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# Why Your Actuary Really Matters

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**1) Introductions**

**2) Why you need an actuary**

**3) What actuaries are trying to prevent**

**4) Why an actuary really matters**

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## **Standard (and vitally important) actuarial services for captive insurance companies:**

- Captive Feasibility Studies
- Actuarial Assistance/Support in Approval & Licensing
- Annual Reserve Reviews & Statements of Actuarial Opinion
- Annual Renewal Premium Pricing
- Assistance with Audits and Financial Condition Examinations
- Assistance with Financial Reporting (i.e. ASU 2015-09)

## **Captive Funding & Feasibility Studies**

- Loss Projections
  - Experience and/or Exposure-based
  - Expected and Adverse Scenarios
  - Pricing of Reinsurance/Fronting Premiums
- Build-up of Recommended Premiums
  - Risk Load (Profit & Contingencies)
  - Captive Service Provider Expenses
  - Taxes and Regulatory Fees
- Recommendation of Initial Capital and Surplus
  - Based on Limits & Adverse Scenarios

# Annual Renewal Premium Pricing

- Based on Loss History and Experience
- Accounts for Changes in:
  - Experience
  - Operations
  - Exposures
  - Limits
- New Coverages
- Reinsurance Pricing

## Regulatory, Reserving and Audit Services

- Actuarial Assistance During Application, Licensing & Business Plan Changes
- Annual Reserve Review & Statement of Actuarial Opinion
  - Required in Most Domiciles
  - Key Component of Solvency Objective of Regulators
- Assistance with Audits and Financial Examinations
- Assistance with Financial Reporting
  - ASU 2015-09 – Optional
  - Ad hoc Reporting to Regulators & Auditors

## What Could Possibly Go Wrong?

- Premium Projections
  - Too Low
    - Solvency Concerns/Need to Recapitalize
    - Examples - Trucking, Livery, Nursing Homes
    - Keep Insureds and Reinsurers
  - Common Causes
    - Data Errors (Omitted Large Loss(es))
    - Poor Benchmarks
    - New or Difficult Coverage, Growth/Expansion
    - Unexpected Changes in Trends (Trucking)

## What Could Possibly Go Wrong?

- Premium Projections
  - Too High
    - Scrutiny for “Grossly Excessive Rates”
    - “Wild Ass” Guesses
    - Scrutiny of Model Manipulation
    - Not Market Comparable or Consistent to Traditional
    - Other Reasonableness Tests (e.g. Rate on Line)
    - Review by Credentialed Actuary at NAIC-accredited domicile doesn’t always help



## What Could Possibly Go Wrong?

- Reserve Projections
  - Too Low
    - Solvency Concerns/Need to Recapitalize
    - Examples - Trucking, Livery, Nursing Homes
    - Regulatory, Audit, Front/Reinsurance Issues
  - Common Causes
    - Claims Handling – Issues and Changes
    - Poor Benchmarks
    - New or Difficult Coverage, Growth/Expansion
    - Unexpected Changes in Trends (Trucking)

## What Could Possibly Go Wrong?

- Reserve Projections
  - Too High
    - Less Frequent in Captives (Mainly 831(a) issue)
    - Scrutiny for Deferral of Income Taxes
    - Questions of Risk Margins, High End of Actuary's Range, etc.
    - Example - Acuity

## What Could Possibly Go Wrong?

- Regulatory Issues
  - Adverse Reserve Development
  - Reserves – Management’s Estimate vs. Actuary’s Central
  - Rate Changes – Inadequate?, Excessive?
  - Capitalization
  - Adverse Scenarios
- Collateral, Audit and Reinsurance Issues
  - Disagreement on Adequate Reserves
  - 2 Actuaries, 3 Answers (Levels of Conservatism)

## Enterprise Risk Management (ERM)

- Notice Our Extra Letters? (ARM, CERA)
- ERM - the process by which “an organization in any industry assesses, controls, exploits, finances and monitors risks from all sources (emphasis added) for the purpose of increasing the organization’s short- and long-term value to its stakeholders.”
- Actuaries are uniquely qualified to contribute to ERM
- New coverages, coordination of structures/layers, captives as profit centers, incentives for locations

## Innovation?

- Captive Actuaries See Lots of “Interesting” Coverages
  - Warranties (Sports Fields, Emergency Generators)
  - Cannabis (Crop, Product Liability, with Crypto Currency)
  - Crop (Swine Influenza, Potato Nematodes)
  - Renewable Energy
  - Credit Enhancement Coverages
  - Conservation Trusts
  - Crop Dusting Airplanes (Organic Overspray)
  - Tenant Liability Insurance
  - Tech Start-Ups – Uber, Lemonade, Task Rabbit

## Risk Transfer and Risk Distribution

- Risk Transfer Assessment
  - Is there a significant chance of a material loss to the captive?
  - Expected Reinsurance Deficit (ERD)
- Risk Distribution Analysis
  - Unrelated Risk, including Pools
    - Lots of Details to Assess
  - Brother-Sister
  - Group Captive
  - Sufficient # of Statistically Independent Risk Units

## Predictive Analytics

- The World Runs on Data Driven Decisions
  - Claims Models – Fraud, Explosive Claims
  - Vendor Evaluation – Medcor, SIUs, TPAs
  - Member or Insured Evaluations
  - Benchmarking – CRICO, Group Captives
  - Safety Devices – Telematics, Wearables, etc.
  - Improved Risk Selection
  - Lives (Not) Impacted by Safety and Loss Control

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