

EXAM 6 – UNITED STATES, FALL 2016

14. (3.25 points)

Given the following information from an insurance company for 2014 and 2015 (all figures are in thousands of dollars):

	2014	2015
Net premiums written	75,000	85,000
Net premiums earned	53,500	57,550
Net loss & LAE incurred	35,100	40,050
Other underwriting expenses incurred	15,000	16,000
Net investment income earned	3,700	3,450
Net realized capital gains	50	65
Net unrealized capital gains	150	250
Federal income tax incurred	525	450
Non-admitted assets	75	40
Provision for reinsurance	100	85
Dividends paid to policyholders	30	25
Dividends paid to stockholders	60	200
Policyholders' surplus	82,000	X

a. (2.25 points)

Calculate X, the 2015 policyholders' surplus.

b. (1 point)

Provide one argument for and one argument against the following statement: "The insurance company is more financially sound at year-end 2015 than at year-end 2014."

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 14															
TOTAL POINT VALUE: 3.25	LEARNING OBJECTIVE: C1, C2														
SAMPLE ANSWERS															
Part a: 2.25 points															
<p>2015</p> <p>UW Profit = $57550 - 40050 - 16000 = 1500$</p> <p>Other Income = $-450 - 25 = -475$</p> <p>Investment Gain = $3450 + 65 = 3515$</p> <p>Net Income = $1500 - 475 + 3515 = 4540$</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2">Change in PHS</td> </tr> <tr> <td style="padding-left: 20px;">Net Income</td> <td style="text-align: right; padding-right: 20px;">4540</td> </tr> <tr> <td style="padding-left: 20px;">change in unrealized gains</td> <td style="text-align: right; padding-right: 20px;">100</td> </tr> <tr> <td style="padding-left: 20px;">change in non-admitted assets</td> <td style="text-align: right; padding-right: 20px;">35</td> </tr> <tr> <td style="padding-left: 20px;">change in provision for reinsurance</td> <td style="text-align: right; padding-right: 20px;">15</td> </tr> <tr> <td style="padding-left: 20px;">Dividends to stockholders</td> <td style="text-align: right; padding-right: 20px;">(200)</td> </tr> <tr> <td style="padding-left: 20px;">Total</td> <td style="text-align: right; padding-right: 20px; border-top: 1px solid black;">4490</td> </tr> </table> <p>Assuming tax on DTA & DTL = 0%</p> <p style="padding-left: 20px;">Policyholder surplus = $82000 + 4490 = 86490$</p> <p>Assuming tax on DTA & DTL = 35%</p> <p style="padding-left: 20px;">Policyholder surplus = $82000 + 4490 + (-.35)(100) = 82000 + 4490 - 35 = 86455$</p> <p>Credit was awarded for either tax assumption.</p>		Change in PHS		Net Income	4540	change in unrealized gains	100	change in non-admitted assets	35	change in provision for reinsurance	15	Dividends to stockholders	(200)	Total	4490
Change in PHS															
Net Income	4540														
change in unrealized gains	100														
change in non-admitted assets	35														
change in provision for reinsurance	15														
Dividends to stockholders	(200)														
Total	4490														
Part b: 1 point															
<p><u>Sample Responses for "one argument for"</u></p> <ul style="list-style-type: none"> • PHS has increased from 82k to 86455 which means the insurer has more surplus to cover adverse events like Cat events or adverse prior year reserve development. Thus making the company more financially sound. • The provision for reinsurance decreased which could imply that they are exposed to less credit risk and are therefore more financially sound. <p><u>Sample Responses for "one argument against"</u></p> <ul style="list-style-type: none"> • IRIS ratio 2, net written premium / surplus, has increased (from 91 to 98), moving closer to the unacceptable/atypical range; this means that even though surplus increased, the company is taking on relatively more risk overall than it was before, so it may be or 															

SAMPLE ANSWERS AND EXAMINER'S REPORT

become less financially sound than it was at year-end 2014.

- The loss ratio actually got worse, from 65.6% to 69.6%. Coupled with the fact that they are writing more business, there may be much more loss that hasn't come on the books yet.
- Investment income went down but unrealized gain went up. This might indicate they are carrying more less-liquid assets.

EXAMINER'S REPORT

The candidates were expected to demonstrate a working understanding of the accounting required to calculate the Capital and Surplus Account on the Statement of Income of the annual statement, and to evaluate the financial health of an insurance entity based on the financial information provided.

Part a

The candidates were expected to determine policyholder surplus by calculating the underlying components.

Common mistakes included:

- Failure to include an item from the calculation of net income.
- Failure to include an item representing a change in a balance sheet item.
- Treating an income sheet item like a balance sheet item (or visa-versa) in calculating the change to surplus (for example, adding the current year's unrealized capital gains to surplus, instead of adding the change in unrealized capital gains to surplus).
- Calculating the change in the wrong direction.
- Failing to copy numbers correctly, and calculating sums and subtractions correctly.

Part b

The candidates were expected to analyze the financial position of an insurance company and describe how the results can imply both positive and negative changes.

Common mistakes included:

- Most candidates provided very simple observations such as "Surplus went up." This, by itself, is not a complete explanation or argument.
- Candidates reported an increase in net premiums written, by itself, indicated a weakened financial position.
- Candidates reported that the decline in federal income taxes was a sign that the company was in a weaker position.
- Some candidates referred to changes in gross premiums written, and changes in loss reserves as if they had that information available to them, but they did not.
- Some candidates reported a decrease in the Provision for reinsurance indicated that the company was in a weaker financial position. These candidates ignored the decrease in credit risk. They attributed the weaker position to less reinsurance protection. Since this was speculative, we did not give credit for this answer.