

ECON 103: Supply and Demand

Game Title: "Market Equilibrium: Differential Costs and Endowments"

Game Overview:

In this game, students will take on the role of buyers and sellers in a market for a particular product. The goal of the game is to find the equilibrium price and quantity in the market by adjusting their buying and selling behavior, taking into account their costs and available money.

Game Rules:

1. Each round of the game will consist of two phases: the buying phase and the selling phase.
2. The game begins with the host setting an initial price. During the buying phase, the buyers will indicate how much of the product they are willing to buy at the current price. They will do this by holding up a card with their unique identifier and the quantity they want to buy (e.g. "Buyer 5 - 3 units"). Buyers can only buy whole units of the product and must have enough money to pay for the product at the current price.
3. During the selling phase, the sellers will indicate how much of the product they are willing to sell at the current price. They will do this by holding up a card with their unique identifier and the quantity they want to sell (e.g. "Seller 12 - 5 units"). Sellers can only sell whole units of the product and must have enough money to cover their production or acquisition costs at the current price.
4. After both phases are complete, calculate the total demand and total supply at the current price. If demand is greater than supply, the price should increase for the next round. If supply is greater than demand, the price should decrease for the next round. If supply and demand are equal, the price should stay the same for the next round.
5. Repeat the buying and selling phases for multiple rounds, adjusting the price after each round based on the results of the previous round. The game ends when the total demand and total supply are equal at a particular price.

Game Notes:

1. Buyers and sellers are randomly assigned to the game using a unique ID, and **each buyer is given a different amount of money, while all sellers face the same cost.**
2. To determine the order of purchase in the buying and selling phase, we use a first-come, first-served approach. Those who fill the game sheet earlier have opportunities to buy/ sell.
3. In this game, there are two **winning criteria**. Buyers who have the lowest average price per unit are considered winners, while sellers who make the highest profits per unit are also winners.

Game Card:

Round	Buyer ID	Quantity Bought	Money Paid	Seller ID	Quantity Sold	Money Received
-------	----------	-----------------	------------	-----------	---------------	----------------

1	1	3	\$30	21	3	\$30
1	1	2	\$20	32	2	\$20
...
...

This game card is available on the google sheet.

<https://docs.google.com/spreadsheets/d/1Ga2M3Sl8k-3mgqIF0rLnlpGEp6A3aigRqjcxNa5aiY/edit?usp=sharing>