Briefing on the Property/Casualty Insurance Industry: 
*Function and Financial Overview*

Maryland Economic Matters Committee
Maryland House of Delegates
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Presentation Outline

The Structure of the Property/Casualty Insurance Industry
  ◆ Organizational & Marketing Structure of Insurers
  ◆ Facts about the P/C Insurance Industry

How Property/Casualty Insurance Works
  ◆ Insurance Cycles
  ◆ Drivers of, and Importance of, Profits

P/C Insurance: Performance Overview
Structure Overview of the P/C Insurance Industry

Very Diverse, Competitive & Innovative Industry
How Many? What Types?

- **2,718 P/C insurance companies in US in 2013**
  - These 2,718 companies consolidate to 1,266 groups
  - Some larger insurance groups have dozens of subsidiaries
  - Baltimore Equitable is the 3rd oldest insurer in the US, est. in 1794 (George Washington was its president!)

- Most insurers are small, operate regionally

- A highly competitive business in most areas and for most types of coverage

- **Lines of Business**
  - Personal, Commercial, Multi-Line
  - Primary vs. Reinsurance

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**Maryland in 2013**
- 820 insurers wrote $9.95B in P/C premiums in MD
- 132 wrote pvt. pass. auto
- 158 wrote homeowners
- 284 wrote workers comp

What is Reinsurance?

Reinsurance is insurance for insurance companies

Essential to helping spread risk globally

- Very important in CAT risk
- Critical for liability coverages, especially when large awards or settlements are possible
- Stabilizes results of, and expands capacity of primary insurers
- Especially important to smaller companies but used by all
- Supplemented by “alternative” market which includes structures such as Catastrophe Bonds
Organizational Structure of Insurers

- **Shareholder-owned (Stock) insurers:** 776 organizations

- **Policyholder-owned insurers**
  - Mutual companies: 397 organizations
  - Reciprocals: 70 organizations

- **Business-owned insurers**
  - Captive: Insurance subsidiary wholly owned by a single company whose primary business is not insurance
  - Risk Retention Groups: Businesses (or other organizations) in same/similar industry form and own an insurer
  - **Self-Insurance:** assumption of its own risk by a business

- **Government-owned insurers:** ~20 organizations

- **“Partner”-owned insurers:** (Lloyds): 11 US organizations
Federal Government Insurance Programs
Where Government Bears Risk

- **Flood**: National Flood Insurance Program
  - HO and most commercial policies exclude flood

- **Crop**: National Crop Insurance Program
  - Available for virtually all perils on most crops
  - Basically a federal subsidy to farmers

- **Nuclear**: Price-Anderson Act
  - Insures nuclear power facilities

- **Terrorism**: Terrorism Risk Insurance Act (TRIA)
  - Just reauthorized for 6 years through 12/31/20

- **Political Risk**: Overseas Private Investment Corporation

- **Pensions**: Pension Benefit Guarantee Corporation
Differences in Focus and Strategy Among Insurers

- **Personal Lines (many also sell Life)**
  - Sells only/mostly auto and homeowners insurance
  - Examples: State Farm, Allstate, USAA

- **Commercial Lines (some sell Life)**
  - Sells only/mostly business insurance
  - Examples: AIG, CNA, ACE

- **Multi-Line (many also sell Life)**
  - Sells many different types of insurance
  - Examples: Hartford, Liberty Mutual, Travelers

- **Mono-Line**
  - Sells only 1 type of insurance
  - Examples: GEICO, Progressive, Zenith
Why Do Strategies Differ?

- Some insurers believe that specializing yields certain advantages:
  - Underwriting edge/experience
  - Price advantage since can keep expenses low
  - Customer loyalty

- Some emphasize wide range of products
  - One brand for many customer needs
  - Product/customer diversification as a business strategy

- Some emphasize price

- Some emphasize quality (e.g., service, claims approach) over price

- Some emphasize long-term financial strength

- Distribution strategies may vary
What Determines in Which Markets an Insurer Operates?

Most insurers started as a regional/niche “player”
- E.g., note “Farm” in many insurance company names
- Note geographic reference in many company names
- Note special nature of risk in name (Church Mutual)

Some have local reputations—and do little advertising

Risk Appetite
- Different insurers are willing/able to accept varying amounts of CAT exposure (may depend on capitalization, expertise, etc.)

Some insurers specialize in certain industries
- E.g., Aviation, marine, energy, medical malpractice
What Determines in Which Markets an Insurer Operates? (cont’d)

- Tort Environment

- Regulatory Environment
  - If viewed as onerous, rigid, capricious, unfair, hostile, or confiscatory, fewer insurers participate

- Size of Market

- Growth Opportunities/Demographics

- Synergies with Other Types of Products Offered
States Remain the Principal Regulator of Insurers in the Wake of Dodd-Frank

- Solvency, rate & form approval, licensing, product approval, consumer protection and education

A Small Number of Insurers Have Received “Systemically Important Financial Institution” (SIFI) Designations

- Their ultimate regulator is the Federal Reserve and are subject to more stringent capital requirements

Federal Insurance Office (FIO) Is Not a Regulatory Agency
The P/C Insurance Industry (as of year-end 2013)

- **$467.9 billion in Earned Premiums**
  - About 51% personal lines, 49% commercial
  - An “earned premium” is a premium dollar for which insurance coverage has already been provided

- **$1.5 trillion in assets** (compared to $3.5 trillion for life insurers)

- **$663.3 billion in Policyholder Surplus** (in other industries, this would be called “Net Worth”)
  - Surplus is a primary measure of claims-paying ability because it is assets in excess of known obligations
Economic Facts About the Insurance Industry in Maryland

- **Employment**
  - Insurers employed 47,930 people in Maryland in 2013
  - Generated $3.7 billion in payroll

- **Gross State Product**
  - Insurers contributed $7.2 billion to Maryland GSP in 2012, accounting for 2.15% of total state GSP

- **Taxes**
  - Premium taxes alone totaled $429.4 million in 2013

- **Claims Payouts**
  - P/C insurers paid (or incurred) claims totaling $5.6 billion in 2
  - L/H claims and benefits paid totaled $8.7
Characteristics of the P/C Insurance Industry

Cyclical and Sometimes Volatile, but Financially Conservative & Strong
Profitability Peaks & Troughs in the P/C Insurance Industry, 1975 – 2016F

*Profitability = P/C insurer ROEs. 2011-14 figures are estimates based on ROAS data. Note: Data for 2008-2014 exclude mortgage and financial guaranty insurers.
Source: Insurance Information Institute; NAIC, ISO, A.M. Best, Conning

Sources: ISO, Fortune; Insurance Information Institute.

P/C Profitability Is Impacted by Both Cyclicality and Ordinary Volatility

- Hugo
- Andrew
- Northridge
- Sept. 11
- Katrina, Rita, Wilma
- Low CATs
- 4 Hurricanes
- Sandy
- Record Tornado Losses
- Financial Crisis*

*Percent*
Back to the Future: Profitability Peaks & Troughs in the P/C Insurance Industry, 1950 – 2014*

*Profitability = P/C insurer ROEs. 2011-14 figures are estimates based on ROAS data. Note: Data for 2008-2014 exclude mortgage and financial guaranty insurers. 2014 figure is through Q3.

Source: Insurance Information Institute; NAIC, ISO, A.M. Best.
The most profitable states over the past decade are widely distributed geographically, though none are in the Gulf region.

Source: NAIC; Insurance Information Institute.
Some of the least profitable states over the past decade were hit hard by catastrophes.

Source: NAIC; Insurance Information Institute.
Three Key Drivers of Profits

- **Underwriting Results** – Insurance operations
  - Companies sometimes lose money on insurance operations, especially from catastrophic losses

- **Investment Results** – Earned on money held until needed for claims or expenses

- **Adequacy of Reserves and Capital/Surplus** –
  - Reserves -- assets dedicated to known/expected claims
  - Capital/surplus -- assets dedicated to unknown/unexpected claims
  - Insurers may need to use profits to strengthen reserves and/or build surplus
U.S. Insured Catastrophe Loss Update

2014 Experiencing Below Average CAT Activity Following a Welcome Respite in 2013 from Very High CAT Losses in 2011/12
U.S. Insured Catastrophe Losses

($ Billions, $ 2013)

2013 Was a Welcome Respite from 2012, the 3rd Costliest Year for Insured Disaster Losses in US History. Longer-term Trend is for more—not fewer—Costly Events

*Through 12/31/14.

Note: 2001 figure includes $20.3B for 9/11 losses reported through 12/31/01 ($25.9B 2011 dollars). Includes only business and personal property claims, business interruption and auto claims. Non-prop/BI losses = $12.2B ($15.6B in 2011 dollars.)

Sources: Property Claims Service/ISO; Insurance Information Institute.
Inflation Adjusted U.S. Catastrophe Losses by Cause of Loss, 1994–2013

1. Catastrophes are defined as events causing direct insured losses to property of $25 million or more in 2013 dollars.
2. Excludes snow.
3. Does not include NFIP flood losses.
4. Includes wildland fires.
5. Includes civil disorders, water damage, utility disruptions and non-property losses such as those covered by workers compensation.

Source: ISO’s Property Claim Services Unit.

- Hurricanes & Tropical Storms, $159.1
- Wind losses are by far cause the most catastrophe losses, even if hurricanes/TS are excluded.
- Wind/Hail/Flood (3), $14.6
- Geological Events, $18.4
- Terrorism, $24.8
- Winter Storms, $24.7
- Events Involving Tornadoes (2), $139.3
- Fires (4), $5.5
- Other (5), $0.2

Tornado share of CAT losses is rising

Insured cat losses from 1993-2012 totaled $386.7B, an average of $19.3B per year or $1.6B per month.
Top 16 Most Costly Disasters in U.S. History

(Insured Losses, 2013 Dollars, $ Billions)

Superstorm Sandy in 2012 was the last mega-CAT to hit the US

12 of the 16 Most Expensive Events in US History Have Occurred Over the Past Decade

Sources: PCS; Insurance Information Institute inflation adjustments to 2013 dollars using the CPI.
Total Value of Insured Coastal Exposure in 2012

(2012, $ Billions)

- New York: $2,923.1
- Florida: $2,862.3
- Texas: $1,175.3
- Massachusetts: $849.6
- New Jersey: $713.9
- Connecticut: $567.8
- Louisiana: $293.5
- S. Carolina: $239.3
- Virginia: $182.3
- Maine: $164.6
- North Carolina: $163.5
- Alabama: $118.2
- Georgia: $106.7
- Delaware: $81.9
- New Hampshire: $64.0
- Mississippi: $60.6
- Rhode Island: $58.3
- Maryland: $17.3

In 2012, New York Ranked as the #1 Most Exposed State to Hurricane Loss, Overtaking Florida with $2.862 Trillion. Texas is very exposed too, and ranked #3 with $1.175 Trillion in insured coastal exposure.

The Insured Value of All Coastal Property Was $10.6 Trillion in 2012, Up 20% from $8.9 Trillion in 2007 and Up 48% from $7.2 Trillion in 2004.

Source: AIR Worldwide
Q. If you were to purchase a home today, which of the following summarizes your views on that home’s risk of damage from natural disasters . . . and your decision to purchase that home?

More Than Half of the Public Would Be Significantly Influenced by Risk of Damage from Natural Disasters. Close to a Third Do Not Regard Such a Risk To Be a Major Consideration.

Source: Insurance Information Institute Annual Pulse Survey.
Federal Disaster Declaration Patterns: 1953-2014

Disaster Declarations Set New Records in Recent Years
The number of federal disaster declarations set a new record in 2011, with 99, shattering 2010’s record 81 declarations.

54 federal disasters were declared in 2014*

The Number of Federal Disaster Declarations Is Rising and Set New Records in 2010 and 2011 Before Dropping in 2012-2014

Federal Disasters Declarations by State, 1953 – 2014: Highest 25 States*

Over the past 60 years, Texas has had the highest number of Federal Disaster Declarations


Federal Disasters Declarations by State, 1953 – 2014: Lowest 25 States*

Over the past 60 years, Wyoming and Rhode Island had the fewest number of Federal Disaster Declarations.


P/C Insurance Industry Is Growing Modestly and Capacity Is Increasing
Net Premium Growth: Annual Change, 1971—2016F

(Percent)

1975-78  1984-87  2000-03

Net Written Premiums Fell 0.7% in 2007 (First Decline Since 1943) by 2.0% in 2008, and 4.2% in 2009, the First 3-Year Decline Since 1930-33.

2015-16F: 4.0%
2014E: 3.9%
2013: 4.6%
2012: +4.3%

*Actual figure based on data through Q3 2014.
Shaded areas denote “hard market” periods
Sources: A.M. Best (historical and forecast), ISO, Insurance Information Institute.
Direct Premiums Written: Total P/C Percent Change by State, 2007-2013

Top 25 States

North Dakota was the country’s growth leader over the past 6 years with premiums written expanding by 74.6%, fueled by the state’s energy boom.

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<th>State</th>
<th>Percent Change (%)</th>
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Sources: SNL Financial LC.; Insurance Information Institute.
### Direct Premiums Written: Total P/C
#### Percent Change by State, 2007-2013

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<td>NV</td>
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<td>DE</td>
<td>-15.3</td>
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Growth was negative in 7 states and DC between 2007 and 2013.

Sources: SNL Financial LC.; Insurance Information Institute.
US Policyholder Surplus: 1975–2014*

Surplus as of 9/30/14 was a record $673.9, up 3.2% from $653.3 of 12/31/13, and up 53.6% ($234.5B) from the crisis trough of $437.1B at 3/31/09

“Surplus” is a measure of underwriting capacity. It is analogous to “Owners Equity” or “Net Worth” in non-insurance organizations.

The Premium-to-Surplus Ratio Stood at $0.73:$1 as of 9/30/14, a Near Record Low (at Least in Recent History)

* As of 9/30/14.
Catastrophe Bond Issuance and Outstanding: 1997-2014

Risk Capital Amount ($ Millions)

2014 Has Seen the Largest Cat Bond Ever - $1.5 Billion (Florida Citizens). Bond Issuance Set a Record.

Source: Guy Carpenter.
Investment Performance is a Key Driver of Profitability

Depressed Yields Will Necessarily Influence Underwriting & Pricing
Distribution of Invested Assets: P/C Insurance Industry, 2013

$ Billions

- Bonds, 62%
- Stocks, 22%
- Cash, Cash Equiv. & ST Investments, 6%
- All Other, 10%

Total Invested Assets = $1.5 Trillion

Due to persistently low interest rates, investment income fell in 2012, 2013 and 2014.

1 Investment gains consist primarily of interest and stock dividends. *2014 figure is estimated based on annualized data through Q3.

Sources: ISO; Insurance Information Institute.

Yields on 10-Year U.S. Treasury Notes have been essentially below 5% for a full decade.

U.S. Treasury yields plunged to historic lows in 2013. Longer-term yields have rebounded a bit.

Since roughly 80% of P/C bond/cash investments are in 10-year or shorter durations, most P/C insurer portfolios will have low-yielding bonds for years to come.

*Monthly, constant maturity, nominal rates, through Dec. 2014.
The yield on invested assets continues to decline as returns on maturing bonds generally still exceed new money yields. The end of the Fed’s QE program in Oct. 2014 should allow some increase in longer maturities while short term interest rate increases are unlikely until mid-to-late 2015.

Sources: Conning.
P/C Insurance Is an Innovative Industry

*Cyber Insurance Is a Recent Example*
Data Breaches 2005-2014, by Number of Breaches and Records Exposed

The Total Number of Data Breaches Rose 28% While the Number of Records Exposed Was Relatively Flat (~2.6%)

* 2014 figures as of Jan. 12, 2014 from the ITRC.
Source: Identity Theft Resource Center.
Data/Privacy Breach: Many Potential Costs Can Be Insured

- Costs of notifying affecting individuals
- Business Income Loss
- Regulatory fines at home & abroad
- Forensic costs to discover cause
- Costs of notifying regulatory authorities
- Defense and settlement costs
- Lost customers and damaged reputation
- Cyber extortion payments

Source: Zurich Insurance; Insurance Information Institute
The Three Basic Elements of Cyber Coverage: Prevention, Transfer, Response

Cyber risk management today involves three essential components, each designed to reduce, mitigate or avoid loss. An increasing number of cyber risk products offered by insurers today provide all three.

Source: Insurance Information Institute research.

- I.I.I.’s 2nd report on cyber risk released June 2014
- Provides information on cyber threats and insurance market solutions
- Global cyber risk overview
  - Quantification of threats by type and industry
- Cyber security and cost of attacks
- Cyber terrorism
- Cyber liability
- Insurance market for cyber risk
- 3rd Report in Q2 2015
Conclusion

- The P/C insurance industry is highly competitive
- It’s a highly cyclical/volatile business
- The industry is financially very strong
- Profitability depends not only on claims activity but also investment returns and other factors
- Many factors influence price (rate) and availability
  - General & individual risk rating factors
  - Nature of regulation has significant impact on competition, consumer choice, and price
Thank you for your time and your attention!

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