AP MACROECONOMICS
MR. LIPMAN

Introduction to Economics

Modules 1-4

Krugman Pages 1-47

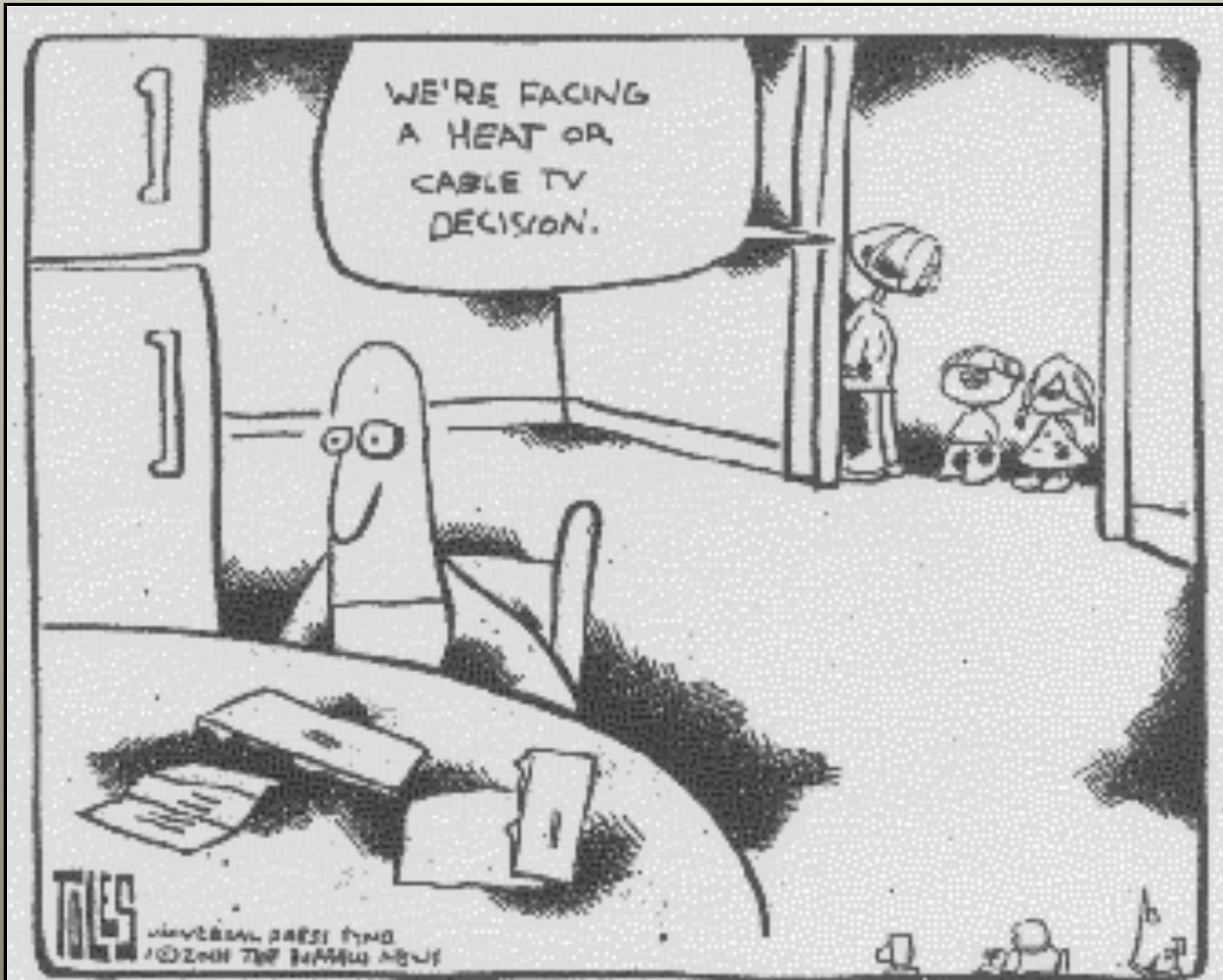
Basic Economic Concepts

What is Economics?

- Economics is the science of scarcity and choices.
- Scarcity results because our wants are greater than our limited resources.
- We must make choices on how we will use our limited resources.
- In economics we study the choices of individuals, firms, and governments.

Economics is the study of __choices__.

Scarcity: What would parents choose? What would kids choose?

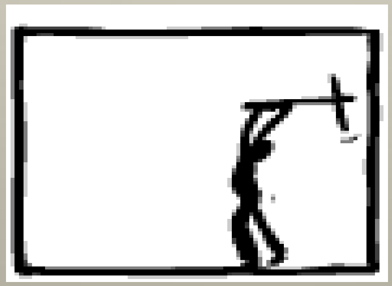


The Four Factors of Production

•**Producing goods and services requires the use of resources.**

•**ALL resources can be classified as one of the following four <u>factors of production</u>:**

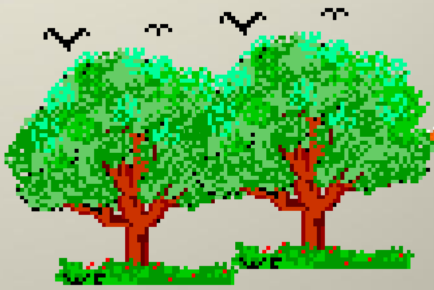
Land 

Labor 

Capital 

Entrepreneurship 

Land = All natural resources that are used to produce goods and services. Anything that comes from “mother nature.” (Water, Sun, Plants, Oil, Trees, Stone, etc.)



Labor = Effort a person devotes to a task for which that person is paid. (manual laborers, lawyers, doctors, **teachers**, waiters, etc.)

Two Types of Capital:

1. **Physical Capital**- **A human-made resource that is used to create other goods and services (tools, tractors, machinery, buildings, factories, etc.)**

2. **Human Capital**- **Any skills or knowledge gained by a worker through education and experience (college degrees, vocational training, etc.)**





- **Entrepreneurship=** **ambitious leaders that combine factors of production to create goods and services.**

- **Examples-Henry Ford, Bill Gates, Steven Jobs, Jeff Bezos. They are Inventors, Store Owners, etc.**

Entrepreneurs:

1. **Take The Initiative**
2. **Innovate**
3. **Take the Risk of Failure**

So they can obtain _PROFIT_.

Profit= Revenue - Costs

Classify the different Factors of Production in the following scenario:

You decide to order a pizza to satisfy the munchies. First, you picked up the telephone and gave your order to the owner that entered it into her computer. This information came up on the chief baker's monitor in the kitchen and he assigned it to one of his cooks. The cook was busy mixing dough out of salt, flour, eggs, and milk.

The cook finished mixing dough, washed his hands in the sink, and prepared your pizza using tomato sauce, cheese, and sausage. He then placed the pizza in the oven. Within 10 minutes the pizza was cooked and placed in a cardboard box. The delivery person then grabbed your pizza, jumped in the company car, and delivered it to your door.

Trade-offs and Opportunity Cost

Trade-offs are ALL the alternatives that we give up whenever we choose one course of action over others.

(Examples: going to the movies or going to a game)

The most desirable alternative given up as a result of a decision is known as opportunity cost.

What are trade-offs of deciding to go to college?

What is the opportunity cost of going to college?

GEICO commercial (15 minutes) assumes you understand opportunity cost. Why?

Given the following assumptions, make a rational choice in your own self-interest

(hold everything else constant)…

1. You want to visit your b/f or g/f for a week
2. You work every weekday earning $100 per day
3. You have three flights to choose from:

    Thursday Night Flight = $275

    Friday Early Morning Flight = $300

    Friday Night Flight = $325

Which flight should you choose? Why?

How is Economics used?

- There are many economists and each have different theories and there is no one absolute theory that always works.

Positive vs. Normative

Positive Statements- Based on facts. Avoids value judgments (**what is or what will be**).

Normative Statements- Includes value judgments (**what should or ought to be, essentially an opinion**).

5 Key Economic Assumptions

1. Society's wants are unlimited, but ALL resources are limited (scarcity).
2. Due to scarcity, choices must be made. Every choice has a cost (a trade-off).
3. Everyone's goal is to make choices that maximize their satisfaction. Everyone acts in their own "self-interest" and "politics" are always a "real-life" factor.
4. Everyone acts rationally by comparing the marginal costs and marginal benefits of every choice
5. Real-life situations can be explained and analyzed through simplified models and graphs.

Key Terms used in Macroeconomics

- Nominal income v. Real income (adjusted for inflation)
- Inflation
- Deflation
- Price Stability
- Labor Force = employed + unemployed

THE LABOR FORCE

- Labor Force = Employed + Unemployed

LF = E + U

Unemployment Rate = U/LF

As of July, 2019 the unemployment rate was 3.7%. In 2009 and 2010, during the height of the great recession, it was over 10%.

Who makes up the Labor Force is determined by a weekly survey

- Employed: Anyone who did work for money during the previous week prior to the survey
- Employed: Anyone who was absent temporarily from work due to vacation, illness, bad weather, or other personal reason
- Employed: Those who work without pay in a family business which exceeds 15 hours a week
- Military (armed forces) are NOT part of the labor force

UNEMPLOYED: Those not working but who are actively seeking employment and are over 16yrs and NOT in school.

Sample Problem: UR% = 100 X U/LF

THE COUNTRY OF LIPMAN LAND HAS THE FOLLOWING:

Military Personnel = 1.5m

Population under 16 working part-time = 0.3m

Population over 16 working part-time and not in school full time. = 4m

Population over 16 working full time = 14m

Those not working but seeking work = 2m

What is the size of the civilian work force?

What is the unemployment rate?

Solution for Lipman Land

Population over 16 working part-time = 4m

Population over 16 working full time = 14m

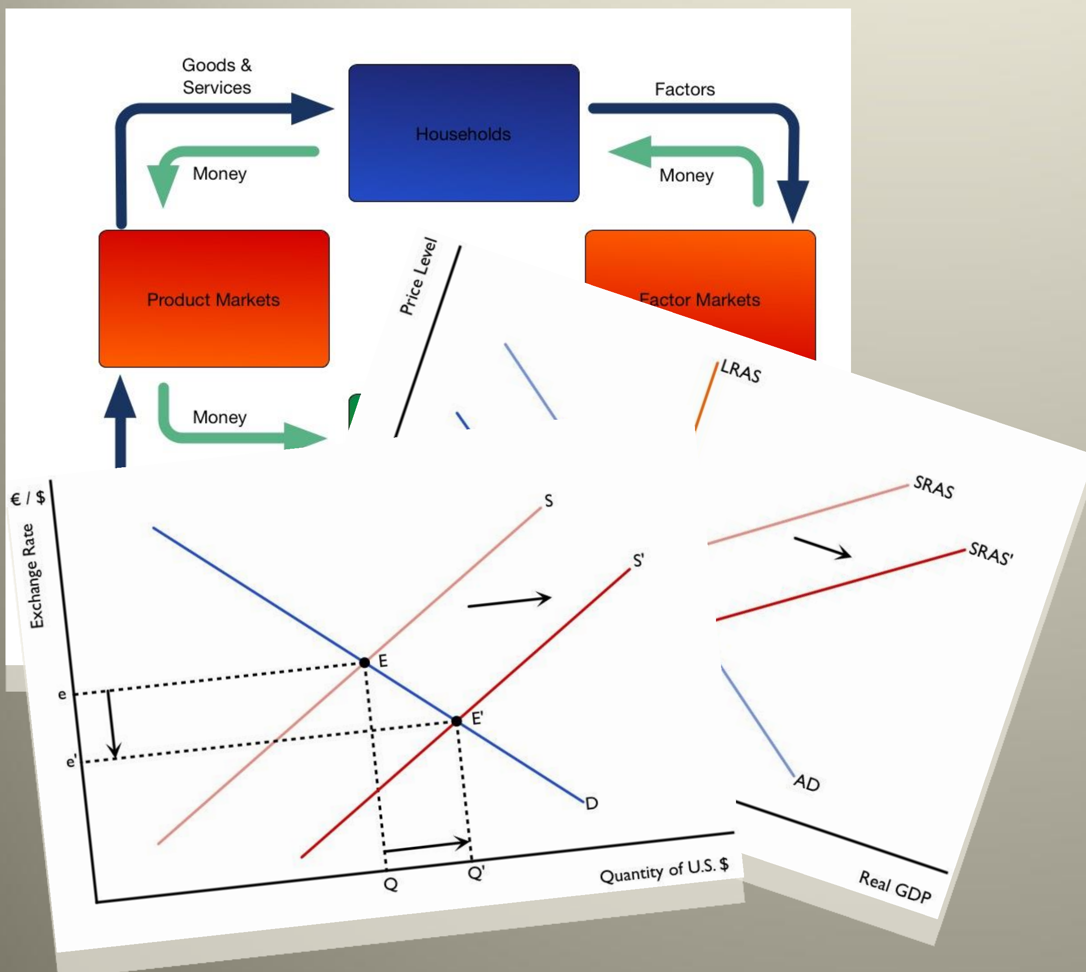
Those not working but seeking work = 2m {U}

- LF = 4 + 14 + 2 for a total of 20 million
  - Never count military persons or those under 16 as part of the Labor Force.

UR% = 100 x (U/LF)

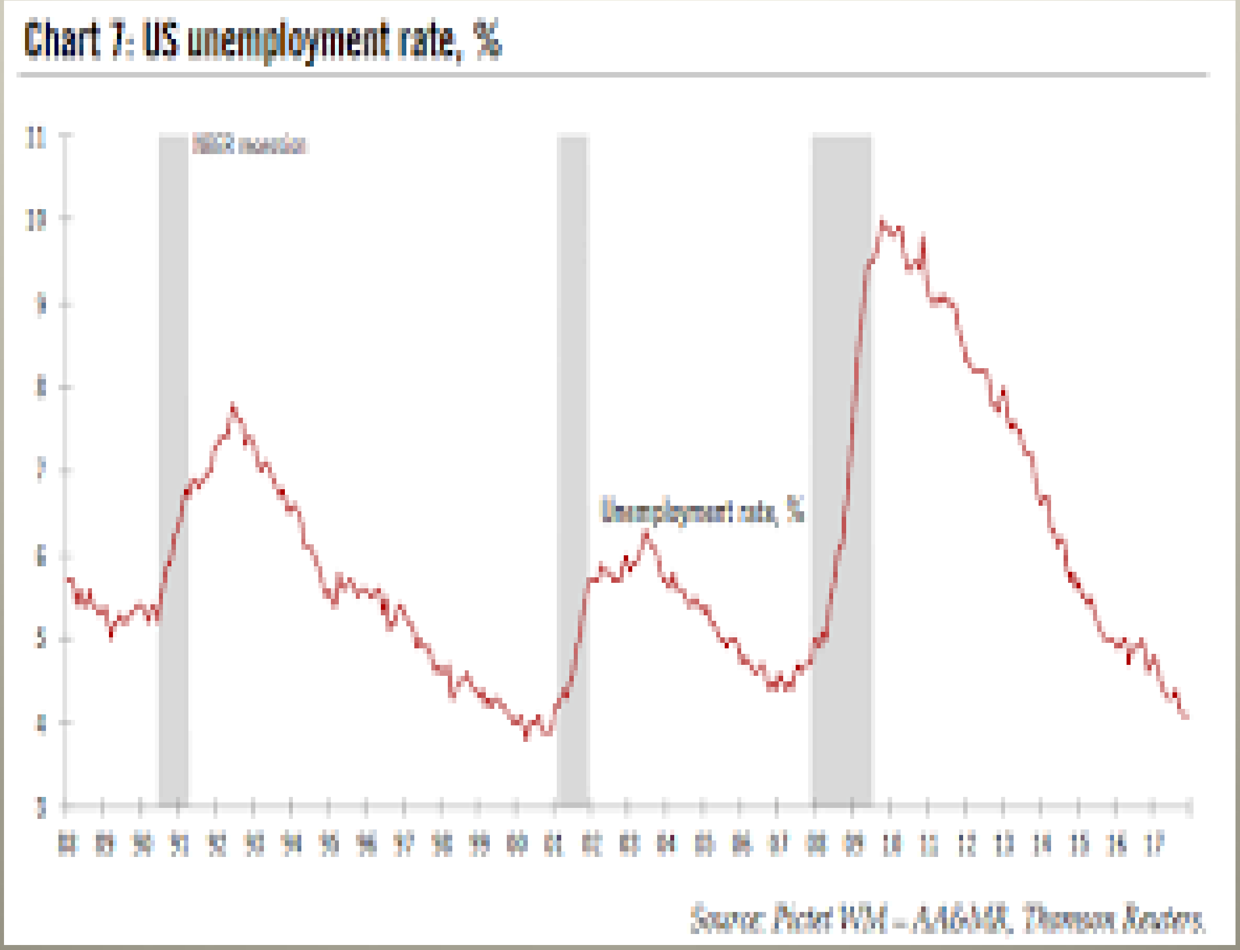
  - UR% = 100 X (2/20) = 10%

Models are used in Economics to help explain what is happening



- Models (aka graphs)
- Other things equal assumption
- *Ceteris Paribus (Latin for "other things equal")*

Unemployment 1990-2017

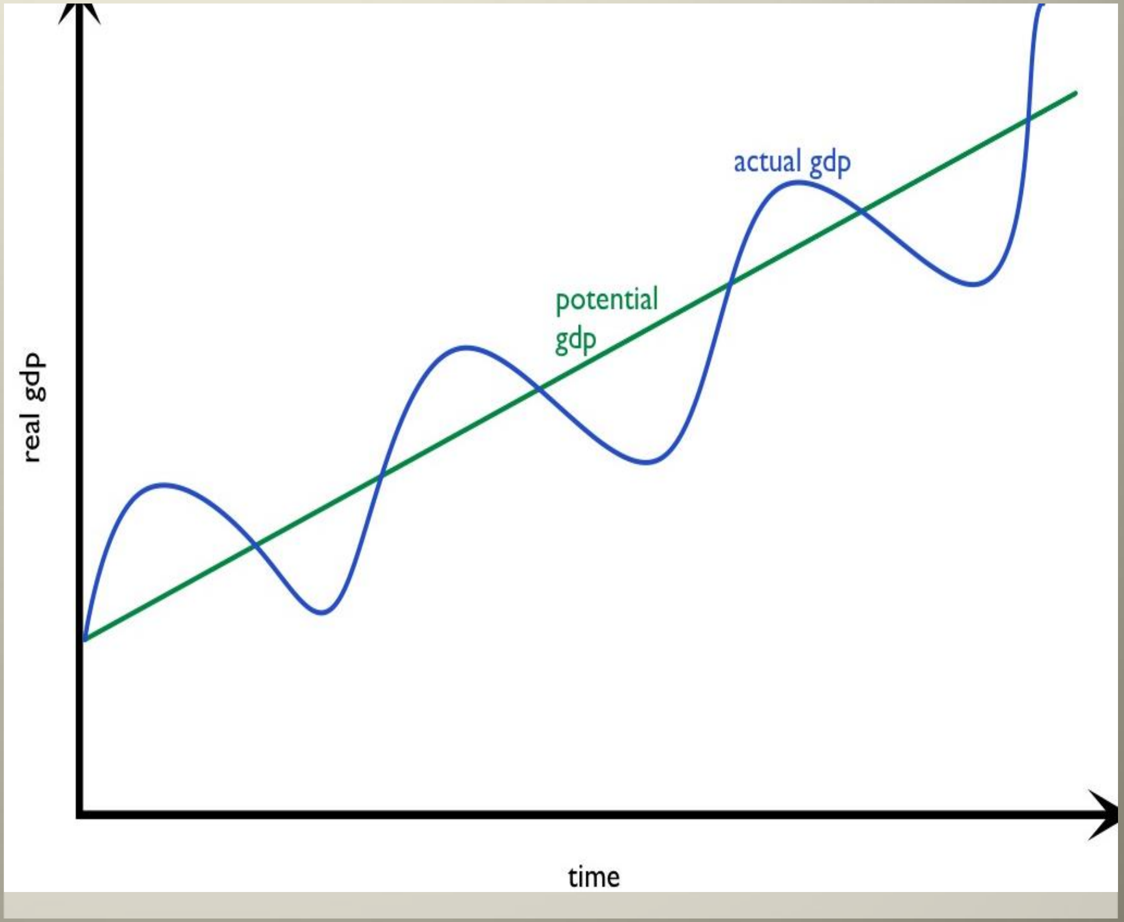


The Various Business Cycles

Depression

- Recession
- Expansion or growth (which leads to inflation)

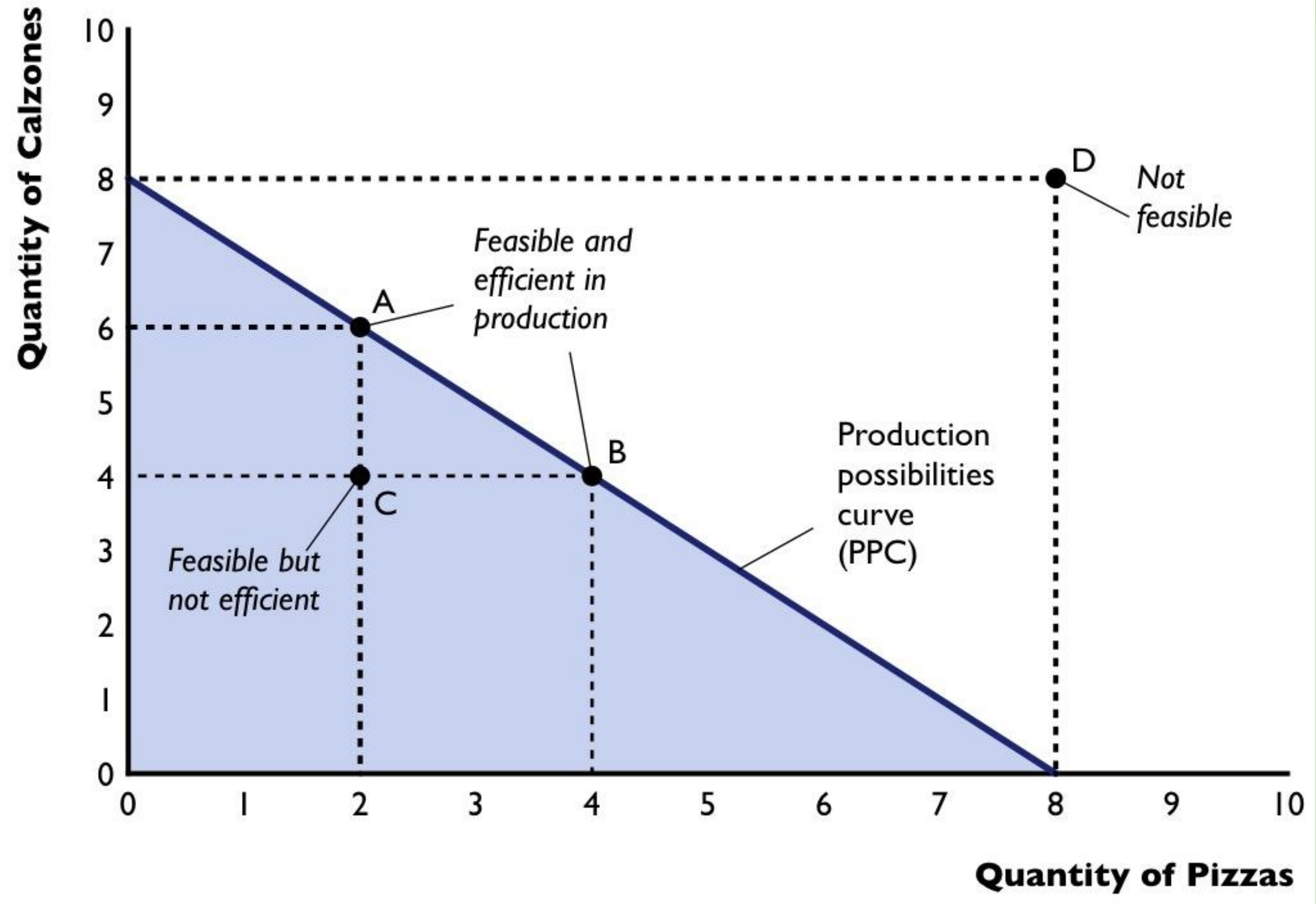
- Graph demonstrates changes happening over time as cycles change



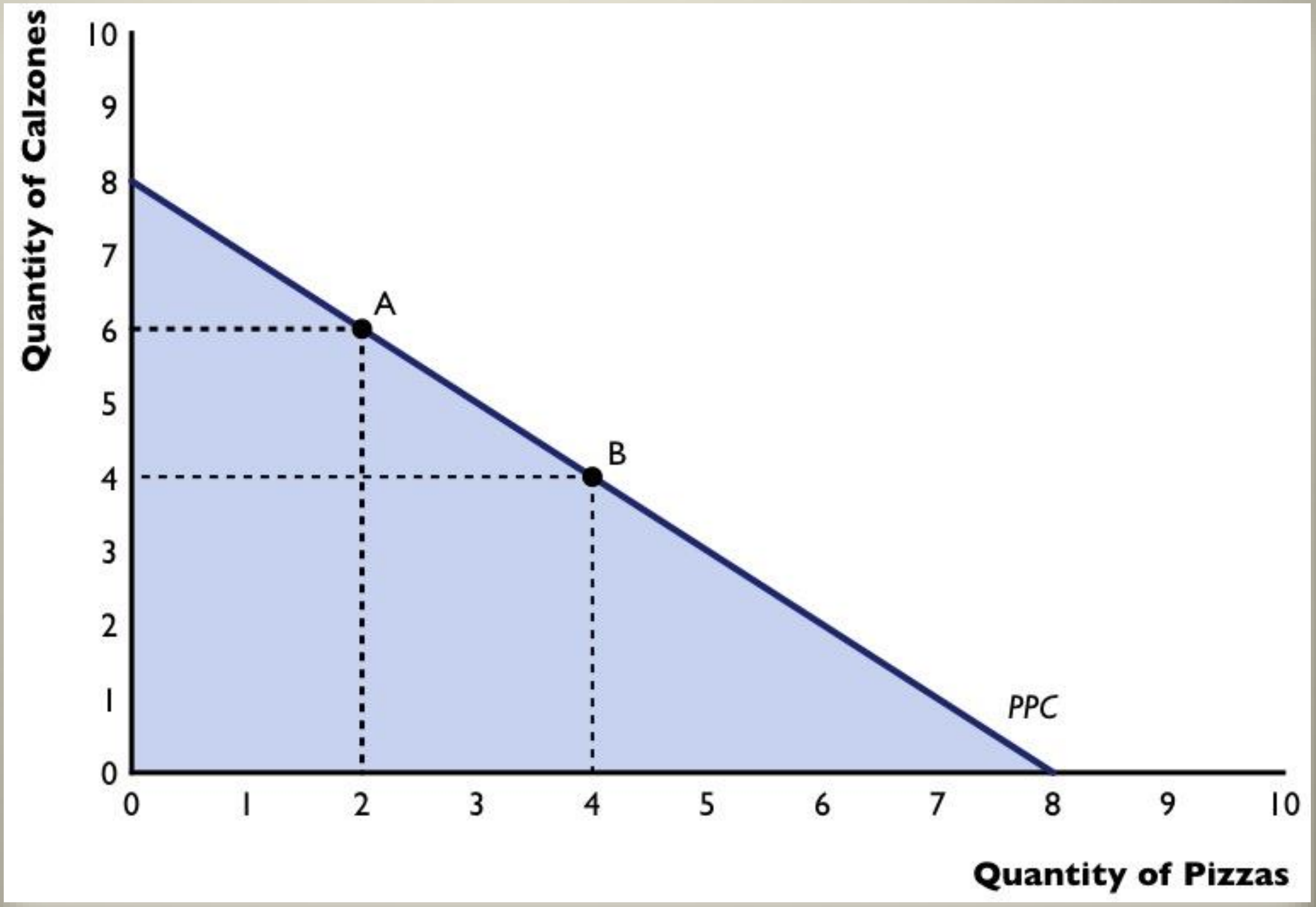
Keys to this Module

- The importance of trade-offs in economic analysis
- Production possibilities curve model explains efficiency as well as opportunity cost, and economic growth
- Two key sources of economic growth - increases in the availability of resources and improvements in technology

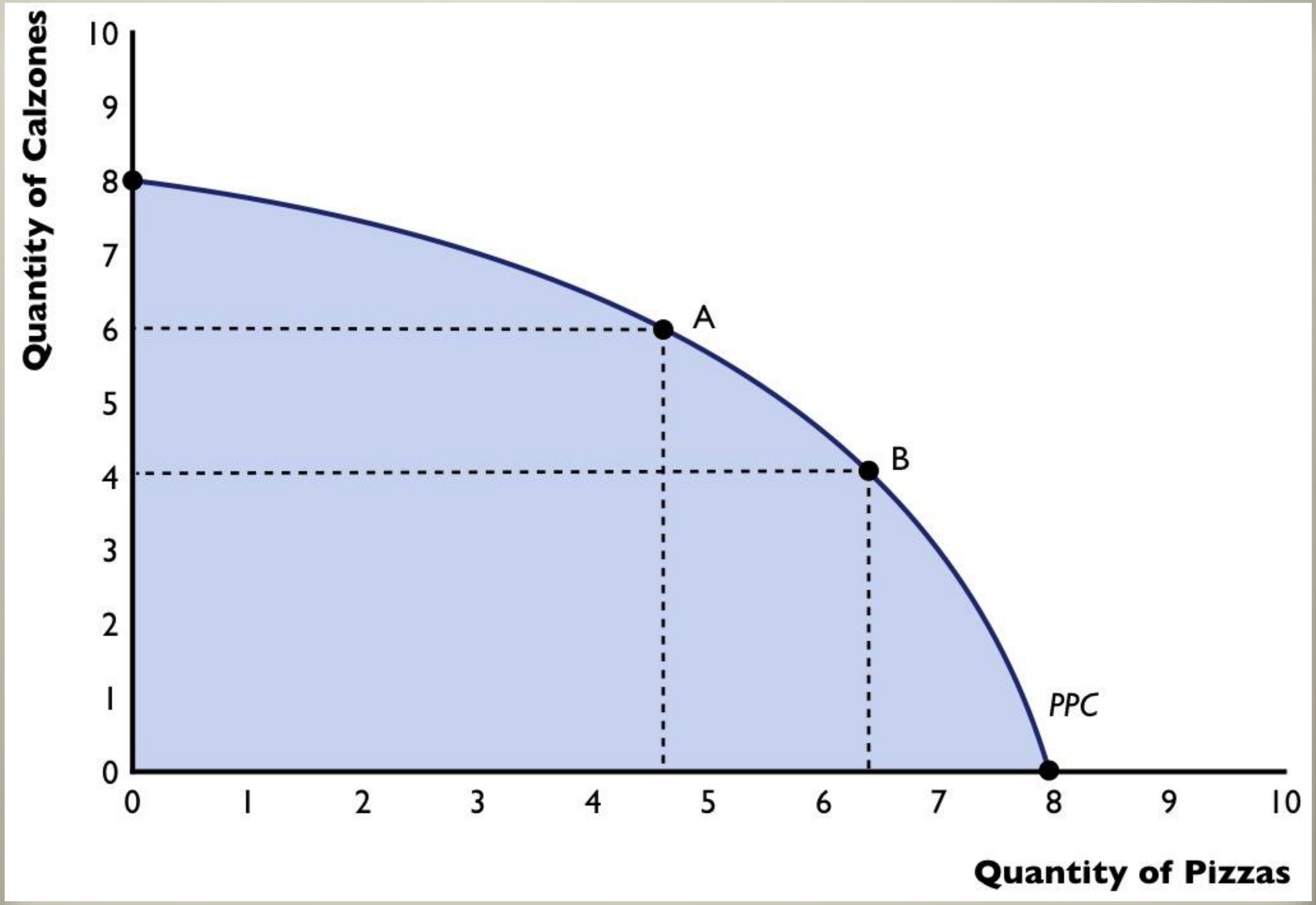
When using a PPC always remember that if a point is inside or on the curve it is feasible but if it lies *outside* the curve then it is not feasible. Being on the curve is most efficient (aka no missed opportunities)



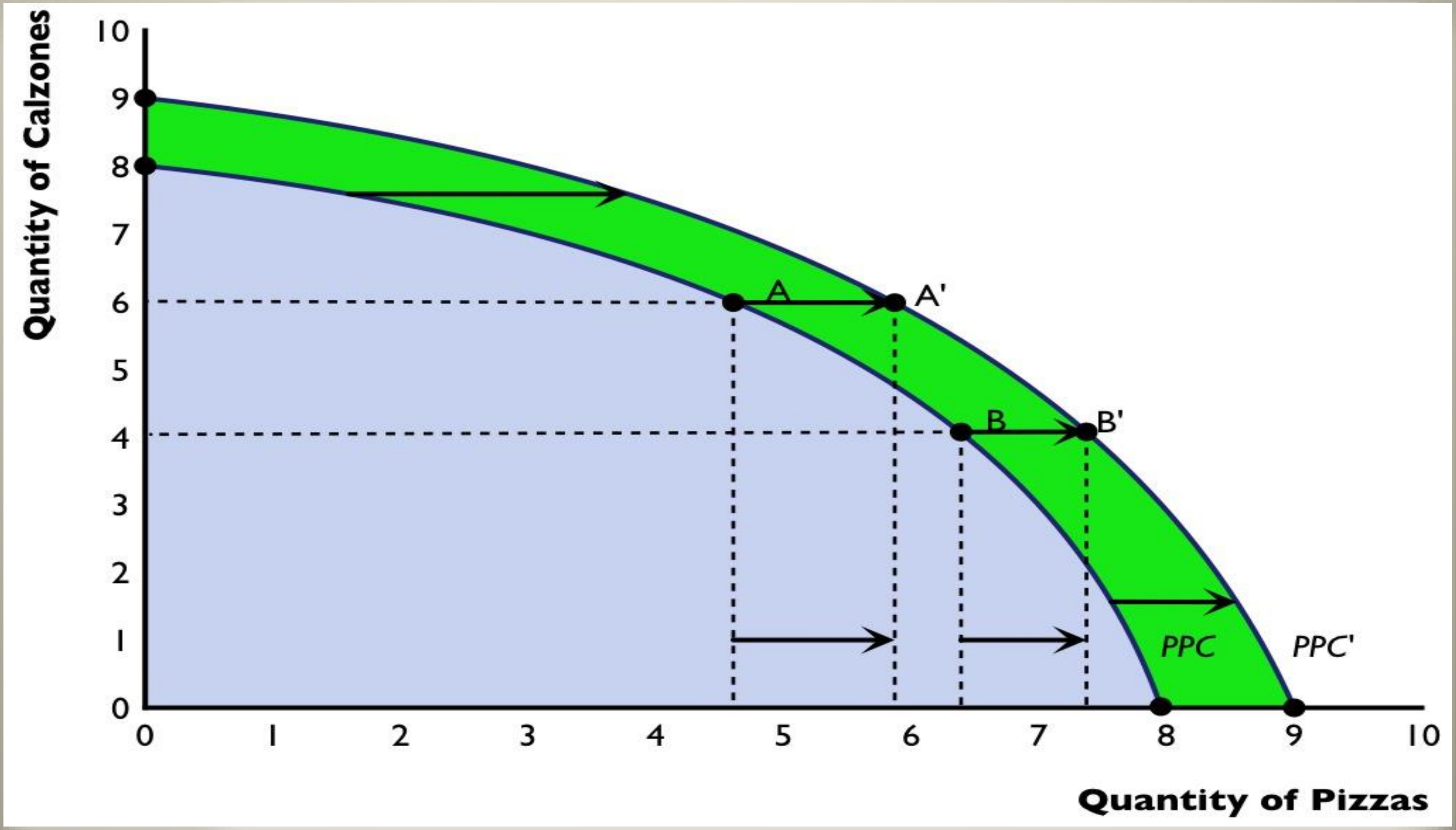
This graph represents a constant opportunity cost for a business that makes both calzones and pizzas. Straight line =s constant opportunity cost.



This graph represent opportunity cost increasing but not uniformly. By producing more pizzas the store owner has to make less calzones in order to be at maximum efficiency. Based on slope of curve we know this to be an example of “the law of increasing opportunity costs”.



EXAMPLE OF ECONOMIC GROWTH



Marginal Analysis

In economics the term marginal = additional

"Thinking on the margin", or MARGINAL ANALYSIS involves making decisions based on the difference of additional benefit vs. the additional cost.

For Example:

You have been shopping at the mall for a half hour, the additional benefit of shopping for another half-hour might outweigh the additional cost (<u>the opportunity cost</u>).

After three hours, the additional benefit from staying an additional half-hour would likely be less than the additional cost.

Marginal Ana sis

Notice t the deci mal rocess wasn't "should I he ould I stay home"

In re "should I

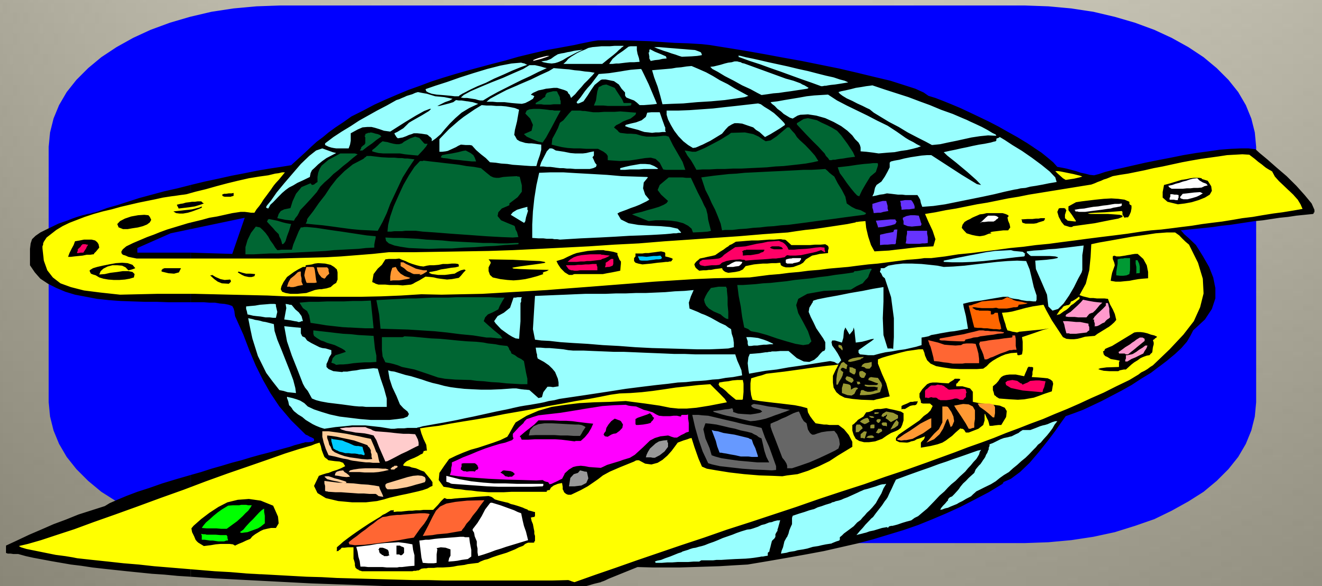
Onc I stay for an additional I g

Everyone will continue to do something until the marginal cost outweighs the marginal benefit. Then they will stop doing it.

The MARGINAL A LYSIS a roach to decision making is more c mely used than the "all or noth ng" approach.

Module 4: Trade & Comparative Advantage

- Economies always produce more and obtain a higher standard of living when each economy specializes in a specific task and then trades with another. The process of globalization.



Gains from Trade

- The key to a much better standard of living for everyone is **trade**.
- The reason we have an economy is that there are **gains from trade**.
- Gains from trade arise from **specialization**.
- Normally a nation’s economy cannot produce or consume beyond its PPC BUT with trade based on **comparative advantage** two nations can consume beyond their own ppc.

KEY CONCEPT

Anytime two nations or people have different opportunity costs then there is the opportunity to gain from trade

Production Possibilities for Two Castaways: Tom **and** Hank

Figure 4.1

(a) Tom's Production Possibilities by himself

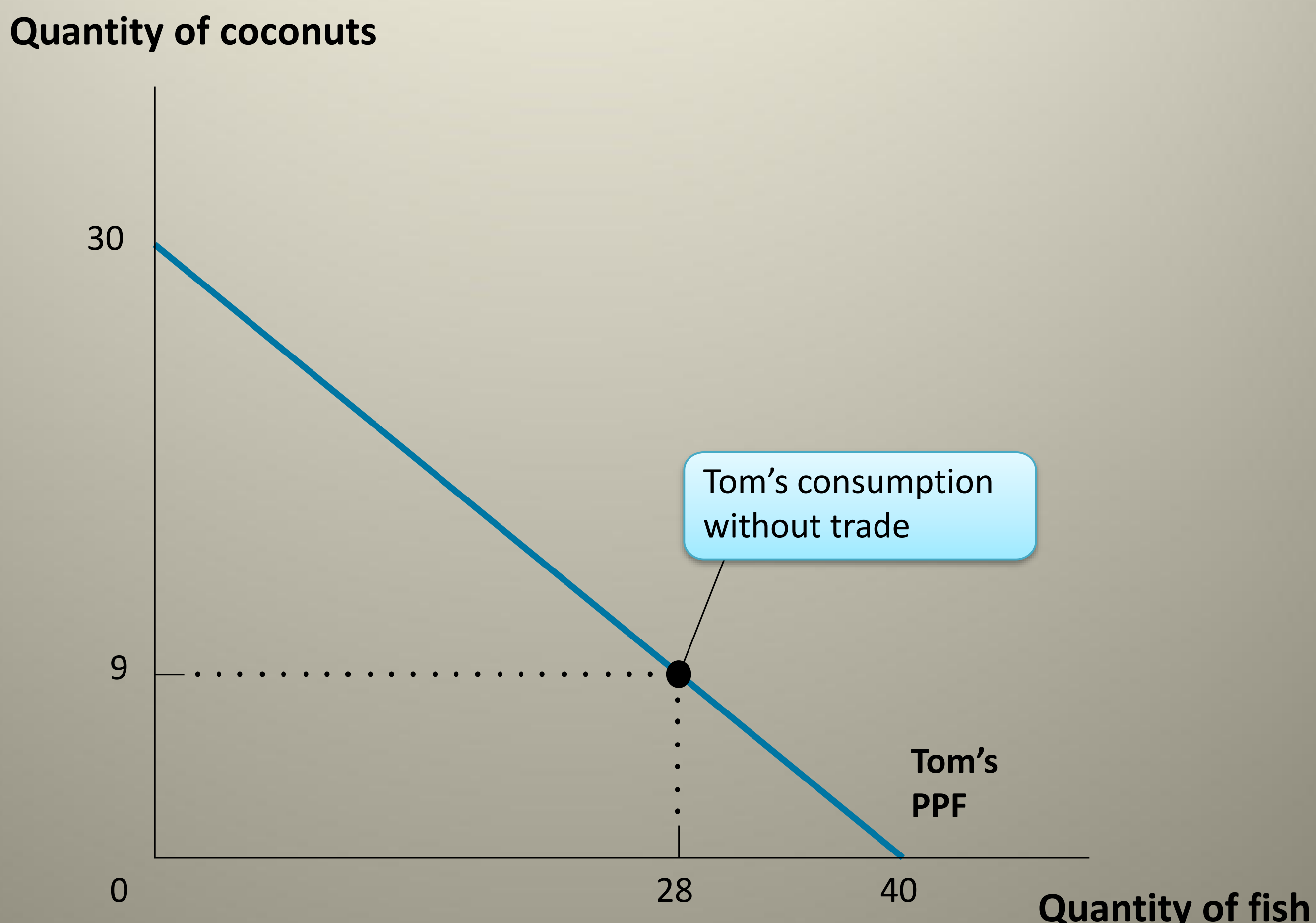
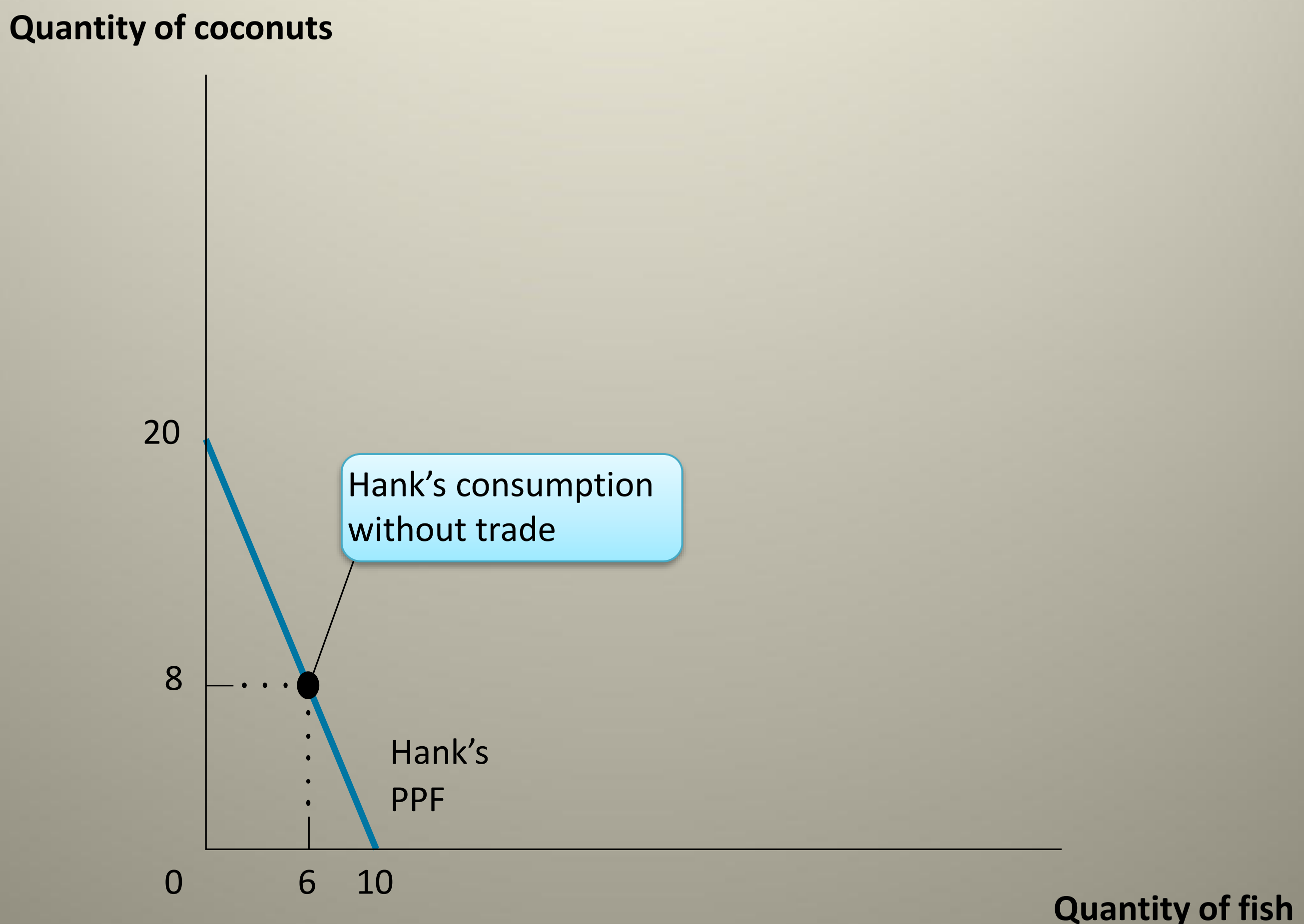
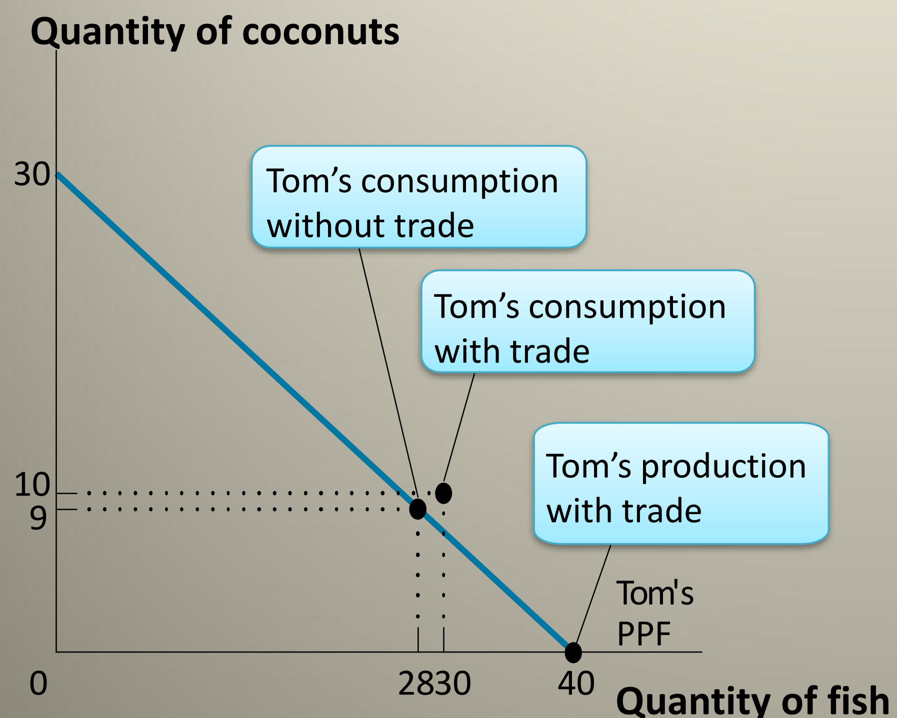


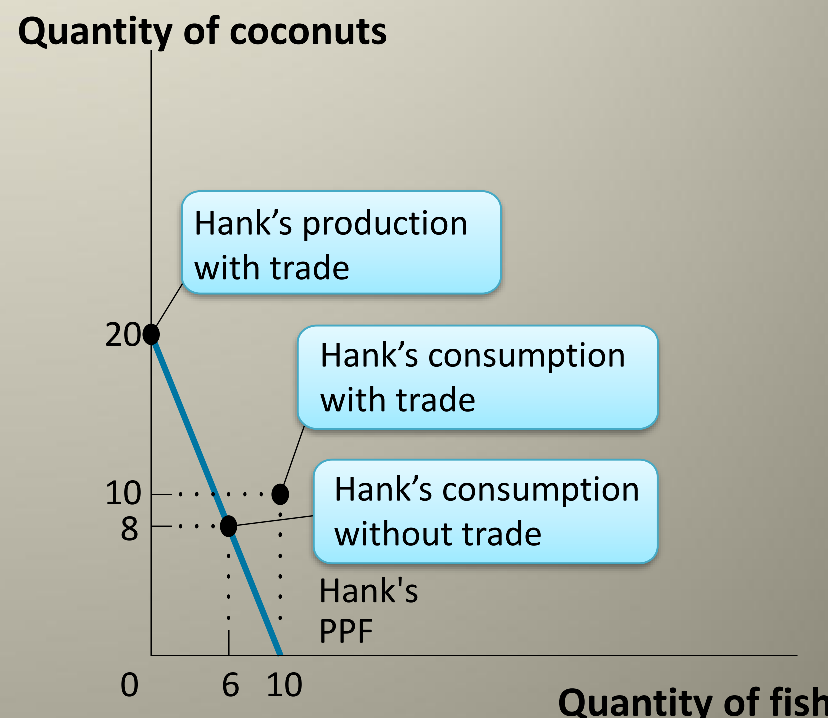
Figure 4.1 **(b) Hank's Production Possibilities by himself**



(a) Tom’s Production and Consumption



(b) Hank’s Production and Consumption



- Both castaways are better off when they each specialize in what they are good at and trade.
- Tom should specialize in catching fish.
- Hank should specialize in gathering coconuts.

»KEY TO KNOW

- An individual has a **comparative advantage** in producing a good or service if the opportunity cost of producing the good is lower for that individual than for other people.

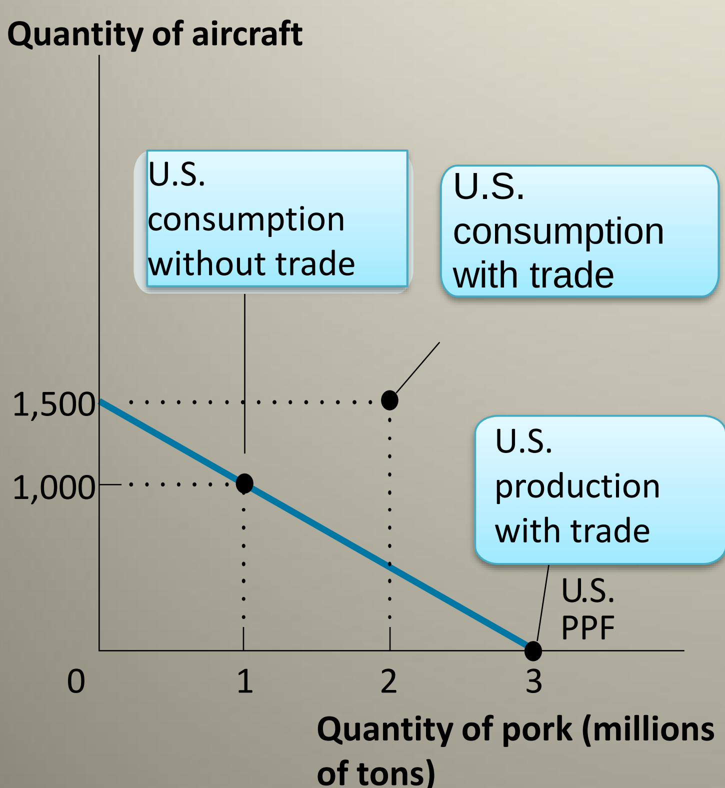
- An individual has an **absolute advantage** in an activity if he or she can do it better than other people. Having an absolute advantage is not the same thing as having a comparative advantage.

- **Comparative advantage** is the basis for trade.
  - Trade can be beneficial to both even if one has an **absolute advantage** in the production of both goods.

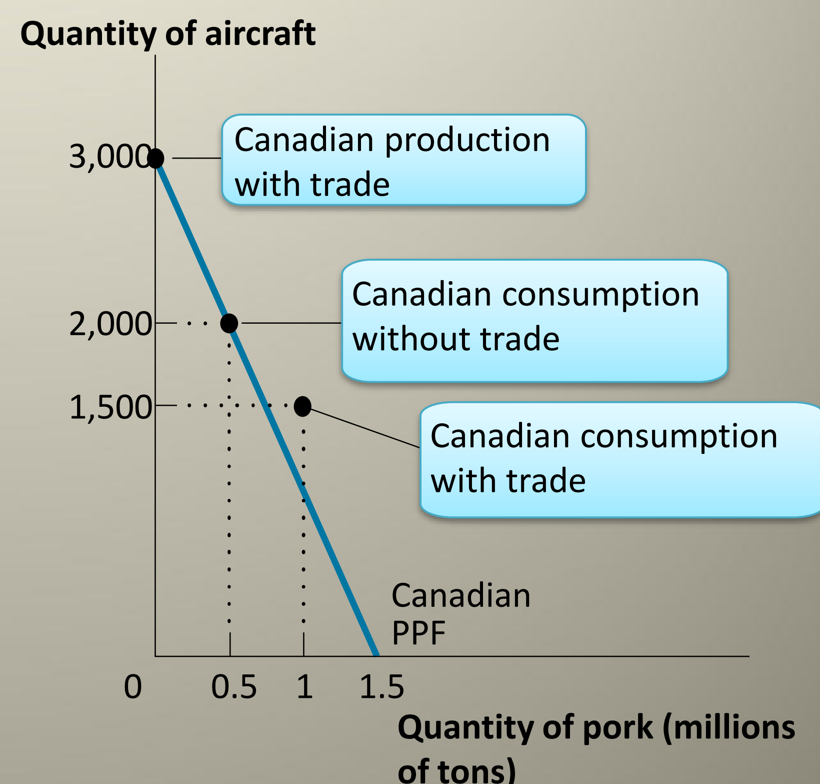
By agreeing to specialize and trade, both traders can be better off.

- Everyone has a comparative advantage in something.

(a) The U.S. Production Possibilities Frontier



(b) Canadian Production Possibilities Frontier



1. A higher standard of living comes from specialization and trade and thus **globalization** is ultimately a benefit for all nations economically.
2. **Comparative advantage** explains the source of gains from trade between individuals and countries.
3. Everyone has a comparative advantage in something.
4. **Absolute advantage** is the ability to produce a particular good or service better than anyone else.