CHAPTER 2
DEFINING THE INSURABLE EVENT

I. SUGGESTED CLASSROOM TIME: 120 MINUTES

II. CHAPTER OVERVIEW

Chapter 2 focuses the reader's attention on the ideal selection used to determine which economic or financial problems are a proper subject for the private insurance transaction. The recent "catastrophic" hurricane losses provide a real illustration for this material. This discussion addresses why some exposures are only insured by our government or not at all. The criteria for ideally insurable exposures are set forth so the student can measure real world possibilities against the standard. I often point out that just as Adam Smith's ideal of perfect competition is not realized in the actual economy, the perfect insurance system doesn't exist either, but some insurance operations, such as fire and life insurance, approach the standards more closely than others. Another way of looking at the exposure criteria it to ask: What are the requirements for the insurance company to have a high probability of making a sustainable profit? Integral to the chapter's discussion is subsidization. This topic, which has enjoyed much attention of the courts, regulators and the news media in recent years, encourages the student to question the role insurance plays in society. The topic of subsidization is embedded in much of what insurance and government does do. The student should also question what the relationship should be between government, the insurance transaction and social welfare.

I also direct instructors to the section at the end of this chapter in this Instructor's Manual. The material on *gambling and insurance* was deleted from this edition of the text. Instructors still may want to discuss this issue given the recent issues with Islamic Law.

III. LECTURE OUTLINE

A. Introduction - Insurance companies must be careful in selecting which exposures to insure since not all exposures or risks are insurable - the redistribution process must be financially feasible and sustainable over a long period of time. So this chapter focuses on the characteristics of an ideal insurable event by the private insurance industry to produce acceptable results for the insurer. Other exposures not meeting the criteria are either handled by government or not insured at all.

B. Ideally Insurable Loss Exposures
   1. A large group of homogeneous units exposed to the same peril - Need for predictive accuracy - allows the law of large numbers to work. "Homogeneous" implies that the exposures' characteristics as well as the size (value) of the exposure is similar.
   2. Losses must be accidental, unintentional from the insured's point of view (beyond the control of the insured). Paying for non-accidental losses would encourage destruction and would be against public policy.
   3. Losses must be definite, measurable and of sufficient severity to cause economic hardship.
      a. Definite - no dispute as to whether the loss has occurred. A purpose of insurance is to eliminate uncertainty, not to create it by insuring ambiguous losses such as "feeling bad," "wear and tear," or "loss of time."
      b. Measurable - a dollar amount must be established in order to place an insured back in the same *financial position* before the loss occurred.

4. Non-catastrophic exposures - Catastrophic losses generally cannot be insured successfully by a non-government insurance system. Catastrophes are generally unpredictable, and natural catastrophes (floods, earthquakes) are confined to limited geographic areas. War is considered a catastrophe because of the amount of destruction over a wide geographic area. Note that "non-catastrophic" is a relative standard. What events threaten a small regional company may be perfectly acceptable to a large national company with an adequate surplus (owner's equity) position.

C. The Impact of Recent Losses

1. Hurricane Andrew caused $16.3 billion in insured losses (1992). In 2005 Hurricane Katrina caused $60 billion (estimate).
2. Subsequent to the hurricane, some insurers reconsidered their exposure to wind damage and some withdrew their policy renewals while others as a result went out of business.
3. Much discussion about the role government versus insurance company versus individual responsibility should play in handling or supporting insurers and individuals for these kinds of losses.

D. Catastrophic Insurance Programs

1. Recent catastrophes and the reasons for increasing costs.
2. Beach plans – several states have set up insurance pools that provide property insurance in areas where private insurers would not voluntarily accept exposures.
3. National Flood Insurance Program - The Federal Insurance & Mitigation Administration (FIMA) administers the National Flood Insurance Program (NFIP).
4. Insurance companies use catastrophic computer modeling to estimate the financial consequences of natural (and other) catastrophes based on geography, wind patterns and other factors.

E. Insurance Becomes Unfeasible When Those Most Exposed To Loss Want Coverage - Insurance works well when a small percent of a large pool of insureds incur loss. When the fraction increases, the premiums increase and the number of willing participants decline. The insurance pool terminates when only those who are likely to suffer loss are left because the premiums become unaffordable relative to the value of the insured property.

F. Terrorism Insurance and Loss estimates

1. The Impact on the Insurance Industry – Many of the concepts discussed can be illustrated by the results of the September 11, 2001 terrorist attack on the World Trade Center in New York and the Pentagon in Washington, D.C. Current total estimate 40- 60 billion dollars resulting in loss of capital, increase in premiums.
    a. Aviation Liability – $4 – 10 billion
    b. Aviation Hull - $500 million
    c. Life insurance – approximately 3,000 dead, estimated payments $3 billion
    d. Property insurance – $9 – 12 billion.
    e. Workers' compensation - $4 billion
    f. business interruption - $10 – 12 billion
    g. Event cancellation - $1 billion
    h. Uninsured losses - billions

2. Defining Terrorism – what is it? How does the insurer define it in contracts? Even if language seems clear, the courts will have to define what is covered by the contract's wording ultimately.

3. The November 2002 Federal Insurance Act – passed as a result of 9/11, 2001
    a. Federal government will share losses with the insurance industry when the Secretary of the Treasury certifies an event as an act of terrorism.
    b. Mandatory participation will all policy holders
    c. Act ends 12/31, 2005 (*As of this writing the Act is being reconsidered. A quick Internet search will allow you to identify the Act's current status.*)
    d. Insurers pay first dollars for losses. Loss payment limited to a percent of previous years premium collections. First year 7 percent, Second year 10 percent, third year 15 percent.
    e. After Federal Government pays 90 percent, insurer 10 percent. Government's maximum limited to 100 billion dollars.
    f. Terrorism premiums can be charged by insurer but must be explicitly stated.

G. Risk Classification – designed to generate a "mathematically fair" price.
1. Subsidization
    a. Competition Minimizes Subsidization - Subsidy can occur when some insureds pay too much while some pay too little as a result of being included (averaged into) in the same pool and paying the same price.
    b. If subsidization occurs on a large scale, a competitor will try to appeal to those paying too much by offering a lower price (with a refined classification). This removes them from the pool and causes the rates in both pools to reflect more fairly the underlying probabilities of loss.
    c. Mandated subsidization exists if state and federal authorities dictate rating classification usage and not allow competition to pull pools of exposures apart based on valid rating characteristics.
2. Adverse Selection - Situation where individuals are able to purchase insurance and pay less than their fair amount. These people have a higher expected loss amount than the average in the group and can result from undisclosed information. An example is health insurance. Many people apply for health insurance when they think they will have medical problems in the future and fail to disclose the fact (this is referred to as asymmetric information). Adverse selection is handled in the underwriting process. Underwriters attempt to minimize adverse selection through the underwriting process.
3. Principles of Risk Classification – the ideal set – not many risk classifications fully conform to the following criteria but never-the-less are used for practical reasons.
    a. Separation and Class Homogeneity - each class should have an identifiable and significantly different expected loss. Within each class, exposures should be homogeneous.
    b. Reliability - the proxy used to measure the exposure should be a reliable, verifiable and not subject to manipulation.
    c. Incentive Value – provides the incentives for reducing frequency or severity of losses
    d. Social Acceptability - criteria should be socially acceptable – can be a controversial proxy such as sex, race, age, life-style.

H. Important Social Issues and Subsidization
1. AIDS (Acquired Immune Deficiency Syndrome) – who should pay for the costs of this virus? How should the cost be shared or spread?
2. Automobile insurance – a social right to drive the automobile so should costs be subsidized for people who have poor driving records or cannot afford the coverage?
3. Pension Benefits – How will failed pension plans be handled? Who pays for the lost benefits?

I. Branches of Insurance – a brief overview
1. Government - Social Security and unemployment, Flood, Terrorism (backup).
2. Private
    a. Non-life: fire, marine, casualty, bonding
    b. Life: life, health, annuity
    c. Other: weather-related, change of law, municipal bond, motion picture completion bonds, boiler and machinery insurance

J. Introduction - Broad concept of legal liability includes:
1. Torts – see discussion below – many types are insurable.
2. Breach of contracts – not insurable, would place the person in control of the breach in the same position being able to collect from the contract.
3. Criminal wrongs – not insurable, would be against public policy.

K. Categories of Civil Wrongs (torts)
1. Intentional interference
2. Strict liability or liability without fault
3. Negligence - doing something a reasonable person would not do, or failing to do something he would do. Reasonable person: one who thinks, speaks and acts based on reason, has normal faculties, is honest and prudent.

L. Some other sources of legal liability
1. Vicarious liability – responsible for someone else's actions
2. Joint-and-several liability- can be held responsible for all liability when only played a small part. Usually due to financial ability to pay for entire claim.

M. Negligence lawsuits
1. Plaintiff is the party claiming injury. Defendant is the party who plaintiff claims caused injury and from whom recovery is sought.
2. It is the plaintiff's duty to establish negligence and damages
    a. Show that defendant had an obligation (duty)
    b. That duty was not performed or there was a failure of the duty
    c. That there was a compensable injury
    d. That injury resulted directly from plaintiff's failure to perform duty (causal connection between injury and breach of duty).
3. Compensatory Damages
    a. Bodily injury - includes medical expenses, loss in wages, future lost income, and pain and suffering
    b. Personal Injuries – injuries incurred when a person is denied their rights.
    c. Punitive Damages - "Extra" damages designed to punish and to make an example to discourage future acts of a similar nature. Can be against defendants as well as against insurers. (Most states do not allow this to be paid out of insurance contracts.)
    d. Property Damage – damage to a person's property and resulting loss of use.
4. *Res ipsa loquitur* (means "the thing speaks for itself"). A legal doctrine applied in cases where the only explanation for the plaintiff's injury is the defendant's negligence. (Example: a surgeon leaves a sponge in the patient.)
5. Defenses in a negligence suit

a. Contributory negligence: Under common law, some act of the plaintiff contributed to his own injuries. This defense relieves the defendant of the duty to compensate the plaintiff even if the defendant's negligence is gross and the plaintiff's is slight.
b. Comparative negligence: A statutory modification of the above doctrine in which a proportion of the plaintiff's damage can be recovered if the plaintiff's contribution to the injury was significantly less than that of the defendant's.
c. Last Clear Chance: A statutory modification of common law. This places the burden of negligence on the person who is deemed to have the last clear chance to avoid the incident.
d. Assumption of the risk: If a plaintiff engages in some activity that a reasonable person knows is dangerous, and he is subsequently injured, he then cannot successfully sue the party causing the injury. The assumption must be an informed assumption in most cases.

6. Negligence and Legal Liability Insurance. The end result of a successful negligence lawsuit is a judgment against the defendant in favor of the plaintiff (question of fact determined by the judge or jury). At this point the defendant's legal liability insurance agrees to pay on the defendant's behalf all sums he is legally liable to pay, up to the policy limits. Many cases are settled before the case goes to court and insurance companies pay. In addition, liability policies pay for defense costs (within policy limits sometimes).
7. Ethics, Liability Insurance, and the Insurable Event – Is it ethical to pass on one’s responsibility for legal liability through an insurance contract?

IV. ANSWERS TO REVIEW QUESTIONS

1. Which of the following exposures to loss would be a likely basis for an insurance system? Explain why the exposures would not qualify as a basis for insurance. *a. The potential loss of domestic pets.* Most domestic pets are of small or indeterminable economic value; hence, domestic pets generally do not meet the requirements for an ideally insurable exposure. On the other hand, show animals or other valuable animals may be the subject of insurance. *b. The potential loss of farm animals.* The economic significance of livestock is calculable as they are frequently traded on the open market and measured easily and are insurable. *c. The potential loss of a college student's textbooks.* The value of a textbook is too small and the loss not sufficiently beyond the control of the insured (consider the end of the term). *d. Insufficient snow to operate a ski resort.* Since the event is beyond the control of the insured and has economic (business interruption) significance, then the event is insurable. *e. The potential loss of receipts at an outdoor concert if it were to be rained out.* Since the event is beyond the control of the insured and has economic (business interruption) significance, then the event is insurable. This is an ideal exposure in most cases which, in fact is frequently insured. *f. The potential loss of a valuable stamp collection.* A stamp collection satisfies all the criteria of an ideally insurable loss exposure. Unfortunately, in recent years losses have been large and more frequent than insurers prefer; hence the premiums for insuring valuable stamp collections are relatively high. In addition, insurers would require an appraisal before insuring the collection documenting its existence and value. *g. The potential loss of a person's memory.* A person’s memory is invaluable, but its economic significance is subject to question, and losses (in most cases) are hard to measure. Health insurance policies do provide compensation for treatment due to mental illness but coverage is often limited to a number of visits or dollars spent due to potential abuse. Recently, however, some insurers have treated mental treatment on the same basis as medical treatment.

2. What is the definition of a catastrophic loss? A catastrophic loss is defined as a potential loss that one cannot predict and is capable of producing an extraordinarily large amount of damage relative to the assets held in the insurance pool. In sum, large amounts of value in a small geographic area relative to what is insured would produce a catastrophic exposure.

3. Why are certain crime losses, such as the theft of furs and jewelry a more difficult exposure to insure than fire loss? (Refer to ideal insurance transactions.) Not all crime losses are beyond the control of the insured and the insurer must protect itself from fraud. Jewelry fraud is relatively easy to do. Large values in small packages can easily be hidden, sold or given away. Positive identity of the property is difficult. Recent increases in losses have caused premiums to go up sharply and only the most exposed to loss want coverage. The private insurance system has eliminated this coverage in places such as the "Gold Coast" in Chicago. Homeowners insurance policies place relatively low limits on fur and jewelry coverage per loss in order to keep the premiums for homeowners polices at acceptable levels for all covered.

4. What difficulties would be present in combining a group of men and women of the same age in the same life insurance pool? Subsidization would occur if men and women are placed in the same pool because there is a statistical difference in life expectancy. In life insurance, women would subsidize men since, on the average, males die, on the average, at an earlier age. The opposite would be true of life income annuities.

5. What would happen to an insurance system in which the insureds were indifferent to the occurrence of losses? Indifference will probably increase the frequency and severity of losses. Insureds must always be in a position to regret losses even though they are insured. This regret encourages careful personal treatment of exposures. Financial incentives which cause regret include deductible provisions, a potential rise in insurance premiums, and possible reimbursement at values less than the insured's perception of the loss. Non-financial incentives also exist. These non-financial incentives include not being reimbursed for aggravation, loss of time, and sentimental value.

6. Why are floods and earthquakes difficult to insure in a privately operated insurance system? The total amount of damage involved with catastrophic losses is hard to predict in advance and can be financially disastrous to the insurer. Many catastrophes occur in limited geographic areas (subject to the same loss at the same time), making the transfer of losses over a sufficient number of exposure units difficult. Thus, the insurance premium for private insurance of catastrophic events would be prohibitive. Note what is catastrophic to one insurer may not be to another. Factors influencing this include geographic spread, surplus (retained earnings) position, reinsurance arrangements, among other factors. In general, one should ask: Are there factors which make the arrangement financially unsustainable for this exposure under this circumstance?

7. Describe who would be providing and who would be receiving a subsidy if an insurer created a special insurance pool combining all people causing 2 or more serious automobile accidents in the past ten years? If an insurer set up a pool with this characteristic, clearly the people who had fewer serious accidents would be subsidizing the sub-group having more serious accidents. Given that some average rate is assumed to be calculated, those paying low premium amounts relative to their record is benefiting and the sub-group with fewer accidents is paying more than they should relative to their record. This relative amount assumes separation and proper premium calculations. Insureds would be more fairly treated if the premiums were graded based on the number of serious accidents.

8. What is adverse selection? How do insurers try to prevent adverse selection? Adverse selection is where the applicant seeks insurance (and does not disclose adverse information) when more likely to experience loss than an average group of applicants. These "poor" exposures try to purchase insurance at average rates, thus getting the "good" or "average" exposures in the insurance pool to subsidize them. Insurers try to prevent adverse selection by "underwriting" and "rating" each application carefully. The purpose of this screening process is to allow each insured to bear a fair share of the losses. Analyzing this further, the main source of adverse selection comes from asymmetric information. That is, generally the insured knows more about the exposure than the insurer does. If information was symmetric, the insurer would have the ability to price fairly and thus minimize the subsidization that arises from improper classification.

9. Explain the statement that adverse selection causes subsidization. (*Also see question 8 above.*) Adverse selection means some exposures with a greater than average expectation of loss were included in the insurance pool at average rates (not rated correctly). The "poor" exposures, by the definition of "adverse selection," are not paying a fair price for their exposure. Since the "poor" exposures are paying too little for their insurance, they are being subsidized by the other exposures paying more for their insurance than if the "poor" exposures were kept out of the pool or priced based on the actual exposure.

10. List and describe the various branches of the private life and non-life insurance industries. **Fire insurance** generally covers stationary property. Damage caused by such perils as windstorm, riot, and vandalism can be added to the basic fire coverage. Business firms often purchase **business income** (**interruption)** coverage, which provides payment for indirect losses associated with damage caused by fires and other covered perils. **Marine insurance** generally covers mobile property. Ocean marine covers ships and their cargoes. Inland marine covers property moving on planes, trains, and trucks. **Casualty insurance** describes several different fields of insurance including automobile insurance, liability insurance, crime insurance, workers' compensation, and accident and health insurance. **Bonding** is a special type of protection in which one party (the surety) guarantees the performance (surety bond) or the honesty (fidelity bond) of a second party to a third party. If the second party's poor performance or dishonesty results in a loss to the third party, the surety must pay. **Life insurance** describes insurance based on human life contingencies. If the covered peril is death, the contract is called life insurance. If the peril is survival, the contract is called an annuity. The annuity guarantees that the insured will not have to survive without money. If the covered peril is sickness or disability, the coverage is called **medical expense insurance** or **disability insurance**. In addition to these standard categories of coverage, insurers offer other types.

11. Explain the four major principles of risk classification. There are four major principles of risk classification. These are: 1) separation and class homogeneity, 2) reliability, 3) incentive value, and 4) social acceptability. Separation means that groups that are statistically different need to be placed in different groups (separation) and not pooled together. Class homogeneity means that within each group, the exposures are similar enough statistically and should not be placed in another group. Reliability means that the proxies for measuring loss potential are not subject to easy manipulation and they are consistent and are verifiable. Incentive value rewards people for lowering their loss potential. Socially acceptable criteria are viewed as permissible to use based on current social standards.

12. What is meant by “incentive value” in a risk classification scheme? Incentive value connotes the encouragement by premium incentives to modify behavior or practices to reduce losses. For

example, the premium for auto insurance is a function of a person's motor vehicle report. The more tickets, the higher cost. Therefore, the fewer motor vehicle tickets, the lower the cost. The insurance system should reward those with good driving records with lower insurance rates thus creating incentive value to reduce the frequency and severity of losses.

13. Why is "social acceptability" of risk classification criteria such a difficult concept on which to get general agreement? The social acceptability classification criteria is the most difficult to define since there is always the question of who is to define what is socially acceptable and what standards to apply. This standard is becoming increasing difficult to satisfy given the tendency to produce politically correct solutions to problems for all concerned. The risk classification criterion has the potential of conflicting with incentive value and can result in a mathematically unfair outcome in many cases. Deviating from the mathematically fair answer to promote social acceptable solutions always produces some form of subsidization.

14. Describe the difference between a civil wrong and a criminal act. Give some examples of each and give some examples of acts that may fall into both categories. A civil wrong involves injury to a person or his property. In addition it will include a violation of a person's civil rights such as freedom of movement, speech and due process. Examples include negligently causing a fire that burns a neighbor's house, or causing a car accident due to inattentive driving. A criminal wrong involves a crime (act against society); committing an action prescribed by statute. Examples include arson and theft. A victim of arson or assault can sue for civil damages, and the defendant can also be prosecuted for his crime under criminal laws.

15. Explain the purpose of strict liability laws. The purpose of strict liability is to predetermine who will bear the costs of compensating injured victims of certain inherently dangerous activities. Under strict liability defense is difficult. Under true absolute liability, there is no defense.

16. Define a *reasonable person*. The reasonable person is one who is honest, prudent, possesses all her faculties and reasons carefully before she acts. It is against this standard that a person's actions are judged to determine if a particular action was, as a matter of fact, "negligent."

17. List the plaintiff's duties in a negligence suit. The plaintiff must: 1. demonstrate an injury. 2. Establish that the defendant had a duty either to do something or to refrain from doing something. 3. establish that the defendant failed to perform his duty. 4. establish that the plaintiff's injuries were a direct result of the defendant's failure to perform a legal duty. There also must be a causal connection between the failure of the duty and the injury.

18. Considering the instructions to the Arkansas jury, how can we know what a "reasonably careful person would foresee" in a given case? In these kinds of cases the jury must decide how a reasonably careful person would act under the same circumstances in question. To constitute negligence, an act must be one from which a reasonably careful person would foresee such an appreciable risk of harm to others as to cause him not to do the act, or to do it in a more careful manner. What an appreciable risk is and whether the result is foreseeable – is clearly a matter of interpretation and judgment.

19. How does the term *bodily injury* differ from the term *personal injury*? Bodily injuries include medical (or funeral) expenses resulting from a loss, wages lost while the plaintiff was recovering from the injury, estimated future income the injury prevents the plaintiff from earning, and pain

and suffering caused by the injury. Personal injuries include damages suffered when a person is deprived of their civil rights.

20. List some good defenses in a negligence suit. Give some examples of each defense. 1. Contributory negligence. Example: assume plaintiff "runs" a stop sign and is hit by a speeding defendant. It is clear the accident would not have happened without the defendant's or the plaintiff's actions. 2. (Informed) assumption of the risk. Example: injuries that result in normal course of athletic activities. 3. The doctrines of *res ipsa loquitur*, comparative negligence and last clear chance are not good for a defendant to raise since they imply unfavorable results for the defense.

21. What are the court's requirements before applying the doctrine of *res ipsa loquitur*? Generally, the following must be shown before applying the doctrine of res ipsa loquitur. The plaintiff's injury could not happen in the absence of negligence. Something exclusively in the control of the defendant caused the injury. It was impossible for the plaintiff's negligence to cause the injury.

22. What are punitive damages, and what purpose do they serve? Punitive damages are intended to award dollars above and beyond the amount needed to make the plaintiff whole (compensatory damages). Their purpose is to both punish the wrongdoer and serve as an example to discourage similar actions. Because of this punitive damages are generally not payable out of legal liability insurance contracts.

V. ANSWERS TO OBJECTIVE QUESTIONS

1. The criteria for ideally insurable losses include all the following except:
   a. Definite losses.
   b. Accidental losses.
   c. A small carefully defined group of exposures.
   d. Low probability of catastrophic loss.

2. One reason floods have not been insured in the United States is:
   a. The potential damage is catastrophic.
   b. The federal government wants to discourage people from living in flood plains and thus has invalidated all flood insurance coverage.
   c. People would not purchase flood insurance, even if it were available at a low or moderate price.
   d. Insurance companies do not know how to define the peril of flood.

3. Credit insurance:
   a. Is mostly sold to bankers.
   b. Repays lenders if their debtors fail to repay their debt.
   c. Insures college students against failure to get credit when they transfer schools.
   d. Insures people or business firms if they have a bad credit rating.

4. If an insurance payment is based on the peril of human survival, the contract is called:
   a. Disability insurance.
   b. Medical expense insurance.
   c. An annuity.
   d. Life insurance.

5. Insurance should be purchased only when losses are large and uncertain, is a statement of:
   a. The central limit theorem
   b. The rule of adverse selection
   c. The law of large numbers
   d. The large loss principle

6. If only the most exposed to loss try to purchase insurance, the insurance pool will fail because:
   a. Insurance agents will not sell the coverage.
   b. The coverage will be too cheap for insurance companies to make money.
   c. The premiums are likely to be more than most people could afford, and perhaps even greater than the cost of the losses.
   d. The potential for fraudulent losses will undermine the insurance underwriting.

7. Which of the following statements is true regarding the Terrorism Insurance Act of 2002?
   a. The act is triggered when the President certified an event is an act of terrorism
   b. The Department of the Treasury pays for all insured losses after a certified act of terrorism.
   c. Participation of property and casualty insurers is mandatory.
   d. The Act lasts for 20 years.

8. *Incentive value* in a risk classification scheme means:
   a. Insureds have a financial incentive to prevent losses.
   b. Insurers have a financial incentive to find a better class of insureds.
   c. Agents have an incentive to sell more insurance.
   d. Insureds have an incentive to purchase the cheapest insurance.

VI. IDEAS FOR INSTRUCTORS AND TEACHING METHODS

1. Debate in class (assigning students to each side if they don't volunteer) the topic: Is "environmental impairment (pollution) liability" an insurable exposure? Make sure students discuss and ultimately define "accidental" loss, as well as other criteria including "affordable premiums." After some debate, add the fact that most of the historic pollution was legal at the time of disposal.

2. Discuss why speculative risks are not insurable. Select a product such as men's or women's clothing and talk about what would happen if the risks associated with product acceptability and profitability were insurable.

3. Split the class into two groups. Assign one group to role-play an insurance company and the other to role-play the prospective insureds. Select an exposure such as health insurance. Make a list on the board of underwriting criteria suggested by the insurance company. Based on the

principles of risk classification presented in the book discuss whether the rating criteria should be used from both the insured's and the insurance company's point of view. Does it meet the principles of risk classification? How does the existence of a disease such as AIDS change your discussion?

4. Eleven insurance companies have been declared insolvent because of the losses caused by Hurricane Andrew. Based on the criteria for insurable loss exposures, have the students discuss the topic: "what condition was violated to cause insolvency." Discuss what the insurance companies could have done to avoid the problem. Are these solutions feasible, socially acceptable or competitive?

5. Each spring the Mississippi river overflows its banks causing much damage. Have students discuss the cost to society of providing federal assistance versus an individual's responsibility for making bad choices. Have this discussion in light of the historic knowledge that rivers overflow their banks and town next to rivers flood. Who pays?

6. Discuss in class whether the terrorism peril is insurable. Include a discussion of the definition of terrorism. Do you think that the loss of the twin towers or 9/11 is one loss or two? Do you think that the November 2002 Federal Insurance Act is a reasonable solution to funding terrorism?

7. Recently there has been a surge in bariatric surgery for the over-weight. Should the private health care system pay for surgery to achieve weight loss solely to improve the quality of life style?

The following section was deleted from the 9th edition of the text. I am including it in the Instructor's Manual because it is relevant to recent issues regarding the relationship between gambling, insurance and Islamic Sharia law. Although I am not an expert on the subject, it appears Sharia law does not allow any transactions that involve interest or any gambling transactions. Although there are ways financial transactions can be structured to circumvent the interest restriction, there remains the issue of insurance being thought of as a gambling transaction. Business transactions may be structured to involve sharing of profit instead of paying or charging interest. Thus, apparently, individuals and businesses adhering to Sharia will not buy insurance to manage their personal and business loss exposures because they do not believe or understand that the insurance transaction is the opposite of gambling. The following is a quote providing one solution to life insurance.

> **Overview of takaful**
> The takaful brand of insurance is a classic example of consumer-driven response to their needs. For generations, Muslims around the world have grown with a mind set that insurance (especially life insurance) is taboo because it contravenes some of the Islamic tenets. Life insurance as sold in conventional way was declared unacceptable in 1903 by some prominent Islamic scholars in the Arab countries. The search was on for an acceptable alternative ever since, and not until the 1970's the debate took sufficient momentum to reach a consensus. In 1985, the Grand Counsel of Islamic scholars in Makkah, Saudi Arabia, Majma al-Fiqh, approved takaful system as the alternative form of insurance written in compliance with Islamic Sharia. It is outside the scope of this presentation to explain how the takaful system works except to say that it is a concept of protection for the good of society, a concept that was never an issue

in Islam in the first place. The Grand Counsel approved this system as a system of co-operation and mutual help but the exact method and operation was left to Islamic scholars and insurance practitioners to resolve, develop and implement. http://www.islamic-banking.com/aom/takaful/ma_bhatti.php

GAMBLING LOSSES ARE NOT INSURABLE EVENTS
Gambling and insurance are opposites. Gambling creates risk (uncertainty) where none previously existed. Insurance reduces risk through pooling and the operation of the law of large numbers. Insurance against gambling losses is not economically possible. If gambling events were insurable, the gambler would be put in the enviable position of being unable to lose: Heads, I win; tails, I collect my insurance. The more I bet, the more I stand to gain. But there is no such thing as a free lunch. The insurance premium must include the charge for the losses and the expenses of operating the insurance pool. Thus, the insurance premium must be more than the mathematically fair value of the potential loss. For example, it might cost $1 to insure the potential loss of $0.50 in a flip of a coin. Moreover, the gambler presumably enjoys the risk of gambling and, therefore, would be unlikely to pay the premium needed for transferring the risk being enjoyed. The possibility of insuring gambling losses can be set aside. American law prohibits using insurance contracts for gambling by insuring property one does not own, or insuring lives in which one has no legal interest. If insurance contracts were used for this type of gambling, as was once possible on the lives of famous people in England, it would likely increase the incidence of fraud and murder. For insurance to operate efficiently, the insured should have an incentive to prevent or at least regret the loss. If the insureds are indifferent to losses, the insurance pool will experience greater losses than predicted. The increased losses in turn will require higher insurance premiums. Soon many insureds will not be able to afford the insurance, and the whole system will collapse. For this reason, our law requires insureds to demonstrate insured events represent a loss to them personally. This requirement is known as the doctrine of insurable interest.

* An internet search of under for ***Sharia*** provides more information on this issue. Also refer to http://en.wikipedia.org/wik/sharia and http://en.wikipedia.org/wik/islamic_banking for a some basic information.

*****