

## **Session 6: The Insurance Mechanism**

1. A group of investors are discussing the formation of a new property and liability insurer. The proposed company would market a new homeowner policy that combines traditional homeowner coverages with unemployment benefits if the policyholder becomes involuntarily unemployed. Each investor would contribute at least \$100,000 and would receive a proportionate interest in the company. In addition, the company would raise additional capital by selling ownership rights to other investors. Management wants to avoid the expense of hiring and training agents to sell the new policy and wants to sell the insurance directly to the public by selective advertising in personal finance magazines.
  - a) Identify the type of insurance company that best fits the above description.
  - b) Identify the marketing system that management is considering adopting.
2. Compare a stock insurer to a mutual insurer with respect to each of the following:
  - a) Parties who legally own the company
  - b) Right to assess policyholders additional premiums
  - c) Right of policyholders to elect the board of directors
3. A luncheon speaker stated that “the number of life insurers has declined sharply during the past decade because of the increase in company mergers and acquisitions, demutualization of insurers, and formation of mutual holding companies.”
  - a) Why have mergers and acquisitions among insurers increased over time?
  - b) What is the meaning of *demutualization*?
  - c) Briefly explain the advantages of demutualization of a mutual life insurer.
  - d) What is a mutual holding company?
  - e) What are the advantages of a mutual holding company to an insurer?
4. Property and casualty insurance can be marketed under different marketing systems. Compare the independent agency system with the exclusive agency system with respect to each of the following:
  - a) Number of insurers represented by the agent
  - b) Ownership of policy expirations
  - c) Differences in the payment of commissions
5. Property Insurance Company is a new property insurer. The company is growing rapidly because of a new homeowners policy that combines traditional homeowner coverages with insurance that pays off the mortgage if the insured dies or becomes totally disabled. Premiums written have increased substantially; new agents have been hired; and the company is considering expanding into additional states. However, its growth has been hampered by statutory accounting rules that require an insurer to write off immediately its first-year acquisition expenses but do not allow full recognition of premium income until the policy period has expired. In this case, explain how reinsurance will enable Property Insurance to continue to grow in an orderly fashion.
6. Felix is a property claims adjuster for a large property insurer. Janet is a policyholder who recently notified the company that the roof of her home incurred substantial damage because of a recent hail storm. Janet owns her home and is insured under a standard homeowners policy with no special endorsements. What questions should Felix ask before the claim is approved for payment by his company?

7. Based on the following information, determine the policyholders' surplus for XYZ Insurance Company:

Total invested assets	\$50,000,000
Loss reserves	40,000,000
Total liabilities	70,000,000
Bonds	35,000,000
Unearned premium reserve	25,000,000
Total assets	90,000,000

8. Based on the following information, determine Mutual Life Insurance Company's gain from operations before income taxes and dividends to policyholders:

Total premium income	\$20,000,000
Licenses, taxes, and fees	580,000
Death benefits paid	6,000,000
Net investment income	3,000,000
Commissions paid	5,900,000
General insurance expense	2,500,000
Surrender benefits paid	800,000
Annuity benefits paid	1,600,000

9. A large casualty insurer writes a substantial amount of private passenger auto insurance. An actuary analyzed claims data for a specific class of drivers for a recent one-year policy period. The claims data showed that the insurer paid out \$30 million for incurred losses and loss-adjustment expenses for each 100,000 cars insured for one year. Based on the pure premium method, calculate the pure premium.

10. For the past calendar year, a property insurer reported the following financial information for a specific line of insurance:

Premiums written	\$25,000,000
Expenses incurred	5,000,000
Incurred losses and loss-adjustment expenses	14,000,000
Earned premiums	20,000,000

- What was the insurer's loss ratio for this line of coverage?
  - Calculate the expense ratio for this line of coverage.
  - What was the combined ratio for this line of coverage?
11. Why are property and casualty insurance companies required to maintain loss reserves?