Scarcity and opportunity cost and the basic tasks of an Economy

The economy is a dynamic, constantly changing mechanism. The natural resources, workers, managers, innovators, equipment, structures, and technical know-how available to produce useful goods and services are all in some way limited. The wants we seek to satisfy, however, are seemingly unlimited. We all have biological needs for minimum amounts of food, clothing, and other basic goods--but few of us are content with minimum amounts of these items. We want amenities, comfort, and luxuries.

The fundamental economic problem is **scarcity**, the imbalance between our desires and the means of satisfying those desires. It is a problem faced by rich as well as poor societies--even the vast wealth of the United States is inadequate to satisfy all the desires of its people. The importance of scarcity as a unifying topic in economics is highlighted by the fact that many economists would define their discipline in the following way:

Economics is the study of how human beings make choices to use scarce resources as they seek to satisfy their seemingly unlimited wants.

Opportunity Cost

When scarcity exists, we know we must sacrifice something of value to obtain more of any scarce good or service. The limited availability of resources such as land, skilled labor, structures, and equipment means that the more resources are used for one purpose, the less will be available for other purposes. The **opportunity cost** of choosing to use resources for one purpose is the sacrifice of the next best alternative for the use of those resources. For example, if your next best alternative to studying for an hour is an hour of swimming, then the opportunity cost of studying is the hour of swimming you sacrifice when you choose to study. If you're considering the choice between a bicycle and new stereo speakers, then the opportunity cost of choosing to buy the bike is the speakers, and vice versa.

The concept of opportunity cost is vital because opportunity cost is a measure of everything you sacrifice to attain a given objective. When you make a decision, you want to consider carefully its opportunity cost before deciding whether the gain is worth the sacrifice you must make.

Three Basic Economic Decisions

The concepts of scarcity and opportunity cost are vital to understanding how the economy works. In the face of the inevitable imbalance between limited productive capability and limitless wants, the following questions need to be considered:

1. *What will be produced?* The productive potential of an economy can't be used to do everything for everybody. Decisions must be made about what to produce and how much of each item to produce with the limited resources available. These decisions are political in nature, and they involve balancing needs and wants of various groups. For example, an increase in the use of productive capacity to provide military equipment inevitably reduces the availability of consumer goods such as cameras, microwaves, and automobiles. Choices must be made about which goods and services to make available and which to forgo.

2. *How will goods and services be produced?* There's more than one way to accomplish any given objective. For example, a certain quantity of iceberg lettuce can be produced on a large tract of land without the use of pesticides or fertilizers. However, the same amount of lettuce can be grown on less land with chemical agents. Goods and services can be produced by business firms or by government or nonprofit enterprises. Crops can be harvested by many workers using hand tools or with specialized machines and fewer workers. Textiles can be loomed and finished by hand or in automated plants where machines rather than workers perform many of the required tasks. Machines or other products (such as chemicals) can be substituted for labor or land when producing any mix of goods. Productive methods that squeeze the most out of available means allow the greatest possible material well-being from limited resources.

3. *To whom will goods and services be distributed?* Are they to be distributed equally to everyone so that each of us lives in the same type of house, eats the same amount and kinds of food, and wears the same clothes? Or are goods to be sold to those willing and able to pay? Under the latter method, people with higher incomes will enjoy more and better products and services than people with lower incomes. Will some of us be given special privileges to enjoy goods and services regardless of our ability to pay for those items? What rules will be used to decide who gets what?

The distribution of material well-being is never perfectly equal. Some people have the financial resources to enjoy great quantities of goods and services of the highest quality. Others, even in a nation with the vast productive potential of the United States, live in poverty. No society has yet discovered how to provide equally for the needs and wants of everyone while still offering the incentives that encourage high-quality production and technological innovation.

Microeconomics versus Macroeconomics

Economic analysis is divided into two main branches--microeconomics and macroeconomics. Both are important in dealing with the problem of scarcity.

Microeconomics takes a close-up view of the economy by concentrating on the choices made by individual participants in the economy such as consumers, workers, business manager, and investors. **Macroeconomics** looks at the economy from a broader perspective by considering its overall performance and the way various sectors of the economy relate to one another. The performance of the economy is gauged by the total value of annual production, the capacity of the economy to provide jobs, changes in the purchasing power of money, and the growth of employment and output.

Microeconomics

Microeconomics analyzes the ways individuals choose among various courses of action by weighing the benefits and costs of alternatives available to them. It emphasizes the role of prices in business and personal decisions. One of the major goals is to understand how the prices of particular goods and services are determined and how prices influence decisions. Because of its preoccupation with prices and the trading of goods and services, microeconomics is sometimes called *price theory*.

Microeconomics studies the actions of individuals as they buy and sell in market transactions. As you know, some services, such as education and police protection, are provided by government agencies rather than being sold in markets. What are the advantages and disadvantages of alternatives to markets as a means of accomplishing the basic tasks of the economy? How do political choices influence the economy's function and performance? You'll find that microeconomic analysis provides a useful point of view about human behavior that will give you insights into important social and political issues.

Macroeconomics

Macroeconomics examines changes in total national production and consumption, averages of the prices of broad groups of goods and services, and the employment of workers in the economy. Macroeconomists seek to explain the causes of economic fluctuations and to suggest policies that will make the fluctuations less abrupt, with the aim of preventing excessive unemployment and rapid price increases.

In macroeconomics, we place special emphasis on understanding the causes of unemployment. The *unemployment rate* is the number of jobless workers who are actively looking for work or who have been laid off from a job and are looking for work, expressed as a percentage of the total labor force. Unemployment is often a major issue in congressional and presidential elections. In fact, the federal government is required by law to pursue policies that seek to keep unemployment from becoming too high. If such policies are to succeed, the individuals who develop them must have a keen understanding of how the economy works.

Inflation is another highly charged political issue studied in macroeconomics. *Inflation* is a general yearly increase in the average level of prices for a broad spectrum of goods and services.

Inflation erodes the purchasing power of money. It can create economic instability in a nation by harming the competitiveness of firms seeking to sell products in foreign markets and by distorting economic choices as people try to unload money today they think will be worth less tomorrow. During the late 1970s, inflation was a severely disrupting influence in the U.S. economy, rising to double-digit levels along with the escalating interest rates. Macroeconomics seeks to understand the causes of inflation, and to help government authorities pursue policies aimed at keeping the inflation rate low and within fairly predictable bounds. Stable and predictable prices facilitate planning for the future and reduce the uncertainty associated with market transactions.

In studying aggregate production in the economy and its fluctuations, macroeconomists seek to uncover the basic influences that cause national production to increase. The key to prosperity in an economy is steady growth in national output. When growth in a nation's output exceeds growth in its population, the output per person in the economy will grow, thus improving the well-being of the population, on average.

Positive Analysis versus Normative Analysis

In the field of economics, we're concerned with more than understanding *how* the economy functions. We also look at ways of improving the outcomes that emerge as the economy accomplishes its tasks of producing and distributing goods and services. The operation of the economy isn't flawless, nor does it please all of us. As individuals, we differ in our opinions about the goals for which resources in the economy should be used. We also disagree about the appropriate nature and extent of government involvement in the economy, and through political channels we express our views about which groups government should help. Because we understand the concept of opportunity cost, we know that, if a government action benefits one group, it inevitably imposes a cost on another group.

In evaluating economic policies, we must understand the basic functioning of the economy before we can predict the impact of those policies on the economy. **Positive analysis** is a way to forecast the impact of changes in economic policies or conditions on observable items such as production, sales, prices, and personal incomes. It then tries to determine who gains and who loses as a result of the changes. Positive analysis makes statements of the "if...then" type that can be supported or refuted by empirical evidence. For example, "*If* the federal government deficit is reduced, *then* interest rates will fall." We can accept or reject these statements by observing whether evidence exists that changes in prices, incomes, or interest rates actually do occur as a direct result of the policy changes.

Because no one completely understands how the economy works, economists often disagree about actual cause-and-effect relationships. Such disagreements must be resolved through examination of the facts that uses statistical methods to test the relationships.

Positive analysis can't be used to evaluate an outcome. For example, positive analysis of government welfare programs can look at the impact of such programs on the incentives of recipients to work and on national production, but it can't determine whether the programs are good or bad. To evaluate the performance of these programs, we must establish criteria or norms against which we'll compare their actual outcomes.

We use **normative analysis** as a way to evaluate the desirability of alternative outcomes according to underlying *value judgments*. A normative statement presents a point of view about what a policy *should* accomplish. For example, "Tariffs and other restrictions that impede free international trade should be eliminated."

The normative approach used by many economists is based on an underlying value judgment that evaluates well-being in a nation only in terms of the well-being of individuals. The normative approach makes recommendations regarding *what ought to be*. It's used to *prescribe* changes in policy and the use of productive capacity in an economy as well as to evaluate performance.