Intro to P&C and CAS

BRUIN ACTUARIAL SOCIETY
Property & Casualty Insurance

- Also known as “General Insurance”
- Two components: (1) Property and (2) Casualty
- Property insurance covers the policyholder’s **possessions**
  - E.g., Home insurance, Earthquake insurance, Renter’s insurance
- Casualty insurance covers **liability** for losses the policyholder causes to others
  - E.g., Auto liability, professional liability (malpractice), workers’ compensation
P&C Actuaries
Functions

- Ratemaking (Pricing)
- Reserving
- Capital Adequacy
- Reinsurance
- ERM
- Trends
P&C Actuaries
Core Functions

- **Ratemaking: Pricing**
  - Are premiums adequate to cover expected losses?
  - Are some classes of policyholders performing better or worse?
  - How does a policyholder’s loss experience influence his/her premium?

- **Reserving**
  - What is the company’s unpaid claim liability?
  - What is the probability distribution of unpaid claim liability?
P&C Actuaries

- Capital Adequacy
  - Will the company’s surplus be adequate in the event of adversity?

- Reinsurance: Insurance for insurance companies
  - How do we structure reinsurance to meet the needs of a group of policyholders?
  - Pricing and reserving, but often with little data.
ERM
- Enterprise-wide, holistic view of risk
- Risk identification and related management and mitigation

Trends
- New developments: climate change, terrorism and political instability, cybercrime
- New products: crop insurance, terrorism insurance, cybercrime insurance (ransom-ware)
- New technologies: big data, predictive analytics
Companies Insurance

Farmers Insurance

Liberty Mutual

Lloyd's

Allstate
What makes P&C insurance interesting?

Key characteristics

- P&C Insurance is short-term
  - Policies are typically annual
  - Losses arise frequently and soon
- Loss generation is uncertain
  - Excellent drivers can have zero accidents
  - Safe employers can have zero workplace accidents
  - Earthquakes, extreme weather, or floods
What makes P&C insurance interesting?
Unique specialty insurance policies: Lloyd’s of London


- Singer Whitney Houston’s vocal cords
- Food critic Egon Ronay’s taste buds
- The cars that carpooled people during the Montgomery Bus Boycotts
- The new World Trade Center
Casualty Actuarial Society

- The actuarial organization for P&C actuaries
- Est. 1914
- 7000 members worldwide and growing
- Maintains Associate and Fellow designations for P&C actuaries
- Administers Exams S and 5 through 9
- Provides academic and professional resources to members, candidates and students
Path to Associateship

- Exams 1, 2, 3 and 4
  - SOA Exams P, FM, MFE, and C
- Exam S (Statistics)
- Exam 5: Pricing and Reserving
- Exam 6: Regulation & Financial Reporting
- VEEs:
  - Corporate Finance
  - Economics
- Online Courses 1 and 2
- Course on Professionalism
Fellowship Requirements

- Exam 7: Advanced Reserving
- Exam 8: Advanced Pricing
- Exam 9: Financial Risk & Rate of Return
CAS Student Central
A program for university students

- Join at www.CASstudentcentral.org
- Free membership
- Online community with 3800 students from 400 schools
CAS Student Central

Resources

- P&C internship listings
- CAS Curriculum Guide
- Case Studies
  - Topics include Catastrophe Modeling, Warranties, Liabilities, etc.
  - Include guides, slides, and Excel workbooks
- Online Community
  - Blog posts with insights and tips
  - Member directory
  - News and updates
CAS Student Central
Resources

- Webinars for students
  - Topics include: Predictive analytics, Excel & R, Career Paths, etc.
- Invitations to networking events, meetings and seminars
  - Seminar topics include: Ratemaking and Product Management, Reinsurance, Casualty Loss Reserve, etc.
- Scholarship opportunities
Additional Resources

- Casualty Actuarial Society
  - Casact.org
- BeAnActuary
  - BeAnActuary.org
- American Academy of Actuaries
  - Actuary.org
- Salary Surveys
  - EzraPenland.com
  - DWSimpson.com
- CAS Student Central on Facebook
Thank you to Anthony Ip
- 2014-15 Vice President
- Analyst at Beecher Carlson

Slides are based on his

Apply for the entry-level analyst position at Beecher Carlson
- BAS Email from March 28th