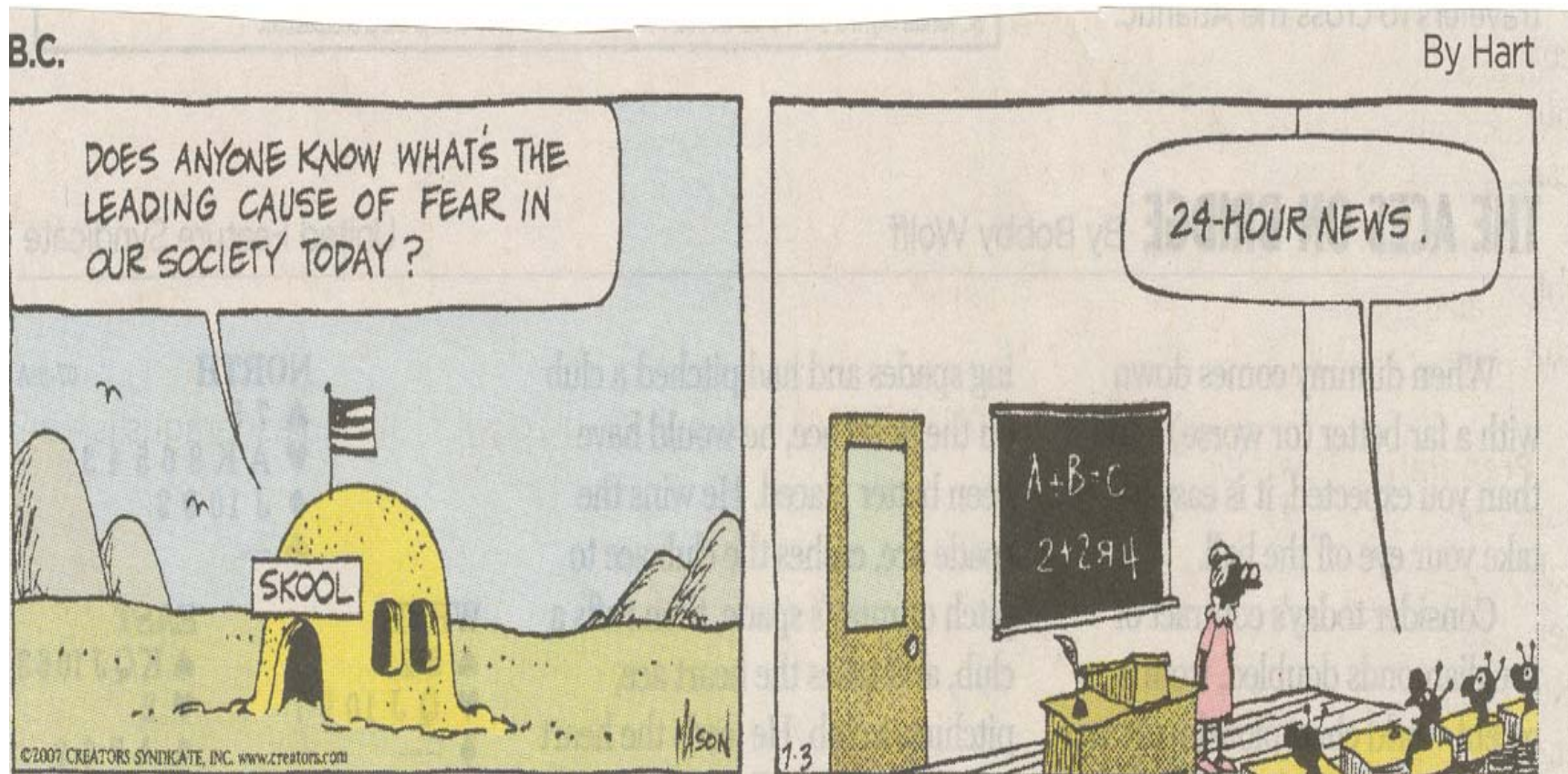


# Basic Economic Concepts

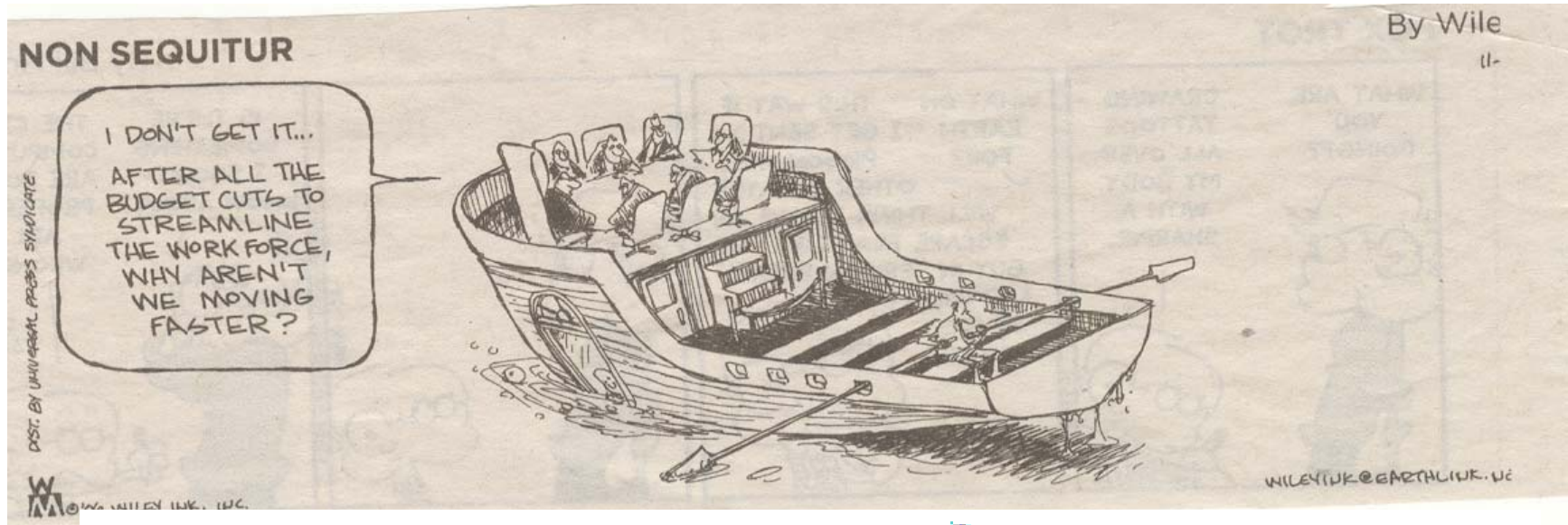


# Basic Economic Vocabulary

- **Needs** are *Necessities* for survival
- **Wants** are Ways of expressing needs and/or goods and services consumed beyond what is necessary for survival.
- **Goods** are physical objects that can be purchased
- **Services** are actions or activities performed for a fee

- **Economics** is the study of scarcity and choice. We have limited resources and unlimited needs and wants. Every economics issue involves personal choice.
- **Scarcity**: there is not enough of “it” available to satisfy the way a society wants to use “it.” This leads us to making choices.
- **Opportunity Cost** is what is sacrificed when one choice is made over the “next best alternative”
- Every decision has an opportunity cost

# Opportunity Cost to every decision!



You study late night  
for a final



The next day you  
are very sleepy



Your opportunity cost  
is a good night's sleep.

# **The Six Core Principles of Economics**

- 1. People choose**
- 2. People's choices involve costs.**
- 3. People respond to incentives in predictable ways.**
- 4. People create systems that influence individual choices and incentives.**
- 5. People gain when there is voluntary exchange.**
- 6. People's choices have consequences that lie in the future.**

# 1. People Choose

We always WANT more than we can get and PRODUCTIVE RESOURCES (HUMAN, NATURAL, CAPITAL) are always limited. Therefore, because of this major economic problem of SCARCITY, we usually choose the alternative that provides the most BENEFITS with the least COST.

## 2. People's choices involve costs.

All Choices Involve Costs The  
OPPORTUNITY COST is the next  
best alternative you give up when  
you make a CHOICE. When we  
choose one thing, we refuse  
something else at the same time.

### **3. People respond to incentives in predictable ways.**

INCENTIVES are actions, awards, or rewards that determine the CHOICES people make. Incentives can be positive or negative. When incentives change, people change their behaviors in predictable ways.

## **4. People create systems that influence individual choices and incentives.**

People cooperate and govern their actions through both written and un written RULES that determine methods of ALLOCATING scarce resources. These RULES determine what is produced, how it is produced, and for whom it is produced. As the rules change, so do individual CHOICES, INCENTIVES, and behavior.

## **5. People gain when there is voluntary exchange.**

People SPECIALIZE in the PRODUCTION of certain GOODS and SERVICES because they expect to gain from it. People TRADE what they produce with other people when they think they can gain something from the EXCHANGE. Some BENEFITS of voluntary TRADE include higher STANDARDS OF LIVING and broader choices of GOODS and SERVICES.

## **6. People's choices have consequences that lie in the future.**

Economists believe that the COSTS and BENEFITS of DECISION MAKING appear in the future, since it is only the future that we can influence. Sometimes our choices can lead to UNINTENDED CONSEQUENCES.

# Key Assumptions in Economics

- People are rationally self-interested
  - \_\_ They seek to maximize their utility (happy points)
- People generally make decisions at the margin
  - \_\_ They weigh the marginal benefit against the marginal cost of a decision
- Ceteris Paribus
  - \_ Economists hold factors constant, except for what's being considered.

"Beautiful, beautiful forest!."



**MACROECONOMICS...**



"Beautiful leaf!"



**MICROECONOMICS...**



# Microeconomics vs. Macroeconomics

- **MICROeconomics (think of small picture)**
- **Individual markets**
- **The behavior of firms (companies) and consumers**
- **Supply and demand**
- **Competition**
- **Resource markets**
- **Market failures**

# Macroeconomics

- **Examines: (Think of the Big Picture)**
- **National Markets**
- **Total output and income of nations**
- **Total supply and demand of the nation**
- **Taxes and government spending**
- **Interest rates and central banks**
- **Unemployment and inflation**
- **Income distribution**
- **Economic growth and development**
- **International Trade**



# **ECONOMICS** - “science of scarcity”

-the study of the **choices** people make in an effort to satisfy their **unlimited needs** and **wants** from **limited resources**.

## The science of “scarcity”

### **Individual Choice:**

Decisions by individuals about what to do, which necessarily involve decisions about what not to do. Think Target and the size of your house.



# SCARCITY

- Marginal decision making = the result of an additional change
- Marginal benefits vs. marginal costs is the basis for making the decision
- Examples:
  - 1 more hour of sleep vs. eating breakfast
  - Part time job vs. goofing off
  - College vs. full time job

**"with other things the same,"  
or "all other things being equal  
or held constant."**



# What you should know from Chapter One



- Define economics
- Describe the “economic way of thinking”
- State some important reason for studying economics
- Explain the importance of *ceteris paribus*
- List eight economic goals and give examples
- Differentiate between micro – and macroeconomics

# Opportunity Cost to every decision!



Economy in actuality

elchimbon, ifunny.mobi

# Three main economics questions



# CAPITALISM – MARKET ECONOMY

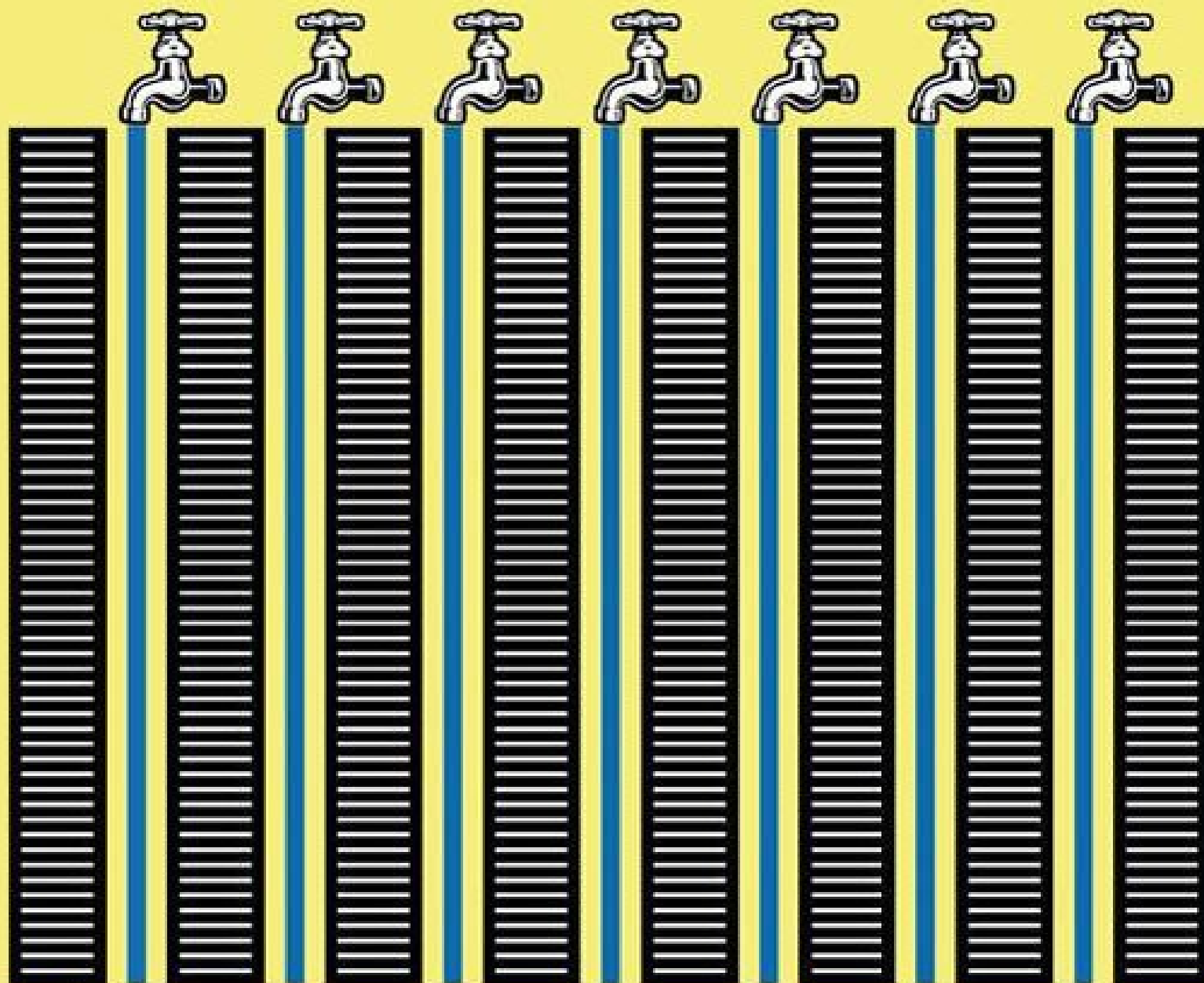
- Markets and Prices coordinate the millions of decisions
- System is facilitated by:
  - Specialization
  - Use of money
  - Technology
  - Active, but limited government involvement

# CAPITALISM – MARKET ECONOMY

- Ownership of all resources is in the hands of individuals
- Decision making is by individuals in the market
- Voluntary exchange of goods and services
- Self interest influences all decisions – to the benefit of society
- Competition is the regulating mechanism

# CAPITALISM – MARKET ECONOMY

- Basic Questions every society must ask:
  - ❑ What goods & services to produce?
  - ❑ How to produce?
  - ❑ How much to produce?
  - ❑ For whom to produce?
  - ❑ How will changes be implemented?



MAIGHTY OPTICAL  
ILLUSIONS

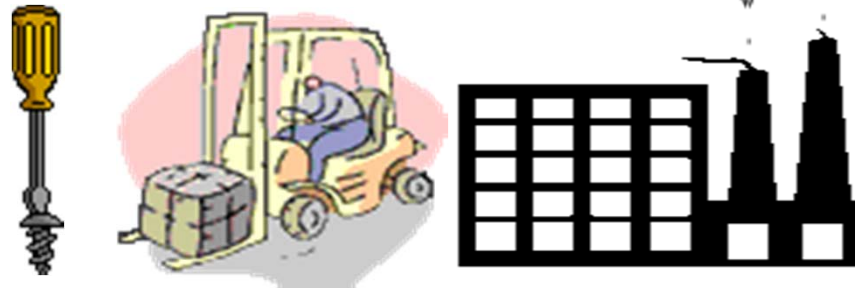
# **Real Capital** v. **Financial Capital**



**Can** produce something directly with these

## **REAL CAPITAL**

[tools, machinery, & factories]



## **FINANCIAL CAPITAL**

[stocks, bonds, and money]

**Can't** produce anything directly with these



**Production** – can only take place once all 4 factors of production are in place

**Gross Domestic Product – GDP**

dollar value of all goods, services and structures produced within a countries' borders

**GNP – Gross National Product**

everything that a country produces within and outside of its own borders

**Consumer good** – used by an individual

**Capital good** – used to produce a consumer good

**Wealth** – accumulation of those products that are tangible, scarce, useful and transferable from one person to another.

**Liquid** – can be turned into cash quickly

**Standard of Living** – quality of life based on the possession of the necessities and luxuries that make life easier



**Adam  
Smith**

**Scotland**

**1723-1790**

**Self Interest**

**The Wealth of Nations**

**1776**

**Specialization**

**Laissez Faire Economics  
(No government  
intervention)**

**The  
Invisible  
Hand**

**Father of Economics  
[Adam Smith]**

# Adam Smith's famous Pin Factory Example

One man could do maybe 10 pins per day [1 man = 10 pins]

Now if there is **specialization**

1 man draws the wire out

1 man straightens the wire

1 man cuts the wire

1 man sharpens the point

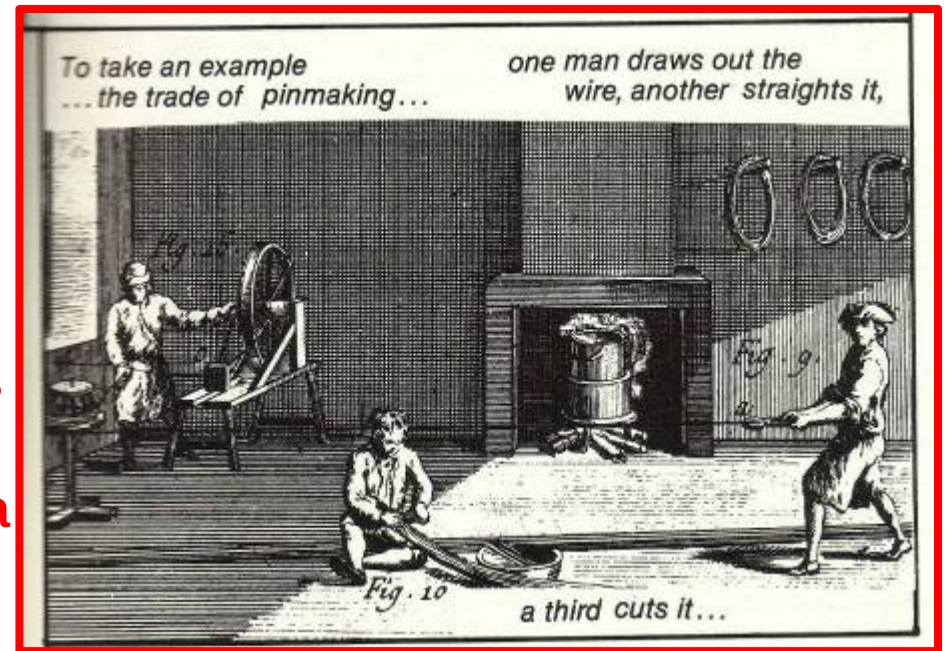
1 man flattens the head

There are **18 distinct operations**

- some perform 2 or 3 operations

**10 people** do **48,000** pins per day

**1 man = 4,800 pins per day**



**Three circumstances come from this specialization.**

1. Increased **dexterity** (learning by doing)
2. **Saving time** (lose time when you move to different operations)
3. Invention of machines (fosters **inventiveness**)



In order to keep up with the increasing demand for those newfangled contraptions, horseless carriages, Ransom E. Olds created the assembly line in 1901. The new approach to putting together automobiles enabled him to more than quadruple his factory's output, from 425 cars in 1901 to 2,500 in 1902.

Olds should have become known as "The father of automotive assembly line," although many people think that it was Henry Ford who invented the assembly line. What Ford did do was to improve upon Olds's idea by installing conveyor belts. That cut the time of manufacturing a Model T from a day and a half to a mere ninety minutes. Henry Ford should be called "The father of automotive mass production."



# Production Possibilities Curve

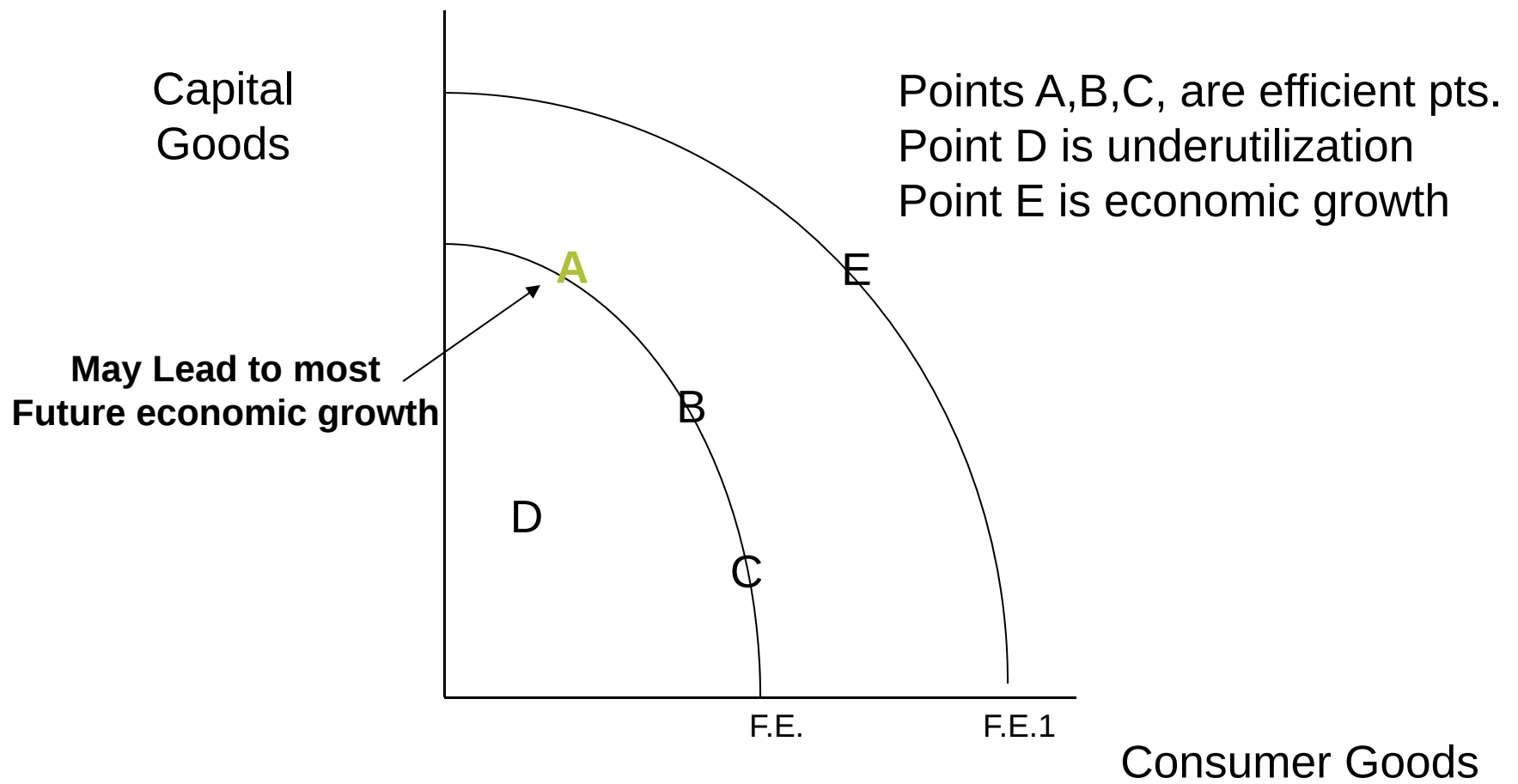
- Assumptions:

- FE/Y
- Fixed Q of Resources and Technology

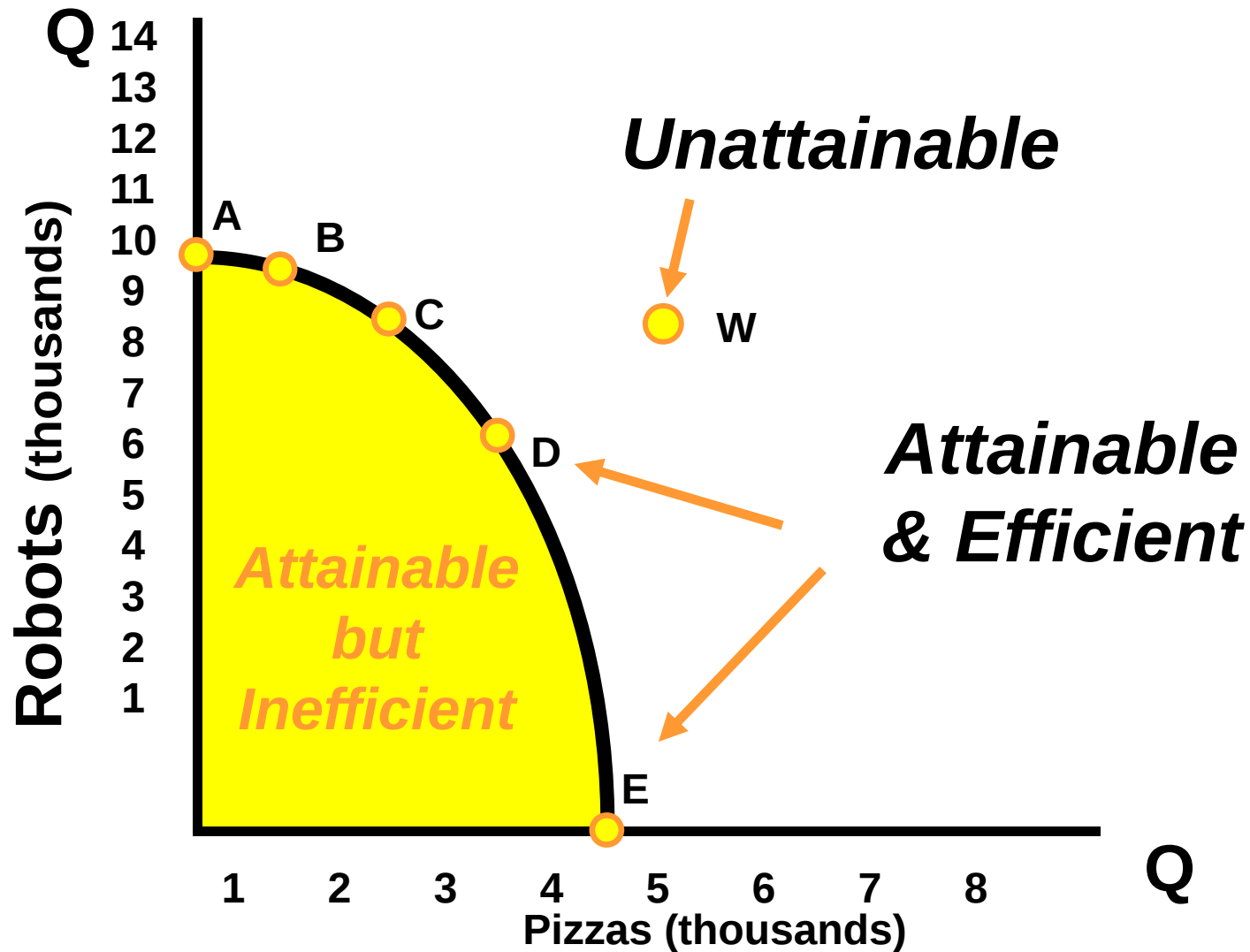
\*Represents:

- **possible combinations of products available with fixed resources and technology**

# Production Possibilities Curve



# PRODUCTION POSSIBILITIES



# Production Possibilities Curve

## Shows:

- **Opportunity Cost**: More pizzas means less robots
- **Unemployment / Inefficiency**: Inside the curve
- **Efficiency**: On the curve
- **Economic Growth**: Curve shifts to the right

The curve bows outwards because of the **Law of Increasing Opportunity Cost**, which states that some economic resources are not completely adaptable to alternative uses, so the resources will yield less of one product.

*Consider an economy which makes cars and computers. Suppose that the economy begins to shift more and more into the manufacture of cars. Initially as resources are diverted into car production, the output of cars rises sharply, but as car production continues to increase, the opportunity cost of producing cars increases significantly. This is because not all resources are adept at car production. Initially, we can find a large supply of potential factory workers, and/or managers well-suited for the auto-industry, but as we focus more and more on car production, increasingly we have to start employing resources unsuited for car production-software engineers for instance. Thus, the opportunity cost of producing cars rises, as the number of cars produced increases.*

English Please.....

L of I OC

to produce more of one good,  
society must sacrifice larger  
and larger amounts of  
alternative goods

## Constant or Linear PPC

If two goods use the same resources for production, it's a one to one trade off and a straight line PPC.

## Law of Decreasing OC – bows inward (concave)

if resources become better suited for production, the line bows inward

# Law of Increasing Opportunity Cost

K.I.S.S. – L of IOC

“I love Lucy”



When Lucy does something bad, Ricky gets mad, Each time Lucy does something stupid again, Ricky gets more and more upset. That's why his chest is always bowed out.



1) Suppose a country can produce either coal or wheat. If when the country is using all of its resources efficiently, the opportunity cost of producing one wheat in terms of coal is always constant, for any level of production, then

- A) the production possibilities frontier for this economy is linear.**
- B) the production possibilities frontier for this economy is bowed outward.**
- C) the production possibilities frontier for this economy is bowed inward.**
- D) the production possibilities frontier for this economy is S-shaped.**
- E) none of the above.**

## *Question # 1*

*Answer: (A) the production possibilities frontier for this economy is linear.*

*The slope of the production possibilities frontier tells us the opportunity cost of producing one good in terms of the other. If the opportunity cost of producing wheat in terms of coal is constant, then the slope of the production possibilities frontier will also be constant. Hence answer A must be correct.*

2) Typically production possibilities frontiers are bowed outward (i.e. concave) because

- A) opportunity costs are always positive.
- B) the problem of scarcity is ever present.
- C) producing one more of one good always entails producing less of another.
- D) resources are not equally well suited to the production of all goods and services.
- E) as we produce more and more of one good, the opportunity cost of producing that good declines.

- *Question # 2 Typically production possibilities frontiers are bowed outward (i.e. concave) because*
- *Answer: (D) resources are not equally well suited to the production of all goods and services.*
- *Note that production possibilities frontiers are downward sloping because society faces usually tradeoffs. However, this does not explain the reason for the concave shape of the production possibilities frontier. A PPF is likely to be so-shaped because not all resources are equally well-suited to producing the same good. Let us consider a concrete example. Consider an economy which makes cars and computers. Suppose that the economy begins to shift more and more into the manufacture of cars. Initially as resources are diverted into car production, the output of cars rises sharply, but as car production continues to increase, the opportunity cost of producing cars increases significantly. This is because not all resources are adept at car production. Initially, we can find a large supply of potential factory workers, and/or managers well-suited for the auto-industry, but as we focus more and more on car production, increasingly we have to start employing resources unsuited for car production-software engineers for instance. Thus, the opportunity cost of producing cars rises, as the number of cars produced increases.*

**3) Suppose Euroworld has a non-zero rate of unemployment. How would you illustrate this on a PPF diagram?**

- A) By a point outside the production possibilities frontier.
- B) By a point on the production possibilities frontier.
- C) By a point inside the production possibilities frontier.
- D) Either by a point on, or inside, the production possibilities frontier.
- E) By a rightward shift in the production possibilities frontier.

*Answer: (C) By a point inside the production possibilities frontier.*

*Recall that a production possibilities frontier is a graph that shows all combinations of any two goods that a society can produce when it uses all of its resources in the most efficient manner, given the current level of technology. If there is unemployment in Euroland, then Euroland is not using all of its resources, hence Euroland cannot be operating on its PPF. Since points outside the PPF are unattainable, this implies that we must be at a point inside the PPF.*

4) Consider an economy where growth has been taking place because of a reduction in the rate of unemployment. How would you illustrate this using a PPF diagram?

- A) By a rightward shift in the PPF.
- B) By a point outside the PPF.
- C) By a point inside the PPF.
- D) By a point located inside the PPF, but at the same time moving closer to the frontier over time.
- E) By a point on the PPF, but moving along it.

*Answer: (D) By a point located inside the PPF, but at the same time moving closer to the frontier over time.*

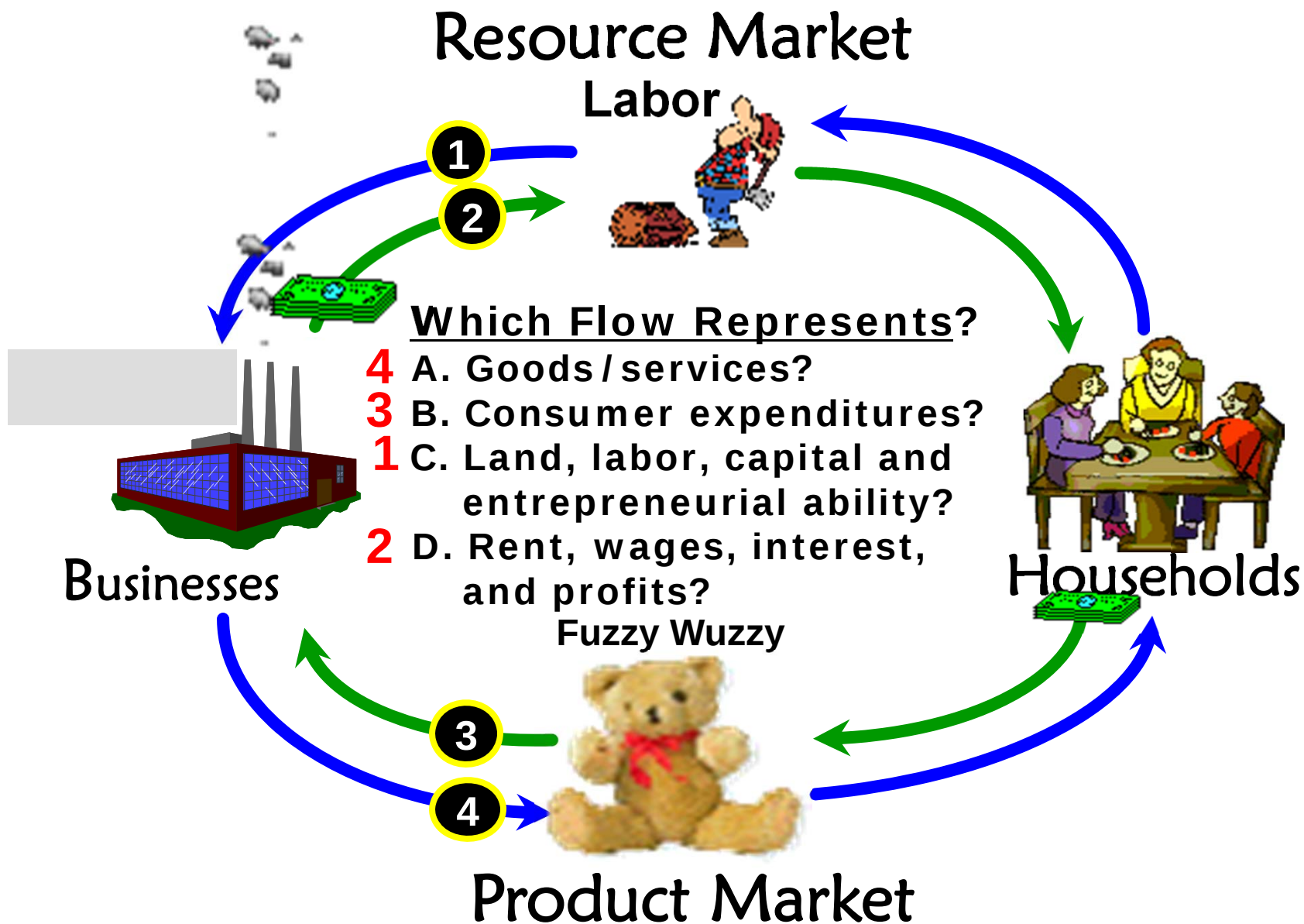
*Typically we would illustrate growth by a rightward shift in the PPF (although not in this case). It should be clear to you why? Long-run economic growth is typically driven by an increase in resources such as labor and capital, as well as technological progress. This improvement in technology and increase in resources makes previously unattainable points (to the right of the frontier) attainable. Hence we would illustrate such a change by a rightward shift in the PPF. However, in this particular instance, the growth in output is being generated by a reduction in unemployment. Initially the economy was not using all of its resources, and over time it is correcting this problem. Hence it is moving closer to the frontier, which corresponds to points where all of its resources are being utilized.*

Assume that two countries, Atlantis and Xanadu, have equal amounts of resources. Atlantis can produce 30 cars or 10 tractors or any combination, as shown by the line MN in the figure above. Xanadu can produce 20 cars or 40 tractors or any combination, as shown by the line PQ in the figure above.

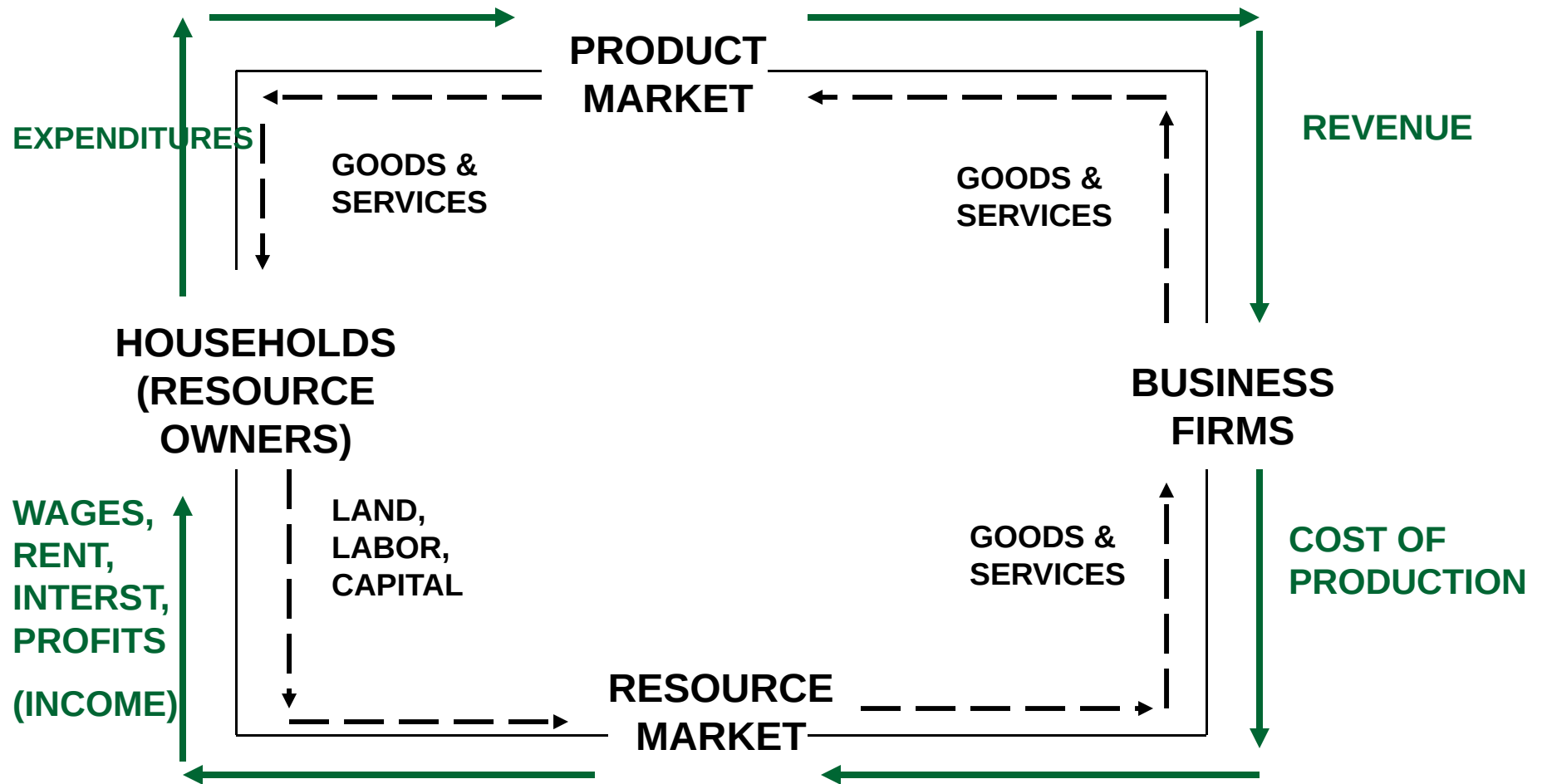
- (a) Which country has an absolute advantage in the production of tractors? Explain how you determined your answer.
- (b) Which country has a comparative advantage in the production of cars? Using the concept of opportunity cost, explain how you determined your answer.
- (c) If the two countries specialize and trade with each other, which country will import cars? Explain why.

How Does Growth Tie in to our  
cyclical economy?

# The Circular-Flow Diagram



# Circular Flow Chart – illustrates the overall operation of the market system



# Circular Flow Model

