# International Trade Experiment

## Country 1

### Objective

You will be assigned the role of a country that produces two goods, clothes and food. Your goal is to negotiate a trade deal that yields you more utility than the maximum utility you yield in autarky.

### Your Role

You are assigned the role of Country 1. Each country is assigned six production plans of clothes and food, allowing them to choose the total amount of each good (clothes and food) they produce. Additionally, all production is consumed.

| Production Plan | Clothes | Food |
|---|---|---|
| 1 | 10 | 0 |
| 2 | 8 | 1 |
| 3 | 6 | 2 |
| 4 | 4 | 3 |
| 5 | 2 | 4 |
| 6 | 0 | 5 |

### Step 1: Choose the Best Plan without Trade

- Before trading with your partner country, you will select the production plan that yields you the highest utility
- Consumption translates into well being at the rate described by the following formula:

  $\text{Utility} = 5 \times \text{minimum}\{\text{Clothes, Food}\}$
- For example, if your country consumes 6 units of clothes and 2 of food, the total utility you receive is:

  $\text{Utility} = 5 \times \text{minimum}\{6, 2\} = 10$
- This is your total utility under autarky; you want to achieve a value higher than this when you negotiate a trade deal.

**Your preferred (highest utility) production plan: _____**

**Your utility from this production plan: _____**

## Step 2: Negotiating Trade Deal

Before choosing your final production and consumption plan, you will be allowed to negotiate with your partner a trade deal. Note that your partner may have a different production plan than you and thus, faces different tradeoffs. Please do not reveal any details of your production plan, these are only to be known by you.

- You will have 5 minutes to trade with your partner
- The trade deal agreement will state the amount of clothes and food that the countries will trade. For example, "Country 1 will trade 3 units of food for 2 units of clothes with Country 2."

## Step 3: Choose Final Production Plan

Now you will privately choose a production plan given your trade deal.

- You must produce enough to cover what you agreed to sell
- For example, if you agree to sell 3 units of food, you cannot choose a plan that yields only 1 unit of food
- Your consumption equals what you produce, plus what you import, minus what you export

| | **Food** | **Clothes** |
|---|---|---|
| **Production Plan** | | |
| **Imports (how much you buy)** | | |
| **Exports (how much you sell)** | | |
| **Consumption Plan** | | |
| **Total Utility** | | |

## Step 4: Calculate Utility After Trade

You and your partner's utilities are recalculated after submitting your final production plans and trade agreement.

- Pairs that are able to reach an agreement that yields a higher utility for both countries compared to their optimal autarky plans are awarded a participation point.

# International Trade Experiment

## Country 2

### Objective

You will be assigned the role of a country that produces two goods, clothes and food. Your goal is to negotiate a trade deal that yields you more utility than the maximum utility you yield in autarky.

### Your Role

You are assigned the role of Country 2. Each country is assigned six production plans of clothes and food, allowing them to choose the total amount of each good (clothes and food) they produce. Additionally, all production is consumed.

| Production Plan | Clothes | Food |
|---|---|---|
| 1 | 0 | 15 |
| 2 | 1 | 12 |
| 3 | 2 | 9 |
| 4 | 3 | 6 |
| 5 | 4 | 3 |
| 6 | 5 | 0 |

### Step 1: Choose the Best Plan without Trade

- Before trading with your partner country, you will select the production plan that yields you the highest utility
- Consumption translates into well being at the rate described by the following formula:

  $$\text{Utility} = 5 \times \text{minimum}\{\text{Clothes, Food}\}$$

- For example, if your country consumes 2 units of clothes and 9 of food, the total utility you receive is:

  $$\text{Utility} = 5 \times \text{minimum}\{2, 9\} = 10$$

- This is your total utility under autarky; you want to achieve a value higher than this when you negotiate a trade deal.

**Your preferred (highest utility) production plan: _____**

**Your utility from this production plan: _____**

## Step 2: Negotiating Trade Deal

Before choosing your final production and consumption plan, you will be allowed to negotiate with your partner a trade deal. Note that your partner may have a different production plan than you and thus, faces different tradeoffs. Please do not reveal any details of your production plan, these are only to be known by you.

- You will have 5 minutes to trade with your partner
- The trade deal agreement will state the amount of clothes and food that the countries will trade. For example, "Country 1 will trade 3 units of food for 2 units of clothes with Country 2."

## Step 3: Choose Final Production Plan

Now you will privately choose a production plan given your trade deal.

- You must produce enough to cover what you agreed to sell
- For example, if you agree to sell 3 units of clothes, you cannot choose a plan that yields only 1 unit of clothes
- Your consumption equals what you produce, plus what you import, minus what you export

| | Food | Clothes |
|---|---|---|
| **Production Plan** | | |
| **Imports (how much you buy)** | | |
| **Exports (how much you sell)** | | |
| **Consumption Plan** | | |
| **Total Utility** | | |

## Step 4: Calculate Utility After Trade

You and your partner's utilities are recalculated after submitting your final production plans and trade agreement.

- Pairs that are able to reach an agreement that yields a higher utility for both countries compared to their optimal autarky plans are awarded a participation point.

Markets - Undergraduate Course
Prof. Andrzej Baranski

# TRADE DEAL

**The following trade deal is binding between countries 1 and 2**

*Country 1 will sell* _____ *units of* _____ *to Country 2 and will receive in return* _____ *units of* _____ *from Country 2.*