

Unit 1: Basic Economic Concepts

REVIEW

1. Explain how you would use the concept of opportunity cost in everyday life.
2. Differentiate between increasing and constant opportunity cost PPCs
3. Explain why the Law of Increasing Opportunity Cost occurs.
4. Explain how you calculate PER UNIT opportunity cost.
5. Explain difference between productive and allocative efficiency on the PPC
6. Identify the 3 Shifters of the PPC
7. Give 2 SPECIFIC scenarios that would shift a PPC outward (**Use Pizza and Robots**)
8. List 10 types of Soda

Specialization and Trade

Why do people trade?

Why do people trade?

1. Assume people didn't trade. What things would you have to go without?

Everything you don't produce yourself!

(Clothes, car, cell phone, bananas, health care, etc)

The Point: Everyone specializes in the production of goods and services and trades it to others

2. What would life be like if cities couldn't trade with cities or states couldn't trade with states?

Limiting trade would reduce people's choices and make people worse off.

The Point: More access to trade means more choices and a higher standard of living.

Absolute and Comparative Advantage



Per Unit Opportunity Cost Review

$$\text{Per Unit Opportunity Cost} = \frac{\text{Opportunity Cost}}{\text{Units Gained}}$$

Assume it costs you \$50 to produce 5 t-shirts. What is your PER UNIT cost for each shirt?

\$10 per shirt

Now, take money out of the equation. Instead of producing 5 shirts you could have made 10 hats.

1. What is your PER UNIT OPPORTUNITY COST for each shirt in terms of hats given up?

1 shirt costs 2 hats

2. What is your PER UNIT OPPORTUNITY COST for each hat in terms of shirts given up?

1 hat costs a half of a shirt

Per Unit Opportunity Cost Review

Ronald McDonald can produce 20 pizzas or 200 burgers

Papa John can produce 100 pizzas or 200 burgers

- 1. What is Ronald's opportunity cost for one pizza in terms of burgers given up? 1 pizza cost 10 burgers**
- 2. What is Ronald's opportunity cost for one burger in terms of pizza given up? 1 burger costs 1/10 pizza**
- 3. What is Papa John's opportunity cost for one pizza in terms of burgers given up? 1 pizza costs 2 burgers**
- 4. What is Papa John's opportunity cost for one burger in terms of pizza given up? 1 burger costs 1/2 pizza**

Ronald has a COMPARATIVE ADVANTAGE in the production of burgers

Papa John has a COMPARATIVE ADVANTAGE in the production of pizza

Absolute and Comparative Advantage

Absolute Advantage

- The producer that can produce the most output OR requires the least amount of inputs (resources)
- Ex: Papa John has an absolute advantage in pizzas because he can produce 100 and Ronald can only make 20.**

Comparative Advantage

- The producer with the lowest opportunity cost.
- Ex: Ronald has a comparative advantage in burgers because he has a lowest PER UNIT opportunity cost.**

Countries should trade if they have a relatively lower opportunity cost

They should specialize in the good that is “cheaper” for them to produce

Benefits of Specialize and Trade

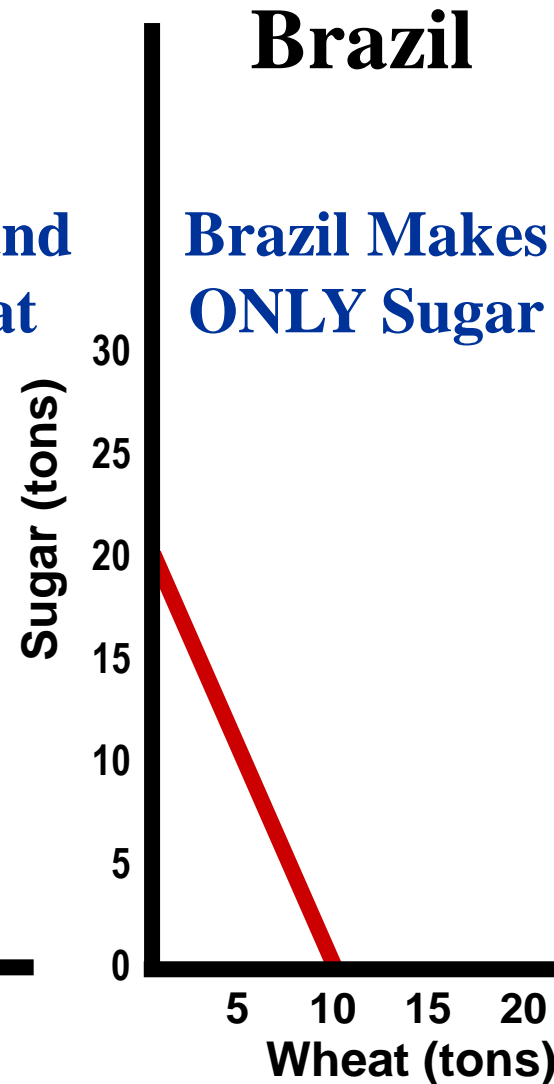
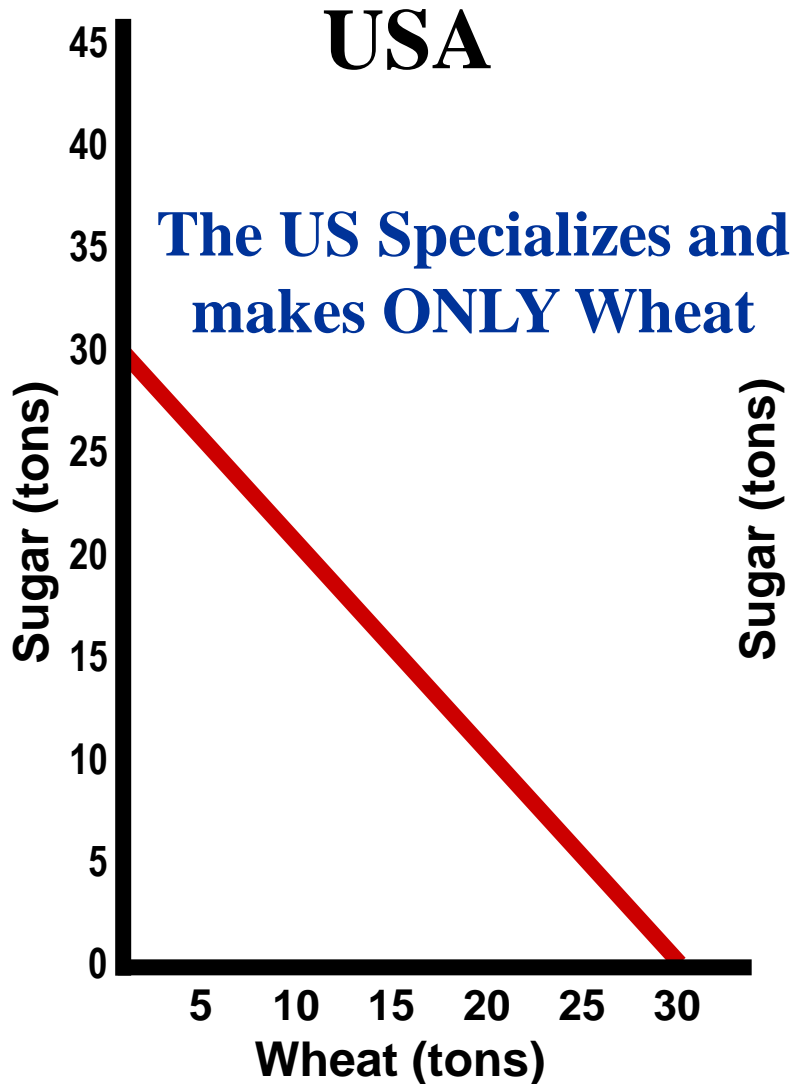


International Trade



Trade: 1 Wheat for 1.5 Sugar

| S | W |
|------|----|
| 0 | 30 |
| 1.5 | 29 |
| 3 | 28 |
| 4.5 | 27 |
| 6 | 26 |
| 7.5 | 25 |
| 9 | 24 |
| 10.5 | 23 |
| 12 | 22 |
| 13.5 | 21 |
| 15 | 20 |
| 16.5 | 19 |
| 18 | 18 |
| 19.5 | 17 |



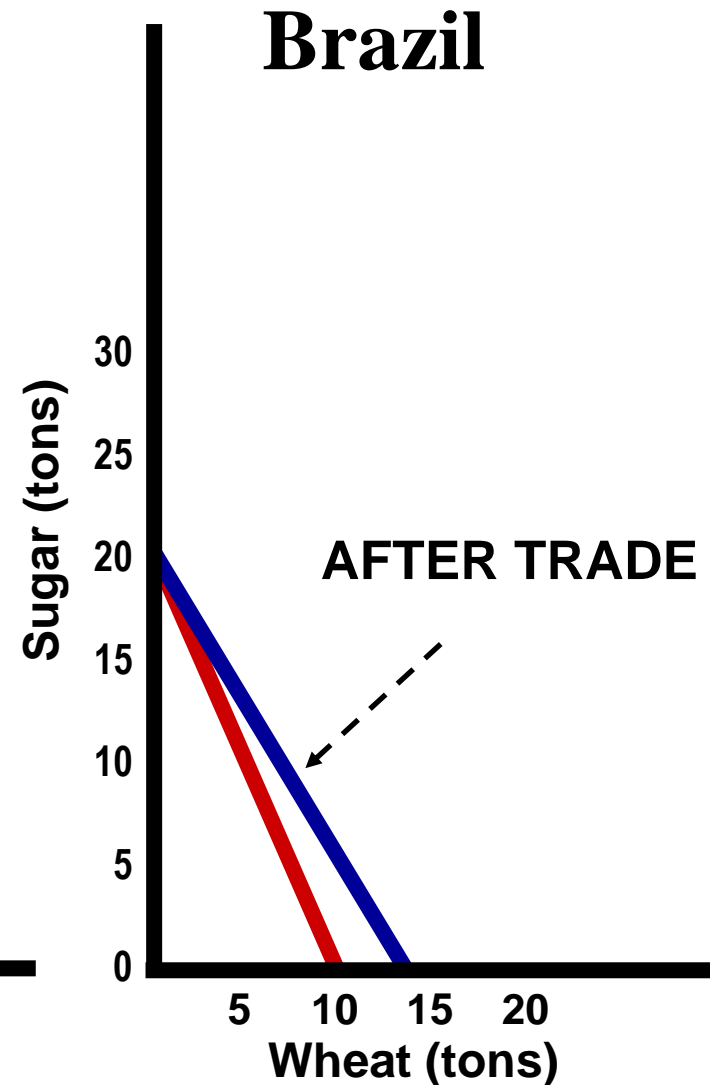
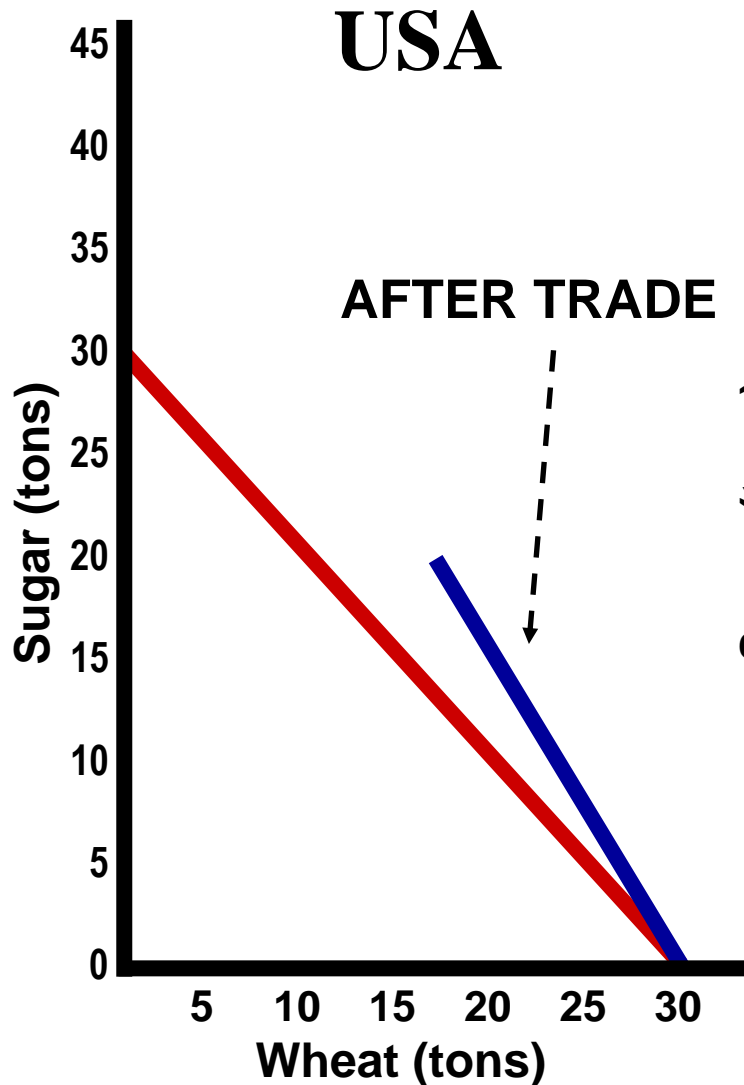
| S | W |
|------|----|
| 20 | 0 |
| 18.5 | 1 |
| 17 | 2 |
| 15.5 | 3 |
| 14 | 4 |
| 12.5 | 5 |
| 11 | 6 |
| 9.5 | 7 |
| 8 | 8 |
| 6.5 | 9 |
| 5 | 10 |
| 3.5 | 11 |



International Trade



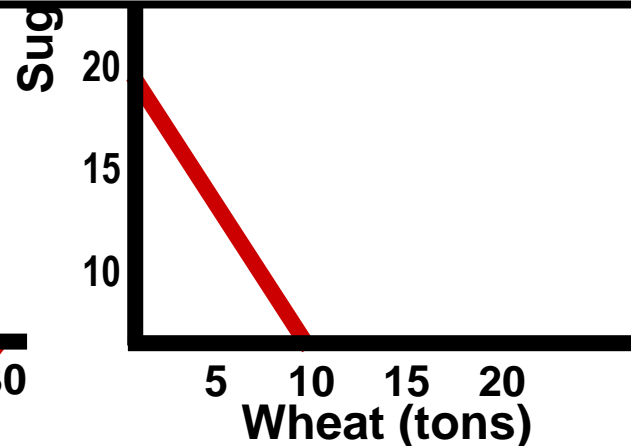
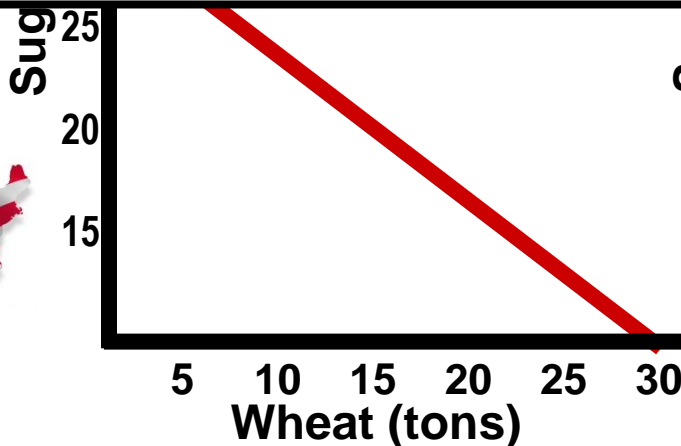
TRADE SHIFTS THE PPC!



| | Wheat | Sugar |
|---------------|-------------------------|---------------------------|
| USA | 30 (1W costs 1S) | 30 (1S costs 1W) |
| Brazil | 10 (1W costs 2S) | 20 (1S costs 1/2W) |

Which country has a comparative advantage in wheat?

- 1. Which country should EXPORT Sugar?**
- 2. Which country should EXPORT Wheat?**
- 3. Which country should IMPORT Wheat?**



Determining Comparative Advantage (Output Method)

The following chart illustrates the number of CDs and pounds of beef that can be produced in one hour.

| | <u>CDs</u> | <u>Beef</u> |
|--------|------------|-------------|
| Japan | 4 | 2 |
| Canada | 4 | 6 |

Output Questions:

OOO=

Output: Other goes Over

1. Which nation has an *absolute advantage* in producing CDs?
2. Which nation has an *absolute advantage* in producing beef?
3. Which has a *comparative advantage* in producing CDs?
4. Which has a *comparative advantage* in producing beef?
5. Should Japan specialize in CDs or beef?
6. Should Canada specialize in CDs or beef?



Determining Comparative Advantage (Input Method)

The following chart illustrates the number of hours it takes to produce one loaf of bread and one bushel of corn.

| | <u>Bread</u> | <u>Corn</u> |
|---------------|--------------|-------------|
| United States | 4 | 2 |
| France | 4 | 6 |

1. Which nation has an *absolute advantage* in producing bread?
2. Which nation has an *absolute advantage* in producing corn?
3. Which has a *comparative advantage* in producing bread?
4. Which has a *comparative advantage* in producing corn?

Input Questions
(The variable is resources or time)

IOU=

Input: Other goes Under



Terms of Trade

Both countries can benefit from trade if they each have relatively lower opportunity costs.

Terms of Trade- The agreed upon conditions that would benefit both countries

Ex: Trade 1 ton of wheat for 1.5 tons of sugar

| | Pineapples | Radios |
|--------------|-------------------|---------------|
| Kenya | 30 | 10 |
| India | 40 | 40 |

- 1. Who has an absolute advantage in Radios?**
- 2. What is the cost of one radio for India?**
- 3. What is the per unit opportunity cost for 1 pineapple for Kenya?**
- 4. Who has a comparative advantage in pineapples?**
- 5. Who has a comparative advantage in radios?**
- 6. Who should import pineapples?**
- 7. Trading 1 radio for how many pineapples would benefit both countries?**

| | Pineapples | Radios |
|--------------|---------------------------|--------------------------|
| Kenya | 30 (1P costs 1/3R) | 10 (1R costs 3 P) |
| India | 40 (1P costs 1R) | 40 (1R costs 1P) |

Kenya wants Radios

If the terms of trade for 1 radio is **greater than 3** pineapples then Kenya is worse off and should make radios on their own.

India wants Pineapples

If the terms of trade for 1 radio is **less than 1** pineapple then India is worse off and should make pineapples on their own.

What terms of trade benefit both countries?

| | Pineapples | Radios |
|--------------|---------------------------|--------------------------|
| Kenya | 30 (1P costs 1/3R) | 10 (1R costs 3 P) |
| India | 40 (1P costs 1R) | 40 (1R costs 1P) |

Trading 1 radio for 2 pineapples will benefit both
If Kenya produces radios by themselves, they give up 3 Pineapples for each radio. If they can trade 2 pineapples for each radio they are better off.

If India produces pineapples by themselves, they give up 1 pineapple for one radio. If they can get 2 pineapples for one radio they are better off.

The countries trade at a lower opportunity cost than if they made the products themselves!

Comparative Advantage Practice

Create a chart for each of the following problems.

- **First- Identify if it is a output or input question**
- **Second-Identify who has the ABSOLUTE ADVANTAGE**
- **Third-Identify who has a COMPARATIVE ADVANTAGE**
- **Fourth- Identify how they should specialize**

1. Sara gives 2 haircuts or 1 perm and hour. Megan gives 3 haircuts or 2 perms per hour.

2. Justin fixes 4 flats or 8 brakes per day. Tim fixes 1 flats or 5 brakes per day.

3. Hannah takes 30 minutes to wash dishes and 1 hour to vacuum the house. Kevin takes 15 minutes to wash dishes and 45 minutes to vacuum.

4. Americans produce 50 computers or 50 TVs per hour. Chinese produce 30 computers or 40 TVs per hour.

More Practice

Input or Output Question?

| Number caught per day | | |
|------------------------------|-------------|-----------------|
| | Deer | Antelope |
| Henry | 4 | 6 |
| John | 24 | 12 |

| Months to produce one | | |
|------------------------------|------------|--------------|
| | Car | Plane |
| Canada | 8 | 10 |
| Japan | 15 | 12 |

| Acres to produce 100 bushels | | |
|-------------------------------------|-------------|-------------|
| | Corn | Rice |
| Henry | 9 | 3 |
| John | 8 | 2 |

Absolute Advantage?

| Number caught per day | | |
|------------------------------|-------------|-----------------|
| | Deer | Antelope |
| Henry | 4 | 6 |
| John | 24 | 12 |

| Months to produce one | | |
|------------------------------|------------|--------------|
| | Car | Plane |
| Canada | 8 | 10 |
| Japan | 15 | 12 |

| Acres to produce 100 bushels | | |
|-------------------------------------|-------------|-------------|
| | Corn | Rice |
| Henry | 9 | 3 |
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Comparative Advantage?

| Number caught per day | | |
|-----------------------|------|----------|
| | Deer | Antelope |
| Henry | 4 | 6 |
| John | 24 | 12 |

OOO

| Months to produce one | | |
|-----------------------|-----|-------|
| | Car | Plane |
| Canada | 8 | 10 |
| Japan | 15 | 12 |

IOU

| Acres to produce 100 bushels | | |
|------------------------------|------|------|
| | Corn | Rice |
| Henry | 9 | 3 |
| John | 8 | 2 |

IOU

Comparative Advantage?

| Number caught per day | | |
|-----------------------|--------------|--------------|
| | Deer | Antelope |
| Henry | 4 (1D=3/2A) | 6 (1A =2/3D) |
| John | 24 (1D=1/2A) | 12(1A=2D) |

OOO

| Months to produce one | | |
|-----------------------|-----|-------|
| | Car | Plane |
| Canada | 8 | 10 |
| Japan | 15 | 12 |

IOU

| Acres to produce 100 bushels | | |
|------------------------------|------|------|
| | Corn | Rice |
| Henry | 9 | 3 |
| John | 8 | 2 |

IOU

Comparative Advantage?

| Number caught per day | | |
|-----------------------|--------------|----------|
| | Deer | Antelope |
| Henry | 4 (1D=3/2A) | 6 |
| John | 24 (1D=1/2A) | 12 |

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| Months to produce one | | |
|-----------------------|--------------|--------------|
| | Car | Plane |
| Canada | 8 (1C=4/5P) | 10 (1P=5/4C) |
| Japan | 15 (1C=5/4P) | 12 (P=4/5C) |

IOU

| Acres to produce 100 bushels | | |
|------------------------------|------|------|
| | Corn | Rice |
| Henry | 9 | 3 |
| John | 8 | 2 |

IOU

Comparative Advantage?

| Number caught per day | | |
|-----------------------|--------------|----------|
| | Deer | Antelope |
| Henry | 4 (1D=3/2A) | 6 |
| John | 24 (1D=1/2A) | 12 |

000

| Months to produce one | | |
|-----------------------|-------------|-------|
| | Car | Plane |
| Canada | 8 (1C=4/5P) | 10 |
| Japan | 15(1C=5/4P) | 12 |

IOU

| Acres to produce 100 bushels | | |
|------------------------------|-----------|------|
| | Corn | Rice |
| Henry | 9 (1C=3R) | 3 |
| John | 8 (1C=4R) | 2 |

IOU