

# What's New in Reserve Financing for Life Insurance Products?

Session 41 PD

2015 SOA Valuation Actuary Symposium

Moderated by

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## First, let's meet the panelists ...

### **Steven M. Clayburn, FSA, MAAA**

Senior Director and Actuary

American Council of Life Insurers

### **Scott Avitabile, Esq.**

Of Counsel, Corporate and Financial Services

Willkie Farr & Gallagher, LLP

### **Li Cheng, FSA, MAAA**

North American Insurance Ratings

Standard & Poor's

## Our organizational plan for this session is:

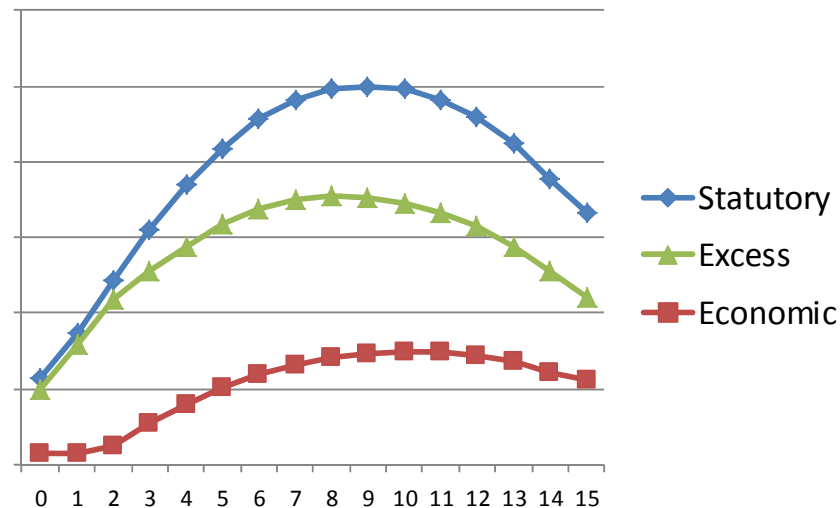
1. Consulting Actuary Perspective (Alan)
2. Life Industry Perspective (Steve)
3. Law Firm Perspective (Scott)
4. Rating Agency Perspective (Li)
5. Questions & Answers (Audience)

# Consulting Actuary Perspective

- Why do many insurers and reinsurers use reserve financing?
- Common forms of life reserve financing transactions
- Recent developments in life reserve financing

## Many banks and reinsurers are willing to finance the excess of statutory over economic reserves

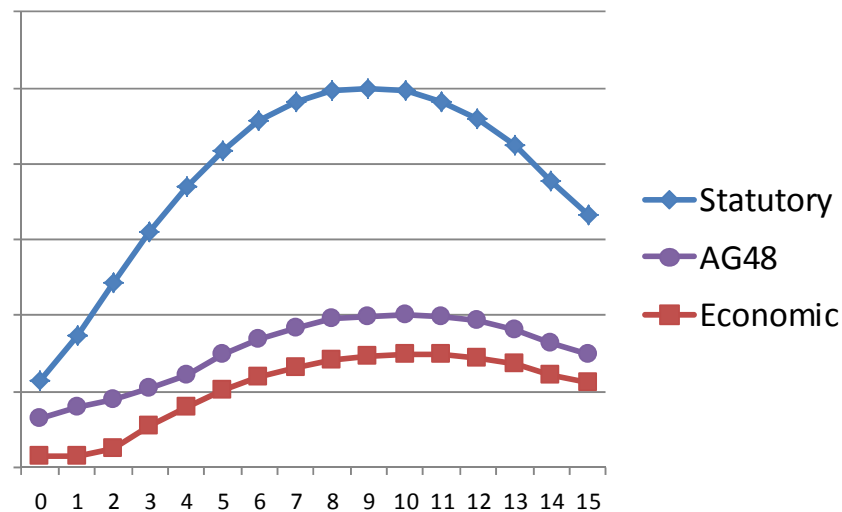
- The definition of economic reserves has historically been a negotiated deal term that for XXX/AXXX financing deals has often been GPV determined with best estimate assumptions. The graph below shows how XXX economic and excess reserves can vary over time.



- New transactions financing policies that are not grandfathered under Actuarial Guideline 48 (“AG48”) involve an AG48 reserve definition.

# Term Life AG48 Reserves Relative to Statutory and Economic Reserves

- For level premium term life (“TL”), AG48 reserves are a modified VM-20 reserve equal to the larger of a net premium reserve and deterministic reserve
- For TL, AG48 reserves generally peak at 30% to 50% of statutory reserves



- That compares with best estimate economic reserves that generally peak at 20% to 40% of statutory

# Universal Life AG48 Reserves Relative to Statutory and Economic Reserves

- For universal life with secondary guarantees (“UL”), AG48 reserves are a modified VM-20 reserve equal to the largest of a net premium reserve, a deterministic reserve and a stochastic reserve
- For UL, the relationship between statutory reserves, AG48 reserves and economic reserves is highly dependent on policy design, the nature of the reinsurance treaty, the degree of asset/liability matching and the definition of economic reserves
  - For UL blocks of policies that have been financed, best estimate economic reserves have generally peaked at 55% to 85% of statutory
  - For UL AG48 reserves our sample size is still too small to generalize



## Why do most large stock life insurers and reinsurers use reserve financing?

- Most competitors price term life and universal life assuming debt-like financing costs for excess reserves
- Reserve financing frees up surplus that can be used to improve RBC ratios, finance sales growth, or invest in acquisitions
- The nature and structure of reserve financing utilized can impact rating agency views of an insurer's capital adequacy, financial flexibility or enterprise risk management ("ERM")

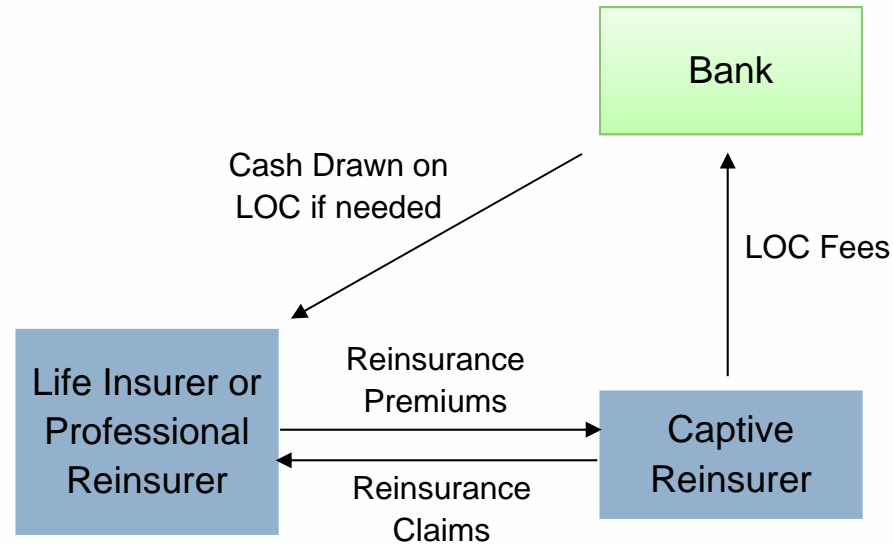
## Insurers have considered reserve & capital financing in a broad variety of forms

- Structured reinsurance
- Letters of credit (“LOC”)
- Credit Linked Notes (“CLN”)
- Funded solutions involving captive surplus note issuance
- Other forms of collateral acceptable to the cedant’s regulator

# Consulting Actuary Perspective

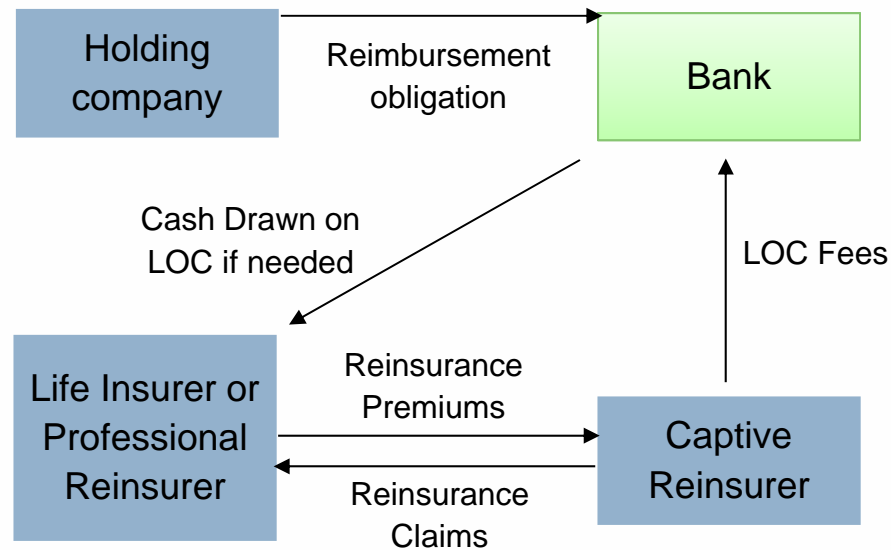
- Why do many insurers and reinsurers use reserve financing?
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## Non-recourse LOC financing can have only a few boxes & arrows, and has been popular since 2010



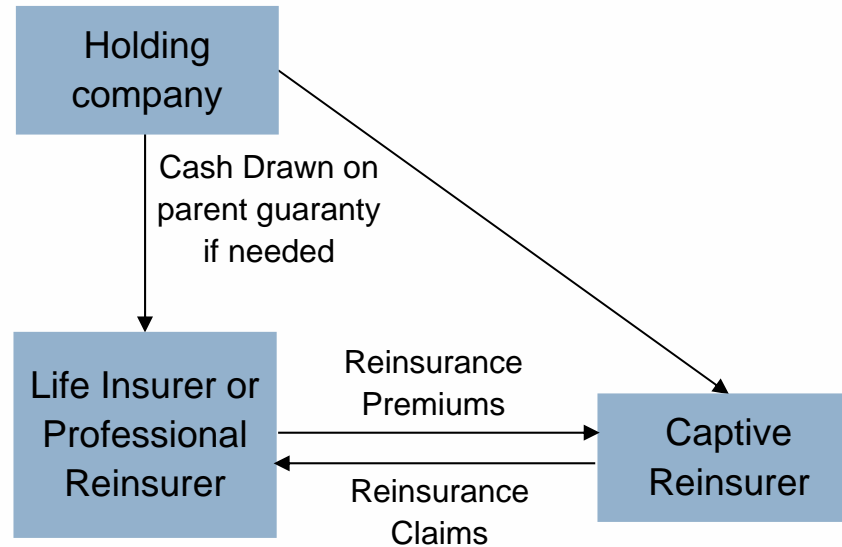
- Some banks have additional features (with extra boxes and arrows) to differentiate their solutions
- Most non-recourse LOCs to date have been “conditional”, whereby a draw is only permitted after economic reserve assets are depleted

## Deal model based recourse LOC financing requires a comprehensive parent guarantee



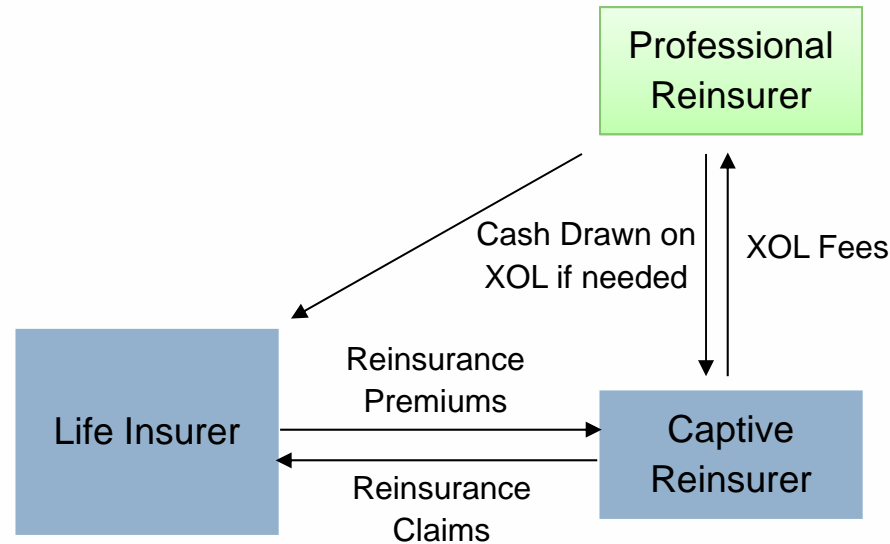
- In addition to an obligation to reimburse amounts drawn, the guarantor might be required upon certain adverse events to post collateral or contribute additional capital to the captive

## If “guaranty of a parent” financing is used instead of an LOC, a bank is not involved



- A guaranty of a parent was first permitted for Iowa insurers under a 2010 Limited Purpose Subsidiary (“LPS”) law and regulation
- Similar laws have passed in GA, IN, NE and TX
- The beneficiary could potentially be the cedant and/or the captive

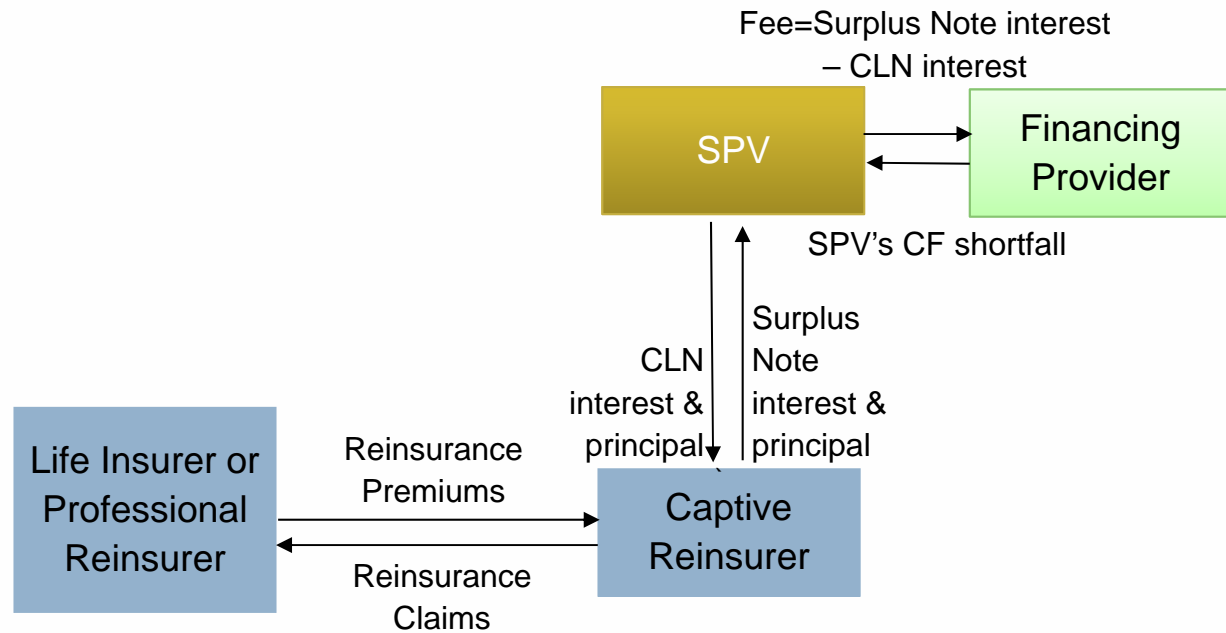
## Some reinsurers offer non-recourse XOL reinsurance to compete with non-recourse LOC financing



- The beneficiary could potentially be the cedant or the captive
- Some reinsurers have additional features to differentiate their solutions
- Most non-recourse XOLs to date have been “conditional”, whereby a draw is only permitted after economic reserve assets are depleted

# A form of non-recourse financing that emerged in 2012 involves an SPV that issues a credit linked note

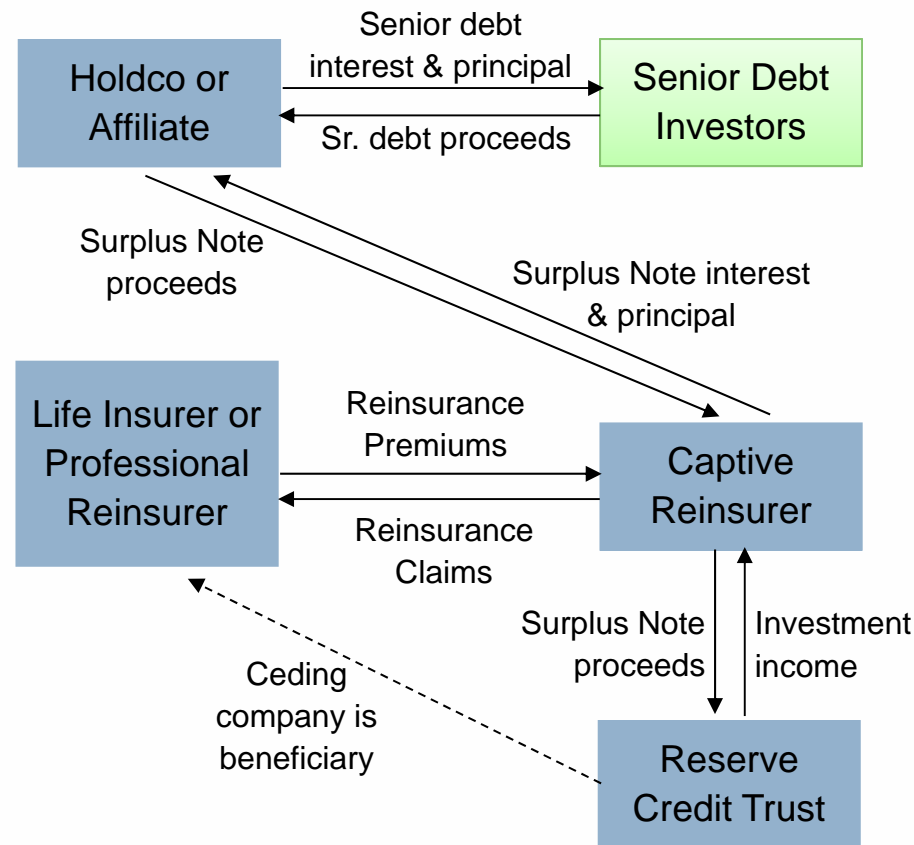
- Captive issues a Surplus Note bought by the SPV, and Captive buys the credit linked note (“CLN”) with a lower coupon
- In good times, the coupon difference is paid to financing provider as a fee
- In bad times, financing provider covers SPV’s CF shortfall



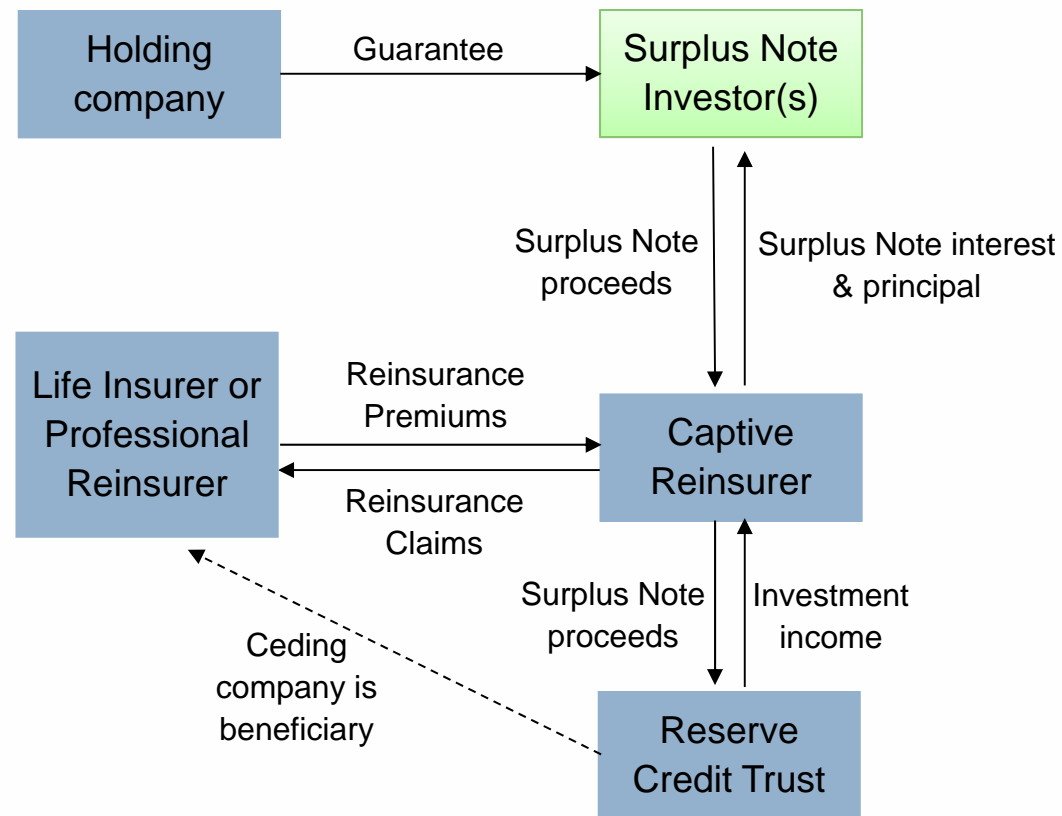


# Non-ILS debt reserve financing often involves holding company issuance of senior debt

- Alternatively, an affiliate of the cedant could issue senior debt or vanilla surplus notes, and then use the proceeds to purchase surplus notes issued by the captive

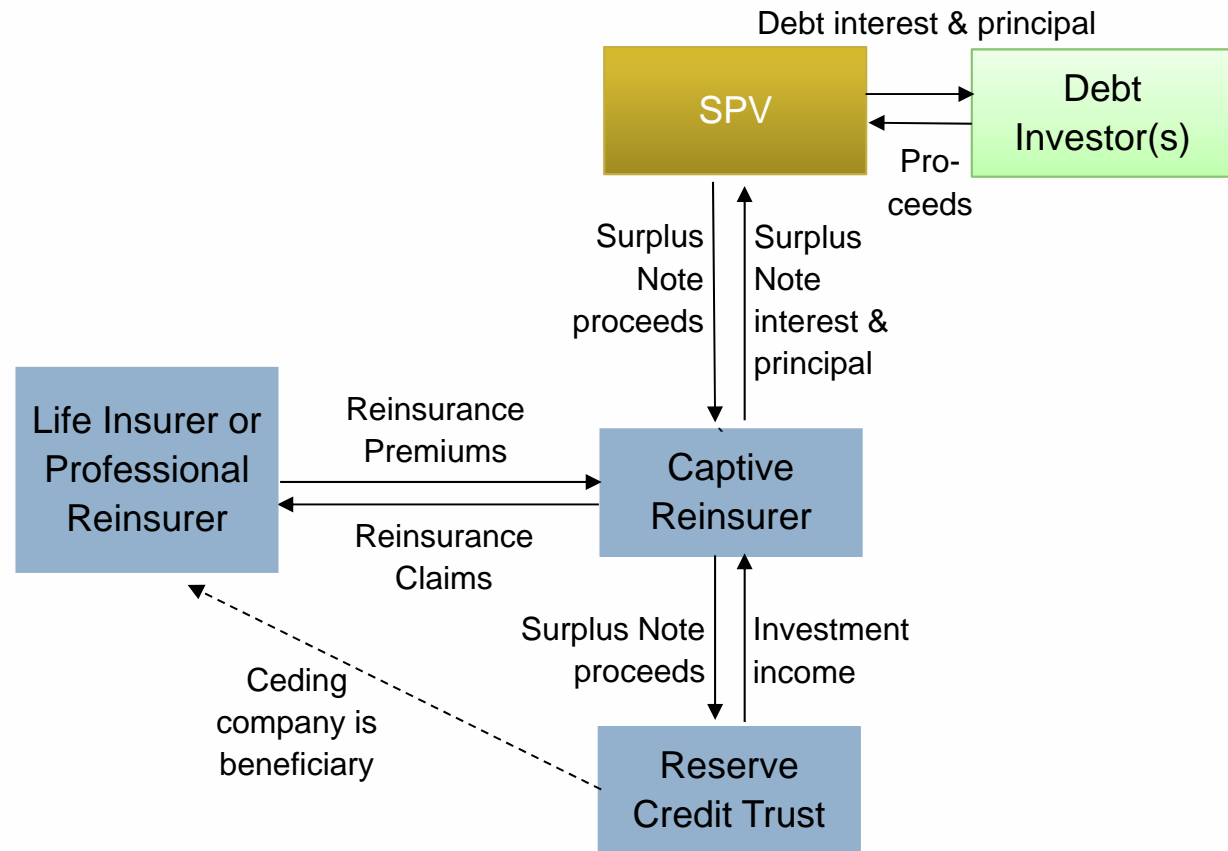


# A recourse funded solution is usually a captive surplus note guaranteed by the holding company

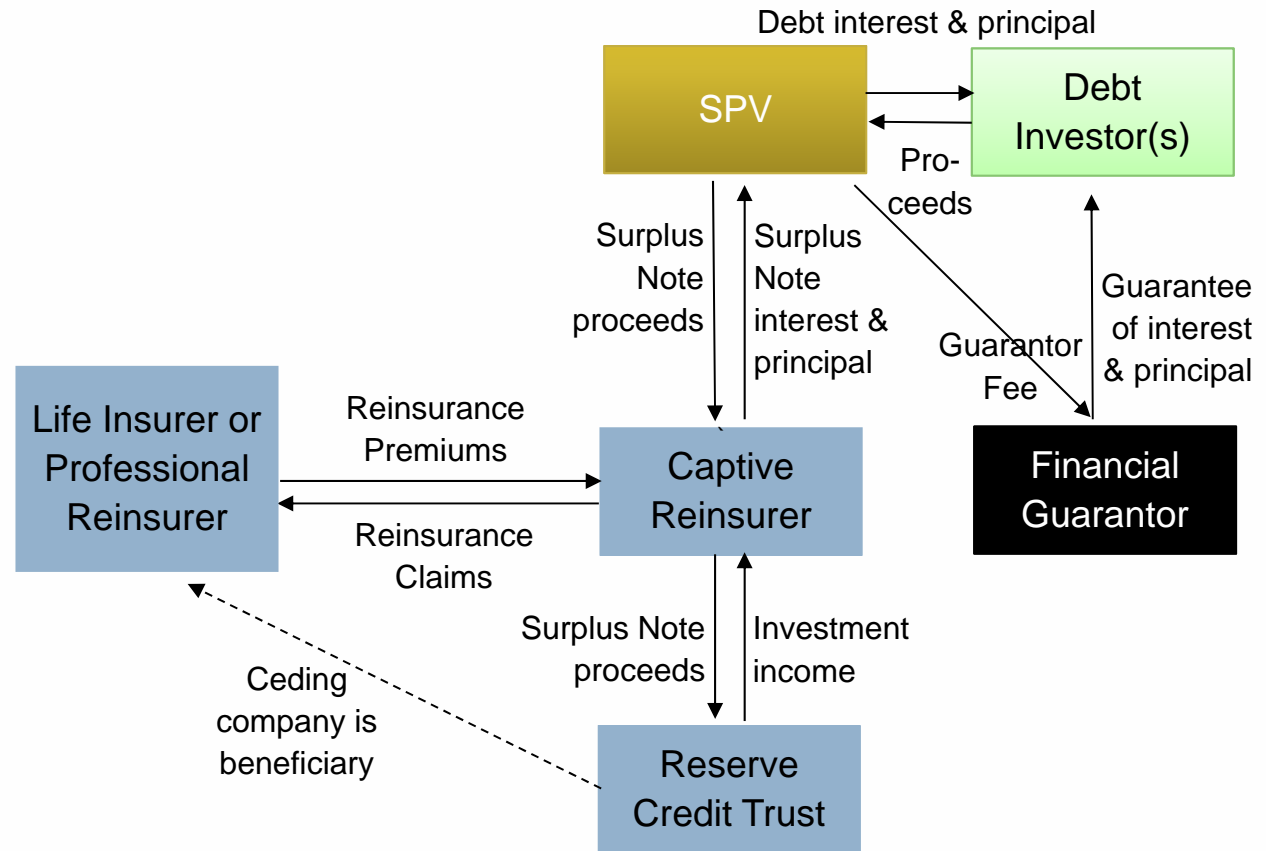


# A non-recourse funded solution usually involves an SPV in between the captive and investors

- Some structures have additional features (with extra boxes and arrows) whereby the holding co. or an affiliate insulates the cedant, captive or SPV from certain risks



# A wrapped funded solution usually involves a guarantee to investors from a financial guarantor



# Consulting Actuary Perspective

- Why do many insurers and reinsurers use reserve financing?
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# Recent reserve financing market developments

- Multi-provider transactions
- AG48 and other NAIC regulatory developments
- Legal, state regulatory approval and transaction structure developments in light of AG48
- Rating agency developments

## Recent rating agency developments

- S&P in March 2015 issued revised reserve financing criteria which are materially different from S&P's views on reserve financing since 2006.
- Moody's in Aug. '13 and May '14 issued comments on US life insurer use of captives, and in March '15 issued Hybrid Equity Credit criteria.
- Fitch in July 2015 issued a) an updated version of its ILS criteria (for the rating of ILS debt instruments) that replaces criteria issued in August 2014, and b) updated Insurance Rating Methodology criteria that replaces criteria issued in September 2014.
- A.M. Best in October 2013 issued a special report on ratings factors for organizations using life captive reinsurers, in April 2014 issued criteria on evaluating surplus notes, and in February 2015 issued a special report on XXX, AXXX captives.
- At least 2 of these agencies rate CLNs.

# What's New in Reserve Financing for Life Insurance Products?

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**Life Insurance Industry Perspective by**

Steven Clayburn, FSA, MAAA

August 31, 2015



# Life Insurance Industry Perspective

- What has happened at the NAIC regarding XXX/AXXX transactions?
- What has happened at the NAIC in relation to the F Committee?
- What has occurred at the NAIC in relation to E Committee items?

# What has transpired at the NAIC in relation to XXX/AXXX transactions?

## Principle-Based Reserving Implementation (EX) Task Force – Charges

- Life Actuarial Task Force – Developed Actuarial Guideline that outlines the actuarial method to apply to Covered Policies when calculating reserves (a modified VM-20).
- Capital Adequacy (E) Task Force – 1) Determined appropriate treatment if an unqualified opinion is due to non-compliance with AG 48, 2) Determine how to calculate the Primary Security shortfall, and 3) Determine how to calculate a consolidated RBC shortfall
- Financial Analysis Handbook (E) Working Group – Developed a new section of the Financial Analysis Handbook that specifies procedures for domestic/lead/captive states' review of XXX/AXXX reinsurance transactions, both initially and on an ongoing basis.

## What has happened at the NAIC in relation to XXX/AXXX transactions? (cont.)

### Principle-Based Reserving Implementation (EX) Task Force – Charges

- Statutory Accounting Principles (E) Working Group – Develop a note for the audited financial statements regarding compliance with the XXX/AXXX Reinsurance Model Regulation
- Blanks Working Group – Adopted 2015 XXX/AXXX Reinsurance Supplemental Reinsurance Exhibits to provide more information on XXX/AXXX transactions.
- Reinsurance (E) Task Force – Draft a XXX/AXXX Regulation that incorporates AG 48 to be included in the Credit for Reinsurance Models

# Life Insurance Industry Perspective

- What has happened at the NAIC regarding XXX/AXXX transactions?
- What has happened at the NAIC in relation to the F Committee?
- What has occurred at the NAIC in relation to E Committee items?

# What has Occurred at the NAIC in Relation to the F Committee Initiative?

The Financial Regulations Standards and Accreditation (F) Committee has rewritten (and adopted) the Preamble to Part A of the accreditation standards.

- The rewrite now scopes in captives and special purpose vehicles that reinsure the following types of life/health business:
  - 1) XXX/AXXX reserves
  - 2) Variable Annuities
  - 3) Long-term care insurance
- Open issues such as effective dates and any grandfathering were discussed at the NAIC national meeting held in Chicago in Mid-August.
- XXX/AXXX captives have a safe harbor if compliant with AG 48.

## Life Insurance Industry Perspective

- What has happened at the NAIC regarding XXX/AXXX transactions?
- What has happened at the NAIC in relation to the F Committee?
- What has occurred at the NAIC in relation to E Committee items?

## What Has Happened at the NAIC Regarding the Financial Condition (E) Committee Initiatives?

- The E Committee issued a survey to obtain feedback on the permitted and prescribed practices.
- Reinsurance Task Force – As mentioned a subgroup of the Task Force has drafted a XXX/AXXX Model Regulation to be incorporated in the Credit for Reinsurance Models.
- Valuation of Securities Task Force/Reinsurance Committee – Recommendation on Revisions to the Meaning and Intent of the Phrase “Securities Listed by The Securities Valuation Office” in the Credit for Reinsurance Model Law
- Variable Annuities Issues Working Group – This group was formed to review variable annuities and determine why companies have utilized captives.

# **What's New in Reserve Financing for Life Insurance Products?**

## **2015 SOA Valuation Actuary Symposium**

**Scott D. Avitabile**, Of Counsel, Willkie Farr & Gallagher LLP

Date: August 31, 2015



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- III. Regulatory Approvals and Issues; AG 48
- IV. NAIC Credit for Reinsurance Model Law and Regulation - Certified Reinsurers

# Financing Solutions to XXX Reserves

## Structured Financing Solutions to XXX/AXXX Reserves

- Structured financial transactions designed to access bank, other risk provider (often large reinsurance companies acting through sponsored SPVs) or capital market investor financing to alleviate the financial strain from Regulation XXX/AXXX reserving requirements on level premium term life and universal life insurance products with no-lapse guarantees
- Permits ceding insurer to retain economic benefits of experience on the ceded policies
- Future transactions that include “Covered Policies” under AG 48 will require adherence to the “Primary Security” and “Other Security” provisions of AG 48

# Basic Structure Overviews and Schematics

## Basic Legal Structure Overview - Historic

- Typical transaction structure combines (a) ceding of level premium term life or universal life risks subject to Regulation XXX/AXXX to a newly formed special purpose reinsurer (usually created under state captive insurance company statutes), (b) credit for reinsurance trust and/or funds withheld account, and (c) one or more of surplus notes, letters of credit, credit linked notes or a stop loss reinsurance agreement
- Typical transaction structure by steps:
  - Ceding insurer forms and provides equity capital to special purpose captive insurer;
  - Ceding insurer and captive enter into reinsurance agreement whereby policies subject to Regulation XXX/AXXX are ceded to the captive. An independent actuarial study is performed on the reinsured book of business. Block of policies is usually closed and identified, although transactions with open reinsurance agreements that permit new business over time are possible;

## Basic Legal Structure Overview (con't)

- Captive issues surplus notes to the bank/SPV/risk taker and/or the bank issues a letter of credit/SPV issues a credit-linked note for the benefit of the ceding insurer and/or the captive;
- Proceeds from the sale of surplus notes, the letter of credit or the credit-linked note are then either deposited in a credit for reinsurance trust or held by the captive or ceding insurer to secure the captive's reinsurance obligations; and
- In a recourse transaction, the ultimate parent company or a well-capitalized affiliate of the captive guarantees payment of fees to the bank/SPV and reimbursement of draws on the letter of credit or credit-linked note. In a non-recourse transaction (usually with conditions to the right to draw), the obligation to reimburse the bank on a letter of credit draw or the SPV on a credit linked note payment is solely that of the captive.

## Potential Changes to Transaction Structure – AG 48

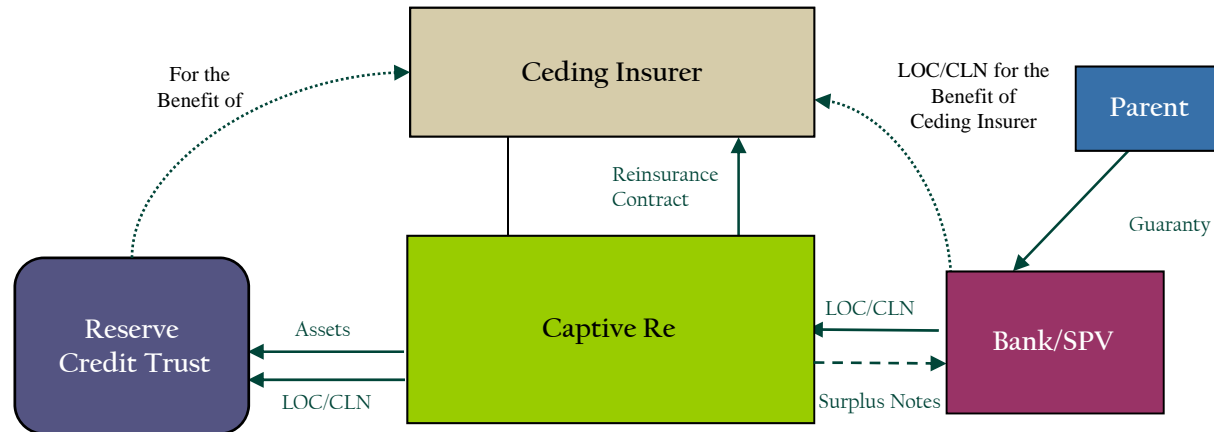
- The principal thrust of AG 48 from a transaction structure perspective is requiring the amount of high quality assets held as security for the cedant as funds withheld, on a modified coinsurance basis or in trust (a) satisfy the AG 48 definition of Primary Security, and (b) be no less than the AG 48 required level of Primary Security, which is larger than a best estimate definition of “economic reserves”.
  - The required level of Primary Security is to be determined in accordance with a modified version of the NAIC’s “VM-20” standard (the “Actuarial Method” under AG 48)
  - Assets that qualify as Primary Security are limited to cash and securities listed by the SVO that are otherwise admitted assets under applicable state law, but expressly exclude letters of credit (clean or conditional), synthetic letters of credit, contingent notes, credit-linked notes or other similar securities that operate in a manner similar to a letter of credit

## Potential Changes to Transaction Structure – (con't)

- “Listed by the SVO” likely not to include bespoke assets that are privately rated by the SVO at the request of an issuer or investor specifically as part of a “Regulatory Transaction”, i.e. created and used solely for the purposes of a state-specific financing transaction
- Assets supporting the Other Security level (the layer of reserves historically referred to as “excess” or “redundant”) include any assets that qualify as Primary Security as well as any assets acceptable to the ceding company’s domiciliary regulator
- AG 48 would appear to support the historic way in which insurers financed the excess reserves, leaving the ultimate decision on what assets would be acceptable to the ceding company’s regulator
- Potential for tighter regulatory scrutiny of assets proposed to support Other Security
- Potential methods of financing a portion of the difference between the new “Actuarial Method” reserve and the old “economic” reserve – surplus notes; securities lending arrangements

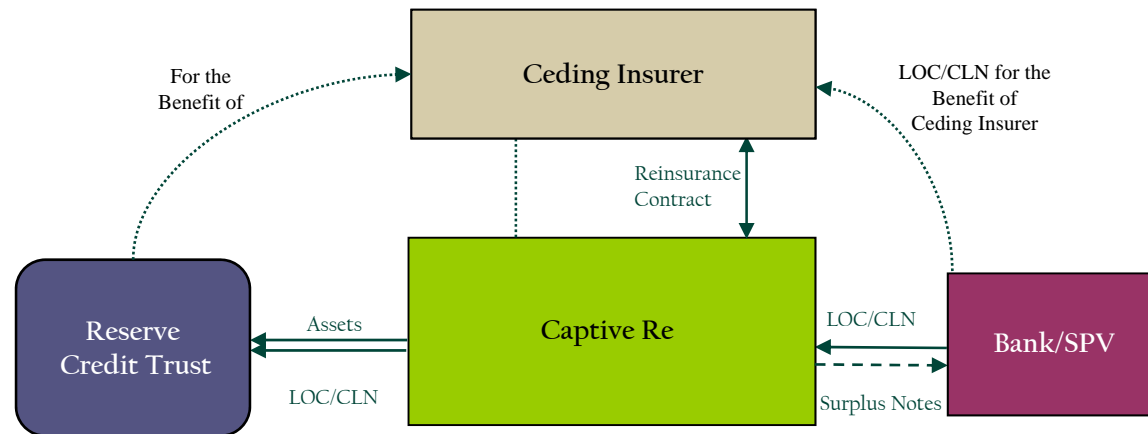


# Structure Schematic – Recourse Transaction (Other Security)



1. Ceding Insurer cedes its XXX/AXXX business to Captive Re through a reinsurance contract
2. Captive Re issues Surplus Notes to the bank or SPV and bank issues letter of credit or SPV issues credit-linked note to Ceding Insurer
3. Captive Re accounts for Surplus Notes, Letter of Credit or Credit-Linked Note as an admitted asset
4. Captive Re deposits proceeds from Surplus Notes or the Letter of Credit/Credit-Linked Note equal to the reserves into the Reserve Credit Trust or the Ceding Insurer holds the Letter of Credit as beneficiary
5. The Reserve Credit Trust is pledged to Ceding Insurer, or Letter of Credit/Credit-Linked Note is held by Ceding Insurer or Captive Re in each case to secure reinsurance reserve credit for the Ceding Insurer
6. Parent Company provides guaranty of obligations of Captive Re
7. Letter of Credit may be drawn upon by the Ceding Insurer at any time

# Structure Schematic – Non-Recourse Transaction (Other Security)



1. Ceding Insurer cedes its XXX/AXXX business to Captive Re through a reinsurance contract
2. Captive Re issues Surplus Notes to the bank or SPV and bank issues letter of credit to ceding Insurer or SPV issues CLN to Captive Re
3. Captive Re accounts for Surplus Notes, Letter of Credit or CLN as an admitted asset
4. Captive Re deposits proceeds from Surplus Notes or the Letter of Credit/CLN equal to the reserves into the Reserve Credit Trust or the Ceding Insurer holds the Letter of Credit as beneficiary
5. The Reserve Credit Trust is pledged to Ceding Insurer, or Letter of Credit/CLN is held by Ceding Insurer or Captive Re in each case to secure reinsurance reserve credit for the Ceding Insurer
6. Obligation to reimburse the bank on a Letter of Credit draw or the SPV on a CLN payment is solely that of the Captive
7. The Letter of Credit or CLN is generally a "conditional draw" Letter of Credit/CLN, requiring certification from the Ceding Insurer that certain conditions have been met before a draw is permitted

WILLKIE FARR & GALLAGHER LLP

# Regulatory Approvals and Issues; AG 48

# Regulatory Approvals and AG 48 Issues

- Formation of Special Purpose Reinsurance Company
  - Choice of domicile (Arizona, Delaware, Nebraska, South Carolina, Vermont, state with an LPS law, offshore)
- Domiciliary Approvals
  - Organization and licensure of captive
  - Affiliate reinsurance arrangement
  - Issuance of surplus notes, if part of the structure
  - Execution and delivery of related transaction documents
  - Ongoing approval of payments on surplus notes and/or dividends, if part of the structure
- Reinsurance Arrangement
  - Terms of reinsurance agreement between ceding insurer and captive must be approved by ceding insurer's domiciliary state
  - Reinsurance trust may be established and if utilized must comply with ceding insurer's domiciliary requirements
  - Investment guidelines must be established to manage the captive's funds inside and outside any reinsurance trust

## Regulatory Approvals and AG 48 Issues (cont.)

- Letter of Credit must comply with ceding insurer's domiciliary requirements, although most transactions in the past few years involved non-recourse letter of credit transactions which utilize "conditional" letters of credit, which do not necessarily comply with such requirements and have traditionally been approved under the "other security acceptable to the Commissioner" provision of the state credit for reinsurance laws
- For transactions including Covered Policies under AG 48, AG 48 "Primary Security" and "Other Security" must meet requirements of AG 48 and be approved by the commissioner of the ceding insurer's domiciliary state

## Regulatory Issues and AG 48

- Order of Draws on Letters of Credit and Credit-Linked Notes
- Conditions to Draws on Letters of Credit and Credit-Linked Notes
  - Conditional draw feature may result in an RBC charge under 2016 RBC rules
  - Inability to obtain SVO rating for a “Regulatory Transaction” which is not eligible as an “Investment Security” under AG 48 and the rules thereunder
  - In light of AG 48, regulators are rethinking the conditional draw concept
- Primary/Joint Liability of the Captive Reinsurer
- Pledge of Assets of the Captive or the Cedant
- Physical Segregation of any Funds Withheld
- Mark-to-Model Collateral Posting
- Permitted Practices
  - Letters of Credit and Credit-Linked Notes as Admitted Assets of the Captive
- Parental Guarantees as Capital of the Captive – As Permitted by Limited Purpose Subsidiary Laws

## Regulatory Issues and AG 48 (con't)

- Limited Purpose Subsidiary
  - Limited Purpose Subsidiary Laws effective in Iowa (12/22/10), Georgia (7/1/11), Indiana (4/6/11) and Texas (6/17/11). All are very similar and based on the original Iowa model
  - An LPS is similar to a captive insurance company in most ways, and is organized via an application, which includes, among other items, a plan of operation, pro forma financial statements and a model of the proposed book of business to be reinsured, the same as would be required to form a special purpose financial captive in most states. AG 48 would apply to business ceded to an LPS the same as it would to a captive

# NAIC Credit for Reinsurance Model Law and Regulation – Certified Reinsurers



## Certified Reinsurers

- In 2011, the NAIC adopted changes to the Credit for Reinsurance Model Law and Regulation (#785 and #786). Specifically, these rules allow for previously unauthorized reinsurers to be designated as “Certified Reinsurers” based on credit worthiness and other requirements.
- Reinsurers deemed Certified Reinsurers would be allowed to post less collateral depending upon the credit ratings obtained from NRSRO’s (A.M. Best, S&P, Moody’s or Fitch).
- In light of AG 48, certain ceding insurers with Certified Reinsurer affiliates in Qualified Jurisdictions are choosing to reinsure XXX/AXXX reserves to such affiliates rather than form captives
- “Qualified Jurisdictions” currently approved by the NAIC as Certified Reinsurer jurisdictions include Bermuda, France, Germany, Ireland, Japan, Switzerland and the United Kingdom.

## Certified Reinsurers

- The Certified Reinsurer must be domiciled and licensed to transact insurance or reinsurance in a Qualified Jurisdiction.
- The Certified Reinsurer must maintain capital and surplus, or its equivalent, of no less than \$250,000,000.
- The Certified Reinsurer must maintain financial strength ratings from two or more rating agencies deemed acceptable by the Commissioner.

## Financial Strength Rating Table

<u>Ratings</u>	<u>Best</u>	<u>S&amp;P</u>	<u>Moody's</u>	<u>Fitch</u>
Secure-1	A++	AAA	Aaa	AAA
Secure-2	A+	AA+, AA, AA-	Aa1, Aa2, Aa3	AA+, AA, AA-
Secure-3	A	A+, A	A1, A2	A+, A
Secure-4	A-	A-	A3	A-
Secure-5	B++, B+	BBB+, BBB, BBB-	Baa1, Baa2, Baa3	BBB+, BBB, BBB-
Vulnerable-6	B, B-C++, C+, C, C-, D, E, F	BB+, BB, BB-, B+, B, B-, CCC, CC, C, D, R	Ba1, Ba2, Ba3, B1, B2, B3, Caa, Ca, C	BB+, BB, BB- B+, B, B-, CCC+, CC, CCC-, DD

# Security Collateral Requirements

<u>Ratings</u>	<u>Security Required</u>
Secure-1	0%
Secure-2	10%
Secure-3	20%
Secure-4	50%
Secure-5	75%
Vulnerable-6	100%

## **What's New in Reserve Financing for Life Insurance Products?**

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Willkie Farr & Gallagher LLP



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# S&P's Treatment Of U.S. Life Reserve Financing Transactions

## DRAFT

**August 2015**

Li Cheng, FSA, CFA, FRM  
Senior Director  
Financial Services Ratings

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# Agenda

## Preliminary Findings on Captives

- Captive Characteristics
- Reserve Redundancy Studies
- Primary Impact Analysis

## S&P's Life Reserving Criteria

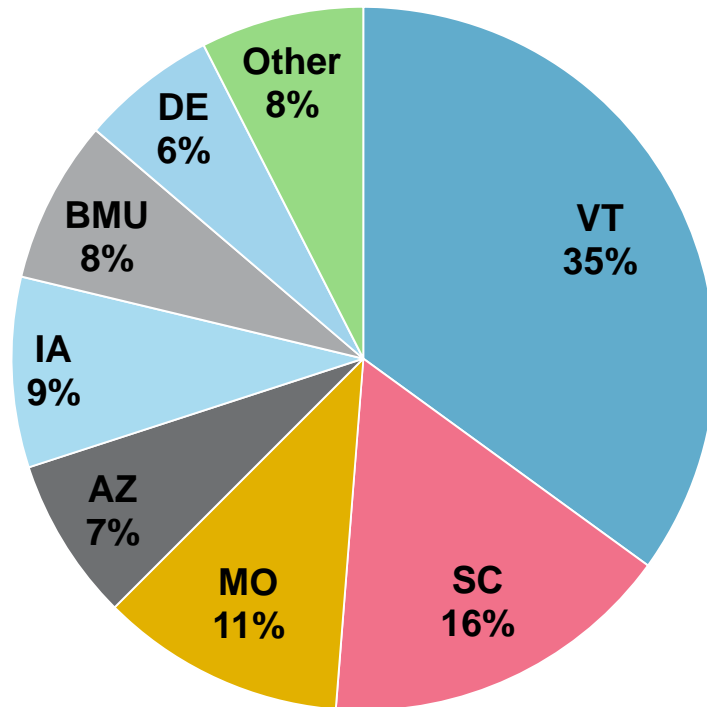
- Principles of Consolidated Capital Analysis
- Aligning Reserves to Economic Levels
- Accounting for Permitted Practices
- Considering Captives' Financing Solutions

# Standard & Poor's Preliminary Findings

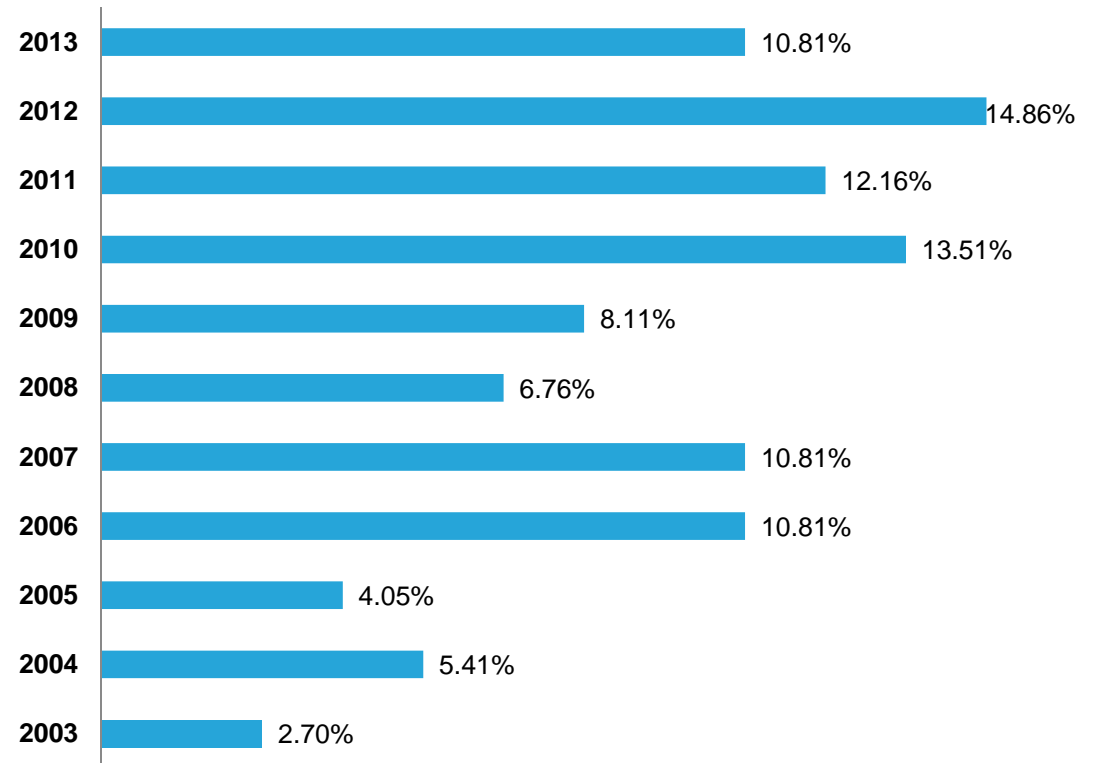


# Reserving Financing Transaction Overview

## Domicile of Captives



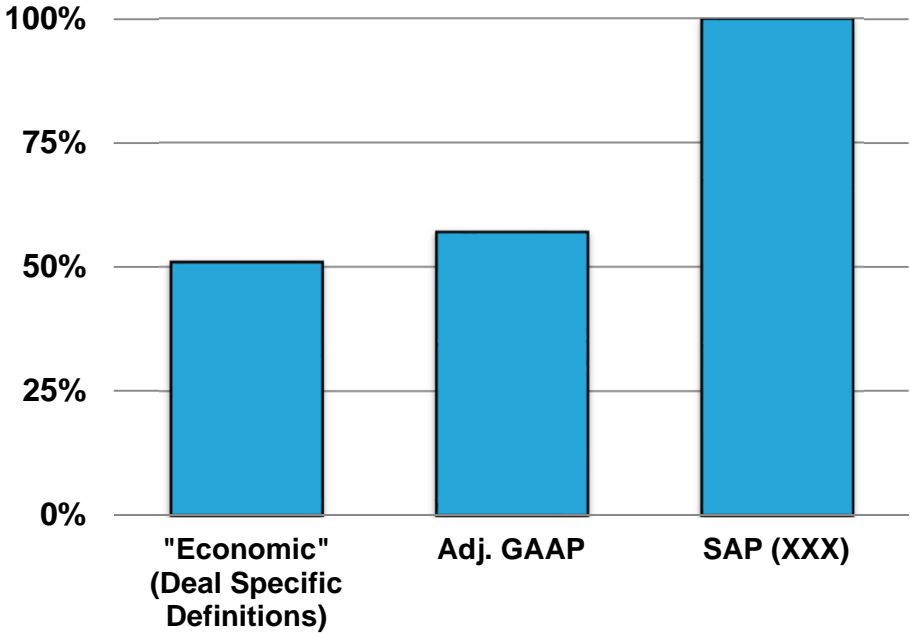
## Year of Captive Origination



Note: The data above represents the distribution of XXX/AXXX captives as of 2013YE

# Captives' Reserving Methodologies

## Term Life Reserves Comparison



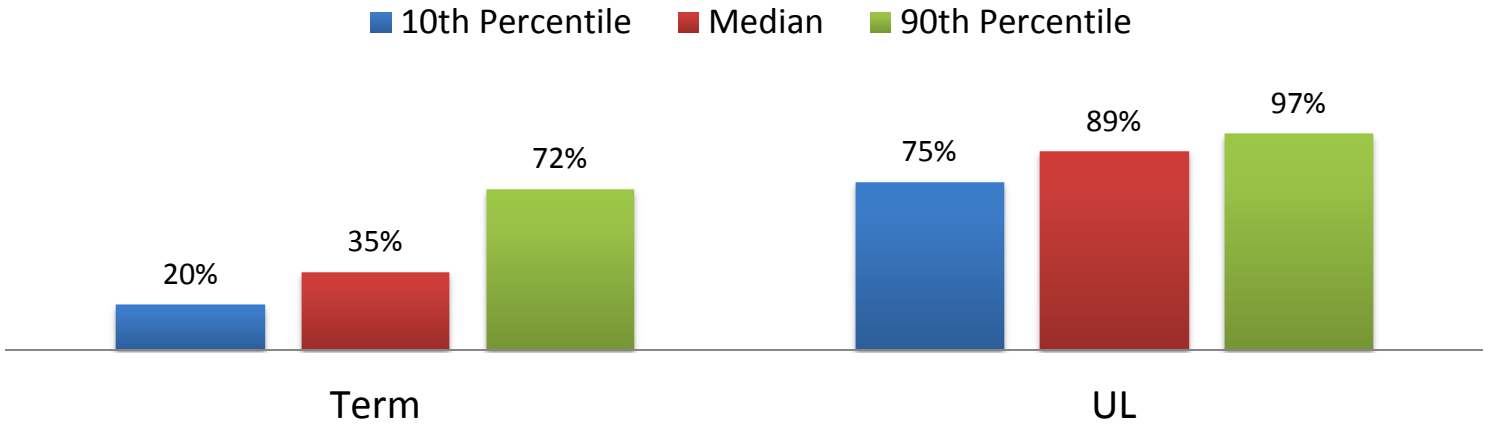
*Note: This chart utilizes data S&P received on prior financing transactions as the reserving data collected for the study*

- Data on prior financing transactions allowed us to compare insurers' best-estimate reserves (i.e. economic reserves) for term products against GAAP and statutory reserves
- Adjusting GAAP reserves for DAC, there was immaterial difference between economic and GAAP reserves
- Both, though, were substantially lower than statutory reserves

# Assessing XXX / AXXX Reserve Redundancies

- Term product GAAP reserves were consistently and materially lower than statutory reserves
- Universal Life redundancies were often far less material
  - Group-level redundancies for this product did not vary greatly
  - Captives' redundancies for these products exhibited greater variation, depending on the type of universal life business ceded

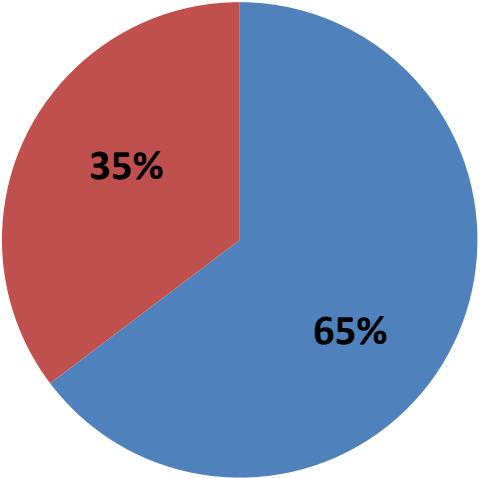
## Variance in the Conservatism of Reserves: GAAP vs. SAP Reserves by Group



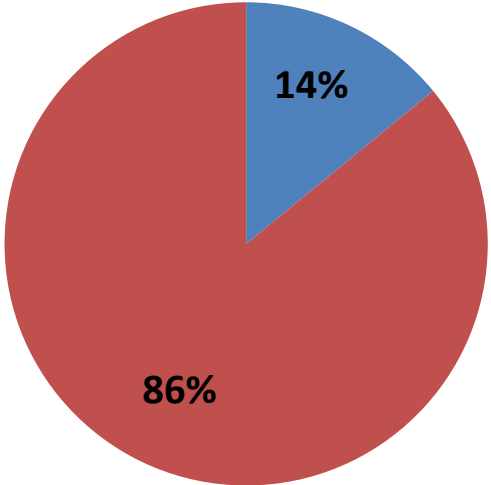
# Assessing XXX / AXXX Reserve Redundancies

- Our data indicates that a majority of XXX/AXXX redundancies reside within captives, even though nearly 90% of statutory reserves (for these products) are held at insurers' operating companies
- This observation is indicative of the large incentives insurers had to cede these lines of business to captives

**Total Redundancy Breakout**  
■ Captives ■ Operating Companies

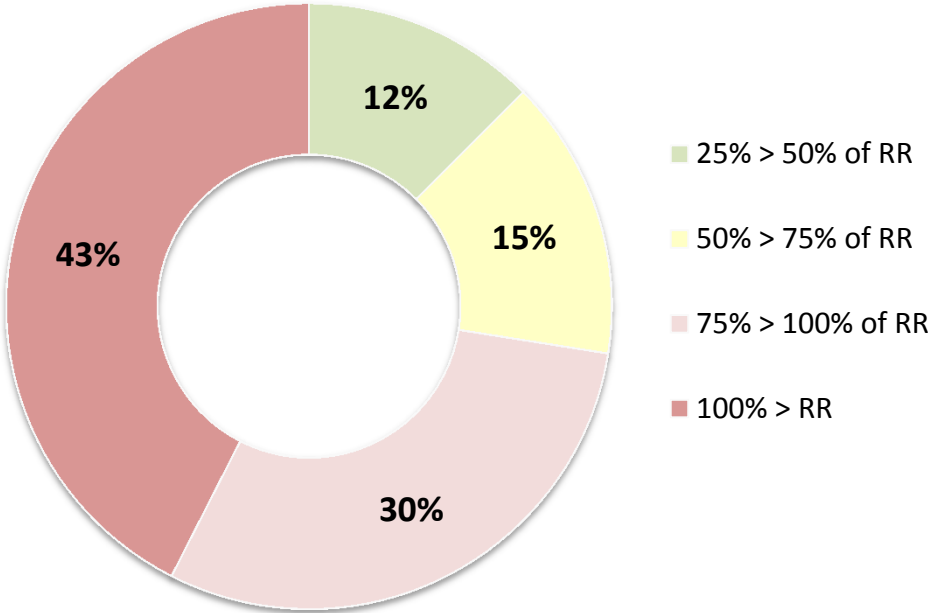


**Total Reserves Breakout**  
■ Captives ■ Operating Companies



# Weighing Insurers' Use of Permitted Practices

**Aggressiveness of Captive Funding**  
Permitted Practices vs. Redundant Reserves

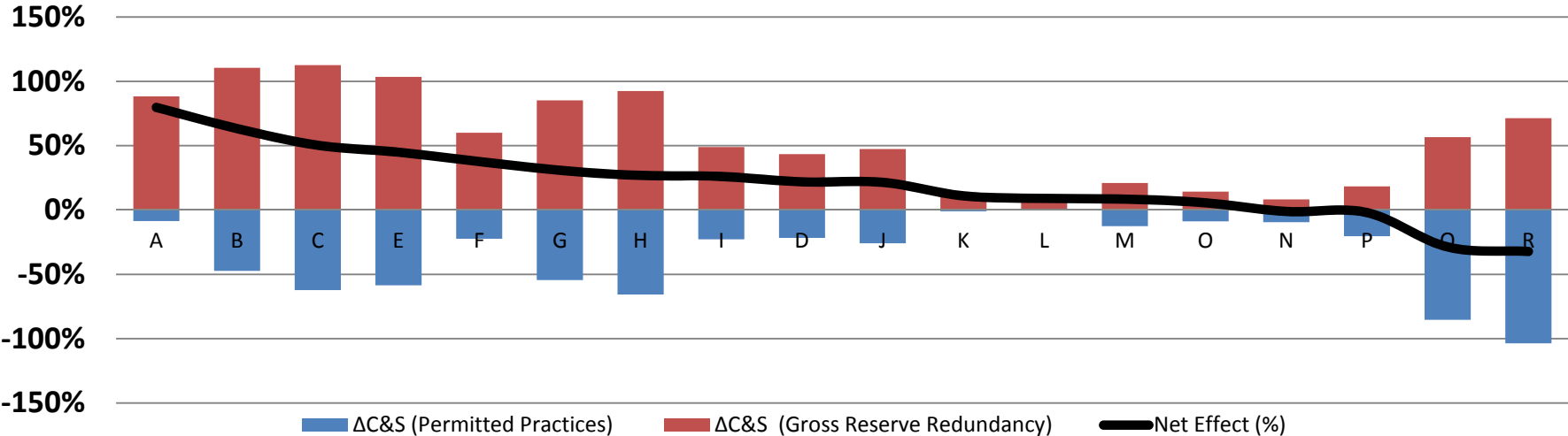


- Nearly half of all captives in this simplified study accounted for liabilities more aggressively than GAAP, even before adjusting reserve redundancies for taxes
- Although insurers' business mix is a good indicator of the extent to which they use captives, other factors (e.g. mutuality) correlate with their use of captives
- Divergence in insurers use of captives leave statutory metrics somewhat incomparable

# Initial Assessment of Insurers' Adjusted Capitalization

- These distortions to statutory metrics represent a significant portion of many insurers' capital and surplus
- On a consolidated basis, insurers' reserve redundancies often outweigh impact of permitted practices; the consideration of taxes often reduces this difference
- In addition, low use of permitted practices could be indicative of a heavy reliance on debt-funded financing solutions relating to captive reinsurance

### Relative Impact to Capital & Surplus



# Standard & Poor's Life Reserve Financing Criteria

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# Scope of the Criteria

## Methodology: Treatment Of U.S. Life Insurance Reserves And Reserve Financing Transactions, March 12, 2015

- These criteria apply to S&P's ratings on insurance groups writing term life and universal life (UL) insurance business
- S&P might apply these criteria to address other U.S. life insurance and annuity blocks of business where
  - We consider the adjustment material to our credit analysis, and
  - Where the same principles regarding the conservatism of SAP and GAAP apply
- Variable annuity business is excluded from the scope of this criteria



# Impact On Ratings

- S&P's assessment of reserve financing transactions can largely be segmented into the four aspects
- Each of these aspects ultimately aim to bring our perspective of insurers' capital and financial flexibility to more consistent and economic levels
- Though each involves separate components of our credit ratings, each of these aspects have effects on others



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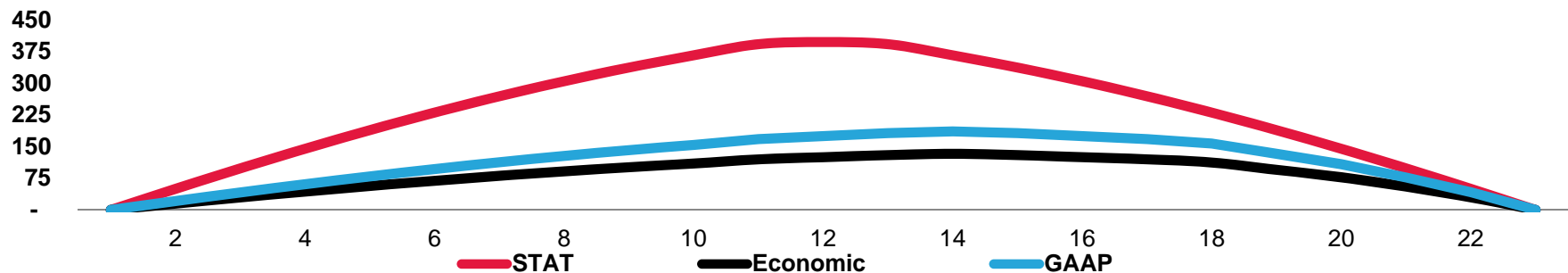
# Consolidated Capital Analysis

- Captives, like other entities, will generally be consolidated into our group-wide view of capitalization
- Captives will only be excluded from the analysis if they were to be considered sufficiently isolated from the overall group's risks
  - We determine a captive's isolation from the group based on analysis of :
    - The captive's level of capitalization
    - The amount of risk being transferred back to the operating companies
      - e.g. recourse rights, investment guarantees, YRT, etc.
    - Fungibility of captive's capital
- We might adjust “representativeness of modeling” score if captives represent a large percentage of the group's consolidated capital

# Recognition of Reserve Redundancies

- Captives use of permitted practices (e.g. LOC funding, stop-loss agreements) to fund redundant reserves are benchmarked against 'economic reserves'
- Economic reserves are rarely comparable across insurers
  - Differing PADs
  - Different accounting bases
  - Gross Premium Reserve vs. Net Premium Reserve
- S&P uses GAAP reserves as a more comparable proxy for economic reserves
  - GAAP reserves improve comparability, but tend to be higher than economic reserves

Reserve Level Trends



# Impact on Total Adjusted Capital (TAC)

## *Permitted Practices vs. GAAP Redundancies*

- Adjustments to TAC often boil down to differences between S&P's calculated reserve redundancies and captives' permitted practices
  - Our reserve redundancy credit to TAC is based on the difference between SAP and adjusted GAAP reserves
- Illustrative example: company ABC has one captive reinsurer, Captive A
  - Statutory reserves = \$500M;
  - GAAP reserves = \$250M;
  - Economic reserves = \$225M
  - Reserve financing: \$275M of LOC

Reserve Redundancy Credit to TAC	Capital Impact
Gross Reserve Redundancy Credit	250
- <i>Expected Tax on Reserve Redundancy Credit</i>	87.5
<b>= Net Reserve Redundancy</b>	<b>162.5</b>
- Permitted Practices	275
<b>= Net Effect on TAC</b>	<b>-112.5</b>

# Measuring Financial Flexibility

## *Effects on leverage and coverage metrics*

- Before these criteria:
  - Most captive debt-financing transactions considered operational leverage
  - Financing costs (i.e. for LOC, CLN, etc.) generally not included in the fixed charge coverage
- Under new criteria (unless isolated):
  - Captives' debt will be included in the group's financial leverage ratio
  - All reserve financing cost will be included in the fixed charge coverage ratio

	Funded Solutions	Unfunded Solutions
Examples	Surplus Notes, Senior Unsecured Notes	Letters of Credit, Credit Linked Notes (Note for Note Deals), Parental Guarantees, XOL\Stop Loss Reinsurance
Increase Capital?	Generally Subject to Limits*	Very unlikely
Leverage Treatment	Included*	Excluded
Fixed Charge Treatment	Included*	Included*

# Measuring Financial Flexibility

## *Effects on leverage and coverage metrics*

Debt Type	Amount	Rate (%)	Fixed Charge	EBITDA
Company Debt	2,000	4.50%	90	400
Captive B LOC	275	1.50%	4	20

	Without Adjusting for Captive	Adjusting for Captive
Fixed Charge	90	94 $= (90+4)$
EBIDTA	400	400
Debt	2,000	2,000
TAC	12,000	11,888 $= (12,000-112.5)$
Financial Leverage	16.7%	16.8%
Fixed Charge Coverage	4.44	4.25



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