

13. (2 points)

An insurance company writes multiple lines of business, including both homeowners and private passenger automobile. Given the following information from the company's Insurance Expense Exhibits (IEEs) and Annual Statements (all figures are in thousands of dollars):

All Lines of Business		2011	2012
Policyholders' surplus		8,000	8,400
Net loss and LAE reserves		16,400	16,700
Net unearned premium reserves		4,000	4,100
Net earned premium		8,800	9,100

Homeowners		2011	2012
Net loss and LAE reserves		1,000	1,100
Net unearned premium reserves		1,700	1,800
Net earned premium		3,100	3,200

Private Passenger Auto		2011	2012
Net loss and LAE reserves		2,000	2,000
Net unearned premium reserves		1,100	1,100
Net earned premium		3,200	3,200

a. (1 point)

Calculate the policyholders' surplus that would be allocated to homeowners and to private passenger auto in the IEE.

b. (0.5 point)

Discuss the effectiveness of the method used to allocate surplus by line of business in the IEE.

c. (0.5 point)

Provide one difference in how the IEE and the Exhibit of Premiums and Losses (Statutory Page 14) present data.

SAMPLE ANSWERS AND EXAMINER'S REPORT

QUESTION 13	
TOTAL POINT VALUE: 2	LEARNING OBJECTIVE: C1
SAMPLE/ACCEPTED ANSWERS	
Part a: 1 point	
<p>Mean PHS = $(8000 + 8400) * .5 = 8200$ Intermed calcs: Total = $.5 * (16,400 + 16,700 + 4000 + 4100) + 9100 = 29,700$ Home = $.5 * (1000 + 1100 + 4000 + 4100) + 3200 = 6000$ PPA = $.5 * (2000 + 2000 + 1100 + 1100) + 3200 = 6300$ Allocated surplus: Home = $6000/29700 * 8200 = 1657$ PPA = $6300/29700 * 8200 + 1739$</p>	
Part b: 0.5 point	
<p>The following all received full credit:</p> <p>Effective as a general method but ignores risk inherent to LOBs such as catastrophe exposure to homeowner.</p> <p>Retrospective measure, does not account for futures changes in the book of business. If change in mix of business or significant growth then not effective</p> <p>Not effective, because it doesn't consider the amount of risk inherent in the line of business. For example, a long tailed line would have more risk than a short tail line.</p>	
Part c: 0.5 point	
<p>The following all received full credit:</p> <p>The difference is how they grouped the LOBs</p> <p>IEE is countrywide, while stat page 14 shoes state by state information</p> <p>In IEE expenses are further broken down by acquisition expenses, commission, taxes, and general expenses</p> <p>There is no investment gain allocated to capital and surplus calculation on stat page 14, but it is included in the IEE</p> <p>IEE = Net and direct Page 14 = Direct</p>	
EXAMINER'S REPORT	
<p>Most candidates got A&B correct and C incorrect.</p>	
Part a	

SAMPLE ANSWERS AND EXAMINER'S REPORT

Candidate was expected to calculate the surplus allocation to LOB in the IEE.

Most candidates answered mostly correct.

Common errors:

- Used the average NEP rather than the 2012 NEP
- Allocated the full mean PHS to both lines rather than the % needed
- Calculated the amount needed for a single line only

Part b

Candidate was expected to know the problems with the IEE surplus calculation method

Most candidates answered mostly correct.

We accepted a broad range of answers. Weaker responses included the following:

- "Does not take into account the duration of the line of business"
- "Not all surplus is required to support the lines"
- "Allocating surplus is artificial in general"

Part c

Candidate was expected to know about the IEE and the Exhibit of Premium and Losses (stat page 14) and major differences.

This question stumped many candidates

Common errors:

- Confusing page 14 with Sched p
 - o CY vs AY
 - o How many years are shown in the exhibit
 - o LOB vs Aggregate view
- Non answers like saying the IEE is in thousands while page 14 is in full dollars
- Confusion about direct vs gross vs net
- Confusion about LOB grouping
- Did not structure response as a comparison