

Option 1:  $W_1 = 50$  with Prob = 1  $E(W_1) = 50$ 

Option 2:  $W_2 = 0$  with Prob = 0.5  $E(W_2) = 0.5 \times 0 + 0.5 \times 100 = 50$ 100 with Prob = 0.5

Expected Utility of Wealth =  $E[U(W)] = \Sigma Prob \times U(W)$ 

 $E[U(W_1)] = U(50)$ 

 $E[U(W_2)] = 0.5 \times U(0) + 0.5 \times U(100)$