

The Trade Game

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Abstract

This paper describes a simple classroom exercise that illustrates the concept of gains from trade, and is appropriate for students from elementary school age through college. The exercise can be expanded to show how the gains from trade are limited by the extent of the market.

JEL Code: A2

Keywords: Trade; Economic education; Trade barriers

The Trade Game (TG) is a classroom exercise that illustrates the concept of gains from trade. While most students have little difficulty with the notion that trade is mutually beneficial in some vague sense, the concrete notion that trade “creates value” is too abstract for many to grasp. This exercise allows students to see and measure the creation of value through trade.¹

Step 1: Collect items

The instructor needs to acquire a wide array of small inexpensive trinkets that will be distributed to the students at the beginning of the exercise. Purchasing items at a dollar store is usually the most cost-effective approach. Figure 1 lists some of the items that we have used. Ideally, the collection will include some items that are more likely to be desired by males and others more likely to be liked by females. It is also acceptable if some items are likely to be superior to other items in the eyes of most everyone.

¹ Joe Calhoun of Florida State University used a variant of this exercise in his winning performance in the 2008 Economic Communicators Contest sponsored by the Association of Private Enterprise Education and the Market-Based Management Institute.

Step 2: Distribute the items to the class

Randomly distribute one item to each student as they are seated at their desks. It sometimes works better to “cheat” a little by intentionally giving lip gloss to male students and baseball cards to female students, so that some students are likely to be unhappy with their initial allocation. Instruct them that the item is theirs to keep but for now they should not open its packaging, eat it, or anything like that.

Playing cards	Cosmetics (lip gloss, lipstick, nail polish)	Hair clips and bows
Food (chips, candy, gum)	Trading cards	Small toys (jacks, balls, squirt guns, toy soldiers)
Clothing items (socks, caps)	Sunglasses	Seasonal decorations (Halloween, etc.)
Pens, pencils, notepads, etc.	Key chains	Lip balm
Stickers	Trial size toothpaste, lotions, shampoos, etc.	Coupons good for certain classroom privileges

Figure 1. Items that can be used in the Trade Game.

Step 3: Rate the items

Using a small scrap of paper or 3x5 index card, have each student rate on a scale of 1-10 (or 1-5) the item they have been given, with a 10 meaning they “really, really like it” and a 1 meaning they “really, really hate it.” Collect the ratings and average the results. If the exercise is being done in an elementary school setting, it can be a good learning exercise to have the students collect the ratings and calculate the average. If time is particularly scarce, this process can be done more quickly by having the students raise their hands for each rating with the instructor keeping track of the counts. Begin a bar chart on the board that reports this average (e.g., 4.5) similar to Figure 2. (Some may find it simpler simply to sum the ratings among the students.)

Step 4: Limited Trade

Next, instruct the students that they can trade their item with any one of their immediate neighbors (e.g., the student in front of or behind them in the row) but not with anyone else in the room. Give them a few minutes to do this. Repeat Step 3 and add another bar to your chart indicating the average of the class (e.g., 6.3; see Figure 3).

In our experience, the average will always increase. This is a good opportunity to call on individual students who made a trade to ask them why they made the trade. Interestingly, even students who did

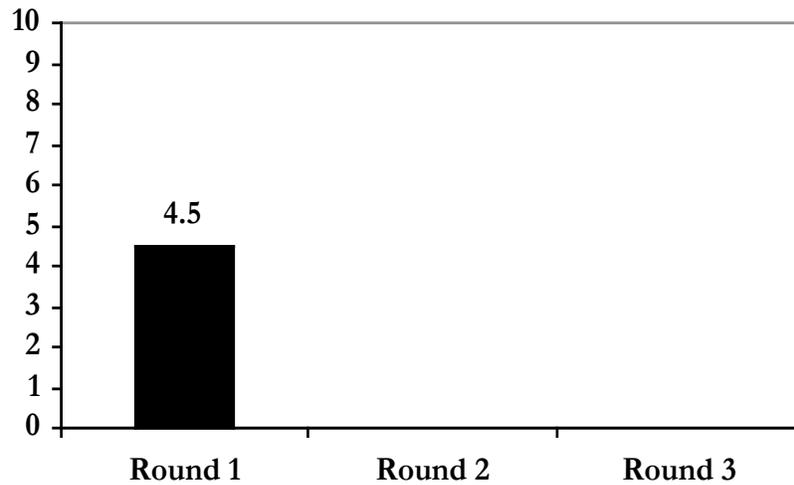


Figure 2. After Round 1 of the Trade Game, the average response from the students is often around 4.5.

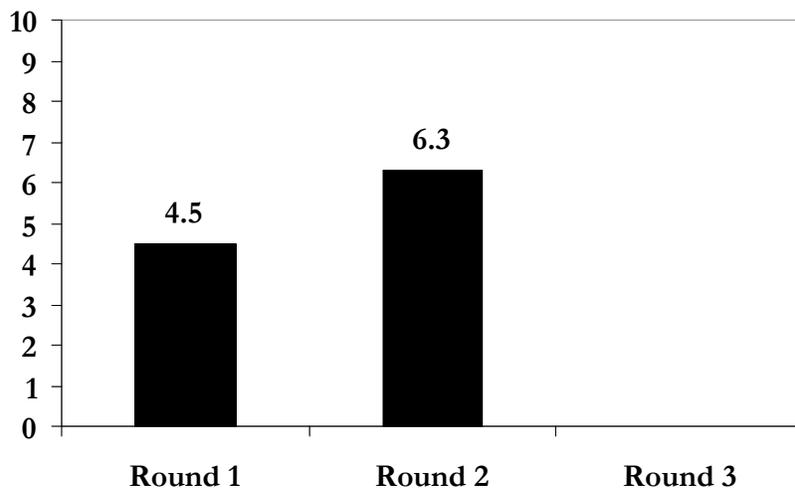


Figure 3. After Round 2 of the Trade Game, the average response from the students is often around 6.3.

not trade often increase their rating on the item they have after having had the opportunity to trade it away.

Step 5: Expanded Trade

As Adam Smith noted, the gains from trade are limited by the extent of the market. The final round allows students to trade their items with anyone in the class. (Warning to elementary school teachers: This can get loud!) As in the previous round, the rating will almost certainly increase (e.g., 7.9; see Figure 4). In more than a dozen trials of this exercise, this pattern of results has never failed to appear.

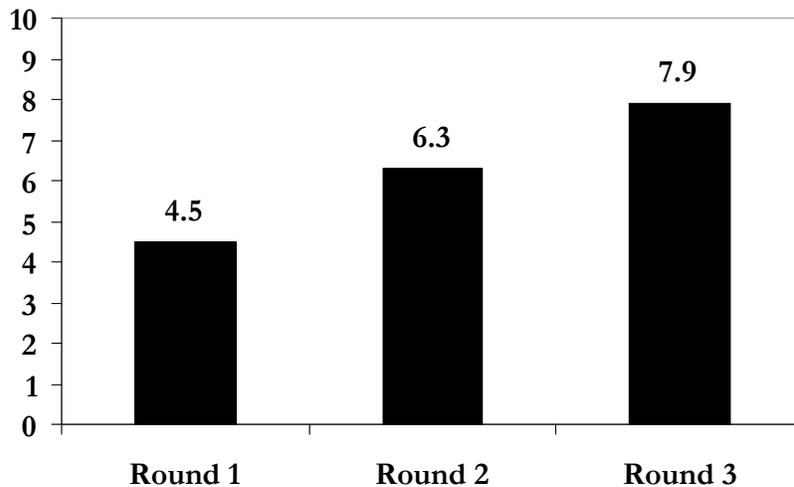


Figure 4. After Round 3 of the Trade Game, the average response from the students is often around 7.9.

This exercise helps students see that gains from trade are real and can be measured. In addition, the TG shows that these gains will be larger if we are allowed to trade with a wider set of people. This is an obvious point at which to begin a more formal discussion about international trade.

As a final question, you can ask the students how they would feel if we forcibly took the items they ended up with and returned them to their original owners. You will be greeted with howls and complaints. (Do not attempt to do this in reality lest you risk a riot!) Yet, this is exactly what tariffs and quotas do – they force us to keep

our own stuff and not trade it to others, thus losing the opportunity to increase our happiness.

Optional Extra Discussion on Global Trade

With younger students we have sometimes taken the time after the TG to ask them to list the number of countries responsible for manufacturing the shirts currently worn by the students in the room. In addition to being a worthwhile mini-lesson on world geography, this discussion drives home the point that we trade with people all over the world. We then ask: Why do these people in Malaysia, Honduras, Congo, etc., make shirts for Americans? Isn't it nice of them to make shirts for us? Of course, the students will know that they make shirts for us because we pay them for the shirts. But after the TG, we now know that these Malaysians do so only because we offer them something in exchange of even more value.

Conclusion

The TG is a simple exercise that illustrates how trade creates value by moving goods from people who value them less to people who value them more. The game can also be used to talk about the importance of market size to the gains from trade and thus to segue to a discussion of international trade and trade restrictions.

An anonymous referee to an earlier version of this paper pointed out that a somewhat more complicated variant of this game is described on the Foundation for Teaching Economics (FTE) website (1999). In the FTE version, the students receive the items in lettered brown bags. In the initial round of ranking, they don't show each other what they have. Next, students rate their item after seeing each other's items. Later, trade takes place. We find our version to be simpler and easier to implement than the FTE version. In addition, we think relatively more emphasis should be placed on the idea that the gains from trade are limited by the extent of the market, and that trade restrictions destroy value.

One limitation of the TG is that it relies on barter exchange alone. Consequently, the important concepts of comparative advantage and specialization in production cannot be illustrated with the TG. Thus, contrary to the claims of the FTE website, the TG does not show that "trade creates wealth." It does show that "trade creates value," but not wealth in the physical sense.

References

- Foundation for Teaching Economics. 1999. "The Magic of Markets: How Trade Creates Wealth."
<http://fte.org/teachers/programs/efl/lessons/mon/eflmon2.htm>