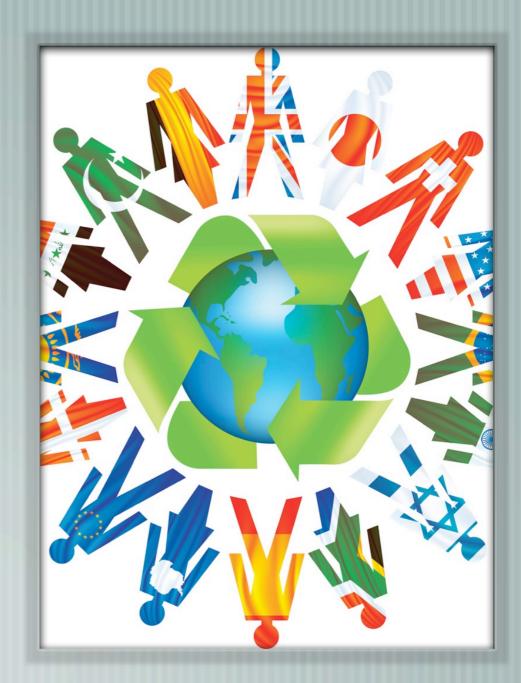
# The Foundations of Economics Chapter 1

# **A Social Science**

- Study of people in society and how they interact with each other
- Earth= Finite
  - have limited resources
  - use resources to produce goods and services
- Goods are physical objects
  - ex: vegetables, books, cars
- Services are intangible
  - ex: insurance, haircuts, car repairs



# Human Wants and Needs

- Human wants and needs are infinite (never satisfied)
- Needs = things we need to survive
  - food, clothing, shelter
- Wants = things we like but are not necessary
- tv, cell phones, name brands



#### Economics

The study of rationing systems. How scarce resources are allocated to fulfill infinite wants and needs of consumers.

## Scarcity

- All goods are relatively scarce
  - relative to people's demand for them
  - ex: not everyone who would like a car has one
    - ability to buy a car is affected by the amount of money they have and the price of the car
- Economic good- any good or service that has a price (thus being rationed)

## Choice

People do not have infinite incomes (\$) so they continually have to make choices on how to spend their money

People have limited financial resources and have to choose between different alternatives



# **Opportunity Cost**

- Opportunity Cost- the next best alternative forgone when an economic decision is made
- Ex: You have the choice to go to the movies for \$15 or purchase a meal at a restaurant for \$15.
  - you choose to go to the movies
  - opportunity cost is the meal at a restaurant you go without
- **Opportunity cost is not measured in money**

#### Economic Goods vs. Free Goods

#### Economic goods

- have an opportunity cost
- relatively scarce
- "Free Goods"
- not really limited in supply
- do not really have an opportunity cost
- do not have a price
  - ex: air (do not have to give up something else in order to breath), salt water

# The Basic Economic Problem

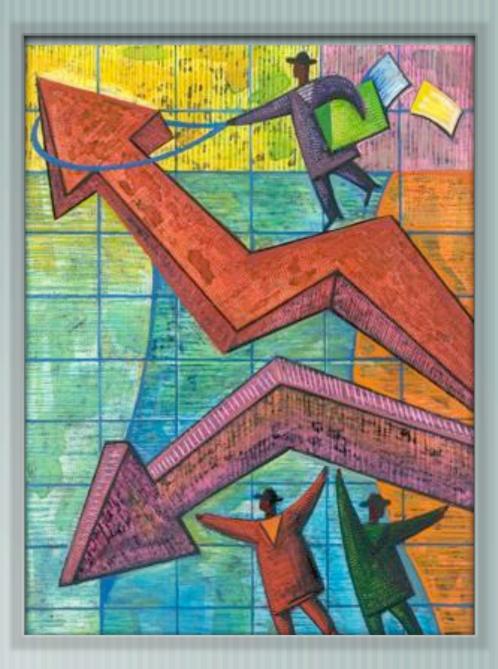
Resources are scarce, wants/needs are infinite so choices need to be made. Three questions represent the basic economic problem:

What should be produced and in what quantities (how much)?

- Ex: how many computers should be produced? Milk? Wheat? This has to be decided for ALL goods!
- How should things be produced?
  - There are many ways of reproducing things and different combinations of resources. Organic or conventional? Automated or manual labor?
- Who should things be produced for?
  - Should they go to people who cannot afford them? Should we try to be "fair"?

# The Basic Economic Problem

- No matter the system used, it must be able to answer the 3 basic economic questions Two theoretical allocation (rationing) systems:
  - planned economy
  - free market economy
- All economies are in reality mixed economies (combination of planned and free market)
- How much should the government intervene?



# Factors of Production

- There are four resources that allow an economy to produce its output (how much is produced), known as the factors of production:
  - Land
  - Labor
  - Capital
    - Management (entrepreneurship)

#### Factors of Production

Capital

Land

entrepreneurship

Labor

Monday, August 12, 2013

#### Land



#### Land includes:

everything that grows on the land or found under it

the sea and everything that is found under the sea

all natural resources

raw materials (gold, coal, natural gas) cultivated products (ex: wheat, rice vegetables) renewable vs.

nonrenewable

### Labor

#### Human factor

physical and mental contributions of the existing workforce to production

# Capital





Railway systems -



Education





Healthcare -

Airports





Utility systems



Social Infrastructure



Comes from investment in physical capital and human capital.

Physical capital- the stock of manufactured resources (factories, machinery, roads, tools used to produce goods and services).

Human capital- the value of the workforce.

Investment in human capital through education or improved health care can be a contributor to economic growth

Infrastructure (social overhead capital) is the large scale public systems, services and facilities that are necessary for economic development

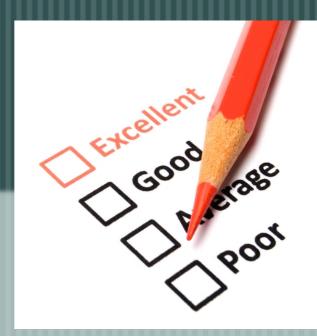
Ex: roads, railways, hospitals, schools, ports, airports, electricity plants etc.

Accumulated by investment (usually by government) to improve economic growth and development

### Management (entrepreneurship)

- [ The organizing and risk-taking factor of production.
  - Entrepreneurs organize the other factors of production (Land, labor, capital)
    - Use their money or investor money to buy the factors of production, produce goods and services and hopefully make a profit.
      - **Profits are not a guarantee = risk taking!**

# Utility



Measures usefulness and pleasure

Gives economists an idea of how much usefulness or pleasure a consumer receives when they consume a product. Two ways to measure: Total utility and marginal utility.

- Total utility is the total satisfaction gained from consuming a certain amount of a product. (ex: person eats five ice creams. Total utility is the satisfaction gained from eating all five of the ice creams)
- Marginal utility is the extra utility gained from consuming one more unit of a product. (ex: person eats ice cream after ice cream, the pleasure derived from each additional unit will start to fall. Eat ice cream for too long, person becomes sick and we have negative utility

#### Microeconomics and Macroeconomics

Microeconomics deals with smaller, discrete economic agents and their reactions to changing events



- looks at individual consumers and how they make decisions Looks at individual firms (businesses)
  - What to produce, how much
- Macroeconomics takes a wider view and measures all economic activity in the economy.
  - looks at inflation, unemployment, distribution of income in a society

#### **Positive Economics and Normative Economics**

- Positive statement can be proven right or wrong
- Positive economics deals with areas that can be proven to be correct or not
- Normative statement is a matter of opinion
- Normative economics deals with areas that are matters of opinion



"Never mind the food. Just bring us the bill so we can argue about it."

## Economists and Model Building

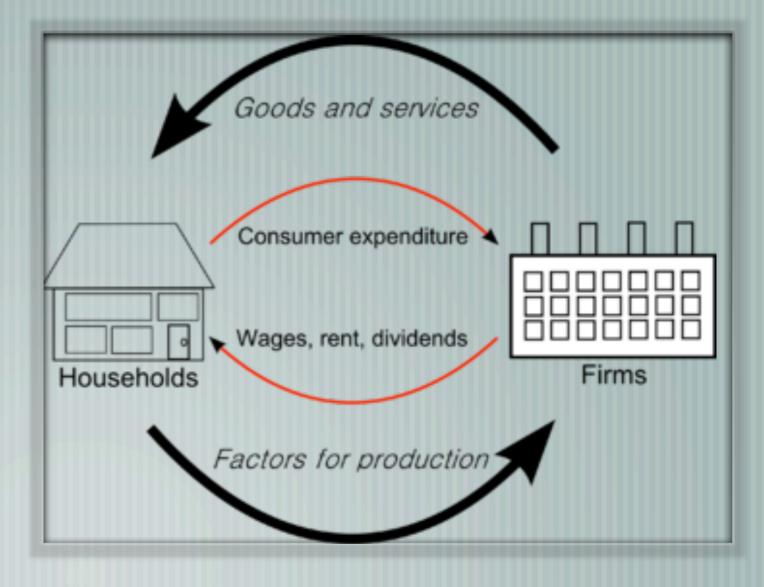
- Economists build models to test and illustrate their theories.
- Models can be manipulated to see if outcomes will change with a different variable
- **Ceteris Paribus** 
  - In Latin means "all other things being equal"
- When economists want to test the effect of the one variable by assuming their is no change in any of the other variables
- Ex: If an economist wants to know how a change in wages will affect people's desire to work, they have to assume that there is no change in another variable like taxes.

# Model Building

- Household represent the groups of individuals in the economy who perform two functions:
  - consumers of goods and services
  - owners and providers of factors of production that are used to make goods and services

Firms represent the productive units in the economy that turn factors of production into goods and services (private sector)

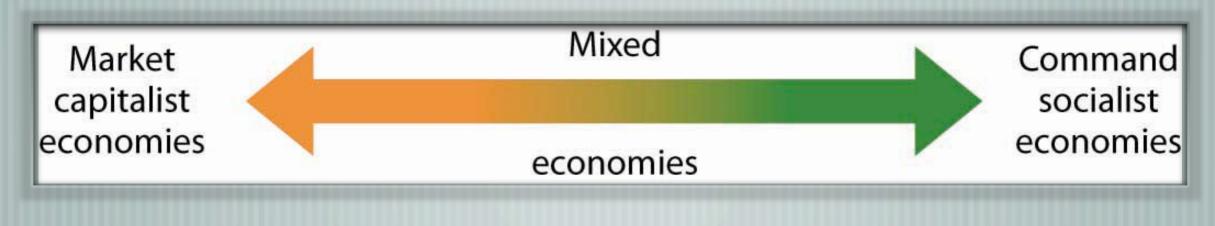
This model ignores Government and international trade



#### Planned Economies Vs. Free Market Economies

Since resources in an economy are relatively scarce, there must be some way of rationing those resources and the goods and services that are produced by them

- Planned economy
  - Free market economy



# Planned Economies

**AKA Centrally planned, command economy** 

- decisions on what to produce, how to produce and who to produce for are made by a central body (government)
- All resources are collectively owned
  - Government arranges production, sets wages, sets prices

# **Centrally Planned Economies**



Many decisions to be made, date to be analyzed and factors of production to be allocated are immense!

- central planning very difficult
- must forecast future to plan ahead
- 1980's 1/3 of the world lived in planned economies (USSR and China)
  - Present day- very few countries rely solely on central planning

## Free Market Economies

- AKA Private enterprise economy, capitalism
  - Prices are used to ration goods and services
  - Production is in private hands
    - Demand and supply are left free to set wages and prices in the economy
    - Economy should work relatively efficiently and sould not have many shortages or surpluses



## Free Market Economies

- Individuals make independent decisions
- Producers decisions are based on the likelihood of profits being made

"Every individual...generally, indeed, neither intends to promote public interest, nor knows how much he is promoting it... he intends only his own gain, and he is in this...led by an invisible hand to promote an end which was no part of his intention." -Adam Smith If there are changes in the pattern of demand, there will be changes in the pattern of supply

Consumers and producers work to their own best interest, the market functions to produce the "best" outcome for both.

# Mixed Economies

- **REALITY = all economies are mixed economies** 
  - differences from country to country is the degree of the mixture
- China has high levels of central planning
  - USA, the UK or Hong Kong have a more free economy but still have some government intervention
- Government involvement is deemed essential, since there are some dangers that will exist if the free market is left to operate on its own

#### Disadvantages of Pure Free Markets

Demerit goods (drugs, prostitution) will be over-provided, driven by high prices

Merit goods (education, health care) will be under provided, since they will only be produced for those who can afford them and not for all

Resources may be used up too quickly and the environment may be damaged (firms seek to make high profits at minimal costs) Some members of society will not be able to look after themselves (orphans, sick, unemployed)

Large firms may grow and dominate industries

leading to high prices, loss of efficiency and excessive power

#### Disadvantages of Planned Economies

Total production, investment, trade and consumption, even in small economy, are too complicated to plan and there will be a misallocation of resources, shortages and surpluses.

Because there is no price system, resources will not be used efficiently. Arbitrary decisions will not be able to make the best use of resources. Incentives tend to be distorted. Workers with guaranteed employment and managers who gain no share of the profits are difficult to motivate. Output and/or quality suffer.

The dominance of the government may lead to a loss of personal liberty and freedom of choice.

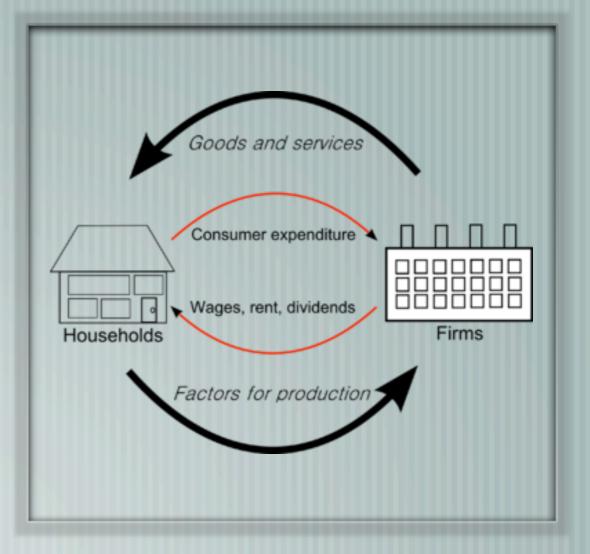
Governments may not share the same aims as the majority of the population ad may implement plans that are not popular or even corrupt.

## Economic Growth

National income is the value of all goods and services produced in an economy in a given period (usually 1 yr)

National income is measured by adding up all the activity of one of the following:

- Value of output of goods and services
- Expenditure of the goods and services
  - Total incomes of the households for letting firms use their factors of production
- Too difficult to measure the value of the factors of production used



### **Economic Growth**

- Inflation (any increase by rising prices) is ignored so that national income is not overstated
- "Real" national income takes into account inflation
- If there is an increase in the level of real national incoem between one year and another, then we could say that the economy has grown
  - However, if the population has grown by the same percentage, then income per head of the population will not have grown
  - We would then measure increases in real national income per capita (per person/ head)
- Economic growth does not tell us much about the actual welfare of people in the country

### **Economic Growth**



The measurement of economic growth is simple a measurement of the change in a country's national output or Gross Domestic Product (GDP) or Gross National Income (GNI)

## **Economic Development**

- Economic development is a measure of welfare, well-being.
- Includes non-monetary indicators like: health and social welfare

Human Development Index (HDI) weighs up real national income per head, the adult literacy rate, the average years of schooling and life expectancy in ranking countries of the world in terms of "development".

## Economic Development

HDI is calculated to give a value between 0 and 1. closer to 1 = more developed > 0.9 = very high human development ------0.8 - 0.9 = high human development 0.5 - 0.8 = medium human development < 0.5 = low human development

#### 2010 rank HDI

Top 10		Bottom 10	
1	Norway	160	Mali
2	Australia	161	Burkina Faso
3	New Zealand	162	Liberia
4	United States	163	Chad
5	Ireland	164	Guinea-Bissau
6	Liechtenstein	165	Mozambique
7	Netherlands	166	Burundi
8	Canada	167	Niger
9	Sweden	168	Congo (Dem Rep)
10	Germany	169	Zimbabwe

#### Greatest drop in rank (2005 to 2010)



# HDI & GDP

Valuable to look at change in HDI over time

Important to look at both GDP and HDI for a country

> just because they have a high GDP doe snot mean that all citizen enjoy the benefits of higher levels of income.

High GDP does not ensure equity

0.000 - 0.280 0.281 - 0.463 0.464 - 0.612 0.613 - 0.696 0.697 - 0.779 0.780 - 0.850 0.851 - 0.946

Quantile classification

Human Development Index, 2009

231-154 231-154 231-154 155-1044 1054-1755 1053-1042 1054-1756 1053-1042 1054-1756 1053-1042 1054-1756 1053-1042 1054-1756 1053-1042 1054-1756 1053-1042 1054-1756 1053-1042 1054-1756 1053-1042 1054-1756 1053-1042 1054-1756 1053-1042 1054-1756 1053-1042 1054-1756 1055-1756 1055-17

# Sustainable Development

World Commission on Environment and development was formed by the UN in 1983

1987 published Our Common Future which shared the opinion that economic growth cannot be sustained into the future if environmental degradation is taking place and non-renewable resources are being used up.

"Sustainable Development"- development that meets th needs of the present without compromising the ability of future generations to meet their own needs

Need to understand the possible consequences of economic growth and its effects on the environment