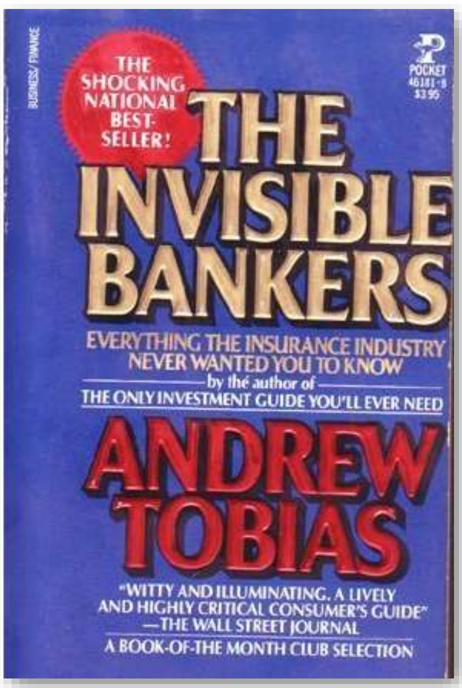
Focus on Capital Efficiency in Pooling

A conceptual filter for decision-making



Pools and Capital

- P/C industry surplus stood at $802 billion after the first half of 2019
- Central question: How much net position, member's equity or surplus is enough to maintain solvency?
  - Is my pool financially secure?
  - A competitive issue, particularly for assessable pools
  - E. H. "Alex" Alexander, former NC board chair: "You can never have too much money!"

"Adequacy" has been a question of paramount importance

Foundation: CAPITAL

- To pay claims
- To smooth volatility of risk over time
- To stabilize rates long-term
- To respond to catastrophic events
- To provide tailored coverage with member-centric interpretations of how that coverage applies
- To provide services based upon member needs/goals (beyond the commercial market offerings)

Capital: From Whence Will it Come?

Ability for a Pool to raise capital is more limited than a commercial carrier

- Assessments for additional capital if, and when, needed (not all pools have this lever)

Implication: focus on fundamentals

- Underwriting
- Reserving
- Claims management
- Preventing losses

Financial Measures for an Insurance Entity

Ratios

- Adequacy: Best's Capital Adequacy Ratio (indication as to whether adequate capital is held to address the risk exposures)
- Liquidity: Insurance Regulatory Information System (IRIS) compares liabilities to liquid assets
- Leverage: debt to equity
- Profitability: Loss, Expense and Combined

Risk Based Capital Score

- NAIC measure to determine a minimum amount of capital required

Confidence Level Analysis

- Statistical concept to express degree of confidence losses will be below or above a given amount

Target Equity

- Based on the ERM model and provides a target range

A Fiduciary Responsibility

Given the amount of capital pools hold and the collective mission of pooling, trustees and staff are placed in a "fiduciary" role dedicated to serve in the best interests of our members.

Questions to consider include:

- Is your pool grappling with the question of "How much?" Do you have a grasp on your "capital adequacy?"
- Are you making the *highest and best use* of the resources available, in other words, how would you assess your "Capital Efficiency?"

From “Capital Adequacy” to “Capital Efficiency”

Conceptual, not Methodological

- **Return on equity, ROE, is a means to measure how efficiently a company is handling shareholders money**
- **Return on Investment, ROI, measures profitability**

While capital efficiency is akin to "ROE" or "ROI;" CE is a concept that can be shaped based on the pool's mission, the needs/goals of the membership and in ways that can clearly distinguish the pool from the commercial market

Capital Efficiency: The Concept

Broadly

The relationship between how many expenses are incurred by the Pool to how much of those expenses are used to provide a good or service.

Specifically

Capital **efficiency** is the idea that the Pool operates in a way that allows it to do more with what it has, or to stretch the effectiveness of the existing resources (members' equity), without having a detrimental effect on its capital **sufficiency/adequacy**, and in some cases enhancing capital adequacy.

TMLIRP’s Why Statement and Core Values

To Partner with local government so that
Texas communities are STRONGER TOGETHER

Public Service Serving the public good – for the benefit of local governments and their tax-paying citizens

Fiscal Responsibility Responsibly managing our members’ pooled funds for the protection of their financial stability

Operational Excellence Delivering excellent member service in all components of our risk financing and loss prevention services

Integrity Serving with honesty, integrity and professionalism

“Capital Efficiency” is viewed as the operationalization of our fiscal responsibility, allowing for operational excellence

"Chance favors the prepared mind"

Louis Pasteur

A way to think about Capital Efficiency:

Preparation + Opportunity = Operational Excellence

Application of the concept:

- Investments
- Reinsurance Strategy
- Member Deductible Analysis

Capital Efficiency - Investments

Preparation (Pool subject to the Public Funds Investment Act)

- Returns:
  - Book Rate of Return = Investment Income without unrealized gains and losses / Total Assets
  - Total Rate of Return = Investment Income with unrealized gains and losses / Total Assets
- The Pool has chosen to primarily consider book rate of return (as opposed to total rate of return) for capital efficiency purposes because investments are held to maturity.
- More importantly, doing so is consistent with the Pool's mission of providing ***stability*** in rates.
- Predictable cash flows – minimal volatility for the membership.
- *Issue: additional funding to be required related to payment of death and lifetime income benefits (WC benefits as a de facto pension system)*

Capital Efficiency - Investments

Opportunity **(a laundry list of options to make the best and highest use of Member capital)**

- Could the Pool trade some additional volatility for higher, long-term returns in order to be more capital efficient?
  - Annuities
  - Member risk-financing model
  - *Expansion of investment options on a limited purpose basis to match de-facto pension liability*
  - Reinsurance Purchase
  - Catastrophe Bonds
  - Retrospective-Rated Reinsurance
  - NLC Mutual (Rent-a-Captive)
  - Captive Establishment

Capital Efficiency - Investments

Operational Excellence

- Legislation that enhanced benefits also provided authorization to invest like a pension fund under the "Prudent Person Rule"
- Eligible Assets:
  - *WC loss reserves* to pay death and lifetime benefits to current and future beneficiaries; and
  - Pool's net position (*members' equity*) for current claim development and future beneficiaries
- Diversification of investments allows for greater yield and reduction of volatility (opportunity analysis increases returns .37% over 20 years and $2.8M per year)
  - *50% investment grade corporate bonds, 35% S&P Equity Index (mutual fund), 15% Modified High Yield Index (high yield corporate bond mutual fund)*
- Conclusion: rate increases, over the long-term are mitigated by additional investment income

Capital Efficiency – Property Reinsurance

Preparation

- Property losses from 2013 through 2017 diminished capital reserves built over the years
- Question: How best to replenish capital:
  - Contributions?
  - Coverage changes?
  - Reinsurance structures?
- Goals for replenishment:
  - Stability – rates and reinsurance
  - Competitive – pricing and coverage
  - Long-term viability

Capital Efficiency – Property Reinsurance

Opportunity (approach from a target equity perspective)

- Consider the risks that impact the Pool’s target equity range:
  - Credit; Underwriting; Reserving and Operational
- *Note: the target equity range moves depending on the characteristics of the four risks noted above*
- Options to meet target equity goal:
  - Replenish Members’ Equity through rate increases
  - Reduce future losses through coverage restrictions
  - Reduce the capital requirement for a catastrophic event through purchase of higher limits of reinsurance; this option essentially moves the goal posts for target equity
  - Consider assumption of greater risk at lower level based on reinsurance pricing and loss experience

Capital Efficiency – Property Reinsurance

Operational Excellence

- Target Equity goal serves as the Pool's "North Star" to provide guidance for the efficient deployment of capital
- Transfer more risk in the upper layers, a capital management strategy:
  - Additional reinsurance purchase reduces volatility for a catastrophic event, thus reducing the amount of members' equity necessary to fund to a 1-in-250 level, without recapitalizing via rate increases, i.e. the Pool rents capital via reinsurance and in the process lowers Members' Equity targets
  - Additional reinsurance layer enables the Pool to fund at a level more consistent with a 1-in-250 event and its target equity goals
- Conclusion: the need for replenishment is mitigated.

Member Deductible Analysis

Preparation
- Member portal, dashboards

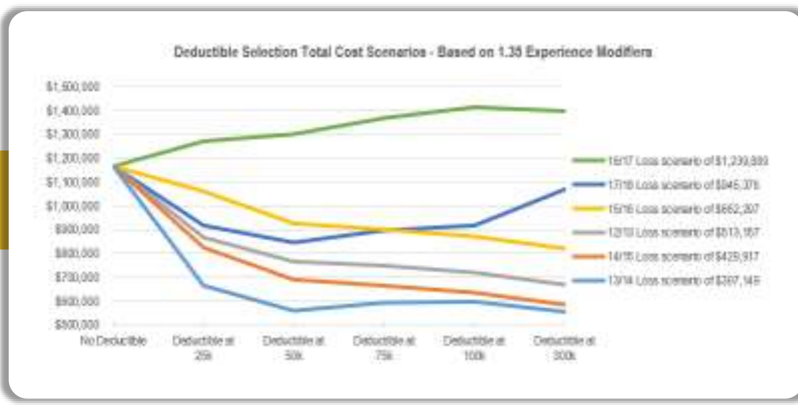
Opportunity
- Assist members in making wise risk management decisions (enhances member partnership long term; aligns member incentives with the Pool)

Operational Excellence
- Good risk management decisions by the member benefit the pool as well while essentially allowing the member to arbitrage against pool rates, resulting in a short-term decrease in the Pool's profitability, but long-term capital efficiency

City Example

- Experience modifier from .80 to 1.17 to projected 1.35
- Increasing loss experience impacts contributions (+169%)
- Opportunity for larger deductible credits and reduced future <u>net</u> loss experience

Workers’ Compensation Deductible Selection



$0 deductible = $1.2M in contribution

Five of six loss scenarios project lower costs at every deductible selection based on losses for that year

16/17 accident year projects higher total costs

Recommendation

- Deductible should be strongly considered to defray increasing contribution costs due to recent loss experience (deductible credits offset the increasing experience modifier)
- Establish a reserve fund for expected deductible costs
  - Initial basis – the deductible credits for the selected deductible
- Long-term: build balances to be utilized over other accident years and thereby reduce costs over time

Cyber Security

Preparation
- Coverage, underwriting requirements and development of loss prevention options

Opportunity
- Mandated training by legislature
- Develop robust cyber resiliency program
- Provide higher coverage limits with underwriting requirements

Operational Excellence
- Members' equity deployed to provide education, encourage cyber hygiene best practices, and enhance members' overall defense against cyber attacks

PTSD

Preparation

- Increased awareness of PTSD and its impacts
- Resiliency training for public safety personnel

Opportunity

- Legislative expansion of PTSD compensability

Operational Excellence

- Invest in training that removes stigma, debriefing services and statewide treatment options specific to stress and PTSD

Other CE Examples

Updating property coverage to include a 150% margin clause and maximum limits for flood claims	• Encourages valuation accuracy • Protects the entire membership by controlling the loss that the **Partnership** can be reasonably expected to finance
Utility Plant Valuation Program	• Improves member equity in contributions paid and encourages fiscal responsibility
Captive Reinsurance Arrangement	• NLC Mutual enables leveraging their investment flexibility
Upgrading Business Software Applications	• Realization of process efficiencies and ability of staff to engage in “higher-level” work

Conclusions

- Capital efficiency is not just the next question after answering the question of “How much?”
- Capital efficiency can serve as a conceptual filter by which decisions are made that impact the question of “How much?” and make the highest and best use of the members’ capital, in a variety of areas:
  - Investment Risk
  - Reinsurance Structure
  - Member risk profile
  - Etc. (such as rates, coverage decisions, process improvements, funding of software applications)
- Bottom line: Pools define “capital efficiency” based on their mission, core values and risk tolerances through preparation and opportunity


Discussion/Questions