

27. (3 points)

A monoline insurer has reported the following experience (figures in the tables below are in thousands of dollars):

Ceded Paid Loss for Primary without Commutation

Policy Year	@12 months	@24 months	@36 months
2014	250	350	450
2015	250	350	
2016	250		

Net Reserves (Case + IBNR) for Primary without Commutation

Policy Year	@12 months	@24 months	@36 months
2014	1,500	1,200	900
2015	1,500	1,200	
2016	1,500		

- A 25% quota share reinsurance agreement has been in place for all three policy years with the same reinsurer.
- The insurer's discount factor is 0.875 for all years.
- 2016 Calendar Year Taxable Income, prior to the commutation, is 37.5 thousand dollars.
- The insurer is considering commuting the reinsurance contract before year-end 2016.

a. (1 point)

The insurance company has decided to commute the reinsurance contract for policy year 2014. Calculate the commutation price that would result in the insurance company paying no income tax for calendar year 2016.

b. (1.5 points)

After negotiation with the reinsurer, a commutation price of \$250,000 was agreed upon. Calculate the following loss triangles for the insurer after the commutation under SAP:

- Net paid losses for policy years 2014 through 2016
- Net ultimate losses for policy years 2014 through 2016

c. (0.5 point)

Other than minimizing taxable income, identify two potential benefits to this insurance company of commuting the reinsurance contract for only one policy year.

Candidates were expected to know additional materiality standards besides those used for Part a.

Common errors included:

- % of premium (written or earned), since the materiality standard is used for purposes of addressing the risk of material adverse deviation in the loss reserve opinion
- Using a different % of the same materiality standard base as Part a (such as 5% of surplus or 5% of reserves when 10% was used in Part a), since the question asked to provide different bases than Part a
- Amount an actuary judgmentally selects
- Providing fewer than 2 items

#### Part d

Candidates were expected to list the two locations in the Statement of Actuarial Opinion where the materiality standard is disclosed.

Common mistakes included:

- Opinion
- Scope
- Exhibit A
- AOS

#### QUESTION 27

**TOTAL POINT VALUE: 3**

**LEARNING OBJECTIVE: E**

#### SAMPLE ANSWERS

**Part a:** 1 point

Target Taxable Income = Premium Received – Reserves Commuted \* Discount Factor  
 $-37,500 = \text{Premium Received} - 300,000 * 0.875$   
 Premium Received = 225,000

**Part b:** 1.5 points

$250 * (0.75 / 0.25) = 750$      $350 * (0.75 / 0.25) = 1,050$      $450 * (0.75 / 0.25) - \text{Premium}$   
 $(250) = 1,100$

$250 * (0.75 / 0.25) = 750$      $350 * (0.75 / 0.25) = 1,050$   
 $250 * (0.75 / 0.25) = 750$

$1,500 + 750 = 2,250$                        $1,200 + 1,050 = 2,250$                        $900 + \text{Reserves } (300) + 1,100 =$   
 $2,300$

$1,500 + 750 = 2,250$                        $1,200 + 1,050 = 2,250$   
 $1,500 + 750 = 2,250$

**Part c:** 0.5 point

Any two of the following:

- Commutation provides cash infusion

- Primary Insurer may have different opinion about loss development / final value of reserves
- Older accident year is more stable and therefore primary willing to retain risk
- Legal / Regulator change in 2015 that makes it desirable to commute just 2014
- Ended a TPA arrangement in 2014 and brought claims in house in 2015
- Reduce credit risk
- Maintain the relationship with the reinsurer
- Reduce administrative costs
- Commute only 1 policy year as a trial run for the possibility of future years
- There are disputes on claims specific to the 1 policy year
- Exit certain markets, territories (not lines of business)
- Facilitates a novation of that policy year
- Lower the provision for reinsurance
- Reduce collateral required

### **EXAMINER'S REPORT**

Candidates were expected to be able to determine the impact of reinsurance and a commutation on paid and ultimate loss triangles as well as taxable income. Candidates were also expected to demonstrate knowledge regarding the benefits of a commutation.

#### **Part a**

The candidates were expected to understand how to calculate taxable income and the impact of a commutation on the premium received and net reserves.

Common mistakes were solving for the incorrect taxable income (such as solving for zero instead of -37,500) and miscalculating the reserves that were commuted (such as forgetting to apply the quota share to convert net reserves to ceded reserves).

#### **Part b**

The candidates were expected to understand the impacts of reinsurance and commutation on the loss triangles.

A common mistake was not properly reflecting the impact of the commutation at 36 months for Policy year 2014, such as by adding the wrong commuted reserve amount to the net ultimate triangles or not reflecting the commutation price in the paid triangle.

#### **Part c**

The candidates were expected to understand benefits of a commutation from the insurer's perspective, particularly for a single policy year.

Common errors included listing reasons that would not apply when there is only one line of business and still a relationship with the reinsurer on the other policy years, such as:

- Exiting from a particular line of business

- Eliminating Credit Risk
- Ending a relationship with the reinsurer

#### QUESTION 28

**TOTAL POINT VALUE: 1.75**

**LEARNING OBJECTIVE: E**

#### SAMPLE ANSWERS

**Part a:** 0.75 point

Prospective reinsurance accounting

And any two of the following:

- Covers future insurable events
- It has timing and underwriting risk
- Signed within a reasonable timeframe

**Part b:** 0.75 point

Either of the following:

- Neither
- Deposit accounting

And both of the following:

- Contract's payment schedule violates timing risk
- Contract lacks risk of significant loss

**Part c:** 0.25 point

Any of the following:

- Write-in liability
- Funds deposited by reinsureds
- As a payable deposit
- Unpaid loss and LAE as liability, not reserves

#### EXAMINER'S REPORT

Candidates were expected to apply the criteria from NAIC SSAP 62R to determine the accounting treatment for sample reinsurance contracts and demonstrate how reinsurance contracts are accounted for in the balance sheet of the reinsurer.

**Part a**

Candidates were expected to determine the type of accounting treatment required for a sample contract and provide their rationale.