

Ex. 8.6) A company is considering buying an equipment with initial cost \$5000 and revenues over the next three years that depend on the economy.

Condition	Receding	Economy stable	Expanding
Probability	0.4	0.4	0.2
	Cash Flows		
Year			
0	-5	-5	-5
1	2.5	2.5	2
2	2	2.5	3
3	1	2.5	3.5

should the equipment be purchased?

Solution

$$PW_R = -5 + 2.5(P/F, 15\%, 1) + 2(P/F, 15\%, 2) + 1(P/F, 15\%, 3) = \$656 K$$

$$PW_S = -5 + 2.5(P/A, 15\%, 2) = \$708 K$$

$$PW_E = -5 + 2(P/F, 15\%, 1) + 3(P/F, 15\%, 2) + 3.5(P/F, 15\%, 3) = \$1309 K$$

$$ECPW = 0.4 \times 656 + 0.4 \times 708 + 0.2 \times 1309 = \$0.283 K > 0$$

purchase equipment