

# RISK MANAGEMENT INSURANCE FUNDAMENTALS



PART 1 OF 4

TUESDAY, SEPT. 13, 2 P.M. EDT | FREE CSG ECADEMY SERIES  
*in Collaboration with The Griffith Insurance Education Foundation*

# Insurance Basics

Insurance provides financial security, and it does so based on principles that ensure that all covered losses will be indemnified.

# Insurance Markets Underpin the U.S. Economy

What would the US economy look like if insurance markets ceased to exist?

- a. No healthcare insurance
- b. No homeowners insurance
- c. No auto insurance
- d. No life insurance
- e. No liability insurance
- f. No workers compensation

Implication => Well functioning insurance markets are a critical component of a strong economy!

# Motivating Theme

Given the importance of information and exponential increase in the use of data, is the performance of insurance markets improving?

- Reduced insurance fraud?
- Improved pricing?
- Privacy concerns?
- Increased innovation?
- Regulatory challenges?

# What Is Insurance?

- A contract that transfers the financial consequences of a potential loss from an insured to an insurance company.
- A means of protecting financial interests when losses occur.

# Insurance Benefits

- How does insurance benefit the insured:
  - Pays an insured's covered losses (indemnifies)
  - Reduces uncertainty
  - Encourages efficient use of resources
  - Helps reduce and prevent losses
- How does insurance benefit business and society:
  - Supports credit
  - Satisfies legal requirements
  - Satisfies business requirements
  - Provides sources of investment funds
  - Reduces social burdens

# Costs Associated With Insurance

## Insureds:

- Premiums

## Insurance providers:

- Operating costs – including profit
- Fraudulent and inflated claims (moral hazards)
- Claims caused by carelessness or indifference (morale hazards)
- Frivolous lawsuits that are settled as nuisance claims

# Fundamental Insurance Principles

Three principles help ensure that the insurance mechanism is actuarially sound:

- Indemnification
- Law of large numbers
- Insurable interest



# The Principle of Indemnity

- To “indemnify” means to compensate for a loss.
- Insurance should not benefit an insured beyond the value of a loss:
  - Insurance should, at most, make the insured whole again.
- Violations of this principle can increase the frequency and severity of losses.

# The Law of Large Numbers

- The mathematical principle that underlies the provision of insurance.
- What would be a large unexpected loss for an individual becomes a manageable and predictable loss in aggregate for an insurer.

# Insurable Interest

- The insured must suffer financially should a loss occur:
  - A driver's own car is totaled.
  - The death of a company's CEO.
- Supports the principle of indemnity—one cannot gain from an insurable loss.

# Economic Issues Related to Insurance Pricing

An insurance policy is priced to reflect the loss exposures the policy covers while allowing for expenses, profit, and contingencies.

# Key Issues in Insurance Pricing

Insurance markets differ from “traditional” markets in many ways:

- Adverse selection
- Moral and morale hazard
- Equity: actuarial and social
- Timing

# Adverse Selection

Adverse selection increases insurers' costs:

- This is a selection problem – who you sell to matters in insurance markets.
- Those with the greatest probability of loss are most likely to buy insurance.
- They tend to have more losses and higher claims than insureds with an average loss probability.

# Avoiding Adverse Selection: Data Collection

- Insurers need information about insureds to set prices that accurately reflect risks.
  - The more finely grained the data, the more precise the pricing.
- Data collection raises privacy concerns:
  - What information is relevant?
  - How much information is too much?
  - How is insured information shared/stored?

# Moral and Morale Hazard

- Behaviors that increase loss frequency and/or severity:
  - Moral—dishonesty
  - Morale—carelessness or indifference
- Common in auto, products liability, and general liability insurance.
- Can be discouraged with policy risk-sharing features (deductibles).



# Actuarial Equity Versus Social Equity

- Fair discrimination—equitable premium for each insured—is essential to insurance pricing.
- State insurance laws prohibit unfair discrimination in insurance pricing.
- What is considered to be unfair varies across the states.

# Equity

## ■ Actuarial Equity:

- Premium is directly proportional to the insured's loss exposure.
- Cost-based pricing—identifies every variable unique to each insured.
- Use of some variables may be prohibited by state law.

## ■ Social Equity:

- Pricing should relate to ability to pay.
- Factors beyond an insured's control should not affect premium.

# Timing

- Short-tail losses:
  - Most losses are recognized, valued, and settled quickly.
  - Comprehensive coverage PPA claim.
- Long-tail losses:
  - Some losses take a long time to manifest, value, and settle.
  - Bodily injury claims related to asbestos.
- The longer the tail, the greater the uncertainty in expected losses for insurance providers.

# Characteristics of Insurable Risks

1. A large quantity of similar people or objects that may be subject to a loss.
2. Losses would be fortuitous.
3. The amount of an expected loss can be predicted.
4. Losses would not be catastrophic to the insurer.
5. Time, location, and extent of a loss can be determined.
6. Covering the expected loss is economically feasible for the insurer.

# Characteristics of the Insurance Product

Insurance products share several characteristics that distinguish them from other types of consumer products.

# Intangibility

## Insurance products:

- Lack physical characteristics.
- Represents a promise (to pay only in the event of loss).

## Product benefits become most apparent when a loss occurs:

- Insureds or claimants are typically facing unpleasant circumstances.
- Heightened emotions complicate the customer service experience.

# Complexity and Legal Status

- An insurance policy contains complicated terms and concepts that are often difficult for consumers to understand:
  - Breadth of coverages.
  - Limits of coverages.
- An insurance policy is a legal contract:
  - Insureds and claimants may hire attorneys to resolve or clarify issues.
  - Some issues may involve courts, regulators, or legislators.

# Insurance as a Risk Management Technique

Loss exposures with serious financial consequences typically require the purchase of insurance.



# Risk Management Techniques

- Identify
- Analyze
- Mitigate
  - Prevention
  - Reduction
- Retain or Transfer

# Retaining vs. Transferring Loss Exposures

## Retain:

- Some loss exposures present minimal potential costs and can be safely retained.
- Other loss exposures have the potential to cause financial ruin.

## Transfer:

- Some loss exposures are most effectively managed by transfer.
- Transferred financial consequences of a loss are borne by another party.
- Insurance is a common risk transfer technique.

# Why Insurance Regulate Insurance Markets

The fundamental purpose of insurance regulation is to protect the public as consumers and policyholders.

# Regulation Basics

## Consumer Protection:

- Regulating and standardizing insurance policies and products.
- Controlling market conduct and preventing unfair trade practices.
- Ensuring that insurance is available and affordable.

## Insurer Solvency:

- Ensure an insurer's claim-paying ability.
- Protect the public interest.
- Safeguard insurer-held funds.

# Insurance Fundamentals for Policymakers

For more information, please contact:

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