Presentation

Navigators Insurance Group

Insurance Operations

Speculative and Pure Risk

- We can identify two broad categories of risk:
  - **Speculative Risk**. The chance where both loss and gain are possible.
  - **Pure Risk**. The chance of an unexpected or unplanned loss without the accompanying chance of a gain.

Question

- Which of the following are pure risks?
- Placing a bet on a horse at a racetrack.
- An explosion in a power plant.
- A decline in the value of a nation’s currency.
- A microwave oven emitting harmful messages from the devil.

Answer

- **Race Track Bet.** Not a pure risk. Upside possibility.
- **Explosion**. A pure risk. Only a downside.
- **Currency Decline.** Not pure risk. Currencies rise and decline in value.
- **Microwave Devil Message.** What do you believe?

Exposure, Peril, and Hazard

- An insurable risk can cause a financial loss and/or disrupt the operations of a business. Three terms help dimension it:
  - **Exposure**. A condition where risk could cause a loss.
  - **Peril**. Immediate cause of a loss.
  - **Hazard**. A condition increasing the likelihood of a loss from a peril.

Question

- A company purchases a building. With respect to the possibility of fire, what is:
  - An exposure?
  - A peril?
  - A hazard?

Answer

- Fire in a building.
  - **Exposure.** Purchase of the building.
  - **Peril**. Electrical fire.
  - **Hazard**. Storing gasoline in the building.

Hazard Categories

- We can identify four kinds of hazards:
  - **Physical.** A condition of the real world that creates a danger.
  - **Moral.** A tendency of a person to lack integrity or be dishonest.
  - **Behavioral.** A tendency of a person to be careless. (also called morale hazard)
  - **Legal.** Characteristics of legal system that increase frequency or severity of losses.

Question

- Identify each as physical, moral, behavioral, or legal.
  - A workman leaving a ladder propped against a house.
  - A witness to a bus crash who hops on the bus and later claims an injury.
  - An individual who rides to work on a motorcycle even on rainy days.
  - A business person who rents a low-cost office in a building with antiquated electricity wiring.

Answer

- **Ladder Against House.** Behavioral. Physical.
- **Witness Files Claim.** Moral.
- **Motorcycle to Work.** Physical but behavioral on rainy days.
- **Bad Rental.** Physical but partly behavioral.

Tests of Insurable Risk

Financial Loss. possibility of a decrease in money or a decline in monetary value.

Definite Loss. We must know conclusively that a loss took place.

Fortuitous Loss. The loss must occur as a result of chance from the perspective of the insured. This is also called a *contingent loss.*

Question

- An individual wants to purchase fire insurance to cover a house located in a dense forest. Is this an insurable risk under the following conditions:
  - If forest fires are common in the area?
  - If a fire is approaching the house?
  - If a child of the owner sets a fire?

Answer

- Insurable if loss is contingent.
  - Yes if forest fires are common in the area. May have a high premium
  - No if a fire is approaching the house (not a contingent loss).
  - Yes if relative of owner sets a fire as long as owner is not an accomplice. (contingent from point of view of owner)

Indemnification

- **Indemnity** refers to a reimbursement that compensates exactly for a loss.
- After a loss, an insured is returned to the approximate financial position prior to the loss.
- The insurer avoids allowing an insured to make a profit from a claim.

Indemnity Calculation

- **Direct Costs.** Damage or harm in its basic and most visible context. The money to repair or replace the asset.
- **Indirect Costs.** Financial damages that are not so obvious or visible. Example is loss of use until an asset is repaired.
- **Consequential Expenses.** Extra costs as the result of a loss.

Question

- An owner keeps a Ferrari in a wooden barn behind his house.
- The Ferrari cost $200,000 five years ago.
- It is worth $300,000 today.
- The owner has asked Lloyd's of London to insure it for $400,000.
- Is Lloyd's likely to offer this insurance?

Insurable Loss

- Risks are insurable when the loss has the following characteristics:
- **Arises from a Pure Risk.** Speculative risks are not insurable.
- **Loss not Trivial.** The administrative costs make it too expensive to insure minor losses.
- **Affordable Premiums.**
- **Acceptable Policy Limit.**

Question

- If a homeowner snaps under pressure and sets fire to his house.
- A court-appointed psychiatrist certified that the person suffered from temporary insanity.
- Would damages to the house be covered by fire insurance?

Question

- A company wanted to purchase insurance to send employees to a restful resort if they suffered serious depression for more than 60 days.
- The insurance would cover travel and living expenses.
- Is this an insurable risk?

Risk Strategies

- Organizations use a mixture of four strategies to deal with frequency and severity of risk. They always use:
  - **Reduction**. Lower the frequency or severity.

The other strategies are:

- **Avoidance.** Do not accept it.
- **Retention**. Keep it.
- **Transfer**. Shift the financial burden to another party.

Question

- Of the risk strategies (1) avoid, (20 retain, and (3) transfer, which one is used for each of the following?
  - Low frequency, high severity.
  - Low frequency, low severity.
  - High frequency, high severity.
  - High frequency, low severity.

Answer

- Reduce for all. Also:
- Low frequency, high severity. **Transfer**
- Low frequency, low severity. **Retain**
- High frequency, high severity. **Avoid**
- High frequency, low severity. **Retain**

Property Insurance

- Provides protection against most risks to property. Includes:
  - Fire flood, earthquake
  - Houses.
  - Commercial Buildings
  - Boilers and equipment.
  - Vehicles.
  - Aircraft.

Liability Insurance

- Liability insurance indemnifies insured against third party claims. It covers:
  - – Lawsuit judgments.
  - – Cost of settlement of claims.
  - – Legal expenses.

Casualty Insurance

- Casualty insurance is a problematically defined term not concerned with life insurance, health insurance, or property insurance. However, the "elastic" term has also been used to describe:
  - Property insurance for aviation, boiler and machinery, glass breakage, and crime.
  - Marine insurance for shipwrecks or losses at sea.
  - Fidelity and surety insurance.
  - Earthquake.
  - Political risk and terrorism.
- NAIC in 1946: Defined legal liability except marine, disability and medical care, and some damage to physical property.

Government Regulation of Insurance

- Characteristics of insurance regulation in the U.S.:
  - **State Level.** Every state has an insurance department. The federal government does not regulate insurance companies.
  - **NAIC.** Regulation is coordinated by the National Association of Insurance Commissioners.

Goals of Regulation

- Regulation pursues goals including:
  - Increase the likelihood of insurer solvency.
  - Protect consumers.
  - Increase the availability of insurance.
  - Encourage reasonable costs for consumers and adequate return for insurers.

Cash Flow Financial Results

• Underwriting Results	36000
• Investment Income	24000
• Taxable Income	60000
• Tax Rate	10%
• Taxes	-6000
• Profit	**54000**

Cash Flow Underwriting

- This is a practice of granting coverage based on rates that are designed to increase an insurance company's cash flows during periods when losses and expenses are likely to exceed premiums.

Insurer Solvency

- **Financial Solvency**. Exists when the company can meet all financial responsibilities and pay all claims fully and on time.
- **Technical Solvency**. Occurs when the insurer has adequate assets to provide a cushion of support for future claims.
- **Technical Insolvency**. Describes a situation where the insurance company fails to meet the minimum capital requirements established by regulators.

Continuing Solvency

- **Adequate Cash Flows**. Cash from operations is sufficient to cover operating expenses and losses incurred.
- **Adequate Equity**. Insurer's capital is sufficient to support the level of premiums and other activities.

Factors Affecting Solvency

- **Sound Underwriting**. Evaluate risks and set premiums to have funds available to pay claims.
- **Sound Investments**. Invest carefully in safe and liquid assets.
- **Cost Control**. Manage operating and other costs.
- **Strong Internal Auditing**. Ensure all activities are in accordance with company policy.

Statutory Accounting

- Statutory accounting is more conservative than GAAP:
  - **Liquidation Viewpoint.** Recognizes relatively-liquid assets available to pay claims. GAAP accounting recognizes all assets.
  - **Conservative Capital.** Because some assets are not accepted, equity will be smaller than GAAP accounting.
  - **Conservative Realization.** Under GAAP accounting, realization occurs when revenues are earned, expenses are incurred, and losses are expected. Regulatory accounting is more conservative.

Admitted Asset

- A high-quality asset that meets requirements of regulators and appears on a regulatory balance sheet.
  - **Liquidity.** Easily converted to cash in a short period of time.
  - **Certainty.** Highly likely to be converted to cash at their reported values if they are needed to pay claims.
- Only admitted assets appear on regulatory balance sheets.

Nonadmitted Asset

- Fails to meet the regulatory standard to be an admitted asset. Examples are:
  - **Furniture, Equipment, and Computers.** Not very marketable at accounting values.
  - **Funds Deposited with Unauthorized Parties.** Insurers not licensed locally for example.
  - **Uncertain Collectibles.** Includes overdue receivables, balances due from agents or brokers, and overdue interest and dividends.

Categories of Accounts

- **Asset**. A financial resource.
- **Reserves.** Obligations to pay claims.
- **Liability**. A debt or money owed to others.
- **Capital**. A source of assets from owners or past profits.
- **Revenue**. An inflow of assets, not limited to cash, in exchange for coverage or services rendered.
- **Expense**. A consumption of any asset while conducting business.

Insurer Balance Sheet

- The most important financial statement for an insurance company.
- **Asset**s. Cash, investments, equipment.
- **Reserves**. Reflect losses occurred but not paid.
- **Liabilities**. Debts or obligations.
- **Capital.** Difference between assets and obligations. “Surplus” is title for account with retained earnings.

Care with Statutory Balance Sheet

- **Missing Assets.** Overdue assets may be quite liquid and reliable.
- **Reserves.** Based on past history and future expectations.
- **Boasting about Reserves.** They show high level of assets to pay claims.
- **Capital.** An accounting entry, not extra “money” in addition to assets.

Insurer Income Statement

- **Revenue.** Money from normal business activities.
- **Losses.** Associated with policies written during the period.
- **Nonfinancial Expenses.** Operating costs.
- **Financial Expenses.** From borrowing or leasing assets.
- **Before-tax Income**.
- **Income after Taxes.**

Question

- Watch out for account titles.
- Insurance analyst says, “I am concerned about overdue premiums?”
- What type of account is that?

Reply

- Overdue Premiums:
- Asset if the company is entitled to collect the premiums.
- Liability if premiums are owed to another party.
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Question

- Underwriter says,
- “What is our strategy for deferred taxes?”
- What type of account?

Question

- Deferred Taxes:
- Asset if it will reduce a subsequent period's income taxes.
- Liability if result of temporary differences between tax rates and taxes payable for the current year.

Reinsurance Parties

- Reinsurance is purchased to spread an insurer's own risk. The parties are:
- **Primary Insurer**. Issues an insurance policy and pays claims that arise from it.
- **Ceding Insurer**. Primary insurer when it transfers (cedes) a portion of the risk to a reinsurer.
- **Reinsurer**. Insurance company that accepts risk under a policy written by a ceding insurer.

Reinsurance Purpose

- **Increase Capacity**. More coverage than allowed based on its financial strength.
- **Stabilize Profits**. Reduce chance of a single large loss.
- **Higher Limits**. Accept risks that exceed its capacity to pay the claim.
- **Specialized Coverage**. Reinsurers have a broad perspective on risk.

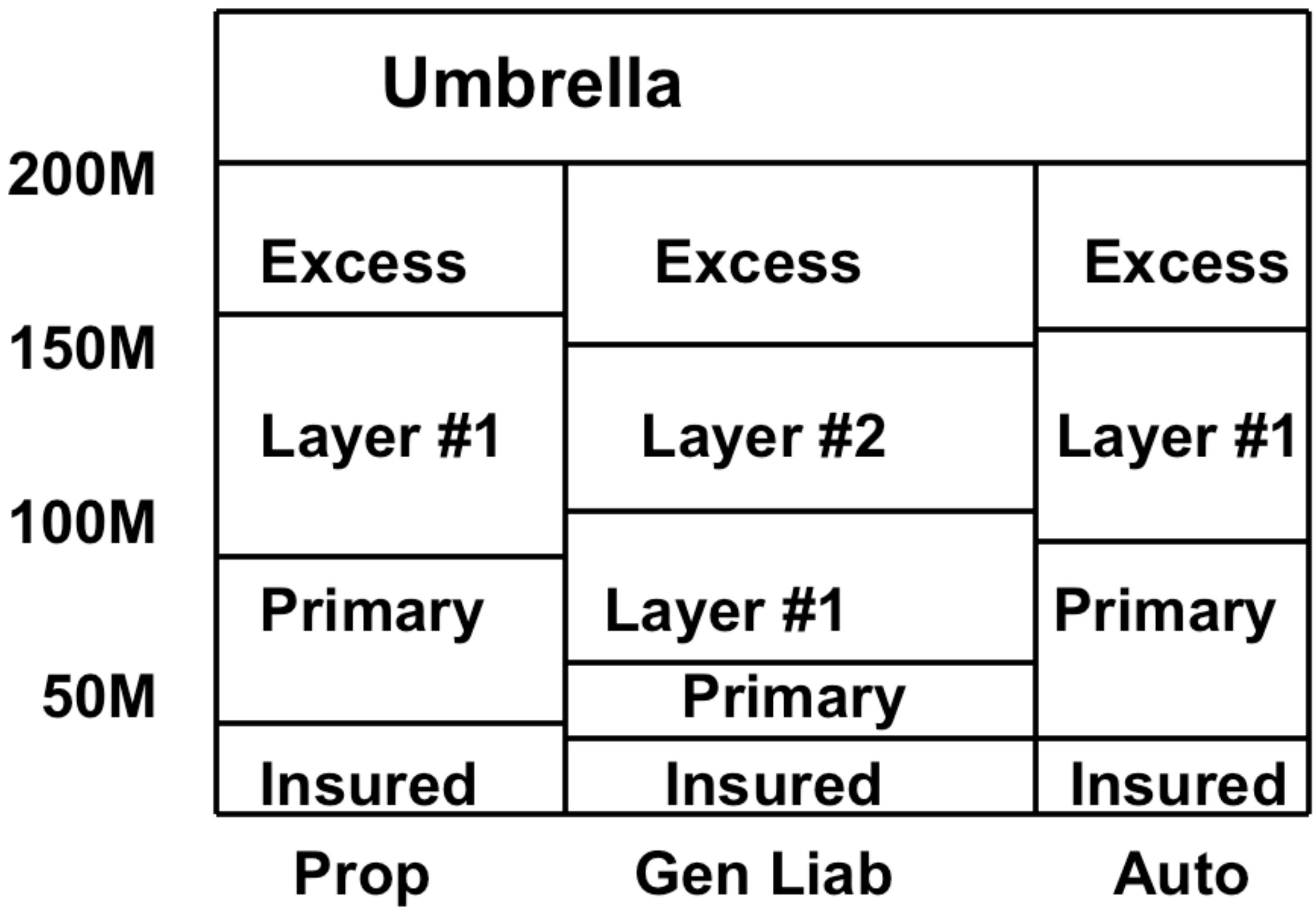
Layering of Insurance

- A layer refers to a level of retention or transfer of an insurable exposure when coverage occurs above a lower level of insurance.
- Each layer is the responsibility of a different party.
- Insurance layers provide higher levels of coverage that might be obtainable without multiple parties.

Policy Layering

- **Insured Retention.** The insured pays the first portion of any loss. This is the deductible.
- **Primary Insurance**. All losses from the retention to the policy limit are in this layer.
- **Excess Insurance**. The insured can buy coverage above the primary limit.
- **Umbrella Insurance**. An insured can buy broad coverage above all limits to protect against catastrophic loss.

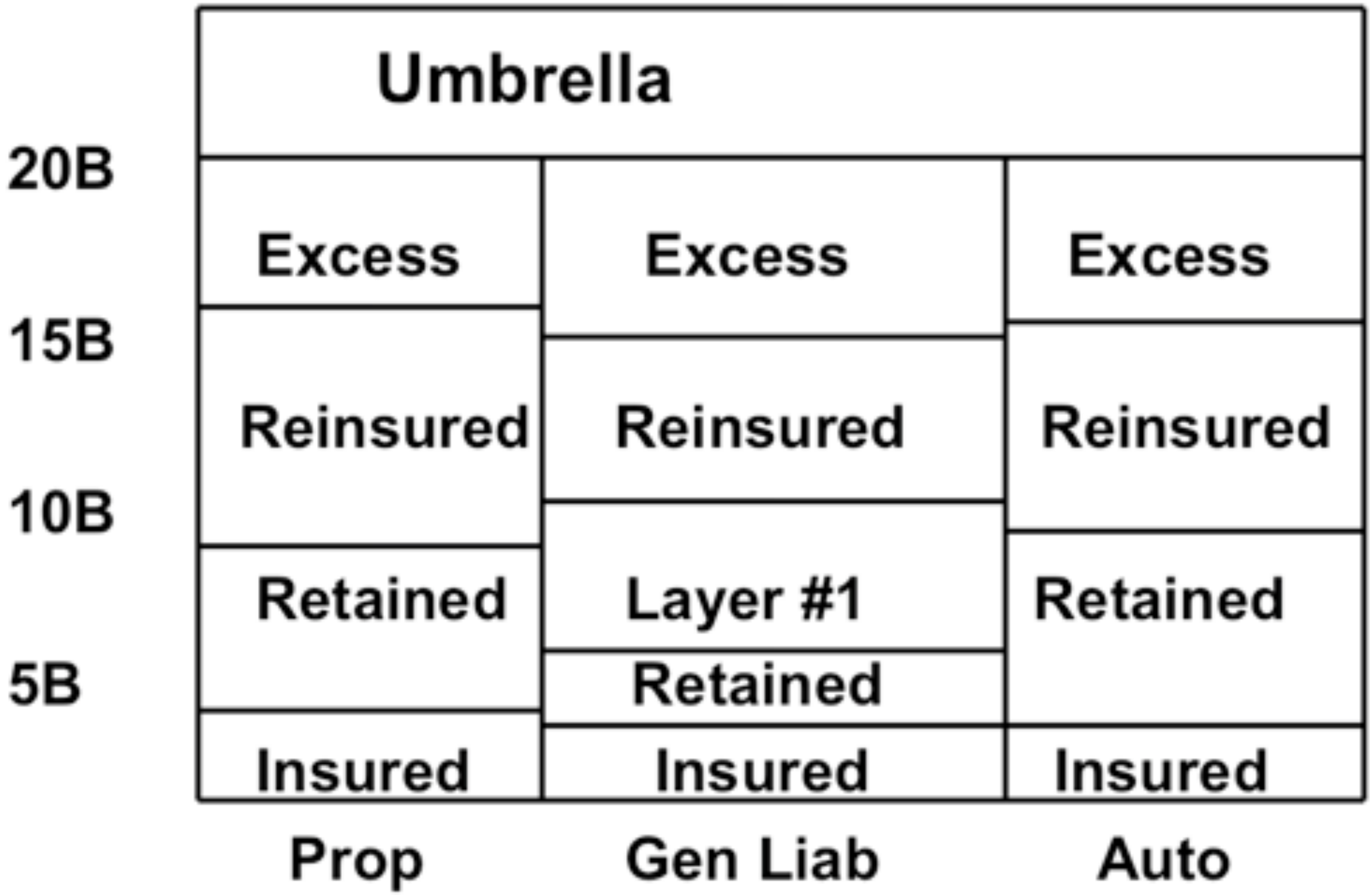
Single Policy Layering



Insurance Company Layering

- **Insured Deductible.** This is the level retained by the insured.
- **Primary Insurance**. This is the first layer retained by the insurer.
- **Reinsurance**. The insurance company can reinsure a portion of the primary layer.
- **Excess Insurance**. This level covers accumulated large above reinsurance.
- **Umbrella Insurance**. This protect broadly against unforeseen catastrophes.

Insurer Layering



Insurance Market Cycle

- A **cycle** refers to a course or series of events or operations that recur regularly and usually lead back to the starting point.
- U.S. property and liability insurance has a tendency of insurance coverage to follow a cyclical pattern with pricing and coverage availability.
- In this context we identify hard and soft markets.

“Soft” Insurance Market

- Exists when insurance coverage is relatively plentiful and offers attractive pricing for organizations.
- **Buyers’ Market.** Insurance companies are highly responsive to the needs of clients.
- **Excess Capacity.** Insurers have premium and revenues goals that exceed the needs of buyers.
- **Market Share Pricing.** Insurers price coverage to retain or increase their market share.

“Hard” Insurance Market

- Exists when insurers withdraw and become more selective when offering coverage.
  - **Sellers’ Market.** Insurance companies restrict exposure and seek out only the best risks.
  - **Restricted Capacity.** Organizations struggle to incorporate insurance into risk management programs.
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Drivers of the Cycle

- **State of the Economy**. Are economic conditions good or bad?
- **Insurer Resources.** Do insurers have enough capital?
- **Underwriting Results.** Are insurers profitable?
- **Cash Flow Underwriting.** Are insurers lowering premium prices to expand business?
- **Long and Short Tail Losses.** What kind of business is being written?
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Long and Short Tail Losses

- **Long-tail Loss**. Exists when an insurance company expects to pay a claim many months or even years after a loss.
- **Short-tail Loss.** Exists when a claim is likely to be paid immediately after a loss.

Goals in Underwriting

- Insurers seek to achieve the following:
  - **Simplicity.** Easy to understand coverage and rates.
  - **Consistency.** Stable rates over time.
  - **Flexibility.** Can adjust to changing conditions.
  - **Loss Control.** Encourage mitigation of losses.
  - **Profitability.** Earn a return on capital.

Steps in Underwriting

- The process followed by an underwriter includes:
  - **Evaluate the Exposure.** Evaluate the perils presented by the application and the hazards that can increase the change of loss.
  - **Compare the Exposure with Guidelines.** The company may prohibit some exposures, restrict others, or limit coverages.
  - **Recommend or Deny Coverage.** After assessing situation, accept or reject application.

- **Historical Data**. What is the history of prior losses and costs?
- **Frequency**. What is the likelihood of r partial or total losses?
- **Severity**. What is the likely size of major claims?

Class Rating

- **Base Rate**. This is a single rate per $1,000 of coverage for similar exposures.
- **Average Experience**. Reflects average losses and claims for the class.

Schedule Rating

- **Base Rate.** Starts with a class rate.
- **Adjustment.** Upward or downward based on the factors in the pool compared to the general population.
- **Example.** Male driver under the age of 25.

Experience Rating

- **Base Rate**. Starts with a class rate.
- **Historical.** What is the claims experience?
- **Example:** Male driver with 3 accidents.

Judgment Rating

- When:
- Difficult to determine a class rate.
- No experience with prior losses.
- Unique exposures.

Adverse Selection

- This refers to the tendency of persons with high chances of loss to seek insurance at average rates.
- Insurers investigate whether a party fits the criteria for coverage.
- It seeks to exclude adverse selection.

Insurance Claim

- An insurance **claim** is a request for payment for an insured loss. Claims are made when the loss is:
  - **Accidental.** Not caused deliberately.
  - **Definite.** It occurs from a known cause at a specific time and place.
  - **Measurable.** The amount of the loss can be calculated.
  - **Covered.** Under a binding insurance policy.

Claims Adjusting

- **Adjusting** refers to the settlement of a claim. The process involves:
  - **Notification.** The insured makes a claim.
  - **Verification.** Proof of a covered loss and the amount of damage.
  - **Payment.** Insurers should give a fair and prompt payment for legitimate claims.
  - **Assistance.** Insurers should help insureds who have suffered a covered loss.

Indemnity

- **Indemnity.** Refers to the compensation for a loss.
- **Indemnity Principle.** Payments of claims under an insurance policy must be limited to the actual loss.

Valuation of the Loss

- **Actual Cash Value.** Replacement value minus ordinary wear and tear on a damaged asset.
- **Replacement Value.** Cost to replace a damaged asset with a new asset.
- **Agreed Upon Value.** Amount of insurance coverage when the insured and insurer agree upon the coverage in advance.