

## EXAM 8 – FALL 2011

18. (3 points)

The following information relates to a large dollar deductible (LDD) workers compensation policy with a per occurrence deductible of \$250,000 and an aggregate deductible of \$2,000,000:

Standard premium	\$1,000,000
Expected loss and ALAE ratio (% of standard premium)	65.0%
Insurance charge at \$2,000,000 (% of loss and ALAE)	8.0%
Excess loss pure premium factor at \$250,000 (% of loss and ALAE)	3.0%
Loss based assessment (% of loss and ALAE)	5.0%
ULAE load (% of loss and ALAE)	7.0%
General expenses (% of standard premium)	6.5%
Credit risk (% of standard premium)	4.0%
Acquisition expense (% of net LDD premium)	2.0%
Taxes (% of net LDD premium)	4.5%
Profit (% of net LDD premium)	2.5%

a. (1.5 points)

Calculate the LDD premium for this policy.

b. (1.5 points)

Identify two primary differences between LDD and excess insurance and briefly describe how each may directly affect the cost.

## Question 18

### Sample 1

$$\begin{aligned} \text{a. LDD Premium} &= \frac{EL(XL + ULAE + LBA) + SP(GO + CR)}{1 - A - T - P} \\ &= \frac{1m(.65)[.11 + .07 + .05] + 1m[.065 + .04]}{1 - .02 - .045 - .025} \\ &= \frac{149,500 + 105,000}{.91} \\ &= 279,670.33 \end{aligned}$$

$$\begin{aligned} XL &= InsCR + XLPP \\ &= .08 + .03 = .11 \end{aligned}$$

- b. 1. Credit risk – LDD insurers have the risk that the insured might not reimburse them for deductible losses, and so this needs to be charged for in the premium calculation. Excess insurance does not have credit risk because they reimburse the insured for losses above the retention, so there is no credit risk charge for excess insurance.

ULAE – LDD insurers do all the servicing on all losses, so the ULAE cost is calculated on the entire expected loss. Since excess insurers only step in above the retention, ULAE is only charged on excess losses.

### Sample 2

$$\begin{aligned} \text{a. Prem} &= \frac{650,000 \bullet (0.08 + 0.03 + 0.05 + 0.07) + 1,000,000(0.065 + 0.04)}{1 - 0.045 - 0.02 - 0.025} \\ &= 279,670 \end{aligned}$$

- b. 1. Taxes & Assessment: LDD is WC, excess is not. Excess pays no assessments & pays G.L. tax rates making it cheaper.  
2. Competition & Profit load: Excess competes on price alone, & so profit loads are competitive & low, (LDD also offer claim handling services). Lowers excess price.