13. (4 points)

Below is an excerpt from an insurance company's Five-Year Historical Data Exhibit as of December 31, 2016.

		2016	2015	2014
Gross Premiums Written				
1.	Liability Lines	272,000	254,000	265,000
2.	Property Lines	81,000	68,000	56,000
6.	Total	353,000	322,000	321,000
Net Premiums Written				
7.	Liability Lines	139,000	169,000	171,000
8.	Property Lines	43,000	47,000	38,000
12.	Total	183,000	216,000	209,000
Statement of Income				
13.	Net underwriting gain (loss)	(28,000)	(26,000)	(9,000)
14.	Net investment gain (loss)	3,000	3,000	3,000
15.	Total other income	17,000	18,000	18,000
18.	Net income	(7,000)	(5,000)	11,000
Balance Sheet Lines				
19.	Total admitted assets	340,000	344,000	341,000
20.	Premiums and considerations			
	20.1 In course of collection	27,000	27,000	28,000
	20.2 Deferred and not yet due	79,000	71,000	72,000
21.	Total Liabilities	271,000	268,000	260,000
22.	Losses	99,000	100,000	93,000
23.	Loss adjustment expenses	32,000	33,000	32,000
24.	Unearned premiums	38,000	58,000	68,000
25.	Capital paid up	3,000	3,000	3,000
26.	Surplus regards policyholders	69,000	76,000	80,000

Using the figures above, fully describe four potential areas of concern regarding the insurance company's financial health based on the data provided.

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Sample 4
Note – correctly used the results calculated for parts a. and b. even if the answers for parts a. and b. were incorrect.

300.83 (before liq cost)
270.83>251.9 do not liquidate profitable.

The income post tax is greater than the inv cap.

EXAMINER'S REPORT

Candidates were expected to calculate the invested capital used for valuation as well as the present value of future net income and relate it to whether shareholders would prefer liquidation or continuous operation.

Part a

Candidates were expected to calculate the invested capital used for valuation of the company

Common errors included:

- Not including a component: UEPR, Surplus, Loss Reserve, DTA
- Miscalculating UEPR or Loss Reserve. For example, using 80% instead of (1-80%) for the Loss Reserve calculation

Part b

Candidates were expected to calculate the after-tax income then use the cost of capital to get NPV.

Common errors included:

- Not doing the present value of the income or incorrect formula
- Not reducing the income for taxes

Part c

Candidates were expected to compare the profitability of the company with the cost of liquidation, then decide if to continue operations or liquidate.

Common errors included:

- Not comparing the company's profitability to the cost of liquidation.
- Drawing the correct conclusion but using assets and liabilities vs. Invested capital and Present Value of Net Income.

QUESTION: SPRING 2018 EXAM 6U, QUESTION 13	
TOTAL POINT VALUE: 4	**LEARNING OBJECTIVES: C1**
SAMPLE ANSWERS	

- Ratio of NWP/GWP decreasing: the company is buying more reinsurance than it previously did. While this helps to cover the catastrophe exposure, reinsurance poses collectability and credit risks. Is the company using reinsurance as surplus aid to mask underlying issues? If so, should consider re-examining financials excluding the impact of the surplus aid.

- The company is shifting mix of business into the Property line. Property line includes catastrophe risk depending on the geographical profile of the book. One catastrophe event can create a solvency problem and take a large chunk out of surplus.

- The company has a high aggregation of liability premium. Liability premium is longer tailed, making reserve adequacy harder to estimate. The line is also volatile and exposed to possible mass tort events, which can erode surplus.

- The company is growing overall premium. Premium growth has historically been a leading indicator of insolvency, particularly when the company has a negative underwriting profit. The company may be dealing with adverse selection, or have rates too low in an effort to grow.

- Overall income is negative. Investment gain and other income are not enough to offset the negative underwriting income. With income negative, the company will erode surplus unless additional capital is paid in. It may be difficult to attain more capital when investors know the company is losing money.

- Underwriting income has gotten more negative year over year. This may indicate adverse selection, or insufficient rate levels in an effort to grow. Since underwriting income is the core of the insurance business, this can indicate that the company is not set up well for the future and will eventually erode their surplus.

- Investment gain is too conservative, and causes problems when coupled with negative underwriting income and low other income. It is possible that the insurer has too conservative of an investment strategy, based on three years of consistent low returns. The low investment income leads to low profitability which erodes surplus.

- A high proportion of the assets are deferred agent balances. Deferred agent balances are not as liquid as other assets, and may be uncollectible, particularly in the event of a sudden solvency event when liquid assets are needed immediately.

- The surplus is decreasing. Surplus provides the company with a cushion to protect against variability. Particularly with growth in Property (catastrophe risk) lines and the concentration in Liability (mass tort), it is important to have enough surplus to cover future obligations and remain solvent.

- The company has a high premium to surplus ratio. While the IRIS values are not unusual, the company writes predominantly liability lines where you'd prefer to see less leverage due to the volatility. The company is increasing premium while decreasing surplus, which results in a more leveraged company. This puts solvency more at risk in a significant surplus event.

- The company is shrinking Net Written Premium. This may imply that the company is not comfortable in its profitability or ability to remain solvent under their current book. It is possible that the company is ceding away profitable parts of its book, and this profit is needed to boost surplus.

EXAMINER'S REPORT

Candidates were expected to identify four areas of concern for the company's financial health, and explain why each item was a concern for health.

Common Errors Included:

- Failure to link why issues would be a concern for financial health. For example, some candidates correctly identified that liability lines were long-tailed, but did not mention that this could cause reserve adequacy and therefore surplus issues. Another example of this is candidates who identified that the company had negative income, but did not identify that this would eventually lead to the company reducing surplus.

QUESTION: SPRING 2018 EXAM 6U, QUESTION 14	
TOTAL POINT VALUE: 2	LEARNING OBJECTIVES: C4

SAMPLE ANSWERS

Sample 1

2016

EP = 6500 (no unearned since 1/1 policy)

Inv. Inc. = 6500 * 5% = 325

2016 discounted loss reserve = 7000/1.05 = 6666.67

2016 tax basis income = 6500+325-6666.67 = 158.33

2017

No more EP

Inv. Inc. = (6500 + 325) * 5% = 341.25

Incurred Loss = Paid loss + Δ Reserves = 7000 + (0 – 6666.67) = 333.33

2017 tax basis income = 341.25 – 333.33 = 7.92

Sample 2

2016

Earned Premium = Written Premium - .8 Δ UEPR → Since premium for policy is fully earned as of 12/31/16 there is no UEPR = 6500

Tax basis IL = Paid Loss + Δ Discounted Loss Reserves