

4. The preexisting conditions exclusion is intended to eliminate coverage for conditions of which the insured was aware prior to purchasing the policy. The policy excludes a sickness or physical condition for which medical advice was received or recommended during some period prior to the inception of the policy, or if there were symptoms that would have caused a prudent person to seek treatment. A time limit may be placed on the exclusion – e.g., medical advice received or should have been sought within two years prior to the inception of the policy.

5. Long term disability contracts typically provide benefits for disabilities with a duration longer than two years. Short-term policies provide benefits for 13, 26, 52, or 104 weeks. Occupational disability contracts include coverage for disabilities incurred on the job as well as those away from the job, while nonoccupational policies cover only off the job disabilities.

6. The first approach pays partial disability benefits when the individual is unable to perform a specified percentage of the functions that constitute the person's normal job. The benefit is ½ of the total disability benefit, regardless of the reduction in earnings. Under the second approach, termed a "residual" disability benefit, payment is triggered by a loss of income, and a portion of the total disability benefit is paid based on the percentage of income lost. See pages 355-356.

7. The students should have little difficulty in identifying three of the seven optional benefit provisions identified on pages 356-357. These seven optional benefit are:

Guaranteed insurability option	Accidental death and dismemberment benefit
Cost-of-living adjustment benefit	Waiver of premium
Automatic benefit increase benefit	Social Insurance Substitute
Social Insurance Supplement	

8. The continuance provisions of individual health insurance policies are Noncancelable, Guaranteed Renewable, Conditionally Renewable, Renewable at the Option of the Insurer, and Cancelable. In addition, some policies have no provisions. See page 358.

9. Insurers may incorporate the provisions dealing with other insurance with the insurer writing the contract, the relation to earnings clause, and, in medical expense insurance, the provision dealing with overinsurance in medical expense coverage. See page 360.

10. If the insured changes to a more hazardous occupation, the benefits under the policy are reduced to those that the premium paid would have purchased for the more hazardous occupation. If the change is to a less hazardous occupation, the excess premium is returned. See page 360.

Answers to Questions for Discussion

1. One area in which a difference may exist is in the provisions with respect to renewability. The policy should be examined to determine if there is a difference in this respect. In addition, the policy definitions relating to bodily injury and disability should be examined. Note should be made of the definition of disability; whether it is defined in terms of the insured's own occupation or the *modified own* definition. In addition, the contracts should be examined to determine if they include a requirement of house or hospital confinement, and also to determine if both occupational and nonoccupational disabilities are covered.

2. The "advice" is unmitigated nonsense. First, individuals who are in poor health are not likely to be able to purchase disability income coverage. Givens apparently assumes that someone who is in good health will remain so indefinitely. The advice to purchase disability income coverage if you are accident-prone seems more appropriate to the newspaper columns on astrology than to a book on financial planning. Amazingly, some people actually read this stuff and think that it makes sense.

3. Students answers may differ, but they generally specify either moral hazard or morale hazard. Both constitute special problems in this area. Morale hazard, while less reprehensible, is probable more widespread.

4. One of the provisions that would appear to be essential is a different waiting period for disabilities arising out of sickness and those arising out of injuries. In addition, the contract might provide benefits for differing durations for sickness and accident. The definition of sickness can be written to exclude preexisting conditions.

5. Application of the principle of the variable annuity to disability income seems both logical and desirable. Some contracts are available on a group basis with provision for index-linked benefits. Depending on the provisions of the disability contract, increases in social security benefits may provide some protection against inflation.

CHAPTER 21

HEALTH INSURANCE - COVERAGE FOR MEDICAL EXPENSES

General Comments on the Chapter

This chapter has been revised significantly since in the 11th edition, primarily due to the introduction of the Patient Protection and Affordable Care Act, also known as “Obamacare.” The discussion of the Affordable Care Act is deferred until later in the chapter, after a basic discussion of health insurance concepts and issues.

The chapter begins by presenting a brief history of health insurance. This includes the introduction of health insurance, evolution of managed care, backlash against managed care, and the introduction of consumer directed health insurance. The basic structure of the health insurance market and health insurance coverages are presented. Finally, the chapter discusses problems with the system, prior reform efforts, and the impact of the Affordable Care Act.

The most significant provisions of the Affordable Care Act became effective in January 2014, after the text and this manual were written. By the fall of 2013, however, it was clear that the implementation faced serious challenges, with a flawed rollout of the federal exchange and a consumer backlash in response to cancelled health insurance plans, narrower provider networks, higher deductibles, and increased premiums for some insureds. Supporters of the law pointed to those who were benefitting – individuals with preexisting conditions and young adults who could stay on their parents’ policies.

Users of the first edition will recall the statement to the effect that national health insurance appeared to be “an idea whose time has arrived.” In earlier editions, the burning health care issue was the cost of health care, which many believed to be out of control. The rate of growth in national health care expenditures slowed in the late 1990s, primarily as a result of managed care initiatives, and concern over costs was replaced by a new concern over the quality of care. This concern manifested itself in widespread criticism of managed care organizations and Congressional proposals “to do something about HMOs.”

Over time, health care costs rose again to the forefront, and attention to the uninsured grew. The Affordable Care Act is an effort to address both issues. Whether it will be successful, however, is far from clear. The debate over how to solve the twin problems of increasing costs and numbers of uninsured will undoubtedly continue. In that context, it is useful for the students to gain an understanding of how the Affordable Care Act operates, including how it aims to solve the problem of the uninsured and how the various subsidies and cross-subsidies operate. In addition, the distinction between managed care and consumer directed health care is a key concept. It reflects a philosophical divide among proponents of reform.

Important Concepts to be Stressed

The most important concepts in this chapter and the principles that we believe should be stressed in the lecture are:

- Blue Cross/Blue Shield/commercial insurers – fee-for-service
- Emergence of managed care – HMOs, PPOs, POS plans
- ERISA exempt self-funded plans, Medicare, Medicaid, SCHIP
- Current deficiencies – access
- Current deficiencies – increasing cost
- Insurance as a complicating factor
- Previous efforts to address the problems
- The insurance product – Traditional forms of health insurance
- Major medical
- Managed care, HMOs, PPOs, POS plans
- Limited health insurance contracts
- Dental expense insurance
- Consumer-directed health care and health savings accounts
- The Affordable Care Act

Answers to Questions for Review

1. Although they are manifest in a myriad of ways, the U.S. health care system faces two broad problems: (1) access to health care, (2) the growing cost of health care.

Past measures aimed at increasing access to health care include the federal Medicare program, the federal-state Medicaid program, the federal legislation COBRA law, and the access provision of HIPAA.

Previous efforts to contain health care costs can be divided into *managed care* and *consumer-directed health care*. Managed care attempts to place cost controls on the providers and receivers of medical care through *utilization review* techniques including *hospital precertification* and *continued stay review*, *second surgical opinion* programs, and *medical care management* programs, including disease management. Consumer-directed health care encourages consumers to control medical expenses by giving them a stake in the expenditures. High-deductible policies combined with medical savings accounts and health savings accounts reflect consumer-directed health care concepts.

2. The term ERISA-exempt health insurance plan refers to self-funded plans that ERISA exempted from state regulation. They include single-employer self-funded plans as well as multi-employer welfare arrangements (MEWAs). Although ERISA was amended in 1983 to permit the states to regulate some aspects of MEWA operations, single-employer plans remain exempt from state regulation of health insurance plans. Because they are exempt from state regulation, these plans avoid the mandated benefit provisions that have been enacted in many states in an attempt to spread the cost of certain procedures (e.g., infertility treatments).

3. The comprehensive major medical policy specifically is discussed on pages 373-374. A major medical policy provides coverage for a wide range of medically-necessary expenses,

and requires the insured to pay a portion of the cost through deductibles, copayments, and coinsurance.

4. The deductible of a major medical policy is designed to exclude small relatively certain losses from coverage. The coinsurance provision is designed to control the level of expenses in excess of the deductible. These features, originally introduced in the first major medical policies have become standard features of most health insurance policies today.

5. Health Maintenance Organizations provide a wide range of health care services to subscribers in return for a fixed annual fee. They represent an alternative approach to the provision of health care as well as to health care financing. They differ from other insurers operating in the health insurance field in the fact that they actually deliver health care in addition to serving as a financing mechanism. See page 367.

6. The operation of the private insurance mechanism complicates the problem of health care access in several ways. As explained on pages 378-379, there is a natural tendency in a free, competitive health insurance market toward risk segmentation—the classification of insureds into groups that reflect their hazards. Insurers have an incentive to identify and compete for insureds with lower than average expected losses, which they do by offering these insureds lower premiums. This inevitably results in segmentation of the market into the better than average exposures and below average exposures. This benefits the low-risk segments of the population but increases cost to the high-risk segment.

The distribution of health costs across the population also suggests a significant potential for adverse selection. Some people have an incentive to not buy insurance because they have lower than average expected loss costs. The problem with this is that today's healthy person may be tomorrow's sick person. Those who do not feel that they need health insurance change their minds after the onset of a serious illness and would then like to join the mechanism that spreads the high cost of health care.

7. Consumer-directed health care plans attempt to control costs by giving insureds a stake in the expenditures, typically through a high deductible health insurance policy. The high deductible policy is often paired with a tax-qualified savings account, such as a health savings account or medical savings account. Individual become responsible for more routine and smaller expenditures, while the insurance policy covers larger expenses.

8. a. Premiums paid by the employer are not taxable as income to the employee, so the availability of this form of protection would be important in the decision to transfer the risk. When the employer pays a part of the premium and the employee pays a part, the decision becomes more complex.

b. For the individual, health insurance premiums are treated as any other medical expense, and are combined with directly incurred medical expenses for deduction purposes. Health insurance premiums and direct medical expenses are deductible to the extent that the total exceeds 7.5% of adjusted gross income. See page 377. Self-employed persons may deduct 100 percent of health insurance premiums.

c. Health care costs incurred directly by the individual are deductible for federal tax purposes to the extent that they exceed 7.5% of adjusted gross income. As noted above,

health insurance premiums paid by the individual are combined with expenses incurred for health care in determining the total health care cost.

d. In addition to the above, under a Health Savings Account (HSA) program, individuals may deduct contributions to their HSA up to the maximum permitted amount, investment earnings are not taxed, and distributions used to pay for qualified medical expense are not taxed.

9. Like many other contracts discussed in the text, the limited health insurance policies violate the rules of good risk management because they place emphasis on the cause of the loss rather than on the effect. The risk management concept suggests that it is the effect that is important, not the cause of a loss. If the individual needs medical expense coverage for those losses covered under the limited policies, he or she needs coverage for those losses that these policies do not cover. Good risk management dictates that protection be obtained against as wide a range of causes as possible. See page 375.

10. The major elements of the Affordable Care Act include: (1) Medicaid expansion, (2) a requirement that individuals purchase qualifying health insurance or pay a penalty (the individual mandate), (3) subsidies to assist low income individuals purchase health insurance, (3) penalties for large employers who fail to offer their employees health insurance, (4) a tax credit for small employers who provide employee health insurance, (5) the creation of health insurance exchanges for individuals and small employers, (6) a requirement that qualifying health insurance plans cover essential health benefits, with policies categorized into standard metallic levels, (7) and a variety of insurance market reforms.

Answers to Questions for Discussion

1. Students answers will differ, generally depending on their personal experiences (or perhaps with those of their parents). The paradox of HMOs is that they seem to achieve what they were intended to achieve: control of medical costs, but they do so at the cost of individual choice. The health-care financing dilemma is that the difference approaches that have been adopted in response to the problem of the growing cost of health care all involve some sacrifice in the individual's choice.

2. This asks for an opinion, and there is no correct answer. Younger students may object to paying higher premiums in order that older insureds may pay lower premiums. Alternatively, they may argue that this provides for a more level premium over one's lifetime, which is a desirable result. It is worth noting that young adults were particularly likely to be uninsured before the Affordable Care Act was introduced, and increasing their premiums could provide another disincentive to purchasing coverage. See page 385.

3. The survey to which the question refers was published in the October 25, 1999 issue of the Archives of Internal Medicine. It indicated that many doctors are willing to lie to insurance companies to help patients get care, especially life-saving or emergency care. A team of researchers surveyed 169 randomly selected internists, who were each given six hypothetical cases in which patients with described illnesses or maladies would not be eligible for treatment under their insurance, but in which coverage would apply if the physician misrepresented the facts to the insurer. In their responses to the hypothetical cases, nearly 60% of the doctors stated

that they would misrepresent the facts to the insurer to help the patient obtain bypass surgery, about half would lie to obtain intravenous pain medication for the dying patient, and a third would lie to obtain psychiatric help for the depressed patient. About a fourth of the doctors state that they would not lie in any of the cases.

The initial response from some quarters was that this was a positive thing—doctors who were willing to go to bat for their patients even if it meant misrepresenting facts to an insurance company. Some parties went on to suggest that it was really the insurance companies that were at fault, for forcing the physicians to lie.

Other observers were less convinced that the motives of the physicians were purely altruistic, cautioning that it should be noted that the physicians were being paid by the insurance companies for the services they lied about. It should be interesting to note on which side of this argument students who have studied insurance will come down.

4. State mandates attempt to spread the cost of certain procedures by requiring that all policies sold in the state include coverage for these procedures. Treatment for infertility is a good example for illustrating the concept. This is a relatively rare and also expensive procedure. If it is not included in all contracts sold in the state, adverse selection would lead to the accumulation of insureds who need the treatment with insurers that provide the coverage. The natural result would be that premiums for these companies would reflect the costs associated with the large number of insureds seeking treatment. Mandating that all policies include coverage for the procedure eliminates the tendency toward segmentation. The same principles apply in the case of certain other maladies, most notably mental illness. The ability of ERISA-exempt self-funded health plans to exempt themselves from mandated benefits frustrates the ability of the states to use mandates to spread the costs for the procedures in question.

5. The quote may not reflect student experiences, but it is indisputable that utilization is at least in part a function of the existence of insurance. The infertility treatment discussed in question 4 above is a good example. A high percentage of those who seek and receive treatment for infertility are covered for the procedure under a health insurance contract. The incidence of treatment for mental illness shows similar characteristics.

Unfortunately, the simple fact of the matter is that there are few policy provisions that have been designed to control overutilization. Exceptions exist in the field of major medical insurance where the deductible and the coinsurance provision help to control utilization. In other areas the policy provisions often are designed so that they encourage unnecessary utilization. Increasingly, however, insurers are moving to correct these deficiencies by altering their contracts to pay for more treatments on an outpatient basis. In addition, procedures pioneered by HMOs, such as second surgical opinions, precertification for hospital admissions, and case management programs attempt to control utilization (with varying degrees of success).

CHAPTER 22

HEALTH INSURANCE FOR THE ELDERLY

General Comments on the Chapter

This chapter was added as a new chapter in the Eighth edition of the text. Although some instructors may not feel that the subject is sufficiently important to warrant detailed discussion, the changes in health insurance and related issues for the elderly represent an area of considerable significance for the nation and for the individuals who are affected. Because financing the health care of the elderly has financial implications for the entire population and for the younger members of individual families, we believe that the subject is one that merits treatment.

In general, the chapter addresses three broad, yet inextricably related areas. Medicare, long-term care, and Medicaid planning. The changes in the Medicare program introduced by the Medicare Prescription Drug, Improvement and Modernization Act of 2003 increased the complexity of the Medicare system and present a new range of choices for seniors. At the same time, the growing number of persons who are spending their final years in custodial institutions makes the topic of long-term care insurance an increasingly important one. The changes in the tax treatment of long-term care insurance, life insurance accelerated benefits, and viatication are all subjects that merit attention. Finally, the burden of financing the long-term care costs of the indigent and the development of Medicaid planning as an alternative to long-term care insurance has direct relevance to the overall topic of health insurance for the elderly.

Important Concepts to be Stressed

The most important concepts in this chapter and the principles that we believe should be stressed in the lecture are:

- Original Medicare
- Medicare supplement insurance coverage
- Medicare Advantage
- HMOs and PPOs, and PSOs under Medicare Advantage
- Private Fee-for-Service option, Medicare Medical Savings Accounts, and MSNs
- Medicare Prescription Drug plans
- The future of Medicare
- Long-term care insurance
- Tax-qualification requirements for LTC insurance under BBA-97
- Life insurance accelerated benefits as an alternative to LTC insurance
- Viatication as an alternative to LTC insurance
- Medicaid planning
- Long-term care partnership programs

Answers to Questions for Review

1. Medicare Part A—Hospital Insurance—covers expenses associated with four broad categories of health care: (1) hospital care, (2) care in a nursing home or extended care facility, (3) home health services, and (4) care in a hospice. The coverage is subject to a deductible and coinsurance-like features. Medicare Part A is financed by part of the Social Security payroll tax paid by workers and their employers, and by self-employed persons. (See pages 406-407).

Medicare Part B, Supplemental Medical Insurance (SMI) is a voluntary coverage financed jointly by monthly premiums paid by persons who elect the coverage and a contribution for each participant by the federal government. The coverage under the SMI is much like a major medical contract. Benefits begin after a \$100 deductible, and Medical SMI pays 80 percent of the covered expenses in excess of the deductible, provided that the charges are *reasonable* (based on customary and prevailing charges). Covered expenses include physicians' and surgeons' services (in a hospital, clinic, doctor's office, or even in the home), home health services up to 100 visits per calendar year, and certain miscellaneous services such as diagnostic tests and outpatient services of a participating hospital. (See pages 407-408).

2. As noted on pages 391, under certain circumstances, persons who are eligible for Medicare but who are still employed have the option of enrolling (with their spouses) in their employer's health insurance plan.

- Federal law requires that employers with 20 or more employees must also offer the same health benefits, under the same conditions, to employees age 65 or over and to their spouses who are 65 or over, that they offer to younger employees and spouses.
- Employers must also offer health care coverage to employees' spouses who are between 65 and 69 even if the employee is under age 65.

If the individual accepts the employer plan, it will be the primary payer and Medicare becomes excess. If the individual rejects the plan, Medicare will be the primary payer for Medicare-covered health services that he or she receives.

3. The traditional Medicare program reflects the fee-for-service approach to financing health care costs that was prevalent in 1965 when Medicare was enacted. Medicare Advantage is an attempt to reform Medicare in the same ways that managed care initiatives such as HMOs and PPOs have changed health care financing generally. Medicare Advantage options must provide at least the same level of benefits as provided under traditional Medicare, and must pass on to beneficiaries any savings in the form of additional benefits. Medicare Advantage options may charge beneficiaries an additional premium to cover add-ons that are not available under traditional Medicare.

Medicare Advantage has been referred to as the privatization of Medicare, primarily because it allows private providers of health care to become the risk bearers of the Medicare program. Congress established Medicare Advantage because it recognized the benefit of providing Medicare beneficiaries with private health coverage options.

4. The essential feature of Medicare MSAs, like Health Savings Accounts, is the use of a high deductible major medical-type policy and a reserve fund that is intended to cover costs that fall within the deductible of the insurance policy. Beneficiaries who choose this option will purchase a high-deductible catastrophic health insurance policy to accompany their medical savings account. Capitated Medicare contributions will be used to pay the premium for the high-deductible catastrophic plan, with the remainder deposited into the beneficiary's MSA. Medicare beneficiaries will pay medical expenses within the deductible with funds from the MSA or out of personal assets. The catastrophic plan will provide coverage for at least the services that are available under Medicare Parts A and B, after the deductible has been met. Withdrawals for non-medical purposes will be subject to income tax.

In advantages and disadvantages of MSAs may be viewed from the perspective of the individual or the perspective of society generally. In this question, the issue is on the advantages and disadvantages to the individual (i.e., the mom and dad). The advantages of an MSA from the perspective of the individual include the following:

- The plan provides full coverage for expenses over the deductible, while Medicare leaves seniors exposed to some catastrophic expenses that could devastate their savings (e.g., prescription drugs and long-term care expenditures to name two). The MSA funds could be used to pay for health expenses such as prescription drugs, which are not covered by Medicare.
- Persons electing an MSA could also contribute the premiums they would pay for Medicare Supplement coverage to their MSA, which would mitigate the exposure to unfunded, uninsured costs.
- People with MSAs plus catastrophic insurance would be free from Medicare rationing restrictions and from concerns about quality of and access to care.

The principal disadvantage of the MSA for the individual beneficiary is the increased risk that he or she assumes. Expenditures within the deductible of the high deductible major medical policy that exceed the balance of the MSA account must be funded by the individual. Less affluent persons could be financially devastated if they took the risk that they would not get sick and were then hit with doctor and hospital bills that were several thousand dollars more than what had accumulated in their MSA. Some critics of MSAs also argue that the might discourage people from seeking needed health care.

5. There are three ways in which life insurance can provide an alternative to long-term care insurance.

- First, the saving element of cash value life insurance provides a source of funding for emergencies of many types, including the cost of long-term care. However, cash values may be limited or nonexistent.
- In addition to cash values, the accelerated benefits feature (living needs benefit) allows the insured to tap the policy's death benefits for the payment of long-term care costs. Living needs benefit usually provide for advance payment of part of the death benefit in the event of designated catastrophic illness, a terminal illness, or the need for custodial or nursing home care that occurs after the insured has reached a specified age ranging from 65 to 85. Most policies specify a maximum limit for the benefit, often

expressed as a percentage of the death benefit. The benefit is usually treated as a lien against the death benefit. Most companies charge interest on the amount of benefits paid, and add the unpaid interest to the lien against death benefits.

- A third way in which life insurance can provide an alternative to long-term care insurance for terminally ill persons is through viatication. (See page 407).

6. LTC policies typically use some combination of triggers to determine eligibility for benefits, such as (1) the inability to perform a certain number of ADLs, (2) suffering from a cognitive impairment, and (3) a medical necessity. LTC policies are not standardized, and ADLs vary. Activities usually listed include eating, bathing, dressing, walking, toileting, transferring, and continence. See pages 404-405.

7. The limitations in the Medicare structure that make Medicare undependable as a source of funding for long-term care are discussed on page 402-403. Although Medicare addresses two facets of the long-term care need (nursing home and home health care), it does so on a very restrictive and limited basis. There is no coverage for intermediate or custodial care.

- Coverage under Medicare is limited to skilled care, which may not be the level of care required by a person who is not sick but who needs assistance with the activities of daily living. There is no coverage for intermediate or custodial care.
- Nursing home care is covered only if within 30 days of a three consecutive day hospital stay for the same condition that requires admission to the nursing facility.
- A physician must certify the need for the skilled care on a daily basis
- The skilled nursing home facility must be certified by Medicare.

If all four requirements have been met, up to 100 days of skilled nursing care benefits are provided, subject to a copayment after the 21st day. The beneficiary is responsible for all costs after 100 days.

For *home health care*, only part-time or intermittent home care is covered (defined as care that is required at least four or fewer times a week). Further, the patient must be house-bound, unable to leave the house except with assistance. The patient must be under a physician's care and the physician must certify the need for home health care.

8. Viatical settlements or viatication refers to the sale of a terminally ill person's life insurance policy to a business firm that specializes in such transactions. These firms are generally referred to as viatical settlement companies. HIPAA clarified the tax-treatment of viatical settlements by adding a new section to the *Internal Revenue Code* (Section 101(g)). Generally, this new provision states that any amount received under a life insurance contract on the life of a terminally ill insured will be treated as an amount paid by reason of the death of the insured. Amounts paid to a chronically ill person are subject to the same limitations that apply to long-term care benefits. See page 407.

9. The Medicaid program is intended to provide assistance to persons who cannot afford adequate health care out of their personal resources. The general requirements for Medicaid eligibility were discussed in Chapter 21. Federal statutes require state Medicaid programs to

cover persons who are receiving Supplemental Security Income (SSI) and persons who met the AFDC eligibility criteria prior to welfare reform. Beginning in 1984, federal legislation expanded required coverage to individuals who are not receiving welfare payments or cash assistance. The expansions of coverage included certain low-income pregnant women, children under age 6, and certain Medicare beneficiaries.

For long-term care, these basic requirements are modified in two ways:

- First, in determining the need-based eligibility, transfers of assets during the three years prior to the determination of eligibility are considered. A person who transfers assets for the purpose of becoming eligible will lose a period of coverage under Medicaid.
- The law allows the spouse of an institutionalized individual to retain a specified level of income and assets. The amount the spouse is allowed to keep is adjusted annually for inflation.

10. The triggers are those set forth in HIPAA as requirements for tax qualification. The triggers are discussed in the text on page 406. HIPAA defines TQ-LTCI as insurance that provides necessary diagnostic, preventive, therapeutic, curing, mitigating and rehabilitative and maintenance or personal services to a *chronically ill person*. A chronically ill person is a person who has been certified as unable to perform, without substantial assistance, at least two activities of daily living for at least 90 days. The activities of daily living are (1) eating; (2) toileting; (3) transferring; (4) bathing; (5) dressing; and (6) continence. The *Code* definition of long-term care insurance includes coverage for persons with Alzheimer's disease by classifying a chronically ill person as one "who requires substantial supervision to be protected from threats to health and safety due to severe cognitive impairment."

Answers to Questions for Discussion

1. The strongest argument in support of the decision to adopt the Medicare Advantage provisions of the BBA-97 is the steady increase in Medicare costs over the past three and a half decades, compared with the gains in efficiency that have been achieved by HMOs and PPOs. The goal of the Medicare Advantage initiative is to contain costs in Medicare by injecting private competition into the system and encouraging more beneficiaries to enroll in managed care plans. The ability to shop for insurance plans could encourage greater efficiency and restrain ever-increasing costs for health care. Health care in America has been transformed by the HMO-based managed care plan and Medicare Advantage is an attempt to move Medicare in the same direction. The rationale behind the introduction of MSAs into the Medicare arena is that they will encourage Medicare beneficiaries to become more prudent consumers of Medicare services. Persons with MSAs will benefit financially to the extent that their medical expenses fall within the deductible.

The arguments that have been offered against the Medicare Advantage program generally relate to the extent to which it will be subject to adverse selection and thereby frustrate the risk sharing features of the program. Some authorities have suggested that the Medicare Advantage program will create a multi-tiered system within Medicare, in which

wealthy beneficiaries opt for fee-for-service, healthy individuals shift into managed care plans, and sicker and more expensive beneficiaries stay in the traditional fee-for-service plan.

2. Conventional wisdom suggests that Medicare MSAs will be most appealing to persons who are healthy and who expect medical expenses significantly below the deductible of the high-deductible health insurance policy. Persons with health problems that involve predictable large costs would find MSAs a poor choice. Anyone whose anticipated medical expenses will exceed the balance of the MSA and will fall within the deductible of the high-deductible policy purchased by MSA holders will be responsible for the costs not funded by the MSA. While most of the discussion of MSAs has focused on the adverse selection that will encourage healthy persons to opt for MSAs, there is another parameter that should influence the selection of MSAs; family income or assets. The MSA option involves an increased element of risk for the Medicare beneficiary. Until the MSA reaches the point at which it is sufficient to fund the full annual deductible of the MSA high-deductible policy, the Medicare beneficiary will need another source of funds as a cushion for uninsured medical expenses.

Some policymakers have predicted that people with more disposable income in relatively good health will be more likely to try MSAs. If that occurs, the per person costs of those remaining in Medicare could rise sharply. In other words, MSAs may encourage adverse selection against the traditional Medicare program. Critics of the MSA option argue that the MSAs would primarily be chosen only by the lower cost healthier retirees, not the higher cost sicker retirees. With the lower cost retirees opting out of Medicare along with their portion of the funds, and the higher cost retirees staying, the result would actually be higher overall costs.

3. The quote is from Professor Joseph Belth's *Insurance Forum*. Belth argues that the financing of long-term care is inconsistent with insurance principles in a number of ways. As we noted in chapter 3, those risks most suited to treatment by insurance are those in which the potential severity is high, but the probability is low. In the case of long-term care, the potential loss is high, but the probability of loss is also high. When the probability of loss is high, the average loss and therefore the premium will also be high—so high in fact that the coverage may not be salable. To reduce covered costs so long-term care policies will be salable, insurers impose restrictions and limitations on the coverage. In addition, there is a serious question as to whether the loss is fortuitous. The decision to enter a nursing home or obtain home care is made by the insured. Insurance companies therefore find it necessary to insert provisions defining the conditions under which the insured's decision to enter a nursing home will be covered ("gatekeeper" provisions).

4. Students' answers will differ, depending on their philosophical orientation. The question does, however, provide an opportunity for integrating a discussion of ethics into the class discussion. Viewed from one perspective, it can be argued that it was Congress that established the loopholes in the Medicaid system that allow one to qualify for Medicaid by spending down. In an often-quoted passage, Judge Learned Hand stated "no one has an obligation to pay more taxes than the law requires." In a sense, the same may be said with respect to the spend-down provisions of Medicaid. No one has an obligation to expose a spend a greater portion of their estate on medical expenses than the law requires. The subject, however, is one upon which reasonable people may disagree.

5. There are some who argue that one can trace the growing problems in the financing of health care to the passage of the Medicare/Medicaid legislation in 1965. Time series analysis seems to suggest a strong correlation between the growth in Medicare and the growing percentage of gross national product devoted to health care. Although the period since 1965 has also been the period characterized by a phenomenal growth in medical technology, there is little question that one of the driving forces in the increase in medical costs for the country has been government-funded health care. Medicare and Medicaid beneficiaries represent under 25% of the population (13.7% for Medicare and 13.0 for Medicaid). Health care expenditures by government (primarily for these two classes of beneficiaries) represents 45% of the nation's total health care expenditures. In addition, Medicare costs historically have grown faster than private sector health care costs, causing medical inflation for everyone. Less health care spending by the elderly—through managed care initiatives such as those introduced by Medicare Advantage—could ease the pressure on all medical prices and slow the rate of increase in health spending generally.

CHAPTER 23

BUSINESS USES OF LIFE AND HEALTH INSURANCE

General Comments on the Chapter

There is a considerable amount of material in this chapter, and while it can be covered in a single lecture or perhaps two, it can easily be expanded to three or four lectures with the addition of some of the supplementary materials that are available. The chapter begins with a brief discussion of the use of life and health insurance as a fringe benefit in business, including the group term life rules of *Internal Revenue Code*, group ordinary life, group paid-up life, group universal life, survivor income benefit insurance, and retired lives reserve. We have also included a brief discussion of cafeteria plans.

Following the discussion of life and health insurance as employee benefits, the chapter turns next to the subject of pensions. It begins with the legislative requirements of ERISA, TEFRA, the Pension Protection Act, and Title VII of the Civil Rights Act. We have attempted to summarize the principal requirements imposed by these laws without becoming overly technical. The general nature of corporate pensions is discussed, together with sufficient detail to familiarize students with the characteristics of the different approaches to pension design. The intent is to familiarize the student with the basic features of corporate pensions and other tax-qualified retirement plans, and to at least note the ways in which insurance products may be used in funding such programs.

A brief discussion of pension plan derisking and longevity risk transfer has been introduced in the 11th edition. In addition to the previously mentioned movement toward defined contribution plans and away from defined benefit plans, some employers are pursuing strategies to limit the impact of their existing defined benefit plans on their own financial statements. One problem is the volatility in funding status that results from emerging pension accounting rules. In some cases, employers are transferring their pension obligations to an insurance company. The chapter presents some recent examples and issues involved.

The final segment of the chapter discusses business uses of life insurance in such areas as the funding of buy and sell agreements, deferred compensation, key-person life insurance, and split dollar plans.

Important Concepts to be Stressed

The most important concepts in this chapter and the principles that we believe should be stressed in the lecture are:

- Employee benefits generally – tax treatment
- Group term life insurance and other life insurance benefits
- Funding issues – life and health insurance
- Federal regulation of qualified retirement plans
- Requirements for qualification
- Funding qualified retirement plans
- ERISA termination insurance – PBGC
- Pension accounting and plan de-risking

- Cafeteria employee benefit plans
- Business continuation life insurance
- Key person life insurance
- Split dollar plans
- Deferred compensation
- Corporate-owned life insurance

Answers to Questions for Review

1. The employee benefits described in the chapter for which the *Internal Revenue Code* provides favorable tax treatment include the following:

Life insurance coverage up to \$50,000	Section 79
Medical expense benefits or insurance	Section 105, 106
Disability benefits or insurance	Section 105, 106
Bargain element of excess term life insurance	Section 79
Contributions to qualified retirement plans	Section 401
Cafeteria plan benefits	Section 125

In addition to these insurance-related employee benefits, other tax-favored employee benefits include tuition reimbursement, dependent care assistance programs, *de minimis* benefits, business-related benefits, such as, car for business use, subscriptions to publications, and professional organization membership, meals and lodging for the convenience of the employer, athletic facilities, and free or subsidized parking.

2. (a) Premiums for employees' health insurance paid by the employer are deductible by the employer as a business expense, but are not taxable to the employee as income. As explained in the text, this results in a net saving to the employees, since in the absence of such treatment, they would have to purchase health insurance out of after tax income.

(b) Contributions by an employer for employee term life insurance are deductible by the employer up to \$50,000 in coverage, and the amount of the premiums is not taxable as income to the employees. (Premiums for group term life insurance in excess of \$50,000 is taxable to the employee as income). The imputed income to which the tax applies is not the premium paid by the employer, but an imputed premium set forth in IRS regulations. See page 414.

3. For a plan to be qualified by the IRS, it must conform to the qualification requirements listed on pages 418-419. They include the requirements that:

- The plan be designed for the exclusive benefit of employees and their beneficiaries.
- Contributions and benefit formulas cannot be designed to discriminate in favor of officers, stockholders, or highly compensated employees.
- The plan must be in writing, and a written description of the plan must set forth all the provisions necessary for qualification.
- The plan must be communicated to the employees, with a written description summarizing major provisions and clearly describing their rights and obligations.
- The plan must provide for nondiversion of contributions, making it impossible for the employer to recapture contributions until all liabilities are satisfied.

- The plan must provide either for definite contributions by the employer or a definite benefit to the worker at the time of retirement.
- The plan must be permanent, and while modifications in the plan over time are permitted, the employer cannot terminate the plan except for "business necessity."
- Vesting must be provided.
- Life insurance benefits may be included in the plan only on an incidental basis.

4. Funding approaches are discussed on pages 421-422. The two funding approaches discussed in these pages are trust fund plans and insured plans. Under trust fund plans, the employer (and employees) retain all risk associated with the promised benefits. Under an insured plan, the insurer may bear the risk or, in some cases it may be shared by the insurer and the employer.

5. Contributions made by the employer on behalf of the employees are specifically allocated to the individual employees under allocated funding instruments, which include individual policy pension trusts, group permanent life insurance, and group deferred annuities. Unallocated funding instruments, in which the contributions are maintained on a collective basis include deposit administration plans, immediate participation guarantee plans, and separate accounts. As noted in the text (page 423), the *Harris Trust* decision required insurers providing immediate participation guarantee plans to modify these plans to avoid assuming the role as fiduciaries under ERISA. In general, the response has been to provide interest guarantees in these plans. (It was the absence of guarantees that influenced the court to decide that IPG contracts were not, as insurers had believed, exempt from the ERISA provisions related to fiduciaries.)

6. Funding deficiencies generally arise in connection with defined benefit programs, and arise from differences between the assumptions on which contributions are based and the actual outcomes. If investment income is less than assumed or if benefits are greater than anticipated (due to unexpected longevity on the part of beneficiaries), the contributions may be insufficient to fund the promised benefits.

7. Under the Immediate Participation Guarantee plan, the employer assumes both a part of the investment risk and a mortality risk. Actual investment income is credited to the fund, but subject to a guaranteed minimum since *Harris Trust*) rather than a fully guaranteed rate as in the case of a deposit administration plan. In addition, benefits are paid directly out of the fund. If investment earnings fall, or if mortality is less than anticipated, the employer bears the loss. Under a group deferred annuity, the insurer assumes the investment and mortality risks.

8. Top-heavy plans are required to make minimum contributions for non-key employees. For a defined contribution plan, the minimum is 3% of employee compensation. For a defined benefit plan, the minimum is the contribution required to fund a benefit equal to 2% of annual compensation in the 5 highest years of earnings, multiplied by the number of years employed. See pages 419.

9. Premiums for key-person life insurance are not deductible as a business expense by the corporation. The policy proceeds received by the corporation in the event of the death of the key-person are not subject to taxation. See page 428.

10. All employers with defined benefit plans are required to insure the benefits of their plan with the PBGC, paying a premium that varies with the nature of the plan. The protection to employees is obvious. The benefits of a covered pension are guaranteed up to 100 percent of the average wages of the worker during his or her five highest earning years, subject to a dollar maximum. The employer also enjoys a modicum of protection. If a plan is terminated with insufficient assets, the employer's obligation to reimburse the PBGC is limited to 30% of the net worth of the employer plus 75% of the remaining liability. See pages 423-425.

Answers to Questions for Discussion

1. The Pension Reform Act violates the freedom of choice of business managers in connection with pension funds, but it may be argued that the social benefits justify this infringement on management prerogatives. Some students may of course differ with this position.

2. From the perspective of other owners, the effect of the disability of an owner is similar in many respects to the death of that owner, especially when the disabled owner was active in the operation of the firm. The other owners may have a legal obligation (or feel a moral obligation) to continue income payments to the disabled owner. If someone must be hired to perform the disabled owner's duties, there is an additional cost to the firm. At the same time, the disability of an owner is fundamentally different from the death of an owner. The disabled owner's interest does not pass to a survivor, and unlike a surviving spouse, the disabled owner may not want to dispose of his or her ownership interest. Finally, unlike death, there may be disagreement over whether the owner is or is not disabled. Instances arise in which an owner may be unable to perform the duties of his or her position, but is unwilling to admit it. In many ways, the perpetuation problem arising from the disability of an owner is more complex than in the case of death.

3. The original reason for nonqualified deferred compensation programs was to create "golden handcuffs"—conditions of employment designed to keep valuable employees. Because nonqualified deferred compensation programs are permitted to discriminate among employees, some have been established for another reason; to create a deferred compensation program that discriminates in favor of highly compensated personnel. The number of nonqualified deferred compensation programs has increased significantly since the enactment of ERISA, primarily because they provide an opportunity to partially shelter income for some employees without including rank and file workers.

4. Students proposals regarding the options for the self-employed chiropractor with full employees should recognize the situation as one in which a Keogh plan is appropriate. Although the chiropractor could establish a SIMPLE plan or a 401(k) plan with provision for elective deferrals, he or she would be limited with the respect to the amount of income that could be sheltered under these plans. Presumably, the desire to shelter personal income is a motivation in this case).

5. If one holds the position that pension benefits are a form of deferred compensation, anything other than full and immediate vesting seems inequitable. Since the worker gives up current income in return for contributions to the pension program, forfeiture of these

contributions under any circumstances seems to leave the worker less well off. However, a case for vesting requirements can be made on the basis of the increased administrative costs that might be involved.

SECTION III

PROPERTY AND LIABILITY INSURANCE

Section III of the book deals with the traditional property and liability fields. As noted in the introduction to Section II, either section may be presented first, although we prefer the sequence in the text.

The material on property and liability coverages has been divided on the basis of personal line coverages and commercial line coverages, in order to permit those teachers who prefer to do so to treat only those coverages designed for the individual or family unit without assigning parts of chapters. At a minimum, we believe that chapters 24, 25, 27, 28, 29 30 and 34 should be covered. Those instructors who choose to cover the commercial line coverages will find that the discussion of most of these coverages is quite brief, and some of the more esoteric forms are only mentioned. If a more in-depth treatment is desired, sample commercial line policy forms may be used to supplement the text material. The ISO Portfolio Program forms serve as the focal point for chapters 31 and 32.

In examining students over their mastery of the property and liability contracts treated in Section III, we use a modified "open-book exam" approach, and permit the students to use policy forms during the examination. This reinforces the notion that the intent is that they learn to understand and interpret contracts, rather than to remember specific policy provisions.

The final chapter of the book, "Insurance in the Future," was added in the second edition. In this edition, it is available on the companion website at www.wiley.com/college/vaughan. We believe that it provides an appropriate close for the course and suggest that it be the final assignment, regardless of whether Section II or Section III is treated first.

CHAPTER 24

THE HOMEOWNERS POLICY - GENERAL PROVISIONS

General Comments on the Chapter

This is the first of two chapters dealing with the homeowners forms. It emphasizes the general nature of the Homeowners policy and the broad general differences among the various forms. It provides an overview of the homeowners program, outlining the differences among the various forms. The discussion briefly notes the differences in the perils insured under the forms, but does not discuss the perils in detail. The detailed discussion of the perils is deferred until Chapter 25.

The chapter is intended to serve two functions. The first is to provide the student with a basic understanding of the Homeowners policy and its provisions. The second equally important function is to emphasize certain property insurance principles. We believe that these can best be illustrated through their use in actual contracts, and the homeowners policy seems the most appropriate choice. The Homeowners' provisions provide an excellent opportunity to explore a variety of property insurance principles, and to illustrate them through a specific contract. Because the forms provide coverage on- and off-premises and provide coverage on both a named-peril and open-peril basis against direct and indirect loss, they represent a microcosm of the property insurance field. Students are exposed to replacement cost and actual cash valuation, blanket and scheduled coverage, and a wide variety of contract provisions that are used in other property insurance forms. In a real sense, the chapter is not just about the Homeowners forms; it is about the way that property insurance contracts are structured—the relationship between insuring agreements and exclusions and the effect of a policy's general conditions on the scope of coverage. We believe that the subject is a most appropriate point of departure for the study of property and liability insurance. The discussion of the Homeowners program uses the new 2011 edition of the Homeowners policy.

One of the important concepts that we feel should be stressed is the definition of personal property. Students will understand the "care, custody, and control" exclusion of Section II when it is discussed in Chapter 28 much better if stress is placed on the fact now that Section I of the policy covers property of others "used by the insured." Much of the misunderstanding regarding this troublesome exclusion stems from a failure to recognize that coverage for such property is basically a property coverage. Liability forms typically exclude property in the insured's care, custody and control, not because the exposure is uninsurable, but because it is expected that property in a bailment situation will be insured under a property insurance form.

Important Concepts to be Stressed

The most important concepts in this chapter, and the principles that we believe should be stressed in the lecture are:

- The general nature of the Homeowners policies
- Differences among the six standard forms
- The replacement cost condition
- The definition of personal property under the forms
- Contents items subject to special limitations

- Loss of Use Coverage - period of indemnification
- The concept of policy "extensions" Additional Coverages

Questions for Review – Chapter 24

1. The four items of coverage under homeowners Section I are designated A, B, C, and D. (See pages 433-434). *Coverage A* provides protection on the dwelling and is included in homeowners forms 2, 3, 5, and 6.

Coverage B provides a specific amount of insurance on the garage and other structures on the premises, equal to 10 percent of the amount on the dwelling. The insurance on other structures may be increased above this standard 10 percent when there is a need.

Coverage C provides coverage on personal property or "contents" and is included in all of the forms. Coverage C is 50% of the coverage on the dwelling. It can be increased when there is a need for a higher limit and it can be decreased, but not below 40% of the amount on the dwelling.

Coverage D, designated *loss of use*, provides coverage for additional living expense and loss of rental income. The standard limit for the loss of use coverage is 10 percent of the amount on the dwelling under Form 8 and 3 percent of the amount on the dwelling under Form 2, 3, and 5. The limit for Coverage D under Form 4 is 20 percent of personal property coverage, and under Form 6 it is 50 percent of the amount on personal property.

2. When the insured and insurer disagree as to the amount of a loss, the amount is determined under the provisions of the appraisal provision in the General Conditions of the Homeowners forms (see pages 443). If the parties disagree as to whether the loss is covered and the disagreement cannot be resolved between the parties, the insured must sue the insurer.

3. The classes of personal property that are excluded from coverage under the Homeowners forms are listed and discussed on pages 438-439. The classes of property subject to specific dollar limits and the limit applicable to each are listed on page 440.

4. The net effect of the inclusion of the term "...or used by the insured" in the definition of personal property under the homeowners policy is to provide a form of bailee coverage under the Homeowners policies. Property owned by others, but which is being used by the insured, is covered both on and off premises against loss by the perils insured against. It may also be noted in this connection that property of others that is not being "used by" an insured is covered, at the option of the insured, while on the premises.

5. The definition of personal property excludes all motorized vehicles except those that are used solely to service a residence or to designed to assist the handicapped, and these are not covered if they are required to be licensed for road use. Students often become confused on this point and erroneously believe that all unlicensed vehicles are covered. To be covered, a vehicle must be both used for the maintenance of the premises and not licensed. (The exclusion also does not apply to portable electronic equipment that can be operated from a power source other than the vehicle's, but coverage is limited to \$1500.) See page 439.

6. As noted on several previous occasions, open-peril coverage is an insuring agreement under which the insurer agrees to pay for loss by any peril except those that are specifically excluded. Under named-peril coverage, the specific causes of loss are listed, and coverage applies to loss caused by one of the specifically designated perils. The principal difference is in the burden of proof regarding a loss. In the case of named peril coverage, it is the insured's obligation to establish that the loss was caused by an insured peril. Under open-peril coverage, the insurer must establish that the loss was caused by an excluded cause of loss.

7. The Inflation Guard Endorsement automatically increases the coverage under the Homeowners Policy to which it is attached by a specified percentage of the face amount of the policy every three months. The percentage increase is selected by the insured at inception, and is available in one-half percent increments beginning with 1% per quarter. The increase applies not only to the dwelling coverage, but to each of the other coverages of the policy as well (except the additional coverages). See page 437.

8. The basic limits imposed on property away from the premises that have been encountered thus far include property rented or held for rental away from the premises (which is excluded), business property away from the premises (which is subject to a \$500 limit), property at a secondary residence (which is limited to 10% of the amount of coverage on personal property), and property at a self-storage facility. Also, as will be noted in the next chapter, certain theft exclusions also apply to property that is away from the insured premises.

9. Business property owned or used by the Insured is covered while on premises, subject to a \$2,500 maximum. In addition, a \$1,500 limit applies to such property while away from the premises. Books of account, paper records, and EDP software media containing business records are excluded. The contents of an apartment owned by the insured but rented to others is specifically excluded (except for the limited coverage on Landlord's Property under the Additional Coverages). Property rented or held for rental away from the premises is also excluded. Business property such as merchandise, held in storage or as samples or for sale or delivery business property pertaining to a business conducted on the premises, which was excluded under earlier forms, is covered, but subject to the specified dollar maximum.

10. The \$80,000 purchase price, which is the market value of the property, is unrelated to its insurable value. In this instance, where the value of the land is known and may be deducted, perhaps the \$60,000 approximates the actual cash value of the property. Rosie should probably be advised to compute the replacement cost of the dwelling (or have someone qualified do so) and then insure for the full replacement cost, in order to avoid a deduction for depreciation in the event of a partial loss. Although the replacement cost condition requires insurance equal only to 80% of the replacement cost, the dwelling should be insured for its full (100%) replacement cost.

Questions for Discussion

1. The insurer will probably be liable to the mortgagee. The policy specifies that the mortgagee is entitled to 10 days written notice of cancellation, and does not specify that such notice is required only in the event of cancellation by the company. It applies in the case of any cancellation. Notice of cancellation should have been sent to the mortgagee. The agent

could be held liable to the company for any amount it was required to pay, because of negligence in the performance of his or her duties.

2. Students answers will differ. Certainly replacement cost coverage on contents promises to be a more troublesome area for companies than is the replacement cost coverage on buildings. The temptation to obtain "new" for "old" with respect to clothing, bicycles, cameras, and a variety of other items may make losses in this area increase. In answer to the question, it seems that replacement cost coverage on contents does violate the principle of indemnity to a greater extent than does replacement cost coverage on buildings.

3. This question can generate considerable discussion and provide an excellent opportunity for students to experiment with contract interpretation. Some students may argue that Jones Jr. and Mary are residents of the parents' household, and that their property therefore qualifies as property owned by an insured. Others may argue that the property is used by the parents, and is therefore covered. The question did not imply either of these conditions. However, coverage would nevertheless be provided, since the definition of personal property stipulates that personal property of others is covered at the option of the insured while on the premises.

4. Jones is correct. The deductible applies to the amount of the loss (\$1,300) and the policy limit with respect to the individual item then applies. If this were not the case, the coverage on money up to \$200 (the standard limit) would be meaningless under a policy with a \$250 deductible (the standard deductible).

5. Whether wall-to-wall carpeting is a building item or contents depends mainly on whether it is installed in lieu of finished flooring. Carpeting installed over a finished floor is treated as contents, while carpeting installed in lieu of finished flooring is considered to be a part of the dwelling. The exclusion of carpeting in the replacement cost extension (which applies only to buildings) recognizes that carpeting can be a part of the building under some circumstances.

CHAPTER 25

THE HOMEOWNERS POLICY - FORMS

General Comments on the Chapter

This chapter continues the discussion of the Homeowners forms, and examines the differences among the various forms in greater detail. Although the text discusses each of the forms, the major focus is on Homeowners Special Form (HO 00 03). Mastery of this contract provides a basis for understanding most of the other forms. In studying Form 3, the student is exposed to the broad-form named perils with respect to the contents coverage, and the open-perils insuring agreement of the buildings. Since the broad-form named perils are also the insuring basis for forms HO 00 02, HO 00 04, and HO 00 06, the only forms that require any further attention are forms HO 00 05, and perhaps HO 00 08.

Besides discussing the differences among the Homeowners forms, the chapter also treats some of the optional coverages available under homeowners policy, including the Scheduled Personal Property Endorsement, the Earthquake Assumption Endorsement, and the Personal Property Replacement Cost Endorsement.

When the number of class periods that can be devoted to the Homeowners forms is limited, this chapter can be treated briefly, or, if necessary, combined with the preceding chapter into a very cursory treatment of the Homeowners forms.

Important Concepts to be Stressed

The important concepts in this chapter, and the principles that we believe should be stressed in the lecture are:

- The Broad Form Perils coverage of HO 00 02
- The Theft Coverage of the Homeowners forms
- The Open-peril dwelling coverage of HO 00 03
- General Exclusions applicable to Section I of the Homeowners
- The Homeowners Contents Broad Form
- The Open-peril contents coverage of HO 00 05
- Condominium Unit Owners Form special provisions
- The Need for and Nature of the Modified Coverage Form HO 00 08
- Scheduled Personal Property Endorsement
- Earthquake Assumption Endorsement
- Replacement Cost Coverage on Contents

Intentional Loss Exclusion

As explained on page 466 of the text, the *intentional loss* exclusion in the homeowners policy eliminates coverage for intentional loss “by or at the direction of an insured; and “with the intent to cause a loss.” This exclusion was revised in 1994, making it applicable to innocent co-insureds as well as to the insured causing the loss. The often-cited case of Kittis Bolduc, a Washington state woman whose husband burned down their home during divorce proceedings, served as one of the triggers for the legislation. Safeco Insurance Co. denied her claim, citing the “intentional acts” exclusion in the homeowners policy. The claim was eventually paid, after intervention by the Washington Commissioner of Insurance Deborah Senn, who also chaired the NAIC Unfair Discrimination Models Working Group.

In March of 1998, the NAIC adopted a model law which, when adopted by a state, effectively nullifies the application of the exclusion to innocent coinsureds who are victims of domestic abuse. The law prohibits insurance companies from denying, canceling, or non-renewing coverage on the basis of abuse status. It also requires insurance companies to pay claims filed by innocent co-insureds. Few states have adopted the model law, however.

The language in the 2010 standard Homeowners Policy makes it clear that innocent coinsureds are not be entitled to coverage under the policy. (“In the event of such loss, no “insured” is entitled to coverage, even “insureds” who did not commit or conspire to commit the act causing the loss.”) One of the industry’s arguments in favor of the provision is that there is a potential for collusion between coinsureds.

Court decisions on the issue of whether innocent coinsureds may recover have been mixed. In some cases, courts have found coverage, citing ambiguity in policy language and others pointing to the provision being contrary to other aspects of insurance law.

Answers to Questions for Review

1. “...without going into great detail,” the essential difference among the Homeowners Broad Form, the Tenants Form, and the Special Form is the coverage on the dwelling. The coverage on personal property is identical under these three forms. With respect to coverage on the dwelling—the area in which these forms differ—the Broad form provides coverage on a broad named peril basis, the Special form provides coverage on an all risk basis, and the Tenants form does not provide coverage at all.

2. (a) Homeowners Form HO-3 covers the building on an open-peril basis and contents for broad named perils. Damage caused by the explosion of a hot water heater to both the dwelling and contents is covered. For the building, the absence of an exclusion of such explosion affords coverage and for contents, the loss falls within the scope of the “Tearing apart, cracking, burning or bulging” peril.

(b) The vehicle damage peril of all Homeowners forms except HO-8 (and HO-1 where it is still used) include damage caused by owned vehicles under the vehicle damage peril. The damage to the garage caused by the insured’s own vehicle is covered.

(c) Trees, shrubs, plants and laws are subject to their own set of insured perils. Vandalism and malicious mischief is an insured peril for trees, shrubs, plants and lawns. So is theft. The damage to the trees caused by vandalism is covered and coverage would also

apply if the tree were stolen. The two major perils for which trees are not covered are windstorm and damage caused by vehicles owned by the insured or a resident of the premises.

(d) The damage caused by freezing of pipes is covered, including the cost of replacing the pipes, provided the insured has met the policy requirements regarding maintaining heat in the building or draining the pipes.

(e) The coverage for stolen tires has not always been clear. Under early Homeowners forms, the motor vehicle exclusion referred only to "motor vehicles," and did not mention parts of the vehicle. As a result, losses of this type were routinely paid by some insurers and consistently denied by others. Later versions of the homeowners forms addressed this ambiguity by specifically stating the vehicle's accessories or equipment were excluded only *while in or upon* the vehicle. Thus, coverage – assuming the tires were not on the vehicle – was crystal clear. Interestingly, the 2010 form has eliminated that clarifying language. ISO's explanatory memorandum when filing the form did not suggest any intention to reduce coverage, so it seems reasonable to believe the loss should be covered

3. Assuming coverage under the Homeowners 2 Broad Form

- a. Damage to the prize cherry tree covered, subject to a \$500 limit (Trees, Shrubs and Other Plants Additional Coverage, which includes nonowned vehicle damage).
- b. The damage to the bicycle is also covered, since the Broad Form coverage on contents—like that of the Special Form—does not exclude damage caused by owned vehicles.
- c. The overflowing bathtub meets the terms of the water damage peril, and coverage applies.
- d. The airline ticket meets the policy definition of insured property, but is subject to the \$1,000 limit on "securities, accounts....tickets, and stamps."
- e. Damage to the picture tube of the TV set is covered under the lightning peril. Although the artificial electricity peril excludes damage to tubes, transistors and similar electronic components, there is not such exclusion under the lightning peril.

4 The Perils of the Broad Form that are not contained in the Homeowners 8 Modified Coverage form are those that give the form its name as the Broad Form. They are perils that broaden the traditional package of fire and extended coverage and include

10. Falling Objects
11. Weight of ice, snow or sleet
12. Accidental discharge or overflow of water or steam
13. Sudden and accidental tearing apart, cracking, burning, or bulging of heating or air conditioning systems
14. Freezing of plumbing, heating, and other systems and appliances
15. Sudden and accidental damage from artificially generated electrical current

Two noteworthy differences in the coverage of the perils that are included in both Form 8 and Form 2. Form 8 excludes all damage caused by vehicles owned or operated by a resident of the premises. (Form HO-2 excludes damage to fences, driveways or walks by owned vehicles, but other damage by owned vehicles is covered). Theft coverage under HO-8 applies only on the premises, and is limited to \$1000 per occurrence.

5. Neither the freezer nor the meat is covered. The proximate cause of the loss is the power transformer burnout. The form covers consequential damage only if it results from damage by an insured peril to equipment on the insured's own premises. If the freezer had been damaged by say, lightning, the loss of both the freezer and the meat would be covered.

6. Important exclusions that become operative when the building is vacant or unoccupied should be noted. Loss to plumbing, heating or air-conditioning systems, or domestic appliances, or by discharge, leakage or overflow from such systems caused by freezing while the building is vacant or unoccupied is excluded unless the Insured has used reasonable care in maintaining heat or unless the systems have been drained and the water shut off.

The policy also excludes vandalism and malicious mischief and glass breakage if the building is vacant beyond 60 days, but the trip described would not constitute vacancy. As long as the furnishings remained it would not be vacant.

The theft exclusions that apply when the property is rented to someone other than the insured would not apply since the building is apparently not going to be rented during the period of time that the parents are gone.

7. The doctrine of concurrent causation holds that when a loss results from two causes, one of which is excluded and one covered, the loss is covered. With respect to open-peril contracts, the doctrine stretched coverage beyond intent, obligating insurers to pay for flood, earthquake, and other types of excluded damage. In response to the doctrine of concurrent causation, a new set of exclusions was added, eliminating coverage for certain types of weather damage, decisions of government bodies, and faulty design, construction, maintenance, or materials. See pages 450-451.

8. There are two sets of exclusions applicable to the theft coverage, and certain classes of property are subject to a dollar limitation for theft losses. See page 453-454.

- The general exclusions applicable to theft losses eliminate coverage for (1) theft committed by an insured, (2) theft in or to a dwelling under construction, and (3) theft from any part of the residence rented to others.
- The off-premises theft exclusions eliminate coverage for (1) property at a secondary residence except while an insured is actually residing at the location, (2) theft of watercraft and their furnishings or theft of property from watercraft, and (3) theft of trailers.

In addition, jewelry and furs are subject to a \$1,500 limit for theft, while silverware and guns are subject to a \$2,500 limit. See page 440.

9. There are nine general exclusions under the Homeowners forms:

Ordinance or Law
Earth Movement
Water Damage

Power Failure
Neglect
War

Nuclear Hazard
Intentional Loss
Government Action

These exclusions are explained on pages 449-450 of the text. Coverage for the loss excluded under the Ordinance or Law exclusion is available by endorsement. In addition, the Earthquake Assumption Endorsement modifies the provisions of the Earth Movement exclusion, providing coverage for loss by earthquake. An extension of coverage provides a modest limit for Ordinance or Law coverage (10% of the amount on the dwelling), which may be increased by endorsement. None of the other exclusions can be modified, but coverage for flood damage is available under the separate Federal Flood Insurance Policy.

10. The special exposures of a condominium unit owner that led to the development of a separate Homeowners form for condominium unit owners all stem from the fact that there are two elements of ownership in a condominium: one collective and one individual. Individual unit owners are generally responsible for the interior portion of their unit, and therefore must arrange insurance coverage on that part of the real property for which they are responsible. In addition, in the event that insurance on the collectively owned part of the structure is inadequate, or in the event that property is damaged by any cause, the condominium association must assess the unit owners to make repairs. Damage to the unit-owners additions is automatically covered for \$1,000 under HO-6, and the amount may be increased. The coverage on unit owner's additions may also be extended to cover on an open-peril basis. See pages 456-457.

Questions for Discussion

1. Because the homeowners policy is designed to meet the insurance needs of the average family unit, and because of underwriting decisions, it must usually be tailored to meet the needs of a specific family. Among the modifications that should be considered, we consider the following to be the most common:

- contents limit adjusted from standard limit to reflect actual exposure
- replacement cost coverage on contents
- schedule valuable items
- earthquake assumption endorsement
- water back up and overflow endorsement
- inflation guard endorsement

2. Damage to the borrowed camping trailer is covered under Jones' policy. The trailer meets the policy definition of insured personal property (property owned or used by an insured) and the peril causing the loss is specifically insured (damage caused by vehicles includes damage caused by a vehicle owned or operated by an insured). The damage to the garage is also caused by a vehicle and is therefore also insured. There may be a debate over the application of the deductible; was the event a single loss or are there two separate losses to which the deductible applies? The policy declarations state that "In case of a loss under Section I, we cover only that part of the loss over the deductible stated." Although there is room for disagreement, we think that most reasonable people would agree that there was a single loss.

3. There have been numerous attempts to identify perils that are covered under a Special Form, and that would not be covered under a Broad Form, and we should not be surprised if students have difficulty with this. Among the types of losses that are often cited are damage by

- a. damage by a friendly fire (such as, for example, when the thermostat on a furnace malfunctioned while occupants were absent), “cooking” the interior of the structure and causing damage to the building and its contents;
- b. damage that has resulted from spilling or leakage of materials from containers (e.g., paint on carpets, oil from tanks, battery acid, and similar materials);
- c. damage caused by melting ice or snow that seeps that backs up under building eaves and in the process causes damage to the interior of premises or to contents;
- d. damage caused by animals that is not excluded (that is, damage by animals other than “birds, rodents, or insects; or animals kept by an insured).

The important feature of open-peril coverage is that it protects against the unimaginable; the burden of establishing that the loss was or was not covered is shifted from the insured to the insurer. Under named peril coverage, a loss is covered only if the insured can establish that it was caused by a designated peril. Under open-peril coverage, a loss is covered unless the insurer can establish that it was caused by an excluded peril.

4. This is the situation for which the new *Other Members of Your Household* endorsement (HO 04 58) was designed. If the *Other Members of Your Household* endorsement is added to the policy, coverage applies as if Mary and Sue each have an HO-4. Even in the absence of this endorsement, however, Mary’s Homeowners 4 Contents Broad Form provides a significant element of coverage on the property owned by Mary, by Sue, and by the two jointly. The trigger of this coverage lies in two provisions in the Personal Property insuring agreement. First, the policy covers property “owned or used by an ‘insured’ while it is anywhere in the world.” Although Sue is not an insured, personal property owned by Sue, but used by Mary, is covered both on an off premises. Property that is owned by Sue but not used by Mary (personal clothing and so on), is covered while it is on the premises. The policy provides that “At your request, we will cover property owned by others while the property is on the part of the “residence premises” occupied by an insured”. The “at your request” wording does not require that the request be made before a loss; it merely reserves to the insured the right to elect whether property of others is or is not covered (in case the limit of insurance is inadequate to cover the insured’s property and the property of others). The major exposure with respect to Sue’s property that is not covered is Sue’s property while away from the premises.

5. The first issue to be investigated is the value of unit-owners additions. Depending on the condominium agreement, the owner may be responsible for insuring the value of a significant amount of real property within the condominium unit. The standard \$1000 on unit owners additions is usually inadequate to cover the fully value of the real property for which the unit owner is responsible.

A second issue relates to the perils for which coverage is provided. The Condominium Unit-Owners Coverage Form provides protection on a broad named-peril basis. The policy should be endorsed to provide open-peril coverage on real property. The owner should also consider adding the earthquake assumption endorsement.

Still another issue relates to the owner's intention to rent the unit to skiers. The policy should be endorsed to provide Rental Unit Coverage. This endorsement extends the policy to cover personal property in a unit that is regularly rented or held for rental to others. (The unendorsed policy covers personal property only if "occasionally" rented to others).

Finally, the owner should increase the limit for Loss Assessment Coverage. This will provide coverage for assessments by the condominium association against the owner for damage to the property that is caused by an insured peril. Changing the named peril coverage on real property (as suggested above), makes the assessment coverage apply on the same open-peril basis as the coverage on the owner's own unit-owners additions.

CHAPTER 26

OTHER PERSONAL FORMS OF PROPERTY INSURANCE

General Comments on the Chapter

This chapter deals with four major areas of property insurance for the individual, and concludes with a brief discussion of considerations in buying property insurance. The four basic property fields that are discussed are the monoline dwelling policies, federal flood insurance, the Mobilehome Policy, and personal inland marine contracts. If coverage of these contracts is deleted, you may still want to assign the section on buying property insurance that begins on page 475.

The chapter opens with a discussion of the monoline dwelling policies, followed by the Mobilehome Program and the flood insurance policy. Given the detailed discussion of the Homeowners forms in the preceding two chapters, the discussion of these contracts is greatly simplified. Each is discussed in terms of its differences from the Homeowners forms. The Mobilehome Program may be of special interest to some students in their role as consumers. While time constraints may preclude covering this subject in the course, the material is available for those students who have a special interest.

In treating personal inland marine coverages, we use the Scheduled Personal Property Endorsement as the basis for discussion, pointing out that the coverages included in this endorsement are also available as separate inland marine floaters.

Although the discussion of buying property insurance summarizes many points that were made in the previous three chapters and in the chapters on risk management, bringing them all together helps to reinforce many of the principles, and to illustrate their application in the purchase of a specific form of insurance.

Important Concepts to Be Stressed

The most important concepts in this chapter, and the principles that we believe should be stressed in the lecture are:

- The distinction among "Basic," "Broad," and "Special" dwelling policies
- Extensions of coverage under the dwelling policies
- The general nature of the Mobilehome Program
- Differences between the Homeowners forms and the Mobilehome Policy
- Optional coverages available under the Mobilehome Policy
- The insuring agreement definition of "flood" under the flood policy
- Flood policy provisions relating to inception and cancellation
- The general nature of personal inland marine coverages
- Examples of specific forms of inland marine coverage
- Coverage for boats
- Tailoring the Homeowners Policy and the Mobilehome Policy
- The general nature of title insurance

Answers to Questions for Review

1. There are three monoline dwelling forms, designated Basic, Broad, and Special. The Broad and Special forms more or less correspond to the Section I coverages of the similarly titled Homeowners forms. The principal difference is that the Dwelling forms do not include theft coverage. The Homeowners Basic Form, which is used in a limited number of states, parallels the Dwelling Basic form. In addition, the mandatory percentage relationship among the various coverages that exists in the Homeowners forms does not exist in the dwelling policies.
2. As noted in the text on page 463, an individual generally purchases a dwelling policy when the property is not eligible for one of the Homeowners forms. This is usually because the property is not owner-occupied, but it may also be that the dwelling contains more than two families, or has more than two roomers or boarders per family. Dwelling policies may be written on dwellings with up to four families, and with up to five roomers or boarders.
3. There is a 30-day waiting period before coverage becomes effective, with two exceptions – (1) the initial purchase of flood insurance is connected to a loan or (2) the flood insurance is purchased during the 13-month period following the revision of the community's Flood Insurance Rate Map. See page 469-470.
4. When a community makes application to the Federal Insurance Administration and agrees to adopt certain flood control measures, it becomes eligible for the Emergency Program. Under the Emergency Program, coverage on single-family dwellings is available up to \$35,000, with up to \$10,000 in coverage on residential contents. After the controls have been implemented and actuarial studies complete, the community becomes eligible for the Regular Program and higher limits are available. Under the regular program, single family dwellings may be insured up to \$250,000, and residential contents up to \$100,000. See page 467.
5. The principal difference is on the property covered rather than in the scope of the coverage. Although the definition of insured property is the same, many items that are normally considered "contents" are built into the mobilehome. The basic limit on contents is 40% (rather than 50% as in the case of the standard Homeowners). See pages 465-466.
6. The Lienholders' Single Interest Conversion Endorsement protects the mobilehome dealer who retains a financial interest in the mobilehome against loss that results from dishonesty on the part of the buyer. In a sense, it is similar to a fidelity bond with the mobilehome owner named as the principal. The mobilehome owner would not purchase this coverage for his or her own protection, but only when required to do so by the dealer. See page 466.
7. The factors that determine the cost of coverage under the dwelling forms and Homeowners forms are discussed on page 475. They include the perils insured against, the area in which the property is located, and the type of construction. The amount of coverage and the level of the deductibles are also determinants of the cost.
8. Although it is sometimes argued that an examination of an abstract eliminates the need for title insurance or that the examination is a substitute for title insurance, the assertion is probably incorrect. As noted in the text on page 477, even if the attorney performing the examination is diligent, there may be defects that are not discovered. If the abstractor or

lawyer performing the examination is free from negligence, she cannot be held liable if a defect in the title is later discovered.

9. The coverages that may be included under the Boatowners Policy are described in pages 474. Coverage is provided under two sections, with Section I designated Physical Damage Coverage and Section II designated Liability Coverage. Physical damage coverage protects the described boat, motors, equipment and trailer on an open-peril basis. Section II includes separate insuring agreements for Watercraft Liability, Medical Expenses, and Uninsured Boaters.

10. An individual might decide to insure property under the Scheduled Personal Property Endorsement for three reasons. The first is that the item may be excluded from coverage or subject to a dollar limit under the Homeowners Policy. Second, the coverage under the Scheduled Personal Property Endorsement is on an open-peril basis. Finally, in the case of antiques or fine arts, the individual may want to obtain valued coverage on the item. In fact, there are some instances in which the insured may want valued coverage on property other than antiques. There are two versions of the *Scheduled Personal Property Endorsement*, one providing coverage for actual cash value or replacement cost and the other providing valued coverage on all scheduled property. Coverage on antiques is on a valued basis under both forms, but property other than antiques is insured on an actual cash value basis under the *Scheduled Personal Property Endorsement* (HO 04 61) and on a valued basis under the new *Scheduled Personal Property Endorsement (With Agreed Value Loss Settlement)* [HO 04-60]. When the personal property is insured on a replacement cost basis, property insured other than antiques insured under the *Scheduled Personal Property Endorsement* (HO 04-61) is also covered for replacement cost.

Answers to Questions for Discussion

1. The proper approach to determination of the amount of contents coverage that should be purchased consists of an inventory of all personal property and an up-to-date valuation of such property. One of the additional benefits that may be derived from this process is the indication of high-valued items that should be specifically scheduled because of the dollar limitations in the Homeowners form.

2. The cancellation provisions of the Federal Flood Insurance Policy are designed to protect the insurer from adverse selection after the policy is issued, and to guarantee insureds continuation of protection when an increase in hazard is predictable. The insured may cancel at any time, but there is no return premium unless the property has been sold. The insurer may not cancel except for nonpayment of premium, and even here 20 days notice is required.

3. The question provides an opportunity to again discuss the principal that one of the axioms of risk management is that it is not the cause of a loss that is important, it is the effect. Should property owners in the same city by fire insurance? Which would hurt more, if the property were destroyed by a fire or by an earthquake? The causes are different, but the effects are the same. Some students will argue that the coverage should not be purchased because of the low probability of loss. They should be reminded of the discussion in chapter 4, in which we noted that the probability that a loss may or may not occur is less important

than the amount or severity of the loss if it does occur. The basic rule "consider the odds" indicates that the best buys in insurance are those in which the probability of loss is quite low and the potential severity is high--exactly the characteristics of earthquake in many locations. It may also be noted that the probability of loss is higher in many areas than is often thought.

4. The issue here is the student's understanding of the distinction between the two approaches to protecting a property "owner" from the loss associated with a defective title. Under a title insurance policy, the insurer pays a dollar indemnity to compensate the person who acquired property with a defective title. The title to the property remains with the rightful owner (whose ownership triggers the loss to the insured who acquired the defective title. Under the Torrens system, the person who acquired the defective title retains the property--the defect is, in effect nullified--and the person whose claim would otherwise be supported by the defect is compensated. Many people believe that the Torrens system is a more logical approach, and that it makes land more valuable as an investment, by guaranteeing a good title and avoids issues relating to improvements to land that might be made by a person who acquires a defective title.

5. Students might find it useful to review the elements of an insurable risk described in chapter 3. Wear and tear, gradual deterioration, and inherent vice are losses that are certain to occur, given normal use of the property. Thus, they do not meet the requirement that the loss be fortuitous from the viewpoint of the insured. Another element of an insurable risk is that the loss must be definite and measurable. This creates a problem for covering damage caused by termites and vermin, since the damage occurs over a period of time and might have taken place before the inception of the policy. To insure these exposures, the insurer would need to inspect the property first.

CHAPTER 27

NEGLIGENCE AND LEGAL LIABILITY

General Comments on the Chapter

Although it is possible to discuss liability insurance without discussing the tort system (just as we discuss fire insurance without a prior discussion of the physical properties of fire), the tort system seems to us to be an important topic for discussion in a beginning course in insurance for several reasons. One is to address that it provides a basis for understanding the liability exposure. This, in turn, is helpful in understanding the distinction between the denial of payment under a liability policy because the insurer does not believe that the insured is liable and a denial because the loss is not covered. In addition, a brief discussion of tort law helps the students to understand the issues involved in proposals for tort reform. Finally, it is a subject that most students find fascinating in its own right.

The chapter treats the basic principles of tort law. Those principles of negligence related to the operation of automobiles and some of the more specialized areas of business liability are discussed in later chapters. The legal principles associated with automobiles are discussed in chapter 29. None of the concepts in the chapter are treated in great depth, and it may be suggested to the students that the discussion is intended to provide a general orientation, and that many of the principles discussed become much more involved in the real world.

Important Concepts to be Stressed

The most important concepts in this chapter, and the principles that we believe should be stressed in the lectures are:

- The general nature of negligence and the law of torts
- Requirements for the imposition of legal liability
- The prudent man rule
- Negligence *per se* and absolute liability
- Res ipsa loquitur
- Damages - nature and classes
- The collateral source rule
- Vicarious liability
- Obligations of property owners
- Attractive nuisance doctrine
- Assumption of risk as a defense
- Contributory negligence and comparative negligence
- Legal liability and bankruptcy
- Possible changes in the tort system

Answers to Questions for Review

1. For an individual to be held liable in a tort action, it must be established that he or she was negligent, that someone suffered injury or damage, and that the negligence was the proximate cause of the damage or injury. See page 481. An additional requirement might be added that there were no acceptable defenses, such as contributory negligence or assumption of risk. An individual who was not personally negligent could also be held legally liable if he or she is vicariously responsible for the negligence of another.

2. A trespasser is one who is on the property without the knowledge or consent of the owner. The owner is obligated only to avoid intentional injury to trespassers. A licensee is one who is on the premises with the knowledge or consent of the owner, but not for any purpose of the owner. The property owner must avoid intentional injury to a licensee and also warn of any dangers the licensee might not be expected to know about. An invitee is one on the premises for some purpose benefiting the property owner or at the request of the property owner. The property owner must make the premises safe for such persons. See page 487.

3. The safe falling on a pedestrian noted in the text is a good example of *res ipsa loquitur*. The owner of an animal with a vicious disposition and that is in the habit of biting people is an example of *scienter*. Violation of the speed limit is considered negligence *per se* in some jurisdictions. See page 483.

4. Vicarious liability involves those situations in which the negligence of one party is imputed to another. The rationale is to permit action against someone with a greater ability to pay. Increasing the number of persons that may be held liable for a given negligent act increases the likelihood that the injured party will collect. Examples of vicarious liability that may be noted include the common law doctrine of *respondeat superior* (let the master answer) and the statutory modifications such as the liability imposed on parents in some states for the willful and malicious acts of their children, and vicarious liability doctrines relating to the automobile. See pages 485-486.

5. The defenses that may be used in a tort action include the assumption of risk doctrine, negligence on the part of the injured party, and the doctrine of last clear chance. The negligence on the part of the injured party may bar damages under the doctrine of contributory negligence or mitigate the amount of damages under the doctrine of comparative negligence. See pages 488-489.

6. Parents may be held liable for the acts of their minor children in several situations. If the child is acting as an agent for the parent, if the parent himself is negligent in supervision, if the parent permits the child to have a dangerous weapon, or in those instances in which liability is imposed by statute. Some states make parents responsible for the willful and malicious acts of their minor children. Other states also have laws relating to parental liability for the operation of automobiles. See page 486.

7. Under the doctrine of contributory negligence, negligence on the part of the injured person will usually defeat his or her claim, no matter how slight that negligence may be. Under the doctrine of comparative negligence, the negligence of the injured party is

considered in determining the amount of damages, but does not defeat the claim. Students will probably feel that comparative negligence is the more equitable approach. See page 488-489.

8. The factors that are considered in determining the amount of damages to which an injured person is entitled include the out of pocket costs such as medical expenses, lost wages (past and future) and other specific damages, general damages such as compensation for pain and suffering and mental anguish, and in some instances, punitive damages. In practice, the amount that will be awarded for the various components of a damage award may depend more on the composition of the jury and its attitudes toward the plaintiff and defendant and on the abilities of the attorneys for each side than on the facts.

9. Absolute liability refers to those circumstances under which liability is imposed simply because the injury took place, and is imposed regardless of whether or not anyone was at fault. Examples of absolute liability include workers compensation laws, keeping wild animals, blasting or using explosives, and containment of water.

10. Although avoidance, reduction and retention are used in dealing with the liability risk, individually or combined they are inadequate as a means of dealing with this hazard. Because the losses in this area can assume catastrophic proportions, the most acceptable approach is transfer of the risk.

Answers to Questions for Discussion

1. The answer is a matter of opinion. It is doubtful if the existence of liability insurance causes one to be less careful than he might otherwise be. As a matter of fact, some authorities question whether the tort system acts as a deterrent to carelessness, at least as far as the individual is concerned. If it does not, and there is disagreement on the point, then it seems unlikely that insurance for tort losses makes one less careful. At the same time, it can be argued that the tort system has an impact on business, especially in the areas such as products liability. Most manufacturers now engage in extensive product testing in an effort to offer products that are safe, and defective products or products with a high potential for liability disappear from the market.

2. The example cited occurred in a small Iowa town in 1971. The burglar collected in the suit and the property owner's farm was sold at public auction to meet the judgment, which was excluded from the terms of the owner's liability coverage as an intentional act. See *Katko v. Briney*, 183 N.W. 2d 657 (Iowa 1971).

3. Again the answer is a matter of opinion. On the average, the increase in the size of awards has been greater than the increase in the price level, so inflation alone is not an explanation. A part of the increase is, of course, due to inflation. Increased skill of claimants' attorneys is probably another factor. It may also be true that higher judgments beget higher judgments, and each new plateau provides a reference point for judgments that follow. Finally, the more widespread use of higher limits of liability insurance coverage is probably also a factor. Since the size of awards has increased more rapidly than inflation, it would seem that either previous awards were inadequate or present awards are excessive. Student's opinions will vary, and the truth is probably somewhere in between. Some previous awards were probably inadequate, and some of the current awards seem excessive.

4. Students' view of the proposals for tort reform may differ, but the discussion of the proposals students believe would or would not be beneficial will reflect their general attitudes toward the tort system. The proposals are summarized on page 508 and include:

1. Alternative dispute resolution
2. Elimination of the doctrine of joint and several liability
3. Sliding fee schedule for plaintiffs attorneys in place of the contingency fee system
4. Limits or caps on awards for pain and suffering
5. Elimination of the collateral source rule
6. Structured settlements in place of lump-sum awards
7. Elimination or modification of punitive damages

As in the case of many of the Questions for Discussion, there is no "right" answer, and students' attitudes will reflect their backgrounds and political orientation.

5. The liability exposures that students face as individuals are, in a sense, more limited than the exposures they will face after leaving school. Most students drive and are exposed to liability arising out of the operation of automobiles. They also engage in a variety of recreational activities, some of which are hazardous to themselves and to others. Although the students have some liability exposure in connection with their current living quarters, it is probably slight. In general, however, students are exposed to liability whenever the activities in which they engage might cause injury to others or damage to the property of others. The liability exposure of the student will likely change after they have completed their education as they become property owners and enter various professions.

CHAPTER 28

GENERAL LIABILITY INSURANCE FOR THE INDIVIDUAL

General Comments on the Chapter

The discussion of the various facets of tort liability in the preceding chapter can easily leave the student with the feeling that the individual is virtually helpless in the face of the liability exposure. While this is not precisely true, the discussion does illustrate that loss prevention is not a satisfactory approach to the liability exposure. This conclusion leads logically to the subject of liability insurance as the most effective technique for dealing with the hazard.

One of the initial points that should be stressed in the lecture is the distinction between the legal liability of the insured to the injured party and the obligation of the insurer under the contract to defend the insured and pay any judgment. An insurer may deny liability in a given situation on one of two grounds: (1) the insurer does not feel that the insured has been negligent or that there has been a loss, and (2) the liability in question is not covered under the policy. From the insured's viewpoint, this represents a distinction of considerable importance. Denial for the first reason still obligates the insurer to defend its insured if a suit is brought, and to pay any judgment if the insured is eventually held liable. In the case of denial because the policy does not cover the loss, the insurer will not pay any judgment or provide a defense.

Important Concepts to be Stressed

The most important concepts in this chapter, and the principles that we believe should be stressed in the lecture are:

- The major types of liability insurance
- Coverages of the Comprehensive Personal Liability Policy
- The CPL liability insuring agreement
- Persons insured under the liability coverage
- The business engaged in by insured exclusions
- The business pursuits endorsement
- Exclusions of motor vehicles and watercraft
- Fire legal liability
- Medical payments coverage
- Damage to property of others coverage
- Personal Injury Liability Endorsement
- The personal umbrella liability policy

Answers to Questions for Review

1. Liability insurance is sometimes called "third party" insurance because it undertakes to compensate someone who is not a party to the contract (the injured person). The injured party who makes claim against the insured and who hopes to be compensated by the insurer is the third party. See page 495.
2. The term "residence premises" includes the dwelling in which the named insured resides and which was listed on the policy declarations, and other structures and grounds at that location. The "insured location" includes not only the residence premises, but also any other residence owned by the insured and declared, plus any residences acquired during the policy period. In addition, it includes any premises in which an insured is temporarily residing, vacant land, land on which a residence is being constructed for any insured, cemetery plots and burial vaults, and premises occasionally rented by the insured for purposes other than business. See page 500-501 and the Homeowners form on the companion website.
3. The definition of persons insured means the individual who purchased the policy (Named Insured) plus resident relatives, and persons under the age of 21 in the custody of the insured. The definition of insured also includes a student enrolled in school full time (as defined by the school) who was a resident of the named insured's household before leaving to attend school if that student is under the age of: 24 if related to the insured or under the age of 21 and in the care of the insured or a resident relative. Finally, the definition of insured also includes anyone having custody of an animal or insured boat owned by the insured (except businesses) and employees of the insured while operating vehicles covered under the policy. See pages 497.
4. The Medical Payments Coverage pays for injuries sustained by persons on premises with the permission of an insured and to persons who are injured away from the premises by an activity of an insured. It applies regardless of the insured's liability or lack thereof. It does not apply to members of the insured's household or to persons residing on the premises, except a residence employee. See pages 503-504.
5. Both the Medical Payments coverage and the Liability Coverage will apply to the injury, since this is an activity away from the premises, and golf carts are covered for both liability and medical payments while away from the premises as long as they are being used for golfing purposes. The liability coverage will apply if the partner brings legal action, but the Medical Payments coverage applies even in the absence of a suit by the partner.
6. Moral obligations are covered under both the medical payments coverage and under the Damage to Property of Others Coverage. Liability is not a factor in either of these coverages, and as long as the bodily injury was caused by an insured, it is covered under medical payments. The same is true with respect to the physical damage coverage. However, the amount of such losses is limited to the specific dollar amounts provided.
7. The policy will respond for the medical expenses of the injured person up to the limits for medical payments coverage. If a suit is brought, the policy will provide defense coverage and pay any judgment up to the limit specified for Coverage E. It might be noted that dog bites have become a major issue in liability insurance for individuals. Dog-bite claims exceed

\$1 billion annually and insurers are nonrenewing policies under which they have had to pay claims for dog bites. Many insurers will not renew policyholders whose dogs have been the source of claims.

8. The Fire Legal Liability Coverage provides protection for tenants against liability arising out of damage to rented premises or their contents by fire, smoke, or explosion caused by the negligence of the insured. The need for this coverage arises from the subrogation provision in the landlord's policy, which would give the insurer a right of action against the negligent tenant.

9. The nature of the umbrella liability policy is discussed on pages 508-509 of the text. As the discussion points out, the umbrella policy is a blanket excess liability policy that provides coverage in excess of a program of underlying coverage usually for an amount ranging upward from \$1,000,000. Auto liability and CPL coverage are required, as a minimum, as underlying coverage. For losses covered by underlying policies, the umbrella responds from the first dollar after the underlying policies are exhausted. Those losses that are covered under the umbrella but not by the underlying coverage are subject to a deductible.

10. A claims-made malpractice policy is distinguished from an occurrence-form policy by the coverage trigger. Section II of the Homeowners policy is written on an occurrence basis and applies to bodily injuries or property damage that occurs during the policy period. A claims-made policy covers claims that are made during the policy period (including claims that relate to injuries that occurred prior to the inception of the policy. In the case of medical malpractice, an error by a physician can go undetected for many years (e.g., a sponge left in a patient during surgery). Under an occurrence form, the policy in effect when the surgery was performed would provide coverage. Providing coverage on a claims-made basis allows insurance companies to "close the books" on policies once they expire.

Answers to Questions for Discussion

1. Coverage under the Liability Coverage of Section II of the Homeowners policy would exist in the case of some losses and in others it would not.

- (a) There would be no coverage for the slanderous remarks about the acquaintance because there is no bodily injury or property damage. However, coverage for such losses would be covered under the Personal Injury Endorsement.
- (b) Injuries to the domestic employee would be covered, assuming that such employees are not included under the workers compensation law of the state in question. The policy will pay defense costs and pay any judgment up to the limit of the policy.
- (c) The loss would be covered. There is no exclusion of dram shop liability or host liability in the comprehensive personal liability coverage.
- (d) The use of the borrowed outboard motor would be covered and the insurer will pay defense costs and any judgment. The policy provision relating to outboard motors excludes only "owned motors."
- (e) There would be no coverage for damage to the mink stole under Coverage E because of the exclusion of damage to property in the care, custody and control of the insured.

2. Coverage under the Medical Payments coverage would exist in the case of some of the losses but in others it would not.

- (a) The injury to the mother-in-law would be excluded by the medical payments insuring agreement that specifies that the coverage does not apply to regular residents of the household. (The mother-in-law is living with the insured).
- (b) Medical payments would apply. The insuring agreement specifically covers injuries caused by an animal owned by the insured.
- (c) The injury to the cleaning lady qualifies as an injury sustained by a residence employee. Medical expenses would therefore be covered, assuming that domestic employees are not covered under the workers comp law of the state in question.
- (d) Medical expenses of the baby-sitter would be covered up to the limit specified. The medical expenses of the child would not be covered, since the child is a regular resident of the household.

3. The Damage to Property of Others coverage would apply to some of the losses, but not to others. In some instances, Section 1 of the policy would apply.

- (a) The Damage to Property of Others coverage will not apply. The lawnmower was stolen, not damaged. However, coverage for the stolen lawnmower would exist under Section I of the policy, subject to the deductible, if any.
- (b) Intentional damage by insureds under the age of 13 is covered, so coverage for damage to the motor up to the \$500 limit would exist.
- (c) Since the damage was caused by an insured, damage to the dress is covered up to the \$500 maximum.
- (d) The Damage to Property of Others coverage excludes damage resulting from the use of motor vehicles. There would be no coverage for the damage to the wagon. If the wagon was being used by one of the insured's own children, coverage would exist under the vehicle damage peril of Section I, subject to the deductible, if any.

4. In the words of an advertisement used by a large multiple line insurer, "you don't have to be a millionaire to be sued for a million dollars." The amount for which a negligent person may be held liable is based on the loss suffered by the injured party, and not on the size of his own income or assets. To the extent that liability insurance acts as a barrier or cushion between the claimant and the negligent party's assets, the higher the limit of the liability coverage, the less the chance that the defendant's assets will be lost. The assets of the friend (small though they may be) are protected from loss by higher limits of coverage.

5. Section II of the Homeowners policy specifically excludes liability arising out of the operation of a day care operation through a mandatory endorsement entitled *No Section II—Liability Coverage for Home Day Care Business: Limited Section I—Property Coverage for Home Day Care Business*. This endorsement is attached to the Homeowners policy unless the *Home Day Care Coverage* endorsement is attached. This means that the basic unendorsed policy does not provide coverage for Mary's operation, but that coverage is available by endorsement. Coverage under the *Home Day Care Coverage* endorsement extends coverage under both Section I and Section II to cover the day care operation. See page 518.

CHAPTER 29

THE AUTOMOBILE AND ITS LEGAL ENVIRONMENT

General Comments on the Chapter

This first chapter on automobile insurance provides an orientation to the legal environment within which automobile insurance operates and to automobile insurance itself. The chapter opens with a brief and very general discussion of the major types of automobile insurance (liability, medical payments, physical damage and uninsured motorists coverages). It then examines some of the statutory modifications of tort law applicable in the field of automobile insurance. Among the more important of these are the vicarious liability statutes and guest laws. In addition, a brief discussion of the requirements of financial responsibility laws is presented.

In addition to the discussion of the traditional legal principles associated with the automobile and insurance requirements imposed by the various states, the chapter also discusses the area of no-fault insurance and describes the general nature of current no-fault laws and automobile reparation reform legislation. We believe that the discussion of the no-fault principle early in the treatment of automobile insurance will be helpful to instructors in states with no-fault laws, since it will permit them to preface the discussion of automobile forms with an explanation of the modified manner in which these forms apply in their state.

Students usually express an interest in the factors that determine the cost of their automobile insurance. Previous editions of the text included a lengthy review of a standard ISO rating plan. Most companies use rating systems that are considerably more complex today, and there is much greater variation among companies. The detailed discussion has been dropped in favor of a general discussion of factors and trends. Students are likely to have both questions and opinions. In particular, there are an increasing number of students whose parents have enrolled them in telematics or other insurer programs that monitor their driving patterns.

Important Concepts to be Stressed

The most important concepts in this chapter, and the principles that we believe should be stressed in the lecture are:

- A brief overview of automobile insurance coverages
- Vicarious liability and the automobile
- Guest hazard statutes
- Compulsory automobile insurance and financial responsibility laws
- Operation of assigned risk plans
- Criticisms of the tort system and the no-fault concept
- Differences among no-fault proposals
- General nature of existing state no-fault laws
- Driver classifications affecting rates
- Use Classifications affecting rates
- Youthful operator discounts
- Safe Driver Rating Plan

- The Shifting View of Auto Insurance

Answers to Questions for Review

1. The three sources of loss associated with the ownership or operation of an automobile include legal liability, injuries that may be suffered by members of the family, and damage to or loss of the automobile. These losses are covered by liability insurance, health insurance and property insurance. The specific automobile coverages applicable are automobile bodily injury and property damage liability for the liability exposure, medical payments and uninsured motorist coverage for the personal injuries, and comprehensive and collision for damage to or loss of the automobile. See pages 512-513.
2. Under the provisions of the financial responsibility laws, all persons involved in an accident in which there is bodily injury or where property damage exceeds some specified amount are required to give evidence of financial responsibility. This is normally done by a certificate from the insurer (SR-21) indicating that coverage was in force at the time of the accident. The laws are compared with the English common law doctrine related to the liability of the owner of a dog, in which the dog was entitled to a "free bite." Drivers are entitled to a "free accident" before they are required to show that they have insurance. See page 515.
3. An SR-21 is required of all parties involved in an accident subject to the financial responsibility law of the state, regardless of negligence. There is no stigma attached to the filing of an SR-21, and it merely states that the individual had insurance at the time of a loss. The SR-22, on the other hand, is security for future accidents. It is a statement by the insurer that liability insurance will be in force for the designated individual in the future. The SR-22 must be filed when the driver has lost his or her license for one reason or another and the state demands some evidence of financial responsibility for future accidents. See page 515.
4. The Automobile Insurance Plans are designed to provide access to insurance for those drivers who, because of past record or other factors, cannot obtain it through normal markets. Automobile Insurance Plans act as applicant sharing programs, in which all insurers operating in a given state accept their proportionate share of the undesirable risks. See page 517-518.
5. An individual may be held vicariously liable under the common law doctrine of *respondeat superior* when there is an agency-principal relationship. In addition, vicarious liability in connection with an automobile can arise under one of the statutory vicarious liability situations discussed on page 513-514: family purpose doctrine, permissive use statutes, or parental liability statutes.
6. The four approaches used to provide automobile insurance to drivers who are unacceptable through normal market channels include the Automobile Insurance Plans (discussed under question 2 above), joint underwriting associations, reinsurance pools, and a state fund in Maryland. See pages 517-518.
7. The tort system is criticized for being wasteful and expensive, having long delays, and producing inadequate or inequitable compensation of injured parties. The most persuasive argument for no-fault laws at the time they were enacted were that there were many persons

who are not adequately compensated under the tort system. When a negligent driver and an innocent one are involved in an accident, they could suffer the same financial loss, but the only the innocent driver would be compensated by the tort system. In addition, it was also argued spuriously that no-fault is a solution to the high cost of auto insurance. That it is not is not a criticism of no-fault, only of some of the misrepresentations about what it can do and is intended to do. See pages 519.

8. Automobile no-fault is similar to workers compensation in that it eliminates the concept of negligence in determining the amount of compensation to the injured party. It differs from workers compensation in the fact that the individual is responsible for his or her own injuries, while under workers compensation the employer is absolutely liable for the injuries, regardless of fault.

9. The four major approaches to auto accidents reparation reform legislation are pure no-fault, modified no-fault, choice no fault, and expanded first party coverage. See page 520. Under a pure no-fault approach, tort liability in connection with automobile accidents would be completely eliminated. No jurisdiction has enacted a pure no-fault law. Under modified no-fault, which currently exists in 9 states, first-party benefits are combined with a partial tort exemption. In a choice no-fault state, consumers are given the choice of (1) first party benefits with a tort limitation or (2) retaining their full tort rights. Choice no-fault currently exists in 3 states. Other states have passed "add-on" first party benefits, without modification of the tort system.

10. Factors considered in determining the rate for automobile liability insurance include the driver classification (age, sex, marital status); the use (pleasure, to work, farming, business); the past driving record of the insured, the number of automobiles insured, the discounts for drivers education or the good student discount, and the limits of coverage to be purchased. Increases in the availability of data and computer technology have enable insurers to "mine" data to identify other factors that are relevant. Additional factors considered in the rates for comprehensive and collision include the age and make (value) of the car and the deductible. Insurers also use factors such as credit history, occupation of the insured, education, previous gaps in coverage, and increasingly, data on the insured's actual driving patterns.

Answers to Questions for Discussion

1. There is no correct answer, and we should not be surprised if students do not come up with an acceptable solution to a problem that has plagued the insurance industry, state and federal legislatures, and insurance consumers. However, the question does provide an interesting point of departure for discussion of a troublesome area.

2. Student's attitudes will differ. The current trend of opinion is against these laws, and many people feel that they are ill-conceived and that they should be repealed.

3. There is no correct answer. Our personal opinion is that the strongest argument in favor of the no-fault system is that there are many people who are not compensated, or who are inadequately compensated under the present system. We believe that advocates of the no-fault approach have always made the error of stressing cost reductions that might be achieved through no-fault laws. If there are people who are not compensated and we believe that they should be, the no-fault system seems to be an efficient way of doing so, but we should not

expect to compensate more people, and at the same time do it at a lower cost. The strongest argument against no-fault, again in our opinion, is that it may create inequities in allocating the cost of accidents.

4. The factors that combine to produce a problem in the automobile area are many. First, with respect to the liability area, there are the automobile injuries themselves, caused by driver errors, poorly designed automobiles, improperly designed highways, and so on. In addition, there is the problem of the high cost of health care, which increases the cost of the injuries suffered by those who are involved in accidents. Next there is the problem of social inflation--the increasing level of compensation awarded by juries to the injured parties.

In the area of physical damage coverages, the cost of repairing automobiles has increased significantly, pushing up the cost of physical damage coverage. Automobile repair costs continue to increase; parts cost money, labor costs are high, and so on. Auto thefts continue to increase, adding further to the physical damage coverage losses. In short, the problems which automobile insurance reflects include the high rate of carnage on the highways, high medical care costs, high jury award, high automobile repair costs, and high theft rates.

5. Proposals to combine all drivers for rating purposes have been made in several states in the recent past. Companies divide drivers into rating classes based on age because statistics indicate that loss experience does vary by age classification. In a competitive market, a company that failed to grant a concession in the rate to drivers with lower expected losses would soon find itself with only the poorer risks, and competitors skimmed the better than average exposures from the market by granting price concessions. In short, insurers divided drivers into different classes with preferential rates for some classes for competitive reasons.

CHAPTER 30

THE PERSONAL AUTO POLICY

General Comments on the Chapter

The main objective of this chapter is to help students to understand some of the features of the Personal Auto Policy that are important to persons insured under this contract. These include, among other things, the requirements with respect to permissive use of automobiles, drive-other-car coverage, coverage on newly acquired autos and similar issues.

The Personal Auto Policy is a complex contract, and it is easy to become lost in the analysis of its provisions. In selecting from the many provisions to emphasize, we begin with the insuring agreement of the liability section and the definitions of Insured and the Covered Auto. Understanding these definitions and their relationship to the liability insuring agreement constitutes a mastery of one of the most difficult areas in auto insurance.

Once the students understand the insuring agreement of the liability section of the policy and the definitions mentioned above, they usually have little difficulty with the medical payments coverage and the physical damage section of the policy. Uninsured motorists coverage is sometimes a bit more troublesome. The basic idea is generally clear enough, but the students are often troubled by the provision that stipulates that a judgment is not conclusive as between the company and the insured with respect to the company's liability under the uninsured motorist coverage. The logic is, of course, the fact that the uninsured motorist may offer no defense, and that an astronomical judgment could be entered by default. The provision for arbitration of the amount of damages usually strikes the students as fair, once they understand the reason for the provision.

Important Concepts to be Stressed

The most important concepts in this chapter, and the principles that we believe should be stressed in the lecture are:

- General nature of the Personal Auto Policy
- Eligibility
- The liability insuring agreement
- Definition of Insured
- Definition of Covered Auto
- Liability exclusions
- Supplementary payments under liability
- Out of state coverage provision
- Medical payments insuring agreement and exclusions
- Uninsured motorists coverage
- Underinsured motorists coverage
- Physical damage - loss other than by collision
- Physical damage - loss by collision
- Buying Automobile Insurance

Answers to Questions for Review

1. The four basic coverage sections of the Personal Auto Policy are Liability, Medical Payments, Uninsured Motorist coverage, and Physical Damage. Students should note that Liability coverage pays for losses sustained by others for which the insured is legally liable; Medical Payments pays for expenses incurred by the insured, family members, and occupants of the covered auto; Uninsured Motorist coverage applies to essentially the same persons as the Medical Payments coverage but also includes coverage for loss of income, general damages, etc., when the loss is caused by an uninsured motorist; and Coverage for Damage to Your Auto applies to the insured's own auto and is a form of direct property coverage.
2. The definition of Insured includes, with respect to the owned automobile, the named insured, family members, other persons using the auto with permission, and any person or organization held legally liable. (See answer to number 3 below.) The named insured and resident relatives are Insureds for non-owned automobiles, provided they reasonably believe that they have permission. See page 531.
3. The definition of Insured automatically includes any person or organization legally responsible for the conduct of a person who is covered under the policy, with the exception that there is no coverage for the vicarious liability of the owner of a non-owned automobile. The rationale for including anyone vicariously liable as an Insured is to provide protection for an employer (or other party on whose behalf an insured is operating the motor vehicle). Coverage for vicarious liability arising out of a non-owned auto, however, does not apply to the owner of that auto if he or she is held vicariously liable for its operation by an insured. The owner must look to his or her own automobile liability coverage for protection. See pages 531-532.
4. The physical damage coverage on non-owned autos is similar to the Section I coverage on property of others in the Homeowners forms. It extends the coverage on the insured's own property to cover property in his or her custody. The original version of the Personal Auto Policy provided coverage for damage to non-owned automobiles under the liability section. This was accomplished through an exception to the care, custody, and control provision. Under the 1985 and later versions, coverage for damage to non-owned autos is provided under the Coverage for Damage to Your Auto section. Coverage for damage to non-owned autos does not apply to vehicles furnished for regular use, or to vehicles other than private passenger autos, pickups or vans. See pages 540-541.
5. An exception to the public or livery conveyance exclusion makes it clear that this exclusion does not apply to shared-expense car pools. The exception was added to the policy to resolve disputes about such arrangements. As noted in the footnote on page 534, the terms public or livery conveyance imply that the vehicle is offered for use by the general public. Although share-expense car pooling arrangements do not constitute use of a vehicle as a public livery conveyance, some insurers (incorrectly) attempted to deny liability when losses occurred in connection with car pooling. To resolve the problem, the exception to the exclusion was inserted in the policy to clarify that share ride arrangements such as the one described do not constitute use of the vehicle as "a public or livery conveyance."

6. The parent's policy will provide coverage for damage to the borrowed pickup, provided it is used with permission, it is not furnished for Jones's regular use, and provided also that it is not being used for business. There are several provisions that relate to the coverage. First, as a resident of his parents' household, Jones Jr. is an insured under the policy, and has coverage while operating non-owned vehicles with permission. The definition of "non-owned auto" under the Coverage for Damage to Your Auto section of the policy defines a non-owned auto to include a pickup, provided the auto is not furnished or available for the regular use of the Named Insured or a resident.

7. The fact that Smith obtains a judgment against the driver of an uninsured vehicle does not necessarily mean that he will collect the amount of the judgment under his uninsured motorist coverage. The policy specifically provides that a judgment arising out of a suit brought without the insurer's consent is not binding on the insurer. The amounts payable under uninsured motorist coverage are determined by negotiation between the insurer and the insured or, if they cannot agree, by arbitration. See page 538-539.

8. A person who does not own an automobile might desire automobile liability insurance for those situations in which he or she borrows or rents a car. Although the borrowed or rented car might have liability coverage, it also might not, or the limits of coverage under the borrowed car might be inadequate. This coverage is available under a Named Nonowner Policy. See pages 545-546.

9. The Miscellaneous Type Vehicle endorsement that is attached to the PAP when it is used to insure a motorcycle significantly changes the provisions of the policy.

(a) With respect to the borrowed private passenger auto that John borrows for a date, there is no coverage under the PAP for John. The friend who is using John's motorcycle will have coverage under John's policy but since the borrowed private passenger auto is not insured, John will have no coverage.

(b) The situation in this case is different from the case above. Coverage under the Miscellaneous Type Vehicle endorsement extends to a temporary substitute auto (i.e., one that is being used as a substitute for the insured vehicle when it is withdrawn from use because of mechanical breakdown, servicing or repair). See page 546-547.

10. The Extended Non-Owned coverage endorsements extend the coverage of the PAP to cover two types of vehicles that are excluded under the basic contract: (1) autos furnished for the regular use of the named insured or a resident relative and (2) autos driven by an insured in the auto business. See page 545.

With respect to the first, an individual who is furnished a company car has no coverage under his or her own PAP for the operation of that vehicle. The assumption is that the auto furnished for the individual's use will be insured by its owner (i.e., the employer). The coverage provided under business auto policies is somewhat narrower in some respects than the PAP, and the Extended Nonowned endorsement makes the PAP of an employee who is furnished a company car applicable to that company car. (One area in which the Commercial Auto Coverage form is narrower than the PAP is with respect to injury to a fellow employee, which is excluded under the Commercial Auto Coverage form but covered under the PAP.

Answers to Questions for Discussion

1. The statement is inaccurate. There are numerous examples of automobiles for which the insured is not covered or persons who are not covered while driving the owned automobile. The most important exceptions to the statement are:

- The policy does not cover the insured while driving any automobile he may own other than the one listed.
- It does not cover him while operating an auto furnished for his regular use.
- It does not cover an auto being operated without permission of the owner.
- It does not cover anyone driving the owned automobile unless they have the permission of the Named Insured.

2. Assuming coverage under the Personal Auto Policy as outlined in the question, coverage would be provided for the losses as follows:

- (a) The \$800 in damage resulting from rolling into the river is covered under comprehensive.
- (b) The medical expenses would be covered under the medical payments coverage. For the named insured and family members, medical payments covers expenses incurred as a result of being "struck by an automobile."
- (c) The car radio and spare tire would be covered, because they are part of the car's equipment. There is no coverage for personal effects under the Personal Auto Policy, so the bag of clothing would not be covered.
- (d) The damage to the trailer is covered under the Coverage for Damage to Your Auto section of the policy. The borrowed trailer is a "non-owned auto" and is therefore covered for loss by collision, subject to a \$500 limit. The \$200 deductible applies to the auto and to the trailer separately.

3. The principal dangers arising out of this situation result from the fact that the designers of the policy did not anticipate living arrangements precisely like the one described. Francesca is covered while operating the covered automobile, as long as she reasonably believes that she has permission (which will usually be the case). However, coverage for non-owned automobiles is provided only for resident relatives, which means that she does not have any coverage while operating a non-owned or borrowed automobile (other than the coverage on the borrowed auto, if any). Eligibility rules for the PAP limit its use to autos owned by an individual or by a husband and wife. When a policy is written for two individuals who are not husband and wife, the policy is endorsed with the Miscellaneous Type Vehicle Endorsement, significantly changing the scope of coverage.

4. Fortunately for Robert, the newly acquired automobile is automatically covered as an "additional auto," and all of the coverages of the policy apply to the newly acquired auto; the physical damage coverage on the old car applies to the new one, and the damage to both cars will be covered under collision. It is noteworthy that even if Robert had not carried physical damage coverage, the new auto would be covered for physical damage under the PAP, subject to a \$500 deductible.

5. While automobile medical payments coverage is reasonably priced, it can be argued that the purchase of automobile medical payments coverage violates the risk management philosophy. From a risk management perspective it is the effect of a loss rather than its cause that is important, and the purchase of automobile medical payments coverage provides coverage for what is a potentially catastrophic loss, but only under a particular set of circumstances. The individual needs medical expense coverage for catastrophic medical expenses no matter what the cause.

The situation with respect to uninsured motorists coverage is somewhat different. While automobile medical payments coverage essentially duplicates the coverage under a health insurance policy, uninsured motorists coverage provides protection against a potentially catastrophic loss and is the only way in which some losses related to auto accidents can be covered. It would covers disfigurement, physical impairment, or general damages (such as pain and suffering) for which a negligent uninsured driver might be liable. Most informed authorities treat Uninsured Motorist coverage as an essential form of protection and recommend that the highest limits possible be purchased. See pages 570-571.

Diminished Value

The controversy over the diminished value concept is an example of the way legislation can have unintended consequences. The laws requiring notation of accidents on an automobile's title are intended to protect subsequent purchasers of a wrecked automobile from being misled regarding the vehicle's history. Even if the automobile has been adequately repaired, the title notation can affect resale or trade-in value. The problem from the insurance perspective is that the diminished value loss is inchoate—that is, it is a work in process. If the vehicle owner keeps the auto and drives it until it wears out, the diminished value does not become a factor. At the same time, it is indisputable that the vehicle's value has been reduced. The question is whether such loss should be compensated through insurance and, if so, how indemnification should be accomplished.

After-Market Auto Parts

Many auto-body repair shops complain about after-market parts, arguing that they are not of the same quality as OEM parts. Cynics, however, point to the higher markup for OEM parts and suggest that the repair shops have a personal incentive to encourage the use of the more expensive OEM parts. They also point out that there have been quality problems with OEM parts. Some non-OEM parts are used widely and without hesitation (e.g., Midas mufflers, Diehard batteries). The controversy is really about the auto-body parts, such as fenders and bumpers. Insurer policies regarding the use of after-market parts vary. Consumers who are concerned about this issue would be wise to inquire about their insurer's policy toward after-market parts.

CHAPTER 31

COMMERCIAL PROPERTY COVERAGES

General Comments on the Chapter

The treatment of the commercial property forms in this chapter is intended as an overview appropriate to a beginning course. We have attempted to stress only the major aspects of the various coverages discussed, emphasizing the distinguishing characteristics of each particular line. For this reason, many of the specific policy forms discussed receive only the briefest treatment, and certain policy provisions that individual instructors may consider important are ignored.

My personal opinion is that a detailed analysis of the commercial property forms may be postponed until a second course in insurance, and that when this chapter and the following one are covered in a first course, they should be used to provide an orientation to the various types of commercial insurance.

This is a tightly written chapter, covering many forms of commercial property insurance that might be treated in a semester long course. We do not believe that the material in this chapter can be covered in less than three class periods, and even at this rate the discussion of each area will be very brief. Four class periods is suggested for minimum adequate coverage of the material in this chapter.

Important Concepts to be Stressed

The most important concepts in this chapter, and the principles that we believe should be stressed in the lecture are listed below, broken down into four major groups, corresponding to the minimum four class periods that we believe will be required to provide adequate coverage of these concepts.

First Class Period

- The ISO Portfolio Program
- Fire insurance against direct loss
- Building and Personal Property Coverage Form
- Special endorsements increasing recovery
- Insurance to value and the concept of coinsurance
- Blanket insurance and reporting forms
- Optional coverages

Second Class Period

- Consequential loss coverages
- Business interruption insurance
- Extra expense
- Contingent business interruption and extra expense
- Boiler and machinery insurance - direct and indirect

Third Class Period

- Transportation coverages - ocean marine coverages
- Ocean marine - perils insured
- Ocean marine - valuation
- Ocean marine - average conditions
- Inland marine - transportation forms
- Business floater policies
- Dealer forms
- Miscellaneous Inland Marine Forms

Fourth Class Period

- Portfolio Program crime coverages
- Employee crime coverages - fidelity bonds
- Blanket position bonds and commercial blanket bonds
- Nonemployee crime coverages
- Package policies for business - the Commercial Package
- Package policies for business - the Businessowners Policy

Answers to Questions for Review

1. The extensions of coverage under the Building and Personal Property Form used to insure commercial buildings are discussed on pages 556-557. Under the Portfolio Building and Personal Property Coverage form, extensions are divided into Additional Coverages and Coverage Extensions. They include:

Additional Coverages

- Debris removal
- Preservation of property
- Fire Department Service Charge
- Pollutant Clean Up and Removal
- Increased cost of construction
- Electronic Data

Coverage Extensions

- Newly Acquired Buildings
- Newly Acquired Business Personal Property
- Personal Effects and Property of Others
- Valuable Papers and Records Coverage
- Property Off Premises
- Outdoor Property
- Nonowned Detached Trailer Coverage.

2. In the event of the \$600,000 loss described, the insurer's liability would be determined by application of the coinsurance formula:

$$\frac{\text{Amount of insurance carried}}{\text{Amount of insurance required}} \times \text{Loss} = \text{Recovery}$$

The insurance required (80% of \$1,250,000) and the amount actually carried (\$900,000) provide the following loss payment: $\$900,000/\$1,000,000 \times \$600,000 = \$540,000$.

3. When the insured is late in filing the report, the last previously filed report becomes the basis for payment. This means that the insured loses the automatic adjustment in coverage that is provided when reports are filed as required. If the insured under reports, the loss is paid in the same proportion that the values reported bore to the values on hand. In effect, this constitutes a 100% coinsurance provision. See pages 561.

4. Contingent business interruption may be needed in one of four situations (only two are asked for). It is used in the case of a contributing property (where the insured obtains the bulk of his goods from a single supplier), a manufacturing property, recipient property (a firm that purchases the bulk of the insured's output) and leader property (a firm that brings customers into the area). See pages 564. The text also notes that ISO Forms can be written to cover *secondary dependencies* arising from contributing and recipient properties.

5. The four coverages that may be included in an ocean marine policy are (1) hull coverage, (2) cargo insurance, (3) freight, and (4) protection and indemnity. See page 568.

6. The six broad classes into which inland marine coverages may be divided are described on page 570. They are:

- Transportation forms
- Means of transportation forms
- Business floater forms
- Dealers forms
- Bailee forms
- Miscellaneous forms

7. A general average is a loss that is borne by all parties in the venture, as, for example, when goods are jettisoned to save the ship. A particular average is a partial loss that is borne by a specific party. Free of particular average, loosely translated, means no partial losses paid. See page 569.

8. The Employee Theft coverage under the new ISO crime program is available on a loss sustained form or under a discovery form. Coverage for each of the described losses depends on whether the coverage is written under the loss sustained form or the discovery form. See page 573.

(a) The \$5,000 theft in 2004 that occurred prior to the inception of the policy in 2005 would not be covered under the loss sustained form; because it was discovered prior to expiration, it would be covered under the discovery form. The second \$5,000 loss occurred during the policy period and would be covered under the loss-sustained form (because it

occurred and was discovered during the policy) and would also be covered under the discovery form (again, because it was discovered during the policy period).

(b) The \$15,000 loss in 2006 occurred after inception and was discovered before the bond was terminated. There is coverage under both the loss-sustained form and the discovery form.

(c) The loss occurred during the period of coverage and was discovered within the discovery period of the loss-sustained form and would be covered. The loss was discovered after expiration of the extended period to discover loss of the discovery form and is not covered under the discovery form.

9. Burglary is stealing property from premises when they are not open for business, usually by forcible entry into the premises, and sometimes by forcible exit by a person who has hidden in the premises when they were open. Robbery is taking property by inflicting violence on the custodian of the property or by putting the custodian in fear of violence. Burglary occurs when the thief breaks into the premises after it is closed and is generally not evident because there is no one around. In the case of robbery, the custodian of the property knows that he or she is being robbed (except in the case where he or she is killed or rendered unconscious). See page 576.

10. There are 10 coverages available under the ISO Breakdown Protection Coverage Form. Six relate to direct damage, and four provide coverage for indirect losses or consequential loss. The indirect loss coverages are: business income and extra expense, spoilage damage, utility interruption, and contingent business interruption and extra expense. See page 566. Coverage is obtained by opting for the coverage in the policy declarations.

Answers to Questions for Discussion

1. The techniques used to enforce the requirement of insurance to value differ with the type of insurance.

(a) The coinsurance clause is the standard approach to encouraging insurance to value in the field of fire insurance.

(b) The full value reporting clause (honesty clause) which has the effect of a 100% coinsurance clause is used in the case of reporting forms to induce insurance to value.

(c) Business interruption insurance uses the contribution (coinsurance) clause or a monthly limitation. Coinsurance options of 50%, 60%, 70%, 80% and 125% are available under the Loss of Income form, and monthly limitations of 1/3, 1/4, and 1/6 are used in the Monthly Limit of Indemnity Option.

(d) The extra expense form uses a cumulative monthly limit (e.g., 40% of the face amount collectible in the first month, 80% in the first two months, and 100% of the face amount for three months or more).

(e) Insurance to value is encouraged in the boiler and machinery field only through the rating structure, which provides increased amounts of coverage at a reducing rate.

2. The question as to which of the coverages discussed in the chapter should be considered "Essential," "Recommended," or "Available" for a local bookstore is, of course, somewhat a matter of opinion. "Essential" coverages would include those coverages that protect against loss that would be beyond the ability of the firm to bear. The amount that the firm could bear would depend on the financial resources of the bookstore. However, it would appear that certain coverages should be considered "Essential," in view of the loss potential involved in the perils against which they protect. Students may not agree with the classification presented below, but the question provides a basis for discussion of many coverages treated in the chapter.

Essential Coverages

- Fire (open perils basis) on the building and contents
- Earthquake coverage on the building and contents
- Boiler and machinery/equipment breakdown coverage
- Business interruption or perhaps extra expense coverage
- Boiler and machinery/equipment breakdown consequential loss coverages
- Fidelity coverage

Important Coverages

- Replacement cost coverage on the building
- Accounts receivable coverage

Optional Coverages

- Transit coverage on incoming stock
- Burglary coverage on stock
- Coverage on money and securities

3. Fidelity losses often occur over an extended period of time, and an employee can steal for years and years without being detected. As a result, fidelity losses can reach enormous amounts over time. The loss that can occur to a building or to other personal property is measurable because the value of the property is measurable. However, since fidelity losses are often aimed at a flow of assets rather than at a fund, they can reach astronomical proportions, far above the level of funds available at any given time. As noted in the chapter, all losses by a given employee are considered to be a single loss. Thus, an employee who steals \$20 a day or \$100 a week will take \$100,000 over a 20 year period.

4. Most commercial fire forms cover property only while on premises. In this, they differ from the personal line forms studied in chapters 24 through 26. To obtain coverage on property away from the premises, the firm also needs transportation coverages, floater coverage, and other forms of inland marine insurance. In fact, the principal reason for inland marine coverage is that fire forms have traditionally limited coverage to listed premises, with only incidental off-premises coverage.

5. The *Businessowners policy* (BOP) is a package policy approach to insurance for business firms similar to the CPP but designed for smaller firms. As explained in the text on pages 578-579, it provides property and liability coverage in a single contract, with a wide range of the options available under the commercial property program automatically included

in the basic package. These options include replacement cost on buildings and contents, business interruption coverage, and extensions to cover accounts receivables, valuable papers, money orders and counterfeit currency, forgery and alteration, and electronic data.

Given the comprehensive nature of the coverage, it may be difficult for students to come up with a list of improvements. In addition to the optional coverages that could be added to the policy (contingent business interruption, employee dishonesty, and mechanical breakdown), other Section I options that might be suggested are transit coverage and consequential damage coverage. Section II (liability) coverage options that might be added to an improved package are employment practices liability coverage and employers nonownership liability coverage.

CHAPTER 32

COMMERCIAL LIABILITY INSURANCE

General Comments on the Chapter

As in the case of the immediately preceding chapter, this chapter includes far more material than can conceivably be covered adequately in a single lecture or even two. However, the material lends itself to a convenient three-part division. One lecture can be devoted to the area of workers' compensation and general liability exposures, a second to general liability and automobile coverages, and a third to liability insurance for common carriers and bailees.

In dealing with the area of general liability insurance, we have placed major emphasis on the various exposures to loss, and have reduced the emphasis on the various policy forms themselves. While this does not provide as complete a treatment of the policy forms as some instructors might prefer, it gives the student a better appreciation of the need for the various forms of coverage.

The inclusion of coverage for common carriers and bailees in this chapter on commercial liability coverage departs from convention, in which these coverages are often discussed with other inland marine coverages. We have always found the conventional approach somewhat confusing to students. By custom and practice, insurance on property in a bailment situation has been provided under property insurance forms, primarily inland marine forms, but sometimes under fire coverage as well. Despite the fact that the coverage is written under property forms, it is designed to cover a liability exposure, which, incidentally, is the reason for the "care, custody, and control" exclusion in most liability forms. For these reasons, we think that it makes more sense to discuss liability coverages together, regardless of their monoline origin.

Important Concepts to be Stressed

The most important concepts in this chapter, and the principles that we believe should be stressed in the lecture are listed below, broken down into three major groups, corresponding to the minimum three class periods that we believe will be required to provide adequate coverage of these concepts.

First Class Period

- Employers liability and workers compensation insurance
- Extraterritorial losses and Other States Coverage
- General liability exposures - premises and operation
- Products and completed operations
- Contingent liability
- Contractual liability

Second Class Period

- Commercial Liability Forms
- Claims made vs. occurrence form
- The retroactive date and Extended reporting date
- Contractual liability insurance
- Personal injury liability coverage
- Liquor liability, pension fiduciary liability, D&O E&O
- Cyber liability
- Commercial automobile insurance - the Business Auto Policy
- Garage coverage form, Auto Dealers Coverage Form
- Aviation insurance

Third Class Period

- Aviation insurance
- The liability of a common carrier
- Insurance requirements of common carriers
- Motor Carrier Coverage Form
- Motor Truck Cargo Liability Policy
- The liability of a bailee
- Bailee liability coverages
- The commercial umbrella liability policy

Answers to Questions for Review

1. The Statutory provision of the standard Workers Compensation and Employers Liability Policy incorporates the law of the state designed in the declarations into the policy, and the benefits specified in the law become the benefits under the policy. The policy assumes the obligation imposed on the insured by the workers' compensation law and a schedule of benefits is therefore unnecessary. See page 583.

2. The Other States Insurance makes the workers' compensation coverage applicable in states other than those in which the insured has operations. States in which the insured actually has operations should be designated in the declarations as states whose laws are covered under the policy and it is with respect to states other than these that the Other States Insurance applies. The policy format requires that the states to which the coverage is to apply be designated. The most common approach is to use a blanket designation that includes "all states except..." The standard exceptions are the state(s) designated under the workers' compensation coverage and those states with monopolistic state funds. The coverage is necessary because many state laws give out of state employees the option of electing to come under the law of the state in which they are injured. This means that an employer can become subject to the law in a state which it has no employees and did not anticipate the need for workers' compensation insurance. See page 585.

3. The commercial general liability policy provides coverage against liability arising out of premises and operations, products and completed operations, independent contractors,

contractual liability, personal injury, fire legal liability, and medical payments. See pages 586-587 and 591-592.

4. The factors that led to the introduction of the claims-made forms were latent injuries (such as those related to asbestosis) and adverse court decisions that the courts reached in connection with such injuries. The older occurrence forms of liability coverage worked very well in those cases where the injury was immediately obvious at the time it occurred. Latent injuries such as asbestosis, however, often did not become manifest until long after the initial exposure took place, forcing insurers to pay losses on policies that had long since expired. While latent injuries in and of themselves would have caused problems for the insurance industry, these problems were compounded by court interpretations that stretched the scope of the policies beyond the policy drafters' original intent. See page 587-588.

5. Although the employer is covered as an insured under the employee's policy, the limits of liability that the employees carry on their own automobiles might be inadequate to meet the judgment that could be entered against the employer. In most cases, the employer does not know whether or not the employees carry insurance, or if they do, what the limits of coverage are. See page 597.

6. The garage liability policy provides coverage against liability arising out of premises and operations, products and completed operations and automobiles. See page 599.

7. A common carrier is liable for all damage to goods in its custody except for damages caused by one of the five specific excepted causes (acts of God, acts of public enemy or public authority, neglect of the shipper, and inherent vice). Even in these cases, the common carrier may be liable if its negligence contributed to the loss. See pages 601-602.

8. The coverages are described on page 596. They consist of (1) website publishing liability, (2) security breach liability, (3) programming errors and omissions liability, (4) expenses due to a computer virus, (5) expenses related to cyber extortion, (6) business income and extra expense, (7) public relations expenses, and (8) expenses to notify parties affected by a security breach.

9. The garage policy provides general liability and automobile liability in a package contract. However, like most other forms of general liability or automobile liability insurance, it excludes damage to property in the care, custody, and control of the insured. Although garagekeepers coverage is classified as an automobile coverage, it is basically a bailee liability coverage, providing protection for the insured against loss arising out of damage to property of others in the insured's care, custody, and control. See page 599.

10. Since work performed in the past can be a source of liability many years after the work has been completed, Smith could be subject to suits for damages arising out of his past work. It would be prudent for him to continue to carry products liability coverage after retirement.

The exact form of coverage he should purchase illustrates the complexity of the differences among the forms. Some students may suggest that Smith purchase a claims-made form with an extended reporting date to cover claims that are made after expiration of the policy. The defect in this approach is that the claims-made form—even with an extended

reporting period—covers claims arising out of occurrences prior to the expiration of the policy. Smith will need to continue to carry products liability coverage after retirement to cover losses that have not yet occurred.

Answers to Questions for Discussion

1. The liability exposures of a business firm are more complex than those of an individual for several reasons. First, there is the product liability exposure, a risk that does not have an exact counterpart in the case of the individual. In addition, the more widespread use of contractual transfers of liability and hold-harmless agreements of business firms adds to the complexity of the business liability exposure. Furthermore, the fact that most customers are invitees, and that juries are more likely to favor the individual in a suit against a business firm also contribute to the special liability exposure of the business firm. Finally, the doctrine of *respondeat superior* and the liability of the firm for the actions of its employees further increases the liability exposure of the business firm. Although vicarious liability may exist in the case of the individual or the family, parents are not fundamentally responsible for the acts of their children in the same manner as the firm is responsible for the acts of its employees.

2. In recent years, it appears there has been a constant stream announcements from firms that they have suffered data breaches. Often, as in the case of Target, sensitive personal information is stolen or inadvertently released. Firms typically notify consumers and offer them assistance so they can monitor their credit record. They may have a special sale to try to get customers back and/or mount a public relations campaign. One question is “How well does the firm address the reputational damage?” There is no correct answer, of course, but it provides another opportunity to reinforce the concept of cyber risk.

3. This question represents one of the most misunderstood principles of the “limited liability” associated with the corporate form of enterprise. The corporation does indeed carry with it limited liability for the corporate investors, but in the case of most small corporations the investor owners are also operators. An injured party may sue the homemakers individually as well as suing the corporation. To illustrate with a simple examples, if one of the owners is involved in an auto accident while on corporate business, she could be sued personally along with the corporation. The corporation provides limited liability only to those stockholders who do not also perform acts.

4. The broadened coverage of the new CGL has eliminated many of the gaps that formerly existed. Students may suggest other coverages, but in our experience the most frequently overlooked coverages in programming of liability insurance have traditionally been Other States insurance (under the Workers Compensation policy), increased limits for fire legal liability, employers nonownership automobile liability, and Directors and Officers liability coverage. In addition to these traditional oversights, coverages that are often overlooked today are pollution liability coverage, employment practices liability, cyber liability, and pension fiduciary liability coverage.

5. Essential liability coverages for the motel with the attached restaurant and cocktail lounge would include the CGL Coverage form with products, liquor liability coverage, innkeepers liability coverage, coverage on owned automobiles (if any), employers non-

ownership auto liability coverage and umbrella liability coverage. Depending on the nature of the insured's operations, coverage may also be needed for pension fiduciary liability and employment-practices liability coverage.

CHAPTER 33

SURETY BONDS AND CREDIT INSURANCE

General Comments on the Chapter

This chapter deals with the seemingly unrelated fields of surety bonding and credit insurance. In a sense, they are more closely related than they appear at first glance. A surety bond may be viewed as a guaranteed opinion regarding an individual's ability to perform or to meet a specific obligation. Although not all credit policies include collection service, those that do may be viewed as a guaranteed collection service; accounts in default are turned over to the insurer for collection, and become payable as losses under the credit policy if the insurer is unable to collect them.

The most important point to be stressed in connection with surety bonds is the distinction between suretyship and insurance. The often-cited distinction between a "two party contract" and a "three party contract" misses the real essence of the difference. As explained in the answer to Question for Review number 1. below, we stress the idea that the surety occupies a position similar to that of the co-signer of a note.

We have also included a brief discussion of credit enhancement insurance to this chapter. The newer forms of coverage that comprise this class are basically surety in nature, and can most easily be understood within the context of surety bonds.

Important Concepts to be Stressed

The most important concepts in the chapter, and the principles that we believe should be stressed in the lecture are:

- The distinction between insurance and suretyship
- The major classes of suretyship
 - Various classes of contract bonds
 - Fiduciary and litigation judicial (or court) bonds
 - License and permit and miscellaneous bonds
 - Public official bonds
- The credit risk exposure and nature of trade credit insurance
 - Specific coverage and general coverage policies
 - Proportional and excess-of-loss policies
- Activity of trade credit insurers in credit risk mitigation
- Financial guaranty insurance
 - Public finance and structured finance
 - Financial Guarantors and the credit crisis
- Mortgage guaranty insurance

Answers to Questions for Review

1. The essential difference between a bond and an insurance contract is in the relationship between the principal and the surety (as compared with the insured/insurer relationship). (See page 610 in the text). The surety becomes co-responsible with the principal to the obligee for performance of the obligation. In a sense, a surety occupies a position similar to that of the co-signer of a note. In addition, the principal is responsible to the surety for any losses that the surety sustains. Thus, the surety enters into a bond only when it is convinced that the principal will perform. The bond is an opinion, backed by the promise of performance by the surety in the absence of performance by the principal. Other differences are in the attitude of the underwriter toward losses and the protection that is provided for the person purchasing the instrument. The purchaser of insurance is protected against loss. The purchaser of the surety bond does not enjoy any protection, but is subject to subrogation by the surety for any losses that it sustains.
2. The underwriting process for a surety bond is basically an investigation of the principal's ability to perform the function for which he or she is to be bonded. The underwriter attempts, in so far as possible, to verify that the principal will perform as obligated, and that the surety will not be required to respond under the bond. In effect, the underwriter attempts to avoid bonding parties in which there is a question concerning their ability to perform. The surety underwriter does not expect any losses under a properly underwritten portfolio of bonds. In the case of fire insurance, in contrast, the underwriter anticipates that some property will burn. The underwriter's function in this case is to obtain a mix of exposures that approximate the loss experience upon which the rates are based. The fire insurance underwriter attempts to select a mix of applicants that are congruent with the fire insurance rates.
3. The obligee under a labor and materials bond is the party for whom a construction project is to be completed. It guarantees that the principal will have paid for all materials used in the project and will have met all obligations for the payment of subcontractors. It protects the owner against liens by suppliers or subcontractors who have not been paid by the contractor. In addition to the principal (the owner of the property), a labor and materials bond is also beneficial to the suppliers and subcontractors on a project, since it guarantees that they will be paid. See page 611.
4. Under a performance contract bond, the surety guarantees that the contractor will complete the construction as required in the contract. This means that the scope of the surety's obligation is the same as that of the principal under the contract. The surety's obligation is thus defined by both the bond and by the underlying contract. See page 635.
5. Based on the facts cited, it appears that the successful bidder may have underestimated the cost of completing the project. With four bidders submitting bids in the range of \$2.4 to \$2.6 million, the 20% difference in the successful contractor's bid is twice the range of difference in the other bids. It is, of course, conceivable that the successful bidder may be able to complete the job at the price bid. Therein lies the dilemma for the party soliciting bids. Given the difference between the low bid and the bids submitted by other contractors, the prospective building owner may be torn between the desire to accept the low bid and apprehension about the bidder's ability to complete the project. The underwriter is likely to

have the same skepticism. The question illustrates how a construction bond benefits the principal, by relieving him or her of the job of judging whether the contractor has the ability to perform the contract.

6. The joint control provision is used in fiduciary bonds, where the principal has custody of assets for the benefit of others (e.g., an executor's bond or an administrator's bond). See page 636. The joint control provision is designed to give the surety protection against a default by the principal in his or her obligation to the beneficiary or beneficiaries of the bond. By requiring joint control of assets for which the principal is responsible, the surety has control over expenditures by the principal.

7. The dishonesty form will pay for losses resulting from the public officials' dishonesty. The faithful performance bond will pay losses resulting from dishonesty, negligence, or lack of ability.

8. First, of course, trade credit insurance is a form of risk transfer. In addition, trade credit insurers may assist their insureds with the reduction of credit risk. Credit risk insurers maintain large databases that can be used to assess the creditworthiness of an insured's customers. They may help the insured set credit limits for a given customer, monitor accounts for early warning signs of a potential credit problem, and assist with collecting debts. See pages 614-615.

9. The two broad categories are (1) public finance and (2) structured finance. In public finance insurance, a financial guarantor guarantees payment of the debt issued by a public body, e.g., a municipal bond. In structured finance insurance, the financial guarantor backs a financial instrument created from a pool of assets. The financial instrument business was the cause of the financial difficulties suffered by mortgage guarantors in the financial crisis. See page 616-617.

10. The financial guarantors had dramatically increased their guarantees on structured finance. Many of these financial instruments were made up of pools of mortgages. Defaults on the mortgages caused the asset values to fall, and financial guarantors suffered severe losses. In addition to the financial losses, some firms have been restructured, and there is ongoing litigation between the financial guarantors and the banks that created and marketed the instruments. See page. 617.

Answers to Questions for Discussion

1. The nature of surety bonding makes the underwriting process a much more critical function than insurance underwriting. Surety bonding underwriting must be based on a thorough analysis of the applicant, and in many cases this analysis is beyond the scope of the agents' ability. The nature of the obligation assumed and the absence of a cancellation provision dictates that only the highly specialized underwriters of the insurer have the capacity to bind the surety on a bond.

2. This very common attitude illustrates the misunderstanding about the nature of surety bonding that is so widely held. The purpose of a surety bond is to investigate the ability of the principal, and, if the principal appears to have the resources, capability and experience to

complete that work intended, to offer a guaranteed opinion with respect to that ability. The surety assumes the position of the cosigner of a note. In the instances cited, Schwartz is asking the bonding company to guarantee the performance of his corporation, when he himself is unwilling to do so. Bonding companies frequently seek such co-indemnity agreements, but in view of the obligation they propose to undertake, this seems only fair.

3. Yes, it is a logical combination, for in each case the peril insured against is the default on an obligation by someone upon whom the "insured" depends. In both cases the financial solvency of the third party is of critical importance.

4. Those who believe financial guarantors (FGs) should be treated more like banks have multiple arguments: (1) the business of FGs is focused on credit risk, which is similar to what banks do, (2) FGs are interconnected with banks, because – particularly in structured finance – banks transfer risk to financial guarantors and suffer losses in the guarantors are unable to pay. (3) Bank regulation is becoming more stringent. There is a risk that banks will simply pass the risk to less regulated FGs.

Those on the other side basically argue the regulation of FGs compared favorably to the regulation of banks in the financial crisis. More specifically, FGs did not have to be bailed out, in contrast to several large banks. A better solution is to make incremental changes to the current system, instead of creating a new regulatory system.

The debate continues, so there is no clear answer.

5. Both contracts provide protection to the public in the event of negligence on the part of the accountant. However, the professional liability policy also protects the accountant from the financial consequences of these acts. The surety bond provides no protection for the accountant, and the surety will proceed against him or her for any loss it sustains.

CHAPTER 34

INSURANCE IN THE FUTURE

General Comments on the Chapter

In this concluding chapter of the book, we leave the specifics of individual policy forms and turn to the broader issues and problems facing the insurance industry and insurance consumers in the future.

Because it deals with the future, much of the discussion is speculative in nature. However, we have tried to avoid ranging across the entire spectrum of possibilities, and have limited the discussion to those developments that seem likely at some time in the near future. The discussion of the possible changes is intended as a non-controversial exposition of the changes that may shape the future of insurance. While we have attempted to avoid evaluating the various possible developments, there are many controversial issues involved, each of which provides ample opportunity for those who like to make value judgments to do so.

The final section of the chapter discusses employment opportunities in the insurance field and the field of risk management. Without going overboard, we have attempted to point out that there are a wide variety of positions available within the industry that offer better than average financial rewards and many of the intangible factors that young people are seeking today.

Important Concepts to be Stressed

The most important concepts in this chapter and the principles that we believe should be stressed in the lecture are:

- Possible changes in social security, Medicare, health insurance, and retirement plans
- Globalization of insurance – foreign insurers in U.S. and U.S. insurers abroad, trends in regulation
- Protection for catastrophe exposures – federal reinsurance
- The terrorism exposure
- Possible changes in the tort system
- Possible changes in tax laws
- Possible changes in the regulation
- Possible changes in the insurance industry itself
- Possible changes in industry structure
- New forms of coverage, Alternative risk transfer
- Changes in forms of compensation
- Alternative risk transfer
- Persistent problems – genetic testing, crime and its costs
- Availability and affordability as a persistent problem
- Lack of consumer sophistication as a persistent problem
- Unwarranted criticism of the insurance industry
- Career opportunities in the insurance field

Answers to Questions for Review

1. The problems facing the Social Security system, Medicare and health insurance in the future are related in large measure by the changing demographics of the country. The baby boomers who were born during the period 1946 through 1964 have had a significant impact on society and on the economy as they have moved as a group through time. This large group of people, combined with increasing longevity has meant fewer workers and more beneficiaries under the Social Security system and Medicare. As respects the health insurance problem, the increased health care costs of the elderly, including costs of long-term care compound the problem of health care generally. There may also be other factors that students will see as related.

2. There has been a shift away from defined benefit pension plan toward defined contribution plans, particularly 401(k) plans, which place more responsibility on the employee. Unfortunately, many employees elect not to contribute to their employer-sponsored 401(k) plans. Others participate but withdraw (and spend) their accumulated savings when they change employers. As a result, many individuals reach retirement age with inadequate savings. The problem is compounded by the fact that many employers no longer provide retiree health care benefits, life expectancies have increased, and there is uncertainty about the future of OASDI. The Pension Protection Act permitted employers to use an automatic enrollment option in their 401(k) plans. This option was intended to increase employee participation. Automatic IRAs have also been suggested as a solution. Under these proposals, employers who do not offer a retirement plan would be required to enroll employees in a payroll-deduction IRA. See page 626.

3. The factors that are contributing to the globalization of insurance are discussed in the text on pages 627-628. Although a variety of factors will contribute to the globalization of insurance in the future, the most influential factors will be the increase in the number of multinational companies, the elimination of financial service trade barriers, and the expansion of foreign insurers into the U.S. market and of U.S. insurers into foreign markets.

4. The European Union has a single market framework for the insurance sector. Insurance firms are authorized and subject to financial oversight in their home country. Home country authorization provides a “single-passport” that permits the insurer to do business in other EU countries. See page 629.

5. The Financial Stability Board was created to foster international coordination in financial stability. One of its activities is to designate global systemically important financial institutions, including global systemically importance insurance groups (G-SIIs). In the U.S., the Financial Stability Oversight Council, created by Dodd-Frank, designates systemic firms for heightened regulation and supervision by the Federal Reserve. As of the late fall 2013, insurance firms have been designated under both processes, but the measures that will apply to designated firms have not been finalized. See pages 633-634.

6. Supporters of the federal terrorism reinsurance program argue that terrorism is not an insurable risk. They point to the limited reinsurance available for terrorism risk and the limited activity in capital markets instruments, such as catastrophe bonds. Without federal subsidies, only high risk properties would buy terrorism insurance. Opponents of the federal

program argue that terrorism risk is insurable, but that the federal program is impeding the development of the private insurance market. Furthermore, by effectively subsidizing premiums, it reduces the incentive for insureds to engage in risk reduction activities.

7. The federal deficit makes it likely that Congress will be searching for revenues. One area receiving attention is the tax treatment of life insurance. A reduction in the tax advantages of life insurance would have a negative effect on demand for life insurance.

8. The text identifies several areas in which regulatory change is possible. The first is the potential for repeal or modification of McCarran-Ferguson to create an optional federal charter. The second possibility is the gradual erosion of state regulatory authority. Although it was once thought that the greatest threat to state regulation was the likelihood of repeal of McCarran-Ferguson, it has become increasingly clear that the threat of gradual erosion of state authority is the greater threat.

NAIC to modernize state insurance regulation will also impact regulation. The NAIC's Interstate Insurance Product Regulation Compact is an outgrowth of that effort, designed to address industry dissatisfaction about the need to obtain product approval from 50+ different jurisdictions. More recently, the NAIC has undertaken a Solvency Modernization Initiative, which includes changes to reinsurance regulation. See pages 634-637.

9. Advanced in genetic testing pose a dilemma for the life and health insurance industry. As scientists continue to make progress in identifying genes that contribute or cause physical conditions, it becomes increasingly likely that we will be able to use genetic testing to identify persons who are likely to contract particular diseases. There is a good change that it would be possible for insurers to use genetic testing to identify individuals likely to encounter health problems later in life. The debate is over whether insurers should be allowed to use the information available from genetic testing in their underwriting decisions. If insurers have access to information that identifies a genetic disorder, they may charge a higher premium, exclude coverage for the condition, or simply reject the application. If insurers are denied access to this information, the result will be significant adverse selection against insurers. Individuals who have undergone genetic testing and become aware they face a high risk of illness will seek to buy large amounts of insurance. Without access to that same information, the premium charged by insurers would not appropriately reflect the risk being assumed. The result is inadequate pricing and cross-subsidization between those with and without genetic disorders. Finally, in addition to the affordability and availability implications, there are confidentiality concerns when third parties have access to the results of a genetic test.

10. The impact of crime and fraud on the insurance industry are discussed on page 664. As noted in that discussion, because much of the property that is damaged by vandalism, arson, and looting is covered by insurance, crime is a major concern for the property and liability insurance industry. Arson, vehicle thefts, and crimes against property all inflate the level of losses that must be funded by insurance premiums. The major problem, however, is insurance fraud, a crime in which insurance companies are the direct victims, but insurance buyers eventually pay the bill. Insurance fraud has been a special problem, especially in the area of health insurance, where unethical physicians collaborate with the criminals to document fictitious claims. Frauds of this type are directed not only against the private insurance industry, but against government programs such as Medicare and Medicaid.

Answers to Questions for Discussion

1. Since the question asks for an opinion, there is no correct answer. However, it would seem that some form of government activity should rank high on the list of most students. At press time, health insurance clearly ranked high on any list of factors having serious implications for the insurance industry. Other factors that will influence the insurance industry in the next decade will be changes in insurance regulation. Finally, globalization of insurance is likely to be cited by many students.

2. The most common response by students to the question of what the insurance industry can do to remedy the lack of consumer sophistication and the misconceptions about insurance held by the public will undoubtedly be consumer education, but this is more easily said than done. There are still many people who misunderstand the nature and functions of insurance and the number does not seem to be diminishing rapidly.

3. The conflict between “capital’s need for an adequate return and the public’s entitlement to the security of the insurance product” reflects the unique view of the insurance industry that is held by some members of society. Although some attitudes toward the industry reflect the generally negative attitude toward corporations held by some people, the notion that insurance is a “right” goes deeper. If one holds the position that insurers are obligated to provide insurance even when it is unprofitable to do so, the question of the return on capital invested in the industry inevitably arises.

Some students may see this question as one dealing with the advantages and disadvantages of socialism and capitalism, and to some extent it is. However, the fundamental issue is not socialism versus private enterprise, but whether insurance is a more appropriate candidate for socialism than other fields of business.

Some people have argued that the operation of the law of large numbers gives insurance certain characteristics of a natural monopoly, and that the essence of insurance, which is the sharing of losses by members of society, makes government a logical entity to operate such a monopoly. Students may argue that insurance is a more appropriate area for government activity than other fields.

4. If students agree with the conclusions offered in the text, they will feel that the employment outlook in the insurance industry is good, and probably better than the outlook in many other fields. However, some students (and some instructors) may disagree with the book in this area.

5. If the book has achieved its goal, those principles that students feel are most important to them personally will involve the various aspects of risk management and insurance buying that have been stressed throughout its pages. However, it is also possible that some students may view principles other than those related to risk management and insurance buying to be more important to them personally.