In-Class Activity: Liquidation Race — SOLUTIONS

Digital Finance – BSc Course | Prof. Dr. Joerg Osterrieder

DeFi Lending | 20 min | Groups of 4

Scenario: Your team manages a DeFi lending position. **Collateral:** 10 ETH at \$3,000 = \$30,000. **Borrowed:** \$20,000 USDC. **Ratio:** 150 %. **Liquidation at:** 120 % (ETH = \$2,400).

Rules: Each round the instructor announces a price change. You have 60 seconds to decide. “Add collateral” = deposit 1 ETH. “Repay debt” = repay \$2,000 USDC. “Nothing” = accept risk. Below 120 % = **LIQUIDATED**.

Rd	Price Drop	New Price	Collateral Value	Ratio	Your Action	Result
0	—	\$3,000	\$30,000	150 %	(start)	OK
1	−8 %					
2	−5 %					
3	−12 %					
4	−3 %					
5	−15 %					
6	+7 %					
7	−10 %					
8	−6 %					

Debrief: Did your team survive? What was the optimal strategy? What does this tell you about DeFi risk?

Answer Key **Cumulative prices:** R1 \$2,760, R2 \$2,622, R3 \$2,307, R4 \$2,238, R5 \$1,902, R6 \$2,035, R7 \$1,832, R8 \$1,722. **Do nothing:** R1 138%, R2 131%, R3 115% **LIQUIDATED**. **Best strategy** (repay \$4K R1, add 1 ETH R2): R1 172.5%, R2 180.3%, R3 158.6%, R4 153.9%, R5 130.8%, R6 139.9%, R7 126.0%, R8 118.4% **LIQUIDATED**. Even optimal play dies. DeFi = **HIGH RISK**.