

EXAM 6 – UNITED STATES, SPRING 2018

19. (2.75 points)

The following information is available for an insurance company as of December 31, 2017 (all figures in millions of dollars):

Statutory policyholders' surplus	89
Statutory gross loss and LAE reserves	44
Statutory ceded loss and LAE reserves	18
Statutory gross unearned premium reserve	55
Statutory ceded unearned premium reserve	19
Provision for reinsurance	1
Deferred acquisition costs	11

a. (0.5 point)

Calculate the company's 2017 surplus on a U.S. GAAP basis.

b. (1.5 points)

Briefly describe the accounting treatment of the following items under each of SAP and U.S. GAAP:

- i. Investment grade bonds held to maturity
- ii. Below investment grade bonds available for sale
- iii. Common stocks held for trading

c. (0.75 point)

Fully describe one reason the treatment of bonds under SAP accounting may be in conflict with the general philosophy of SAP accounting.

**SAMPLE ANSWERS AND EXAMINER'S REPORT**

<b>QUESTION: SPRING 2018 EXAM 6U, QUESTION 19</b>	
<b>TOTAL POINT VALUE: 2.75</b>	<b>LEARNING OBJECTIVE: C3</b>
<b>SAMPLE ANSWERS</b>	
<b>Part a: 0.5 point</b>	
<p><u>Sample 1</u>            GAAP Equity = Statutory Surplus + Provision for Reinsurance + DAC Asset  <math>101 = 89 + 1 + 11</math></p> <p><u>Sample 2</u>            Assuming management's estimate of uncollectible reinsurance equals provision for reinsurance            GAAP Surplus = Statutory Surplus + DAC Asset  <math>100 = 89 + 11</math></p>	
<b>Part b: 1.5 points</b>	
<p><u>Sample 1</u></p> <ol style="list-style-type: none"> <li>1) GAAP: Amortized cost SAP: Amortized cost</li> <li>2) GAAP: min(amortized cost, fair value) SAP: Fair value</li> <li>3) GAAP: Fair value SAP: Fair value</li> </ol> <p><u>Sample 2</u></p> <ol style="list-style-type: none"> <li>(1) SAP: amortized cost GAAP: amortized cost</li> <li>(2) SAP: lower (amortized cost, fair value) GAAP: fair market value</li> <li>(3) SAP: market GAAP: market</li> </ol>	
<b>Part c: 0.75 point</b>	
<p><u>Sample 1</u>            SAP values in a conservative way. (1) SAP values high grade bond @ amortized cost, this might be greater than fair value of the bond when the market expectation/demand for this bond deteriorates without/before a de-grade in bond rating → since rating agency tend to delay downgrade to avoid erroneous downgrades</p> <p><u>Sample 2</u>            SAP has a conservative viewpoint as it is focused on solvency. Recording bonds at amortized cost instead of market value may overstate the value of the bonds if they were purchased in an environment of rising interest rates. Conservative usually means looking at the lowest yet reasonable possible valuation.</p>	

## SAMPLE ANSWERS AND EXAMINER'S REPORT

<b>EXAMINER'S REPORT</b>
<p>Candidates were expected to demonstrate knowledge of the general philosophy of SAP accounting, as well as similarities and differences between SAP and GAAP, including:</p> <ul style="list-style-type: none"><li>• Deferred acquisition costs</li><li>• Provision for reinsurance</li><li>• Gross &amp; ceded loss &amp; LAE reserves</li><li>• Invested assets (bonds and stocks)</li></ul>
<p><b>Part a</b></p> <p>Candidates were expected to identify which of the listed balance sheet items impacted surplus differently between SAP and GAAP and to calculate GAAP equity.</p> <p>Common mistakes included applying the wrong sign to the provision for reinsurance or DAC, and adjusting surplus for loss &amp; LAE reserves or UPR from SAP to GAAP.</p>
<p><b>Part b</b></p> <p>Candidates were expected to identify the balance sheet carrying value, or income statement treatment, of various classifications of bonds and stocks between SAP and GAAP.</p> <p>Common mistakes included identifying an incorrect carrying value for a particular category, or answering "book value" or "asset". Book value is synonymous with carrying value, with methodology that differs by accounting standard, and is what the question is asking the candidate to describe. Bonds and stocks are indeed assets, however the question is asking for the accounting treatment of these assets.</p>
<p><b>Part c</b></p> <p>Candidates were expected to identify the general philosophy of SAP accounting, and explain an example where the accounting treatment of bonds could be considered to differ from this philosophy.</p> <p>A common mistake was to describe a situation where the fair value of a bond is greater than the carrying value, however in such a case, SAP's treatment would be conservative relative to fair value.</p>

<b>QUESTION: SPRING 2018 EXAM 6U, QUESTION 20</b>	
<b>TOTAL POINT VALUE: 3.5</b>	<b>LEARNING OBJECTIVE: D</b>
<b>SAMPLE ANSWERS</b>	
<p><b>Part a:</b> 0.5 point</p> <ul style="list-style-type: none"><li>• The actuary's range of reasonable estimation of loss and LAE reserve</li><li>• Point estimate for loss &amp; LAE reserves</li><li>• Difference between carried reserve and both range points and point estimate</li><li>• AOS also includes if 3 or more years had 1-yr adverse development of 5% or greater of prior year surplus.</li></ul> <p><u>OR</u> Discussion on adverse development witnessed in the past 5 years and the cause of it.</p>	