Daily Exercise Solution

Given information:

Benefits:
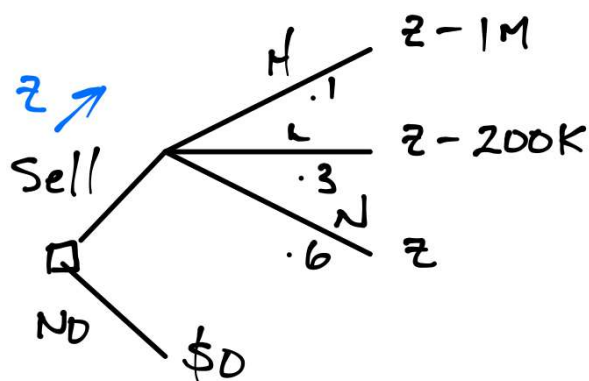
Policy A: $B_A = \$50{,}000$
Policy B: $B_B = \$200{,}000$

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