Session 88PD: Tax Reform: Implications on Models

**Moderator:**
Melanie Dunn FSA, MAAA

**Presenters:**
David V McKay ASA, MAAA
Samuel Carter Schauf FSA, MAAA, CERA
Yang Yu FSA, CERA, ACIA
Tax Reform
Tax Cuts and Jobs Act

DAVID MCKAY
Director and Actuary, AIG
August 28, 2018
“In this world nothing is as certain as Death and Taxes.”
-Benjamin Franklin

“The difference between death and taxes is death doesn’t get worse every time congress meets.”
-Will Rogers
Agenda

➢ Introduction
➢ Life Insurance Changes – What Changed?
➢ Overall Impact
➢ Tax Reserves
   ➢ What Changed
   ➢ What Stayed the Same
   ➢ What is not deductible
   ➢ Transition
➢ 807(f) Changes
➢ Net Operating Loss
➢ Proration and DRD
➢ Upcoming things to expect
Introduction

2. Last Significant Tax Reforms
   - 1984 Act
   - 1959 Act
Life Insurance Companies - What Changed

➢ Corporate Tax Rate
➢ Corporate AMT Repealed
➢ Proration Rules
➢ DAC rates and Amortization of DAC
➢ Tax Reserves
➢ 807(f) rules
➢ NOL carryback provisions
➢ Interest Expense Deductions
➢ Reinsurance
Tax Reductions

➢ Tax Rate Reduced from 35% to 21%
➢ Alternative Minimum Tax (AMT) repealed
Tax Increases

1. DAC TAX
   - The capitalization rates increased by 20%
     - Annuities: 1.75% increases to 2.09%
     - Group: 2.05% increases to 2.45%
     - Life: 7.70% increases to 9.20%
   - The capitalization change is prospective only.
   - The length of amortization increased
     - 10 year amortization schedule extended to 15 years
     - The amortization change is for new capitalization amounts

2. Tax Reserves

3. Off Shore Reinsurance
Overall Impact

- Reduced Tax Rate
- Repealed AMT
- DAC Tax
- Tax Reserves
- Off-Shore Reinsurance
- Other Changes
Tax Reserve – Life Insurance – Non Variable

Non Variable Contracts: 92.81% of adjusted statutory reserves. The adjusted statutory reserves are generally the statutory reserves reported in the NAIC annual statement net of deferred and uncollected premiums, deficiency reserves, excess interest reserves and CFT reserves.

Basic Steps:

1. Start with statutory reserves as computed for NAIC annual statement
2. Adjust statutory reserves, if necessary, to conform with CRVM, CARVM or another NAIC-prescribed method applicable to the contract as of the valuation date – use NAIC method, not a single-state permitted or prescribed practice
3. Adjust those reserves for mortality, interest or other assumptions only if the assumptions are not permissible under method prescribed by the NAIC
4. Allocate any aggregate reserves to particular contracts
5. Reduce the resulting reserves by deficiency reserves, D&U premiums
6. Reduce the adjusted reserve by the 7.19% haircut
7. Floor the reserve at the net surrender value
8. Cap the reserve at allocable statutory reserves
Tax Reserve – Life Insurance – Variable

**Variable Contracts:** The sum of (1) the greater of the NSV or the separate account green book reserve, plus (2) 92.81% of any aggregate reserve in excess of the green book reserve (the reserves held in the blue book). Tax reserves may not exceed the annual statement reserves. IE:

**Example of mechanics behind the Tax Reserve calculation (may vary between companies)**

- **For General Account portion**, tax reserve is 92.81% of adjusted statutory reserves subject to NSV/deposit floor determined on a seriatim basis.
- **For Separate Account portion**, tax reserve is the greater of NSV or 100% green book reserve.
Tax Reserve – Life Insurance
Variable Annuity Example/Formula

\[ \text{TaxRes} = \max(\text{SABR}, (\text{SANSV} + \text{GANSV})) + 0.9281 \times (\text{Aggregate policy reserve} - \max(\text{SABR}, (\text{SANSV} + \text{GANSV}))) \]

- **TaxRes** = tax reserve
- Aggregate policy reserve = SABR + GABR + XS (total policy reserves both Green and Blue Book)
- SABR = separate account basic reserve = “variable portion of the aggregate reserve”
- GABR = general account basic reserve
- XS = excess of AG 43 reserve over total basic reserve
- GANSV = general account portion of net surrender value
- SANSV = separate account portion of net surrender value
What Stayed the Same

1. **Tax reserve method = NAIC-prescribed method**
   - I.R.C. §807(d)(3)

2. **Tax reserve rules apply on a seriatim basis, with net surrender value floor**

3. **Statutory reserve cap and statutory reserve test for life insurance company qualification**
   - I.R.C. §807(d)(1)(C)

4. **Definition of the six tax reserve categories**
   - I.R.C. §807(c)

5. **Tax rules on the following reserves:**
   - I.R.C. §807(c)(2) – Unearned premiums (Unpaid losses have changed)
   - I.R.C. §807(c)(4) - Dividend accumulations and amounts held at interest in connection with insurance and annuity contracts
   - I.R.C. §807(c)(5) - Premiums paid in advance and liabilities for premium deposit funds
   - I.R.C. §807(c)(6) - Reasonable special contingency reserves under contracts of group term life insurance or group A&H insurance that are held for retired lives, premium stabilization, or a combination of both.
Not Deductible

1. **Deficiency reserves**
   - I.R.C. §807(d)(3)(C) – “No additional reserve deduction allowed for deficiency reserves”

2. **Reserves attributable to deferred and uncollected (D&U) premiums**
   - I.R.C. §807(d)(4) – “…shall not include any reserve attributable to a deferred and uncollected premium if the establishment of such reserve is not permitted under section 811(c)”

3. **Reserves for “excess interest” beyond end of taxable year**
   - I.R.C. §811(d) – “For purposes of this part (other than section 816), amounts in the nature of interest to be paid or credited under any contract for any period which is computed at a rate which—
     1. exceeds the interest rate in effect under section 808(g) for the contract for such period, and
     2. is guaranteed beyond the end of the taxable year on which the reserves are being computed, shall be taken into account in computing the reserves with respect to such contract as if such interest were guaranteed only up to the end of the taxable year.

4. **Asset adequacy reserves required by Sections 3 and 6 of the Standard Valuation Law**

5. **Any reserves not required by law**
Transition

➢ The resulting change is recognized over 8 years
➢ Tax Reserves need to be calculated under old and new methods as of 12/31/2017.
Section 807(f) Changes

1. The 10-year spread of the difference between reserves no longer applies.

2. Changes in basis are treated similarly to an accounting method change under section 481.
   - Treated as initiated by taxpayer and made with consent of the Secretary
   - In general, 1 year for net negative adjustment and 4-year spread for net positive adjustment

3. Repeal of 10-year spread is effective for taxable years beginning after December 31, 2017.

4. Pre-2018 807(f) adjustments continue to be taken into account over their remaining spread.
Net Operating Loss – Life Insurance Companies

1. Prior
   - 3 year carryback
   - 15 year carryforward

2. New Regulation
   - No carryback
   - Indefinite carryforward
   - Limited to 80% of taxable income
Proration and DRD

➢ Proration – the life insurance company proration formula (company’s share) was replaced with a fixed 70% amount. Under the old law, the proration formula was computed at the mutual fund level and could produce a very wide range of results.

➢ DRD (Dividend Received Deduction) – deduction changed from 70% to 50%. This results in an increase in dividend income.
Upcoming things to Expect

➢ Technical Correction
➢ Amendments
INDUSTRY IMPACT & MODELING IMPLICATIONS OF TAX REFORM

AUGUST 28TH, 2018

Daniel Yu, FSA, CERA, ACIA
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Key provisions of the TCJA affecting life insurers
A major decrease to corporate taxes is partially offset by smaller provisions

<table>
<thead>
<tr>
<th>#</th>
<th>Description</th>
<th>$BN increase (decrease) to federal tax revenues over 2017 – 2028 period</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Changes in tax reserve &amp; unpaid loss reserve</td>
<td>15.8</td>
</tr>
<tr>
<td>2</td>
<td>DAC tax capitalization rates &amp; amortization</td>
<td>7.2</td>
</tr>
<tr>
<td>3</td>
<td>Adjustment for change in computing reserves (eliminate 10 yr spread)</td>
<td>1.2</td>
</tr>
<tr>
<td>4</td>
<td>Net investment income proration rules</td>
<td>0.6</td>
</tr>
<tr>
<td>5</td>
<td>Reduction in tax rate &amp; repeal of AMT</td>
<td>(1,389.8)</td>
</tr>
<tr>
<td>6</td>
<td>Net operating loss carryback / carryforward</td>
<td>201.1</td>
</tr>
<tr>
<td>7</td>
<td>Limitation on net interest deduction</td>
<td>253.4</td>
</tr>
<tr>
<td>8</td>
<td>Deemed repatriation of deferred foreign income</td>
<td>338.8</td>
</tr>
<tr>
<td>9</td>
<td>Base Erosion and Anti-Abuse Tax</td>
<td>149.6</td>
</tr>
<tr>
<td>10</td>
<td>Deduction for GILTI &amp; foreign-derived intangible income</td>
<td>48.6</td>
</tr>
</tbody>
</table>

Source: https://www.jct.gov/publications.html?func=download&id=5053&chk=5053&no_html=1

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Change in tax reserve & unpaid loss reserve

- Expected decrease in tax reserves, increase in taxable income
- Prospective change

DAC tax capitalization rates & amortization

- Prospective increase to rates and amortization
- Expected to increase taxable income

Adjustment for change in computing reserves

- Eliminated preferential tax treatment

Net investment income proration rules

- Brought certainty to the computation of proration adjustment
Reduction in tax rate and repeal of AMT

- Overall a beneficial change – increased income

(1,389.8)

NOL Carryback / Carryforward

- Loss of carryback is likely detrimental, carryforward beneficial.
- Prospective change

201.1

Limitation on net interest deduction

- Impact may be limited since insurer business interest income usually exceeds business interest expense

253.4
<table>
<thead>
<tr>
<th>Deemed repatriation of deferred foreign income</th>
</tr>
</thead>
<tbody>
<tr>
<td>• One time charge for untaxed post-1986 foreign income</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Base Erosion and Anti-Abuse Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>• AMT for companies exceeding 3-yr average $500mm income and paying base erosion payments</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Deduction for GILTI &amp; foreign-derived intangible income</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Minimum tax on income that must be included regardless of actual repatriation of income</td>
</tr>
</tbody>
</table>

International provisions affecting insurers
### Key provisions of the TCJA affecting life insurers

A major decrease to corporate taxes is partially offset by smaller provisions

| 1. Changes in tax reserve & unpaid loss reserve | $BN increase (decrease) to federal tax revenues over 2017 – 2028 period |
| 2. DAC tax capitalization rates & amortization |  |
| 3. Adjustment for change in computing reserves (eliminate 10 yr spread) |  |
| 4. Net investment income proration rules |  |
| 5. Reduction in tax rate & repeal of AMT | (1,389.8) |
| 6. Net operating loss carryback / carryforward | 201.1 |
| 7. Limitation on net interest deduction | 253.4 |
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| 10. Deduction for GILTI & foreign-derived intangible income | 48.6 |

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Industry impact of tax reform
Change in DTA and DTL for largest insurers

-29.9%
Average change in deferred tax assets from 2016 to 2017.

-20.2%
Average change in deferred tax liabilities from 2016 to 2017.
Industry impact of tax reform
Starting net DTA is positively linearly correlated with impact to income tax expense

A positive net DTA pre-reform generally meant an increase to taxable income post-reform
How did your group model the tax reserve methodology changes for 2017 year end filing?

a. Explicit model run
b. Aggregate reserve scaling or other
## Modeling the changes for tax reform
### Impact to inputs, methodology and output

<table>
<thead>
<tr>
<th>Change Description</th>
<th>Relative Complexity*</th>
<th>Input Requirements</th>
<th>Output Requirements</th>
<th>Remarks / Challenges / Simplifications</th>
</tr>
</thead>
</table>
| Changes in tax reserve / unpaid loss reserve | ![Low Complexity](https://example.com/low_complexity_icon) | • NAIC reserve & NSV  
• Initial impact for 8-yr spread  
• Unpaid loss rsv YC | • Tracking 8-yr spread  
• Tracking NAIC reserves | • Additional rule for variable products  
• Prior permitted practice exemptions  
• Uncertainty in yield curve for unpaid loss reserve |
| DAC tax rates / amort | ![Medium Complexity](https://example.com/medium_complexity_icon) | • Revised capitalization rates and amortization period | • Can use existing DAC tax amortization streams | • Bifurcation of pre-2018 and post-2017 premiums |
| Eliminate 10-yr spread | ![High Complexity](https://example.com/high_complexity_icon) | • No additional requirements | • No additional requirements | • Narrowing of the definition of basis changes  
• No longer a need to track spreads |
| Net investment income proration rules | ![Low Complexity](https://example.com/low_complexity_icon) | • Updated proration factors  
• DRD benefit percentages | • No additional requirements | |
| Reduction in tax rate & repeal of AMT | ![Medium Complexity](https://example.com/medium_complexity_icon) | • Updated tax rate input | • No additional requirements | |
| Net operating loss carryback / carryforward | ![Low Complexity](https://example.com/low_complexity_icon) | • No additional requirements | • Bifurcation between non-life and life is required | • Complexity for conglomerates tracking life insurance, non-life insurance and non-Insurance NOLs |
| Limitation on net interest deduction | ![Low Complexity](https://example.com/low_complexity_icon) | • No additional requirements | • No additional requirements | |
| Deemed repatriation of deferred foreign income | ![Low Complexity](https://example.com/low_complexity_icon) | • Determination of income subject to tax  
• Initial impact for 8-yr spread | • Tracking 8-yr spread | |
| Base Erosion and Anti-Abuse Tax | ![Low Complexity](https://example.com/low_complexity_icon) | • Identification of applicable tax rate | • No additional requirements | |
| GILTI & foreign-derived intangible income | ![Low Complexity](https://example.com/low_complexity_icon) | • Updated tax rates | • No additional requirements | |

*Compares the relative complexity of implementing the particular change within valuation models relative to other tax reform related changes on the list.
Modeling implications of tax reform

Key takeaways

Modeling implications

• New tax reserve calculation represents a significant simplification to existing approaches
• Elimination of need to maintain separate basis assumptions
• Easier to reconcile Stat and Tax impacts

Transition

• Companies have lead time to assess and validate the capabilities of their modelling systems
• Graded impact to tax reserves will start for the 2018 tax year, making it an opportune time to review existing methods
• Booking modifications/fixes to existing reserves and topsides will allow all changes to impact financials at the same time
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Tax Reform
Impact on Reinsurers and Reinsurance

Carter Schauf, Assistant Vice President and Actuary
Financial Solutions

Valuation Actuary Symposium
August 28, 2018
Agenda

- Impact of Tax Reform on Reinsurers
  - BEAT

- Other Impacts on Reinsurance Marketplace
Tax Reform
Impact on Reinsurers

- Tax Rate
- Tax Reserve
- International Provisions
  - BEAT
  - GILTI / CFC / PFIC
Background: Off Shore Reinsurance

Example 1 (US Intermediary)
Example 2 (Directly Offshore)

Direct Writer → Non-US Reinsurer
How BEAT Affects Off Shore Reinsurance

- Back to Example 1 (US Intermediary)
How BEAT Affects Off Shore Reinsurance

- Back to Example 2 (Directly Offshore)
Introduces a base erosion minimum tax amount, on PAYMENTS not PROFITS

Excess of modified taxable income times BEAT rate over “regular tax liability”

BEAT rate = 5% in 2018, 10% in 2019-2025, 12.5% in 2026+

Impact on (re-)insurers with retrocessions to non-US taxpaying affiliates

- How much of an impact?
US Re, a US subsidiary of Global Re, a non-US reinsurer

Cedes 90% proportionate share of business to Foreign Re, an Ireland-based affiliate
# Illustrative BEAT Calculation

## Prior to Tax Reform

<table>
<thead>
<tr>
<th>Tax Calculation (Before Tax Reform)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Premiums</td>
<td>10,000</td>
</tr>
<tr>
<td>Gross Claims</td>
<td>8,500</td>
</tr>
<tr>
<td>Total Taxable Income</td>
<td>1,500</td>
</tr>
<tr>
<td>US Re Taxable Income</td>
<td>150</td>
</tr>
<tr>
<td>US Re Tax @ 35%</td>
<td>52.5</td>
</tr>
<tr>
<td>Foreign Re Taxable Income</td>
<td>1,350</td>
</tr>
<tr>
<td>Foreign Re Tax @ 12.5%</td>
<td>168.75</td>
</tr>
<tr>
<td>Global Re Total Tax</td>
<td>221.25</td>
</tr>
<tr>
<td>Global Re Total Post-Tax Income</td>
<td>1,278.75</td>
</tr>
<tr>
<td>Global Re Profit Margin</td>
<td>12.79%</td>
</tr>
</tbody>
</table>
## Illustrative BEAT Calculation
### After Tax Reform (Excluding BEAT)

<table>
<thead>
<tr>
<th>Tax Calculation (At New US Tax Rate)</th>
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</tr>
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<tbody>
<tr>
<td>Gross Premiums</td>
<td>10,000</td>
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<td>US Re Taxable Income</td>
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<td>US Re Tax @ 21%</td>
<td>31.5</td>
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<td>Foreign Re Taxable Income</td>
<td>1,350</td>
</tr>
<tr>
<td>Foreign Re Tax @ 12.5%</td>
<td>168.75</td>
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<tr>
<td>Global Re Total Tax</td>
<td>200.25</td>
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<tr>
<td>Global Re Total Post-Tax Income</td>
<td>1,299.75</td>
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<tr>
<td>Global Re Profit Margin</td>
<td>13.00%</td>
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</tbody>
</table>
**Illustrative BEAT Calculation**

After Tax Reform (Including BEAT)

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<th>Description</th>
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<td>Foreign Re Taxable Income</td>
<td>1,350</td>
</tr>
<tr>
<td>Foreign Re Tax @ 12.5%</td>
<td>168.75</td>
</tr>
<tr>
<td><strong>BEAT Modified Taxable Income</strong></td>
<td>150 + 9,000 = 9,150</td>
</tr>
<tr>
<td><strong>BEAT Minimum Tax Amount</strong></td>
<td>9,150 * 10% - 31.5 = 883.5</td>
</tr>
<tr>
<td>Global Re Total Tax</td>
<td>1,083.75</td>
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<tr>
<td>Global Re Total Post-Tax Income</td>
<td>416.25</td>
</tr>
<tr>
<td>Global Re Profit Margin</td>
<td>4.16%</td>
</tr>
</tbody>
</table>
Beat the BEAT – Options and Challenges

• Eliminate overseas retros
  - Economically viable?
  - “Affiliated Reinsurance Companies”

• Retro to foreign-based US taxpaying affiliate
  - Timing / set-up?
  - How does 92.81% of stat reserve cap apply for non-US regulatory environments?
Other International Provisions

GILTI / CFC / PFIC

- Complex interactive sections of tax code
- Careful analysis of foreign affiliate set-ups needed
- Consult your tax advisor!!
Tax Reform
Other Impacts on Reinsurance

- Uncertainty at year-end 2017
- Distraction in 2018
- Unwinding tax-disadvantaged retros
- Post-tax economics for cedants and reinsurers
- Change in tax rate -> Change in capital ratios