

Insurance Risk 101

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Life Insurance Risk 101

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Overview

- Principles of insurance
- Life insurance products and pricing
- Risks a life insurer faces
- Mortality risk and underwriting
- Other risks



Principles of Insurance

- Gambling vs. Insurance
- Law of Large Numbers
- Risks insured (life insurance)



Life Insurance Products

- Term Life
- Permanent Life
- Deferred Annuities
- Payout Annuities



Considerations in Setting Premium Rates

- Premium rate adequacy
- Premiums must be equitable
- Premiums should be fair



Insurance Company Risks

- Some examples
 - Legal - litigation
 - Operational - mistakes, errors, etc.
 - Pricing - inadequate premiums
 - Regulatory - new requirements
 - Reputation - negative press



Life Insurance Pricing Risks

- Mortality
- Persistency
- Expenses
- Investment



Mortality Risk

- Historical perspective
- Trends
- Insured vs. Population Data
- The Adverse Selection Problem



Underwriting

- Selection
- Classification
- Major factors considered
- Classification Methods
- Classification Categories



Other Risks

- The traditional model has changed
- Concern for outliving retirement assets is becoming a greater concern than premature death
- This has caused growth in asset accumulation products
- Investment risks and competition with banks and securities firms is significant for insurers



The Pricing Process

- Probability of event occurring
- Time value of money
- The benefit promised
- Expenses
- Contingencies (risks)
- Profit



An Overview of Property & Casualty Insurance

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Property & Casualty Insurance

Outline of Discussion

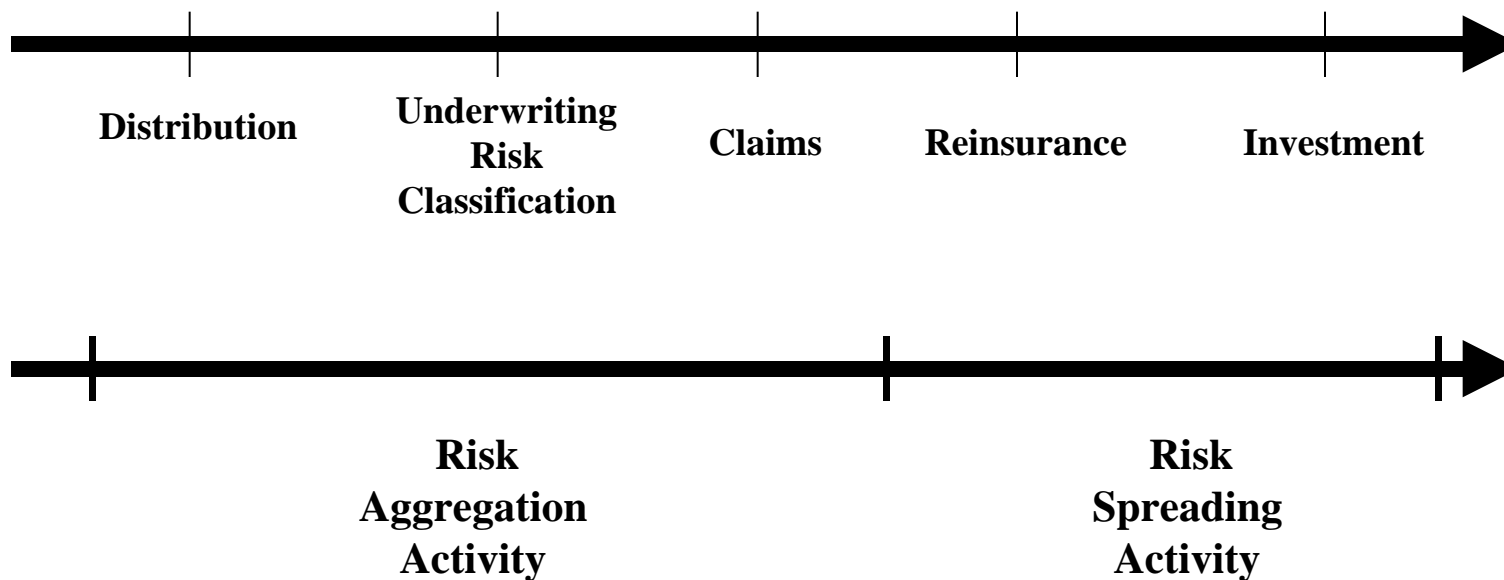
Insurance Value Chain

Risk Aggregation Activities

Risk Spreading Activities



Insurance Value Chain



Insurance Value Chain

P&C Lines of Business (LOB)

- Personal Lines
- Commercial Lines
- Reinsurance



Risk Aggregation Activity

Distribution Channels

- Direct Writers -- Develop, maintain and manage their own agency force
- Agency Writers -- Use independent contractors (insurance agents) as their insurance sales force
- Association/Group Purchasing Programs
- Internet



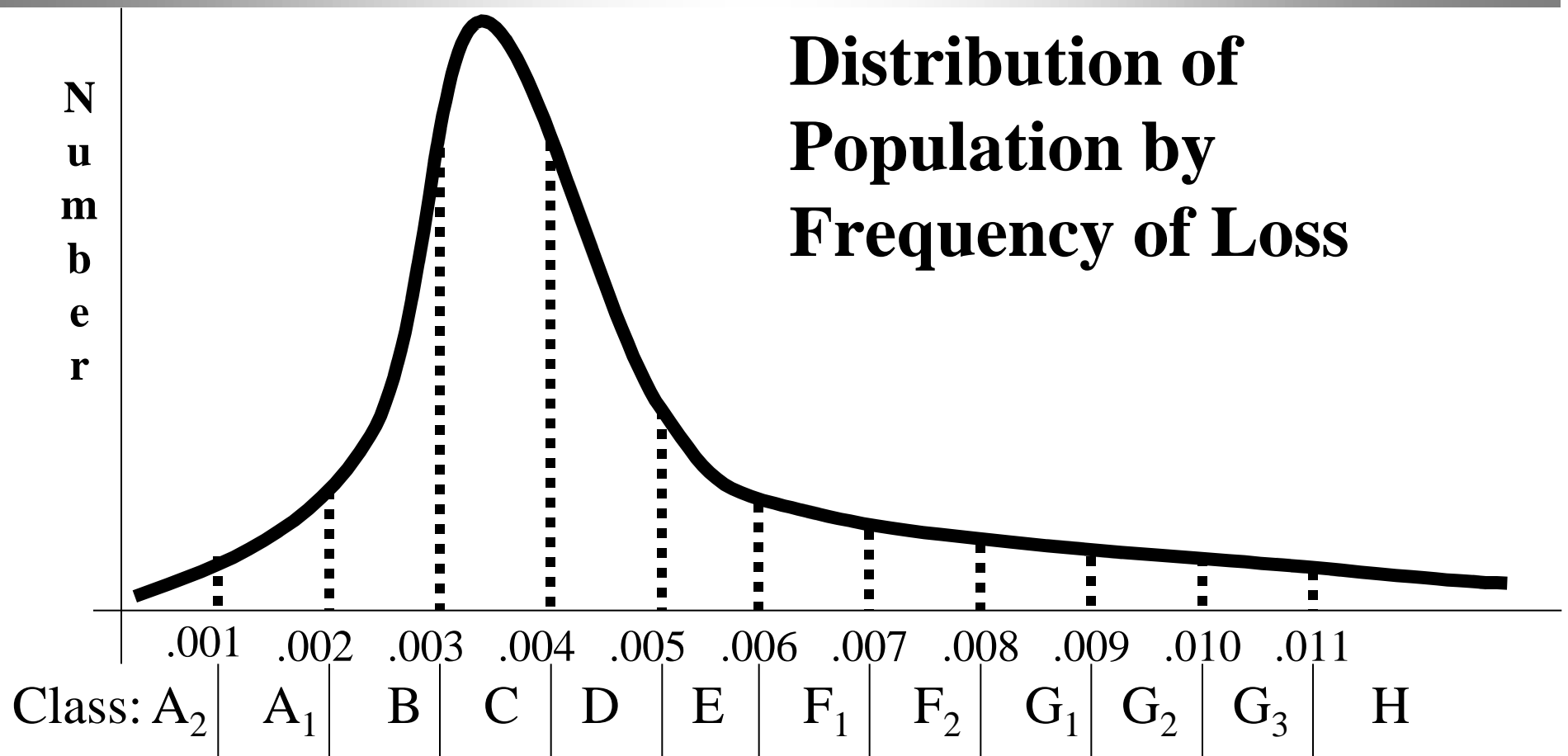
Risk Aggregation Activity

Underwriting Services

- Selection
 - The process by which an insurance company decides whether to issue requested insurance.
- Classification
 - The process of assigning a proposed insured to a group of insureds of approximately the same expected loss probabilities.



Risk Aggregation Activity



Risk Aggregation Activity

Claims Services

Variable Claim Values

- Efficacy in Claims Settlement -- Paying the “right” amount for claims
- Efficiency in Claims Operations -- Performing services at the “lowest” cost



Risk Spreading Activity

Reinsurance Services

- Loss Portfolio Management
 - Solvency Risk
-

Individual Claim Severity Risk

Catastrophe Risk

Pricing Risk



Risk Spreading Activity

Investment Services

- Investment Portfolio Management
 - Asset/Liability Matching
 - Asset Class Allocation
 - Investment Risks
-
- | | |
|------------------|----------------------|
| > Market Risk | > Political Risk |
| > Liquidity Risk | > Exchange Risk |
| > Default Risk | > Interest Rate Risk |



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