BCOA
Bermuda Captive Owners Association

The Role of The Actuary

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Presenters

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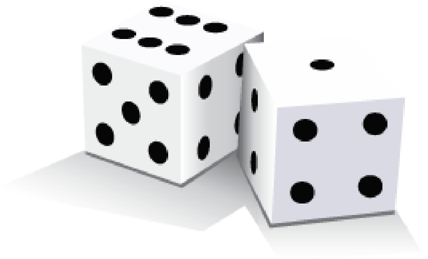
Why Do Insurance Companies Need Actuaries?

- Most types of companies have liabilities which are relatively CERTAIN

- Insurance companies have liabilities which are UNCERTAIN



Due to the Uncertain Nature of Liabilities, Actuaries Perform Key Functions:

- Analyses of Needed Reserves
- Pricing
- Reinsurance
- Regulatory Compliance
- Enterprise Risk Management
- Many other functions involving math, statistics, financial modeling, and investments

For Captives, Actuaries Are Critical For:

- Everything mentioned on the previous slide (Reserving, Pricing, Reinsurance, Modeling)
- Feasibility Study When Forming A Captive
- Corresponding with Fronting Carrier Actuaries
- Analyzing Collateral Levels For Reasonableness
- Working With Captive Managers

How Are Actuaries Trained?

- Extensive undergraduate studies in math and statistics is not technically required, but practically a pre-requisite.
- Extensive Examinations are administered covering a broad spectrum of topics needed to understand and even manage an insurance company.
  - Exams are administered every 6 months and required hundreds of hours of study for each exam. There are 10 exams, some broken up into sub-parts.
  - Completing the exams is elusive for many, and those who make it through the exam process may have spent many years (5 at a minimum) finishing.

Societies and Credentials

- Casualty Actuarial Society (CAS) – Property Casualty Actuaries
  - Associate of the CAS (ACAS) – 7 Complete Exams
  - Fellow of the CAS (FCAS) – All Exams Completed
- Society of Actuaries (SOA) – Life & Health Actuaries
  - Associate of the SOA (ASA) – 7 Complete Exams
  - Fellow of the SOA (FSA) – All Exams Completed

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Societies and Credentials - Continued

- American Society of Pension Professionals and Actuaries (SPA)
  - Member of the SPA (MSPA)
  - Fellow of the SPA (FSPA)
- American Academy of Actuaries (AAA)
  - Member of the AAA (MAAA) – Credentialed In Anything Already Mentioned
- Others
  - Conference of Consulting Actuaries
  - Canadian Institute of Actuaries, Institute & Faculty of Actuaries (UK), Colegio Nacional de Actuarios (Mexico), Institute of Actuaries of Australia
  - Others as Approved

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Board Interaction

- Unlike larger insurance companies, captive boards are often made up people from outside the insurance industry.
- Include Actuaries in Board Meetings and Discussions
  - Actuary works on behalf of the Board
  - Educates Directors
  - Provides Assurance to Directors That A Professionally Skilled Actuary Is Supporting the Captive
  - Helps Actuaries Understand any Nuances of the Business

Reliance on Actuaries

- Many businesses have fallen prey to aggressive reserving and aggressive pricing. "Aggressive" means low – often too low.
- Loss Reserves should always be set objectively reflecting a reasonably likely outcome, preferably the most likely outcome.
- Pricing should be established considering several factors (growth strategies, competitive environment, etc.) but should always be established such that rates be "neither inadequate, excessive, or unfairly discriminatory".

Company Failure – An Example (Reserving)

- The management team of a particular captive puts several things in place to improve results. A year later, the actuary produces their analysis using historical patterns spanning the past several years. Management feels that things are better than in the past and elects to book reserves well below actuarial estimates.
- Great results are reported and the captive decides to invest in additional marketing.
- The captive suffers several unexpected large liability claims over the next year, and the actuarial estimates of needed reserves rises significantly.
- The management team must book increased reserves which wipes out most of the surplus, causing the captive to fail statutory standards of capital adequacy.
- The captive must stop writing business and goes into an ugly liquidation.

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Company Failure – An Example (Pricing)

- A particular association captive finds that the marketplace is extremely competitive and several members leave for cheaper coverage from another agent. The management does not want to lose business and in fact has a plan in place for growth of 20% in the next year. To achieve the desired growth in this very competitive marketplace, the management team decides to cut rates by “whatever it takes” to maintain high retention and write a healthy amount of new business.
- A year later, the actuaries note that earned premiums are rising, but they are unaware of the reduced pricing.
- A year after that, loss ratios increase to 90% and surplus begins to quickly disappear due to increased paid losses and increased reserves.
- Two years later, the surplus is depleted to low levels and the captive goes in to an ugly liquidation.

Reliance on Actuaries

- It is very important to rely on actuarial estimates when setting reserve levels and in setting prices. Working closely with the actuaries, and relying on their work helps everyone and results in fewer surprises.
- Don’t be afraid to question the work of your actuaries. There may be areas they have not considered that result in changes to their estimates.

Working With Actuaries

- Your actuaries will optimally have good working relationships with
  - The Management Team
  - The Captive Owner(s)
  - The Board of Directors
  - The Captive Management Company
  - The Auditors
  - Your Investment Manager
  - Fronting Carriers

Finding Actuaries

- As Employees
  - Executive Recruiters Can Help
  - There are Recruiters Who Specialize in Placing Actuaries
- As Consultants
  - Captive Managers and Other Captives Can Help Give Suggestions
  - Attend conferences such as BCC – Actuarial Consultants attend
  - Most Large Brokers and Auditors have Actuarial Services Available

Questions?