Daily Exercise Solution

Given information:

Benefits:

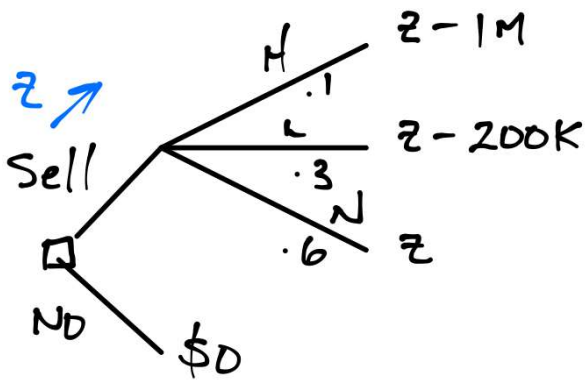
Policy A: $B_A = \$50{,}000$

Policy B: $B_B = \$200{,}000$

Policy B risks:

State	Probability	Damage
H	10%	$1,000,000
L	30%	$200,000
N	60%	$0

Graphing the insurance company's policy decision:



Premium for fair insurance for B:

$$Z = 0.1 * (\$1{,}000{,}000) + 0.3 * (\$200{,}000) + 0.6 * (\$0)$$

$$Z = \$160{,}000$$

Overall payoffs for each policy:

$$\Delta SS_A = B_A = \$50{,}000$$

$$\Delta SS_B = B_B - Z = \$200{,}000 - \$160{,}000 = \$40{,}000$$

Policy A is better