

Captive Insurance: Another View

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Session Overview


- Feasibility Studies
- Proforma Financial Statements
- Funding
- Reserving
- Data Issues
- Examinations
- ASOPs

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Just in Case Department



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What is a Captive?

Definition:

A closely held insurance company that is owned and controlled by its insureds

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Basics of Captives

- ◆ Types of captives
 - Single parent
 - Group
- ◆ Type of coverage
 - Common coverages (WC, AL, PR)
 - Atypical coverage (loss of employee)

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Why Form a Captive?

- ◆ Affordability of insurance
- ◆ Availability of insurance
- ◆ Better than average insured (cost savings)
- ◆ Better coverage
- ◆ Control of risk management process
- ◆ Growth of parent
 - Organic growth
 - Merger or acquisition

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Lines of Business ~ Top 5

- Property
- General Liability
- Workers Compensation & EL
- Professional Liability
- Auto Liability or APD

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Other Popular Lines of Business

- | | |
|--|--|
| <input type="checkbox"/> TRIA Specific Policies | <input type="checkbox"/> Warranty |
| <input type="checkbox"/> Umbrella Liability | <input type="checkbox"/> D&O |
| <input type="checkbox"/> Products Liability | <input type="checkbox"/> E&O |
| <input type="checkbox"/> Pollution Liability | <input type="checkbox"/> Life XXX |
| <input type="checkbox"/> Crime, Surety, Fidelity | <input type="checkbox"/> Marine |
| <input type="checkbox"/> Employee Benefits – DOL App. | <input type="checkbox"/> Mortgage Guaranty |
| <input type="checkbox"/> Credit Life, Accident, Health | <input type="checkbox"/> Flood, Earthquake |
| <input type="checkbox"/> Environmental Impairment | <input type="checkbox"/> Medical Stop Loss |
| <input type="checkbox"/> Business Interruption | |

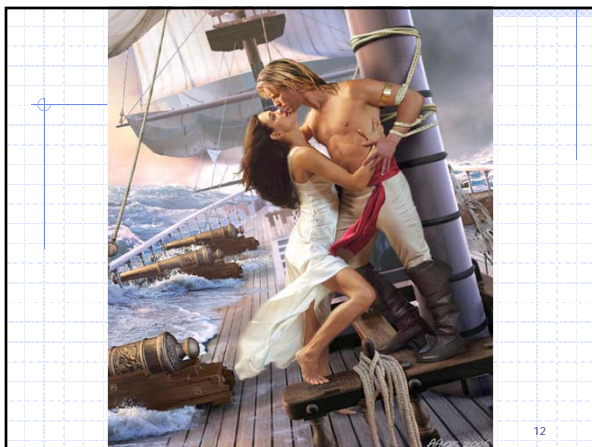
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The Role of The Actuary

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What do actuaries do for captives?

- ◆ Feasibility studies
 - The database starts here
- ◆ Pro-forma financial statements
 - The game plan for the future. Helps define appropriate capital levels.
- ◆ Rate / funding studies
- ◆ Reserve reviews
 - The actuary can work from the start-up or after captive has been in existence.

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Unique Issues of Working with Single Parent Captives

- ◆ Common coverages (WC, AL, PR)
 - Client should have data
 - ◆ Loss history
 - ◆ Exposures
 - May need external data too
 - How have the client's operations changed from the experience period to the future?
 - ◆ Expansion, closings
 - ◆ Mergers, acquisitions
 - ◆ Class and state mix

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Unique Issues of Working with Single Parent Captives

- ◆ Atypical coverage (loss of employee)
 - Frequently no internal data will exist. Client should have perspective (employee turnover). Talk to the client. Understand their business.
 - May be able to find external data sources
 - Consider the claim reporting lags that are likely
 - How have the client's operations changed from the experience period to the future?
 - Heavy dose of professional judgment.
 - Reconsider your assumptions every year.

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Characteristics of Group Captives

- ◆ Group captives can be like a small insurance company.
- ◆ Frequently homogenous group of insureds based on:
 - Class or classes
 - Association membership
 - Geography

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Unique Issues of Working with Group Captives

- ◆ Typical data base is not large enough to be sufficiently credible.
- ◆ Stability is reduced if the data base is segmented such as by class or geography.
- ◆ Be mindful of both the quantity of insureds and the quality of insureds.

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The Feasibility Process for a Captive

- Information gathering
- Review of loss data and financial information
- Captive modeling
- Business plan development
- Structure of captive
- Determination of optimal ownership structure
- Analysis of tax issues*
- Domicile analysis
- Implementation steps
- Final report issued
- Ongoing consulting

* All such matters should be reviewed with the client's own qualified tax, accounting, and legal advisors.

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Issues with Feasibility Studies

- ◆ Need to project past activity to next year
- ◆ Premiums
 - Exposure
 - Rates
 - Pricing
- ◆ Losses
 - Exposure
 - Frequency
 - Severity

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Issues with Feasibility Studies

- ◆ Fixed expenses. Start up. Ongoing.
- ◆ Variable expenses. Any commissions? Reinsurance? Taxes.
- ◆ Investment income. Know the investment policy.
- ◆ Know if there are loans to parent or non-interest bearing investments.
- ◆ Initial capitalization. Varies with premium, limit, reinsurance, variability.


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Data Collection Issues
(garbage in, money out!)



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Data Collection Issues



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Data Collection Issues

- Availability
- Credibility
- Common Group Challenges (but not exclusively!)
 - Varying policy & valuation dates
 - Differing claims TPA's with differing case reserve philosophies
 - Homogeneity of risks

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Issues With Estimating Ultimate Losses – Common Coverages

- ◆ Methods
 - Frequent use of Bornhuetter Ferguson
 - Many use Loss Development Method
 - Some use non-traditional approach (discussions with captive, claims staff)

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Issues With Estimating Ultimate Losses – Common Coverages

- ◆ Assumptions
 - For rate and reserving studies, refer to the feasibility study and pro-formas
 - For B-F, the initial expected losses. Derived from feasibility study?
 - For B-F and LDM, LDFs. What is the source?

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Issues With Estimating Ultimate Losses – Atypical Coverages

- ◆ Methods
 - Frequently cannot apply standard methods
 - Can revert to Bornhuetter Ferguson or Expected Loss Method for immature years
- ◆ Assumptions
 - For rate and reserving studies, refer to the feasibility study and pro-formas
 - Revisit your initial assumptions

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Estimating Ultimate Losses

◆ Atypical coverage example (business interruption)

- 1. Likelihood of breakdown 2%
- 2. Duration of downtime 1 week
- 3. Lost revenue per week \$180,000
- 4. Non-continuing expenses \$ 30,000
- 5. Lost profit per week \$150,000
- 6. Expected loss (1)*(2)*(5) \$ 3,000

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Issues with Pro-Forma Financials

◆ Need to project future activity from past history

◆ Premiums

- Exposure growth
- Rate changes
- Pricing changes

◆ Losses

- Exposure growth
- Frequency trend (low frequency coverage)
- Severity trend

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Issues with Pro-Forma Financials

◆ Expense trends

◆ Consistency across trends and changes

◆ Surplus levels should be commensurate with size and variability.

◆ Adverse scenario should reflect a true adverse scenario. It should be a serious sensitivity test. No consultant wants to tell a captive owner that they need to add more capital.

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Issues with Reserve Reviews

- ◆ Data
 - Exposures, premium for the captive's layer of loss
 - Initial estimate of ultimate losses
 - Feasibility study and pro-formas after assessing the accuracy 1, 2, 3 years later.
- ◆ Be aware of leverage in the reserve to surplus ratio.

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Issues with Reserve Reviews

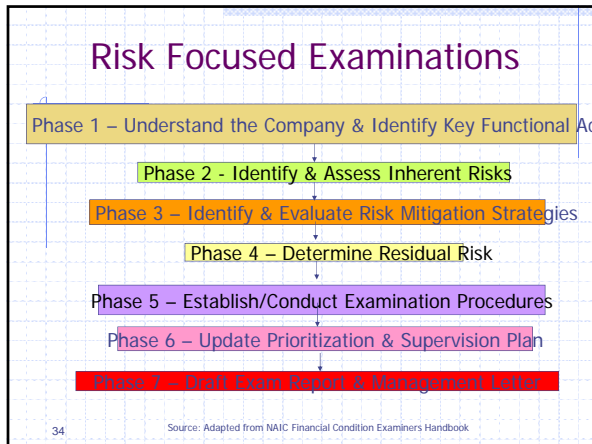
- ◆ Methods
 - Some captives have little loss data.
 - Traditional methods frequently not appropriate.
 - Know the individual incidents if practical.
- ◆ Assumptions
 - Loss Development Factors. Probably not enough client data. Use other appropriate factors (internal studies, industry)

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Risk Focused Exams (RFE)

- ◆ RFEs aim to target an examination based on an analysis of the more significant business risks.
- ◆ Feasibility studies and pro-formas should reflect these risks as well.
- ◆ More quantitative assessment of the risks inherent in the insurer's business.
- ◆ Focuses on an insurer's efforts to identify and mitigate those risks.

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- ### Risk Focused Exams
- ◆ Phase 1 – Understand the Company and Identify Key Activities to be Reviewed
 - ◆ Phase 2 – Identify and Assess Inherent Risks
 - ◆ Phase 3 – Identify and Evaluate Risk Mitigation Strategies/Controls
 - ◆ Phase 4 – Determine Residual Risk
 - ◆ Phase 5 – Establish/Conduct Exam Procedures
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- ### RFE– Phase 1- Understanding the Company and Identify Key Activities
- ◆ Company and insured history on:
 - Underwriting – Significant for group captives. Changes in operations for groups and single parents.
 - Claims handling – Who handles claims? Volume of claim activity. Case reserving.
 - Reserving – For bulk reserve, that is us.
 - Reinsurance – Need for reinsurance.
 - ◆ Much data comes from interviews and documents.
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RFE – Phase 2 – Identify and Assess Inherent Risks

- ◆What can go wrong?
- ◆Examiners will write risk statements.
 - Data integrity. Completeness and accuracy.
 - Premiums are not adequate.
 - Changes in claims handling not adequately reflected in reserves.
 - Reserving assumptions and methodologies are not appropriate.

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RFE – Phase 3 – Identify and Evaluate Risk Mitigation Strategies / Controls

- ◆Review pricing / underwriting controls.
 - Are rates set using a disciplined approach?
 - For group captives, have underwriting standards changed?
 - Experience level of underwriting staff.
- ◆Claims handling process
 - Experience of claims staff.
 - Case reserving philosophy and history.

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RFE – Phase 4 – Determine Residual Risk

- ◆NAIC formula

$$\begin{array}{r} \text{Inherent risk} \\ \text{Minus} \\ \text{Internal controls} \\ \text{Equals} \\ \text{Calculated residual risk} \end{array}$$

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RFE – Phase 5 – Establish / Conduct Exam Procedures

- ◆ Actuarial reports and/or work papers will likely be reviewed. Keep your documentation and data in good order.
- ◆ Know the results of your prior analyses. Regular adverse development will require greater depth of examiner review.
- ◆ Think sensitivity testing

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ASOP's



The American Society of Orthopedic Professionals



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CAS Statement of Principles on Reserves

- ◆ Data organization – Members of a group captive may have different effective dates, valuation dates, etc. Possibly different TPA's with their different definitions and philosophies.
- ◆ Homogeneity could apply to class, industry, geography. May have heterogeneity that gets magnified due to small size.

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CAS Statement of Principles on Reserves

- ◆ Credibility is generally lacking. Trying to gain credibility by increasing the size frequently does not work since heterogeneity frequently increases.
- ◆ Data availability – Prepare at the beginning to get the needed data. Pray for a good captive manager.

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CAS Statement of Principles on Reserves

- ◆ Emergence and settlement patterns – Much conjecture as data base is probably either young or small.
- ◆ Development patterns – May be able to construct some triangles for groups. Probably not credible. Consider alternative sources (NCCI, ISO, Best). Remember the data (net, direct, layer of loss, state, subline, claims-made / occurrence, etc.)

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CAS Statement of Principles on Reserves

- ◆ Reinsurance.
- ◆ Operational changes can be significant especially for growing companies starting single parent captives.
 - State mix
 - Class mix
 - Vertical integration

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CAS Statement of Principles on Reserves

- ◆ All of these issues may make it difficult to use many methods with a sufficient degree of confidence.
- ◆ If using a loss ratio method, carefully assess the reasonableness of the selected loss ratio. Reconsider the loss ratio annually.

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ASOP 23 – Data Quality

- ◆ Need complete and accurate data. Better to have data with additional detail such as state, class, etc.
- ◆ Reliance on data supplied by others is significant for captives. Coverage layers need to be reported accurately. Supplied by captive manager

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ASOP 23 – Data Quality

- ◆ 3.3 – Reliance on data supplied by others.
- ◆ 3.4 – Reliance on other information/ Contract provisions, plan documents, reinsurance treaties.
- ◆ 3.5 – Review of data. Reasonable and consistent.
- ◆ 3.7 – Use of data. Sufficiency, enhancements, adjustments, inadequacy.

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**Actuarial Standard of Practice 36
– Statements of Opinion**

- Opinions needed for audited financial statements
- Addressed to captive regulator
- Opinion must comply with actuarial standards
- Supporting work is subject to examination

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**ASOP 41 – Actuarial
Communications**

- ◆ 3.1 – Scope of work. Reserve or rate review may not be the proper analysis for a feasibility study.
- ◆ 3.2 – Actuary should disclose findings and identify methods, procedures, assumptions, and data used by the actuary with sufficient clarity that another actuary can make an objective appraisal of the reasonableness of the actuary's work.

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**ASOP 41 – Actuarial
Communications**

- ◆ 3.4.1 – Uncertainty or risk. Uncertainty is a certainty.
- ◆ 3.4.3 – Reliance on other sources of data is a certainty too. Actuary is responsible for the report except when the actuary disclaims responsibility.

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ASOP 41 – Actuarial Communications

- ◆ 3.4.4 – Responsibility for Assumptions and Methods – Silence in report = actuarial acceptance of responsibility. Does the actuary agree, disagree, or have no opinion? Disclose as required in 4.3.
- ◆ 4.1.3 – Review disclosure section (user, scope, qualifications, risk, etc)
- ◆ 4.1.3.b – Intended purpose

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ASOP 43 – Unpaid Claim Estimates

- ◆ 2.7 Model risk can be greater especially for younger captives. Specified phenomenon may be unclear.
- ◆ 2.8 – Parameter risk is generally greater for captives since they are often smaller, newer, and more unknown.
- ◆ 2.10 – Process risk is generally greater for captives for the same reasons as 2.8.

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ASOP 43 – Unpaid Claim Estimates

- ◆ 3.1 – Purpose or Use. Why is this analysis being completed?
- ◆ 3.2 – Constraints on the Estimate. Limited data may be a constraint.
- ◆ 3.6.1 – Methods and Models.
- ◆ 3.6.2 – Assumptions. More professional judgment. Sensitivity tests are important.
- ◆ 3.6.8 – Uncertainty. What are the risks?

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