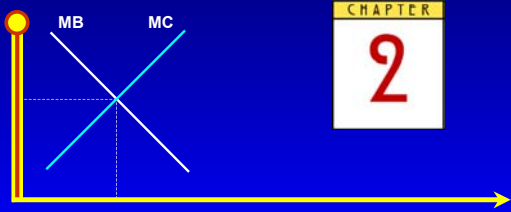


**Comparative Advantage:
The Basis for Exchange**



CHAPTER
2

Exchange and Opportunity Cost

- **Absolute Advantage**
 - One person has an absolute advantage over another if he or she takes fewer hours to perform a task than the other person

Exchange and Opportunity Cost

- **Comparative Advantage**
 - One person has a comparative advantage over another if his or her opportunity cost of performing a task is lower than the other person's opportunity cost

Exchange and Opportunity Cost

- The Principle of Comparative Advantage
 - Should Paula update her own web page?

	Time to update web page	Time to complete bicycle repair
Paula	20 minutes	10 minutes
Beth	30 minutes	30 minutes

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Exchange and Opportunity Cost

- The Principle of Comparative Advantage
 - Should Paula update her own web page?

	Opportunity Cost of updating a web page	Opportunity Cost of a bicycle repair
Paula	2 bicycle repairs	0.5 web page updates
Beth	1 bicycle repair	1 web page update

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Exchange and Opportunity Cost

- The Principle of Comparative Advantage
 - Should Paula update her own web page?
 - How many web pages and bicycle repairs can Paula and Beth produce a day if they both work eight-hour days?

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Exchange and Opportunity Cost

■ The Principle of Comparative Advantage

If they split their time evenly and produce 16 web pages

	Web Pages	Bicycle Repairs
Paula	12	24
Beth	4	12
Total	16	36

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Exchange and Opportunity Cost

■ The Principle of Comparative Advantage

If they specialized in their comparative advantage

	Web Pages	Bicycle Repairs
Paula	0	48
Beth	16	0
Total	16	48


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Exchange and Opportunity Cost

■ The Principle of Comparative Advantage

- Everyone does best when each person (or each country) concentrates on the activities for which his or her opportunity cost is lowest

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 **Exchange and Opportunity Cost**


- Sources of Comparative Advantage
 - Individual
 - ◆ Inborn talent
 - ◆ Education
 - ◆ Training
 - ◆ Experience

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 **Exchange and Opportunity Cost**

- Sources of Comparative Advantage
 - National Level
 - ◆ Natural resources
 - ◆ Cultural institutions

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 **Comparative Advantage and Production Possibilities**

- The Production Possibilities Curve
 - A graph that describes the maximum amount of one good that can be produced for every possible level of production of another good.

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Comparative Advantage and Production Possibilities

- The Production Possibilities Curve
 - Assume
 - ◆ A small economy that
 - Produces only two goods - coffee and nuts
 - Has only one worker who works 6 hrs/day

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Susan's Production Possibilities

Opportunity Cost (OC)

1. OC nuts = Loss in coffee/gain in nuts
2. OC coffee = Loss in nuts/gain in coffee

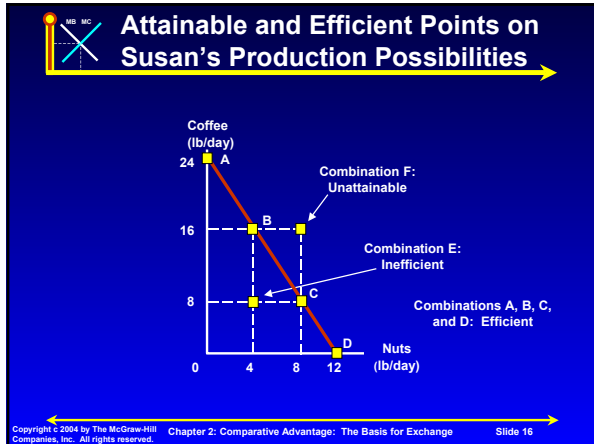
Production Possibilities Curve: All combinations of coffee and nuts that can be produced with Susan's labor

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Susan's Production Possibilities

The scarcity principle:
Having more of one good generally means having less of another good.

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- ### Comparative Advantage and Production Possibilities
- The Production Possibilities Curve
 - Attainable Point
 - ◆ Any combination of goods that can be produced using currently available resources
 - Unattainable Point
 - ◆ Any combination that cannot be produced using currently available resources
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- ### Comparative Advantage and Production Possibilities
- The Production Possibilities Curve
 - Efficient Point
 - ◆ Any combination of goods for which currently available resources do not allow an increase in the production of one good without a reduction in the production of the other
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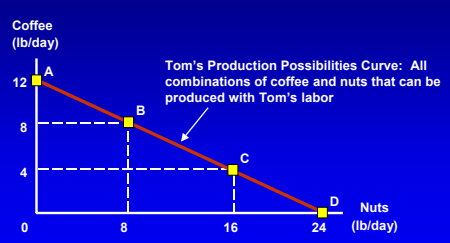
Comparative Advantage and Production Possibilities

The Production Possibilities Curve

- Inefficient Point
 - ◆ Any combination of goods for which currently available resources enable an increase in the production of one good without a reduction in the production of the other

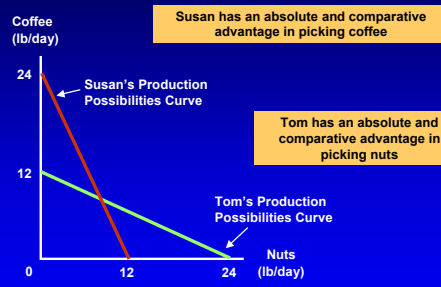
Tom's Production Possibilities

Tom's Production Possibilities Curve for a 6 hour day



How Individual Productivity Affects the Slope and Position of the Production Possibilities Curve

Individual Production Possibilities Curves Compared



Comparative Advantage and Production Possibilities

- The gains from specialization grow larger as the difference in opportunity cost increases
 - Without Specialization

Tom: 5 hrs coffee = 5 lb	1 hr nuts = 5 lb
Susan: 1 hr coffee = <u>5 lb</u>	5 hrs nuts = <u>5 lb</u>
Total: 10 lb	10 lb

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Comparative Advantage and Production Possibilities

- The gains from specialization grow larger as the difference in opportunity cost increases
 - With Specialization

Tom: 30 lb coffee	0 lb nuts
Susan: 0 lb coffee	30 lb nuts
Total: 30 lb	30 lb

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Production Possibilities Curve For a Large Economy

Assume: An economy that produces only two goods, coffee and nuts

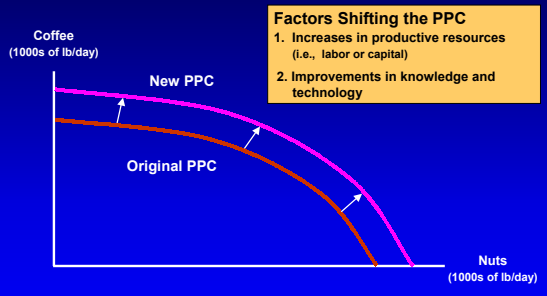
Why would the Production Possibilities Curve have an outward bow?

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Comparative Advantage and Production Possibilities

- The Principle of Increasing Opportunity Cost (“The Low-Hanging-Fruit Principle”)
 - In expanding the production of any good, first employ those resources with the lowest opportunity costs, and only afterward turn to resources with higher opportunity costs

Economic Growth: An Outward Shift in the Economy’s PPC



Factors That Shift The Economy’s Production Possibilities Curve

- Increasing Productive Resources
 - Investment in new factories and equipment
 - Population growth
- Improvements in Knowledge and Technology
 - Increasing education
 - Gains from specialization

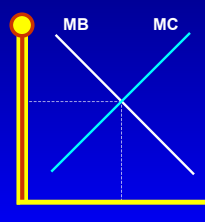
Factors That Shift The Economy's Production Possibilities Curve

- Why have countries Like Nepal been So slow to specialize?
 - Low population density
 - Isolation
- Some factors that may limit specializa-tion in other countries
 - Laws
 - Customs

Comparative Advantage and International Trade

- Economic Naturalist
 - If trade between nations is so beneficial, why are free-trade agreements so controversial?

End of Chapter



CHAPTER
2
