

Additional Downloads

This document includes the following information to accompany “A classroom tariff setting game,” *Journal of Economic Education*, 374(4), 2006, 431-441:

1. A revised version of Table 1. The published version was scrambled during typesetting.
2. Student instruction and results sheet (suitable for distribution to students).
3. An outline of the structure of the game (suitable for data projector display).
4. Figures 1 & 2 game (suitable for distribution to students and data projector display).

TABLE 1: Utility, Production, and Factor Endowments

Utility	$U_{EU} = B_{EU}^{1/4} P_{EU}^{3/4}$ $U_{US} = B_{US}^{3/4} P_{US}^{1/4}$
Production	$B_j = 1.75 K_{bj}^{1/4} L_{bj}^{3/4}$ $P_j = 1.75 K_{pj}^{3/4} L_{pj}^{1/4}$
Factor endowments	$K_{bj} + K_{pj} = 4000$ $L_{bj} + L_{pj} = 4000$

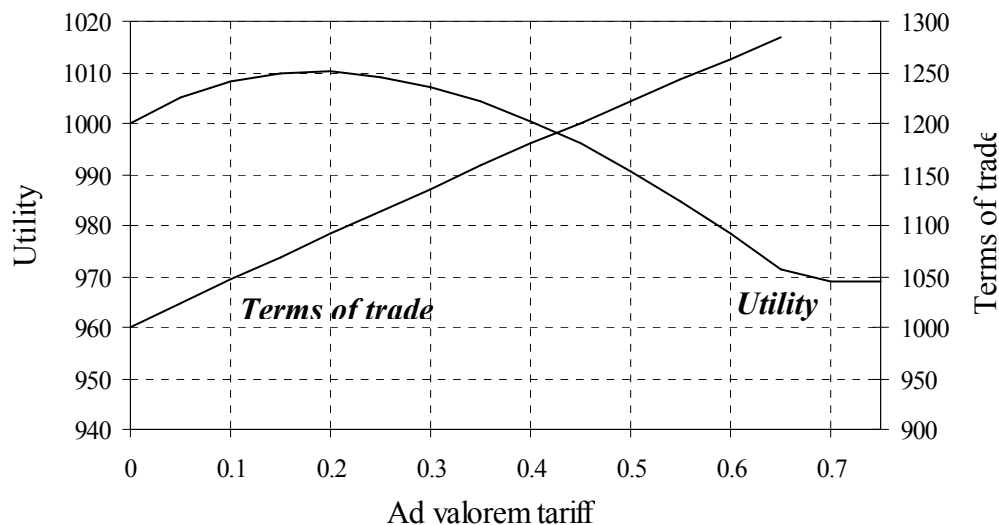
Note: B_j , and P_j , denote the quantity of beer and pretzels in country j (j = European Union, United States) respectively; and K_{ij} and L_{ij} denote the quantity of capital and labor employed by industry i in country j respectively (i = beer, pretzels).

Student instruction and result sheet

Consider two countries, the EU and the US, which produce two goods, beer and pretzels. The EU exports beer and import pretzels and the US exports pretzels and imports beer when the two countries trade. A tariff setting game will be played during the tutorial. You will be divided into six groups and assigned a country type and number. Your group will trade with the group of opposite number and similar type (i.e. three trading pairs – US¹ and EU¹, EU² and US², and EU³ and US³ – will play the game simultaneously).

Figure 1 displays the EU's utility and terms of trade for various *ad valorem* import tariffs levied by the EU when the US commits to free trade. (Note: the game is symmetric, so the diagram can also be interpreted to display US utility and terms of trade when the US chooses a positive tariff and the EU commits to free trade).

Figure 1: EU utility and terms of trade when the EU imposes a tariff and the US commits to free trade



The diagram illustrates that, when the US commits to free trade, the welfare-maximising tariff for the EU is 20%. Your objective is to maximise your country's utility by choosing a non-negative, *ad valorem* import tariff in each round. Your chosen tariff must be a multiple of 5% (e.g. 0%, 5%, 10%, 15%, etc). The starting point for the game is free trade. EU country groups can only choose a different tariff in odd-numbered rounds and US country groups may only levy a different tariff in even-numbered rounds. Tariff choices remain in place for two rounds. That is, the sequence of the game is as follows: *Round 1* – EU country groups choose tariffs while

US country groups impose zero tariffs; *Round 2* – US country groups select a tariff while EU country groups maintain tariffs chosen in Round 1; *Round 3* – EU country groups select a tariff while US country groups maintain tariffs chosen in Round 2; and so on. The game will last for an unspecified number of rounds.

You are not required to calculate your chosen tariffs explicitly, but you should use the information displayed in Figure 1 and, where applicable, results from previous rounds, to assist your decisions. You will have two minutes to select a tariff in each round, which must be chosen without communicating with your trading partner. Communication between country pairs is not allowed. At the end of the game, a prize will be awarded to members of the best performing EU country group and best performing US country group (where ‘best’ is assessed by average utility achieved). Record your outcomes in Table 1.

Table 1: Results from the tariff setting game

Round	EU tariff (%)	US tariff (%)	EU utility	US utility	EU terms of trade	US terms of trade
Free Trade	0	0	1000.00	1000.00	1000.00	1000.00
1						
2						
3						
4						
5						
6						
7						
8						
.						

A Tariff Setting Game - Outline

- Three trading pairs – US¹ and EU¹, EU² and US², and EU³ and US³ – will play the game simultaneously
- Your objective is to maximise your county's utility by choosing a non-negative, *ad valorem* import tariff in each round.
- Your chosen tariff must be a multiple of 5% (e.g. 0%, 5%, 10%, 15%, etc).
- The starting point for the game is free trade
- EU country groups can only choose a different tariff in odd-numbered rounds and US country groups may only levy a different tariff in even-numbered rounds
- Tariff choices remain in place for two rounds
- You are not required to calculate your chosen tariffs explicitly
- The game will last for an unspecified number of rounds
- A prize will be awarded to members of the best performing EU country group and best performing US country group

Figure 1: EU utility and terms of trade when the EU imposes a tariff and the US commits to free trade

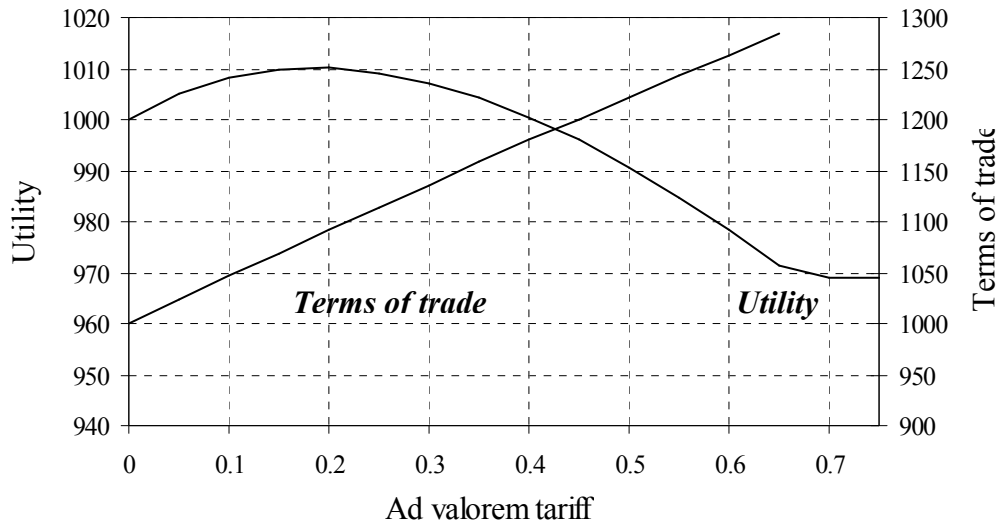


Figure 2: Payoff matrix for tariff setting game

		US	
		$\tau^{US} = 0$	$\tau^{US} = 0.15$
<i>EU</i>	$\tau^{EU} = 0$	1000.00 1000.00	985.62 1009.77
	$\tau^{EU} = 0.15$	1009.77 985.62	990.78 990.78