

19. (1.5 points)

An actuary has priced a large dollar deductible policy using the information given below and has indicated a premium of \$273,500. Assume no collateral is held on behalf of the insured.

Standard Premium	1,000,000
Ground-up Expected Loss and ALAE Ratio	65%
Excess Ratio (% of Total Loss and ALAE)	10%
ULAE Load (% of Total Loss and ALAE)	8%
General Expenses (% of Standard Premium)	5%
Credit Risk Load (% of Standard Premium)	X%
Acquisition Expenses (% of Net Premium)	5%
Taxes (% of Net Premium)	7%
Profit and Contingencies (% of Net Premium)	5%

a. (1 point)

Calculate X, the implied Credit Risk Load in the actuary's indicated premium.

b. (0.5 points)

Explain why profit loads can be higher for large dollar deductible policies compared to excess policies.

**QUESTION 19****Total Point Value: 1.50****Learning Objective: B7B, B7C****Sample Answers****Part a: 1.00 points**

Sample 1

$$\text{Premium} = \frac{[(EL) \times (XL + ULAE) + (SP) \times (GO + CR)]}{1 - A - T - P}$$

$$273,500 = \frac{(1,000,000)(.65)(.1 + .08) + (1,000,000)(.05 + X)}{1 - .05 - .07 - .05}$$

$$X = .06 = 6\%$$

**Part b: 0.50 points**

Sample 1

In an LDD policy, the insurer services the claim from the ground up. As a result, LDD insurers compete with each other both on price and on the quality of their service contracts. In an XS policy the losses below the deductible are often serviced by a TPA or the insured themselves, as a result the XS insurers compete with each other primarily on price. This drives down the profit loads which can even sometimes be negative.

Sample 2

For LDD, insurer services claims in deductible layer, while on an excess policy, service is handled by a TPA. Because LDD insurers compete on both service and profit, profit can be higher than for XS insurers which compete only on price.

Sample 3

LDD policies have a shorter average payout period since they pay from the 1<sup>st</sup> dollar. An excess policy doesn't pay until the layer is reached, thus they have a longer period to collect investment income, resulting in a smaller profit load when targeting the same return on surplus.

## EXAM 8 FALL 2015 SAMPLE ANSWERS AND EXAMINER'S REPORT

### EXAMINERS REPORT

#### Part a:

This was a straight forward calculation problem. Most candidates received full credit. The most common point deductions were for simple calculation errors.

#### Part b:

The key word in this part was to **explain**. Common deductions were for responses that specified that large dollar deductible plans (LDD) have a higher profit margin compared to excess plans, but did not give further details. Common answers were simply stating that LDD were more service based or that excess have a longer tail, but not going into the detail of why that is. We were looking for the differentiation that LDD insurers service claims from ground up where as excess insurers don't get involved until the deductible has been breached.