

Comparative Advantage

Week Two Recitation

Comparative Advantage

Comparative Advantage accounts for the
Wealth of Nations

The Principle of Comparative Advantage

Comparative Advantage and Production
Possibilities

What have we learned?

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Assignment for Week 2 Recitation

Read Chapters 1-4 of *The Wealth of Nations* by Adam Smith. There is a pdf copy of the reading on the course web page, www.unc.edu/~salemi.

Review the discussion questions for the article also on the web page.

Bring copies of the reading and questions to recitation.

Come to recitation with preliminary answers to the questions. Expect a quiz. You need not write out your answers.

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Review: Scarcity Principle

Your "Reservation Price" is the most you would pay to obtain a good or service.

Your "Surplus" in a transaction is the difference between your reservation price and what you actually pay.

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Use Your Clickers To Answer
The Following
Graded Questions

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On Saturday morning, you have decided to wash, wax, and detail your car. The improvements to your car's appearance are worth \$50 to you. You have decided to do the work yourself because the next best use of your time is working a morning shift at your job for \$30. Now a friend suggests a fun outing that will take all morning. Your opportunity cost for that outing is...

- A. \$0
- B. \$20
- C. \$30
- D. \$50

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I have read the syllabus for Econ 101 Section 8 and agree to abide by the course rules.

- A. Yes
- B. No

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Comparative Advantage

If person A can do either of two tasks in less time than person B, person A will have an "absolute advantage" in both tasks.

It is likely, however, that person A will have a comparative advantage in only one task.

Who should undertake each task depends on comparative advantage, not on absolute advantage.

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Comparative Advantage

Person A has a comparative advantage over Person B if Person A's opportunity cost of performing a task is lower than Person B's opportunity cost of performing the same task.

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Comparative Advantage

Ari and Sam must write a class report with charts. In one hour...

Ari can write 300 words or make 3 charts.

Sam can write 200 words or make 1 chart.

Who should do each task?

	Cost of 100 Words	Cost of One Chart
Ari	1 Chart	100 Words
Sam	½ Chart	200 Words

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To the extent possible, Sam should write and Ari should make charts.

Sam has a lower opportunity cost for word craft.

Sam has a comparative advantage in word craft.

Ari has a lower opportunity cost in chart making.

Ari has a comparative advantage in chart making.

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Ari has an absolute advantage in chart making and word craft.

But...

It would be inefficient for Ari to write if Sam is available to write and there are still charts to be made.

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Comparative Advantage

Suppose the report must include 600 words and two charts and that both must contribute. How much time will it take if...

Ari	Sam	Total Time
Writes	Charts	$2 + 2 = 4$ hours
Charts	Writes	$2/3 + 3 = 3.67$ hours

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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 the lowest.

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Use Your Clicker To Answer
The Following
Graded Question.

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In one eight hour work day....
Sam can: wax 4 cars or wash 12 cars.
Ari can: wax 3 cars or wash 6 cars.

Which of the following is true? Sam's cost of washing one car is ...

- A. Greater than Ari's Cost of washing a car.
- B. One third of a waxed car.
- C. Three waxed cars.
- D. One half of a waxed car.

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Comparative Advantage

In one eight hour day...

Ari can wax 3 cars or wash 6 cars.

Sam can wax 4 cars or wash 12 cars.

Who should do each task?

	Cost of A Waxed Car	Cost of A Washed Car
Ari	2 Washed Cars	1/2 Waxed Car
Sam	3 Washed Cars	1/3 Waxed Car

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Comparative Advantage

Many corporations willingly provide their CEOs with a personal assistant who accomplishes both business and personal tasks for the CEO.

Why do corporations provide personal assistants?

Should the shareholders complain?

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Use Your Clickers To Answer
The Following
Non-Graded Question

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Many corporations provide their CEOs with a personal assistant who accomplishes both business and personal tasks. Which of the following is closest to your view? Shareholders should...

- A. Oppose the practice because it lowers firm profits and shareholder dividends.
- B. Oppose the practice but acknowledge that CEOs expect to have a personal assistant.
- C. Approve the practice because it amounts to tax free compensation for the CEO.
- D. Approve the practice because it frees the CEO to perform more important tasks.

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Production Possibilities

The production possibilities graph describes the maximum amount of one good that can be produced for every possible level of production of the other good.

The PPF shows that resource scarcity implies that production of any good entails an opportunity cost.

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Production Possibilities

In 8 hours

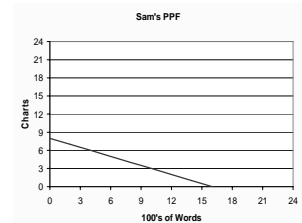
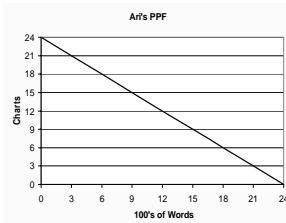
Ari can write 2400 words or make 24 charts.

Sam can write 1600 words or make 8 charts.

	Cost of 100 Words	Cost of One Chart
Ari	1 Chart	100 Words
Sam	½ Chart	200 Words

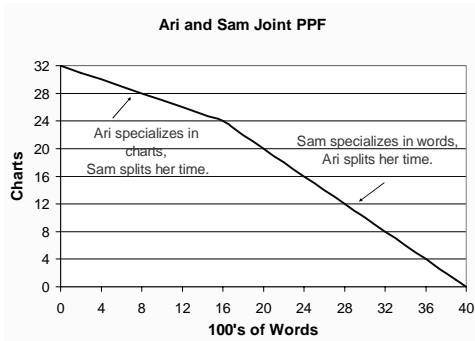
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Production Possibilities Graphs



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Joint Production Possibilities Graph



Law of Increasing Cost

Optimal Resource Allocation

In expanding the production of any good, first employ those resources with the lowest opportunity cost, and only afterward turn to resources with higher opportunity costs.

Law of Increasing Cost

As production of a good expands, the opportunity cost of the good increases.

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Survivors



Four survivors are stuck on an island. Each can either fish or gather berries. The following table shows what each survivor can produce in a day.

	Jean	Joe	Jerry	Jack
Fish (lbs)	4	3	2	1
Berries (lbs)	1	2	3	4

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Use your clicker to answer the following graded question.

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Which survivor should be the first assigned to pick berries?

- A. Jean
- B. Joe
- C. Jerry
- D. Jack

	Jean	Joe	Jerry	Jack
Fish (lbs)	4	3	2	1
Berries (lbs)	1	2	3	4

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Questions for Further Study

Suppose at their evening meeting, the survivors decide to make a stew using 6 pounds of fish. They would want, in addition, as many berries as possible.

How should work be assigned the next day? Who should fish and who should gather? Why?
 Given their work assignments, what is the group's opportunity cost for fish? Explain.
 Why does the cost of fish increase as the survivors decide to produce more fish?

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Survivors Challenge

Suppose at their evening meeting, the survivors decide to make a stew using 6 pounds of fish. They would want, in addition, as many berries as possible.

Draw a graph showing the survivors production possibilities for fish and berries.

I will pay \$10 to the first student who sends me a correct production possibilities graph for the survivors.

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Comparative Advantage

Prepare to discuss *Wealth of Nations*

Everyone does best when they concentrate on activities for which their opportunity cost is the lowest.

Comparative Advantage accounts for the *Wealth of Nations*

The Production Possibilities Frontier production of any good entails an opportunity cost because productive resources are finite.

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