

# Principles of Risk Management and Insurance

R. B. Drennan, Ph.D.  
Associate Professor and Chairman  
Department of Risk, Insurance and Healthcare  
Management  
Fox School of Business  
Temple University

July 10, 2013

# Risk

# Risk Defined

- Risk is ***uncertainty*** concerning the occurrence of a loss or events which might produce a loss (an event)
- Losses are measured in financial terms
- Managing risk involves decision making under uncertainty

# Risk Terminology

- Losses can be analyzed according to:
  - Probability or Chance – how likely?
  - Peril – immediate cause of a loss
    - e.g, fire, theft, death
  - Frequency – how often?
  - Severity – how much in financial terms when it occurs
  - Total dollar losses in a time period

# Risk Terminology

- Hazard
  - A condition which lies behind the occurrence of a loss
    - Could increase frequency
    - Could increase severity
    - Could increase both

# Risk Terminology

- Type of Hazards
  - Physical
  - Moral
  - Morale

# Pure Risk

- Pure Risk Events
  - Two possible future states of the world
    - Loss
    - No Loss
- Random events cause the possible future states of the world to occur
- Personal, Property and Liability Pure Risk
- Generally are insurable

# Speculative Risk

- Speculative Risk Events
  - Three possible future states of the world
    - Loss
    - Gain
    - No Loss or Gain
- Random events cause the possible future states of the world to occur
- Generally are NOT insurable



# Economic Burden of Risk

- Cost of Losses – expected or unexpected
- Cost of Risk Management Techniques
  - Loss mitigation
  - Insurance and other risk financing
- Loss of Good and Services judged to be ‘too risky’
- Cost of residual uncertainty

# Risk Management

# Definition of Risk Management

- Identification, measurement and treatment
- Of exposures to potential accidental losses
- Almost always in situations where the only possible outcomes are loss or no loss
- Traditional risk management [TRM] - management of pure risk

# Risk Management Process

- Identifying and classifying exposures to loss –Ask what can happen?
  - Classifying exposures - TRM
    - Property
    - Liability – tort, absolute, contract
    - Net Income – business interruption
    - Personnel – loss of key personnel

# Risk Management Process

- Identifying and classifying exposures to loss – Ask what can happen?
  - Classifying exposures – Enterprise Risk Management [ERM]
    - Hazard
    - Operational
    - Financial
    - Business/Strategic

# Risk Management Techniques

- Avoidance – refrain from activity either proactively or reactively
- Retention – assume financial responsibility for the loss
  - Self Insurance
  - Captives
  - RRGs [sharing]

# Risk Management Techniques

- Loss Control – Loss Mitigation
  - Loss Prevention – reduce frequency
  - Loss Reduction – reduce severity
- Non-Insurance Transfer - financial responsibility rests with 3<sup>rd</sup> party
- Insurance Transfer

# Loss Exposure Characteristics and Risk Management Options

		Frequency Of Losses	
		High	Low
Severity Of Losses	High	Avoidance	Transfer
	Low	Retention & Control	Retention



# Insurance Principles, Self-Insurance and Risk Pools



*This painted tin mark was issued by Norwich Union in England in the mid-1900s.*

# Characteristics of Insurance

- Insurance involves ***transfer*** and ***pooling***
- Risk transfer from the insured to the insurer
  - Insurer assumes financial responsibility for the loss
  - Insurer agrees to ***indemnify*** the insured in the event of a covered loss

# Characteristics of Insurance

- Fully indemnified?
- Should insurers sell contracts that always fully indemnify their customers?
- Forms of indemnification
  - Cash
  - Repair/replacement of an asset
  - Provision of services
- 1<sup>st</sup> vs. 3<sup>rd</sup> party claims

# Characteristics of Insurance

- Insurer accepts the risk transfer through ***pooling***
- Insurers face ***estimation risk***
- By accepting many homogeneous exposures to loss:
  - Accuracy of predictions of future losses to the group can be improved
  - Law of Large Numbers
  - Estimation risk is addressed

# Characteristics of Insurance

- Trade *uncertainty* for *certainty*
- Without insurance:
  - An individual is uncertain about individual frequency and severity
- With insurance:
  - An individual trades a potentially large and unpredictable loss [*uncertainty*]
  - In exchange for a relatively small and predictable loss [*certainty*]
  - Premium can be viewed as a loss with probability equal to 1 – a *certain loss*

# Characteristics of Insurance

- Social Costs of Risk Treatment
  - Cost of operating an insurance mechanism
  - Cost of moral hazard
    - Fraudulent claims
    - Inflated losses

# Characteristics of Insurance

- Social Benefits of Risk Treatment
  - Indemnification for losses
  - Less worry and fear
  - Source of investment funds
  - Loss Prevention
  - Enhancement of Credit

# Self-Insurance

- Entity decides to pay for losses from current revenue or from pre-funded accounts
- Best suited for high frequency, low severity claims
  - Predictability
  - Financial capacity to pay losses
- Typical exposures include:
  - Workers' Compensation
  - Employer-provided health care



# Advantages of Self-Insurance

- Improved cash flow
- Reduced loading and assessment
- Improved benefits from successful loss prevention/loss reduction efforts
- Reduced indirect impact of health insurance regulations on plan design

# Disadvantages of Self-Insurance

- Potential for catastrophic losses
- Administrative burden
- Direct claim interaction with employees
- Slightly reduced income tax advantages in some cases

# Ideal Requirements of an Insurable Risk

- Not all risks are insurable in the private sector
- Ideally, risks should meet these requirements
- Requirements are often violated
- Insurer can either address the problem through some contractual solution or decide not to insure that particular risk
- Few risks meet each requirement ideally

# Ideal Requirements of an Insurable Risk

- Risk Pools should contain a large number of homogeneous exposure units
  - Large number?
    - Accuracy of predictions
  - Homogeneous?
    - Similar with respect to expected loss

# Ideal Requirements of an Insurable Risk

- Underwriting and Risk Classification
  - Designed to produce homogeneous risk pools
  - Charge higher risks more
  - Charge lower risks less
  - Risk-based or actuarial pricing
- Problem of adverse selection otherwise

# Ideal Requirements of an Insurable Risk

- Loss should be fortuitous [accidental or unintentional]
- Loss should be beyond the control of the insured
- Problem of ***moral hazard*** might arise
- Presence of insurance changes behavior of the insured so as to increase frequency and/or severity of losses
- Why a problem?

# Ideal Requirements of an Insurable Risk

- Loss should be definite and measurable [time, place and amount]
- Definite
  - Easy to verify that a loss has in fact occurred
- Measurable
  - Easy to measure or determine the amount of the loss

# Ideal Requirements of an Insurable Risk

- No catastrophic loss possibility to the insurer – ***correlated risks***
- Occurrence of a single event should not cause multiple losses
  - Earthquake, flood, hurricane, terrorism
- Solved partially by geographic and financial diversification [reinsurance]



# Ideal Requirements of an Insurable Risk

- Insuring loss must be economically feasible
  - Loss should be significant to the insured
  - Cost of premium [pure premium + loading] should be small compared to the size of the potential loss

# Ideal Requirements of an Insurable Risk

- Limits to insurability
  - Moral Hazard
    - Behavior after a contract
  - Adverse Selection
    - Behavior before a contract

# Measuring Insurable Risks

- Elements of Pricing
  - Frequency
  - Severity
  - Expenses
  - Investment Income [timing]

# Measuring Insurable Risks

- Uniqueness of insurance pricing
  - Pricing before the fact
  - Reliance on the past
  - Ultimate cost not known until the future
- Important Statistical Concepts
  - The Law of Large Numbers
  - Double Application of the Law of Large Numbers

# Risk Modification Activities

- Loss Prevention and Reduction
- Deductibles
- Coinsurance (Insurance to value)
- Coinsurance and Copayments (Participation)
- Exclusions

# Writing Insurable Risks

- Transfer and Pooling of Risks
- Adequate, equitable and reasonable rate structure
  - ***Actuarial Equity*** [risk-based pricing] vs. ***Social Equity*** [fairness]
- Role of the contract

# Writing Insurable Risks

- Capital Required to Back Promises
  - Losses Can Exceed Expectations
  - Usually, Capital is Called Equity or Net Worth
  - Insurer Capital is Called “Surplus”
  - Surplus is Cushion Against Unexpected

# Underwriting

- Private Systems engage in ***risk evaluation*** and ***risk classification***
  - Underwriting
- Selection and proper classification of ***insurable risks***
- Addresses potential adverse selection resulting from information asymmetries



# Underwriting

- Risk Evaluation
  - Identify risks with similar characteristics
  - Place them in the same risk pool
  - Ideally should pay same price base on actuarial equity
  - Pools should be relatively homogeneous

# Underwriting

- Information about the risk is needed in order to do proper risk evaluation
  - Inadequate information
  - Misinformation
  - Relevant information
  - Confidential

# Underwriting

- Issues in Risk Classification
  - Fairness
    - Actuarial Equity vs. Social Equity
    - Public Policy
  - Rate Adequacy
  - Availability

# Rating Factors Used

- Life
  - age
  - gender
  - medical condition
- Homeowners
  - location
  - construction
  - age of property
- Auto
  - territory
  - type of vehicle
  - age
  - gender
  - marital status
  - mileage
  - driving record

# Questions?

Thank You!  
Rob Drennan

INFORM+INSPIRE

# Life Insurance, Annuities and Health Insurance

R. B. Drennan, PhD  
Associate Professor and Chairman  
Department of Risk, Insurance and Healthcare Management  
Fox School of Business  
Temple University  
July 10, 2013

# Life Numbers...

- How long will you live?
  - What is “life expectancy”?
  - Males/Females
  - Today: M / F

Life Expectancy At Birth		
Year	Female	Male
1850	40.5	38.3
1900	51.1	48.3
1950	71.7	66.0

# Mortality: Nature of the Loss (Premature Death)

Meaning-- “Death with outstanding unfulfilled financial obligations”

## ■ Costs

- Loss of earnings to family (Human Life Value)
- Final expenses (Liquidity Issue)
- Non-economic costs
  - Emotional loss, role models

## ■ Leading Causes of Death in US

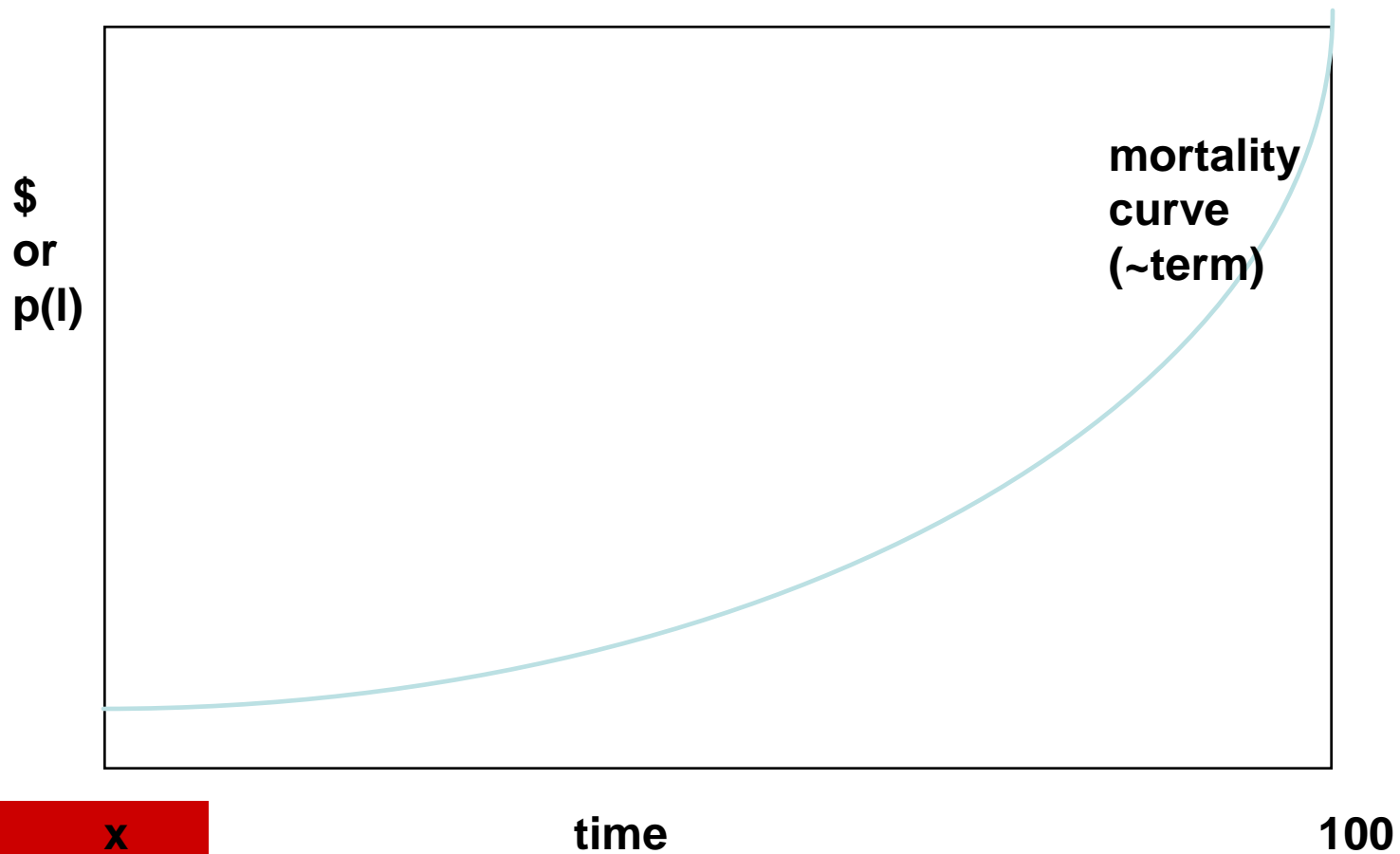
- Heart Disease, Cancer, Stroke, Lung Disease, Accidents



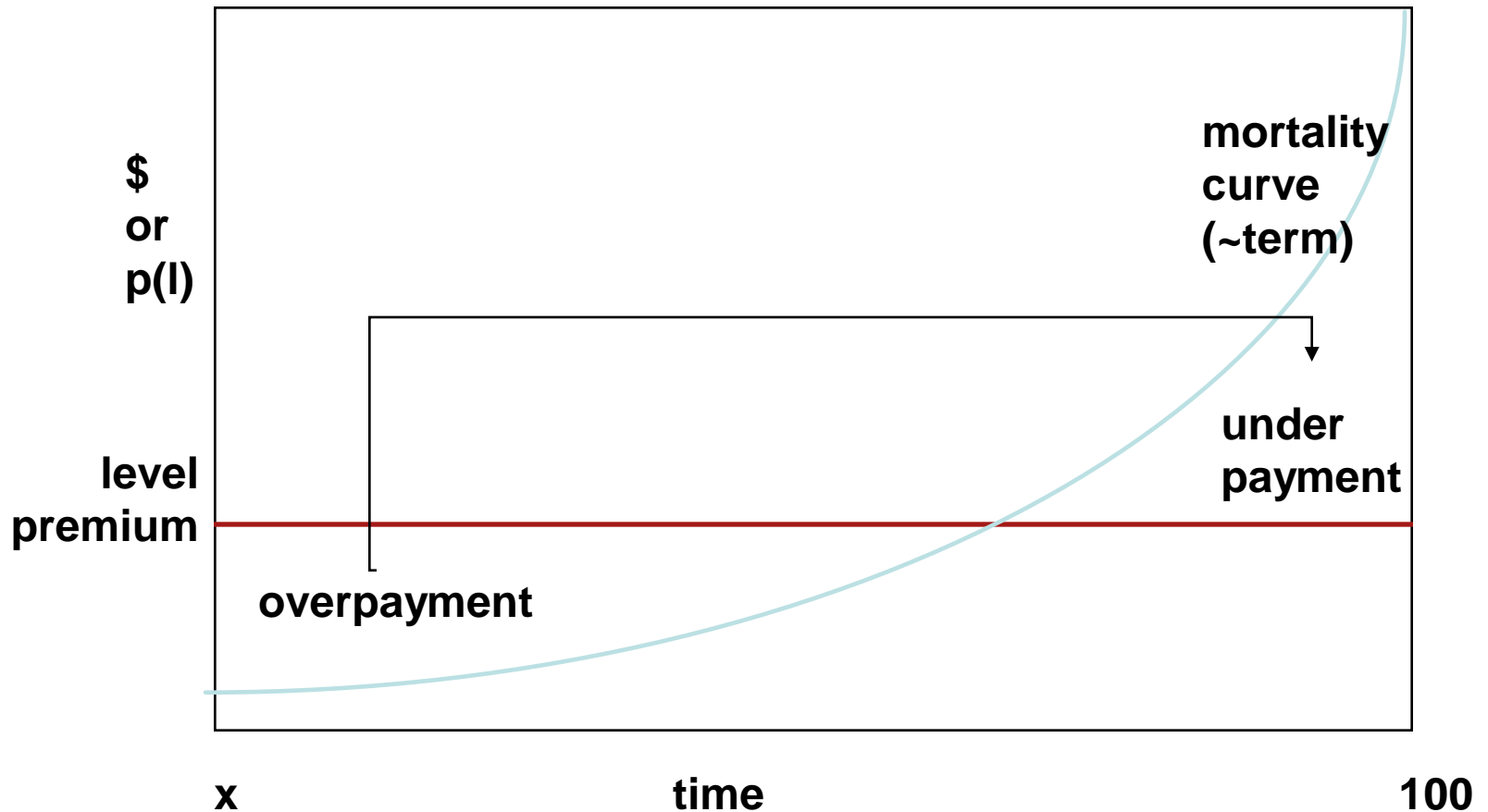
# Life Numbers...

- Probability of death for 20-35 year-old:
  - In U.S.:
    - X out of 1,000
  - \$100,000 of LI coverage:
    - $F * S$
    - $.001 * \$100,000 = \$\underline{\hspace{2cm}}$
    - \$1 per \$1000 of face amount
    - Price for pure protection

# Term Life Insurance Pricing



# Term Versus Permanent Pricing



# Life Insurance Products

- **Traditional**
  - Term Life – no cash value
  - Whole Life
  - Endowment
  - Annuities
- **Non-Traditional**
  - Universal Life
  - Variable Life
  - Variable Universal Life
  - Variable Annuities

# Life Insurance Rate (Price) Development

- Mortality Experience and Rating Factors
  - Age (group 20 and 60 year-olds?)
  - Male / Female
  - Smoker / Non-Smoker
  - Race?
  - Unique Factors: Hobbies, Job, Foreign Residence

# Life Insurance Rate (Price) Development

- Loading (Net Rate vs. Gross Rate)
  - Expenses
  - Taxes
  - Contingencies
  - Profit
- Interest (Long-term contract)

# Objectives in Insurance Ratemaking

- Adequate
  - The payments generated by a block of policies plus any investment return on same must be sufficient to cover current / future benefits and costs
- Equitable (not “unfairly” discriminatory)
  - Refers to setting premiums commensurate with expected losses and expenses; also suggests no cross subsidization. Sets a floor.
- Not Excessive
  - Sets a ceiling
  - Competition
  - Regulation

# Consumer Protection

- Unfair Trade Practices
  - Rebating, Twisting vs. Replacement
- Market Conduct Examinations
- Policy Forms - Contracts
  - Definition of key terms
    - Grace period
    - Incontestability Clause
    - Surrender values
    - Reinstatement



# Taxation of Life Insurance Products

- Death Benefit
  - Not taxable to beneficiary
  - No limit as to face amount
  - True for all types of life insurance contracts

# Taxation of Life Insurance Products

- Cash Value Life Insurance [CVLI]
  - Product has two components
  - Protection *and* savings or cash value
  - Cash value accumulates over time – credited with interest
    - ‘Inside buildup’

# Taxation of Life Insurance Products

- No federal income tax for a policyholder with respect to any earnings on CVLI
- True *if* the life insurance contract meets the definition of a life insurance contract under *Section 7702* – must have the appropriate balance between death protection and cash value

# Taxation of Life Insurance Products

- Policy Loans
- Borrow cash value – interest charged
- Interest is not deductible if policy is Single Premium Whole Life or Endowment Contracts

# Annuities

- Oscar Wilde:

*– "...It is better to have a permanent income than to be fascinating."*

# The Risk

- We've worked and saved \$1 million
- The Risk: We might live a (really) long time and outlive our assets
- In most countries:
  - 65-year-old men and women can expect to live to 81 and 85
  - 1/3 women and 1/5 men born today will live beyond 90

# How Long Will Retirement Assets Last?

<i>Annual Withdrawal Rate</i>	<i>Average Annual Total Return</i>						
	4%	5%	6%	7%	8%	9%	10%
15%	7	8	8	9	9	10	11
14	8	9	9	10	11	11	13
13	9	9	10	11	12	13	15
12	10	11	11	12	14	16	18
11	11	12	13	14	16	19	25
10	13	14	15	17	20	26	
9	14	16	18	22	28		
8	17	20	23	30			
7	21	25	33				
6	28	36					

*Years Your Assets Will Last*

Example: If you have saved \$100,000 for retirement and withdraw 10 percent of the money each year, your money will last 20 years if you earn an average annual total return of 8 percent.

Source: Adaptation of "How Much Can You Take from Your Retirement Assets," *In The Vanguard* (Winter 1997).

# Life Insurance vs. Annuities

- Think of as opposite of LI
  - Life insurance addresses the risk of dying too soon—mortality risk
  - Annuities address the risk of living “too long”—longevity risk



# Life Insurance vs. Annuities

- Over 50% of Life Insurer premiums today are for annuities instead of LI—why the shift from when they were only 25%?
- Basic Idea is: For every \$100,000, 65-year-old can receive ~\$700 in monthly income (\$8,400 per year), for life.
- Now, women receive more or less than men? And why?

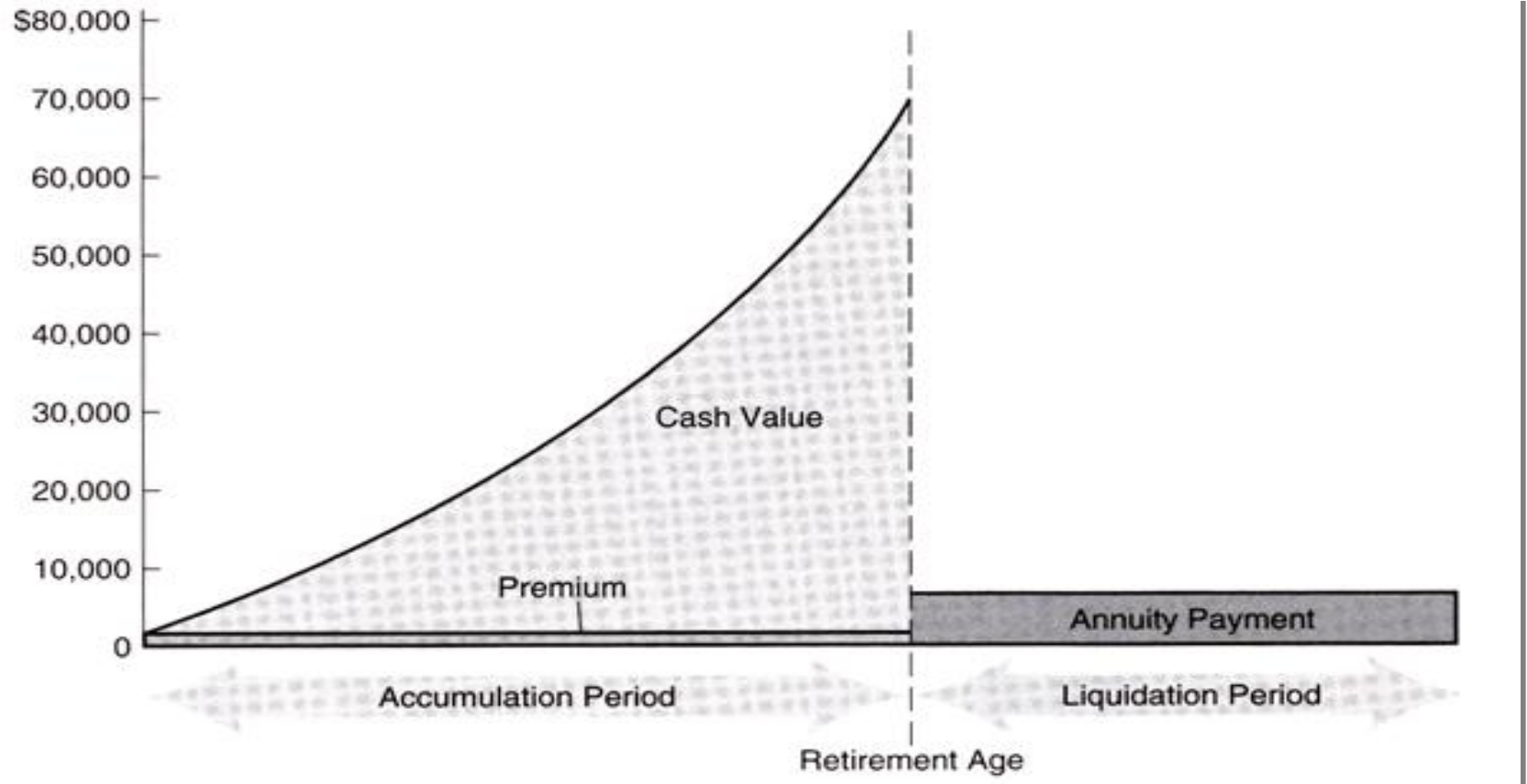
# Annuities Defined

- Life Annuity
  - In return for a single premium or a series of premiums
  - Provides a series of periodic payments to a named person
  - Starting at a specified date (now or later)
  - For life
- *...People always live forever when there is any annuity to be paid to them. Jane Austen*

# Purpose of Annuities

- Purpose: to provide an income that cannot be outlived
  - Insurer takes on longevity risk and investment risk
  - Annuitant / Payee takes on risk of dying too soon
    - Live to 104, good deal; Die in 6 months, not so good
- Insurer not so concerned with poor health of applicants for annuities

# One Product, Two Stages: A Deferred Stage, Then an Immediate Stage



Source: Black and Skipper, *Life & Health Insurance*, 13<sup>th</sup> edition, (Upper Saddle River, NJ: Prentice-Hall, 2000) p. 165.

# Annuities—Mechanics

- Longevity risk is pooled by insurer
  - Insurer can predict the approximate number of annuitants who will be alive at the end of each year
  - Some individuals will live long / short

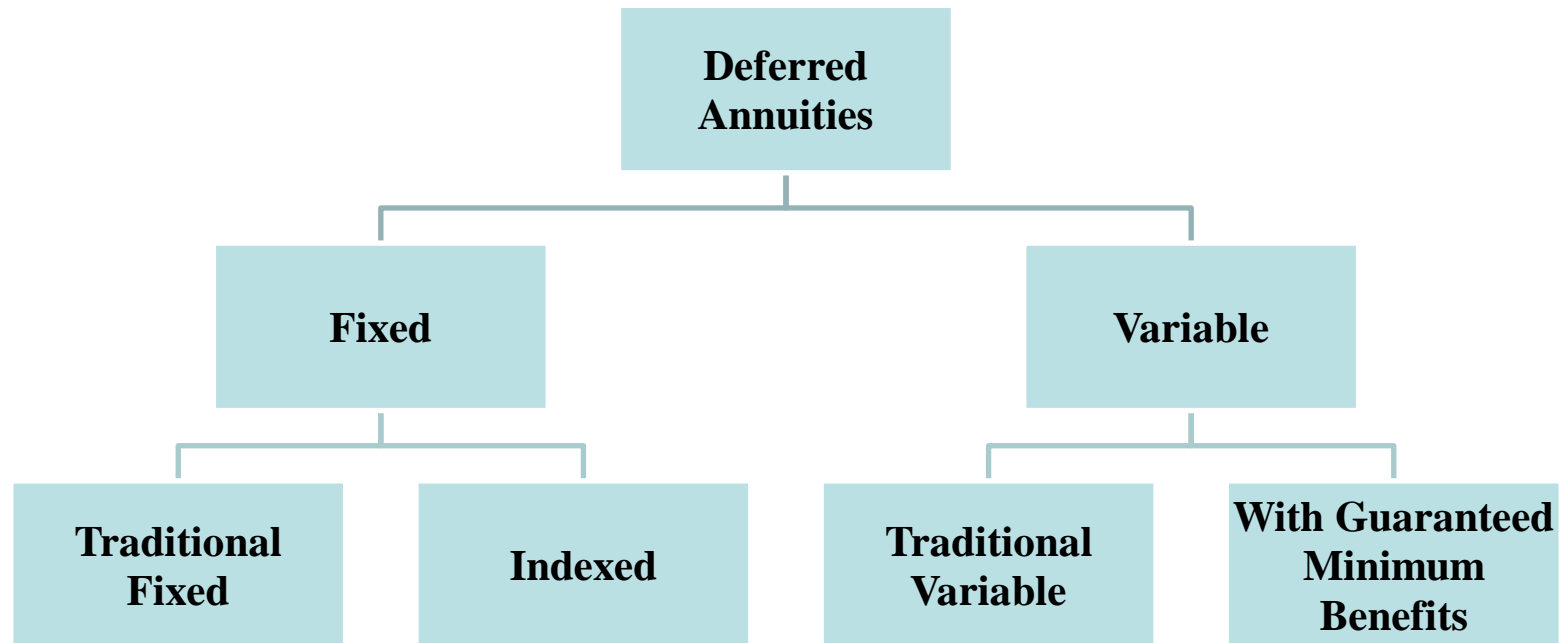
# Annuities—Mechanics

- The unliquidated contributions of those who die early can be used to provide payments to those who live a long time – ***benefit of survivorship***
- Some people are uncomfortable with big “forfeit”—to be discussed shortly. Thus, few people annuitize, and even fewer annuitize without some form of minimum guarantee

# Annuity Settlement Options

- **Cash option**—lump sum or in installments for a period of time
- **Life annuity (no refund)** – provides life income while annuitant alive; payments end at death
  - Highest periodic income
  - But potential for big forfeiture
- **Life annuity w/ guaranteed payments**
  - Usually 5, 10, 15 or 20 years
- In general, monthly benefit is related to risk borne by annuitant versus insurer

# Deferred Annuities, Classified by Underlying Investment





# Fixed Annuities

- Traditional Fixed
  - Guaranteed ROR at the time of purchase
  - No investment risk for the purchaser
  - More safety
  - Tradeoff – ROR is very modest

# Fixed Annuities

- Indexed Annuities
  - Splits the difference between a fixed and variable annuity
  - Fixed guaranteed minimum ROR
  - Variable ROR tied to S&P Market Index or some other barometer of investment growth
  - Can participate in the market while still protecting their principal

# Variable Annuities

- Traditional Variable
  - Ties the growth of the annuity to stock and mutual funds
  - No guarantees offered by the insurer

# Variable Annuities

- Variable with Living Benefit Option
  - Guaranteed minimum benefits
  - Guaranteed benefits for life
  - Guaranteed minimum ROR
  - Opportunity for a portion of their funds to be invested at a potentially higher ROR

## U.S. Individual Annuity Sales

### 2012 Annual Results

(\$ in thousands)

Rank	Company name	Total	Company name	Variable	Company name	Fixed
1	Jackson National Life	\$ 22,409,432	Prudential Annuities	\$ 19,973,508	Allianz Life of North America	\$ 5,474,499
2	Prudential Annuities	20,644,510	Jackson National Life	19,724,094	New York Life	4,837,618
3	MetLife	19,467,427	MetLife	17,700,289	AVIVA	4,131,558
4	TIAA-CREF	14,086,450	TIAA-CREF	14,086,450	American Equity Investment Life	3,947,621
5	Lincoln Financial Group	13,436,361	Lincoln Financial Group	10,425,920	Security Benefit Life	3,541,045
6	AIG Companies	12,029,663	AXA Equitable	8,804,850	AIG Companies	3,245,866
7	AXA Equitable	8,853,107	AIG Companies	8,783,797	Lincoln Financial Group	3,010,441
8	Allianz Life of North America	8,798,208	Transamerica	5,273,715	Great American	2,879,739
9	New York Life	7,485,329	RiverSource Life Insurance	5,157,282	Jackson National Life	2,685,338
10	Pacific Life	6,254,041	Nationwide Financial	4,220,900	Pacific Life	2,263,851
11	Nationwide Financial	6,073,800	Pacific Life	3,990,190	Midland National	1,928,661
12	RiverSource Life Insurance	5,618,970	Allianz Life of North America	3,323,709	Nationwide Financial	1,852,900
13	Transamerica	5,444,220	Thrivent Financial for Lutherans	2,746,408	MetLife	1,767,138
14	AVIVA	4,131,558	Protective Life	2,734,056	Fidelity & Guaranty Life	1,612,247
15	American Equity Investment Life	3,947,621	New York Life	2,647,711	EquiTrust Life	1,585,154
16	Security Benefit Life	3,856,446	Fidelity Investments Life	1,887,325	Massachusetts Mutual Life	1,476,530
17	Protective Life	3,325,766	Guardian Life of America	1,447,201	Symetra Financial	1,421,458
18	Thrivent Financial for Lutherans	3,215,032	Northwestern Mutual Life	1,426,838	Genworth Financial	1,407,476
19	Great American	2,925,903	Principal Financial Group	869,837	North American Company for Life and Health	1,363,452
20	Massachusetts Mutual Life	2,277,787	Hartford Life	814,610	ING	1,207,996
	<b>Top 20</b>	<b>174,281,631</b>		<b>136,038,689</b>		<b>51,640,588</b>
	<b>Total industry</b>	<b>219,700,000</b>		<b>147,400,000</b>		<b>72,300,000</b>
	<b>Top 20 share</b>	<b>79%</b>		<b>92%</b>		<b>71%</b>

Source: U.S. Individual Annuities Sales Survey, LIMRA

# States Regulates Fixed and Variable Annuities

- *Annuities are insurance products because, in their immediate annuity stage, they involve “life contingencies”*
  - This means the benefit depends on how long someone lives
  - As insurance products, they are regulated by the states
  - State regulation of annuities covers
    - Minimum reserves
    - Contract provisions
    - Market conduct standards

# Summary of Annuities

- Annuities are financial products that many people find hard to understand
- Regulators have been concerned that some people are buying annuities that are unsuitable for them – particularly variable annuities
- Indexed annuities are still regulated by the states but have been proposed to be regulated by the SEC
- Suitability standards are inconsistent from one jurisdiction to another
- Regulation will differ depending on which suitability model is relied on

# Health Insurance

July 10, 2013

R. B. Drennan, Ph.D.

Associate Professor and Chairman

Department of Risk, Insurance and Healthcare Management

Fox School of Business

Temple University



# Role of ERISA – Employee Retirement Income Security Act

- ERISA established federal standards for pensions and other employee benefits and prohibits states from regulating such plans
  - The ***preemption clause*** states that ERISA supersedes all state laws relating to employee benefit plans as defined under ERISA
  - One such exemption is for state laws regulating insurance

# Employer Provided Health Insurance

- **Employer-Based Distribution System**
  - Majority of health insurance is employer-provided through an employee benefit plan
  - Receives favorable tax treatment
  - Group insurance is offered without evidence of insurability

# Employer Provided Health Insurance

- Employer-Based Distribution System
  - Employers essentially provide a '**subsidy**' to employees for the purchase of health insurance
  - Traditionally, this subsidy was 100% of the cost of the plan – **non-contributory basis**
  - Most employers now provide a subsidy of less than 100% - **contributory basis**

# Employer Provided Health Insurance

Percentage of Firms Offering Health Benefits, by Firm Size, 1999-2010

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>FIRM SIZE</b>												
3-9 Workers	56%	57%	58%	58%	55%	52%	47%	48%	45%	49%	46%	59%*
10-24 Workers	74	80	77	70*	76	74	72	73	76	78	72	76
25-49 Workers	86	91	90	86	84	87	87	87	83	90*	87	92
50-199 Workers	97	97	96	95	95	92	93	92	94	94	95	95
<b>All Small Firms (3-199 Workers)</b>	<b>65%</b>	<b>68%</b>	<b>68%</b>	<b>66%</b>	<b>65%</b>	<b>63%</b>	<b>59%</b>	<b>60%</b>	<b>59%</b>	<b>62%</b>	<b>59%</b>	<b>68%*</b>
<b>All Large Firms (200 or More Workers)</b>	<b>99%</b>	<b>99%</b>	<b>99%</b>	<b>98%</b>	<b>98%</b>	<b>99%</b>	<b>98%</b>	<b>98%</b>	<b>99%</b>	<b>99%</b>	<b>98%</b>	<b>99%</b>
<b>ALL FIRMS</b>	<b>66%</b>	<b>69%</b>	<b>68%</b>	<b>66%</b>	<b>66%</b>	<b>63%</b>	<b>60%</b>	<b>61%</b>	<b>60%</b>	<b>63%</b>	<b>60%</b>	<b>69%*</b>

\* Estimate is statistically different from estimate for the previous year shown ( $p < .05$ ).

Note: As noted in the Survey Design and Methods section, estimates presented in this exhibit are based on the sample of both firms that completed the entire survey and those that answered just one question about whether they offer health benefits.

Source: Kaiser/HRET Survey of Employer-Sponsored Health Benefits, 1999-2010.

# Traditional Indemnity Plans

- Traditional Indemnity Plans
  - Third Party Payment and Traditional Plans
  - Three parties in health care transaction
    - Consumer/Buyer/Insured/Patient
    - Provider/Seller (e.g., doctors, hospitals)
    - Financial Intermediary/Third Party (e.g., insurer)

# Traditional Indemnity Plans

- Incentives
  - Classic Moral Hazard Problem
    - No incentive to consider price/quality/quantity of services
  - Role of third party
    - Assume financial responsibility for services delivered
    - Any management of cost is **retrospective** in nature
    - Management of **cost** and not **care**
  - Result of combined incentives – increased utilization and costs

# Traditional Indemnity Plans

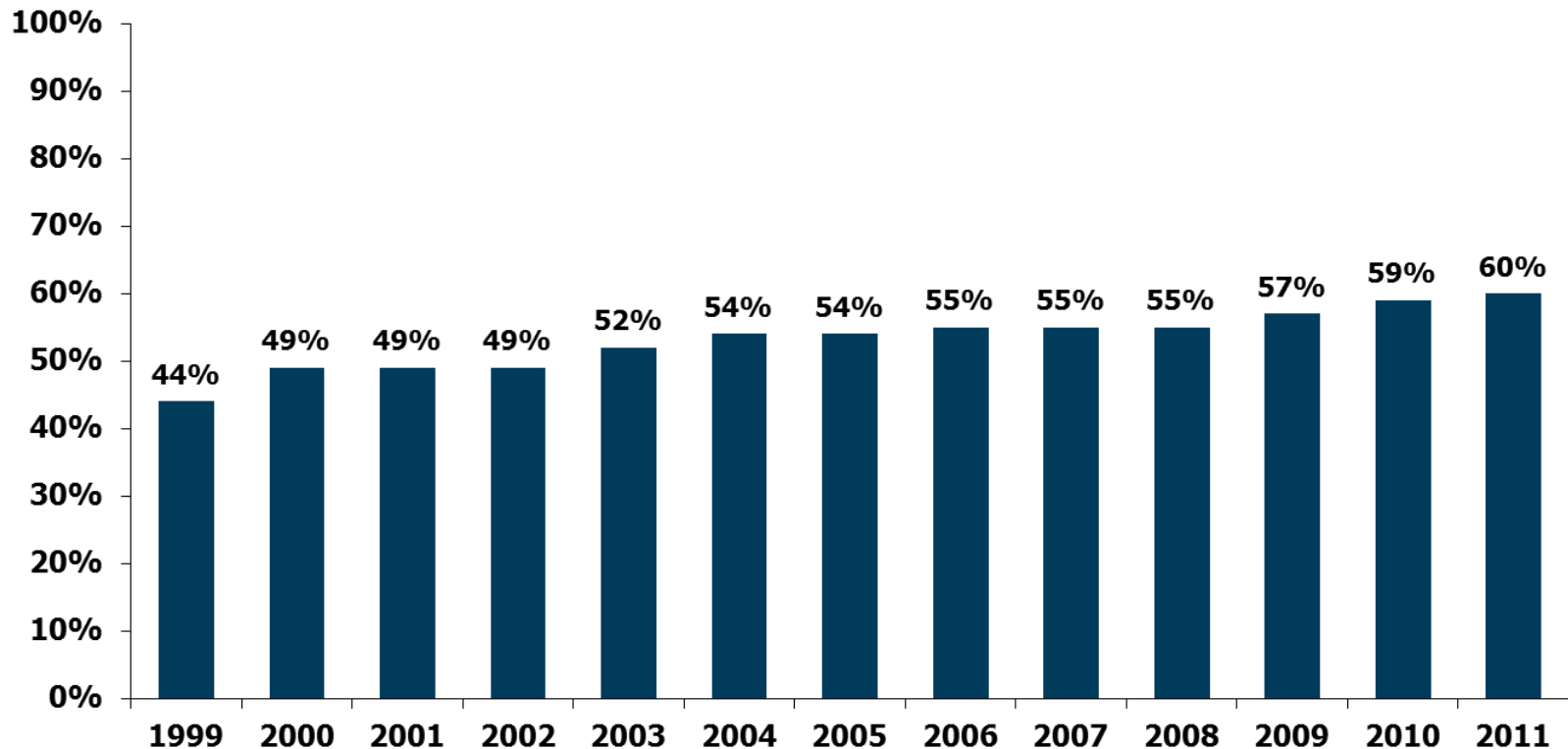
- Traditional Indemnity Plans – Market Share
  - 1980 – 95% of market
  - 2012 – 1% of market

# Early Attempts to Contain Costs

- Employers Move to Self-Funding
  - Take advantage of ERISA preemption
    - Avoid State Mandates
  - Savings in some administrative costs charged by insurers



# Percentage of Covered Workers in Partially or Completely Self-Funded Plans, 1999-2011



## Percentage of Covered Workers Enrolled in Partially or Completely Self-Insured Plans which Purchase Different Types of Stoploss Insurance, by Firm Size, 2011

	Percentage of Covered Workers in Partially or Completely Self-Funded Plans	Percentage of Covered Workers Enrolled in a Self-Funded Plan that Purchased Stoploss Insurance	Percentage of Covered Workers Enrolled in a Self-Funded Plan that Purchases Stoploss Insurance which Includes a Limit on Per Employee Spending <sup>‡</sup>	Average Per Employee Claims Cost at which Stoploss Insurance Pays Benefit <sup>‡</sup>
<b>FIRM SIZE</b>				
50-199 Workers	23%*	85%*	89%	\$73,824*
200-999 Workers	50*	90*	75	136,719*
1,000-4,999 Workers	79*	88*	84	205,210*
5,000 or More Workers	96*	40*	80	301,815*
<b>All Large Firms (200 or More Workers)</b>	<b>82%*</b>	<b>57%*</b>	<b>80%</b>	<b>\$208,280</b>
<b>ALL FIRMS</b>	<b>60%</b>	<b>58%</b>	<b>81%</b>	<b>\$199,605</b>

\* Estimate is statistically different from estimate for all other firms not in the indicated category (p<.05).

Source: Kaiser/HRET Survey of Employer-Sponsored Health Benefits, 2011.

# The Move to Managed Care

- HMOs
  - Restrictions on choice of providers depending on the type of HMO and restrictions on ease of access to specialists and hospitals
    - Restrict coverage to use of HMO-affiliated physicians and hospitals
    - No coverage for out-of-plan utilization

# The Move to Managed Care

- HMOs
  - Group Practice Plan and Staff Models [closed panel] and Individual Practice Associations [IPA]
  - Provider ‘manages’ the care/transaction ***prospectively***
  - Providers at risk for overutilization through the use of capitation or some other type of payment system shifting risk
  - ‘Quality of care’ becomes an issue
    - Many HMOs compete on quality scores in addition to price

# The Move to Managed Care

- PPOs – Preferred Provider Organizations
  - Insurers' attempt to develop a managed care plan to address perceived problems with HMOs
  - PPO doctors agree to discount services and agree to accept PPO payment as payment in full
    - Receive discounted fee-for-service payments
    - Providers are not at financial risk for overutilization

# The Move to Managed Care

- PPOs – Preferred Provider Organizations
  - Members of the PPO decide at the point they need services:
    - Use of a network physician
      - Lower out of pocket costs
    - Use of a non-network physician
      - Higher out of pocket costs
  - PPOs rely on receiving discounts from providers and providing incentives for insureds to use the preferred providers to contain costs

# The Move to Managed Care

- POS-Type HMOs
  - Structure
    - HMO core
    - Ability to go outside the HMO network
  - Similar decision and incentives for members decide at the 'point-of-service' about network physicians
  - Care outside the network is not managed
  - POS plans [like PPOs] provide incentives for insureds to behave as traditional consumers through the use of ***benefit differentials***

# Consumerism

- Traditional health care plans are characterized by:
  - Low deductibles
  - High expense in terms of premiums
  - Lack of incentives for insureds to behave as traditional consumers



# Consumerism

- Definition/Rationale
  - Plans give incentives for patients/insureds to behave as more 'traditional consumers'
    - Goal is to cause them to consider price and quality of care in health care and health insurance consumption decisions
    - Patient now becomes a more active participant in the third party payment system
  - Individuals need information to make informed decisions

# Consumerism

- Examples:
  - Employers provide less than 100% subsidy for health insurance (contributory financing)
  - Plan raises cost sharing for use of non-network physicians [PPOs, POS]
  - Tiered prescription drug plans
  - Tiered provider networks
  - Large deductible plans combined with catastrophic insurance coverages
    - HRAs, MSA, HSAs

# Consumer Driven Health Plans [CDHPs]

- Major Characteristics:
  - Employer offers a high deductible health plan with a high out-of-pocket maximum and catastrophic protection beyond
  - Premium is reduced as a result
  - Employee owns an account [e.g., HSA]
  - Preventive care is covered at 100%
  - Any unused funds are portable and can be carried forward to the next year

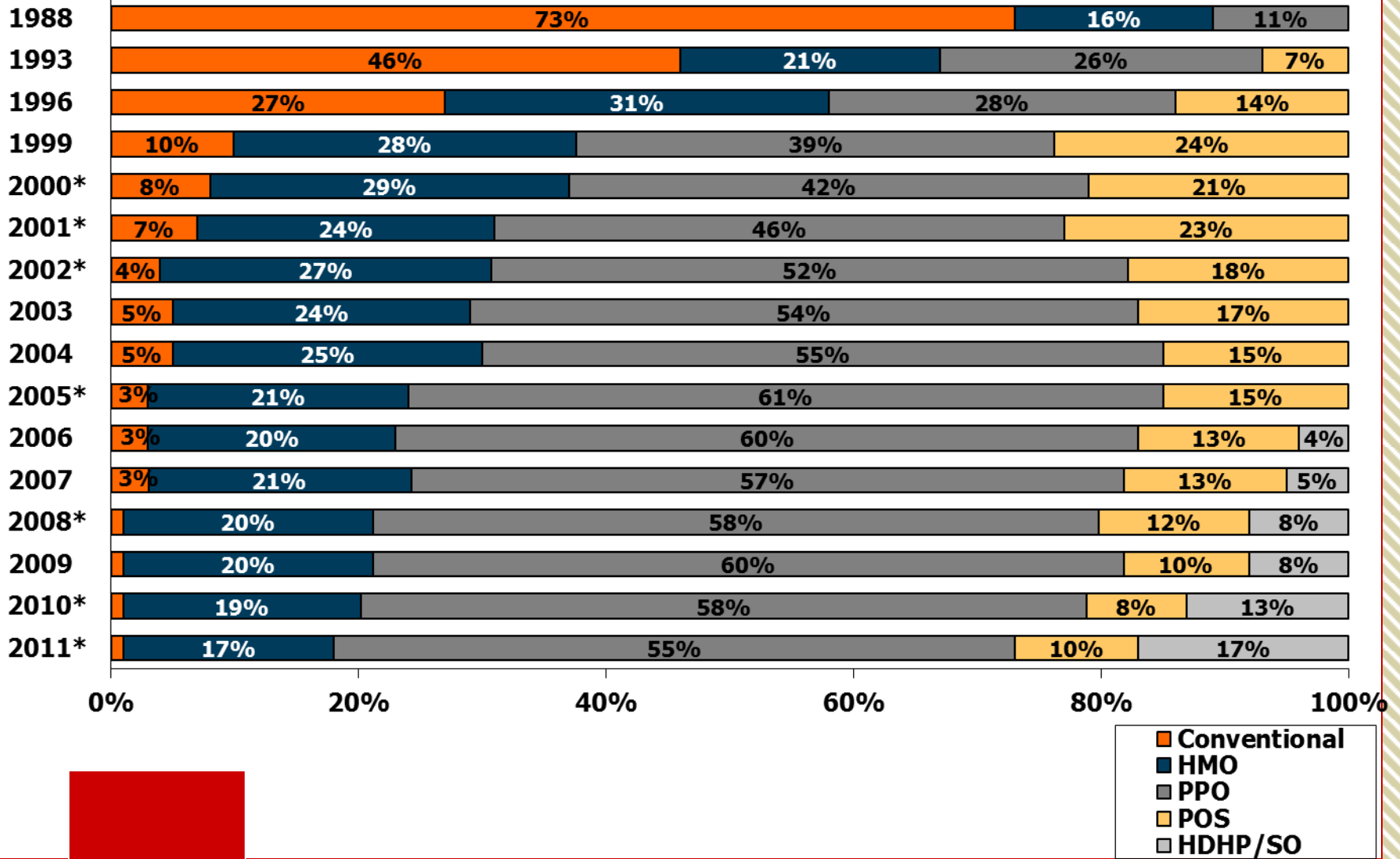
# Consumer Driven Health Plans [CDHPs]

- A properly constructed CDHP has three components :
  - A high deductible health plan
  - A savings account owned and managed by insureds
  - Information tools needed to help manage health care needs

# Consumer Driven Health Plans [CDHPs]

- Why CDHPs might work to contain costs
  - Insureds are now spending their own money for many health care encounters
  - Example of **consumerism** in the consumption of health care
  - Helps to control the classic moral hazard problem created by traditional health insurance plans with low deductible

## Distribution of Health Plan Enrollment for Covered Workers, by Plan Type, 1988-2011



# Patient Protection and Affordable Care Act (PPACA)

- Prohibition of Annual and Lifetime Limits
- Extension of Dependent Coverage
- PCE limits
- Grandfathered Plans
- MLR regulation

# Patient Protection and Affordable Care Act (PPACA)

- State Exchanges
- Individual and Employer Mandate
- Coverage Requirements
- Affordability
- Premium Subsidies and Tax Credits
- Emerging Issue: Self-Insurance and Stop-Loss Regulation



# Life Insurance, Annuities and Health Insurance

Thank you  
For more information contact:

The Griffith Insurance Education Foundation  
7100 North High Street, Suite 200  
Worthington, Ohio 43085

Phone: 855-288-7743  
Email: [info@griffithfoundation.org](mailto:info@griffithfoundation.org)

INFORM+INSPIRE

# Property and Liability Insurance Overview

Insurance 101 Seminar

Philadelphia, PA

July 10<sup>th</sup>, 2013

David M. Pooser, Ph.D.

Assistant Professor

School of Risk Management, Insurance, & Actuarial Science

St. John's University

New York, NY

# Outline

- Insurance Industry Overview

- Property Insurance Overview
- Liability Insurance Overview
- Casualty Insurance Overview

- Property Insurance

- Common Property Insurance Contracts
- Property Insurance Contractual Provisions
- Property Insurance Renewals, Cancellations, and Lapses
- Property Insurance Exclusions

- Catastrophic Risk in Property Insurance

- Common Catastrophes in the U.S.
- Issues with Insurance Catastrophes
- Which Catastrophes are Covered?
- The Insurance Market Reaction to Catastrophes
- Financing Catastrophes

- Liability Insurance

- Elements of Negligence
- Liability Insurance for Negligent Acts / Common Liability Insurance Contracts
- Trends in Liability Losses
- Who does Liability Insurance Protect?

- Property and Liability Contracts

- Homeowners Insurance
- Auto Insurance
- Workers' Compensation Insurance

# The U.S. Insurance Industry

- Divided into two primary sectors:
  - Property and Casualty Insurance – aka – Property and Liability Insurance
  - Life, Accident & Health Insurance

# Property and Liability Insurance Overview

- Property insurance:
  - Provides coverage for monetary losses arising from the damage to commercial and personal property (e.g., houses, cars, buildings, inventory)
- Direct Loss vs. Indirect Loss
  - Direct Loss – Cost to replace or repair the property
  - Indirect Loss – Costs associated with the loss of use of the property

# Property and Liability Insurance Overview

- Liability insurance
  - Provides coverage for lawsuits arising from the potential negligence of the insured individual or business
  - Many policies also include the cost of a legal defense in the event of a lawsuit.
    - Do lawyer's fees contribute toward the limit of liability?

# Property and Liability Insurance Overview

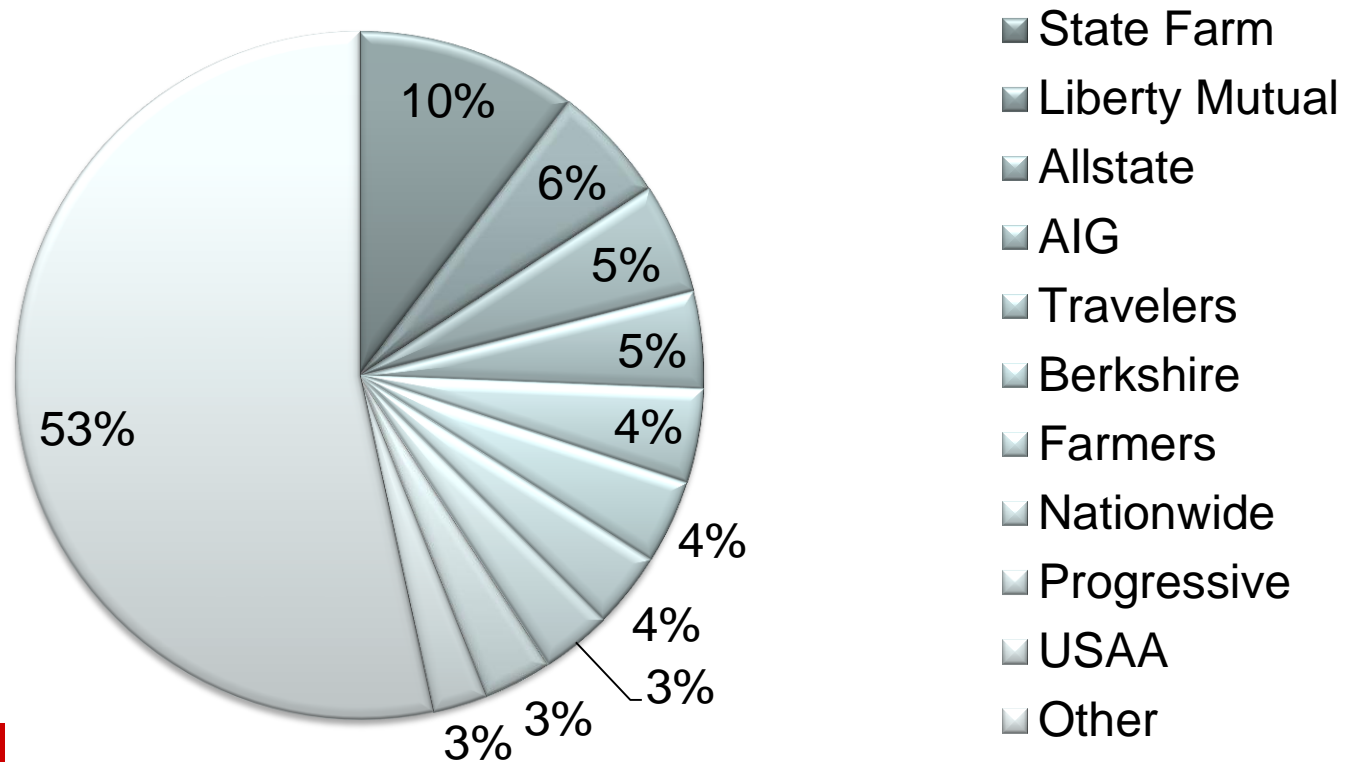
- 2012 Direct Premiums: \$515 billion  
Top writer: State Farm (\$53.6 B)
- 2012 Net Premiums: \$460 billion
- 2012 Invested Assets: \$1,383 billion  
66% invested in bonds

## Top Property and Liability Lines

- Automobile: \$190 B
- Homeowners Multi-Peril: \$74 B
- Workers' Comp: \$47 B
- Commercial Multi-Peril: \$34 B
- Ocean and Inland Marine: \$17 B

# Property and Liability Insurance Overview – Top Writers

## Premiums



Source: SNL Financial



# PROPERTY INSURANCE

# Property Insurance Contractual Provisions

- Valuation of Property (for loss payment)
  - Replacement Cost (RC)
  - Actual Cash Value (ACV)
  - Guaranteed Replacement Cost (GRC)
  - Agreed Value / Valued Policy

# Property Insurance Contractual Provisions

- Deductibles
  - Straight vs. Percentage
  - Hurricane / Earthquake Deductibles
- Coinsurance
  - Not the same as copay in health
  - Encourages Insuring to Value
  - Property value fluctuation can lead to penalties
- Coverage Limits

# Coverage of Perils

- **Named Perils**
  - **Basic Coverage** – All perils covered are specifically named
- **Open Perils**
  - **Broader Coverage** – All perils are covered unless specifically excluded

# Cancellation and Non-Renewal of Policies

- Insured may cancel at any time
- Insurer may cancel with 10 days notice
  - For nonpayment of premium
  - Within the first 60 days of policy issuance
- Insurer may cancel with 20 days notice
  - For change in risk or misrepresentation by the insured
- Nonrenewal laws vary by state; some do not allow nonrenewal after 2 or 3 years

# Common Property Insurance Exclusions

- Ordinance or law
- Earth movement
- Water damage (including flood)
- Power failure (if failure takes place off premises)
- Neglect
- War
- Nuclear hazard
- Intentional loss
- Governmental action

# Water Damage Exclusion

- Is Flood covered? No.
  - This is often overlooked in coastal regions
- Flood, surface water, waves, tidal water, overflow of a body of water, or spray from any of these, whether or not driven by wind
- Water or water-borne material which backs up through sewers or drains or which overflows or is discharged from a sump, sump pump, or related equipment or;
- Water or water-borne material below the surface of the ground, including water which exerts pressure on or seeps or leaks through a building, sidewalk, driveway, foundation, swimming pool or other structure; caused by or resulting from human or animal forces or any act of nature.

# CATASTROPHES



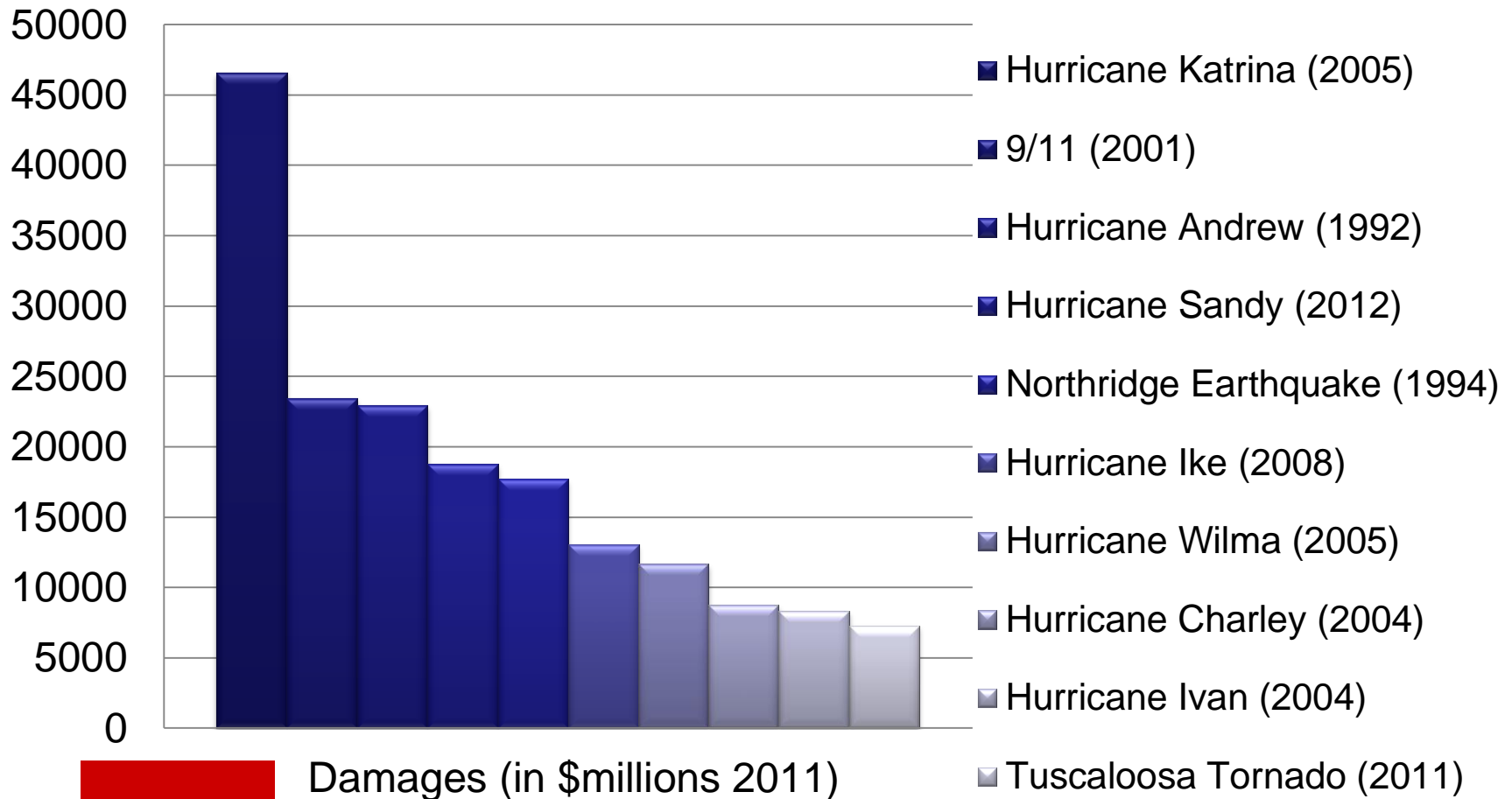
# Catastrophes

- Numerous types of disasters have affected the U.S.
  - Hurricanes
  - Tornado
  - Earthquake
  - Man-made (e.g., terrorism)
  - Wildfire

# Requirements of Insurable Risk – Catastrophes

- Large # of Exposure Units ✓
- Loss Accidental and Unintentional ?
- Loss Determinable and Measurable ?
- Loss Not Catastrophic X
- Chance of Loss Calculable X
- Premium Economically Feasible ?

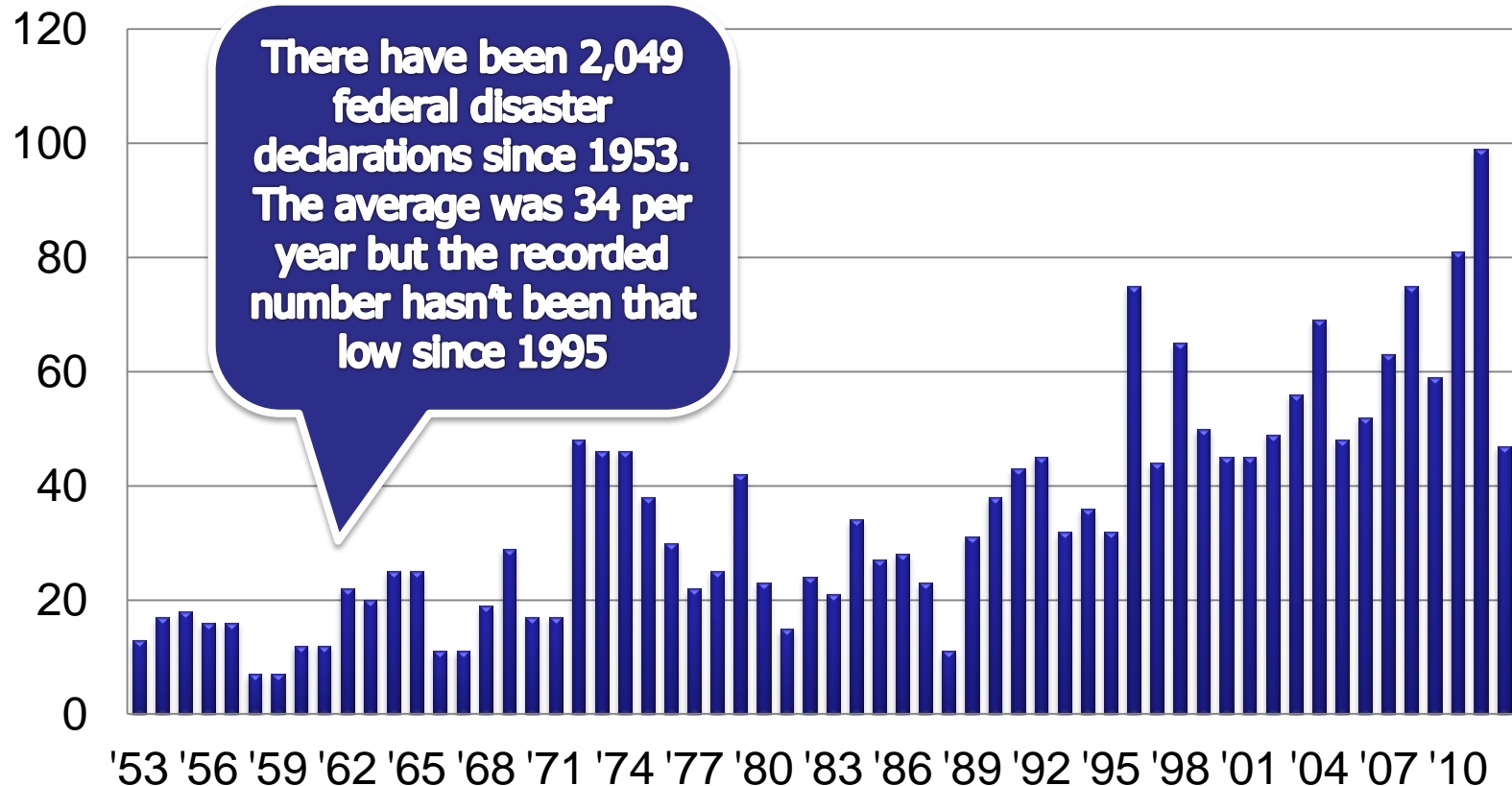
# Top Ten Catastrophes (U.S.) by Insured Losses



Source – Insurance Information Institute

# Number of Federal Disaster Declarations, 1953 - 2011

## Number of Recorded Disasters Per Year

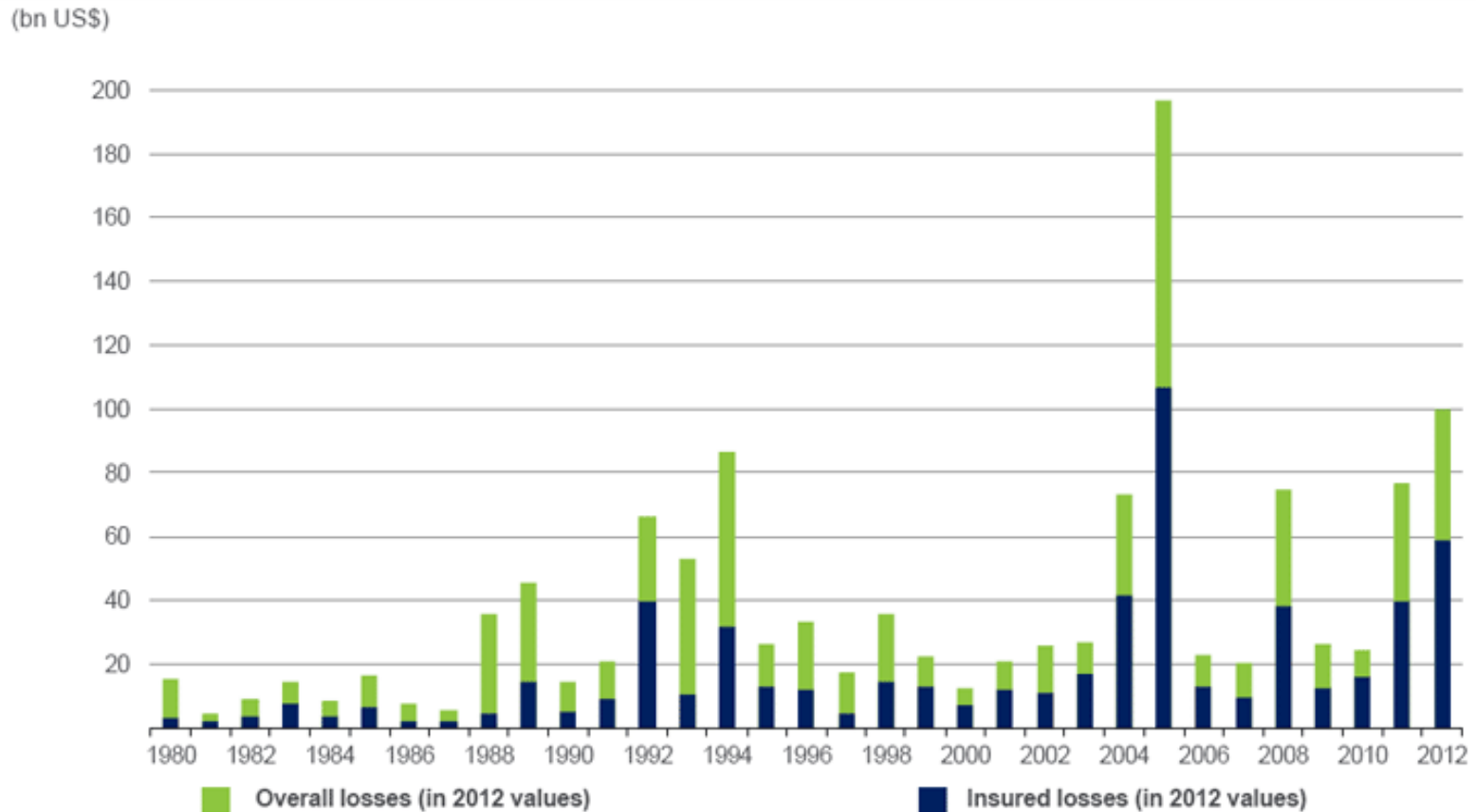


Source: FEMA (<http://www.fema.gov/disasters/grid/year>)

# Trends in Catastrophe Losses

- [http://www.iii.org/facts\\_statistics/catastrophes-us.html](http://www.iii.org/facts_statistics/catastrophes-us.html)

Insured losses in the U.S. In 2012 were the second highest on record.



# Financing Catastrophic Loss

- Diversification geographically
- Catastrophe swaps
- Financial markets (CAT bonds)
- Reinsurance

# PRINCIPLES OF LIABILITY

# Liability Insurance

- Typically provides insurance coverage for individuals and businesses for unintentional torts
- Often includes legal defense costs *outside the limit of insurance*
- Liability insurance protects the defendant, but also provides protection to others in society when the defendant cannot pay restitution



# Components of Liability Insurance Policies

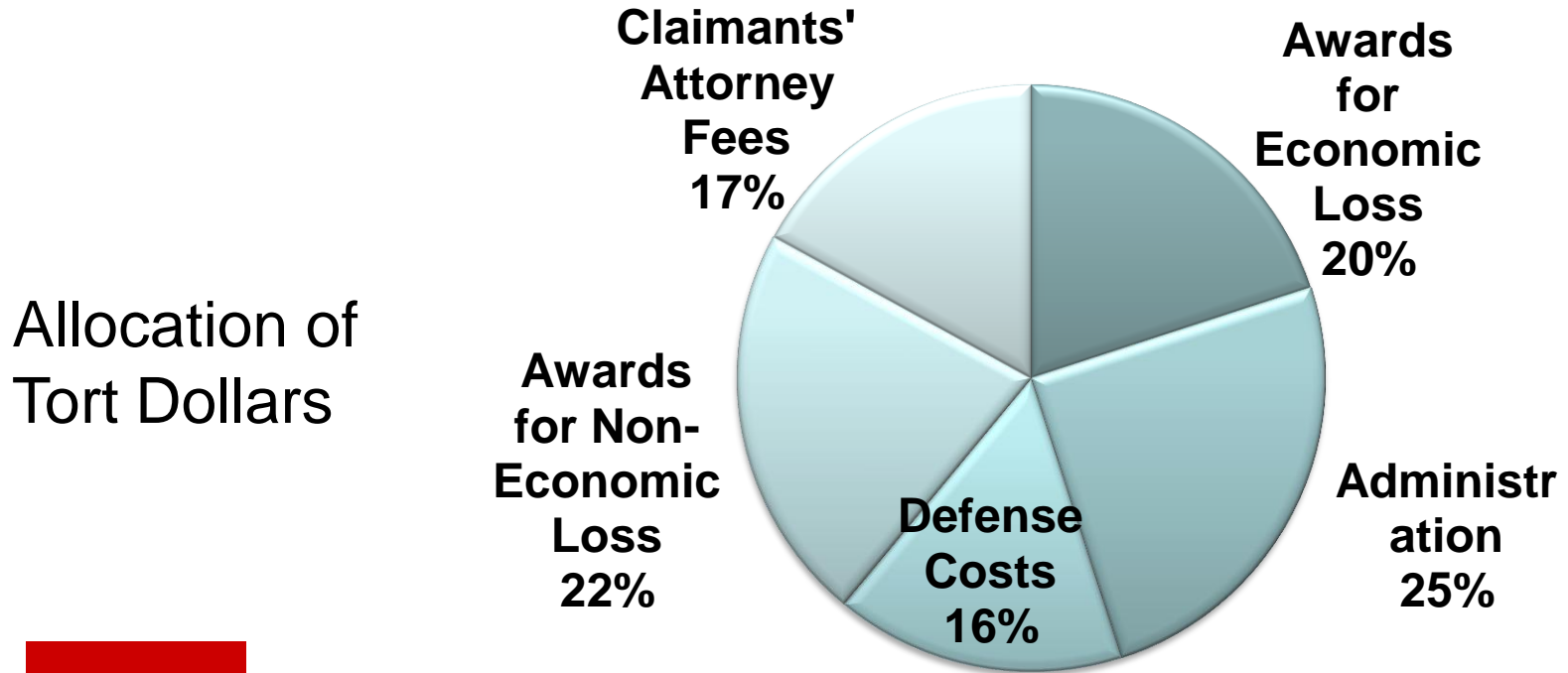
- Policy Limit (Face Value)
- Defense Costs
- Policy Trigger
  - Claims Made
  - Occurrence

# Social Perspective on Liability Insurance

- Liability insurance helps ensure accident victims do not go uncompensated
- Liability insurance helps ensure a negligent party is held responsible for his/her actions

# Issues with the U.S. Tort System

- Rising tort costs with little compensation reaching the victim



# Issues with the U.S. Tort System

- Decreasing availability of insurance
- Disappearing goods and services
- Refusal of some firms to enter the U.S. market

# Cost Drivers in the U.S. Tort System

- Long-tail exposures
- Court rulings favoring plaintiffs
- High jury awards

# HOMEOWNERS INSURANCE

# Homeowners Coverage Provided

- Homeowners policies provide insurance protection for real property, personal property, loss of use (and increased expenses), and third party liability

# Different Homeowners Forms

- HO-3
  - Named perils
- HO-5
  - Open perils
- HO-4
  - Renters
- HO-6
  - Condominium



# Trends in Homeowners' Insurance Costs

Annual Premiums (in millions USD)



# Pricing Factors for Homeowners' Insurance

- Home Characteristics
  - Construction
  - Age
  - Location (near fire protection)
- Deductible
- Catastrophe area
- Court jurisdiction
- Fraud prevalence

# Comparing the Homeowners' Premium by State

Rank	Most expensive states	Average expenditure	Rank	Least expensive states	Average expenditure
1	Texas	\$1,560	1	Idaho	\$500
2	Louisiana	\$1,546	2	Oregon	\$535
3	Florida	\$1,544	3	Utah	\$558
4	Oklahoma	\$1,246	4	Wisconsin	\$563
5	Mississippi	\$1,217	5	Washington	\$595
6	Rhode Island	\$1,092	6	Ohio	\$614
7	Kansas	\$1,066	7	Delaware	\$636
8	Washington D.C.	\$1,065	8	Arizona	\$666
9	Connecticut	\$1,052	9	Maine	\$645
10	Massachusetts	\$1,050	10	South Dakota	\$678

# Trends in Homeowners Pricing

- Catastrophes are the largest cost driver in recent years
  - 25% of claims 1997-2003
  - 39% of claims 2004-2011
- Non-catastrophe claims are far less volatile
- Fraudulent claims are rising according to numerous insurance advisory groups

# AUTO INSURANCE

The Griffith Insurance Education Foundation

# Coverage Provided

- Part A – Liability\*\*
- Part B – Medical Payments / No Fault
- Part C – Uninsured Motorist Coverage
- Part D – Property Damage (to own car)

\*\* - Required Coverage

# Liability Insurance

- Provides coverage to the driver of a vehicle for property damage or bodily injury to a third party
  - Limits often described xx/xxx/xx
  - Single BI / Total BI / PD
- Coverage follows the vehicle, but your policy covers you in any vehicle
- Also provides a legal defense not inclusive of limits

# Liability Limits (Example)

- A policy with limits 100/300/75 has
  - \$100,000 bodily injury liability to any individual
  - \$300,000 bodily injury liability to all individuals in an accident
  - \$75,000 property damage liability to all individuals in an accident



# Medical Payments

- “No-fault” insurance will pay for medical services, funeral services, and some lost wages and extra expenses
  - Inured in a car crash
  - Injured as a pedestrian hit by a car

# Uninsured / Underinsured Motorist

- Provides bodily injury protection to the insured and other passengers in an owned vehicle IF hit by an uninsured (or underinsured) vehicle
  - Also covers the named insured in a non-owned vehicle
- Coverage cannot exceed the BI limit from Part A

# Stacked vs. Non-Stacked

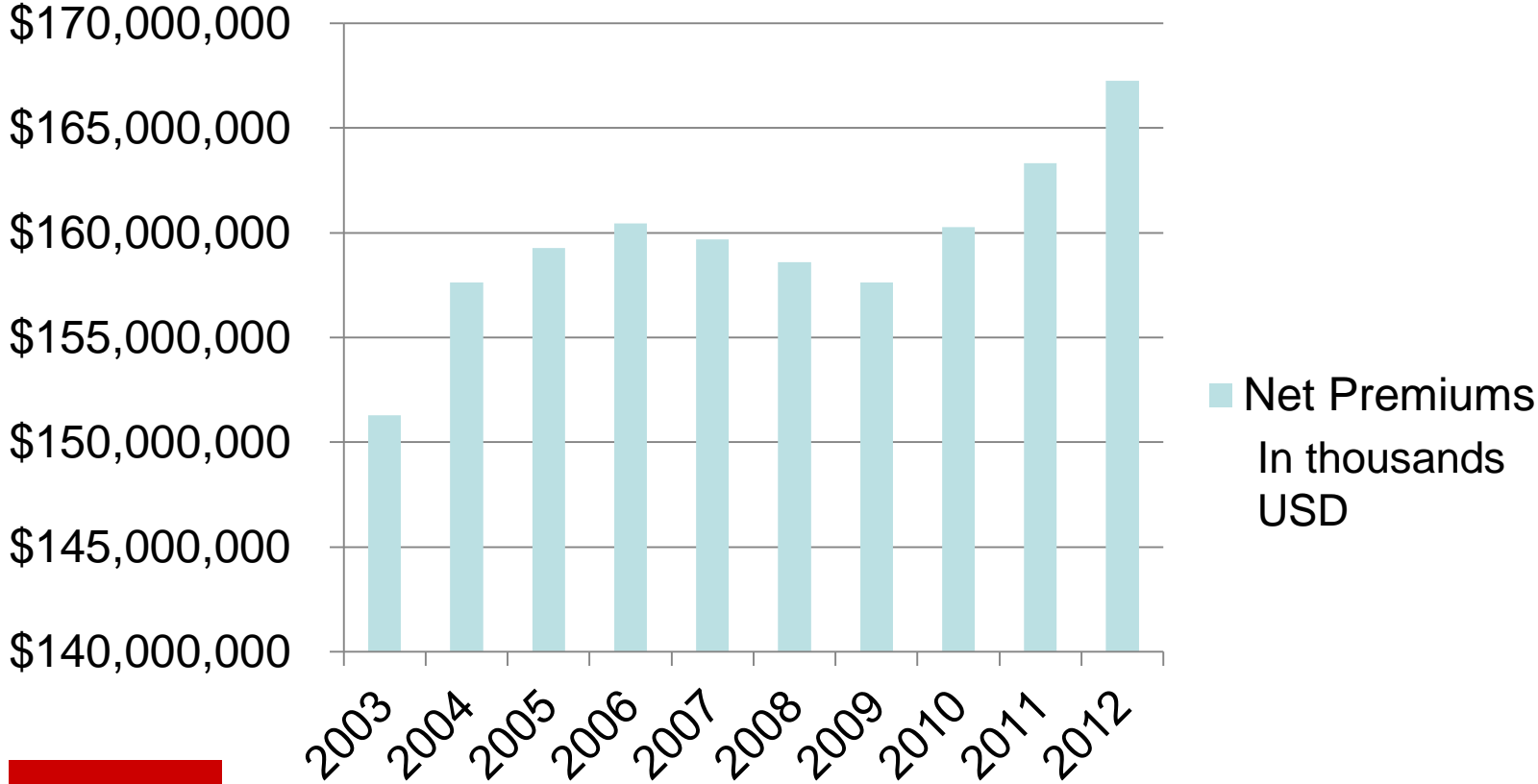
- Stacked – Uninsured motorist coverage limit is the total of each vehicle in the household
- Non-Stacked – Uninsured motorist coverage limit only applies to the car being driven

# Collision & Comprehensive

- Provides coverage for collision (upset of the vehicle with another object) and other-than-collision (e.g., striking an animal, theft, vandalism) losses
- Must pay deductible for coverage
  - Higher deductible = lower premium
- ONLY covers your vehicle
- Coverage follows the car

# Trends in Auto Insurance Premiums

## Net Premiums



# Pricing Factors for Auto Insurance

- Age ★
- Sex ★
- Driving Record ★
- Credit Score ★
- Accident history ★
- Miles driven
- Location
- Vehicle Class

**What do most of these factors attempt to measure?**

# Comparing Auto Insurance Premiums by State

Rank	Most expensive states	Average expenditure	Rank	Least expensive states	Average expenditure
1	New Jersey	\$1,157.30	1	South Dakota	\$525.16
2	District of Columbia	1,133.87	2	North Dakota	528.81
3	Louisiana	1,121.46	3	Iowa	546.59
4	New York	1,078.88	4	Idaho	547.78
5	Florida	1,036.76	5	Maine	582.29
6	Delaware	1,030.98	6	Nebraska	592.69
7	Rhode Island	984.95	7	North Carolina	599.90
8	Connecticut	965.22	8	Wisconsin	613.37
9	Maryland	947.70	9	Ohio	619.46
10	Michigan	934.60	10	Wyoming	621.08

# **WORKERS COMPENSATION INSURANCE**

The Griffith Insurance Education Foundation



# What is Workers' Comp?

- Designed to protect workers against injury in the workplace
  - Holds employers **STRICTLY** liable for workplace injury or disease
- Helps pay for:
  - Medical expenses
  - Lost income
  - Rehabilitation costs

# Social Aspects of Workers' Comp

- Increased incentive for safety in the workplace
  - Discounts and premium rebates for safer employers
- Reduces litigation costs and wait times in paying for worker injuries

# Workers' Comp Laws

- Workers' compensation insurance is required in every state except Texas
- Some states
  - Allow purchase of workers' comp from private insurers
  - Allow employers to self insure
  - Offer state-run workers' comp insurance (monopolistic or competitive)

# Fraud in Workers' Comp Insurance

- Workers:
  - Monday morning injuries
  - Inflated claims
  - Faking injury
  - Extending breaks from work
- Employers:
  - Reporting reduced payroll
  - Increasing the experience of workers
  - Misreporting the number of workers

# INFORM+INSPIRE

Thank you for your attention!

Any Questions?

Contact Info:

David M. Pooser

Email: [pooserd@stjohns.edu](mailto:pooserd@stjohns.edu)

Address: St. John's University

101 Murray Street

New York, NY 10007

Tel: (212) 284-7010

INFORM+INSPIRE

# The Business of Insurance, Regulation, and Public Policy

Insurance 101 Seminar

Philadelphia, PA

July 10<sup>th</sup>, 2013

David M. Pooser, Ph.D.

Assistant Professor

School of Risk Management, Insurance, & Actuarial Science

St. John's University

New York, NY

# Outline

- The Business of Insurance
  - Insurance Contracts
  - Insurance Company Corporate Structure and Marketing
  - Insurer Performance
  - Investments for Insurers
  - Insurance Industry Characteristics
- The Secondary Insurance Market
  - Excess and Surplus Lines (E&S) Insurance Overview
  - Regulation of E&S Insurance
  - Principles of Reinsurance
  - Reinsurance Contracts
  - Reinsurance Loss Payment Structure
  - Guaranty Fund Overview
  - Guaranty Fund Funding and Sample State Systems
- Insurance Regulation
  - History of U.S. Insurance Regulation
  - Current State Regulation
  - What is the Regulator's Primary Focus and What is Regulated by the States?
  - Current Issues in Insurance Regulation
  - The Problem of Insurance Fraud

# THE INSURANCE BUSINESS



# The Insurance Contract

- Parts
  - Declarations
  - Definitions
  - Insuring Agreement
  - Exclusions
  - Conditions
- Requirements
  - Offer and acceptance
    - Who makes the offer?
  - Consideration
    - What is the insurer's consideration?
  - Competent Parties
  - Legal Purpose

# Insurer Structure

- Corporate Structure
  - Stock
  - Mutual
  - Lloyds of London
  - Others
- Incorporation
  - Domestic
  - Foreign
  - Alien
- Admitted vs. Non-Admitted Insurers

# Insurer Corporate Structure

- Stock Insurers – Three Parties
  - Shareholders / Owners
  - Managers / Employees
  - Policyholders / Customers
- Mutual Insurers – Two Parties
  - Shareholders + Policyholders
  - Managers
- Other Insurers
  - Lloyds of London companies
  - Reciprocal exchanges
  - Government insurers

# Insurance Distribution Systems

- Agents and brokers
  - Independent agents
  - Exclusive agents
  - Brokers
- Direct sales
  - Direct Response
  - Direct Writers

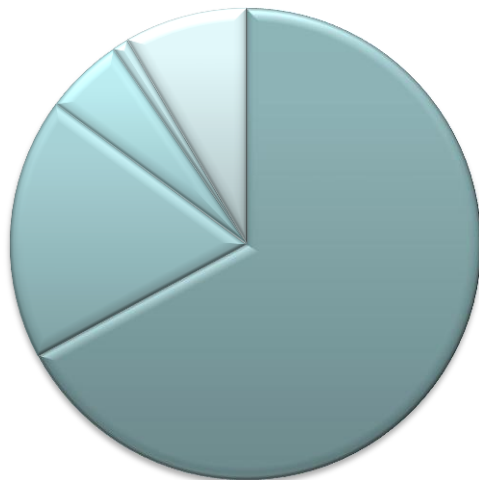
# Insurer Profitability

- Loss Ratio
  - $(\text{Incurred Losses} + \text{Loss Adjustment Expenses}) / \text{Premiums Earned}$
- Expense Ratio
  - $\text{Underwriting Expenses} / \text{Premiums Written}$
- Combined Ratio
  - $\text{Loss Ratio} + \text{Expense Ratio}$
  - Less than 1.0? Greater than 1.0?

# Investments for Insurers

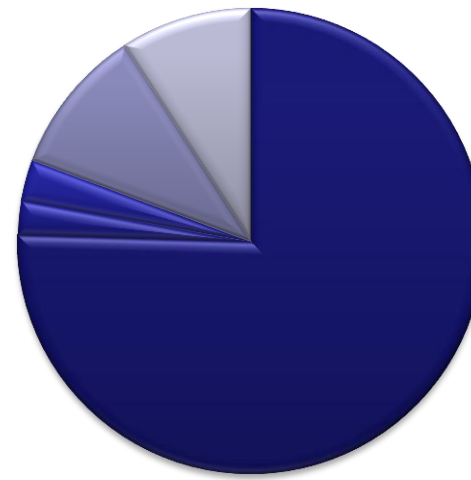
- Can an insurer with a combined ratio over 1.0 still be profitable?

**P&L Asset Allocation**



- Bonds
- Stocks
- Cash
- Real Property
- Other

**Life Asset Allocation**



- Bonds
- Stocks
- Cash
- Real Property
- Other

Source: NAIC 2011 Data

# Industry Facts and Figures

- Life Insurance (2011 Values)
  - NPW: \$622 Billion
    - Annuities 49.5%
    - Life 24.2%
  - Invested Assets: \$3,361 Billion
  - Investment Income: ~\$167 Billion
  - Net Income (after tax): \$14.3 Billion
  - Separate Accounts: \$1,835 Billion

# Industry Facts and Figures

- Property and Liability Insurance (2011 Values)
  - DPW: \$502 Billion
  - NPW: \$442 Billion
  - Invested Assets: \$1,343 Billion
  - Investment Income: \$51 Billion
  - Net Income (after tax): \$20.1 Billion



# **NON-ADMITTED INSURERS / THE INSURANCE SECONDARY MARKET**

# Non-admitted Insurers

- Excess and Surplus Lines
  - Often written for undesirable risks, unique risks, very high limit risks
  - Can be written by specialty insurers, insurers licensed in another state, Lloyds Syndicates, or insurers licensed in another country
- Reinsurers

# Excess and Surplus Lines

- Only for the P&L industry
- Surplus Lines has helped place insurance for the risks of:
  - Florida hurricanes
  - California earthquakes
  - Midwest tornados
- Excess Insurance is typically for consumers seeking insurance coverage exceeding the limits of a standard insurance company

# Regulating E&S Markets

- Only non-admitted insurers may sell the insurance
  - E&S coverage must be placed through an E&S broker
  - Some states require 'rejection' letters from admitted insurers before coverage may be placed
    - Typically 2-3 insurers must be 'tested' before the E&S market can be approached
- E&S markets have grown from under 4% of the market in 1984 to more than 14% of the market in 2004. (Source – AAMGA 2006)

# Reinsurance

- A type of insurance purchased by insurers
  - In reality, it is a more complex financial transaction than an insurance contract, but reinsurers help bear part of the risk primary insurers write
- Often helps improve
  - Insurer Solvency
  - Statutory Capital
  - Loss stability

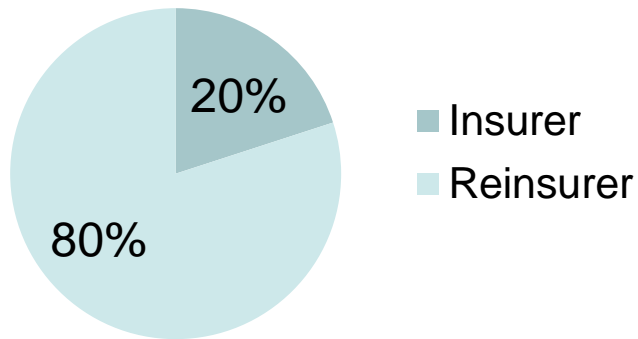
# Reinsurance Contracts

- **Facultative**
  - Facultative is sold on a per-policy basis
  - Facultative may help an insurer place a very large risk
- **Treaty**
  - Treaty is sold for an entire 'book of business'
  - Treaty may help an insurer write a larger share of a particular line or in a geographic region

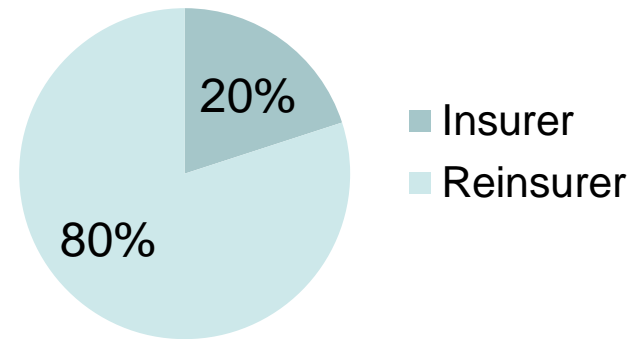
# Reinsurer Loss Payments

- Pro-Rata
  - Primary insurer and reinsurers share an equal portion of the premium and losses

**Premium**



**Losses & LAE**



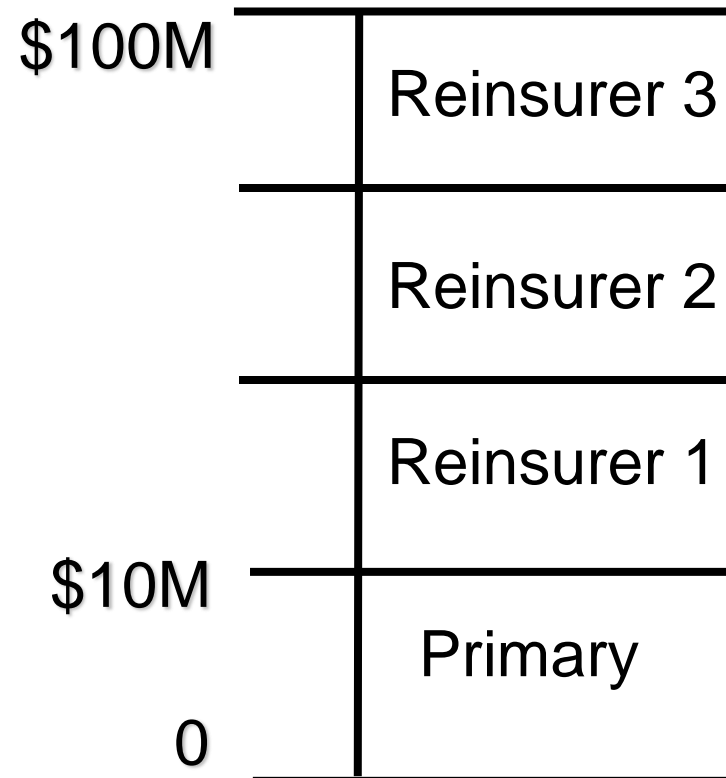
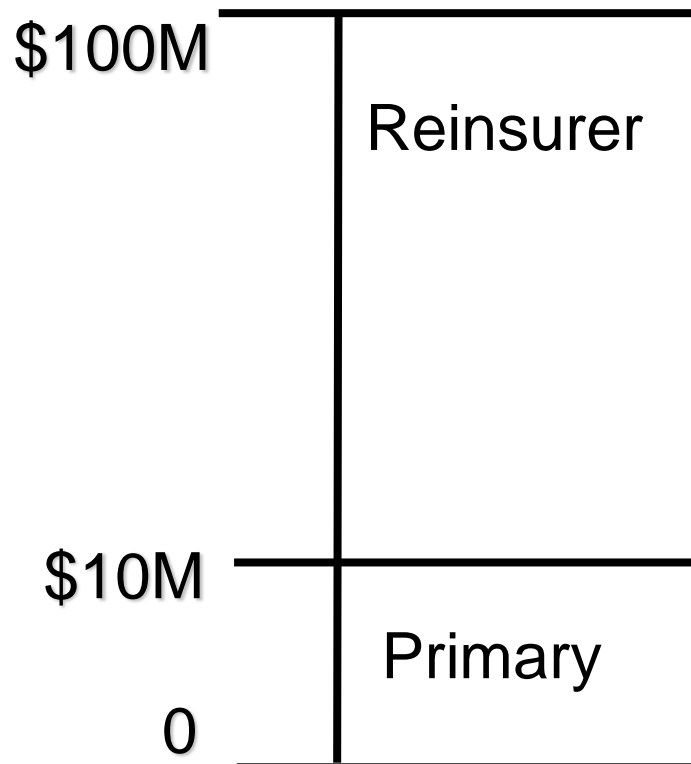
# Reinsurer Loss Payments

- Excess of Loss
  - A Reinsurer(s) pays a portion of loss exceeding a pre-determined threshold up to a limit.
  - The Primary insurer retains the risk up to this threshold.
  - Ex. – A primary insurer agrees to insure a commercial building valued at \$100 million. This insurer can only hold \$10 million in risk for any individual contract. It does not want to lose the contract so it sells the excess \$90 million to reinsurers.



# Excess of Loss Reinsurance

Policies can be written with one or multiple reinsurers



# Guaranty Funds

- When insurers become insolvent, each state has a Guaranty Fund mechanism to pay claims to the policyholders affected
  - New York is pre-insolvency
  - All other states are post-insolvency
- There are separate guaranty funds for Life and Property/Liability policies

# Funding the Guaranty Funds

- Most states assess the remaining insurers after an insolvency in order to pay outstanding claims
  - Insurers pass along the assessment to policyholders
  - Some insurers may receive tax benefits in order to offset the cost
- The effects of an insurer insolvency are borne by the state's insured businesses and individuals

# Guaranty Fund Characteristics

- These characteristics vary, but common rules are:
  - Policies terminate 30 days after insurer becomes insolvent
  - Claim limits are \$300,000 or the policy limit
    - Is your home worth more than \$300,000?
  - States may impose a set deductible for payment of claims

# REGULATION OF INSURANCE

# History of Insurance Regulation

- *Paul v. Virginia (1868)*
  - Samuel Paul was a New York licensed agent who was selling insurance in Virginia
  - Virginia said he needed to get a license and sell from a Virginia company
  - Paul argued insurance was interstate commerce and shouldn't have interstate restrictions: shouldn't be regulated by the states
  - Supreme court said insurance IS NOT interstate commerce and should be regulated by states

# History of Insurance Regulation

- *U.S. v. SEUA (1944)*
  - SEUA (an association of insurers) was accused of monopolistic pricing
  - SEUA argued they were not subject to Sherman Clayton and other federal monopolistic pricing laws because they are regulated by states
  - U.S. Supreme court decided insurance is now interstate commerce and **SHOULD** be regulated by the **FEDERAL GOVT.**

# History of Insurance Regulation

- McCarran Ferguson (1945)
  - Reasserted the “right” of the federal government to regulate insurance
  - Said federal government will generally NOT get involved in regulation as long as the states are doing an adequate job
  
- States passed rating laws
  - Rates must be
    - Adequate
    - Not unfairly discriminatory
    - Not Excessive



# Current Insurance Regulation

- Each state regulates insurance activities through an insurance department
  - Insurance transactions are taxed
  - Each department is run by a commissioner
- Common regulation and laws for insurers are supported by the National Association of Insurance Commissioners (NAIC)
  - No legal authority – attempts to create model laws and promote uniformity

# What is the primary focus of insurance regulation?

- Solvency.

# Rationale of Regulation

- Insurers collect payment in advance
- Insurance transactions are often complex and opaque
- To protect the state's citizens, the states monitor and regulate insurers'
  - Formation
  - Investments
  - Operations
  - Prices
  - Policy forms
  - Sales practices

# Regulation of Solvency

- Methods of monitoring solvency
  - Kenney Ratio
    - Based on Policyholder Surplus
  - Risk Based Capital (RBC)
    - Keep a certain amount of capital on hand depending on the riskiness of investments and operations
  - Type and quality of investments
    - Admitted Assets – can be shown on balance sheet
  - Reserving
  - Annual reports
  - On-site financial exams (every 3-5 years)

# Accounting Standards in the Insurance Industry

- SAP – Regulatory Concern
  - Designed so that an insurer could stop business at any time and have sufficient funds to pay outstanding claims
  - Non-admitted assets do not count
    - Can you pay an insurance claim with goodwill?
- GAAP – Investor Concern
- What do publicly traded insurers do?

# Regulation of Rates

- Prior Approval
- File and Use
- Use and File
- Open Competition

# Regulation of Policy Forms

- Insurance commissioners can approve or disapprove of policy forms
- Insurance Services Office (ISO) is a private insurance advisory organization
  - Develops standard insurance contracts
  - Many states require standard insurance contracts (e.g., auto, home) to be no more restrictive than an ISO form

# Regulation of Sales Practices

- Agents must pass a state licensing exam
- Unfair Trade Practices prohibit
  - Unfair discrimination in underwriting
  - False advertising
  - Inequitable claim settlement
  - Twisting – inducing clients to cancel one policy for another (increase commission)
  - Rebating – sharing the commission on a sale with the customer
- Monitoring and publishing complaint data
- Enhancing consumer knowledge through publication



# **CURRENT ISSUES IN INSURANCE**

The Griffith Insurance Education Foundation

# Underwriting Issues

- Credit score rating
  - Correlation with race and income
- Use of Gender in rating
  - Some countries and states have discontinued the use of gender difference in insurance
- Use of Marriage status in rating
  - Are these discriminatory?

# Homeowners Insurance Availability

- Some insurers are refusing to sell HO insurance in certain states
  - High-Risk Perils
    - Flood
    - Wind
    - Earthquake
- State and federal government plans:
  - E.g., Citizens, NFIP, JUAs and wind pools
- Incentives of government insurance

# Auto Insurance Availability

- Automobile coverage for High Risk Drivers
  - Assigned Risk Plan – Each company is assigned a portion of high risk drivers based on its proportion of auto premiums in the state
  - Joint Underwriting Association – High risk drivers are insured by a servicing company. All losses are passed on to the auto insurers in the state, proportionally
  - Reinsurance Pool – High risk drivers purchase insurance through a standard insurer, but all premiums and claims are passed along to a state pool

# State vs. Federal Regulation

- There are calls to pass insurance regulation to the federal government
- Pros:
  - Uniform laws and standards
  - Greater efficiency through one agency
  - Cost savings to large insurers passed on to consumers
- Cons:
  - Loss of tax revenue by states
  - Less responsiveness to local needs
  - Dilution of states' rights
  - Less innovation in regulation

# INSURANCE FRAUD

# Insurance Fraud Overview

- Cost to the U.S. economy
  - 45% of insurers estimate fraud represents 10% of their claims volume
  - 32% estimate fraud is 20% of their claims volume
  - According to the FBI, non-health insurance fraud is estimated at more than \$40 billion per year
- Insurers and state regulators believe fraudulent claims rates are increasing – especially in personal auto lines
- According to the IRC, 1 in 4 Americans believes claims padding is acceptable practice

# Auto Fraud

- No Fault Fraud
  - Fraudsters often operate in groups to stage accidents
  - High-frequency claims include “phantom” injuries such as whiplash and other neck and back problems
  - Fly-by-night chiropractic centers
- Underwriting Fraud
  - Knowingly false statements regarding vehicle use, storage, location, and mileage used to receive lower premiums
- Physical Damage Fraud
  - Destroying a vehicle to collect the insurance proceeds
    - Lays Potato Chips



# Workers comp Fraud

- Employer fraud
  - Misreporting number of employees, wages, hours, or working conditions
  - Paying employees as independent contractors
- Employee fraud
  - Monday morning injuries
  - Old injuries
  - Sidelineing / Extending benefits
- Employer fraud often reduces the insurance premium paid
- Employee fraud often increases the insurance benefits received

# INFORM+INSPIRE

Thank you for your attention!

Any Questions?

Contact Info:

David M. Pooser

Email: [pooserd@stjohns.edu](mailto:pooserd@stjohns.edu)

Address: St. John's University

101 Murray Street

New York, NY 10007

Tel: (212) 284-7010