

IT TAKES VISION

# How to Determine if a Captive is a Good Idea

RIMS CONNECTICUT VALLEY CHAPTER

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# Agenda

- Common Advantages of Captives
- Strategic Best Practices for Using a Captive
- A Quantitative Decision Approach for Your Company
  - Key Process Steps
  - Evaluating Risks and Returns
- Thoughts/Conclusions

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# Common Advantages of Captives\*

- Reduce cost (stop “trading dollars” with insurance market) (S, P, G)
- Stabilize cost (S, P, G)
- Recapture investment income (S, P, G)
- Improve/enhance cost allocation (S, P, G)
- Provide coverage not available in market (S, P, G)
- Make an underwriting profit (G)
- Possible federal income tax advantages (timing of deductions, small insurer rules) (P, G)

**\* Can be applicable to: Self-Insurance (“S”), Pure Captive (“P”), Group Captive (“G”)**

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## Common Advantages of Captives (cont.)

- Access to reinsurance markets (with goal of reducing cost or finding coverage not available in direct markets) (P, G)
- Centralize risk management, management of retentions, data (P, G)
- Meet regulatory/business requirements (certificates of insurance) (P, G)
- Enhance business relationships (“related” unrelated business) (P, G)
- Write international risks (P, G)
- Special situations (e.g., terrorism) (P, G)

***What is implied by the list? The ability to use capital more effectively.***

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# Strategic Best Practices for Using a Captive

- By managing and reducing operating expenses, a firm can increase shareholder value
- The risk management function, with Board support, is an integrated part of the strategy and planning actions of this insurance entity
- A defined way exists for measuring the (future) success of the captive
  - Provides the optimal balance of risk retention and risk transfer
  - Operates within Board/management's risk appetite and tolerances
  - Meets/exceeds the company's cost of capital hurdle rate

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# Quantitative Decision Approach - Key Process Steps

- Identify your risks
- Identify your risk tolerances
  - Formulate a risk appetite statement
- Quantify your risks
- Quantify your returns by managing your surplus to:
  - *exceed company hurdle rates*
    - ✓ *within company risk tolerances.*

# Identify Your Risks

- Address three main areas of risk, in coordination:

## Assets

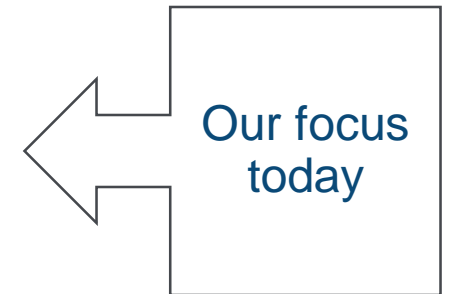
- ✓ Asset allocation strategies and investment management policy

## Liabilities and Surplus

- ✓ Retention levels, limits, and program structures appropriate to risk appetite
- ✓ A surplus management policy appropriate to that risk

## Operations and Market Environments

- ✓ Captive management policies
- ✓ Impact of insurance markets, financial markets and regulatory markets



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# Formulate a Risk Appetite Statement

- Purpose: Articulation of a company's preferred position on the risk-reward spectrum. This statement is the linchpin of the plan for optimal use of the captive.
- Considerations:
  - Examine risk tolerances and attitudes toward risk
  - Link with strategic objectives and planning time horizon
  - Assess existing risk profile and capacity (coverage, limits, reinsurance)
  - Balance need for complex risk analysis with simplicity of communication
- Should address the following 3 key questions as applicable:
  - What are the quantitative metrics that define these risk levels?
  - What are the acceptable probabilities for these risk levels?
  - What is the appropriate time horizon for these questions?



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# Formulate a Risk Appetite Statement (cont.)

## ■ Sample Risk Appetite Statements

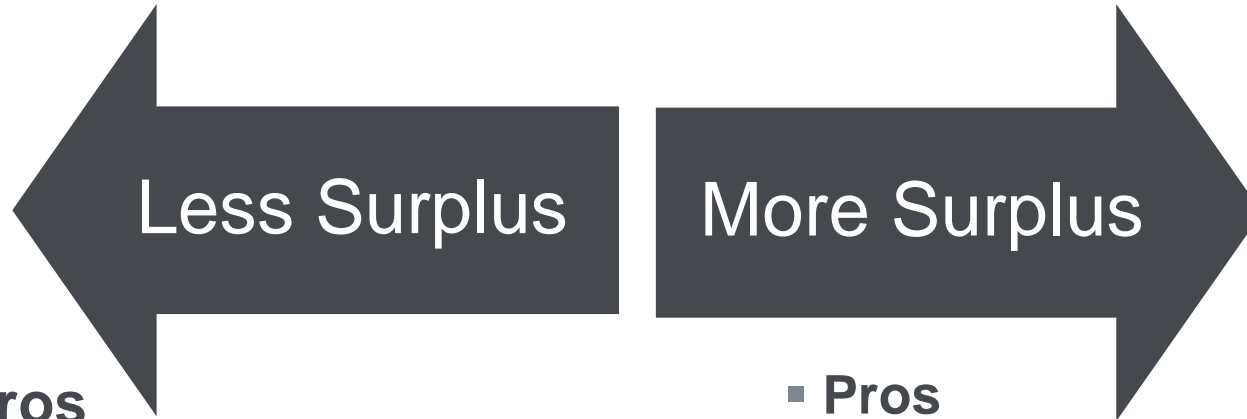
- *Company will maintain surplus to ensure a 90% probability that its premium-to-surplus ratio will remain lower than 2:1 over a 5-year planning horizon.*
- *Company will maintain surplus to ensure a 90% probability that its premium-to-surplus ratio will remain higher than 1:2 over a 5-year planning horizon.*
- *Company will maintain surplus to ensure a 1% probability of insolvency the next 1-3 years.*
- *Company will ensure an 80% probability of being able to dividend a baseline amount to its parent for the next 5 years for paying off prior debt financing.*

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# Quantify Your Risks

- Independent actuarial analysis, using a variety of commonly accepted methods, of projected expected losses by line of business
- Stochastic variability analysis - estimation of aggregate loss distributions derived from claim frequency and claim severity distributions by line of business
  - This would include modeling both prospective premium risk and reserve run-off risk
  - Allow for Stress Testing:
    - ✓ Identifying the maximum potential loss, including correlation assumptions / clash exposures
    - ✓ Other key assumptions (i.e., premium changes, dividends to parent, reserve development, exposure growth, etc.)
- Goal: Find desired surplus amount *and* retention levels, within the framework of company's risk appetite statement, that also minimizes total cost of risk and capital (TCORAC)

# Surplus (Return) Management - Background



- **Pros**

- Uses capital efficiently

- **Cons**

- Increases risk of insolvency
- Inhibits growth

- **Pros**

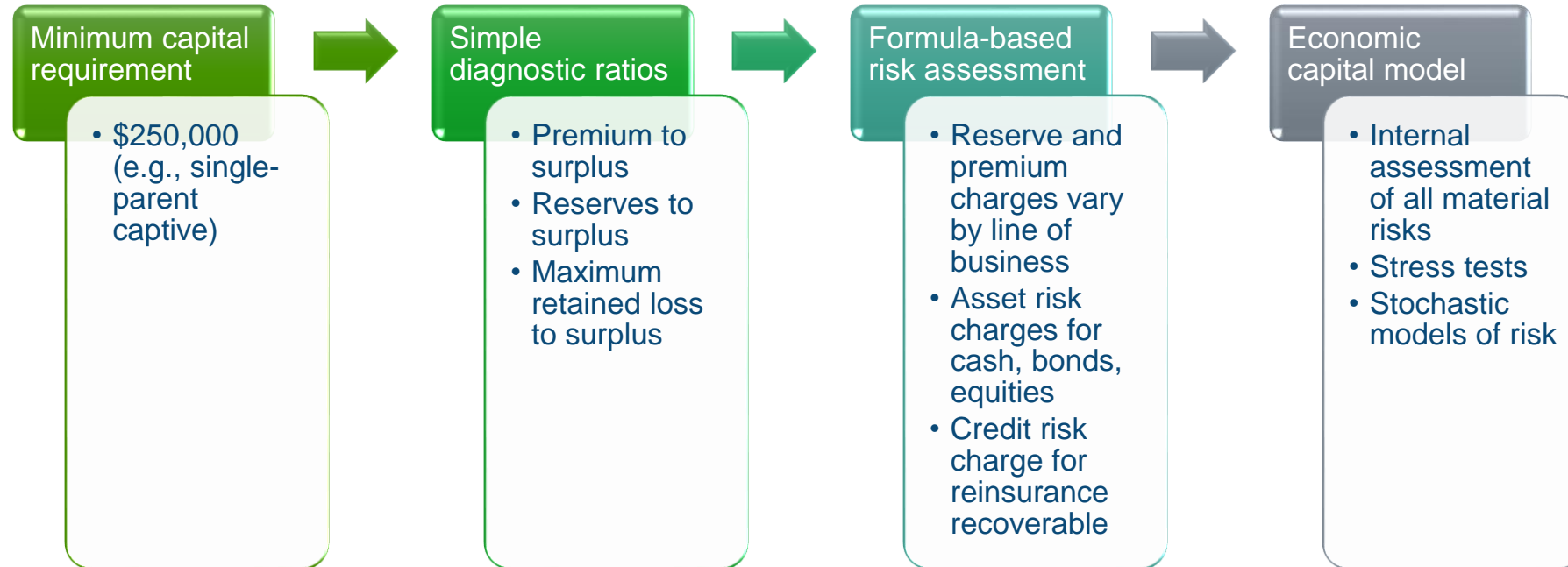
- Provides financial security
- Allows for premium growth
- Is a source of investable funds

- **Cons**

- Ties up capital
- Need for increase in profits to maintain returns

***No “one size fits all surplus policy”. It depends on Company strategies, goals and risk profile.***

# Possible Approaches to Surplus Management



Matching Surplus to Risk

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# Surplus (Return) Management – Pro-Forma Financials

- Develop a pro-forma financial model to project expected surplus levels over the length of the company's strategic planning time horizon
  - Balance Sheet
  - Income Statement
    - ✓ Return on Surplus
  - Cash Flow
  - Calculation of selected captive performance metrics
    - ✓ Ending surplus
    - ✓ TCORAC
- Again, find option that provides lowest TCORAC within company risk tolerances

Now, what is TCORAC?

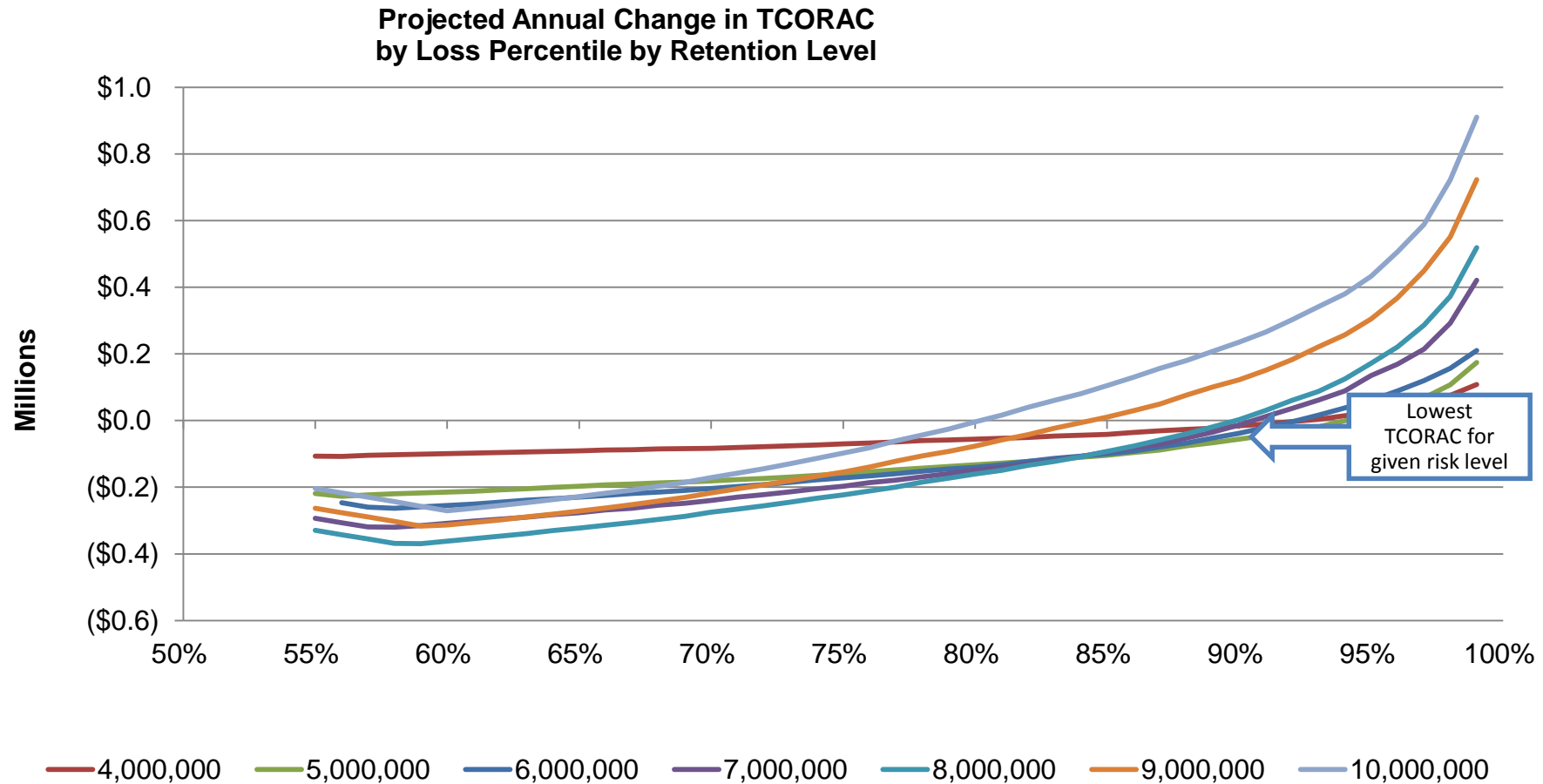
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# Total Cost of Risk and Capital (TCORAC)

- Estimate TCOR
  - Expected Losses
  - Expenses
  - Reinsurance Premium (per market pricing)
- Estimate capital required (or “capital at risk”) for various retention levels to fund loss scenario at adverse probability levels
  - Probability levels based on company’s risk tolerance
  - Balance of: exposing more capital at higher retention (risk) vs. potential cost savings from doing so (return).
- Estimate cost of capital required to fund adverse loss scenario
  - Cost of capital % (CofC %) based on company-specific hurdle rates
  - Cost of capital = CofC % x Capital at Risk

***Lowest TCORAC provides best balance of risk and return.***

# Total Cost of Risk and Capital (TCORAC) - Sample



**At a selected confidence level of 90%, \$5M retention has lowest TCORAC.**

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# Surplus (Return) Management - Summary

- Process determined the optimal retentions and target level of surplus that met risk appetite/tolerances and minimized TCORAC over the planning horizon
- Can, lastly, create a target surplus management policy statement with objectives and constraints specific to your company
  - Possible Objectives:
    - ✓ The risk appetite statement criteria
    - ✓ Hurdle rates
    - ✓ How to utilize excess surplus when and if the captive reaches that position.
  - Possible Constraints:
    - ✓ Market excess premiums
    - ✓ Budgets
    - ✓ Limits of insurance
    - ✓ Risks to be included



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# Thoughts/Conclusions

- Collaboration between experts is crucial to making sound decisions
  - Board/Captive Management
  - Financial
  - Risk Management
  - Captive Manager
  - Actuary
  - Attorney
  - Regulator
  - Investment Advisor
  - TPA
  - Others
- Using a firm's capital wisely is the ultimate test of a captive's benefit

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# Questions & Answers