

OUTLINE — August 28, 2017

- Production Possibilities Frontier
 - Law of Increasing Opportunity Costs
- Economic Growth

No laptops (exceptions for accommodations)

Tablets ok

Cell phones silenced & put away

Announcements sent by email by Prof. Olney

Extra handouts: in racks outside 532 Evans

A Simple but Powerful Economic Model

- How does the economy allocate its scarce resources?
- Resources include

- Subject to constraints

Criteria Allocating Scarce Resources Production Possibilities Frontier Economic Growth Economic Aid

Production Possibilities Frontier

- Every model:
 - Question – Simplifications - Assumptions
- Question:

*What are the general characteristics
of the possible combinations of output
that can be produced
in an economy
within a given time period?*

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Production Possibilities Frontier

- Simplify: Only 2 types of output

- Assume: No deliberate waste
 - We use all resources as efficiently as possible

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Demonstration: "No Deliberate Waste"

- On a scale of 0 (horrible) to 100 (fabulous),
 - Rank your ability to produce food
 - Rank your ability to produce machines
- Now, compute the ratio: $\frac{\text{Food}}{\text{Machines}}$
- Line up high-to-low according to ratio: $\frac{\text{Food}}{\text{Machines}}$
- Who produces food? Machines?

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Example: Food & Machines

- Possible combinations of food (F) & machines (M)?

January	February
100 machines 2,000 units food	110 machines _____ units food

- Opportunity cost of those 10 machines?

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Opportunity Cost

- Definition
 - Most desired activity foregone in order to do something else
- What are the opportunity costs of going to college?

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Opportunity Cost

January	February	March
100 machines 2,000 units food	110 machines _____ units food	120 machines _____ units food

- Opportunity cost of those 10 machines?

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Law of Increasing Opportunity Costs



- Opportunity costs increase because resources are not *ubiquitous* (not equally well-suited to all tasks)

Production Possibilities Frontier for this example

January: 100 M & 2,000 F
 February: 110 M & 1,900 F
 March: 120 M & 1,500 F



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Production Possibilities Frontier, in general



Economic Growth

- Economic Growth shifts the PPF out
- Growth: an increase in total output
 - (or sometimes, an increase in total output *per person*)
- Sources of growth
 1. increased quantity of resources
 2. increased productivity of resources

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Example: Increase labor force



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Ex.: Increase productivity in **food** production



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What can increase productivity?

- Institutions!

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Example: Hurricane Harvey



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