Actuarial Issues for Captive Insurance Companies

Ratemaking, Reserving and Beyond

Pino, ACAS, MAAA, ARM
mith

What is a captive?

- Insurance subsidiary of a non-insurance parent
- Exists to serve the risk management needs of the parent and/or to support the core business goals of the parent, rather than for its own profitability
- Risk financing vehicle for retaining corporate insurance risks

Captives today

- Approximately 5,000 captives world wide
- Significant growth occurred in 2002 – 2003 as a result of the post-9/11 hard market
- Growth has continued at a slower rate in recent years due to the soft market

Presenters

- Susan R Pino, Actuarial, Risk and Analytics, Deloitte Consulting
- Paul Smith, Insurance Risk Management Advisor, Ernst & Young

What we're covering

- Captive Refresher
- Types of Risks Covered
- Actuarial Involvement and Support of Captives
- Case Studies

What we're covering

- **Captive Refresher**
- Types of Risks Covered
- Actuarial Involvement and Support of Captives
- Case Studies

What is a typical captive?

- Risk retention device
- Vehicle for achieving an organization's insurance, finance and management goals
- Subsidiary owned by a parent organization (results are normally consolidated up to parent)
- Owned by shareholders whose primary business is not insurance
- Insures "related risks" – risks of its shareholders
- May insure "unrelated risks" (i.e., third-party business)
- Can operate as a direct insurer or a reinsurer

Captives offer opportunities for financing:

- Property/Casualty retentions
  - Medical malpractice and hospital professional liability
  - Products/completed operations liability
  - Other general liability
  - Workers' compensation and automobile liability, as applicable
- Loss reserves maintained within organization's deductibles, on a "claims-made" basis
- EITF 03-08 occurrence-based reserves maintained for unasserted claims
- Possible benefits under Terrorism Risk and Insurance Act (TRIA)
- Reinsurance. Deductible Reimbursement

Types of captives

- **Single parent captives** – Insure the risks of the owner or its subsidiaries. Can also cover the risks of unrelated entities.
- **Group/Association captives** – Owned by multiple unrelated entities and designed to insure the risks of the different entities. An association captive insures risks of entities in same or similar industries. Group captives can also insure organizations other than owners.
- **Agency captives** – Owned by insurance broker to insure client risks. Most established as rent-a-captives.
- **Rent-a-captive** – Licensed offshore insurer formed by their owners to insure the risks of other organizations for a fee.

Types of captives

- **Protected cell companies** – Used with rent-a-captives, they cover the risks of unrelated third parties. They allow a captive to segregate the accounts of each individual insured so that each account is protected from the liabilities of other accounts within the captive.
- **Risk retention groups** – Special form of group captive limited to liability coverages for owner/insured.

Common reasons for a captive

- Insurance coverage availability problems
- Pricing/cost issues
- Flexibility
- Tax advantages (Federal, International and State)
- Access to reinsurance markets
- Stability of costs

Common reasons for a captive

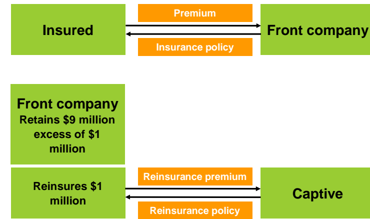
- Access to terrorism programs
- Strengthen business relationships with stakeholders (third party business)
- Coordinate programs
  - Across countries
  - Across subsidiaries
- Participate as reinsurer where utilizing local company is mandated
- Write directly into European Union (EU) with either EU-based captive or cell
- Write US and international employee benefits
- Estate planning for privately-held companies

Reasons against captive formation

- Costs both internal and external
- Capitalization and cash commitment
- Inadequate loss reserves and potential losses
- Increased cost of other insurance not included in the captive

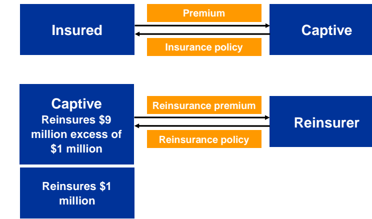
Fronted program

Example: a transaction of an insurance policy at a retention of $10 million



Reinsurer program

Example: a transaction of an insurance policy at a retention of $10 million



What is insurance?

- ***Helvering v. LeGierse* – Insurance Requires**:
  - Risk Shifting
  - Risk Distribution
  - Commonly accepted notions of insurance
- **IRS View**: Revenue Ruling 77-316 – Neither Can be Accomplished in one "Economic Family."
- **View of Courts**: Never really accepted IRS Economic Family Argument. Three Prong Test Established:
  - Is there an insurance risk?
  - Was there risk shifting and risk distribution?
  - Was the arrangement viewed as "insurance" in the commonly accepted sense?

Premium deductibility

- The key factors IRS will consider include:
  - Business Purpose of Transaction
  - Ownership Structure
  - Capitalization of Subsidiary
  - Compliance with Commercial and Legal Norms of Insurance
  - Diversification of both Insureds and the Risks they Insure
  - Investment policy

Tax benefits

- Federal Tax benefits:
  - Acceleration of tax deduction: Captive takes tax deduction when loss reserve is set, rather than when loss is actually paid.
  - Tax efficiency of insurance treatment vs. self-insured reserve
  - Potential source of cash that monetizes deferred tax assets
- State and local tax benefits:
  - A wide variety of state tax planning opportunities exist that may be implemented in tandem with federal tax planning or as stand-alone projects
  - Base shift: May reduce applicable state corporate income taxes due to movement of reserves to captive, since captives frequently are not subject to state corporate income tax
  - Exclusion of captive from many state unitary or consolidated filings

What we're covering

- Captive Refresher
- **Types of Risks Covered**
- Actuarial Involvement and Support of Captives
- Case Studies

Types of risks covered in captives?

- Professional Liability
- Errors & Omissions Liability (Cost of corrections)
- General Liability
- Cyber Liability
- Workers' Compensation
- Directors & Officers Liability
- Property and Business Interruption
- Automobile Liability
- Employee Benefits
- Warranty Programs
- Credit Risk
- Franchisee Insurance Programs
- Customer Insurance Programs (marine cargo, transit, product replacement, etc.)

Workers' compensation

Risk Management Issues

- Risk Management Issues
- Proof of coverage required
- Fronted program/Deductible reimbursement
- Typical retentions: $250K-1M
- Limits: Statutory

Actuarial Issues

- Higher frequency generally lower severity
- Working layer analysis possible
- Good benchmarking data
- Potential clash exposure
- Long tailed
- Employer's liability
- Reforms
- State specific issues

Property

Risk Management Issues	Actuarial Issues
▪ Not in most captives pre-9/11 ▪ Typical deductibles $1M-5M ▪ Limits: Very large ▪ Write whole structure in captive, reinsure out all but retention	▪ Low frequency ▪ Little to no loss experience ▪ High severity/catastrophe potential ▪ Short tail ▪ Pricing and reinsurance considerations ▪ Capital considerations

Product recall liability

Risk Management Issues	Actuarial Issues
▪ Expensive coverage ▪ Claims settlement issues ▪ Customize policy ▪ Fund for event	▪ Short tailed ▪ Low frequency ▪ Little to no loss experience ▪ Catastrophe potential ▪ Appropriate exposure base

Employee benefits

Risk Management Issues	Actuarial Issues
▪ Large source of third party business ▪ Requires DOL approval ▪ Fronted ▪ Benefit improvement for the employee is required	▪ Separate or combined SAO ▪ Annual premiums versus lump sum (retiree medical) ▪ Consideration of who benefits from the insurance

What we're covering

- Captive Refresher
- Types of Risks Covered
- **Actuarial Involvement and Support of Captives**
- Case Studies

Actuaries and captives

- **Captive Feasibility Studies**
  - Loss projections
  - Projected payment streams
  - Confidence levels
  - Initial capital needs
  - Initial pricing/premium
  - Pro formas
  - Retention analyses
- **Analysis of cash build up available for loan backs**
- **Analysis of Risk Transfer**
- **On-Going Reserving**
  - Financial statements
  - Ranges/confidence level analysis
- **On-going Pricing/Ratemaking**
  - Funding
  - Confidence level analysis
- **First Party Policies/Premium**

Ratemaking and premiums

- **"Arms Length":**
  - Driven by market rates
  - Based on loss expectation
  - Risk Transfer
  - Helps substantiate treatment as insurance and deduction of reserves
- **Issues Encountered:**
  - Limited data
    - Low frequency, high severity coverages (TRIA)
    - New coverages - television
    - High layers
  - Required Risk Margin/
  - Exposure Estimates
  - Expenses and Frictional Costs (fixed and variable)
  - Reinsurance versus Deductible Reimbursement

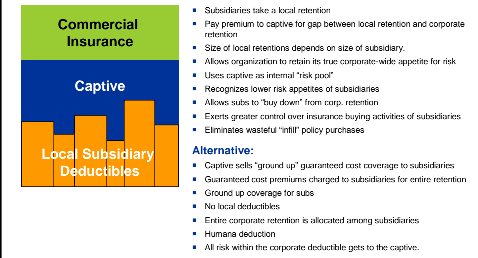
Reserving and financial statement support

- **Deductibility of Reserves**
  - Allowed(!)
  - Application of IRS discount factor
  - Controls
- **Reserving and Capital Requirements**
- **Third Party Business**
- **Fronting**

What we're covering

- Captive Refresher
- Types of Risks Covered
- Actuarial Involvement and Support of Captives
- **Case Studies**

Deductible funding plan in a captive



- Subsidiaries take a local retention
- Pay premium to captive for gap between local retention and corporate retention
- Size of local retentions depends on size of subsidiary.
- Allows organization to retain its true corporate-wide appetite for risk
- Uses captive as internal "risk pool"
- Recognizes lower risk appetites of subsidiaries
- Allows subs to "buy down" from corp. retention
- Exerts greater control over insurance buying activities of subsidiaries
- Eliminates wasteful "infill" policy purchases

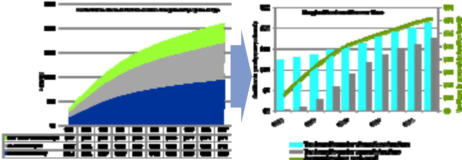
Alternative:

- Captive sells "ground up" guaranteed cost coverage to subsidiaries
- Guaranteed cost premiums charged to subsidiaries for entire retention
- Ground up coverage for subs
- No local deductibles
- Entire corporate retention is allocated among subsidiaries
- Humana deduction
- All risk within the corporate deductible gets to the captive.

Case Study A: Publicly-traded Healthcare Organization

Situation:
Parent under-utilizes captive, retaining risks for first $500k/occ., all loss adjustment expenses, and occurrence-based EITF 03-08 reserve.

Solution:
Captive to insure hospital professional liability risks from the first dollar to the corporate $3 million retention. Captive to insure the HPL risks on an occurrence basis, *even though parent buys commercial insurance on a claims-made basis*



Projected 10-year future value of the "permanent" timing benefit: $71.4 million (NPV = $64.1 million)

Key Idea:
Unlock the value in the occurrence-based EITF 03-08 reserve. Let the captive underwrite risks on an occurrence basis, even if parent buys commercial claims made coverage. While concurrent policies may be convenient for the risk manager, they lead to the accumulation of significant non-deductible reserves.

Case Study B: TRIA Benefits with State Tax Planning

Background:

- TRIA coverage remains a challenge for many insureds with significant urban locations.
- TRIA, as renewed, does not require insurers to offer coverage for nuclear, biological, chemical or radiological terrorism (NBCR), leaving virtually all insureds bare for this risk. However, TRIA does provide backstop protections to insurers willing to offer these coverages.
- Using a captive to insure this significant risk (along with perhaps other significant uninsured risks of the parent) is a prudent strategy for firms in this situation, since insurers may gain access to federal backstops provided under TRIA.
- Insurance companies generally pay tax on premiums at the state level, and not on net income (either underwriting or investment).

Solution:

- Capitalize a new captive to write NBCR risks of parent, as well as other risks (e.g., excess EQ, flood/windstorm/storm surge).
- Business purpose of company is to access Federal benefits under TRIA
- Capital needs to be commensurate with risks assumed; premiums need to be risk based and market based.

Projected Benefits:

- Access to potentially valuable federal backstop under TRIA.
- Depending on whether captive is an insurer for Federal Income Tax purposes, subs may get a current state income tax deduction for premiums paid to the captive, while captive may not pay state income tax on premium revenue in captive.
- Investment income held on loss reserves awaiting payment may not be subject to state corporate income tax, if they are held at the captive.
- If the captive lends money to affiliates, interest paid by subs may be deductible for state income tax purposes at the sub level, yet not taxable to the captive.

15% share retained by insurer

NBCR Terrorism Risks

85% share Reinsured By U.S. Government

Deductible of 20% of Direct Earned Premium per Terrorism event