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Optimal policy and equilibrium



The optimal policy of a strategic player

- So far we have considered that players decide the bid that maximizes their profit.
- In reality, strategic players use policies when they need to trade into the market.



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The optimal policy of a strategic player

- Consider that the policy is linear in parameters.
- Consider that each strategic player has the same policy parameters.
- Each strategic player learns the best policy given different inputs, and eventually the policy might converge to an equilibrium.



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Exercise

- Consider a linear policy in parameters for each strategic player, be creative.
- What does the policy represent?
- Apply it to the Best Response Algorithm.
- Is there any convergence? How can the policies in equilibrium be interpreted? What difference is there between the equilibrium policies of the different players?



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