

Experimenting with Taxes and Subsidies in a Classic Pit Market



Journal of Economics Teaching
Symposium on Economics Teaching
8/1/25: 10:30

Presentors

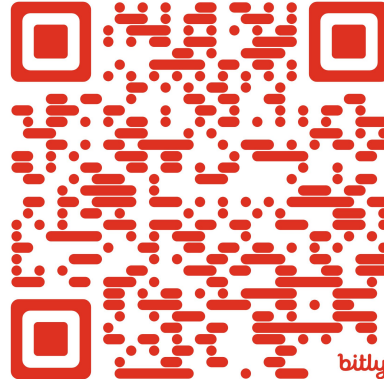


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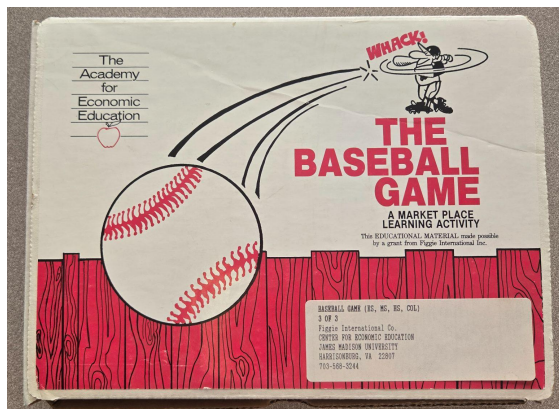
Building on Legends

Classroom Games

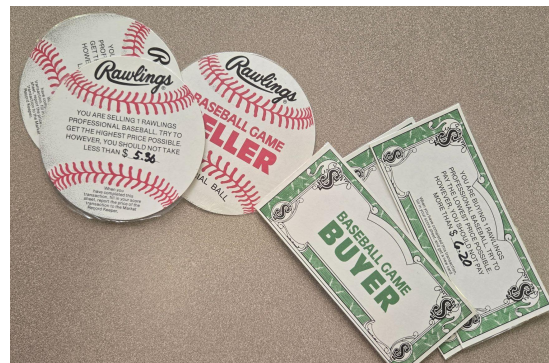
Trading in a Pit Market

Charles A. Holt

Journal of Economic
Perspectives-Vol. 10, Number 1
(1996) pgs 193-203



Baseball Game
Gerald Swanson
1978 (?)



Should we Subsidize Energy?

Energy Economics Lesson 6



This is part of the Energy Economics curriculum...BUT...may not be published...or maybe it will...

Market simulation introduction

Today we are going to participate in a simulated market for solar panels.

Half of you will be consumers looking to buy solar panels. You will remain a buyer throughout this simulation.

Half of you will be producers looking to sell solar panels. You will remain a seller throughout this simulation.

Making transactions

We will have three rounds to buy and sell solar panels.

In each round, buyers and sellers will negotiate with each other to determine the price of a solar panel.

Once you agree upon a price, see your teacher to record your agreed upon price....

Making transactions

...Get a new Buy Card and Sell Card.

Each of you should try to conduct as many transactions as possible in each round.

You DO NOT need to buy or sell to the same person. In fact, you should talk to as many different classmates as possible each round.

Directions for buyers

Each buyer will start the first round with a “Buy Card” and a “Buyer Sales Record Sheet.”

Your Buy Card will say, **“You are authorized to BUY one solar panel, paying as little as possible. If you pay more than _____, you will lose money.”**

You will need to record the price listed on your Buy Card AND the price you agree to pay for a solar panel.

The goal for buyers and sellers is to make as much profit as possible.

Directions for sellers

Each seller will start the first round with a “Sell Card” and a “Seller Sales Record Sheet.”

Your Buy Card will say, **“You are authorized to SELL one solar panel, charging as much as possible. If you sell for less than _____, you will lose money.”**

You will need to record the price listed on your Buy Card AND the price you agree to pay for a solar panel

At the end of each round...

Remember, buyers and sellers will both need to record the prices listed on their cards AND the price they agreed to sell/buy the solar panel after each transaction.

At the end of each round, buyers and sellers BOTH need to tally up if they made a gain/profit or loss for that round in their Sales Record Sheet.

Time to trade!

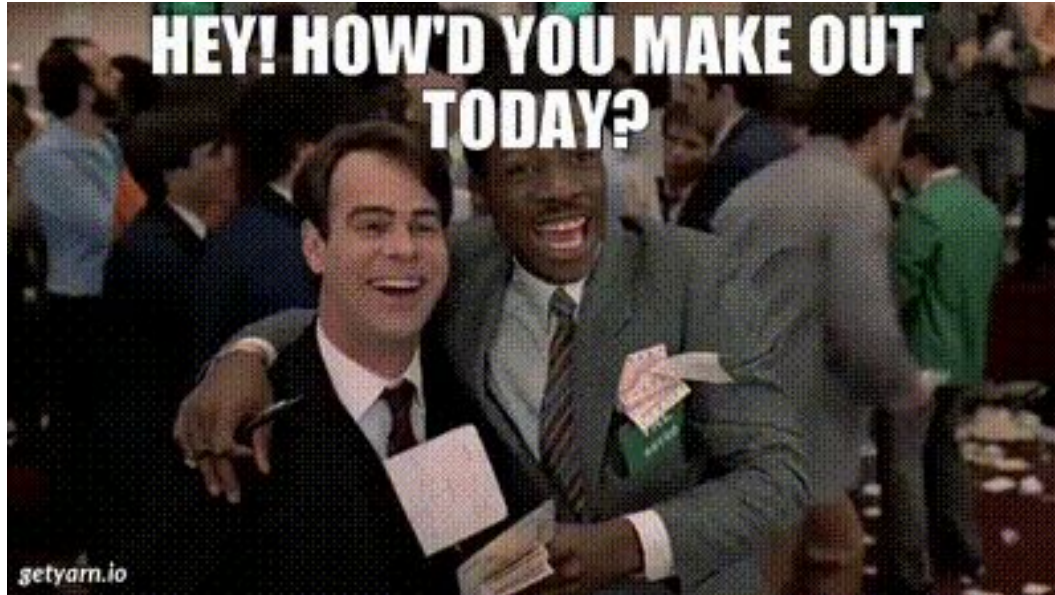
You will have FIVE MINUTES to trade in round 1.

Try to make AS MANY transactions as possible.

YOU MAY NEED TO TAKE A LOSS IF YOU GET A BAD CARD. Get rid of a bad card quickly and recover by making more transactions with other cards.



Take a minute to record your transactions while we explain the rules for round 2



Update for round 2

The government wants to promote the use of solar panels.

To do this, they are going to give each buyer a \$100 tax credit for EACH solar panel buyers purchase in round 2.

This \$100 represents a government **subsidy**. A subsidy is a transfer of money from the government to either businesses or consumers.

Buyers should record this \$100 tax credit in the gain/loss column of their Sales Record Sheet.

Time to trade!

You will have FIVE MINUTES to trade in round 2.

YOU MAY NEED TO TAKE A LOSS IF YOU GET A BAD CARD. Get rid of a bad card quickly and recover by making more transactions with other cards.

REMEMBER, buyers get a \$100 tax credit in this round.



Take a minute to record your transactions while we explain the rules for round 2



Update for round 3

The government could also provide a subsidy to solar panels to increase the supply of them because they think solar panels are a positive externality. The government wants to encourage sellers to sell more solar panels.

To do so, they are going to give producers a \$100 tax credit for each solar panel they sell.

Update for round 3

Sellers can EITHER keep their tax credit as profit. IF they do this, they should record their \$100 in the profit column of their Sales Record Sheet.

OR they can lower the price they charge buyers and try to sell more solar panels. IF they do this, they should reflect the tax credit in the lowered price recorded in their Sales Record Sheet.

Time to trade!

You will have FIVE MINUTES to trade in round 3.

Buyers still get a \$100 tax credit in this round.

Sellers get a \$100 tax credit in this round. They can either pass that credit along to the buyers OR sellers can keep the \$100 and record it as profit.



Extensions/adaptations

Potential discussion regarding the efficacy of subsidies (lags, rent seeking, etc.) (Tesla article)

Revisit with international trade (tariffs, subsidies for domestic producers, etc.)

Labor with minimum wage laws

Questions/comments/IMPROVEMENTS?

