

	S1	S2	S3	
C1 (Renovate) (in \$1000)	-120	-160	100	160
C2 (do nothing) (in \$1000)	0	-120	30	120
C3 (sell) (in \$1000)	-230	0	-150	230

170 50 130

(a)

Criterion of pessimism (minimax) C1

(b)

optimism (maximax) C2

(c)

regret C2

(d)

Hurwicz

$$C_{opt} = \max(p_0) + (1-p_0) \min(p_0)$$

$$C_1: p(130) + (1-p)(-110) = 240p - 110$$

$$C_2: p(170) + (1-p)(-70) = 240p - 70$$

$$C_3: p(50) + (1-p)(-60) = 110p - 60$$

$$240p - 70 = 110p - 60 \Rightarrow 130p = 10 \Rightarrow p = \frac{1}{13}$$

when $1 \geq p > \frac{1}{13}$ C2

$0 \leq p < \frac{1}{13}$ C3

$p = \frac{1}{13}$ C2 or C3