

# CRM

FINANCING  
OF RISK

## STUDY GUIDE

EXAM PREP AND ANSWER KEY

- **Knowledge Checks**
- **Check-Ins**
- **Self-Quizzes**
- **Sample Exam Questions**
- **Glossary of Terms**



**RISK & INSURANCE**  
EDUCATION ALLIANCE

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# CRM

# FINANCING OF RISK

## STUDY GUIDE

### EXAM PREP AND ANSWER KEY

This Study Guide has been prepared to enhance your learning experience. It contains all of the Check-In questions, Knowledge Checks, and Self-Quizzes contained within the course, along with an Answer Key and Glossary. Use it as a tool to help practice and assess your knowledge of the course material, but *do not* mistake it for a comprehensive "short-cut" to preparing for the final exam.

Be sure to take a look at the Appendix that follows the Answer Key in this Study Guide. It contains valuable suggestions for test preparation and study techniques, as well as some sample exam questions and a glossary of terms.

Your path to success in passing the final exam will come from your attentiveness during the course and the effort you put into preparation.



**RISK & INSURANCE**  
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# **Tools to Assess Your Knowledge**

Check-Ins, Knowledge Checks,  
and Self-Quizzes by Topic





## Section 1: Risk Financing Fundamentals

2. Cat-o-Rama indoor playground has had numerous claims in the past year. It seems that patrons' cats are biting and scratching the other owners and families. Twice, a series of rabies shots had to be administered. Numerous individuals have tripped over the cats and sustained fractures. Cat-o-Rama receives a notice that their insurance company is not going to pay any further claims and that they may be responsible for paying unsettled claims. What is the most likely reason for this?



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3. Benji, a new producer, knows that he has sold over \$3,000,000 in policy premiums this year. However, when he looks at his commission report, it only shows \$1,750,000 in premiums upon which he is receiving commission. What metric is the agency accountant most likely using to calculate the commissions owed?

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# Insurable Risks from Differing Points of View

## ▶▶ Knowledge Check



**Directions:** Respond to the following.

1. Chuck is the risk manager for a fireworks manufacturer. Provide an example of an exposure Chuck might identify as an insurable risk and explain how Chuck might address that risk.

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2. What concerns might an insurance underwriter have when determining whether or not this is an insurable risk?

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# Common Risk Financing Options



## ▶▶ Knowledge Check

**Directions:** Read the scenarios below and identify the type of arrangement each describes.

1. Wilson Designs hires an information technology company, ABC IT, to perform upgrades to its data management system. One of ABC IT's employees is walking across Wilson's office when he trips over a rip in the carpet and breaks his leg. The ABC IT employee files a workers compensation claim. The insurance company pays the claim and then tries to recover its payments from Wilson Designs. The insurance company is unsuccessful because the parties have signed an agreement.

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2. A photocopier is leased for sixty months for \$500 per month. The photocopier somehow catches fire and burns a large portion of the building. The amount of damages available from the leasing company would be insufficient to cover the needed repairs. The company would not be able to receive more than \$30,000 because of a clause in the lease.

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# Risk Financing Decisions

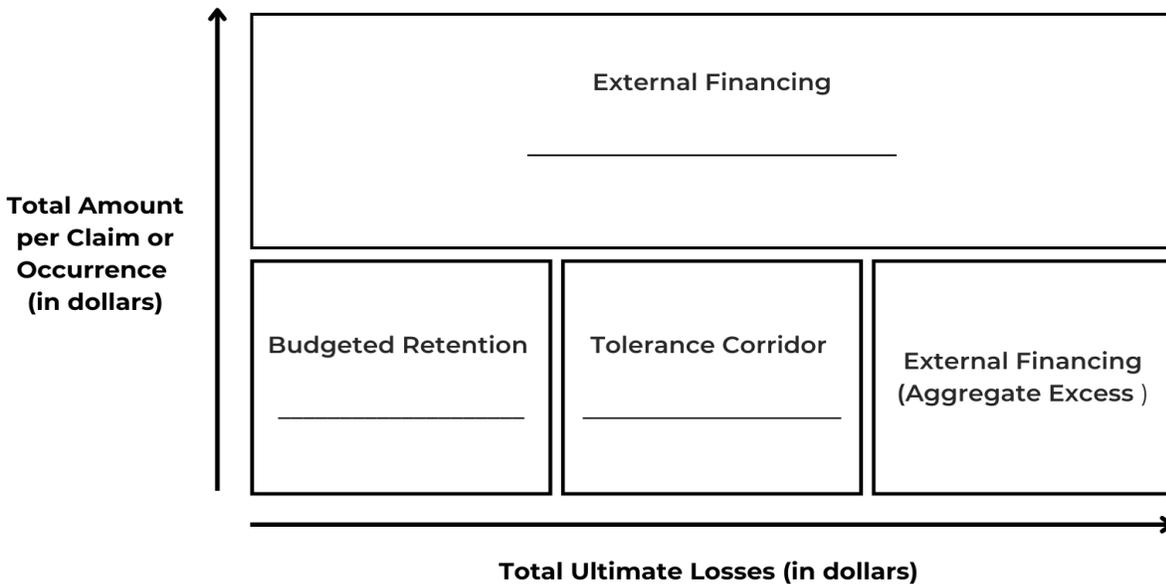
## ▶▶ Knowledge Check



**Directions:** Read the scenario below and complete the Retention/External Financing Diagram.

The risk manager of a framing company knows that it typically costs the company \$7,000 annually for merchandise damaged in transit, such as chipped, broken, or water-damaged wood and glass breakage. The damages are broken down as follows:

- 20 individual damages that run between \$50 and \$100
- Five damages that cost \$100 to \$250
- The remaining balance is damages over \$250.



Explain your answer.

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# Reinsurance



## » Knowledge Check

**Directions:** Read the scenarios and respond.

1. Jules is a new underwriter with Alpha Insurance Company. He has had a very frustrating time with his reinsurance submissions to Zenon. No matter the type or size of risk, they are all rejected by the reinsurer. Help Jules by explaining why this may be happening.

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2. Emilia is the COO of OMI insurance company. She is concerned with fluctuating operational results. She knows that this is common in the industry, yet wishes to have better predictability of results. One option she has identified is reducing the number of high exposure accounts the company accepts, which would impact revenues and reduce some losses. Can you recommend an alternative solution to Emilia?

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## Section 1 Self-Quiz

**Directions:** Fill in the blanks using the terms from the word bank. Some terms may be used more than once, and not all terms will be used.

<b>incurred</b>	<b>paid</b>	<b>aggregate</b>	<b>loss reserve</b>	<b>reported</b>
<b>written</b>	<b>net written</b>	<b>earned</b>	<b>unearned</b>	<b>budgeted retention</b>
<b>tolerance corridor</b>	<b>treaty</b>	<b>ceding</b>	<b>retrocession</b>	<b>facultative</b>

1. The amount of the premium that has been "used up" during the term of a policy is the \_\_\_\_\_ premium.
2. The \_\_\_\_\_ premium is equivalent to the total written premiums, minus the premiums ceded to a reinsurance company, plus any reinsurance assumed.
3. One method of calculating \_\_\_\_\_ losses involves determining the total amount of paid claims and loss reserves associated with a particular period of time, usually a policy year.
4. IBNR refers to losses that have been \_\_\_\_\_ but not \_\_\_\_\_.
5. An insurer's \_\_\_\_\_ is an estimation of the liability for all unpaid claims, including IBNR, that have occurred as of a given date.
6. \_\_\_\_\_ refers to the marginal retention beyond the budgeted retention that an organization may also choose to retain.

## Section 1: Risk Financing Fundamentals

7. With respect to reinsurance, \_\_\_\_\_ refers to a transaction that transfers liability from the reinsurer to another insurer.
8. With \_\_\_\_\_ reinsurance, each exposure that the ceding or primary company wishes to reinsure is offered to the reinsurer as a single transaction.

**Directions:** Select the best response for each of the following questions.

9. Identify one way in which the underwriter's perspective on insurable risks differs from that of the risk manager.
  - The underwriter sees insurable risk as catastrophic, while the risk manager does not.
  - The underwriter views insurable risk as being those that are unique to an organization, while the risk manager believes they should be widely shared.
  - The risk manager considers insurable risk to be easily calculable, while the underwriter sees it as unpredictable.
  - The underwriter views an insurable risk as non-catastrophic, while the risk manager believes it could cripple the organization.
10. Which of the following exposures would *most likely* be considered an insurable risk to an insurance underwriter?
  - Routine wear and tear on machinery
  - The risk of fire damaging a commercial building
  - Damage caused by gradual rust on a vehicle
  - A flood affecting an entire town located in a flood-prone area

## Section 1: Risk Financing Fundamentals

11. Which of the following is an example of a waiver of subrogation being used as a method of contractual risk transfer?
- A tenant's insurance company pays for flood damage caused by the building owner's negligence but cannot pursue the owner for reimbursement due to a pre-existing agreement.
  - A construction contractor includes a clause in a contract limiting liability for any damages caused during the project to the total contract fee.
  - Two neighbors sign an agreement stating that one will not be held responsible for damages caused by cutting down a tree.
  - A contract requires one party to assume all financial responsibility for any injuries or damages that occur during a shared event, regardless of fault.
12. Which of the following is the *most likely* reason why an organization might choose to retain the cost of a risk rather than insure it?
- The organization expects a large loss that would overwhelm its reserves.
  - The insurance premium is more expensive than the expected cost of losses.
  - The organization has had bad experiences with insurance companies in the past.
  - The organization rarely experiences losses and thus does not require insurance.
13. Why might an organization use a Retention/External Financing Diagram when making risk financing decisions?
- To visually compare the cost of externally insuring all risks versus self-insuring all risks
  - To depict the total number of claims it expects to receive in a given period
  - To determine the right balance between the organization's internal funds and external risk financing options
  - To eliminate the need for external financing by maximizing budgeted retention

## Section 1: Risk Financing Fundamentals

14. A risk manager at XYZ Corp is reviewing claims data and finds that the company regularly incurs \$8,000 in small claims for equipment damage under \$1,000 each year. XYZ Corp is considering setting a budgeted retention of \$10,000 for these claims and creating a tolerance corridor for claims between \$1,000 and \$3,000. How might the risk manager use a Retention/External Financing Diagram to determine which risks to retain and which to externally finance?
- Retain all claims up to \$10,000 and purchase insurance for claims over \$10,000.
  - Retain claims under \$1,000 and externally finance claims over \$1,000.
  - Retain claims up to \$3,000 and purchase insurance for individual claims exceeding \$3,000.
  - Retain all claims, eliminating the need for external financing entirely.
15. Which of the following scenarios is an example of pro rata reinsurance?
- An insurer retains \$500,000 of each claim and reinsures any losses that exceed this amount with a reinsurer up to \$1,000,000.
  - An insurer is reimbursed by a reinsurer only when the total claims for a policy period exceed a loss ratio of 70%.
  - An insurer retains the first \$100,000 of every claim and reinsures the rest with a reinsurer, up to a limit of \$500,000.
  - An insurer shares 50% of all premiums and 50% of all losses for a particular class of risk with a reinsurer, regardless of the size of the claim.

# Section 2: Risk Financing Program Decision-Making

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## External and Internal Sources of Risk Financing

### ▶▶ Knowledge Check



**Directions:** Read the scenario below and respond to the prompts.

Cafe Italiano is a neighborhood trattoria. It has about 15 tables and serves about 60 meals on a weekend night. The kitchen staff is comprised of two line chefs, four sous chefs, and an expeditor. The restaurant offers valet parking. The management team is reviewing the potential exposures the restaurant faces.

For each of the exposures listed below, determine whether internal financing, external financing, or a combination of the two would be a good fit.

1. Knife cuts sustained by the kitchen staff

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2. Food poisoning

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## Section 2: Risk Financing Program Decision-Making

3. Patrons slipping and falling due to food on the floor

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4. Damage to patrons' vehicles during valet parking

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# Loss-Indicated Premiums



## ▶▶ Knowledge Check

**Directions:** Answer the questions associated with the following scenario.

You have estimated your losses for the coming year at \$300,000. Your underwriter has told you the expense ratio for this line of business is 40%.

1. What is the loss-indicated premium?

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2. If the premium quoted by the underwriter is \$600,000, should you purchase this policy? Why?

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3. If the premium quoted by the underwriter is \$400,000, should you purchase this policy? Why?

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4. If the premium quoted by the underwriter is \$510,000, should you purchase this policy? Why?

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# Total Cost of Risk (TCOR)



## ▶▶ Knowledge Check

**Directions:** Read the scenario and complete the exercise.

Nancy, the chief financial officer of Pinnacle All World ATVs, asked you, as the risk manager, to prepare a total cost of risk report. The organization has a general liability policy with a \$2,000,000 deductible per-occurrence and self-insures property damage for the company-owned vehicles.

1. Based on the following information, fill in the table. Indicate (yes or no) if the item should be included in the total cost of risk AND provide the reason for your decision.

Costs	Include in the TCOR?	Reasoning
Insurance premiums for all lines of coverage \$300,000		
Repairs of office equipment damaged by an employee's negligence \$20,000		
Settlement of a general liability claim paid by the insurer and billed back to the insured \$55,000		
Safety consultant hired to perform physical inspections at each of the locations \$10,000		

Section 2: Risk Financing Program Decision-Making

Costs	Include in the TCOR?	Reasoning
The recovery of damage to a company-owned vehicle from a negligent driver's insurer  \$4,000		
Salary of the director of marketing, including her benefits  \$65,000		
Overtime paid to an employee covering for another employee who was out of work recovering from a work-related accident  \$15,000		

2. What is Pinnacle's total cost of risk?

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# Characteristics of Risk Financing

## Check-In



**Directions:** Indicate whether each statement is true or false.

1. The degree of loss sensitivity is the impact that only the frequency of losses will have on the risk financing program.

**True**

**False**

2. Top-down pricing typically begins by analyzing the insured's own loss experience.

**True**

**False**

3. Collateral is a form of property or funds pledged to an insurer to assure repayment in case the insured defaults on obligations.

**True**

**False**

4. A major disadvantage of bottom-up pricing is that if loss predictions are incorrect, it can lead to inappropriate premium pricing.

**True**

**False**

5. The insured does not need to update exposure data frequently to ensure accurate collateral requirements.

**True**

**False**

## Section 2: Risk Financing Program Decision-Making

### Check-In



**Directions** Review the scenarios and determine if a low- or high-retention plan is needed.

	Low- or High-Retention Plan?
1. Your organization prefers a plan with little to no collateral requirement.	
2. Plan flexibility is extremely important to your organization.	
3. Your organization is looking for a plan with cash flow advantages.	
4. Your organization prefers a plan with pre-bundled services.	

» Knowledge Check



**Directions:** For each of the scenarios below, state which risk financing characteristic would be most important and provide a brief explanation for your answer.

1. A technology startup needs an insurance plan that accounts for its rapidly evolving product lines and fluctuating workforce.

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2. A construction company wants to retain control over claims management and loss control processes, such as ensuring prompt resolution of workplace injury claims to prevent escalating medical costs and prolonged employee absences.

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3. A retail chain seeks a guaranteed cost insurance policy that sets fixed premiums to avoid unexpected increases in insurance costs during the fiscal year.

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4. A healthcare provider prefers a large deductible insurance plan that reduces premium costs and allows them to allocate cash to other operational needs, paying claims as they arise.

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## Section 2 Self-Quiz

**Directions:** Match the risk financing terms to their definitions.

A. Waiver of subrogation	_____ An arrangement in which Party A agrees to make Party B whole if a loss results from Party A's operations or negligence
B. Hold harmless agreement	_____ A pre-event agreement preventing an insurance carrier from recovering the payments it makes on a claim from a third party
C. Maintenance deductible	_____ The use of external funds to finance risks from one entity to another in exchange for a premium
D. Indemnity agreement	_____ An arrangement whereby one party assumes the financial liability inherent in a situation, thereby relieving another party of that liability
E. Insurance	_____ State-chartered insurance companies that are owned by their members and insure commercial businesses and government entities against liability risks
F. Risk retention and risk purchasing groups	_____ Relatively small deductibles that is standard on many insurance policies and must be paid before the insurer will pay out a claim
G. Small deductible	_____ An optional deductible amount the insured can choose to assume in exchange for a premium reduction; usually does not require collateral

## Section 2: Risk Financing Program Decision-Making

**Directions:** Select the best response for the following questions.

1. Which of the following is an example of a non-insurance, external risk financing option?
  - Purchasing a general liability policy
  - Using a self-insured retention (SIR) for liability claims
  - Requiring a contractor to sign a hold harmless agreement
  - An unplanned risk retention
  
2. Which of the following best describes the key difference between a large deductible and a self-insured retention (SIR)?
  - With a large deductible, the insured organization controls the payment of losses and defense costs, whereas with a SIR, the insurance company is responsible for claims handling from the start.
  - With a large deductible, the insurance company handles claims and pays losses upfront, whereas with a SIR, the insured organization is responsible for paying losses and defense costs until the retention limit is reached.
  - A large deductible requires the organization to pay for all claims costs directly, while a SIR involves only partial responsibility for claims.
  - A self-insured retention is always larger than a large deductible and requires less risk management control by the insured organization.

## Section 2: Risk Financing Program Decision-Making

3. Crescent Manufacturing is evaluating how to manage its risk of property damage due to frequent machinery breakdowns. The company has experienced a few significant losses in the past, and its cash flow is not stable enough to absorb large unexpected expenses. The CFO is concerned about the potential financial impact of future losses and wants to protect the company's assets without using too much of its own funds.

Which option is most likely to meet Crescent Manufacturing's needs?

- Setting aside internal funds to cover any future machinery breakdown losses (self-insurance)
  - Implementing a small-deductible policy and paying claims directly from company funds as losses arise
  - Increasing retention amounts and using the company's savings to finance losses internally
  - Purchasing an insurance policy to transfer the financial responsibility of future machinery breakdown losses to a third party
4. Which of the following equations correctly illustrates how to calculate a loss-indicated premium?
- $X = Z/(1-Y)$ , where  $X$  = the loss-indicated premium,  $Z$  = losses, and  $Y$  = expense ratio
  - $X = Z/(1-Y)$ , where  $X$  = the loss-indicated premium,  $Z$  = expense ratio, and  $Y$  = losses
  - $X = (1-Y)/Z$ , where  $X$  = the loss-indicated premium,  $Z$  = losses, and  $Y$  = expense ratio
  - $X = (1-Y)/Z$ , where  $X$  = the loss-indicated premium,  $Z$  = expense ratio, and  $Y$  = losses

## Section 2: Risk Financing Program Decision-Making

5. XYZ Corporation has estimated that its expected losses for the upcoming year will be \$600,000. The underwriter has informed the company that the expense ratio for this line of business is 25%.

What is the loss-indicated premium XYZ Corporation should expect?

- \$600,000
  - \$750,000
  - \$800,000
  - \$900,000
6. ABC Corporation has estimated its expected losses for the upcoming year to be \$500,000, and the underwriter has informed them that the expense ratio is 20%. The quoted premium for an insurance policy is \$525,000. Based on this information, what action should the risk manager take?
- Purchase the insurance because the quoted premium is less than the loss-indicated premium
  - Retain the risk because the quoted premium is less than the loss-indicated premium
  - Purchase excess insurance because the quoted premium is significantly greater than the loss-indicated premium
  - Consider qualitative factors because the difference between the quoted premium and the loss-indicated premium is small
7. Which of the following is an example of a quantifiable indirect cost in total cost of risk (TCOR)?
- Premiums paid for insurance coverage
  - Deductibles paid for self-insured claims
  - Payroll costs for the risk management department
  - The cost of additional safety training following a workplace accident

## Section 2: Risk Financing Program Decision-Making

8. A risk manager at Summit Outdoor Equipment is reviewing the company's risk financing strategy. They are considering increasing the deductible on their general liability policy, which would reduce insurance premiums but increase retained losses. How should the total cost of risk (TCOR) be used to guide this decision?
- By ensuring that the total amount of retained losses remains lower than insurance premiums
  - By evaluating the trade-off between reduced insurance premiums and the potential increase in retained losses
  - By focusing on minimizing external service costs and risk management department costs
  - By maximizing insurance coverage to eliminate the need for any retention of losses
9. An organization paid \$15,000 in legal fees for handling a self-insured claim. Which type of TCOR component does this cost fall under?
- Insurance costs
  - Retained losses
  - Risk management department costs
  - Quantifiable indirect costs

## Section 2: Risk Financing Program Decision-Making

**Directions:** Fill in the blanks using the terms and phrases in the word bank.

<b>degree of loss sensitivity</b>	<b>degree of certainty</b>	<b>costs/pricing</b>	<b>collateral requirements</b>	<b>cash flow</b>
<b>accounting/tax impact</b>	<b>plan flexibility</b>	<b>service options</b>	<b>degree of retention</b>	<b>resources</b>
<b>risk appetite</b>	<b>financial flexibility</b>	<b>fluctuations</b>	<b>compliance</b>	<b>cost containment</b>

10. The predictability of the costs associated with financing risk is known as the \_\_\_\_\_. It is important because it allows an organization to effectively manage \_\_\_\_\_.
11. \_\_\_\_\_ refer to the assets provided as security to ensure the satisfaction of a future liability. This is an important consideration, as it can tie up \_\_\_\_\_ and restrict the ability of the organization to borrow additional funds at favorable terms or qualify for surety bonds.
12. The deductibility of premiums and losses and the recording requirements for losses and loss reserves are components of \_\_\_\_\_. It is essential for a risk manager to understand and adhere to \_\_\_\_\_ requirements.
13. \_\_\_\_\_ include loss control, actuarial assistance, and claims administration and can impact an organization's degree of responsibility, control, and \_\_\_\_\_.
14. An organization's levels of internal versus external financing make up its \_\_\_\_\_ and can greatly affect the organization's ability to absorb financial \_\_\_\_\_ and the responsibility of the claims and loss control processes.

# Section 3: Methods for Risk Financing

## Evaluating Simple Risk Financing Options

### Check-In



**Directions:** Using the word bank, complete the statements below; not all words will necessarily be used.

fully insured	dividend	small-deductible	sliding scale
flat	cash flow	projected	future

1. A \_\_\_\_\_ plan creates stability in the TCOR.
2. A \_\_\_\_\_ plan be either a \_\_\_\_\_ or a \_\_\_\_\_ form.
3. The insured reimburses them for a percentage of losses paid under a \_\_\_\_\_ plan.
4. A plan with virtually no cash flow is a \_\_\_\_\_ plan.
5. One key factor influencing the use of dividend plans is the level of confidence in \_\_\_\_\_ losses.



# Retrospectively Rated Plans

## Check-In



**Directions:** Match the term with its description.

A. Non-subject premium	<p>_____ Typically calculated as a percentage of the standard premium by applying a basic premium factor</p>
B. Standard premium	<p>_____ A modifier of the retrospective rating formula to allow for claim adjustment expenses and the cost of the insurer's (or third-party administrator's) claim services</p>
C. Basic premium	<p>_____ Limits the financial responsibility of the insured</p>
D. Loss conversion factor	<p>_____ Premium with guaranteed cost and do not adjusted based on losses</p>
E. Maximum premium	<p>_____ Calculated by multiplying the policy rate by the exposure base</p>

## ▶▶ Knowledge Check



**Directions:** Read the scenario below and respond to the question.

Smithville Widget Company has been diligently benchmarking its production, sales, and losses over the past few years to improve quality and reduce losses. Thanks to the efforts of their risk manager, they have seen significant improvements in operational efficiency and cost control. Now, as they prepare to renew their workers compensation insurance, the company is presented with the option of a retrospectively rated plan.

**Question:** How could Smithville Widget Company's focus on benchmarking and reducing losses impact their decision to adopt a retrospectively rated workers compensation plan, and what are the potential benefits of this approach?

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# Self-Insurance Plans



## ▶▶ Knowledge Check

**Directions:** Read the scenario below and respond to the prompts.

Big Company is one of the largest corporations in the U.S. and worldwide. They have decided to self-insure all exposures starting next year. Management identifies its biggest risks as property, general liability, automobile liability, workers compensation, and executive risks (D&O, EPL, and fiduciary).

Six months into the self-insurance program, Big Company receives violation notices from several state insurance departments, stating that they lack workers compensation and automobile insurance. The notice does not mention the other three coverage areas.

1. Explain why those states would send a notice for workers compensation and automobile liability but not for property, general liability, and executive risks.

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2. Explain what Big Company will have to provide to satisfy the insurance regulators and other governmental agencies in those states.

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## Section 3 Self-Quiz

**Directions:** Select the best response for the following questions.

1. What is a key characteristic that distinguishes simple risk financing options from more complex plans like retrospectively rated or large deductible plans?
  - Simple risk financing options provide fully customizable policy terms and conditions.
  - Simple risk financing options rely on standard insurance policy terms with minimal internal financing.
  - Simple risk financing options exclude the possibility of installment payment plans for premiums.
  - Simple risk financing options are only available from surplus lines carriers.
  
2. Which of the following is a primary advantage of a basic fully insured plan?
  - Significant cash flow benefits for the insured organization
  - High flexibility and customization options for coverage
  - Certainty in budgeting for insurable losses and minimal responsibility for claims handling
  - Lower overall costs compared to other risk financing options
  
3. What is a key disadvantage of basic fully insured plans for risk financing?
  - They provide significant cash flow advantages to the insured organization.
  - They offer extensive customization options for coverage and services.
  - They encourage short-term incentives to reduce losses and lower the Total Cost of Risk.
  - They are generally expensive due to insurer overhead costs and lack cash flow benefits for the insured.

### Section 3: Methods for Risk Financing

4. Which statement best describes a disadvantage of dividend plans for risk financing?
- Dividends are uncertain, and a single severe claim can significantly impact results.
  - Premiums are not deductible under dividend plans, unlike guaranteed cost plans.
  - Dividend plans guarantee refunds to the insured regardless of losses or claims.
  - The insured has complete control over claim management and reserving processes.
5. Which of the following factors is most important when choosing a dividend plan?
- Availability of high-deductible options for reduced premium costs
  - Insurer's dividend history and consistency in declarations
  - Guaranteed actuarial precision in loss projections
  - Contractual guarantee of dividend payments
6. Why are Letters of Credit (LOCs) the most commonly used form of collateral in high-deductible plans?
- They require no fees or financial commitments from the insured.
  - They allow the insured to increase their borrowing capacity for operational needs.
  - They are pre-qualified loans that guarantee funds availability to the insurer.
  - They eliminate the need for interest rates on borrowed funds.
7. Which form of collateral involves a three-party contract that guarantees payment to the insurer if the insured fails to fulfill their obligations?
- Certificates of Deposit (CDs)
  - Surety Bonds
  - Accounts Receivable
  - Cash and cash equivalents

### Section 3: Methods for Risk Financing

8. What is the primary difference between prospective and retrospective rating methods in insurance policies?
- Prospective rating adjusts premiums annually, while retrospective rating is fixed throughout the policy term.
  - Prospective rating applies only to large deductible plans, while retrospective rating applies only to small-deductible plans.
  - Prospective rating uses loss experience for adjustments, while retrospective rating relies on manual rates without adjustments.
  - Prospective rating sets premiums before the policy begins, while retrospective rating adjusts premiums during and after the policy period based on actual losses.
9. Which of the following is true about retrospectively rated plans?
- Premium adjustments occur before the policy expires, based on anticipated losses.
  - Adjustments are made periodically based on actual loss experience until all claims are resolved.
  - The insured is not at risk of higher premium adjustments regardless of claim outcomes.
  - Insurers bear no financial risk since premiums are fixed at the policy's inception.
10. Which statement accurately describes a characteristic of paid-loss and incurred-loss retrospective rating plans?
- Once all losses are finalized, both paid-loss and incurred-loss plans result in the same total premium.
  - Paid-loss plans require a higher initial outlay but eliminate the need for collateral.
  - Incurred-loss plans determine premiums using losses already paid by the insurer.
  - Deferred premium plans and depressed premium plans provide identical cash flow advantages.

### Section 3: Methods for Risk Financing

11. Retrospectively rated plans allow for premium adjustments based on the insured's actual loss experience, which can result in either a refund or additional charges.

**True**

**False**

12. Self-insurance is considered a pooled risk strategy, where multiple organizations share the cost of losses through collective premium contributions.

**True**

**False**

13. Self-insurance is the most cost-effective method for managing predictable losses, as it eliminates insurer profit, contingency loadings, and premium taxes.

**True**

**False**

## Section 3: Methods for Risk Financing

# Section 4: The Risk Financing Team

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## Introduction

### » Knowledge Check



**Directions:** For each task presented in the following scenario, determine whether the organization should engage an **actuary** or an **accountant** and explain your reasoning.

A mid-sized insurance company is reviewing its risk financing strategies to ensure long-term financial stability. The company faces the following two tasks:

**Task 1:** Assess whether the reserves set aside for current and future claims are sufficient based on historical data trends and potential future risks.

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**Task 2:** Ensure that the organization's annual financial statements accurately reflect the costs associated with claims, including compliance with relevant accounting standards.

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# Insurance Provider Selection

## Check-In



**Directions:** Using the words from the word bank, complete the statements below.

<b>timeline</b>	<b>broad assignment</b>	<b>conceptual bidding</b>	<b>accountant</b>
<b>mathematical</b>	<b>open bidding</b>	<b>statistical</b>	

1. Actuaries use \_\_\_\_\_ and \_\_\_\_\_ models based on historical data to determine, assess, and plan for the financial impact of risks.
2. A(n) \_\_\_\_\_ provides a primary mechanism for a review of risk financing results as reflected on financial statements.
3. In a(n) \_\_\_\_\_ process, any agency may respond to an advertisement or notice.
4. When the agent presents their qualifications and experience as the primary focus of the selection process, it is considered \_\_\_\_\_.
5. A(n) \_\_\_\_\_ designates the agent or broker as the organization's agent or broker of record, granting them authority to approach all insurance markets or service providers to negotiate on the organization's behalf.
6. The RFP should include a(n) \_\_\_\_\_ for submission.

## » Knowledge Check



**Directions:** Read the scenario and respond.

The top management of Acme Corporation decides that they will invite three insurance procurement providers: Frank Wilson (the brother-in-law and the local broker), International Insurance Services (a national brokerage), and Quality Mutual (a direct writer), to provide proposals.

What are the insurance provider considerations that management should evaluate during the selection process? Be sure to explain your answers.

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## Actuarial Services

### Check-In



**Directions:** Select the correct response for each of the following questions.

1. Which of the following is a risk financing function of actuaries?
  - Managing claim reserves
  - Calculating IBNR reserves
  - Pursuing subrogation recoveries
  
2. Which of the following is a claims management function?
  - Verifying the notes to the financial statements
  - Settling claims for the lowest amount possible
  - Setting high reserves to account for the impact of inflation
  - Mitigating damages
  
3. Consistent economic conditions and legal environments contribute to:
  - Reserve instability
  - Equitable resolution of claims
  - Reserve stability
  - Favorable loss experience
  
4. An adjuster who makes checks payable to an accomplice and codes them to a claim file is committing:
  - Systemic fraud
  - Burglary
  - A felony
  - Bad faith

## ▶ Knowledge Check



**Directions:** Read the scenario and respond.

Acme Dynamite Company is in the final stages of acquiring Anvil Industries. One of the major issues remaining to be decided in the purchase agreement is the existence of loss reserves in the Anvil Industries self-funded workers compensation program, which has been managed by three different TPAs over the past six years.

1. Acme’s risk manager, Wiley, believes an actuary can help analyze reserves and identify factors affecting their stability, particularly due to frequent TPA changes. Identify two additional factors that contribute to reserve instability.

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2. Acme’s CEO does not understand why the reserves are an issue and questions why Wiley wants to hire an actuary. He says, “After all, it really doesn’t matter what number you provide, because these reserves don’t affect any real business decisions.” How should Wiley respond to that statement?

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3. Discuss the term materiality of reserves from a risk manager’s perspective.

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## Section 4 Self-Quiz

**Directions:** Select the best response for the following questions.

1. Identify the primary role of an insurance agent or broker in a risk financing program.
  - To investigate claims and negotiate settlements
  - To provide financial analysis and reporting
  - To assess and access the insurance market for the risk manager
  - To offer tax treatment and deductibility advice
  
2. Which of the following professionals is responsible for ensuring compliance with financial regulations and providing financial analysis for risk financing programs?
  - Actuary
  - Financial/Accounting Professional
  - Claims Adjuster
  - Consultant
  
3. How do actuaries contribute to risk financing programs?
  - By negotiating settlements and controlling claim costs
  - By auditing the organization's insurance program and projecting claims costs
  - By structuring risk financing programs for tax efficiency
  - By evaluating internal controls and ensuring financial transparency

## Section 4: The Risk Financing Team

4. Which of the following scenarios would most likely require input from a tax professional in a risk financing program?
- A company is evaluating whether its loss reserves meet industry benchmarks.
  - An organization is determining the appropriate deductible level for its insurance policy.
  - A business wants to understand the implications of forming a captive insurance company.
  - A risk manager is negotiating settlement amounts for third-party claims.
5. Which of the following is a key reason for preparing coverage specifications in the insurance provider selection process?
- To clearly outline the desired insurance program elements and allow for standardized comparisons
  - To ensure that all insurance providers submit the lowest possible bid
  - To eliminate the need for insurance applications
  - To allow agents and brokers to adjust coverage details after the policy is issued
6. Why is it recommended to begin the insurance provider selection process at least six months before the renewal date?
- To allow time for marketing materials to be developed
  - To ensure coverage specifications are finalized after policies are issued
  - To prevent coverage gaps and allow sufficient time for evaluation and negotiation
  - To accommodate last-minute changes in the selection process

## Section 4: The Risk Financing Team

7. What is one of the key challenges of the **open bidding** method for selecting an insurance provider?

- It ensures that the lowest cost provider is always selected.
- It gives all insurance providers equal access to market bids.
- It eliminates the need for qualification checks on agents and brokers.
- It can lead to market blocking, where one agent prevents competitors from obtaining quotes.

8. A professional services contract for an agent or broker should always include a confidentiality and non-disclosure agreement.

**True**

**False**

9. The scope of work in a professional services contract only outlines the objectives of the work, not its limits.

**True**

**False**

10. A professional services contract for an agent or broker typically includes a marketing strategy for the insurance provider.

**True**

**False**

## Section 4: The Risk Financing Team

11. **Directions:** Match the correct term definition to the term name.

A. Agent/Broker Assignment	_____	An evaluation of the professional qualifications and approach of the agent or broker without considering specific insurance proposals
B. Conceptual Bidding	_____	The organization assigns a specific agent or broker to represent them, with or without restrictions.
C. Open Bidding	_____	A public invitation for bids, where any qualified individual or organization can submit a proposal
D. Request for Proposal (RFP)	_____	A formal process where a select group of agents or brokers are invited to submit proposals, outlining their qualifications and approach

12. What is the primary goal of claims management?

- To increase the number of claims filed
- To reduce the financial impact of claims on an organization
- To delay claim settlements
- To increase insurance premiums

13. Which of the following is a factor that contributes to reserve instability?

- Stable economic conditions
- Low employee turnover
- High turnover among management or claims adjusters
- High volume of similar claims

## Section 4: The Risk Financing Team

14. Claims fraud can exist internally, externally, or systemically.

**True**

**False**

15. Accurate reserving is only important for self-insurers and not for insurance carriers.

**True**

**False**

16. What is one of the key roles of an actuary in risk financing?

- Managing claim settlements
- Pursuing subrogation recoveries
- Negotiating claims with TPAs
- Ensuring insurance premiums are reasonable and appropriate

17. What is the primary reason an actuary is involved in the analysis of loss reserves?

- To assess the effectiveness of risk control programs
- To negotiate settlements for claims
- To manage claim payments
- To forecast the future impact of claims and losses

18. Which factor contributes to the instability of loss reserves?

- Stable economic conditions
- A high volume of similar claims
- Inflation and claims development
- Consistent management of claims

## Section 4: The Risk Financing Team

# Section 5: Alternate Risk Financing

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## Considerations for Implementing Alternative Risk Financing Solutions

### ▶▶ Knowledge Check



**Directions:** Read the scenario and answer the question.

Colonial Industries is trying to determine if they should move from a traditional risk financing plan to an alternative one. They are concerned because the state gubernatorial elections are approaching later this year. What are some pertinent issues they should consider?

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# Understanding Risk Pooling



## ▶▶ Knowledge Check

**Directions:** Read the scenario and answer the question.

### Proposed Plan

- Loss fund of \$500,000
- Retained earnings of \$1,000,000
- \$25,000,000 aggregate excess coverage
- \$5,000,000 attachment point

### Current Plan

- Loss fund of \$500,000
- Retained earnings of \$1,000,000
- \$5,000,000 aggregate excess coverage
- \$2,500,000 attachment point

The Spa and Resort Operators Association (SROA) has sponsored a general liability risk pool for the benefit of its members. There are twelve members, nine operators of single-unit spas and the "Big Three:" Hot Springs Health Spas, Mineral Wells Hot Yoga Studios, and Tranquility Resorts, which account for 75% of the exposure-based contributions to the loss fund. However, all members have an equal vote.

The "Big Three" are addressing how the pool would handle catastrophe claims from infections caused by *Mycobacterium avium* complex, *Pseudomonas aeruginosa*, and *Legionella pneumophila* (the most severe, with a 15–20% mortality rate).

An SROA attorney found the average jury award for hot-tub-related deaths is \$2.5M in damages and \$500K in legal expenses.

You have been brought in as an expert to assess how the pool would handle two scenarios in the same policy year:

How would you explain to the board of directors the payment of claims for a single death and multiple deaths, given the current pool coverage?

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# Captive Insurance Companies

## Check-In



**Directions** Indicate what type of captive is being described by each of the following statements.

1. A captive formed to service an organization's clients: \_\_\_\_\_
2. A captive formed to service an organization's members: \_\_\_\_\_
3. A captive formed to service a single organization: \_\_\_\_\_



# Fronting Programs and Captive Insurance: Structure, Purpose, and Risk Considerations

## Check-In



**Directions:** Indicate if the statement is true or false

1. The purpose of a fronting program is to allow an organization to retain and manage their own risks while complying with legal, regulatory, or contractual obligations that require coverage from a highly rated and admitted insurance company.

**True**

**False**

2. Most captives enjoy tax advantages over standard insurance programs because the IRS allows premium deductibility even when tax advantages are a motivation for captive utilization.

**True**

**False**

3. As organizations assume greater levels of risk retention, they may use a captive to gain more flexibility in both pricing and policy structure.

**True**

**False**

4. A captive enables pricing to be more closely aligned with the insured's specific exposure base, rather than the broader average that may not accurately reflect that insured's actual risk of loss.

**True**

**False**





# Finite Risk Insurance



## ▶▶ Knowledge Check

**Directions:** Read the scenario below and answer the questions.

Delta Seabring, a national fraternity, anticipates a wave of claims related to past hazing and misconduct incidents. To manage potential financial exposure, the fraternity opts for a finite risk insurance contract.

Delta hires GDI Actuarial Consultants to assess potential damages based on the limited number of known and settled claims. GDI projects a liability of \$250 million over the next decade. Since past events are not covered by existing insurance policies and former insurers are no longer in business, alternative risk financing is necessary.

Delta decides to establish a finite risk insurance contract with the following parameters:

<b>Limits of coverage:</b>	\$250,000,000
<b>Term:</b>	10 years
<b>Annual premium:</b>	\$25,000,000
<b>Insurer fee:</b>	10%
<b>Interest rate:</b>	2%

Late in the tenth year, a settlement in a class action suit against Delta was reached and the insurance carrier paid out \$150,000,000 in claims.

1. How much money will Delta receive when the contract commutation calculation is completed at the end of the tenth year?

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## Section 5: Alternate Risk Financing

2. What risks were taken during this ten-year period by both Delta and the insurance carrier?

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## Section 5 Self-Quiz

**Directions:** Select the best response for the following questions.

1. Alternative risk financing methods are always designed to transfer risk to an external insurer.

**True**

**False**

2. Which of the following is a primary reason that smaller organizations participate in risk pools?

- To maximize investment earnings for individual members
- To reduce administrative costs by outsourcing operations
- To lower individual exposures by distributing risk among members
- To increase their risk retention and self-insurance capabilities

3. What distinguishes a risk pool from traditional insurance coverage?

- Pools provide higher individual limits than insurance companies.
- Pools combine exposure and loss data to present as a single entity to an underwriter.
- Pools eliminate the need for loss control or claims management services.
- Pools are regulated at the federal level for multi-state coverage.

4. Which of the following scenarios would most likely trigger a joint and several liability assessment?

- A member of the pool achieves strong investment returns.
- A member withdraws from the pool with favorable claims history.
- The pool experiences unexpected adverse claims development.
- The pool secures excess insurance coverage with a low attachment point.

## Section 5: Alternate Risk Financing

5. Which of the following is a key advantage of risk pooling?
- Guaranteed low-cost premiums in all circumstances
  - Higher administrative expenses for improved oversight
  - Reduced financial risk through the removal of member accountability
  - Cost stability due to less vulnerability to insurance market fluctuations
6. Which of the following is a key limitation of risk pooling?
- Members may face additional financial liability if the pool's funds are insufficient.
  - Pools are restricted to only offering coverage for property damage.
  - Pools are unable to adjust coverage to meet members' unique needs.
  - Pools cannot offer excess insurance options for catastrophic losses.
7. Captive insurance companies are owned and controlled by external investors rather than the insured organizations themselves.

**True**

**False**

8. Single-parent captives are typically used by smaller organizations that cannot afford commercial insurance coverage.

**True**

**False**

9. Group captives are composed of unrelated organizations that combine their resources to create a captive insurance company.

**True**

**False**

10. True rent-a-captives provide insurance services exclusively to their sponsors and cannot offer coverage to outside organizations.

**True**

**False**

## Section 5: Alternate Risk Financing

11. Which of the following is a key financial benefit of utilizing a captive insurance program?
- Reduced administrative workload
  - Guaranteed lower premiums compared to traditional insurance
  - Greater control over investment income and surplus management
  - Automatic exemption from U.S. tax laws
12. Which factor increases the likelihood of a tax audit when an organization utilizes a captive?
- Maintaining U.S. bank accounts
  - Using offshore vendors
  - Attempting to shelter earnings for tax evasion purposes
  - Offering customized insurance coverage
13. What is a reason why organizations may seek to form a captive insurance company?
- To ensure coverage for hard-to-insure risks like coastal wind damage
  - To completely eliminate insurance costs
  - To avoid complying with regulatory standards
  - To reduce the organization's workforce
14. Which of the following best describes why premium deductibility can be challenging for captives?
- Captives are exempt from U.S. tax laws.
  - Captives typically have fewer policyholders than traditional insurers.
  - Captives are required to charge significantly higher premiums than commercial insurers.
  - The IRS closely examines whether risk-sharing and genuine risk transfer are present.

Section 5: Alternate Risk Financing

15. A fronting carrier assumes significant underwriting risk when entering a fronting agreement.

**True**

**False**

16. A primary reason that organizations use fronting programs is to meet regulatory or contractual requirements requiring an admitted and financially rated carrier.

**True**

**False**

17. In the event of a claim under a fronting agreement, the claimant receives payment directly from the captive.

**True**

**False**

18. **Directions:** Match the correct step in the captive development process to the corresponding explanation.

A. Licensing	<input type="checkbox"/> Conducting a TCOR analysis and evaluating financial practicality
B. Feasibility determination	<input type="checkbox"/> Choosing a jurisdiction based on capital requirements and regulatory environment
C. Domicile selection	<input type="checkbox"/> Submitting an application with a pro forma financial statement
D. Formation and funding	<input type="checkbox"/> Electing directors, finalizing policies, and ensuring adequate capitalization

19. Regulatory considerations, such as reserving requirements and surplus obligations, can influence decisions made during both the feasibility and domicile selection steps.

**True**

**False**

## Section 5: Alternate Risk Financing

20. Financial considerations, such as capital requirements and investment flexibility, have no impact on the licensing step since those decisions are finalized in earlier steps.

**True**

**False**

21. Operational considerations, such as service provider selection and meeting requirements, are exclusive to the formation and funding stage.

**True**

**False**

22. Because the steps in captive development are sequential, decisions about funding requirements cannot be addressed until the feasibility and domicile selection steps are completed.

**True**

**False**

23. Which of the following best describes why finite risk insurance is termed "finite"?

- It is designed to cover an unlimited range of risks.
- It requires minimal financial commitment from the insured.
- The financial commitment is limited in both time and amount.
- It exclusively covers high-frequency, low-severity risks.

24. In which scenario would finite risk insurance be most appropriate?

- A retail store seeking general liability coverage for frequent customer injuries
- A large self-insurer in a hurricane-prone area seeking coverage for catastrophic property damage
- A manufacturing company in a non-seismic region seeking standard property coverage
- A small business looking for affordable coverage for everyday operational risks

## Section 5: Alternate Risk Financing

25. Which of the following best describes a retrospective finite risk insurance contract?

- A contract that funds future losses that may never occur
- A contract designed to fund known losses that have already occurred but are not yet fully quantified
- A contract designed to cover only environmental risks and catastrophic losses
- A contract that pays dividends based on unused premium funds

26. What is the primary purpose of a loss portfolio transfer (LPT) in finite risk insurance?

- To provide excess coverage for future catastrophic losses
- To eliminate the need for annual premium audits
- To ensure that all policy funds are returned to the insured
- To transfer known but unresolved losses to an insurer in exchange for a premium

27. Which feature of finite risk insurance ensures that the insured may receive unused premium funds at the end of the policy term?

- Commutation
- Policy term
- Cancellation
- Risk transfer

28. Why does finite risk insurance expose insurers to greater credit risk than traditional insurance?

- The insurer is required to cover frequent low-severity claims.
- The insurer's profits are dependent on underwriting results alone.
- The multi-year policy structure increases the risk of paid losses exceeding premium payments over time.
- The insured is allowed to cancel the policy at any time without penalty.

## Section 5: Alternate Risk Financing

29. Which of the following best describes the risk manager's role in managing tax strategies?

- The risk manager is solely responsible for all tax-related decisions.
- The risk manager provides expert tax advice to the organization.
- The risk manager collaborates with tax professionals to assess the tax implications of risk financing decisions.
- The risk manager ensures the organization complies with all tax regulations.

30. What is the primary purpose of a private letter ruling (PLR)?

- To establish new IRS tax laws
- To provide an official IRS decision on complex tax matters specific to a taxpayer's situation
- To determine appropriate risk financing strategies
- To confirm FAS 113 compliance for insurance programs

31. Which of the following statements best describes the "10-10 rule" under FAS 113?

- There must be at least a 10% chance that losses will exceed 110% of the contributed premium.
- The insurance contract must provide at least 10% coverage for losses above \$10,000.
- The insurer must retain at least 10% of its premium as a loss fund.
- The insurance contract must provide a 10-year loss coverage guarantee.

## Section 5: Alternate Risk Financing

# Answer Key

## Section 1: Risk Financing Fundamentals

# Section 1: Risk Financing Fundamentals

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## Risk Financing Terminology

### » Knowledge Check



**Directions:** Read each scenario and answer the questions that follow.

Each answer should contain at least one of the risk financing terms listed above in the text (refer to the LG).

1. On March 31<sup>st</sup> Group X Industries receives a summons and complaint for an accident that occurred the previous October—about which it knew nothing. The agent is worried that the insurance company will automatically raise the premiums due to the accident. The risk manager assures him that the insurance company has made provisions for this type of occurrence. Which risk financing term describes the provisions to which the risk manager is referring?

IBNR—This is an example of a claim which was incurred but had not yet been reported to the insurance company.

2. Cat-o-Rama indoor playground has had numerous claims in the past year. It seems that patrons' cats are biting and scratching the other owners and families. Twice, a series of rabies shots had to be administered. Numerous individuals have tripped over the cats and sustained fractures. Cat-o-Rama receives a notice that their insurance company is not going to pay any further claims and that they may be responsible for paying unsettled claims. What is the most likely reason for this?



The insurance company has paid the policy aggregate (the maximum amount an insurer will pay during a policy period regardless of the number of claims).

## Section 1: Risk Financing Fundamentals

3. Benji, a new producer, knows that he has sold over \$3,000,000 in policy premiums this year. However, when he looks at his commission report, it only shows \$1,750,000 in premiums upon which he is receiving commission. What metric is the agency accountant most likely using to calculate the commissions owed?

The accountant is calculating commissions based on earned premium—the amount of the premium that has been "used up" during the term of a policy. Though Benji has sold \$3,000,000 in premiums, only a portion of those premiums have actually been earned by this point in the year.

# Insurable Risks from Differing Points of View

## ▶▶ Knowledge Check



**Directions:** Respond to the following.

1. Chuck is the risk manager for a fireworks manufacturer. Provide an example of an exposure Chuck might identify as an insurable risk and explain how Chuck might address that risk.

Chuck would consider the exposure of an explosion or an injury to a customer as insurable risks. Based on the inherent danger of this exposure, Chuck would want to transfer that financial responsibility to a third party.

2. What concerns might an insurance underwriter have when determining whether or not this is an insurable risk?

An explosion in a fireworks factory is likely to be a fortuitous risk - one that is unplanned. The underwriter may have access to industry data which may also make this a calculable risk as to average frequency and severity. Similarly, the underwriter would likely have access to data regarding the frequency and severity of fireworks-related injuries, making injuries to customers a calculable risk as well.

# Common Risk Financing Options



## ▶▶ Knowledge Check

**Directions:** Read the scenarios below and identify the type of arrangement each describes.

1. Wilson Designs hires an information technology company, ABC IT, to perform upgrades to its data management system. One of ABC IT's employees is walking across Wilson's office when he trips over a rip in the carpet and breaks his leg. The ABC IT employee files a workers compensation claim. The insurance company pays the claim and then tries to recover its payments from Wilson Designs. The insurance company is unsuccessful because the parties have signed an agreement.

Waiver of Subrogation—the waiver prevents ABC's insurance company from pursuing the responsible party.

2. A photocopier is leased for sixty months for \$500 per month. The photocopier somehow catches fire and burns a large portion of the building. The amount of damages available from the leasing company would be insufficient to cover the needed repairs. The company would not be able to receive more than \$30,000 because of a clause in the lease.

Limit of liability clause—this clause sets the amount recoverable in the case of a loss. With equipment leases this amount is generally the total lease value.

# Risk Financing Decisions

## ▶▶ Knowledge Check

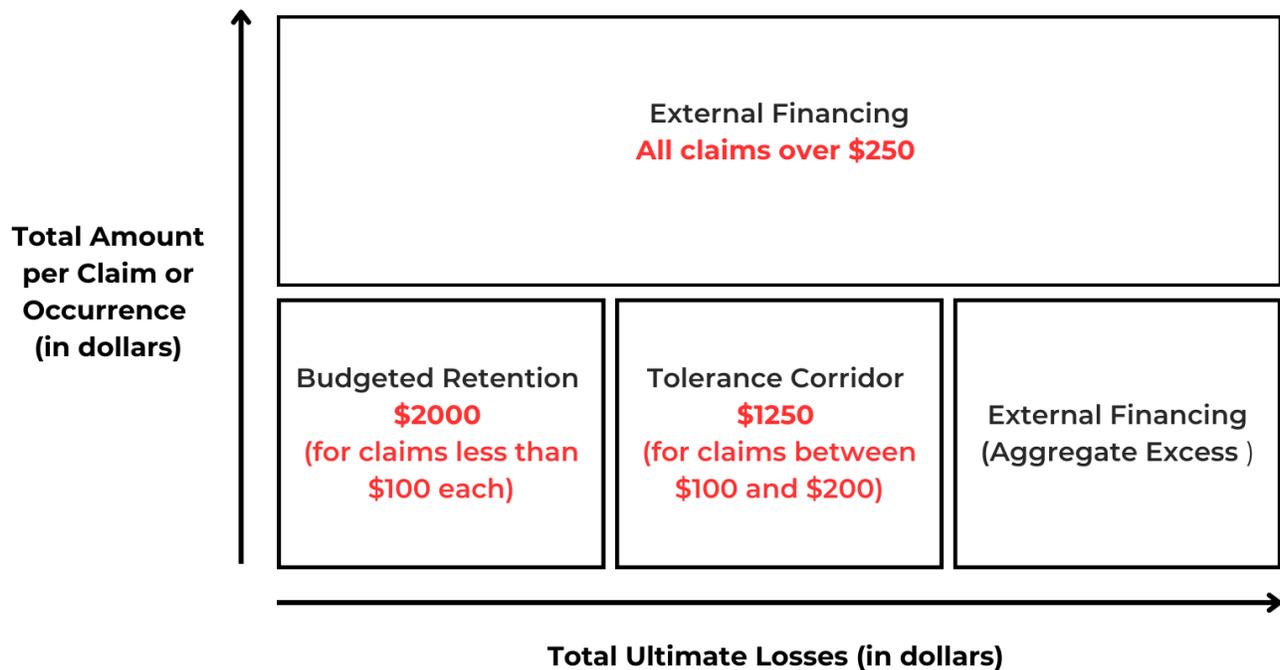


**Directions:** Read the scenario below and complete the Retention/External Financing Diagram.

The risk manager of a framing company knows that it typically costs the company \$7,000 annually for merchandise damaged in transit, such as chipped, broken, or water-damaged wood and glass breakage. The damages are broken down as follows:

- 20 individual damages that run between \$50 and \$100
- Five damages that cost \$100 to \$250
- The remaining balance is for damages over \$250.

Explain your answer.



The risk manager would place the 20 (maximum \$2,000) smaller claims in his budgeted retention, the 5 claims from \$100 to \$250 (maximum \$1250) in the tolerance corridor and obtain excess insurance for claims over \$250. He might also wish to obtain aggregate insurance.

# Reinsurance



## » Knowledge Check

**Directions:** Read the scenarios and respond.

1. Jules is a new underwriter with Alpha Insurance Company. He has had a very frustrating time with his reinsurance submissions to Zenon. No matter the type or size of risk, they are all rejected by the reinsurer. Help Jules by explaining why this may be happening.

Alpha may only have a facultative reinsurance contract with Zenon. If that is the case, Zenon may reject any and all submissions it does not wish to reinsure. Or Jules may be submitting exposures which are outside of the terms of the contract.

2. Emilia is the COO of OMI insurance company. She is concerned with fluctuating operational results. She knows that this is common in the industry yet wishes to have better predictability of results. One option she has identified is reducing the number of high exposure accounts the company accepts, which would impact revenues and reduce some losses. Can you recommend an alternative solution to Emilia?

By reinsuring those high exposure accounts, Emilia will share the risk of high exposure losses. Reinsurance reduces the extremes in loss experience, and stabilizes the insurer's operating results

## Section 1 Self-Quiz

**Directions:** Fill in the blanks using the terms from the word bank. Some terms may be used more than once, and not all terms will be used.

incurred	paid	aggregate	loss reserve	reported
written	net written	earned	unearned	budgeted retention
tolerance corridor	treaty	ceding	retrocession	facultative

1. The amount of the premium that has been "used up" during the term of a policy is the \_\_\_\_\_ premium. earned
2. The \_\_\_\_\_ premium is equivalent to the total written premiums, minus the premiums ceded to a reinsurance company, plus any reinsurance assumed. net written
3. One method of calculating \_\_\_\_\_ losses involves determining the total amount of paid claims and loss reserves associated with a particular period of time, usually a policy year. incurred
4. IBNR refers to losses that have been \_\_\_\_\_ but not \_\_\_\_\_. incurred;  
reported
5. An insurer's \_\_\_\_\_ is an estimation of the liability for all unpaid claims, including IBNR, that have occurred as of a given date. loss reserve
6. \_\_\_\_\_ refers to the marginal retention beyond the budgeted retention that an organization may also choose to retain. Tolerance corridor

## Section 1: Risk Financing Fundamentals

7. With respect to reinsurance, \_\_\_\_\_ refers to a transaction that transfers liability from the reinsurer to another insurer. retrocession
8. With \_\_\_\_\_ reinsurance, each exposure that the ceding or primary company wishes to reinsure is offered to the reinsurer as a single transaction. facultative

**Directions:** Select the best response for each of the following questions.

9. Identify one way in which the underwriter's perspective on insurable risks differs from that of the risk manager.
  - The underwriter sees insurable risk as catastrophic, while the risk manager does not.
  - The underwriter views insurable risk as being those that are unique to an organization, while the risk manager believes they should be widely shared.
  - The risk manager considers insurable risk to be easily calculable, while the underwriter sees it as unpredictable.
  - The underwriter views an insurable risk as non-catastrophic, while the risk manager believes it could cripple the organization.

A risk manager typically seeks insurance for catastrophic risks that could severely impact or cripple their organization, such as natural disasters or significant financial losses. However, the underwriter may reject insuring such catastrophic risks if they are likely to affect many policyholders at once, as this could threaten the insurer's financial stability.

## Section 1: Risk Financing Fundamentals

10. Which of the following exposures would most likely be considered an insurable risk to an insurance underwriter?

- Routine wear and tear on machinery
- The risk of fire damaging a commercial building
- Damage caused by gradual rust on a vehicle
- A flood affecting an entire town located in a flood-prone area

From an underwriter's perspective, the risk of fire is a typical insurable risk because it meets the key elements: it is accidental, definite in terms of loss, and large enough to cause economic distress. Additionally, fire risk can be calculated based on historical data, and it does not generally cause simultaneous losses to many exposure units. Other options, like routine wear and tear or gradual rust, are not considered insurable risks, and flood-prone areas are often excluded due to the catastrophic potential.

11. Which of the following is an example of a waiver of subrogation being used as a method of contractual risk transfer?

- A tenant's insurance company pays for flood damage caused by the building owner's negligence but cannot pursue the owner for reimbursement due to a pre-existing agreement.
- A construction contractor includes a clause in a contract limiting liability for any damages caused during the project to the total contract fee.
- Two neighbors sign an agreement stating that one will not be held responsible for damages caused by cutting down a tree.
- A contract requires one party to assume all financial responsibility for any injuries or damages that occur during a shared event, regardless of fault.

This example describes a waiver of subrogation because the tenant's insurance company is prevented from seeking reimbursement from the responsible party (the building owner), even though the owner was at fault. This type of agreement shifts the risk by waiving the right to recover damages from the party responsible for the loss.

## Section 1: Risk Financing Fundamentals

12. Which of the following is the most likely reason why an organization might choose to retain the cost of a risk rather than insure it?

- The organization expects a large loss that would overwhelm its reserves.
- The insurance premium is more expensive than the expected cost of losses.
- The organization has had bad experiences with insurance companies in the past.
- The organization rarely experiences losses and thus does not require insurance.

An organization might choose to retain the cost of a risk if the cost of purchasing insurance (the premium) is higher than the expected cost of losses. In such cases, the organization might find it more economical to pay for losses using internal funds rather than paying for insurance coverage.

13. Why might an organization use a Retention/External Financing Diagram when making risk financing decisions?

- To visually compare the cost of externally insuring all risks versus self-insuring all risks
- To depict the total number of claims it expects to receive in a given period
- To determine the right balance between the organization's internal funds and external risk financing options
- To eliminate the need for external financing by maximizing budgeted retention

A Retention/External Financing Diagram is used to help an organization visualize its risk tolerance and the balance between how much risk it retains internally and how much it covers through external sources like insurance.

## Section 1: Risk Financing Fundamentals

14. A risk manager at XYZ Corp is reviewing claims data and finds that the company regularly incurs \$8,000 in small claims for equipment damage under \$1,000 each year. XYZ Corp is considering setting a budgeted retention of \$10,000 for these claims and creating a tolerance corridor for claims between \$1,000 and \$3,000. How might the risk manager use a Retention/External Financing Diagram to determine which risks to retain and which to externally finance?

- Retain all claims up to \$10,000 and purchase insurance for claims over \$10,000.
- Retain claims under \$1,000 and externally finance claims over \$1,000.
- Retain claims up to \$3,000 and purchase insurance for individual claims exceeding \$3,000.
- Retain all claims, eliminating the need for external financing entirely.

The risk manager would use the diagram to determine that claims under \$1,000 are covered by the budgeted retention and claims between \$1,000 and \$3,000 fall within the tolerance corridor. Claims over \$3,000 would be financed externally through insurance.

15. Which of the following scenarios is an example of pro rata reinsurance?

- An insurer retains \$500,000 of each claim and reinsures any losses that exceed this amount with a reinsurer up to \$1,000,000.
- An insurer is reimbursed by a reinsurer only when the total claims for a policy period exceed a loss ratio of 70%.
- An insurer retains the first \$100,000 of every claim and reinsures the rest with a reinsurer, up to a limit of \$500,000.
- An insurer shares 50% of all premiums and 50% of all losses for a particular class of risk with a reinsurer, regardless of the size of the claim.

This is an example of pro rata reinsurance (specifically a quota share arrangement), where both premiums and losses are shared proportionally between the insurer and the reinsurer according to a set percentage.

## Section 1: Risk Financing Fundamentals

# Section 2: Risk Financing Program Decision-Making

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## External and Internal Sources of Risk Financing

### ▶▶ Knowledge Check



**Directions:** Read the scenario below and respond to the prompts.

Cafe Italiano is a neighborhood trattoria. It has about 15 tables and serves about 60 meals on a weekend night. The kitchen staff is comprised of two line chefs, four sous chefs, and an expeditor. The restaurant offers valet parking. The management team is reviewing the potential exposures the restaurant faces.

For each of the exposures listed below determine whether internal financing, external financing, or a combination of the two would be a good fit.

1. Knife cuts sustained by the kitchen staff

These injuries are seldom serious and can be financed internally as first aid items.

2. Food poisoning

This type of injury can result in hospitalization and be quite costly. It is best financed externally using an insurance policy.

3. Patrons slipping and falling due to food on the floor

These accidents can vary from no injury to fractured bones and head injuries. They should be financed by a combination of internal financing in the form of a manageable deductible and externally with an insurance policy.

4. Damage to patrons' vehicles during valet parking

These claims should be financed externally through contractual risk transfer—outsourcing the valet services to a third party and also requiring that the restaurant be named as an additional insured on the parking company's insurance policy.

## Loss-Indicated Premiums



### ▶▶ Knowledge Check

**Directions:** Answer the questions associated with the following scenario.

You have estimated your losses for the coming year at \$300,000. Your underwriter has told you the expense ratio for this line of business is 40%.

1. What is the loss-indicated premium?

\$500,000

$$X = \$300,000$$

$$1 - 0.40$$

$$X = \mathbf{\$500,000}$$

2. If the premium quoted by the underwriter is \$600,000, should you purchase this policy? Why?

No, because the quoted premium is significantly greater than the indicated premium.

3. If the premium quoted by the underwriter is \$400,000, should you purchase this policy? Why?

Yes, because the quoted premium is significantly lower than the indicated premium.

4. If the premium quoted by the underwriter is \$510,000, should you purchase this policy? Why?

It depends upon qualitative aspects because the difference between the quoted and indicated premiums is small.

# Total Cost of Risk (TCOR)



## ▶▶ Knowledge Check

**Directions:** Read the scenario and complete the exercise.

Nancy, the chief financial officer of Pinnacle All World ATVs, asked you, as the risk manager, to prepare a total cost of risk report. The organization has a general liability policy with a \$2,000,000 deductible per-occurrence and self-insures property damage for the company-owned vehicles.

1. Based on the following information, fill in the table. Indicate (yes or no) if the item should be included in the total cost of risk AND provide the reason for your decision.

Costs	Include in the TCOR?	Reasoning
Insurance premiums for all lines of coverage \$300,000	Yes	This is an insurance cost.
Repairs of office equipment damaged by an employee's negligence \$20,000	No	This cost is unrelated to risk management or insured losses, and thus is not an element of TCOR.
Settlement of a general liability claim paid by the insurer and billed back to the insured \$55,000	Yes	This is a retained loss.
Safety consultant hired to perform physical inspections at each of the locations \$10,000	Yes	This is an external service cost.

## Section 2: Risk Financing Program Decision-Making

Costs	Include in the TCOR?	Reasoning
The recovery of damage to a company-owned vehicle from a negligent driver's insurer  \$4,000	Yes	This is a credit to the TCOR.
Salary of the director of marketing, including her benefits  \$65,000	No	Marketing is not part of TCOR.
Overtime paid to an employee covering for another employee who was out of work recovering from a work-related accident  \$15,000	Yes	This is an indirect cost associated with an insured event.

2. What is Pinnacle's total cost of risk?

\$376,000 (300,000 + 55,000 + 10,000 - 4,000 + 15,000)

## Characteristics of Risk Financing

### Check-In



**Directions:** Indicate whether each statement is true or false.

1. The degree of loss sensitivity is the impact that only the frequency of losses will have on the risk financing program.

**True**

**False**

The degree of loss sensitivity considers both the frequency and severity of losses and how they impact the risk financing program.

2. Top-down pricing typically begins by analyzing the insured's own loss experience.

**True**

**False**

Top-down pricing uses a base rate established by rating authorities, rather than the insured's own loss experience, which is a characteristic of bottom-up pricing.

3. Collateral is a form of property or funds pledged to an insurer to assure repayment in case the insured defaults on obligations.

**True**

**False**

Collateral, such as cash or letters of credit, helps ensure that insurers are repaid if the insured defaults.

4. A major disadvantage of bottom-up pricing is that if loss predictions are incorrect, it can lead to inappropriate premium pricing.

**True**

**False**

The insured must keep exposure data current to ensure collateral requirements are accurate and appropriately adjusted from one policy period to another.

5. The insured does not need to update exposure data frequently to ensure accurate collateral requirements.

**True**

**False**

The insured must keep exposure data current to ensure collateral requirements are accurate and appropriately adjusted from one policy period to another.

## Check-In



**Directions** Review the scenarios and determine if a low- or high-retention plan is needed.

	Low- or High-Retention Plan?
1. Your organization prefers a plan with little to no collateral requirement.	Low
2. Plan flexibility is extremely important to your organization.	High
3. Your organization is looking for a plan with cash flow advantages.	High
4. Your organization prefers a plan with pre-bundled services.	Low

The greater the risk appetite and risk-taking ability of an organization, the higher the retention they are willing to consider. Similarly, the financial flexibility and the ability of the organization to manage claims influences the selection of retentions.

## » Knowledge Check



**Directions:** For each of the scenarios below, state which risk financing characteristic would be most important and provide a brief explanation for your answer.

1. A technology startup needs an insurance plan that accounts for its rapidly evolving product lines and fluctuating workforce.

Plan flexibility—this company needs a plan that can be customized to meet its specific needs.

2. A construction company wants to retain control over claims management and loss control processes, such as ensuring prompt resolution of workplace injury claims to prevent escalating medical costs and prolonged employee absences.

Service options—this company is seeking a plan that will allow it to contain costs by maintaining a degree of control over claims management and loss control services.

3. A retail chain seeks a guaranteed cost insurance policy that sets fixed premiums to avoid unexpected increases in insurance costs during the fiscal year.

Degree of certainty—this company prioritizes being able to budget for the policy year's claims.

4. A healthcare provider prefers a large deductible insurance plan that reduces premium costs and allows them to allocate cash to other operational needs, paying claims as they arise.

Cash flow—this organization is seeking a plan that will allow for flexibility in the timing and control of risk financing costs, providing financial flexibility.

## Section 2 Self-Quiz

**Directions:** Match the risk financing terms to their definitions.

A. Waiver of subrogation	<u>D</u> An arrangement in which Party A agrees to make Party B whole if a loss results from Party A's operations or negligence
B. Hold harmless agreement	<u>A</u> A pre-event agreement preventing an insurance carrier from recovering the payments it makes on a claim from a third party
C. Maintenance deductible	<u>E</u> The use of external funds to finance risks from one entity to another in exchange for a premium
D. Indemnity agreement	<u>B</u> An arrangement whereby one party assumes the financial liability inherent in a situation, thereby relieving another party of that liability
E. Insurance	<u>F</u> State-chartered insurance companies that are owned by their members and insure commercial businesses and government entities against liability risks
F. Risk retention and risk purchasing groups	<u>C</u> Relatively small deductible that is standard on many insurance policies and must be paid before the insurer will pay out a claim
G. Small deductible	<u>G</u> An optional deductible amount the insured can choose to assume in exchange for a premium reduction; usually does not require collateral

## Section 2: Risk Financing Program Decision-Making

**Directions:** Select the best response for the following questions.

1. Which of the following is an example of a non-insurance, external risk financing option?

- Purchasing a general liability policy
- Using a self-insured retention (SIR) for liability claims
- Requiring a contractor to sign a hold harmless agreement
- An unplanned risk retention

A hold-harmless agreement is a non-insurance transfer where one party assumes the financial liability, transferring the risk to a third party without the involvement of an insurance company.

2. Which of the following best describes the key difference between a large deductible and a self-insured retention (SIR)?

- With a large deductible, the insured organization controls the payment of losses and defense costs, whereas with a SIR, the insurance company is responsible for claims handling from the start.
- With a large deductible, the insurance company handles claims and pays losses upfront, whereas with a SIR, the insured organization is responsible for paying losses and defense costs until the retention limit is reached.
- A large deductible requires the organization to pay for all claims costs directly, while a SIR involves only partial responsibility for claims.
- A self-insured retention is always larger than a large deductible and requires less risk management control by the insured organization.

With a large deductible, the insurance company controls claims handling and pays for losses upfront, billing the insured for the deductible amount later. In contrast, with a SIR, the insured organization manages and pays for losses, including defense costs, until the retention amount is met.

## Section 2: Risk Financing Program Decision-Making

3. Crescent Manufacturing is evaluating how to manage its risk of property damage due to frequent machinery breakdowns. The company has experienced a few significant losses in the past, and its cash flow is not stable enough to absorb large unexpected expenses. The CFO is concerned about the potential financial impact of future losses and wants to protect the company's assets without using too much of its own funds.

Which option is most likely to meet Crescent Manufacturing's needs?

- Setting aside internal funds to cover any future machinery breakdown losses (self-insurance)
- Implementing a small-deductible policy and paying claims directly from company funds as losses arise
- Increasing retention amounts and using the company's savings to finance losses internally
- Purchasing an insurance policy to transfer the financial responsibility of future machinery breakdown losses to a third party

Crescent Manufacturing's unstable cash flow and concern over absorbing large expenses suggest that external risk financing, such as purchasing insurance, would be the best choice. This option transfers the financial responsibility to a third party, protecting the company's assets without relying on internal funds.

4. Which of the following equations correctly illustrates how to calculate a loss-indicated premium?

- $X = Z/(1-Y)$ , where  $X$  = the loss-indicated premium,  $Z$  = losses, and  $Y$  = expense ratio
- $X = Z/(1-Y)$ , where  $X$  = the loss-indicated premium,  $Z$  = expense ratio, and  $Y$  = losses
- $X = (1-Y)/Z$ , where  $X$  = the loss-indicated premium,  $Z$  = losses, and  $Y$  = expense ratio
- $X = (1-Y)/Z$ , where  $X$  = the loss-indicated premium,  $Z$  = expense ratio, and  $Y$  = losses

To review this formula, see "Loss-Indicated Premium Formula" in Section 2 of the Learning Guide.

## Section 2: Risk Financing Program Decision-Making

5. XYZ Corporation has estimated that its expected losses for the upcoming year will be \$600,000. The underwriter has informed the company that the expense ratio for this line of business is 25%.

What is the loss-indicated premium XYZ Corporation should expect?

- \$600,000
- \$750,000
- \$800,000
- \$900,000

The loss-indicated premium is calculated using the formula:

$$\text{Loss-Indicated Premium} = \frac{\text{Expected Losses}}{1 - \text{Expense Ratio}}$$

Substituting the Values:

$$X \text{ (loss-indicated premium)} = \frac{\$600,000}{1 - 0.25}$$

$$X \text{ (loss-indicated premium)} = \frac{\$600,000}{0.75}$$

$$X = \$800,000$$

Thus, the loss-indicated premium is \$800,000.

## Section 2: Risk Financing Program Decision-Making

6. ABC Corporation has estimated its expected losses for the upcoming year to be \$500,000, and the underwriter has informed them that the expense ratio is 20%. The quoted premium for an insurance policy is \$525,000. Based on this information, what action should the risk manager take?
- Purchase the insurance because the quoted premium is less than the loss-indicated premium
  - Retain the risk because the quoted premium is less than the loss-indicated premium
  - Purchase excess insurance because the quoted premium is significantly greater than the loss-indicated premium
  - Consider qualitative factors because the difference between the quoted premium and the loss-indicated premium is small

First, calculate the loss-indicated premium using the formula:

$$X (\text{loss-indicated premium}) = \frac{\$500,000}{1-0.20}$$

$$X (\text{loss-indicated premium}) = \frac{\$500,000}{0.80}$$

$$\text{Loss-indicated premium} = \$625,000$$

Since the quoted premium of \$525,000 is significantly less than the loss-indicated premium of \$625,000, it is more efficient to retain the risk rather than purchase the insurance.

## Section 2: Risk Financing Program Decision-Making

7. Which of the following is an example of a quantifiable indirect cost in total cost of risk (TCOR)?

- Premiums paid for insurance coverage
- Deductibles paid for self-insured claims
- Payroll costs for the risk management department
- The cost of additional safety training following a workplace accident

Additional safety training is a quantifiable indirect cost of an insured event (in this case a workplace accident).

8. A risk manager at Summit Outdoor Equipment is reviewing the company's risk financing strategy. They are considering increasing the deductible on their general liability policy, which would reduce insurance premiums but increase retained losses. How should the total cost of risk (TCOR) be used to guide this decision?

- By ensuring that the total amount of retained losses remains lower than insurance premiums
- By evaluating the trade-off between reduced insurance premiums and the potential increase in retained losses
- By focusing on minimizing external service costs and risk management department costs
- By maximizing insurance coverage to eliminate the need for any retention of losses

TCOR helps the risk manager find a balance between reducing insurance premiums and handling higher retained losses, such as deductibles. By increasing the deductible, premiums go down, but the company takes on more risk by paying more out-of-pocket for claims. TCOR guides the decision by evaluating whether the savings from lower premiums are worth the potential increase in claims costs, ensuring that the overall risk financing strategy is cost-effective. The other options either ignore this trade-off or focus too narrowly on other cost factors.

## Section 2: Risk Financing Program Decision-Making

9. An organization paid \$15,000 in legal fees for handling a self-insured claim. Which type of TCOR component does this cost fall under?

- Insurance costs
- Retained losses
- Risk management department costs
- Quantifiable indirect costs

The \$15,000 in legal fees for handling a self-insured claim falls under the category of retained losses. Retained losses include costs associated with claims that an organization chooses to self-insure, such as deductibles, self-insured retentions, and any expenses related to managing those claims. Legal fees incurred while addressing self-insured claims are considered part of the allocated loss adjustment expenses (ALAE), which are specifically categorized under retained losses.

**Directions:** Fill in the blanks using the terms and phrases in the word bank.

<b>degree of loss sensitivity</b>	<b>degree of certainty</b>	<b>costs/pricing</b>	<b>collateral requirements</b>	<b>cash flow</b>
<b>accounting/tax impact</b>	<b>plan flexibility</b>	<b>service options</b>	<b>degree of retention</b>	<b>resources</b>
<b>risk appetite</b>	<b>financial flexibility</b>	<b>fluctuations</b>	<b>compliance</b>	<b>cost containment</b>

10. The predictability of the costs associated with financing risk is known as the \_\_\_\_\_. It is important because it allows an organization to effectively manage \_\_\_\_\_.

(degree of certainty; resources)

11. \_\_\_\_\_ refer to the assets provided as security to ensure the satisfaction of a future liability. This is an important consideration, as it can tie up \_\_\_\_\_ and restrict the ability of the organization to borrow additional funds at favorable terms or qualify for surety bonds. (Collateral requirements; cash flow)

## Section 2: Risk Financing Program Decision-Making

12. The deductibility of premiums and losses and the recording requirements for losses and loss reserves are components of \_\_\_\_\_. It is essential for a risk manager to understand and adhere to \_\_\_\_\_ requirements. (accounting/tax impact: compliance)
13. \_\_\_\_\_ include loss control, actuarial assistance, and claims administration and can impact an organization's degree of responsibility, control, and \_\_\_\_\_. (Service options: cost containment)
14. An organization's levels of internal versus external financing make up its \_\_\_\_\_ and can greatly affect the organization's ability to absorb financial \_\_\_\_\_ and the responsibility of the claims and loss control processes. (degree of retention: fluctuations)

## Section 2: Risk Financing Program Decision-Making

## Section 3: Methods for Risk Financing

### Evaluating Simple Risk Financing Options

#### Check-In



**Directions:** Using the word bank, complete the statements below; not all words will necessarily be used.

fully insured	dividend	Small-deductible	sliding scale
flat	cash flow	projected	future

1. A \_\_\_\_\_ plan creates stability in the TCOR. (fully insured)
2. A \_\_\_\_\_ plan be either a \_\_\_\_\_ or a \_\_\_\_\_ form.  
(dividend; flat; sliding scale)
3. The insured reimburses them for a percentage of losses paid under a \_\_\_\_\_ plan. (small deductible)
4. A plan with virtually no cash flow is a \_\_\_\_\_ plan. (fully insured)
5. One key factor influencing the use of dividend plans is the level of confidence in \_\_\_\_\_ losses. (projected)

## » Knowledge Check



**Directions:** Read the scenario below. Identify the basic kind of insurance plan each of the three key executives is most likely to favor and briefly explain why each would favor that plan.

Primus Industries is reviewing insurance proposals without a dedicated risk or insurance manager, relying instead on joint decision-making by the CEO, COO, and CFO.

- **CFO:** A cautious CPA who values strict budgets and financial predictability, she knows exactly what Primus is capable of performing and is unwilling to venture into unknown areas.
- **COO:** Believes progress requires taking some risks but recognizes that too much exposure can be dangerous; he feels the company's effective loss control mainly benefits insurers, not Primus.
- **CEO:** Began his career in Primus's sales department and rose through the ranks; he believes the company is financially strong and should take control of its future—though not by taking excessive risks for minimal rewards.

The CFO is likely to prefer a Guaranteed Cost Plan because it has little risk and little variability in costs.

The COO is likely to prefer a Dividend Plan because he is relatively cautious and wishes to take advantage of their good loss experience.

The CEO is likely to prefer a Deductible Plan because Primus is well-funded and should take more risk within predictable and controllable levels.

## Retrospectively Rated Plans

### Check-In



**Directions:** Match the term with its description.

A. Non-subject premium	<u>D</u>	Typically calculated as a percentage of the standard premium by applying a basic premium factor
B. Standard premium	<u>E</u>	A modifier of the retrospective rating formula to allow for claim adjustment expenses and the cost of the insurer's (or third-party administrator's) claim services
C. Basic premium	<u>A</u>	Limits the financial responsibility of the insured
D. Loss conversion factor	<u>B</u>	Premium with guaranteed cost and do not adjusted based on losses
E. Maximum premium	<u>C</u>	Calculated by multiplying the policy rate by the exposure base

## » Knowledge Check



**Directions:** Read the scenario below and respond to the question.

Smithville Widget Company has been diligently benchmarking its production, sales, and losses over the past few years to improve quality and reduce losses. Thanks to the efforts of their risk manager, they have seen significant improvements in operational efficiency and cost control. Now, as they prepare to renew their workers compensation insurance, the company is presented with the option of a retrospectively rated plan.

**Question:** How could Smithville Widget Company's focus on benchmarking and reducing losses impact their decision to adopt a retrospectively rated workers compensation plan, and what are the potential benefits of this approach?

A retrospectively rated plan essentially “rewards” the insured for a continuous reduction in losses by reducing the policy premium. Each year in the retrospective rating plan will have its own audit and subsequent adjustments, repeating for each new policy term. This can create significant cash flow flexibility. Because Smithville has focused on reducing their losses, they can anticipate premium reductions over the next several years.

# Self-Insurance Plans



## ▶▶ Knowledge Check

**Directions:** Read the scenario below and respond to the prompts.

Big Company is one of the largest corporations in the U.S. and worldwide. They have decided to self-insure all exposures starting next year. Management identifies its biggest risks as property, general liability, automobile liability, workers compensation, and executive risks (D&O, EPL, and fiduciary).

Six months into the self-insurance program, Big Company receives violation notices from several state insurance departments, stating that they lack workers compensation and automobile insurance. The notice does not mention the other three coverage areas.

1. Explain why those states would send a notice for workers compensation and automobile liability but not for property, general liability, and executive risks.

Worker compensation and automobile liability are generally subject to state regulations that provide regulatory oversight to assure statutory financial responsibility (Qualified Self-Insurance Plans). No such regulations apply to general liability, executive risks, or property.

2. Explain what Big Company will have to provide to satisfy the insurance regulators and other governmental agencies in those states.

They will have to request approval and receive certificates of authority to operate as a self-insured entity. To obtain the approval and certificate of authority, they will have to provide actuarial opinions as to reserve adequacy and fund balance sufficiency, and in most cases, purchase excess insurance coverage.

## Section 3 Self-Quiz

**Directions:** Select the best response for the following questions.

1. What is a key characteristic that distinguishes simple risk financing options from more complex plans like retrospectively rated or large deductible plans?

- Simple risk financing options provide fully customizable policy terms and conditions.
- Simple risk financing options rely on standard insurance policy terms with minimal internal financing.
- Simple risk financing options exclude the possibility of installment payment plans for premiums.
- Simple risk financing options are only available from surplus lines carriers.

Simple risk financing options rely on standard insurance policies with minimal internal financing, such as small deductibles, and provide straightforward coverage without the flexibility of more complex plans like retrospectively rated or large deductible plans. They are designed for simplicity and consistency rather than customization or high loss sensitivity.

2. Which of the following is a primary advantage of a basic fully insured plan?

- Significant cash flow benefits for the insured organization
- High flexibility and customization options for coverage
- Certainty in budgeting for insurable losses and minimal responsibility for claims handling
- Lower overall costs compared to other risk financing options

Basic fully insured plans offer predictable costs and reduced administrative burdens, as premiums and deductibles are set upfront, and claims are handled by the insurer. However, they lack flexibility, cash flow benefits, and are often more expensive due to insurer overhead.

### Section 3: Methods for Risk Financing

3. What is a key disadvantage of basic fully insured plans for risk financing?

- They provide significant cash flow advantages to the insured organization.
- They offer extensive customization options for coverage and services.
- They encourage short-term incentives to reduce losses and lower the Total Cost of Risk.
- They are generally expensive due to insurer overhead costs and lack cash flow benefits for the insured.

Basic fully insured plans are costly because insurer expenses, including profit and contingency loadings, significantly increase premiums. They also provide limited or no cash flow benefits to the insured, as the insurance carrier collects premiums upfront while paying losses over time. Additionally, these plans lack flexibility and incentives for short-term loss reduction.

4. Which statement best describes a disadvantage of dividend plans for risk financing?

- Dividends are uncertain, and a single severe claim can significantly impact results.
- Premiums are not deductible under dividend plans, unlike guaranteed cost plans.
- Dividend plans guarantee refunds to the insured regardless of losses or claims.
- The insured has complete control over claim management and reserving processes.

Dividend plans depend on the insurer's discretion to declare a dividend, creating uncertainty for the insured.

### Section 3: Methods for Risk Financing

5. Which of the following factors is most important when choosing a dividend plan?

- Availability of high-deductible options for reduced premium costs
- Insurer's dividend history and consistency in declarations
- Guaranteed actuarial precision in loss projections
- Contractual guarantee of dividend payments

Since dividends are not contractually guaranteed, an insurer's history of consistent dividend declarations is a key factor in choosing a dividend plan.

6. Why are Letters of Credit (LOCs) the most commonly used form of collateral in high-deductible plans?

- They require no fees or financial commitments from the insured.
- They allow the insured to increase their borrowing capacity for operational needs.
- They are pre-qualified loans that guarantee funds availability to the insurer.
- They eliminate the need for interest rates on borrowed funds.

Letters of Credit (LOCs) are a preferred form of collateral in high-deductible plans because they provide a guaranteed line of credit that the insurer can access when necessary.

### Section 3: Methods for Risk Financing

7. Which form of collateral involves a three-party contract that guarantees payment to the insurer if the insured fails to fulfill their obligations?

Certificates of Deposit (CDs)

Surety Bonds

Accounts Receivable

Cash and cash equivalents

Surety bonds are three-party contracts that involve the insured (obligor), the insurer (obligee), and the surety. In this arrangement, the surety promises to cover the insured's obligations—such as reimbursing the insurer for claims paid under a deductible—if the insured defaults.

8. What is the primary difference between prospective and retrospective rating methods in insurance policies?

Prospective rating adjusts premiums annually, while retrospective rating is fixed throughout the policy term.

Prospective rating applies only to large deductible plans, while retrospective rating applies only to small-deductible plans.

Prospective rating uses loss experience for adjustments, while retrospective rating relies on manual rates without adjustments.

Prospective rating sets premiums before the policy begins, while retrospective rating adjusts premiums during and after the policy period based on actual losses.

Prospective rating establishes policy rates before the policy term begins, based on manual rates and anticipated exposures. These rates are fixed except for adjustments due to endorsements or audits for actual exposures. This method is common in guaranteed cost plans.

### Section 3: Methods for Risk Financing

9. Which of the following is true about retrospectively rated plans?

- Premium adjustments occur before the policy expires, based on anticipated losses.
- Adjustments are made periodically based on actual loss experience until all claims are resolved.
- The insured is not at risk of higher premium adjustments regardless of claim outcomes.
- Insurers bear no financial risk since premiums are fixed at the policy's inception.

Retrospectively rated plans adjust premiums periodically, typically on an annual basis, based on actual loss experience rather than just initial estimates.

10. Which statement accurately describes a characteristic of paid-loss and incurred-loss retrospective rating plans?

- Once all losses are finalized, both paid-loss and incurred-loss plans result in the same total premium.
- Paid-loss plans require a higher initial outlay but eliminate the need for collateral.
- Incurred-loss plans determine premiums using losses already paid by the insurer.
- Deferred premium plans and depressed premium plans provide identical cash flow advantages.

Although paid-loss and incurred-loss retrospectively rated plans differ in how and when premiums are adjusted, the total premium paid under both plans will be identical once all losses are fully settled.

11. Retrospectively rated plans allow for premium adjustments based on the insured's actual loss experience, which can result in either a refund or additional charges.

**True**

**False**

Retrospectively rated plans are designed to adjust premiums periodically based on actual loss experience. If losses are lower than expected, the insured may receive a refund; if losses exceed projections, additional premiums are charged. This feature makes retrospective plans highly sensitive to loss performance.

### Section 3: Methods for Risk Financing

12. Self-insurance is considered a pooled risk strategy, where multiple organizations share the cost of losses through collective premium contributions.

**True**

**False**

Self-insurance is not a pooled risk strategy. Unlike traditional insurance, a single organization assumes responsibility for its own risks, though it may purchase excess coverage for catastrophic losses.

13. Self-insurance is the most cost-effective method for managing predictable losses, as it eliminates insurer profit, contingency loadings, and premium taxes.

**True**

**False**

Self-insurance is cost-effective when losses are predictable because it eliminates insurer profit margins, contingency charges, and premium taxes, potentially leading to significant savings. This method also allows for greater control over claims management and loss control efforts, directly benefiting the organization.

## Section 3: Methods for Risk Financing

# Section 4: The Risk Financing Team

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## Introduction

### » Knowledge Check



**Directions:** For each task presented in the following scenario, determine whether the organization should engage an **actuary** or an **accountant** and explain your reasoning.

A mid-sized insurance company is reviewing its risk financing strategies to ensure long-term financial stability. The company faces the following two tasks:

**Task 1:** Assess whether the reserves set aside for current and future claims are sufficient based on historical data trends and potential future risks.

This task would be performed by an actuary. Actuaries use mathematical and statistical models based on historical data to determine, assess, and plan for the financial impact of risk. They also determine the adequacy of loss reserves and anticipated future needs.

**Task 2:** Ensure that the organization's annual financial statements accurately reflect the costs associated with claims, including compliance with relevant accounting standards.

This task would be performed by an accountant. Accountants evaluate the financial implications of various risk management strategies, monitor budgets related to risk financing programs, and ensure accurate reporting of reserves and claims costs. These professionals also ensure compliance with financial regulations and standards.

# Insurance Provider Selection

## Check-In



**Directions:** Using the words from the word bank, complete the statements below.

<b>timeline</b>	<b>broad assignment</b>	<b>conceptual bidding</b>	<b>accountant</b>
<b>mathematical</b>	<b>open bidding</b>	<b>statistical</b>	

1. Actuaries use \_\_\_\_\_ and \_\_\_\_\_ models based on historical data to determine, assess, and plan for the financial impact of risks.  
(mathematical; statistical)
2. A(n) \_\_\_\_\_ provides a primary mechanism for a review of risk financing results as reflected on financial statements. (accountant)
3. In a(n) \_\_\_\_\_ process, any agency may respond to an advertisement or notice. (open bidding)
4. When the agent presents their qualifications and experience as the primary focus of the selection process, it is considered \_\_\_\_\_.  
(conceptual bidding)
5. A(n) \_\_\_\_\_ designates the agent or broker as the organization's agent or broker of record, granting them authority to approach all insurance markets or service providers to negotiate on the organization's behalf.  
(broad assignment)
6. The RFP should include a(n) \_\_\_\_\_ for submission. (timeline)

## » Knowledge Check



**Directions:** Read the scenario and respond.

The top management of Acme Corporation decides that they will invite three insurance procurement providers: Frank Wilson (the brother-in-law and the local broker), International Insurance Services (a national brokerage), and Quality Mutual (a direct writer) to provide proposals.

What are the insurance provider considerations that management should evaluate during the selection process? Be sure to explain your answers.

- In which jurisdiction or jurisdictions are they licensed?
- How long has the provider been in business?
- Who will be on the team? What are their qualifications (experience, professional designations, education, tenure, position in the company)?
- What draft authority does the provider have?
- Does the agency or broker have errors and omissions (professional liability) insurance? What are the limits?
- Has the agency or broker had professional liability losses?
- Summary of services the agency or broker intends to provide
- Listing of carriers represented, direct or through other intermediaries
- Carrier compensation arrangement, including contingent commissions or profit sharing
- References (e.g., insurance company underwriters, and at least one former client)

# The Role of Claims Management



## » Knowledge Check

**Directions:** Read the scenario below and respond.

Arielle, the newly appointed risk manager for Xenon Construction Co., has been examining the company's construction contracts and subcontractor agreements to assess the allocation of financial responsibility for potential losses. During her review, she discovers that her predecessor neglected to enforce several key contractual obligations outlined in these agreements. Determined to address this oversight, Arielle, in collaboration with the company's legal counsel, drafts and issues multiple demand letters to initiate the enforcement process.

Explain how enforcing contractual obligations of others supports risk financing.

Contractual obligations such as hold harmless agreements reduce the amount of money that is paid out in claims, thus reducing the Total Cost of Risk for the organization. By enforcing these obligations, the risk manager/claim manager controls and manages claims expenditures and conserves financial resources.

## Actuarial Services

### Check-In



**Directions:** Select the correct response for each of the following questions.

- Which of the following is a risk financing function of actuaries?
  - Managing claim reserves
  - Calculating IBNR reserves
  - Pursuing subrogation recoveries
- Which of the following is a claims management function?
  - Verifying the notes to the financial statements
  - Settling claims for the lowest amount possible
  - Setting high reserves to account for the impact of inflation
  - Mitigating damages
- Consistent economic conditions and legal environments contribute to:
  - Reserve instability
  - Equitable resolution of claims
  - Reserve stability
  - Favorable loss experience
- An adjuster who makes checks payable to an accomplice and codes them to a claim file is committing:
  - Systemic fraud
  - Burglary
  - A felony
  - Bad faith

## » Knowledge Check



**Directions:** Read the scenario and respond.

Acme Dynamite Company is in the final stages of acquiring Anvil Industries. One of the major issues remaining to be decided in the purchase agreement is the existence of loss reserves in the Anvil Industries self-funded workers compensation program, which has been managed by three different TPAs over the past six years.

1. Acme’s risk manager, Wiley, believes an actuary can help analyze reserves and identify factors affecting their stability, particularly due to frequent TPA changes. Identify two additional factors that contribute to reserve instability.
  - Changing economic and legal environments—tort reform
  - Changes to workers compensation benefit structures
  - Lack of uniform procedures for adjusters
  - Changing rate of inflation
  - Capabilities of individual attorneys
  - Insufficient volume of similar claims
2. Acme’s CEO does not understand why the reserves are an issue and questions why Wiley wants to hire an actuary. He says, “After all, it really doesn’t matter what number you provide, because these reserves don’t affect any real business decisions.” How should Wiley respond to that statement?

An Actuary, or Actuarial Analyst, assesses the financial impact of potential risks using statistics, financial theories, and mathematics. Their duties include estimating probabilities of the success of certain business decisions and projecting the probability and costs of potential negative events. If Anvil has repeatedly understated its reserves, the true amount of the liabilities Acme is assuming is not properly valued and severely impacts the acquisition decision.

Acme’s insurance program (deductibles, limits, and retentions) would be affected by reserve insufficiency requiring an actuarial analysis of the entire insurance program.

Industry experience shows that total claims reserves increase in value over time for several reasons beyond incompleteness and non-reporting. Existing claims may increase

## Section 4: The Risk Financing Team

their value from inflationary pressures. As more resources become involved in the life of the claim (lawyers, medical professionals, rehab personnel, etc.), the values of reserves may also increase.

3. Discuss the term materiality of reserves from a risk manager's perspective.

An event is material if it would impact a decision. A loss reserve is material if: 1) It is the subject of the actuarial study or 2) If failure to include the reserve(s)/considerations of financing could produce a misleading conclusion (e.g., failure to consider excess insurance or reinsurance could mislead people regarding the financial strength of cash reserves).

If a loss reserve is material to the overall Total Cost of Risk, then the loss reserve should be identified and quantified by a risk management professional, insurance professional, or actuary.

## Section 4 Self-Quiz

**Directions:** Select the best response for the following questions.

1. Identify the primary role of an insurance agent or broker in a risk financing program.

- To investigate claims and negotiate settlements
- To provide financial analysis and reporting
- To assess and access the insurance market for the risk manager
- To offer tax treatment and deductibility advice

The insurance agent or broker plays a crucial role in helping the risk manager navigate the insurance market. Their expertise allows the organization to identify suitable coverage options, understand market trends, and secure the best possible insurance solutions.

2. Which of the following professionals is responsible for ensuring compliance with financial regulations and providing financial analysis for risk financing programs?

- Actuary
- Financial/Accounting Professional
- Claims Adjuster
- Consultant

Financial/Accounting professionals evaluate the financial implications of risk financing programs, ensure compliance with financial regulations, and provide critical financial analysis and reporting.

## Section 4: The Risk Financing Team

3. How do actuaries contribute to risk financing programs?

- By negotiating settlements and controlling claim costs
- By auditing the organization's insurance program and projecting claims costs
- By structuring risk financing programs for tax efficiency
- By evaluating internal controls and ensuring financial transparency

Actuaries analyze historical data, calculate loss reserves, and assess the financial impact of risk to help organizations plan for future claims costs and risk financing needs.

4. Which of the following scenarios would most likely require input from a tax professional in a risk financing program?

- A company is evaluating whether its loss reserves meet industry benchmarks.
- An organization is determining the appropriate deductible level for its insurance policy.
- A business wants to understand the implications of forming a captive insurance company.
- A risk manager is negotiating settlement amounts for third-party claims.

Tax professionals provide guidance on the tax treatment of premiums, losses, and reserves when forming a captive insurance company. They help businesses navigate tax regulations and structure risk financing programs for optimal tax benefits.

## Section 4: The Risk Financing Team

5. Which of the following is a key reason for preparing coverage specifications in the insurance provider selection process?

- To clearly outline the desired insurance program elements and allow for standardized comparisons
- To ensure that all insurance providers submit the lowest possible bid
- To eliminate the need for insurance applications
- To allow agents and brokers to adjust coverage details after the policy is issued

By outlining key coverage elements, exclusions, and optional treatments, the risk manager can compare proposals on an "apples-to-apples" basis. This prevents discrepancies in policy terms and ensures the selected provider meets organizational requirements.

6. Why is it recommended to begin the insurance provider selection process at least six months before the renewal date?

- To allow time for marketing materials to be developed
- To ensure coverage specifications are finalized after policies are issued
- To prevent coverage gaps and allow sufficient time for evaluation and negotiation
- To accommodate last-minute changes in the selection process

By starting six months in advance, the organization ensures a well-structured selection process, fair comparisons, and seamless policy renewals.

## Section 4: The Risk Financing Team

7. What is one of the key challenges of the **open bidding** method for selecting an insurance provider?
- It ensures that the lowest cost provider is always selected.
  - It gives all insurance providers equal access to market bids.
  - It eliminates the need for qualification checks on agents and brokers.
  - It can lead to market blocking, where one agent prevents competitors from obtaining quotes.

Market blocking occurs when the first agent to submit applications to insurers effectively secures exclusive access to that insurer, preventing competitors from obtaining quotes. Since open bidding allows any qualified broker to submit proposals, agents may rush to secure insurers, creating an unfair advantage.

8. A professional services contract for an agent or broker should always include a confidentiality and non-disclosure agreement.

**True**

**False**

Confidentiality and non-disclosure agreements are essential contract elements to protect sensitive information shared between the organization and the agent/broker. These provisions ensure that proprietary business information and risk management strategies are not disclosed to third parties.

9. The scope of work in a professional services contract only outlines the objectives of the work, not its limits.

**True**

**False**

The scope of work in a professional services contract only outlines the objectives of the work, not its limits.

Section 4: The Risk Financing Team

10. A professional services contract for an agent or broker typically includes a marketing strategy for the insurance provider.

**True**

**False**

A professional services contract focuses on defining the agent/broker's role, responsibilities, and obligations in risk management, such as claims reporting, risk assessment, and contract review. Marketing strategies for the insurance provider are not relevant to the agreement's purpose and are not included in such contracts.

11. **Directions:** Match the correct term definition to the term name.

A. Agent/Broker Assignment	<u>B</u> An evaluation of the professional qualifications and approach of the agent or broker without considering specific insurance proposals
B. Conceptual Bidding	<u>A</u> The organization assigns a specific agent or broker to represent them, with or without restrictions.
C. Open Bidding	<u>C</u> A public invitation for bids, where any qualified individual or organization can submit a proposal
D. Request for Proposal (RFP)	<u>D</u> A formal process where a select group of agents or brokers are invited to submit proposals, outlining their qualifications and approach

12. What is the primary goal of claims management?

- To increase the number of claims filed
- To reduce the financial impact of claims on an organization
- To delay claim settlements
- To increase insurance premiums

Claims management aims to minimize or reduce the financial impact that claims have on an organization. This includes gathering data, enforcing obligations, and mitigating damages.

## Section 4: The Risk Financing Team

13. Which of the following is a factor that contributes to reserve instability?

- Stable economic conditions
- Low employee turnover
- High turnover among management or claims adjusters
- High volume of similar claims

High turnover among management or claims adjusters is one of the operational factors that contribute to reserve instability, as it disrupts consistency in claims handling.

14. Claims fraud can exist internally, externally, or systemically.

**True**

**False**

Fraud can arise from within the organization (internal), from outside (external), or from organizational failures (systemic), impacting claims management.

15. Accurate reserving is only important for self-insurers and not for insurance carriers.

**True**

**False**

Accurate reserving is critical for both self-insurers and insurance carriers. It impacts financial stability, rating, and regulatory scrutiny for all types of insurers.

16. What is one of the key roles of an actuary in risk financing?

- Managing claim settlements
- Pursuing subrogation recoveries
- Negotiating claims with TPAs
- Ensuring insurance premiums are reasonable and appropriate

Actuaries play a critical role in ensuring that insurance premiums are reasonable, neither excessive nor inadequate, and that retentions in risk financing plans are appropriate.

## Section 4: The Risk Financing Team

17. What is the primary reason an actuary is involved in the analysis of loss reserves?

- To assess the effectiveness of risk control programs
- To negotiate settlements for claims
- To manage claim payments
- To forecast the future impact of claims and losses

Actuaries are involved in analyzing loss reserves to forecast the future impact of claims and to ensure accurate budgeting for potential future payouts.

18. Which factor contributes to the instability of loss reserves?

- Stable economic conditions
- A high volume of similar claims
- Inflation and claims development
- Consistent management of claims

Inflation and the development of claims contribute to the instability of loss reserves, as claims may increase in value over time due to these factors.

# Section 5: Alternate Risk Financing

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## Considerations for Implementing Alternative Risk Financing Solutions

### ▶▶ Knowledge Check



**Directions:** Read the scenario and answer the question.

Colonial Industries is trying to determine if they should move from a traditional risk financing plan to an alternative one. They are concerned because the state gubernatorial elections are approaching later this year. What are some pertinent issues they should consider?

What are the economic platforms of the incumbent and her challenger? Is there a likelihood of long-term economic changes depending on which party is elected? If the challenger wins, will he appoint a judiciary with views and leanings that differ from those of the current one? How might these changes affect the insurance market and Colonial's options?

# Understanding Risk Pooling



## ▶▶ Knowledge Check

**Directions:** Read the scenario and answer the question.

### Proposed Plan

- Loss fund of \$500,000
- Retained earnings of \$1,000,000
- \$25,000,000 aggregate excess coverage
- \$5,000,000 attachment point

### Current Plan

- Loss fund of \$500,000
- Retained earnings of \$1,000,000
- \$5,000,000 aggregate excess coverage
- \$2,500,000 attachment point

The Spa and Resort Operators Association (SROA) has sponsored a general liability risk pool for the benefit of its members. There are twelve members, nine operators of single-unit spas and the "Big Three:" Hot Springs Health Spas, Mineral Wells Hot Yoga Studios, and Tranquility Resorts, which account for 75% of the exposure-based contributions to the loss fund. However, all members have an equal vote.

The "Big Three" are addressing how the pool would handle catastrophe claims from infections caused by Mycobacterium avium complex, Pseudomonas aeruginosa, and Legionella pneumophila (the most severe, with a 15–20% mortality rate).

An SROA attorney found the average jury award for hot-tub-related deaths is \$2.5M in damages and \$500K in legal expenses.

You have been brought in as an expert to assess how the pool would handle two scenarios in the same policy year:

How would you explain to the board of directors the payment of claims for a single death and multiple deaths, given the current pool coverage?

### **Current Program:**

- Single death: Assumed cost of \$3,000,000
  - The pool would pay \$500,000 from the loss fund and \$1,000,000 from retained earnings. There is a \$1,000,000 gap before the aggregate excess coverage attachment point is reached, and these funds are owed by the pool

## Section 5: Alternate Risk Financing

- members on a joint and several basis. The insurer pays the remaining \$500,000.
- THE RESULT: the pool is out of funds and the members pay \$1,000,000 collectively according to the participating agreement. There must be assessments or the pool must cease operations. Closing the pool does not eliminate the financial obligation of the members.
  - Multiple deaths: Assumed total cost of \$15,000,000
    - The pool would pay \$500,000 from the loss fund and \$1,000,000 from retained earnings. There is a \$1,000,000 gap before the aggregate excess coverage attachment point is reached, and these funds are owed by the pool members on a joint and several basis. The insurer pays the policy limit of \$5,000,000, leaving unpaid damages of \$7,500,000. This amount is owed by the pool members.
    - THE RESULT: the pool is out of funds and members are responsible for a total of \$8,500,000 on a joint and several basis. There must be assessments, or the pool must cease operations. Closing the pool does not eliminate the financial obligation of the members.

# Captive Insurance Companies

## Check-In



**Directions** Indicate what type of captive is being described by each of the following statements.

1. A captive formed to service an organization's clients: Agency Captive
2. A captive formed to service an organization's members: Association Captive
3. A captive formed to service a single organization: Single parent or pure captive

## » Knowledge Check



**Directions:** Read the scenario and answer the question.

Concerned over their fellow board members' short-sightedness in valuing low premiums over catastrophic protection, the "Big Three" spa operators decided they should investigate forming a captive. Rather than immediately considering what type of captive to form or where the captive should be domiciled, they prepared a list of reasons to form a captive (or join one if they found a good fit with an existing captive) as well as a list of very specific reasons not to form a captive.

How might the "Big Three" spa operators analyze the potential benefits and drawbacks of forming a captive, and what strategic considerations should they evaluate to determine whether a captive is the most effective solution for their insurance needs?

The Big Three are aware that the captive provides them with a tailored product. It will have greater flexibility in terms of coverage as they will be designing their own plan. They are also able to achieve better pricing and improved products and services than with a traditional insurance plan which uses filed rates and is not specific to their exposures. All of these are advantages to be considered.

Conversely, the captive holds certain disadvantages for them, not the least of which are the handling of taxes and the high probability of tax audits. Consideration must also be given to the intended purpose of the captive. It is not a favorable vehicle for estate planning and should never be used for evading taxes. Also important is the IRS's unpredictable treatment of premium deductibility, which is generally certain with a traditional commercial insurance policy.

# Fronting Programs and Captive Insurance: Structure, Purpose, and Risk Considerations

## Check-In



**Directions:** Indicate if the statement is true or false

1. The purpose of a fronting program is to allow an organization to retain and manage their own risks while complying with legal, regulatory, or contractual obligations that require coverage from a highly rated and admitted insurance company.

**True**

**False**

2. Most captives enjoy tax advantages over standard insurance programs because the IRS allows premium deductibility even when tax advantages are a motivation for captive utilization.

**True**

**False**

3. As organizations assume greater levels of risk retention, they may use a captive to gain more flexibility in both pricing and policy structure.

**True**

**False**

4. A captive enables pricing to be more closely aligned with the insured's specific exposure base, rather than the broader average that may not accurately reflect that insured's actual risk of loss.

**True**

**False**

## » Knowledge Check



**Directions:** Read the scenario and respond to the prompt.

"The Big Three" chose to exit the SROA pool and established an offshore captive insurance company, Verum Agua Assurance Company, Ltd., in Bermuda to provide their general liability and workers compensation coverage. However, since many of their spas operate in large shopping malls, property owners and managers require insurers to be admitted carriers with a minimum financial strength rating from agencies like A.M. Best, Moody's, Fitch, or Standard & Poor's. As a Bermuda-based entity, Verum Agua Assurance Ltd. is not an admitted insurer in any U.S. state and lacks a financial rating due to the substantial cost of obtaining one.

Describe how the "Big Three" can comply with state workers compensation proof of coverage requirements and fulfill the lease obligations set by mall owners and managers. Additionally, explain the mechanics of this arrangement and how it ensures compliance with both regulatory and contractual demands.

The "Big Three" and Verum Agua would identify a licensed, admitted carrier with at least the minimum acceptable rating and negotiate a fronting agreement with that carrier.

The fronting carrier retains little or no risk and maintains regulatory compliance.

Verum Agua becomes a reinsurer to the front, and retains a specified amount of loss per occurrence, 100% of loss below the aggregate stop loss, invests the reserve funds, and accumulates surplus from underwriting profit and investment income.

Verum Agua may secure reinsurance from other reinsurers to pay losses in excess of the per occurrence limit and losses in excess of the aggregate stop loss.

The fronting company issues a policy, certificates of coverage, and pays claims, with reimbursement from Verum Agua, the reinsurer. The fronting fee pays the fronting carrier for their services and the use of their name and licensure.

# Development Process of a Captive



## » Knowledge Check

**Directions:** Read the scenario and answer the question.

The remaining nine pool members of Spa and Resort Operators Association (SROA) are very concerned about the pool's viability now that the Big Three have exited the pool. They learn that the Big Three have formed a captive and ask you, their consultant, which type of captive they should consider. What do you recommend?

Since the association only has nine members, it is not a good candidate for a single parent captive. The capital funding and administrative requirements would be too onerous. The same is true of an association captive; the organization is not large enough to support its own captive. They could consider a group captive, if they find a homogeneous group (all pool and spa operators) whose premium structure, underwriting guidelines, and services meet their needs. The exposures would be similar. If a rent-a-captive is available that may be the best choice. The insureds can directly control the underwriting of their own risks as in a typical captive, and the losses of one insured are isolated or segregated rather than shared with all other insureds. A rent-a-captive is commonly used by an organization that desires more control over its destiny but is not willing to risk the capital commitment required of a pure captive or to expose itself to the financial vicissitudes of other organizations over which it has no control.

# Finite Risk Insurance



## ▶▶ Knowledge Check

**Directions:** Read the scenario below and answer the questions.

Delta Seabring, a national fraternity, anticipates a wave of claims related to past hazing and misconduct incidents. To manage potential financial exposure, the fraternity opts for a finite risk insurance contract.

Delta hires GDI Actuarial Consultants to assess potential damages based on the limited number of known and settled claims. GDI projects a liability of \$250 million over the next decade. Since past events are not covered by existing insurance policies and former insurers are no longer in business, alternative risk financing is necessary.

Delta decides to establish a finite risk insurance contract with the following parameters:

<b>Limits of coverage:</b>	\$250,000,000
<b>Term:</b>	10 years
<b>Annual premium:</b>	\$25,000,000
<b>Insurer fee:</b>	10%
<b>Interest rate:</b>	2%

Late in the tenth year, a settlement in a class action suit against Delta was reached and the insurance carrier paid out \$150,000,000 in claims.

- How much money will Delta receive when the contract commutation calculation is completed at the end of the tenth year?

Total premiums/limits available	\$250,000,000
Less total insurer fee	- <u>\$ 25,000,000</u>
	\$225,000,000
Plus investment income at 2%	<u>\$ 5,000,000</u>
	\$230,000,000
Less settlement of class action suit	- <u>\$150,000,000</u>
Balance to Delta	\$ 80,000,000

## Section 5: Alternate Risk Financing

2. What risks were taken during this ten-year period by both Delta and the insurance carrier?

- Risks taken by Delta:
  - Damages greater than \$250,000,000 plus expenses
  - Challenges to tax deductibility of \$25,000,000 premium per year
  - Ongoing reputational risk
- Risks taken by Insurer:
  - Credit risk of Delta defaulting on annual premium or paid losses exceeding the premium payments
  - Interest rate risk if the spread between the actual investment income and the preset risk-free interest rate used in commutation is less than the spread between the assumed investment income and the preset rate

# Risk Financing and Taxation

## ▶▶ Knowledge Check



**Directions:** Read the scenario and answer the question.

Tina, a risk manager, is evaluating a finite risk insurance plan to address environmental liabilities. The tax team warns that the plan may fail FAS 113 criteria, risking the loss of tax deductibility. Additionally, potential excise taxes on offshore insurer payments could impact costs.

How should Tina collaborate with the tax team to strategically evaluate the trade-offs between risk financing effectiveness and potential tax consequences?

Tina should work with the tax team to quantify the downside risk of non-compliance with FAS113, and potential excise taxes. They might consider three scenarios—best case, bad case, and worst case. She and the tax team must also discuss the actual financial benefits of the finite risk insurance plan (e.g. avoiding fines, penalties, and clean-up costs related to the environmental exposures). Essentially, they must do a cost benefit analysis. Then Tina needs to assess the qualitative impact of not utilizing a finite risk plan to address environmental liabilities. For example, what are the potential impacts to reputation and goodwill?

## Section 5 Self-Quiz

**Directions:** Select the best response for the following questions.

1. Alternative risk financing methods are always designed to transfer risk to an external insurer.

**True**

**False**

Alternative risk financing methods are not always designed to transfer risk. While some strategies may involve risk transfer, others focus on retaining and managing risk internally through mechanisms like captives or self-insurance.

2. Which of the following is a primary reason that smaller organizations participate in risk pools?

To maximize investment earnings for individual members

To reduce administrative costs by outsourcing operations

To lower individual exposures by distributing risk among members

To increase their risk retention and self-insurance capabilities

Smaller organizations join risk pools to lower their individual exposures by distributing risk among members. This strategy helps them combat rising premiums and rates.

3. What distinguishes a risk pool from traditional insurance coverage?

Pools provide higher individual limits than insurance companies.

Pools combine exposure and loss data to present as a single entity to an underwriter.

Pools eliminate the need for loss control or claims management services.

Pools are regulated at the federal level for multi-state coverage.

Risk pools combine exposure and loss data to present to an underwriter as if the group operates as a single entity. This collective presentation often results in more favorable insurance terms.

## Section 5: Alternate Risk Financing

4. Which of the following scenarios would most likely trigger a joint and several liability assessment?

- A member of the pool achieves strong investment returns.
- A member withdraws from the pool with favorable claims history.
- The pool experiences unexpected adverse claims development.
- The pool secures excess insurance coverage with a low attachment point.

Unexpected adverse claim development can deplete the pool's loss fund, requiring members to make additional contributions to restore the required balance.

5. Which of the following is a key advantage of risk pooling?

- Guaranteed low-cost premiums in all circumstances
- Higher administrative expenses for improved oversight
- Reduced financial risk through the removal of member accountability
- Cost stability due to less vulnerability to insurance market fluctuations

One of the key advantages of pooling is cost stability, as pooling premiums are based on expected member losses and administrative costs rather than fluctuating commercial insurance rates.

6. Which of the following is a key limitation of risk pooling?

- Members may face additional financial liability if the pool's funds are insufficient.
- Pools are restricted to only offering coverage for property damage.
- Pools are unable to adjust coverage to meet members' unique needs.
- Pools cannot offer excess insurance options for catastrophic losses.

A significant limitation of risk pooling is joint and several liability, where members may be required to contribute additional funds if the pool's resources are inadequate to cover claims.

## Section 5: Alternate Risk Financing

7. Captive insurance companies are owned and controlled by external investors rather than the insured organizations themselves.

**True**

**False**

Captive insurance companies are closely held insurance entities whose insurance business is supplied by and controlled by their owners, which are the beneficiaries of the captive.

8. Single-parent captives are typically used by smaller organizations that cannot afford commercial insurance coverage.

**True**

**False**

Single-parent captives are typically established by large organizations with substantial financial resources to support long-term risk management strategies. These entities often use captives to fill gaps in traditional coverage or manage specialized risks.

9. Group captives are composed of unrelated organizations that combine their resources to create a captive insurance company.

**True**

**False**

Group captives are formed when multiple, unrelated organizations come together to establish a captive. These companies may be homogeneous (similar industries) or heterogeneous (varied industries) and are often used to manage shared risks more effectively.

10. True rent-a-captives provide insurance services exclusively to their sponsors and cannot offer coverage to outside organizations.

**True**

**False**

Rent-a-captives are designed to provide insurance facilities to outside organizations for a fee. These arrangements allow businesses to manage their risks without fully committing to forming their own captive.

## Section 5: Alternate Risk Financing

11. Which of the following is a key financial benefit of utilizing a captive insurance program?

- Reduced administrative workload
- Guaranteed lower premiums compared to traditional insurance
- Greater control over investment income and surplus management
- Automatic exemption from U.S. tax laws

Captives allow owners to earn investment income on premiums, reserves, and policyholder surplus, providing greater control over financial stability. Unlike traditional insurance where these profits go to the insurer, captives can reinvest earnings to reduce future premiums or pay dividends.

12. Which factor increases the likelihood of a tax audit when an organization utilizes a captive?

- Maintaining U.S. bank accounts
- Using offshore vendors
- Attempting to shelter earnings for tax evasion purposes
- Offering customized insurance coverage

Using a captive to intentionally shelter earnings offshore is a serious legal violation that greatly raises the risk of an IRS audit. While maintaining U.S. accounts or using offshore vendors may have regulatory implications, they do not inherently indicate tax evasion.

## Section 5: Alternate Risk Financing

13. What is a reason why organizations may seek to form a captive insurance company?

- To ensure coverage for hard-to-insure risks like coastal wind damage
- To completely eliminate insurance costs
- To avoid complying with regulatory standards
- To reduce the organization's workforce

Captives are often formed to address specialized risks that may be difficult to insure through traditional markets, such as high-risk property damage or niche industry exposures. While captives can reduce costs, they still require regulatory compliance and careful management.

14. Which of the following best describes why premium deductibility can be challenging for captives?

- Captives are exempt from U.S. tax laws.
- Captives typically have fewer policyholders than traditional insurers.
- Captives are required to charge significantly higher premiums than commercial insurers.
- The IRS closely examines whether risk-sharing and genuine risk transfer are present.

The IRS evaluates captives carefully to determine if they meet the standards for legitimate insurance operations. Captives must demonstrate genuine risk transfer and appropriate risk distribution to qualify for premium deductibility. Without proper documentation and structure, deductibility could be denied.

15. A fronting carrier assumes significant underwriting risk when entering a fronting agreement.

**True**

**False**

While the fronting carrier issues the insurance policy, it typically assumes little to no underwriting risk. The captive (or another reinsurer) bears the financial responsibility for claims. However, the fronting carrier may face financial exposure if the captive fails to reimburse claims, which is why collateral is often required.

## Section 5: Alternate Risk Financing

16. A primary reason that organizations use fronting programs is to meet regulatory or contractual requirements requiring an admitted and financially rated carrier.

**True**

**False**

Fronting programs are commonly used to satisfy regulations or contracts that require insurance from an admitted carrier with a specific financial rating. This allows the organization to maintain control over its risk financing while complying with legal obligations.

17. In the event of a claim under a fronting agreement, the claimant receives payment directly from the captive.

**True**

**False**

In a fronting program, the fronting carrier issues the policy and pays claims directly to the claimant. The captive reimburses the fronting carrier for those claims under a reinsurance contract, maintaining the captive's financial responsibility while ensuring claims are processed through the licensed and admitted carrier.

18. **Directions:** Match the correct step in the captive development process to the corresponding explanation.

A. Licensing	<u>B</u> Conducting a TCOR analysis and evaluating financial practicality
B. Feasibility determination	<u>C</u> Choosing a jurisdiction based on capital requirements and regulatory environment
C. Domicile selection	<u>A</u> Submitting an application with a pro forma financial statement
D. Formation and funding	<u>D</u> Electing directors, finalizing policies, and ensuring adequate capitalization

## Section 5: Alternate Risk Financing

19. Regulatory considerations, such as reserving requirements and surplus obligations, can influence decisions made during both the feasibility and domicile selection steps.

**True**

**False**

These regulatory factors play a role in both evaluating the captive's financial viability and selecting a suitable domicile.

20. Financial considerations, such as capital requirements and investment flexibility, have no impact on the licensing step since those decisions are finalized in earlier steps.

**True**

**False**

Financial considerations directly affect the licensing process, particularly when preparing pro forma financial statements and demonstrating adequate capitalization.

21. Operational considerations, such as service provider selection and meeting requirements, are exclusive to the formation and funding stage.

**True**

**False**

Operational considerations often begin as early as the feasibility study and continue throughout the entire captive development process.

22. Because the steps in captive development are sequential, decisions about funding requirements cannot be addressed until the feasibility and domicile selection steps are completed.

**True**

**False**

Elements of funding are often addressed early in the feasibility phase and refined as domicile and licensing decisions are made.

## Section 5: Alternate Risk Financing

23. Which of the following best describes why finite risk insurance is termed "finite"?

- It is designed to cover an unlimited range of risks.
- It requires minimal financial commitment from the insured.
- The financial commitment is limited in both time and amount.
- It exclusively covers high-frequency, low-severity risks.

Finite risk insurance is termed "finite" because the financial commitment is predetermined, both in terms of the total amount of expected losses and the time period during which those losses are covered.

24. In which scenario would finite risk insurance be most appropriate?

- A retail store seeking general liability coverage for frequent customer injuries
- A large self-insurer in a hurricane-prone area seeking coverage for catastrophic property damage
- A manufacturing company in a non-seismic region seeking standard property coverage
- A small business looking for affordable coverage for everyday operational risks

Finite risk insurance is most appropriate for organizations facing high-severity, low-frequency risks that may be difficult to insure through traditional means. Examples include catastrophic events such as earthquakes, hurricanes, or environmental liabilities where traditional coverage may be unavailable or excessively costly.

## Section 5: Alternate Risk Financing

25. Which of the following best describes a retrospective finite risk insurance contract?

- A contract that funds future losses that may never occur
- A contract designed to fund known losses that have already occurred but are not yet fully quantified
- A contract designed to cover only environmental risks and catastrophic losses
- A contract that pays dividends based on unused premium funds

Retrospective finite risk insurance contracts address past events and post-loss situations, including losses that have already occurred but are either unknown or not yet fully quantified.

26. What is the primary purpose of a loss portfolio transfer (LPT) in finite risk insurance?

- To provide excess coverage for future catastrophic losses
- To eliminate the need for annual premium audits
- To ensure that all policy funds are returned to the insured
- To transfer known but unresolved losses to an insurer in exchange for a premium

A Loss Portfolio Transfer (LPT) is a type of retrospective contract that transfers known losses (with uncertain values) to an insurer or reinsurer.

27. Which feature of finite risk insurance ensures that the insured may receive unused premium funds at the end of the policy term?

- Commutation
- Policy term
- Cancellation
- Risk transfer

The commutation provision allows for the return of unused funds from the experience account to the insured at the end of the policy term. This provision is unique to finite risk insurance and differs from traditional dividends in standard insurance policies.

## Section 5: Alternate Risk Financing

28. Why does finite risk insurance expose insurers to greater credit risk than traditional insurance?

- The insurer is required to cover frequent low-severity claims.
- The insurer's profits are dependent on underwriting results alone.
- The multi-year policy structure increases the risk of paid losses exceeding premium payments over time.
- The insured is allowed to cancel the policy at any time without penalty.

The multi-year nature of finite risk insurance policies increases the insurer's credit risk since paid losses may exceed premium payments made during the extended policy term.

29. Which of the following best describes the risk manager's role in managing tax strategies?

- The risk manager is solely responsible for all tax-related decisions.
- The risk manager provides expert tax advice to the organization.
- The risk manager collaborates with tax professionals to assess the tax implications of risk financing decisions.
- The risk manager ensures the organization complies with all tax regulations.

While the risk manager is not responsible for making tax decisions, they must work closely with the tax department, tax attorney, or CPA to evaluate the tax impact of risk financing strategies. Effective collaboration ensures both risk and tax considerations are addressed.

## Section 5: Alternate Risk Financing

30. What is the primary purpose of a private letter ruling (PLR)?

- To establish new IRS tax laws
- To provide an official IRS decision on complex tax matters specific to a taxpayer's situation
- To determine appropriate risk financing strategies
- To confirm FAS 113 compliance for insurance programs

A Private Letter Ruling (PLR) is an official IRS decision that offers guidance on complex tax questions. Risk managers may need a PLR to understand the tax implications of certain risk financing strategies, such as finite risk programs.

31. Which of the following statements best describes the "10-10 rule" under FAS 113?

- There must be at least a 10% chance that losses will exceed 110% of the contributed premium.
- The insurance contract must provide at least 10% coverage for losses above \$10,000.
- The insurer must retain at least 10% of its premium as a loss fund.
- The insurance contract must provide a 10-year loss coverage guarantee.

The "10-10 rule" under FAS 113 requires that there must be at least a 10% chance that losses will exceed 110% of the contributed premium for tax-deductible risk transfers. This rule helps determine whether certain insurance arrangements qualify for favorable tax treatment.

# Appendix

## Appendix

# Preparing for the Final Exam

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The testing period for the Final Exam is 2-1/2 hours long. The test itself is composed of 17-21 short-answer questions for a total of 200 possible points. Questions appear in the order of presentation of the topics.

Remain aware of the time as you take the test. Pace yourself and be aware that unanswered questions are considered incorrect.

## Study Techniques

There are some techniques you can use to help you prepare for the end-of-course test. Apply the same techniques to each chapter in your Learning Guide.

1. Review the Section Goal.
2. Review each Learning Objective.
3. Change each head and subhead into a question. Then answer the question. For example,  
Header: The Vision Statement  
Question: What is a vision statement?
4. Review each diagram, graph, and table. Interpret what you see. Ask yourself how it relates to a specific Learning Objective.
5. Check your answers to each Check-In. Correct your original answers, if necessary.
6. Check your answers to each Knowledge Check. Consider ways to improve your original answers.
7. Re-read the summary at the end of each section.
8. Check your answers to each question in the Self-Quizzes at the end of each section. Correct your original answers, if necessary.
9. Review any comments, highlights, or notes you made in each section.
10. Rewrite important ideas in your own words. Find ways to connect those ideas to your own work experience.

11. Make flash cards to help you review important vocabulary.

## Sample Exam Questions

1. Justin Case, the risk manager of Contingency Planning Concepts, Inc. (CPC), is preparing a report for the board of directors detailing the total cost of risk (TCOR) for the organization. Justin has identified several items that he might consider including in CPC's TCOR. Identify how much, if any, of the following amounts should be included in the report. (12 points)

- a. CPC suffered a \$100,000 property loss covered by an insurance policy. The policy carried a \$25,000 deductible which was paid by CPC.

**Sample Answer:** Include \$25,000.

- b. CPC paid \$25,000 to a law firm to defend a personal injury lawsuit that was not covered by the liability insurance policy.

**Sample Answer:** Include \$25,000.

- c. CPC's risk management department has annual payroll and benefits costs of \$200,000.

**Sample Answer:** Include \$200,000.

- d. CPC's Human Resource department paid \$25,000 for pre-hire strength testing to be sure that employment candidates could physically perform the work required of them to avoid getting injured on the job.

**Sample Answer:** Include \$25,000.

- e. CPC paid \$25,000 to a law firm for legal assistance in filing a stock offering with the Securities and Exchange Commission.

**Sample Answer:** Don't include.

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- f. CPC suffered a \$2,000,000 liability loss. The liability policy provided a limit of \$1,000,000 with no deductible. There was no excess liability or umbrella policy in force.

**Sample Answer:** Include \$1,000,000.

2. As the insurance market hardens, the use of reinsurance becomes even more important. Carefully differentiate between each of the following sets of reinsurance terms.

- a. Treaty reinsurance vs. facultative reinsurance (4 points)

**Sample Answers: (2 points each)**

- **Treaty** - automatic agreement when the reinsurer agrees to accept all business qualifying under the agreement or treaty
- **Facultative** - single, one-time reinsurance agreement that is individually underwritten by the reinsurer

- b. Quota share vs. surplus share (4 points)

**Sample Answers: (2 points each)**

- **Quota share** - reinsurer takes a portion of every exposure based on a percentage split
- **Surplus share** - reinsurer takes a portion of every exposure above a set dollar retention level

# Glossary of Terms

## Section 1

**aggregate** – the maximum amount an insurer will pay during a policy period regardless of the number of claims

**budgeted retention** – the portion of expected losses the organization is willing and able to retain

**ceding company** – the direct or primary insurer that contracts with a reinsurer to share all or a certain portion of its losses assumed under insurance contracts issued in return for a stated premium

**cession** – a transaction that transfers liability from the ceding company to the reinsurer

**earned premium** – the amount of the premium that has been “used up” during the term of a policy, such as a one-year policy in effect for six months, so half of the total premium has been earned

**excess of loss reinsurance** – also known as non-proportional reinsurance, this is an agreement to share specified losses; the reinsurer indemnifies the primary insurer for the amount of loss in excess of a specified retention, which is stated as either a dollar or percentage amount; the reinsurer does not participate in losses until a loss exceeds the amount retained by the primary insurer

**exculpatory agreement** – an arrangement whereby one party agrees to absolve a second party from any liability for a particular loss, even when damage or injury is caused by the negligence of the second party

**hold harmless agreement** – a contractual arrangement where one party (the indemnitor) assumes the financial consequences of the liability inherent in a situation (and possibly a defense obligation) relieving the other party (the indemnitee) of that financial responsibility; common types are limited form, intermediate form, and broad form

**incurred but not reported (IBNR)** – the liability for unpaid claims not reflected by the evaluation date in the case reserve estimates for losses

**incurred losses** – the total amount of paid claims, outstanding interest on judgments, expenses on third-party recoveries, loss adjustment expenses, and loss reserves associated with a particular period of time, usually a policy year; additionally, paid claims, case reserves,

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and IBNR reserves until ultimate incurred claims are reached, at which time there is no remaining IBNR

**indemnity agreement** – a contractual agreement similar to a hold harmless agreement that is made between two parties in which one party (indemnitor) agrees to pay for potential losses or damages caused by the other party (the indemnitee), perhaps even back to the primary insurer, in whole or in part

**insurable risk** – risk that an insurance carrier is willing to provide coverage for by weighing the potential for a loss that is definite or accidental, calculable, usually not catastrophic, shared by many, and measured by factoring in probabilities and costs

**limitation of liability clause** – a provision in a contract that typically limits the liability of the company to some proportion of its fee or a defined dollar value; found in equipment leases, these clauses are also known as liquidated damages clauses

**loss reserve** – an estimation of the liability for all unpaid claims that have occurred as of a given date, including those claims incurred but not yet reported (IBNR), claims due but not yet paid, and amounts not yet due; additionally, the case reserve on a single claim

**net written premium** – the total written premiums minus premiums ceded to a reinsurance company plus any reinsurance assumed

**per occurrence** – maximum amount an insurer will pay for claims resulting from a single occurrence

**pro rata reinsurance** or **proportional reinsurance** – an agreement to share insurance coverage. The reinsurer gets an agreed percentage of the original premium, less a ceding commission, and pays the same percentage of all losses covered by the reinsurance contract. There is no occurrence limit under a pro rata reinsurance agreement, so the reinsurer has a catastrophe exposure.

**reinsurance** – a contractual agreement in which one insurer agrees to insure the assumed liabilities of another insurer, a self-insured firm, or another reinsurer

**reinsurer** – an insurer that accepts all or a portion of the liabilities of the ceding or primary company

**retention** – the action of an organization to retain a portion, or all, of the cost of risk, by financing the loss internally through the use of organizational funds, reserves, or loans (non-insurance), or self-insurance and deductibles; the net amount of risk a ceding company or their reinsurer keeps or retains

## Appendix

**retention/external financing diagram** – a graphic depiction of an organization’s financial ability and risk appetite, including the internal methods of risk financing (budgeted retention and the tolerance corridor) and the external sources of risk financing (per occurrence and aggregate) for the portion of losses that are unexpected or beyond what the organization chooses to retain

**retrocession** – a transaction that transfers liability from the reinsurer to another insurer

**tolerance corridor** – the marginal retention beyond the budgeted retention that an organization may also choose to retain

**unearned premium** – the amount of the premium remaining after deducting the earned premium from written premium; the portion of a premium representing the “unused” or unexpired portion of the policy period

**waiver of subrogation** – a pre-event agreement to waive the right to seek recovery from a responsible party’s insurance carrier for loss payments made to the insured

**written premium** – the total premiums on all policies written by an insurer during a specified period of time, regardless of the portions that have been earned

## Section 2

**collateral** – usually in the form of funds or liquid personal property (e.g., inventory, accounts receivable); this is property pledged to an insurer to assure any funds advanced on behalf of the insured (typically a deductible) is repaid to the insurer in the event the insured defaults

**external financing** – the use of funds of another entity outside of the organization to finance losses

**insurance transfer** – the use of external funds to finance risks from one entity to another in exchange for the premium payment

**internal financing** – the use of an organization’s funds for the financing of losses, including the self-financing of risk exposures (retention) as well as deductibles and self-insured retentions on insurance policies

**loss-indicated premium** – also known as a loss-adjusted premium, this is the required premium to pay for expected losses, loss adjustment expenses, and the carrier’s operating expenses; the break-even point between premiums and total expenses for expected losses

**non-insurance transfer** – involves the contractual transfer of risk to another party without the use of an insurance company, such as subcontracting a portion of operations to a third party via the use of indemnity agreements, additional insured endorsements, hold-harmless agreements, waivers of subrogation, and risk-retention and risk-purchasing groups

**quantifiable indirect costs** – a possible component of the total cost of risk (TCOR); includes costs such as lost productivity following a loss, training for new employees, overtime, lost opportunity costs, social costs, and general management changes; these are difficult to calculate and may be the subject of dispute

**total cost of risk (TCOR)** – the sum of all costs associated with the risk management function of an organization or entity; a risk management tool used to direct risk management decisions, track progress in loss reduction, and establish accountability in the workplace; organizations can incorporate the TCOR into product and/or service pricing

### Section 3

**accounts receivable** – the trade credit owed to the insured which can be “factored” or sold to a third party to quickly generate cash flow, rather than waiting for delayed payments from vendors or other debtors. These receivables can be pledged to the insurance carrier as collateral to secure reimbursement; if the insured fails to pay the reimbursement, the carrier can factor in the receivables at a discounted value.

**basic premium** – also called the “insurance charge,” this is typically calculated as a percentage of the standard premium by applying a basic premium factor designed to cover the insurance carrier’s expenses, like loss control, commissions, profit, and contingencies, as well as adjust the retrospective premium to fall within predetermined minimum and maximum limits.

**certificates of deposit (CDs)** – contractual deposits with a financial institution that can be used as collateral. The financial institution may not release funds from CDs to the insured without the insurer’s approval.

**deferred premium plan** – a plan where the insurance carrier agrees that the premium payment will be made on an installment basis, with a deposit paid upfront and installment payments continuing over the policy term or even later

**depressed premium plan** – a plan that provides a short-term cash flow benefit and may be available in certain circumstances. It is priced deliberately using a lower exposure base, generating a lower standard premium from which all other premiums are calculated, with a “correction” being made following the premium audit.

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**dividend plan** – a plan that is similar to a guaranteed cost insurance plan but with the potential of a dividend payment if losses meet a certain threshold, affording the insured limited or one-way loss sensitivity and the possibility of receiving a dividend for an excellent loss experience. The insured has an interest in the loss results and an incentive to control losses.

**flat dividend plan** – a plan that offers a single sum if the plan conditions are met. This amount is usually expressed as a percentage of the premium.

**fully insured plan** – a basic plan to fully insure everything, offering stability in the total cost of risk (TCOR). Organizations with a low-risk appetite, limited capacity to manage services, and a preference for minimal variability in their TCOR, often select this type of plan. Premiums are calculated by multiplying the rate by the exposure, adjusting for the workers compensation experience modifier, and applying any scheduled or discretionary credits.

**incurred loss plan** – the projected or anticipated losses, calculated at their trended and developed ultimate value and used to determine the estimated final retrospective premium. The deposit premium is based on that ultimate value.

**large-deductible plan** – a plan that offers a deductible of \$100,000 to \$1,000,000 or even may match the policy limit. This type of policy meets the requirements of excess or umbrella carriers, which mandate underlying insurance and will not provide coverage over self-insurance. It allows insureds the ability to negotiate a significantly higher deductible, along with a substantial premium reduction while preserving the structure of a traditional insurance policy.

**letter of credit (LOC)** – a pre-qualified loan an organization may obtain from a financial institution. The LOC states the insured has access to a guaranteed line of credit from the financial institution, and the insurer can access those funds according to the collateral documents. An “evergreen” LOC is simply a line of credit that renews automatically.

**loss conversion factor** – a measure designed to modify the retrospective rating formula to allow for claims adjustment expenses and the cost of the insurer's (or third-party administrator's) claims services. The loss conversion factor (LCF) is applied to any losses that are covered by the plan.

**maximum premiums** – calculated as a percentage of the standard premium using maximum factors negotiated with the underwriter, these limit the financial responsibility of the insured. Once the maximum retrospective premium is paid, all additional losses are the responsibility of the insurer, subject to the limit of liability of the insurance policies.

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**minimum premiums** – calculated as a percentage of the standard premium using minimum factors negotiated with the underwriter, this is the amount of premium the insured will pay, even if there are zero losses. It includes the insurer's expenses and other charges as negotiated.

**non-subject premium** – premium (also called excess premium) that is guaranteed cost and does not adjust based on losses. This kind of premium is included in the deposit premium, undergoes a premium audit, and appears as a constant charge on all retrospective premium adjustment worksheets.

**prospective rating** – Policy rates are set before the policy begins in this method of rating. This is used in guaranteed cost and small-dividend programs which rely on manual and class rates and can only be adjusted before the policy is issued.

**retrospective rating** – Policy rates for premiums are adjusted after the policy period based on actual losses, allowing costs to reflect the company's performance and loss experience.

**sliding scale or variable dividend plan** – a loss-sensitive plan in which the percentage of the premium reduction increases according to a schedule as the insured's losses decrease. An insured with losses in the lowest range or band will receive the maximum dividend or premium reduction scheduled, and, as losses rise, the percentage of reduction decreases.

**small-deductible plan** – a plan based on standard insurance policy options with a fixed premium, guaranteed cost structure, and a higher deductible. This type of plan is generally rated on a manual basis, with deductible options provided in a table of deductibles with corresponding premium credits; deductible options may range from \$1,000 to \$50,000.

**standard premium** – the premium arrived at by multiplying the appropriate rate by the proper exposure measure or unit

**surety bonds** – three-party contracts, typically issued by the surety divisions of non-involved insurance carriers and private carriers. The surety commits to paying a specified amount to the insurance carrier seeking security or collateral if the insured (the principal) fails to fulfill the obligations outlined in the surety agreement.

**tabular plans** – retrospectively rated plans that use a table to determine the appropriate premium based on a policyholder's level of risk. The table lists the maximum and minimum rates for the specific policy.

**tax multiplier** – a factor used in the retrospective rating formula to account for licenses, fees, assessments, and premium taxes the insurer must pay on collected premiums. Applied in the final step in the formula, the tax multiplier is added to all other charges and premium

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components. It may also include a charge to help the insurer subsidize the assigned risk or involuntary insurance market.

**total cost of risk (TCOR)** - a risk management tool used to direct risk management decisions, track progress in loss reduction, and establish accountability in the workplace. Organizations can incorporate the TCOR into product and/or service pricing.

### Section 4

**accountant** - an individual, usually a Certified Public Accountant (CPA), who tracks and reports on financial transactions that pertain to business

**actuary** - an individual, who usually holds a professional designation and computes statistics related to insurance, estimates loss reserves, and develops premium rates

**external financing team** - comprised of a broad range of outside service providers who are tapped according to the functions or areas that need support; members include the insurance provider/agent and actuarial, tax, and legal professionals

**internal financing team** - members of this team consist of personnel from the risk management, accounting, finance, legal, and audit departments.

**risk** - the possibility of a variation in outcomes from a given set of circumstances

### Section 5

**captive insurance program** - an internal risk-financing mechanism structured through an independent legal entity known as the captive and owned by the sponsoring organization. It provides insurance coverage for its specific exposures, allowing the sponsor to keep full control over loss sensitivity and risk retention, except when the captive secures reinsurance. It is created to allow organizations to retain and manage their own risk, lower costs, tailor insurance to their needs, and maintain greater control over claims and risk management.

**commutation provision** - allows for the disbursement of a positive balance in the experience account according to the agreement. This is *not* the same as a dividend but simply a return of unused funds that have accumulated in the experience account.

**contributed capital** - funds contributed to the captive by the shareholders/owners. It has various forms, including cash, letters of credit, other approved funds, or surplus.

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**earned surplus** – the retained earnings or cumulative net income after payment of the tax from underwriting and investment activities

**finite risk insurance** – a range of loss financing strategies that integrate internal and external risk financing while involving traditional insurers in nontraditional ways. Known as “financial insurance,” it is termed “finite” because it functions similarly to high-level loss retention programs, which require that the full annual aggregate expected losses be funded during the policy term since the financial commitment is both finite in time and amount. Losses exceeding this predefined amount may be covered by an excess insurance policy or by the traditional insurer issuing the finite risk policy and their reinsurers.

**fronting program** – an organization selects a licensed and financially rated primary carrier to act as the fronting carrier and policy issuer. The organization’s captive serves as the reinsurer, assuming the risk for policies issued on its behalf. Generally, the fronting carrier cedes 100% of the losses to the captive but may retain a portion of the risk and premiums; the organization pays premiums to the fronting carrier, covering expected losses.

**joint and several liability** – a legal doctrine that refers to liability being assigned or apportioned collectively and/or individually to one or more of several liable parties

**paid-in-capital** – an additional infusion of cash meant to act as “pre-funded retained earnings” until the insurance operation (captive) generates its earnings. In insurance regulation, the level of policyholder surplus (PHS) is used to limit the amount of premium that can be supported by the surplus to prevent overextension of underwriting and imperiled solvency.

**pooling** – designed to collectively manage the loss exposures and administrative responsibilities of two or more organizations that cannot legally or practically self-insure risks individually. It involves an agreement among the organizations’ service providers to combine their exposure and loss data—and this is presented to an underwriter as though the group operates as a single entity.

**private letter ruling (PLR)** – an official IRS decision responding to taxpayer inquiries about complex tax matters. Risk financing options like finite risk programs may require a PLR for clarity regarding tax treatment, although these rulings are not legally binding.