

EXAM 6 – CANADA, FALL 2019

23. (3 points)

The following information is available for a federally regulated property and casualty insurance company as at December 31, 2018. All amounts are in thousands of dollars (\$000s).

| 20.10 – Assets | Current year | Prior year |
|------------------------------------|--------------|------------|
| Cash and Cash Equivalents | 0 | 0 |
| Investment Income due and accrued | 0 | 0 |
| Total Investments | 380,000 | 350,000 |
| Recoverable from Reinsurers | | |
| Unearned Premiums | 70,000 | 60,000 |
| Unpaid Claims and Adjustments | 140,000 | 140,000 |
| Total Assets | ? | 700,000 |

| 20.20 – Liabilities and Equity | Current year | Prior year |
|--------------------------------|--------------|------------|
| Unearned Premiums | 140,000 | 120,000 |
| Unpaid Claims and Adjustments | 380,000 | 350,000 |
| Total Liabilities | 650,000 | 600,000 |

| 20.30 – Statement of Income | Current year | Prior year |
|---------------------------------------|--------------|------------|
| Premiums Written | | |
| Direct | 200,000 | 180,000 |
| Reinsurance Assumed | 30,000 | 20,000 |
| Reinsurance Ceded | 80,000 | 50,000 |
| Underwriting Income (Loss) | 13,000 | 8,000 |
| Net Investment Income | 17,000 | 10,000 |
| Total Income Taxes | 7,000 | 5,000 |
| Net Income (Loss) for the Year | 23,000 | 13,000 |

| 20.54 – Statement of Changes in Equity | Current year | Prior year |
|--|--------------|------------|
| Total Comprehensive Income for the Year | 30,000 | 18,000 |
| Dividends – Preferred | 1,000 | 1,000 |
| Dividends – Common | 14,000 | 9,000 |

The company has no income from subsidiaries and no realized capital gains.

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EXAM 6 – CANADA, FALL 2019

a. (2 points)

Calculate the following key financial indicators for the current year:

- i. Return on revenue
- ii. Net loss reserves to equity
- iii. Overall net leverage
- iv. Investment yield

b. (1 point)

Comment on the company's financial health.

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SAMPLE ANSWERS AND EXAMINER'S REPORT

| | |
|---|-------------------------------|
| QUESTION 23 | |
| TOTAL POINT VALUE: 3 | LEARNING OBJECTIVE: C2 |
| SAMPLE ANSWERS | |
| Part a: 2 points | |
| <u>Sample 1</u> | |
| <p>i. $\text{RoR} = \text{Net income before taxes} / \text{GWP}$ $= (\text{UW income} + \text{Net Investment Income}) / (\text{Direct Written Premiums} + \text{Assumed Written Premiums}) = (17\,000 + 13\,000) / (200\,000 + 30\,000) = 13.04\%$</p> | |
| <p>ii. $\text{Net Loss Reserves} = \text{Unpaid Claims and Adjustments} - \text{Unpaid Claims and Adjustment Recoverable from Reinsurers} = 380\,000 - 140\,000 = 220\,000$</p> <p>$\text{Equity} = \text{Prior Year Equity} + \text{Total Comprehensive Income of the Year} - \text{Dividends}$ $= (700\,000 - 600\,000) + 30\,000 - 1\,000 - 4\,000 = 115\,000$</p> <p>$\text{Net Loss Reserves to Equity} = \text{Net Loss Reserves} / \text{Equity}$ $= 220\,000 / 115\,000 = 208.7\%$</p> | |
| <p>iii. $\text{NWP} = 200\,000 + 30\,000 - 80\,000 = 150\,000$</p> <p>$\text{Total Net Liabilities} = 650\,000 - 70\,000 - 140\,000 = 440\,000$</p> <p>$\text{Overall Net Leverage} = (\text{Net Written Premiums} + \text{Total Net Liabilities}) / \text{Equity}$ $= (150\,000 + 440\,000) / 115\,000 = 513.0\%$</p> | |
| <p>iv. $\text{Investment Yield} = 2 \times (\text{Net Investment Income} + \text{OCI}) / (\text{Prior Year Invested Assets} + \text{Current Year Invested Assets} - \text{Net Investment Income} - \text{OCI})$ $= 2 \times (17\,000 + 30\,000 - 23\,000) / (380\,000 + 350\,000 - 17\,000 - (30\,000 - 23\,000))$ $= 6.8\%$</p> | |
| <u>Sample 2</u> | |
| <p>i. $\text{RoR} = \text{Net income before taxes} / \text{GWP}$ $= (17\,000 + 13\,000) / (200\,000 + 30\,000) = 13.04\%$</p> | |
| <p>ii. $\text{Net Loss Reserves} = 380\,000 - 140\,000 = 220\,000$</p> <p>$\text{Equity} = 100\,000 + 30\,000 - 4\,000 - 1\,000 = 115\,000$</p> <p>$\text{Net Loss Reserves to Equity} = 220\,000 / 115\,000 = 208.7\%$</p> | |
| <p>iii. $\text{Overall Net Leverage}$ $= ((200000+30000-80000) + (650000-70000-140000)) / 115000 = 513\%$</p> | |
| <p>iv. $\text{Investment Yield} = 2 \times \text{Net Investment Income} / (\text{Prior Year Invested Assets} + \text{Current Year Invested Assets} - \text{Net Investment Income})$</p> | |

SAMPLE ANSWERS AND EXAMINER'S REPORT

$$= 2 \times 17\,000 / (380\,000 + 350\,000 - 17\,000) = 4.8 \%$$

For the investment yield, both answers based on the MSA reading and the Annual Return were accepted.

Part b: 1 point

Sample 1

- RoR is 13.04% > 6.2% ok
- Net Loss Reserves to Equity is 208.7% > 200% not ok
- Overall Net Leverage is 513 % > 400% not ok

Overall, the company is in poor financial position as it has good return but it may be exposed to financial distress if reserves are inadequate.

Sample 2

- RoR: 13.04% > 6.2% ok
- Net Loss Reserves to Equity: 208.7% > 200% not ok
- Overall Net Leverage: 513 % > 400% not ok

Overall the company may be in poor financial condition because the company has good return but there is a risk for the solvency of the company if there are small deviations in outstanding reserves.

EXAMINER'S REPORT

Candidates were expected to demonstrate knowledge of the key financial indicators and how to use them to comment on the financial health of a company.

Part a

Candidates were expected to know how to calculate the key financial indicators and their components.

Common errors included:

- Using the Total Comprehensive Income as the Other Comprehensive Income
- Not using Total Liabilities to calculate the Total Net Liabilities
- Using the Total Assets instead of the Total Invested Assets to calculate the Investment Yield

Part b

Candidates were expected to demonstrate knowledge of the key financial indicators thresholds and their meanings

A common error included:

- Not recalling the required threshold