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| Experimental Economics |

Individual Choice Experiments

MobLab Game: Bomb Risk Game

Key Teaching Points:

* Individuals differ in their risk tolerance. Risk preferences displayed in one environment might predict behavior in another environment.
* Expected payoff is maximized by opening 50 boxes. Opening fewer boxes is consistent with risk aversion, while opening more is consistent with risk-preferring behavior.

MobLab Game: Monty Hall

Key Teaching Points:

* Through repeated iterations of the Monty Hall game, students learn the intuition behind Bayes' Rule.

See our pre-built surveys that include Holt Laury (2000) risk elicitation, Allais Paradox, and other pre-built survey-based experiments on heuristics and biases. Also, use our Blank Survey to generate your own survey-based experiments.

Market Experiments

MobLab Game: Pit Market

Key Teaching Points:

* Approximates the trading institution used in Chamberlin (1948). In a one shot pit market, price and quantity did not converge to the equilibrium prediction.

MobLab Game: Double Auction

Key Teaching Points:

* Approximates the trading institution of Smith (1962). Contrary to Chamberlin (1948), Smith finds that with the double auction institution, and multiple rounds, price and quantity converge to the equilibrium prediction.

Explore additional trading institutions and their effects on market outcomes. MobLab has Interest Rate & Inflation (Call Market), and Asset Market as well.

Auction Experiments

MobLab Game: Private Value Sealed Bid Auction

Key Teaching Points:

* Use first and second price auction rules to highlight differences in equilibrium bid strategies.
* Test the theory of revenue equivalence across pricing rules.

MobLab Game: Common Value Sealed Bid Auction

Key Teaching Points:

* Show differences between private and common value auctions as well as how bidders are susceptible to the winner's curse in common value auctions.

There other auction formats to explore such as English, Dutch, and All Pay auctions. In the DisplayAd Auction, students can act as auctioneers and choose reservation price and first v. second price formats to see their effect on revenue.

Games and Strategic Behavior

MobLab Game: Keynesian Beauty Contest

Key Teaching Points:

* Strategic thought requires making conjectures about the reasoning and choices of others whose actions affect the payoffs of my choices.
* Test the solution concept of iterated dominance and lead into a discussion of bounded rationality.

MobLab Game: Instructor Specified Matrix

Key Teaching Points:

* Create your own normal form game.
* Test solution different concepts such as Nash Equilibrium and Mixed Strategy Nash Equilibrium.
* Explore the effects of communication, one-shot v. multi-round play, and indefinite repetition on behavior in these games.

MobLab has a number of pre-built games such as prisoner's dilemma, battle of the sexes, minimum effort, stag hunt, rock-paper-scissors, and more.

Bargaining Experiments

MobLab Game: Alternating offer bargaining

Key Teaching Points:

* This game may be used as an example of backward induction and used to motivate sub-game perfect Nash Equilibria in indefinitely repeated games.

MobLab Game: Ultimatum

Key Teaching Points:

* Students are not often good at backward induction. The ultimatum game was designed as a simplification to test backward induction.
* Demonstrates how social norms such as fairness and altruism may result in behaviors that deviate from game theoretic predictions.

Altruism, Fairness, and Reciprocity

MobLab Game: Dictator Game

Key Teaching Points:

* Simplification of the ultimatum game. The game helps distinguish between strategic and non-strategic altruism.

MobLab Game: Trust Game

Key Teaching Points:

* Explore and test backward induction and subgame perfect Nash Equilibrium.
* Preferences for trustworthiness (positive reciprocity) or fairness may lead a Responder to return positive amounts. Anticipating this, and perhaps also motivated by altruism or fairness, Investors may choose to invest.

MobLab Game: Public Good: Linear

Key Teaching Points:

* Show how individual profit maximization leads to the free-rider problem, but, that individuals do not begin playing their dominant strategy.
* Show the effects of group size and MPCR ("rate of return") on cooperation in a public goods experiment.
* Show the effects of communication and indefinite repetition on cooperation.

MobLab Game: Public Good: Punishment and Reward

Key Teaching Points:

* Show the strength of norms for fairness. In this game students can incur a cost to punish free-riders or reward contributors.
* Show how incurring these costs results in preserving norms for cooperation.

Explore the Ultimatum: Strategy Method game and the Threshold Level Public Goods game as well.

Industrial Organization

MobLab Game: Cournot Competition

Key Teaching Points:

* Test the Cournot-Nash Equilibrium prediction.
* Use communication and indefinite repetition to facilitate collusive arrangements.

MobLab Game: Bertrand Competition

Key Teaching Points:

* Test the number of firms needed to achieve the P=MC prediction.
* Explore the effects of capacity constraints and price matching on market outcomes.

MobLab has a number of other Industrial Organization games such as Stackelberg Competition and Double Marginalization (with different contract solutions).

Political Science

MobLab Game: Voter Turnout (Two Candidate)

Key Teaching Points:

* Explore the paradox of voting with students.
* Explore comparative statics such as the size effect, competition effect, and underdog effect.

MobLab Game: Two Candidate Election

Key Teaching Points:

* Familiarize students with the spatial model of voting.
* In the standard one-dimensional spatial voting model with two candidates, in equilibrium both candidates choose the policy most preferred by the median voter.

Other political science related games include Multilateral Bargaining, Commons Fishery, Voter Turnout (Single Candidate).