***Financial Markets and Institutions, 7e* (Saunders)**

**Chapter 15 Insurance Companies**

1) A man has what he believes is a mild heart attack but he doesn't go to the hospital. Instead he calls his insurance agent and doubles the amount of his life insurance. This is an example of the moral hazard problem in insurance.

Answer: FALSE

Difficulty: 1 Easy

Topic: Life Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-02 Review the four basic lines of business performed by life insurance companies.

Accessibility: Keyboard Navigation

2) In a typical variable life policy the policyholder may vary the premium payments and the maturity date of the policy.

Answer: FALSE

Difficulty: 2 Medium

Topic: Life Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-02 Review the four basic lines of business performed by life insurance companies.

Accessibility: Keyboard Navigation

3) In a universal life policy the cash value of the contract grows at a fixed rate set by the life insurer.

Answer: FALSE

Difficulty: 2 Medium

Topic: Life Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-02 Review the four basic lines of business performed by life insurance companies.

Accessibility: Keyboard Navigation

4) A 65-year-old person has saved $1,250,000 and wishes to receive 10 annual annuity payments, beginning in one year. If the annuity rate is 5.75 percent, he can expect to receive $167,829 per year.

Answer: TRUE

Explanation: With a financial calculator, input PV = −1,250,000, N = 10, I = 5.75, FV = 0 and solve for PMT to get 167,829.

Difficulty: 2 Medium

Topic: Life Insurance Companies

Bloom's: Analyze; Apply

AACSB: Analytical Thinking

Learning Goal: 15-02 Review the four basic lines of business performed by life insurance companies.

Accessibility: Keyboard Navigation

5) Premiums on standard annual renewable term life will generally increase as the policyholder ages.

Answer: TRUE

Difficulty: 1 Easy

Topic: Life Insurance Companies

Bloom's: Understand

AACSB: Reflective Thinking

Learning Goal: 15-02 Review the four basic lines of business performed by life insurance companies.

Accessibility: Keyboard Navigation

6) Policy reserves are the primary asset of the typical life insurer.

Answer: FALSE

Difficulty: 2 Medium

Topic: Life Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-03 Identify the major assets and liabilities of life insurance companies.

Accessibility: Keyboard Navigation

7) Life insurers write over 50 percent of all health insurance premiums.

Answer: TRUE

Difficulty: 1 Easy

Topic: Life Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-02 Review the four basic lines of business performed by life insurance companies.

Accessibility: Keyboard Navigation

8) Life insurance policy reserves are the estimated current worth of expected future payouts.

Answer: TRUE

Difficulty: 2 Medium

Topic: Life Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-03 Identify the major assets and liabilities of life insurance companies.

Accessibility: Keyboard Navigation

9) The cash surrender value of a life insurance policy is the present value of expected future payouts on the policy.

Answer: FALSE

Difficulty: 2 Medium

Topic: Life Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-03 Identify the major assets and liabilities of life insurance companies.

Accessibility: Keyboard Navigation

10) The McFadden Act grants states the primary right to regulate insurance companies.

Answer: FALSE

Difficulty: 2 Medium

Topic: Life Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-04 Classify the major regulations governing life insurance companies.

Accessibility: Keyboard Navigation

11) The National Association of Insurance Commissions (NAIC) examines and regulates insurance companies.

Answer: FALSE

Difficulty: 2 Medium

Topic: Life Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-04 Classify the major regulations governing life insurance companies.

Accessibility: Keyboard Navigation

12) Most states maintain a permanent reserve fund to resolve insurance company failures.

Answer: FALSE

Difficulty: 1 Easy

Topic: Life Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-04 Classify the major regulations governing life insurance companies.

Accessibility: Keyboard Navigation

13) The top 10 property and casualty firms underwrite half of all the P&C premiums written.

Answer: TRUE

Difficulty: 2 Medium

Topic: Property-Casualty Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-05 Analyze the major lines of business performed by property-casualty insurance companies.

Accessibility: Keyboard Navigation

14) The primary asset for P&C insurers is bonds.

Answer: TRUE

Difficulty: 1 Easy

Topic: Property-Casualty Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

15) Property loss risk is generally easier to estimate than liability loss risk.

Answer: TRUE

Difficulty: 1 Easy

Topic: Property-Casualty Insurance Companies

Bloom's: Understand

AACSB: Reflective Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

16) Liability lawsuits related to asbestos claims are an example of long tail losses.

Answer: TRUE

Difficulty: 2 Medium

Topic: Property-Casualty Insurance Companies

Bloom's: Understand

AACSB: Reflective Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

17) Liability losses are more subject to social inflation than property losses.

Answer: TRUE

Difficulty: 1 Easy

Topic: Property-Casualty Insurance Companies

Bloom's: Understand

AACSB: Reflective Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

18) Insurance companies charge different premiums to people based on preexisting health conditions in order to reduce the adverse selection problem.

Answer: TRUE

Difficulty: 2 Medium

Topic: Life Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-02 Review the four basic lines of business performed by life insurance companies.

Accessibility: Keyboard Navigation

19) A whole life insurance policy pays the face value of the contract on death of the policyholder to the beneficiaries.

Answer: TRUE

Difficulty: 2 Medium

Topic: Life Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-02 Review the four basic lines of business performed by life insurance companies.

Accessibility: Keyboard Navigation

20) The adverse selection problem arises in situations when the policyholders engage in risky activities that increase the probability of an insurance payoff.

Answer: FALSE

Difficulty: 2 Medium

Topic: Life Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-02 Review the four basic lines of business performed by life insurance companies.

Accessibility: Keyboard Navigation

21) Policy reserves are a(n)

A) balance sheet liability.

B) balance sheet asset.

C) separate account item.

D) insurance guarantee fund payment.

E) income statement revenue item.

Answer: A

Difficulty: 2 Medium

Topic: Life Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-03 Identify the major assets and liabilities of life insurance companies.

Accessibility: Keyboard Navigation

22) The following type(s) of life insurance policies do not have a savings feature:

A) Term life

B) Whole life

C) Variable life

D) Universal life

E) Both variable life and universal life

Answer: A

Difficulty: 2 Medium

Topic: Life Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-02 Review the four basic lines of business performed by life insurance companies.

Accessibility: Keyboard Navigation

23) In property and casualty insurance the combined ratio is equal to \_\_\_\_\_\_\_\_ divided by total premiums written.

A) the sum of the loss ratio plus loss adjustment expenses

B) the sum of the loss ratio plus the expense ratio

C) the operating ratio minus dividends paid to policyholders

D) the nominal ratio plus the real ratio

E) 1 minus the operating ratio

Answer: B

Difficulty: 3 Hard

Topic: Property-Casualty Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

24) The term "variable" in a variable life policy refers to the

A) policyholder's ability to vary the premiums.

B) insurer's ability to vary the rate of return on the policy.

C) variable growth rate of the cash value of the policy.

D) insurer's ability to vary the premiums.

E) the policyholder's ability to cancel the plan.

Answer: C

Difficulty: 2 Medium

Topic: Life Insurance Companies

Bloom's: Understand

AACSB: Reflective Thinking

Learning Goal: 15-02 Review the four basic lines of business performed by life insurance companies.

Accessibility: Keyboard Navigation

25) The primary regulator of insurance firms is the

A) NAIC.

B) McCarran-Ferguson Commission.

C) FDIC.

D) state insurance regulator.

E) SEC.

Answer: D

Difficulty: 2 Medium

Topic: Life Insurance Companies; Property-Casualty Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-04 Classify the major regulations governing life insurance companies.; 15-07 Recognize the main regulators of property-casualty insurance companies.

Accessibility: Keyboard Navigation

26) Which one of the following statements concerning annuities offered by insurers is not true?

A) Interest on annuities is not taxed until the investor receives the payments.

B) Annuity payments may be fixed or variable.

C) Annuity contributions are not capped by the IRS.

D) Annuities can be deferred or immediate.

E) Annuity payments must cease upon the policyholder's death.

Answer: E

Difficulty: 2 Medium

Topic: Life Insurance Companies

Bloom's: Understand

AACSB: Reflective Thinking

Learning Goal: 15-02 Review the four basic lines of business performed by life insurance companies.

Accessibility: Keyboard Navigation

27) An investor has $25,000 that he can invest today. In addition to this amount, he can also invest $12,000 per year for 30 years (beginning one year from now) at which time he will retire. He plans on living for 25 years after he retires. If interest rates are 8 percent, what size annual annuity payment can he obtain for his retirement years? (All annuity payments are at year-end. Round your answer to the nearest dollar.)

A) $64,439

B) $192,501

C) $150,913

D) $161,096

E) $173,488

Answer: C

Explanation: [($25,000 × 1.0830) + ($12,000 × FVIFA (8%, 30 yrs.)]/PVIFA (8%, 25 yrs.)

Financial Calculator Solution:

First find the FV of the accumulated amount: PV = −25,000, PMT = −12,000, N = 30, I = 8 and solve for FV to get 1,610,965. The amount the investor will have when he retires is $1,610,965. Now, convert this amount into 25-year annuity: PV = −1,610,965, N = 25, I = 8, FV = 0 and solve for PMT to get 150,913.

Difficulty: 3 Hard

Topic: Life Insurance Companies

Bloom's: Analyze; Apply

AACSB: Analytical Thinking

Learning Goal: 15-02 Review the four basic lines of business performed by life insurance companies.

Accessibility: Keyboard Navigation

28) A policyholder wishes to annuitize the cash value of her insurance policy at retirement. She desires an annual payment of $95,000 per year and the cash value is expected to be $1,100,000 at retirement. Approximately how many payments can she expect to receive if annuity interest rates are 5.122 percent?

A) 18

B) 16

C) 14

D) 12

E) 10

Answer: A

Explanation: $1,100,000/$95,000 = PVIFA (5.122%, N yrs.); N = 18; log rule or financial calculator required

Financial Calculator Solution:

Input PV = −1,100,000, I = 5.122, PMT = 95,000, FV = 0 and solve for N to get 17.999 which is 18.

Difficulty: 2 Medium

Topic: Life Insurance Companies

Bloom's: Analyze; Apply

AACSB: Analytical Thinking

Learning Goal: 15-02 Review the four basic lines of business performed by life insurance companies.

Accessibility: Keyboard Navigation

29) The largest asset category of life insurers is \_\_\_\_\_\_\_\_ and the largest liability category is \_\_\_\_\_\_\_\_.

A) bonds; separate account items

B) separate account items; current policy claims

C) bonds; policy reserves

D) policy reserves; mortgage loans

E) common stock; dividend reserve

Answer: C

Difficulty: 2 Medium

Topic: Life Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-03 Identify the major assets and liabilities of life insurance companies.

Accessibility: Keyboard Navigation

30) The most important federal legislation affecting the regulation of life insurance companies prior to 1999 was the

A) McCarran-Ferguson Act.

B) McFadden Act.

C) Investment Company Act.

D) SEC Act.

E) Insurance Freedom Act.

Answer: A

Difficulty: 1 Easy

Topic: Life Insurance Companies

Bloom's: Understand

AACSB: Reflective Thinking

Learning Goal: 15-04 Classify the major regulations governing life insurance companies.

Accessibility: Keyboard Navigation

31) Which of the following statements are true?

I. Catastrophe bonds may be used as a form of reinsurance.

II. Catastrophe bonds are structured so that if an insured event results in large losses for an insurer, the bond's required payments increase.

III. Buyers of catastrophe bonds benefit if the adverse event occurs.

IV. When issued, catastrophe bonds will have promised yields above the risk-free rate.

A) I and II only

B) I and IV only

C) II and III only

D) II and IV only

E) III and IV only

Answer: B

Difficulty: 2 Medium

Topic: Property-Casualty Insurance Companies

Bloom's: Understand

AACSB: Reflective Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

32) In 2016 the average combined ratio after dividends for the P&C industry was\_\_\_\_\_\_\_\_.

A) 100.01

B) 105.6

C) 107.2

D) 97.6

E) 93.5

Answer: A

Difficulty: 3 Hard

Topic: Property-Casualty Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

33) Hurricane damage in a given area is an example of a \_\_\_\_\_\_\_\_ for which it is difficult to predict loss exposure.

A) low-severity, low-frequency event

B) high-severity, high-frequency event

C) low-severity, high-frequency event

D) high-severity, low-frequency event

E) low-frequency, high-frequency event

Answer: D

Difficulty: 1 Easy

Topic: Property-Casualty Insurance Companies

Bloom's: Understand

AACSB: Reflective Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

34) Property and casualty insurers hold \_\_\_\_\_\_\_\_ short-term assets than life insurers because property and casualty loss rates are \_\_\_\_\_\_\_\_ predictable than life insurance loss rates.

A) more; more

B) more; less

C) less; less

D) less; more

E) no; highly

Answer: B

Difficulty: 2 Medium

Topic: Life Insurance Companies; Property-Casualty Insurance Companies

Bloom's: Understand

AACSB: Reflective Thinking

Learning Goal: 15-03 Identify the major assets and liabilities of life insurance companies.; 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

35) The operating ratio is calculated as

A) the loss ratio minus the underwriting cycle lag.

B) the loss ratio plus the loss adjustment expense ratio plus the commission to premium ratio.

C) the combined ratio after dividends minus the investment yield.

D) the combined ratio minus the loss ratio.

E) none of these options are correct.

Answer: C

Difficulty: 2 Medium

Topic: Property-Casualty Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

36) An insurance line has a loss ratio of 72 percent and an expense ratio of 35 percent, and the firm pays 2 percent of premiums to policyholders as dividends. What level of investment yield is needed to make the P&C firm break even?

A) 5 percent

B) 7 percent

C) 9 percent

D) 11 percent

E) 18 percent

Answer: C

Explanation: The combined ratio is 109%, therefore to break even it needs to earn 9% on its investments.

Difficulty: 2 Medium

Topic: Property-Casualty Insurance Companies

Bloom's: Analyze; Apply

AACSB: Analytical Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

37) The two major components of expense risk for P&C insurers are

A) the combined ratio and the premium ratio.

B) loss adjustment expenses and variations in commission and other expenses.

C) investment yield and premiums earned.

D) dividend ratio and investment yield.

E) none of these options are correct.

Answer: B

Difficulty: 2 Medium

Topic: Property-Casualty Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

38) At P&C insurers, if the combined ratio is less than 100 percent, the premiums charged were sufficient to cover

A) losses only.

B) expenses only.

C) both losses and expenses.

D) losses, expenses, and investment returns on premiums.

Answer: C

Difficulty: 2 Medium

Topic: Property-Casualty Insurance Companies

Bloom's: Understand

AACSB: Reflective Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

39) For P&C insurers, if the combined ratio is more than 100 percent, that firm

A) could not have been profitable.

B) must have been profitable.

C) may have been profitable if investment returns were high enough.

D) was profitable if the LAE was low enough.

Answer: C

Difficulty: 2 Medium

Topic: Property-Casualty Insurance Companies

Bloom's: Understand

AACSB: Reflective Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

40) Estimates of the cost of the September 11, 2001, terrorist attacks on the World Trade Center indicate that the cost to insurance companies was as high as

A) $20 billion.

B) $30 billion.

C) $40 billion.

D) $50 billion.

E) $60 billion.

Answer: C

Difficulty: 1 Easy

Topic: Property-Casualty Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

41) A policyholder wishes to annuitize the cash value of her insurance policy at retirement. The cash value is $725,000. What payment (to the nearest dollar) can he expect if he wishes to receive 15 years of payments (starting next year) and interest rates are 5.25 percent?

A) $43,333

B) $55,555

C) $71,033

D) $60,524

E) $29,250

Answer: C

Explanation: Payment = $725,000/PVIFA (15 yrs., 5.25%)

With a financial calculator: Input PV = −725,000, N = 15, I = 5.25, FV = 0 and solve for PMT to get 71,033.43.

Difficulty: 2 Medium

Topic: Life Insurance Companies

Bloom's: Analyze; Apply

AACSB: Analytical Thinking

Learning Goal: 15-02 Review the four basic lines of business performed by life insurance companies.

Accessibility: Keyboard Navigation

42) An insurance line has a loss ratio of 62 percent and an expense ratio of 35 percent; the firm pays 2 percent of premiums to policyholders as dividends and has an investment yield to premium ratio of 9 percent. The operating ratio for this line is

A) 86.

B) 90.

C) 95.

D) 106.

E) 109.

Answer: B

Explanation: Operating ratio = 62 + 35 + 2 − 9

Difficulty: 2 Medium

Topic: Property-Casualty Insurance Companies

Bloom's: Analyze; Apply

AACSB: Analytical Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

43) An insurance line has a pure loss ratio of 65 percent, LAE of 16 percent and an expense ratio of 26 percent; the firm pays 3 percent of premiums to policyholders as dividends and has an investment yield to premium ratio of 6 percent. Which one of the following statements is true?

A) The line is profitable because the operating ratio is greater than 100.

B) The line is profitable because the operating ratio is less than 100.

C) The line is not profitable because the operating ratio is greater than 100.

D) The line is profitable because the combined ratio after dividends is greater than 100.

E) The line is profitable because the combined ratio after dividends is less than 100.

Answer: C

Explanation: Operating ratio = 65 + 16 + 26 + 3 − 6 = 104

Difficulty: 3 Hard

Topic: Property-Casualty Insurance Companies

Bloom's: Understand

AACSB: Analytical Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

44) In terms of dollar costs, the worst U.S. catastrophe since 2000 was caused by

A) the terrorist attacks on the World Trade Center and the Pentagon.

B) Hurricane Katrina.

C) the California fires of 2007.

D) the Florida hurricanes of 2004.

E) Hurricane Rita of 2005.

Answer: B

Difficulty: 2 Medium

Topic: Property-Casualty Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

45) Premiums received before the coverage period are termed

A) unearned premiums.

B) lagged premiums.

C) loss-adjustment expenses.

D) loss reserves.

E) policyholder's surplus.

Answer: A

Difficulty: 2 Medium

Topic: Property-Casualty Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

46) Which one of the following would provide an example of social inflation?

A) Large malpractice awards beyond the level of damages incurred

B) Increase in costs on auto physical damage claims

C) Increase in prescription drug cost claims

D) Losses to repair damages caused by hurricanes in Florida

E) Rising cost of funeral expenses due to inflation

Answer: A

Difficulty: 1 Easy

Topic: Property-Casualty Insurance Companies

Bloom's: Understand

AACSB: Reflective Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

47) The P&C loss ratio on an insurance line contains

I. payouts on claims.

II. brokerage commissions incurred to market the claims.

III. costs associated with settling claims.

IV. dividend payouts to policyholders.

A) I and II only

B) I, III, and IV only

C) I and III only

D) II and IV only

E) III and IV only

Answer: C

Difficulty: 3 Hard

Topic: Property-Casualty Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

48) The best underwriting performance since 1936 in terms of the combined ratio occurred during \_\_\_\_\_\_\_\_ for property and casualty insurers.

A) 1999 and 2000

B) 2001 and 2002

C) 2002 and 2003

D) 2004 and 2005

E) 2006 and 2007

Answer: E

Difficulty: 2 Medium

Topic: Property-Casualty Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

49) State Farm and other P&C insurers came into conflict with policyholders over claims filed as a result of Hurricane Katrina that resulted in lawsuits. The conflict resulted from

A) insurers' refusal to pay until reinsurance funds were collected.

B) policyholders' fraudulent claims.

C) insurers' insistence that the Katrina storm surge resulted in flood damage that was not covered.

D) insurers overcharging for hurricane insurance.

Answer: C

Difficulty: 1 Easy

Topic: Property-Casualty Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-07 Recognize the main regulators of property-casualty insurance companies.

Accessibility: Keyboard Navigation

50) Insurance companies face the problem of \_\_\_\_\_\_\_\_ when people with highest probability of getting the insurance payoffs are the ones who purchase insurance.

A) moral hazard

B) adverse selection

C) fraud

D) over-insurance

E) agency costs

Answer: B

Difficulty: 2 Medium

Topic: Life Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-02 Review the four basic lines of business performed by life insurance companies.

Accessibility: Keyboard Navigation

51) How do insurance guarantee funds differ from bank deposit insurance funds?

Answer:

* The insurance funds are administered by the insurance firms, not the government, unlike the FDIC.
* No permanent fund to back policyholder claims exists, whereas bank deposits are backed by a permanent fund that the FDIC can draw on.
* The size of the required contributions that surviving insurance firms must make varies widely from state to state. In some states the required payments in any one year may be capped, so policyholders may encounter delays in recovering their claims. This is not true for bank deposit insurance.
* Not all states require insurers to have guarantee funds, but most bank deposits have federal insurance.

Difficulty: 1 Easy

Topic: Life Insurance Companies; Property-Casualty Insurance Companies

Bloom's: Understand

AACSB: Reflective Thinking

Learning Goal: 15-04 Classify the major regulations governing life insurance companies.; 15-07 Recognize the main regulators of property-casualty insurance companies.

Accessibility: Keyboard Navigation

52) What additional flexibilities are provided by variable and universal life as compared to a standard whole life or endowment policy?

Answer: Variable life allows the policyholder to choose among various mutual fund investments where their cash value is invested. The choice allows policyholders to choose what level of risk they wish to bear. Universal life and variable universal life allow the policyholders to vary the amount of premiums paid and the maturity of the contract. Premiums can even be skipped. Traditional policies lack these flexibilities.

Difficulty: 1 Easy

Topic: Life Insurance Companies

Bloom's: Understand

AACSB: Reflective Thinking

Learning Goal: 15-02 Review the four basic lines of business performed by life insurance companies.

Accessibility: Keyboard Navigation

53) A 65-year-old wishes to convert the cash value of his insurance policy into an annuity. He can select an annuity that will last 15 years or one that lasts 20 years. If the cash value is $450,000 and interest rates are 5.25 percent, how much less per year will he receive if he chooses the 20-year annuity?

Answer:

|  |  |  |
| --- | --- | --- |
| 15-year: $450,000 | = | PMT15 × PVIFA (N = 15, r = 5.25%) |
| PMT15 | = | $44,090 |
| 20-year: $450,000 | = | PMT20 × PVIFA (N = 20, r = 5.25%) |
| PMT20 | = | $36,879 |
| Difference: He receives $7,211 less per year with the 20-year. | | |

Financial Calculator Solution:

For the 15-year annuity selection: Input PV = −450,000, N = 15, I = 5.25, FV = 0 and solve for PMT to get 44,089.72.

For the 20-year annuity selection: Input PV = −450,000, N = 20, I = 5.25, FV = 0 and solve for PMT to get 36,878.53.

The difference is $7,211.19 per year less for the 20-year annuity.

Difficulty: 2 Medium

Topic: Life Insurance Companies

Bloom's: Analyze; Apply

AACSB: Analytical Thinking

Learning Goal: 15-02 Review the four basic lines of business performed by life insurance companies.

Accessibility: Keyboard Navigation

54) What three main sources of underwriter risk exist for P&C insurers?

Answer:

* Unexpected increases in loss rates
* Unexpected increases in expenses
* Unexpected decreases in investment yields

Difficulty: 1 Easy

Topic: Property-Casualty Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

55) Why are P&C insurers dependent on investment yields? Is this an argument for changing how this industry operates and/or how we regulate the industry? Explain.

Answer: High loss ratios and expense ratios have made many of the main P&C lines unprofitable in certain years due to high payouts, high loss adjustment expenses, and large commissions. The combined ratio after dividends has often been above 100, indicating that payouts are greater than premiums paid in. In this case, the insurer must have sufficiently high investment yields on premiums invested to make up for the unprofitable lines and still pay a sufficient rate of return to stockholders so that the industry can attract capital. These results indicate the need for P&C insurers to increase premiums on many lines, to better diversify to cut losses, or to be able to better minimize moral hazard and adverse selection. Perhaps insurance premiums should be fully deregulated and determined by the market, although this would raise costs of insurance and possibly social costs to deal with a greater number of uninsured people. Alternatively, commissions could be cut in order to cut costs and/or tax advantages given to P&C insurers.

Difficulty: 3 Hard

Topic: Property-Casualty Insurance Companies

Bloom's: Remember; Understand

AACSB: Reflective Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

56) What is separate account business? How important is it to life insurers?

Answer: Assets managed by the life insurer on behalf of a client, such as pension fund assets, are separate account business. In 2016, about 37.6 percent of assets were separate accounts—quite a significant portion of their business.

Difficulty: 1 Easy

Topic: Life Insurance Companies

Bloom's: Remember; Understand

AACSB: Reflective Thinking

Learning Goal: 15-03 Identify the major assets and liabilities of life insurance companies.

Accessibility: Keyboard Navigation

57) What are the main lines of P&C insurance?

Answer: Fire and allied lines, homeowners multiple peril, commercial multiple peril, automobile liability and physical damage, and liability insurance other than auto.

Difficulty: 1 Easy

Topic: Property-Casualty Insurance Companies

Bloom's: Remember

AACSB: Reflective Thinking

Learning Goal: 15-05 Analyze the major lines of business performed by property-casualty insurance companies.

Accessibility: Keyboard Navigation

58)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Annual Data | Thousands of Dollars | | | | |
| Premiums earned |  | $ | 35,600 |  |  | |
| Losses incurred |  | $ | 26,760 |  |  | |
| Expenses/commissions |  | $ | 9,125 |  |  | |
| Dividends paid to policyholders |  | $ | 600 |  |  | |
| Investment income on premiums |  | $ | 1,525 |  |  | |

What is the combined ratio after dividends for this line? Are premiums sufficient to generate profitability for this line? Why or why not?

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Combined ratio after dividends | = |  | 26,760 + 9,125 + 600 | = | 102.49 | % |
|  |  |  | 35,600 |  |  |  |

Answer: Premiums are not sufficient to generate profitability for this since the combined ratio is greater than 100.

Difficulty: 2 Medium

Topic: Property-Casualty Insurance Companies

Bloom's: Analyze; Apply; Evaluate

AACSB: Analytical Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

59)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Annual Data | Thousands of Dollars | | | | |
| Premiums earned |  | $ | 35,600 |  |  | |
| Losses incurred |  | $ | 26,760 |  |  | |
| Expenses/commissions |  | $ | 9,125 |  |  | |
| Dividends paid to policyholders |  | $ | 600 |  |  | |
| Investment income on premiums |  | $ | 1,525 |  |  | |

What is the operating ratio for this line? Is the line profitable?

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Operating Ratio | = | combined ratio after dividends | − | investment income | = | 102.49% | − | 1,525 | = | 98.20% |
|  |  |  |  | premiums earned |  |  |  | 35,600 |  |  |

Answer: Since the operating ratio is less than 100, the line is profitable but only after including investment income on premiums.

Difficulty: 2 Medium

Topic: Property-Casualty Insurance Companies

Bloom's: Analyze; Apply

AACSB: Analytical Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

60)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Annual Data | Thousands of Dollars | | | | |
| Premiums earned |  | $ | 35,600 |  |  | |
| Losses incurred |  | $ | 26,760 |  |  | |
| Expenses/commissions |  | $ | 9,125 |  |  | |
| Dividends paid to policyholders |  | $ | 600 |  |  | |
| Investment income on premiums |  | $ | 1,525 |  |  | |

Everything else constant, what is the maximum expected loss ratio that would yield a profitable line after including investment income?

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Max $ Loss + 9,125 +  600 − 1,525 | = | 100 | % | ; | Max | $ | Loss | = | $ | 27,400 |
| 35,600 |  |  |  |  |  |  |  |  |  |  |

Answer: Maximum Loss ratio = 27,400/35,600 = 76.97%

Difficulty: 3 Hard

Topic: Property-Casualty Insurance Companies

Bloom's: Analyze; Apply

AACSB: Analytical Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation

61) Halliburton was allowed to bankrupt one of its subsidiaries in settlements of lawsuits on asbestos cases. What are the pros and cons of allowing a firm to limit its liability by shifting the liability to only one subsidiary rather than placing all of the corporation's assets at risk?

Answer: The pros are probably limited to cost arguments. It may keep the cost of liability insurance down to allow a firm to protect the assets of unrelated subsidiaries. The cons are the reduced ability to collect damages. The asbestos-related damages are huge and the ability of claimants to recover losses and punitive damages is reduced by this decision. There is probably also a moral hazard problem since firms may be more likely to engage in risky or unethical practices because they can protect more corporate assets than would otherwise be the case.

Difficulty: 3 Hard

Topic: Property-Casualty Insurance Companies

Bloom's: Evaluate

AACSB: Analytical Thinking

Learning Goal: 15-05 Analyze the major lines of business performed by property-casualty insurance companies.

Accessibility: Keyboard Navigation

62) Why do P&C insurers place a large percentage of their investments in bonds and maintain large surpluses?

Answer: P&C insurers need stable cash flows to offset potentially volatile loss ratios. In many years it is only the investment returns that make a P&C insurer profitable: hence the need for a stable investment. Similarly, the large surpluses are needed for years when losses are running higher than anticipated and/or investment returns are less than expected. Moreover, in some years, catastrophe losses have been quite large and the large surpluses are needed to absorb losses.

Difficulty: 2 Medium

Topic: Property-Casualty Insurance Companies

Bloom's: Understand

AACSB: Reflective Thinking

Learning Goal: 15-06 Identify the main asset and liability items on property-casualty insurance company balance sheets.

Accessibility: Keyboard Navigation