
Insurance Companies

The objectives of the chapter are to provide an understanding of:

- Why individuals buy insurance.
- The regulatory issues affecting insurance and the accounting system insurance companies use.
- The various types of property and casualty insurance.
- The various types of life and health insurance plans.
- Bond insurance.
- How insurance companies lay off some of the risks they underwrite.

Why People Buy Insurance

- Insurance is an economic device whereby an individual or a business transfers the risk of uncertain financial loss by payment of a premium.
  - Reduces financial loss if an event does take place.
  - Insurance spreads the losses that do occur and reduces the uncertainty of loss outcomes.
  - Insurance brings peace of mind and makes costs more certain.

Incentives to Purchase Insurance

- Risk-averse persons purchase insurance to:
  - Remove uncertainty of costs associated with an outcome.
  - Increase their marginal utility by preserving their wealth.

Marginal Utility Curves

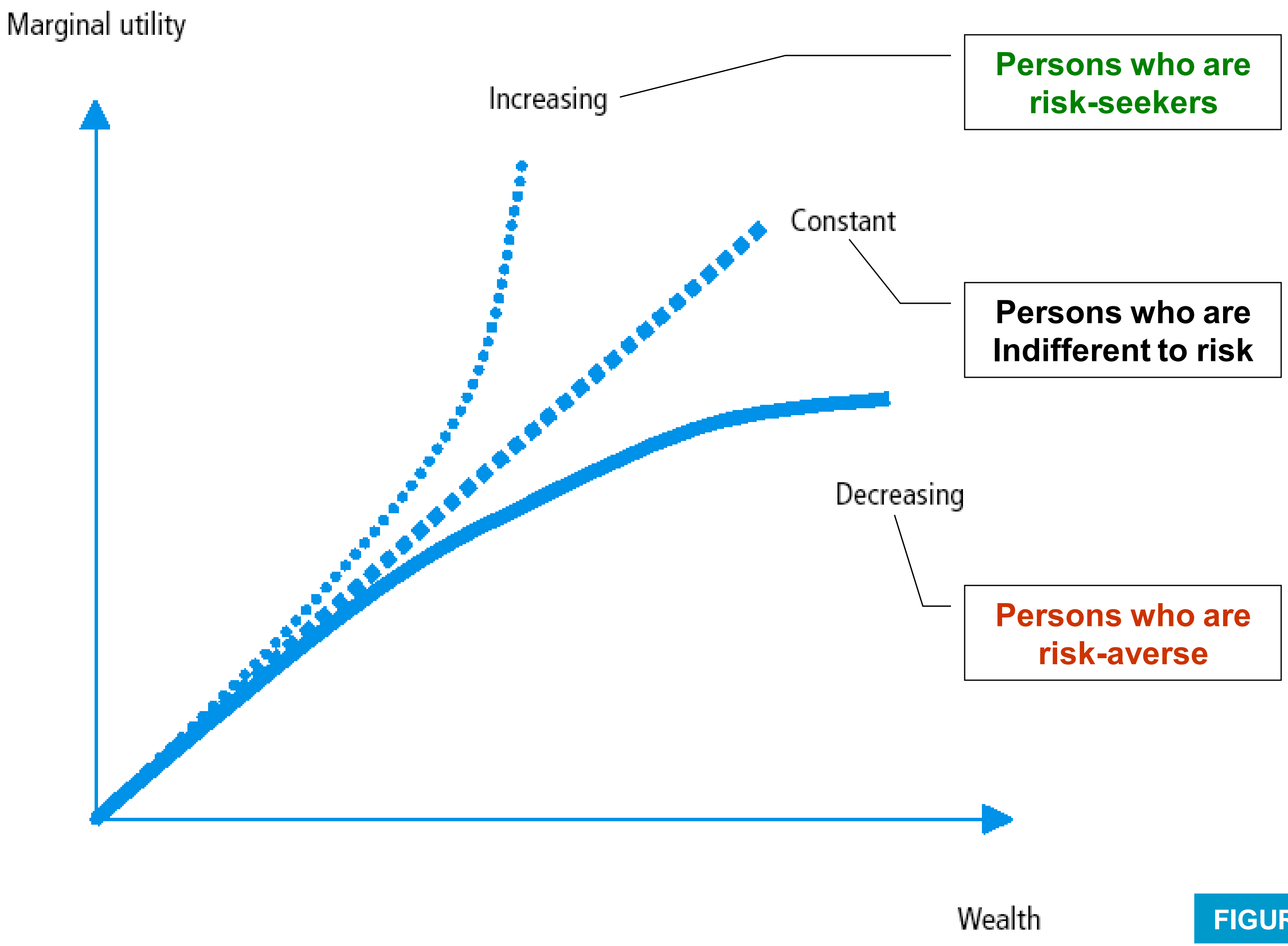


FIGURE 7.1

Insurance and Utility Theory

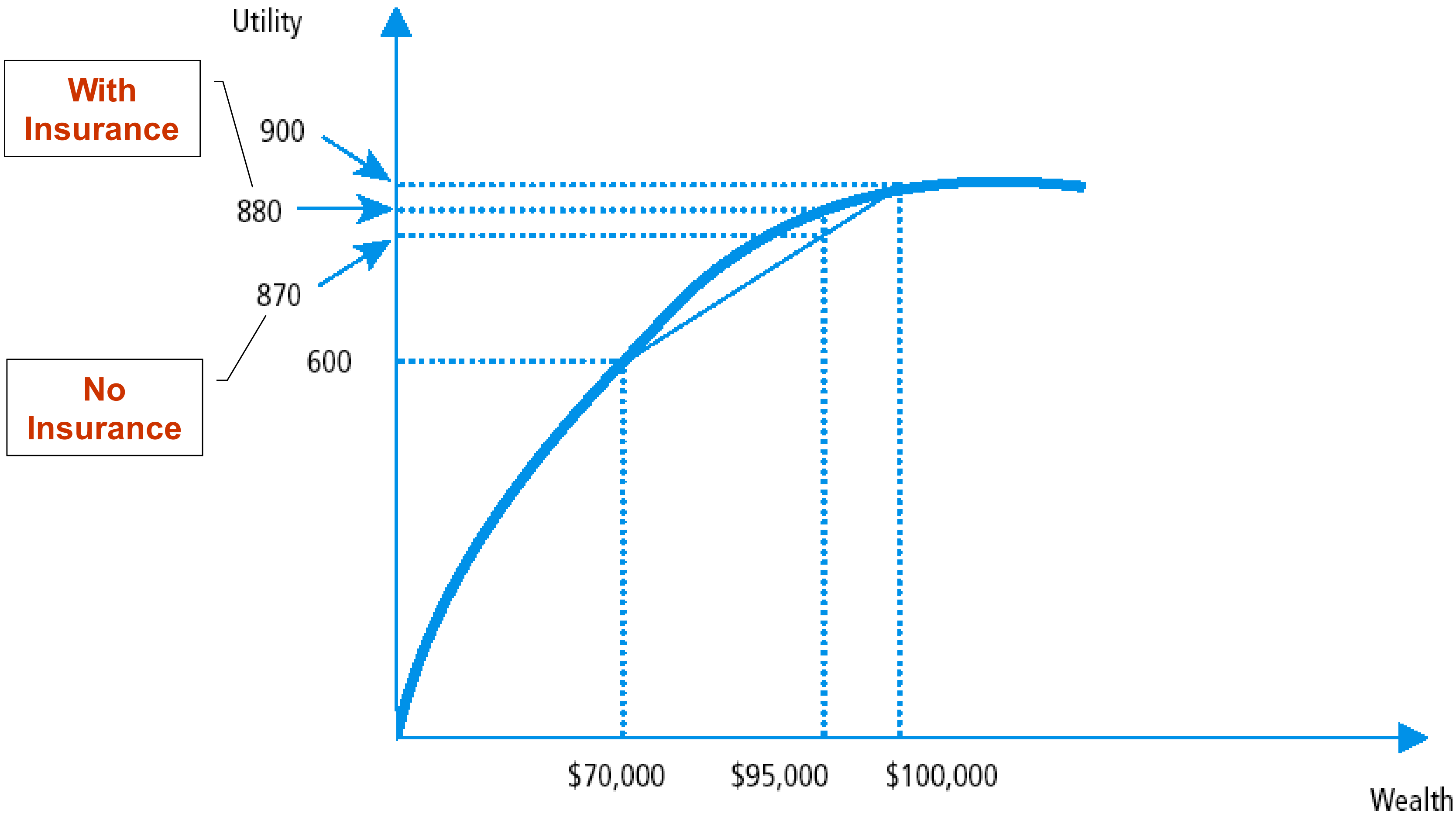


FIGURE 7.2

Types of Private Insurers

- Life insurers
  - Sell life insurance and annuities on both an individual and a group basis.
- Property and liability insurers
  - Sell all types of insurance designed to indemnify for damage to property and for legal liability.
- Health insurers
  - Sell accident and health insurance on both an individual and a group basis.

Types of Private Insurers (cont'd)

- Reinsurers
  - Assume underwriting risks from other insurance companies in exchange for premiums.
- Financial insurers
  - Provide guarantees for financial obligations such as municipal bonds and asset-backed securities (securities backed by pools of underlying assets).

Government Insurers

- Social Security
  - Created in 1935 to help meet the risks of old age and unemployment.
- Other government-backed insurance programs
  - War risk insurance
  - Nuclear energy liability insurance
  - Veterans' life insurance
  - Federal crop insurance
  - Mortgage loan insurance
  - Flood insurance

Regulations

- States individually regulate the insurance industry through their legislative, judicial,and executive branches.
  - Legislatures enact laws that govern the conduct of the insurance industry within a state’s boundaries.
  - Courts exercise control over the industry through their decisions interpreting the laws.
  - Executive branches carry out the actual regulation through the commissioner of insurance.

Regulations (cont'd)

- The National Association of Insurance Commissioners
  - Formulates regulatory guidelines for the insurance industry.
  - Facilitates the exchange of information and ideas and coordinate regulatory activities for state insurance commissioners.
  - Established the Financial Regulation Standards Accreditation Program to assist state legislatures and insurance departments in developing an effective system of solvency regulation.

Insurance Industry Regulation

- Licensing and examination
  - By licensing a company, the commissioner certifies its financial stability and soundness of operations.
  - The commissioner's office periodically inspects each company conducting business in the state.
- Maintaining insurer solvency
  - NAIC Insurance Regulatory Information System (IRIS) provides computerized analysis of the financial condition of insurers.
  - Risk-based capital standards that compare the insurer's risk-adjusted capital and actual capital.

Statutory Accounting Requirements

- Recognition of admitted assets
  - Only those assets that can readily convert into cash are included on the balance sheet.
- Valuation of assets
  - Stocks are recorded at market value.
  - Bonds not in default carry their amortized value and those in default carry market value.
- Matching of expenses and revenues
  - Expenses are accounted for on a cash basis and revenues are recorded on an accrual basis.

Statutory Regulation of Reserves

- Reserve accounts
  - Unearned premium reserve
    - Represents the premiums that the insured have paid in advance for the unexpired terms of their outstanding policies.
  - Loss or claim reserves
    - **Incurred losses** are the losses that take place during the particular period under consideration.
    - **Paid losses** refer to losses paid during a particular period regardless of the time when the loss occurred.

Insurance Industry Regulations

- Investments
  - Investments by insurance companies are regulated by each state's insurance code.
  - Property and liability insurers have greater latitude in their investments than life insurers.

Insurance Industry Regulations (cont'd)

- Regulation of rates
  - Rates and income from investments must be sufficient to pay all losses and expenses.
  - Rates cannot be excessive to realize unreasonable profits.
  - Rates must not discriminate unfairly in charging different rates for clients with approximately the same degree of risk.

Property And Casualty Insurance

- Property and casualty insurance
  - Designed to indemnify for damage to property and for legal liability.
    - Loss of or damage to property
    - Loss or impairment of income-producing ability
    - Damages caused by third party negligence
    - Loss resulting from injury or death due to occupational accidents
  - Personal insurance
    - Automobile and homeowners insurance
  - Business insurance
    - Property, liability, and professional malpractice insurance

Automobile Insurance

- Automobile insurance policy
  - A contract wherein the owner pays a premium, and in exchange the insurance company promises to pay for specific car-related financial losses during the term of the policy.
  - Legal requirements mandated by state laws:
    - **Liability insurance** for injury and property damages to other parties by the policyholder's vehicle.
    - **Uninsured motorists' insurance** covers injury and damages not covered by the other party's insurance or in the case of a hit-and-run accident.

Automobile Insurance (cont'd)

- Physical damage coverage
  - **Collision coverage** pays for damage to the car caused by accidental impact with a vehicle or object.
    - The actual cash value of the vehicle less the deductible (the amount of the loss that the policyholder must pay) is the maximum amount that can be paid.
  - **Comprehensive coverage** pays for most types of damage to the car resulting from a situation other than a collision.

Individual Property Insurance

- Homeowners/Renters Insurance
  - Provides a range of coverage with choices on limits and deductibles.
  - Most homeowner's policies cover the primary dwelling, other structures, personal property, family liability, and injuries to guests.
  - Optional coverage may be obtained for losses due to loss assessment, earthquakes, and floods.

Business Insurance

- Business insurance
  - Provides protection against losses that occur in the course of doing business
    - Property damage to commercial automobiles, business property, cargo in transit or in storage, tools and equipment.
    - Losses caused by business interruption and crime.
  - Includes general liability coverage and umbrella excess liability insurance.

Life Insurance

- Life insurance
  - Provides families with protection against loss of income as a result of the death of a family member.
  - Protects companies against losses as a result of the death of a key employee.

Types of Life Insurance

- Term life
  - Provides maximum coverage at lowest premium.
  - If insured dies within time frame that the policy is in effect, the beneficiary receives the death payment.
  - If the insured survives the period of time the policy is in effect, the beneficiary receives nothing and the coverage is terminated.
  - The premium on a term policy is low because the policy has no cash value.
  - Term life insurance premiums increase with age.

Types of Life Insurance (cont'd)

- Whole life insurance
  - Has guaranteed premiums and death benefits and a minimum interest rate that will be credited to the funds accumulated in the policy.
    - The purchaser agrees to pay regular premiums to the insurance company in exchange for a death benefit and a cash value account where cash can accumulate on a tax-deferred basis.
  - Remains in force during the purchaser's entire lifetime while building a cash value that the insured can borrow against.

Types of Life Insurance (cont'd)

- Universal Life
  - Is a variation on whole life in that it allows the policy owner to vary the amount and timing of premium payments and the death benefit.
  - Keeps the insurance part of the policy separate from the investment, or accumulation, portion.
  - Allows insurance companies invest the money on behalf of the policyholders in money market funds.

Types of Life Insurance (cont'd)

- Variable life
  - Is an investment-oriented whole life policy that provides a return (the death benefit or the value of the variable life policy) based on an underlying portfolio of mutual funds.
  - Offers fixed premiums and a minimum death benefit.
  - Guarantees that the face amount of the policy will never be less than the originally issued face amount no matter what the investment results are, as long as the policy owner pays scheduled premiums.

Types of Life Insurance (cont'd)

- Variable universal life
  - Combines the flexibility of universal life insurance with the investment account features of variable life insurance.
- Survivorship universal life insurance
  - Covers two people with one policy in that the death benefit is paid to the specified beneficiary upon the second death.

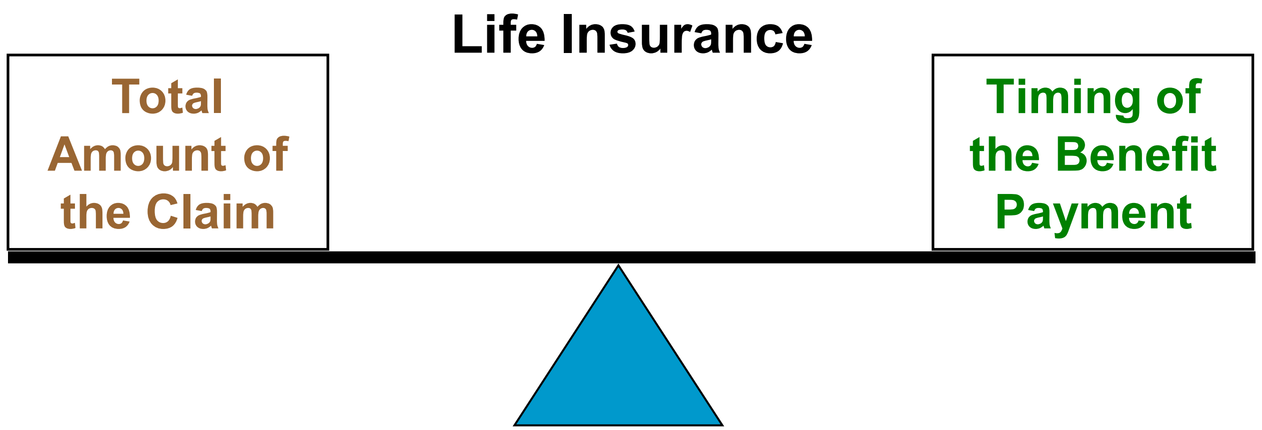
Annuities

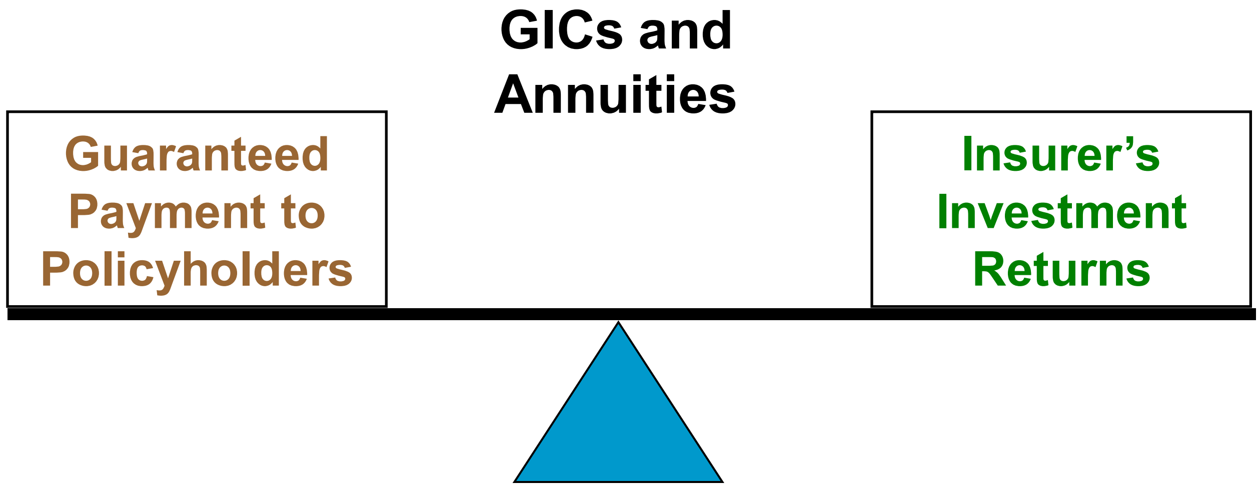
- Annuity
  - Is a financial product in which policyholders pay premiums in exchange for an income for a specified period of time.
- Classifications of annuities
  - **Immediate annuities** provide a stream of payments for a period of time once holder pays the insurance company a lump sum of money (called a premium).
  - **Deferred annuity** are funded either with lump sums of money and/or with smaller sums over a period of time and pay out later as policyholders retire.

Types of Life Insurance (cont'd)

- Guarantee investment contract (GIC)
  - Is an investment product issued by an insurance company in return for a payment by an investor.
  - Offers a relatively high initial return guarantee and impose restrictions on the investor's ability to withdraw funds.
- Synthetic GIC
  - A guaranteed account secured by a pool of assets owned by the investors to protect investors from claims by the insurance company's general creditors.

Nature of Liabilities





Health Insurance

- Indemnity insurance (fee-for-service insurance)
  - The policyholder pays an amount of medical expenses up front, and afterward the insurance company pays the majority of the bill.
- Managed care plans
  - The insurer makes arrangements with a network of health-care providers to treat policyholders, who are offered financial incentives to use the providers in the network.

Types of Managed Care Plans

- Preferred Provider Organizations (PPOs)
  - Are a network of health-care providers that accept insurer- negotiated lower fees
  - Insurers give policyholders strong financial incentives to stay within the network.
- Point-of-Service Plans (POS)
  - Have gate-keepers (primary care physicians) that policyholders must choose from the plan’s network of doctors.
  - This physician refers the insured to a specialist if necessary.

Types of Managed Care Plans

- Health Maintenance Organizations (HMOs)
  - Are the least expensive, but also the least flexible, type of health plan.
  - Gear their services toward members of group plans.

Financial Insurance

- Benefits of bond insurance
  - Provides security and protection against default risk
  - Upholds credit rating of bonds
  - Insures interest and return of principal
  - Is unconditional and irrevocable
  - Enhances liquidity

Financial Insurance

- Remote loss (zero loss underwriting)
  - Providing insurance only to bonds with a low risk of default to minimize claims-paying liabilities.
- Bond insurance criteria
  - Revenue and financial history
  - Demographics
  - Quality of management.
  - Quality and amount of collateral

Reinsurance

- Reinsurance contract
  - One insurer (the reinsurer) charges a premium to indemnify another insurer (the ceding insurer or primary insurer) against all or part of the loss it may sustain under the issued policies.
- Reinsurance functions
  - Limits liability on specific risks
  - Increases individual insurers' capacity
  - Shares liability when losses overwhelm resources
  - Helps stabilize the wide swings in profit and loss margins inherent in the insurance business.

Reasons for Reinsurance

- **Protects a ceding insurer against a single, catastrophic loss or multiple large losses, allowing it to write larger amounts of insurance.**
- **Provides stabilization that helps smooth the ceding insurer's year to year operating results.**
- **Helps a firm that wants to exit an old line of business or enter a new one.**
- **Provides the ceding insurer with a source of underwriting information when entering a new line of insurance or a new market.**

Types of Reinsurance

- Facultative reinsurance arrangement
  - The ceding insurer has the option to offer an individual risk to the reinsurer, and the reinsurer has the right to accept or reject this risk.
- Treaty reinsurance
  - The reinsurer must accept all of a ceding insurer's book of business included within the terms of the reinsurance contract.

Insurance Securitization

- Catastrophe risk securitization
  - Insurers package their catastrophe risk as securities that can be sold to investors instead of transferring the underwriting risk to a reinsurer within the insurance industry
  - The risk is transferred to the broader capital markets as contingent surplus notes, catastrophe bonds, catastrophe equity puts, and exchange-traded catastrophe options.

Catastrophe Risk Securities

- Contingent surplus notes (CSNs)
  - Surplus notes that an insurer has the right to issue in the future to investors in exchange for cash upon the occurrence of specific events.
- Catastrophe bonds (CATs)
  - “Act of God” bonds that require investors to forgive some or all principal or interest if catastrophe losses exceed the trigger specified in the bond.

Catastrophe Risk Securities (cont'd)

- Catastrophe equity puts (CatEPuts)
  - Put options that insurers can buy from investors that give an insurer the right to sell a specified amount of its stock to investors at a predetermined price if catastrophe losses surpass a specified trigger.
- Exchange-traded catastrophe options
  - Standardized contracts based on catastrophe indexes of insurers or the entire property/casualty industry.
  - Entitle the insurer to a cash payment from the seller if a catastrophe causes the index to rise above a strike price specified in the contract.