

Coordination Game:

Hunting Game:

2 Hunters H_1
 H_2

— Deer (D)
— Rabbit (R)

$H_1 \backslash H_2$	D	R
D	2, 2	0, 1
R	1, 0	1, 1

2 Nash Equilibria

Hunting Game

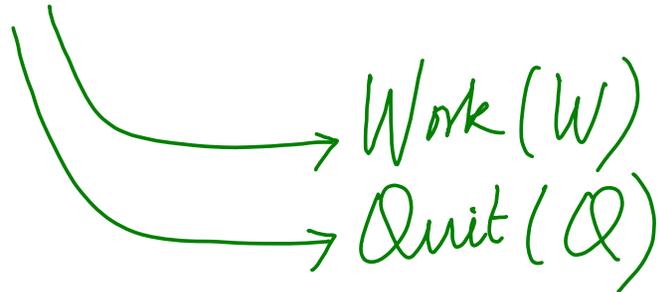
- 2 Nash Equilibria
- (D, D) — Pareto optimal
- (R, R) — Not Pareto optimal

$H_1 \backslash H_2$	D	R
D	(2, 2)	0, 1
R	1, 0	(1, 1)

In the coordination game, there is NO dominant strategy.

This is also known as a coordination game because it requires coordination to achieve the Pareto optimal equilibrium.

Start up Game:



Coordination Game.

$E_1 \backslash E_2$	W	Q
W	2, 2	0, 1
Q	1, 0	1, 1

2 NE (W,W) (Q,Q)

Investment Game:

N player

→ large number

invest $\{0, 10\}$

if invest
payoff $\begin{cases} 5 & \text{if } 90\% \text{ or} \\ & \text{more invest} \\ -10 & \text{if less than} \\ & 90\% \text{ invest} \end{cases}$

if invest 0, or NOT invest
payoff = 0.

2 Nash Equilibria of
the investment game.

- Everyone invests
- No one invests.

$N = 100$.

Every one invests.

→ No incentive to
switch; since switching
reduces pay off from 5 to 0.

No one invests

— If no one is investing,
best response is NOT to
invest.

Similar to coordination
Game, since 2 NE

— all invest — Pareto
optimal

— None Invest