Chain-Store Paradox

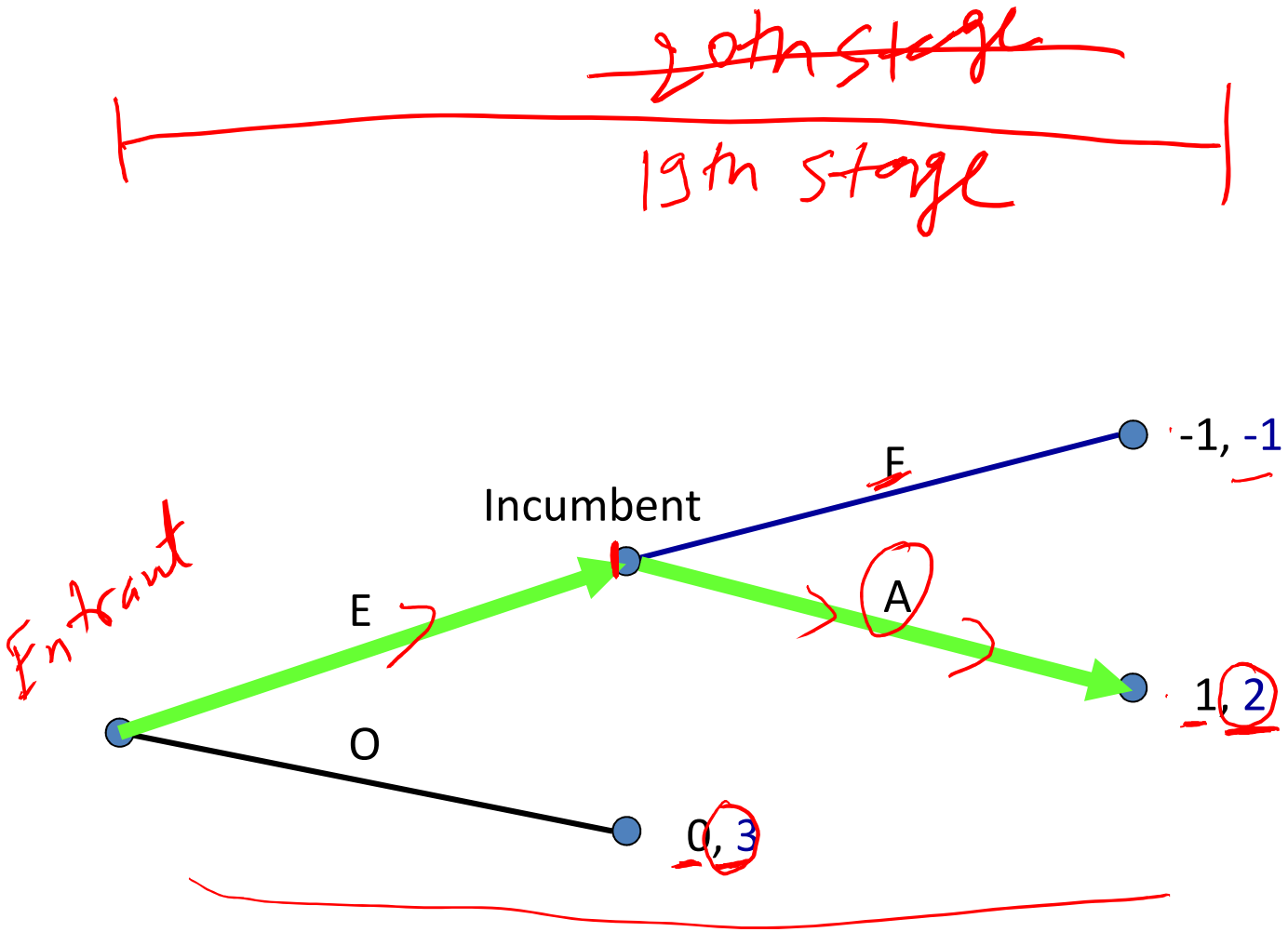
Dr. Vimal Kumar, Assistant Professor of Economics

Indian Institute of Technology Kanpur, vimalk@gmail.com

The Chain Store Paradox

- Selten (1978) proposed a finitely repeated version of the Entry Game in which the incumbent is a monopolist with a chain of stores in 20 different locations.
- At each location, a single entrant (challenger) firm, indexed by f=1,2,...20, decide to compete with the monopolist.
- The challengers make their decisions sequentially.
- Challenger 1 decides whether to enter or not at location 1, chain store decides to fight or accommodate, then challenger 2 decides to enter or not at location 2, the chain store, then decides to accommodate or fight……

Backward Induction



The Chain Store Paradox

- This game is very similar to finitely repeated game.
- Outcome using Backward Induction

What about Deterrence?

- The above solution not seem empirically plausible. Why?
- Under the proposed equilibrium, the incumbent earns: 2x20 =40. But can he do better? Say by fighting first 15, accommodating the last 5.
- The role of deterrence.
- If this strategy is common knowledge then the first 15 stay out and earn 0 each, while the incumbent earns 3x15+2x5=55>40.
- Why this paraodx?

The Role of Reputation