

## How to Study for Chapter 1: Introduction

Chapter 1 introduces the main theme of the course.

1. Begin by looking over the Objectives listed below. This will tell you the main points you should be looking for as you read the chapter.
2. Like most disciplines, Economics has its own technical language. It is important to understand this language. New words or definitions are highlighted in italics in the text and also shown in red color.
3. As you read the text, other key points are highlighted in bold type and in blue color.
4. You will be given an In Class Assignment and a Homework assignment to illustrate the main concepts of this chapter. The Homework assignment is included in the text below. Answer all of the questions you are asked in the sections called "Test Your Understanding".
5. When you have finished the text and the assignments, go back to the Objectives. See if you can answer the questions without looking back at the text. If not, go back and re-read that part of the text. Then, do the practice quiz for Chapter 1.

## Objectives for Chapter 1: Introduction

At the end of Chapter 1, you will be able to answer the following:

1. What are the two assumptions made about people's desires for material goods and services?
2. What are the "**factors of production**"? Define each and give examples. What is meant by "entrepreneurship"?
3. What is "**scarcity**"?
4. What are the three questions that every society must answer?
5. What is meant by "**opportunity cost**"? Give some examples. For example, what is the opportunity cost to you of taking this course?
6. What is meant by "**capitalism**"? by "**socialism**"?
7. What is a "**market economy**"? What is a "**command economy**"?

## Chapter 1

## Introduction (Most recent revision June 2004)

You are about to begin your study of economics. The word "economy" is derived from the Greek word: "oikos", household. Economy means "management of the household" (ecology, also derived from the same Greek word, means "study of the household"). The "household" here refers to the entire society. **An economy begins with the desires of the people in the society for material goods and services.** Notice that we use the word "desires" or "wants", rather than "needs". We shall not concern ourselves with the question of what it is that people truly need. (Someone once ascertained that humans could survive by eating a diet of pork, lard, and molasses. It is a fair guess that few people would desire this diet!) Also notice that the focus is on **material** goods and services. We shall be concerned with food, shelter, clothing, health care, recreation, entertainment, and so forth; we shall not be concerned with psychological desires such as love, power, or respect. **(Any product that satisfies people's desires is called a "good" or a "service". The act of obtaining these material goods and services is called "consumption".)**

Modern Economics makes **two assumptions** about people's desires for material goods and services. **First, they are insatiable.** No matter how many goods and services people have, they still want more! Today, even the poorest Americans have more goods and services than could have possibly been imagined by people living 200 years ago. Yet, we still desire more and more! **Second, they are rational.** People's desires are not to be questioned. I desire the things I desire for my own reasons. You desire the things you desire for your own reasons. I know what is best for me and you know what is best for you!

In order to satisfy their desires for consumer goods, the people in the society must engage in production. To produce, people begin with **natural resources**. Nature provides land, minerals, trees, water, fish, animals, and so forth. Usually the people must do something to these natural resources to satisfy their desires --- harvest the fruits and vegetables, dig the minerals, cut the trees, catch the fish, and so forth. The productive contribution made by the people is called **labor**. However, with natural resources and labor alone, the society will not be able to satisfy the desires of the people very well. From earliest times, people have learned that they could satisfy their desires better by taking some of the natural resources and converting them into a form that will not meet desires today but which will allow greater production in the future. Thus, wood and iron are used to make a hammer. The hammer is not desired by anyone for its own sake, but it does allow people to build more of those things they do desire. We call this indirect use of natural resources **"capital"**. Do not confuse this meaning of the word "capital" with other meanings. In business use, for example, capital sometimes refers to the money invested by the owner of a business. **Capital here refers to goods made by people for the purpose of increasing production.** Examples are machines, tools, equipment, and factory buildings. Finally, there is a need for someone to recognize the desires that people have and then bring together the appropriate natural resources, labor, and capital to meet these desires. There is risk involved; if one does not recognize the desires correctly or if one organizes the production inefficiently, considerable loss could result. So, for example, Steve Wozniak and Steven Jobs recognized a desire of some people in the society --- a desire for a computer that could be operated at home. They didn't just develop such a computer. They started a company --- Apple! With others, they obtained the natural resources, hired and trained the workers, bought the necessary machinery, and organized the production process. The success of the Apple II allowed both of them to have

wealth valued in the hundreds of millions of dollars. A person who undertakes this activity is called an **entrepreneur**. Successful entrepreneurs become famous. So Ray Kroc (MacDonalds), Bill Gates (Microsoft), Sam Walton (Wal-Mart), Irwin Jacobs (Qualcomm), and many others are very well known. Unfortunately, most entrepreneurs are not so successful. *Natural resources, labor, capital, and entrepreneurship are called the factors of production.*

**\*Test Your Understanding \*.**

Think of any restaurant you have ever been to: Dennys, MacDonalds, Taco Bell, Pizza Hut, or any other. Write a list of some of the things used by that restaurant that would qualify as natural resources. Write a list of some of the things used by that restaurant that would qualify as labor. Write a list of some of the things used by that restaurant that would qualify as capital. Who is the entrepreneur in this restaurant and what does the entrepreneur do?

The factors of production determine the maximum amounts of the various goods and services that can be produced. But people's desires for these goods and services are insatiable. *As a result, the desires always exceed the ability to meet them, a phenomenon known as scarcity.* Scarcity generates the fundamental problem faced by all societies. Because of scarcity, every society must answer three major questions:

**(1) What to Produce?**

In a world of scarcity, any choice to produce something is also a choice not to produce something else. Production of all of the goods and services that are desired is simply not possible! *The value of whatever is sacrificed when a decision is made is called "opportunity cost"*. Sometimes, opportunity cost can be easily measured in money. If you choose to spend \$15 on a CD, you are sacrificing \$15 worth of other goods or services that you could have bought. In other situations, opportunity cost may be harder to measure. Your decision to take Principles of Microeconomics this term has an opportunity cost --- the value of the time you will sacrifice. If you would have worked during this time, your sacrifice can be measured easily; you sacrificed the wages you would have earned. But if you would have watched television, slept, or spent time with your children or friends, it is harder to put a dollar value on your sacrifice. But that does not change the fact that you have sacrificed time to take Principles of Microeconomics!

**\*Test Your Understanding \*.**

You have decided to take Principles of Microeconomics this semester. What is the opportunity cost of this decision? Try to consider all of the sacrifices you expect to make. Then, try to put a dollar value on them so that you can determine exactly what you are sacrificing.

The opportunity costs are composed of \_\_\_\_\_.

I estimate that the dollar value of the opportunity costs of taking Principles of Microeconomics is equal to: \$ \_\_\_\_\_ Show how you arrived at this number.

For a society, the goal is to produce just the "right" quantity of each good or service (from the perspective of consumers). We want to be sure that the society would not be better off if we had more of a particular good produced nor better off if we had less produced. We call such as goal *allocative efficiency. This means that the factors of production are being allocated to produce just the "right quantity" of each good or service.* We shall discuss in a later chapter how we know if the factors of production are indeed being allocated efficiently.

## (2) How to Produce?

Having decided what to produce, we must now determine how to produce it. This means that we must decide on the **combinations of the factors of production** that we will use. Goods produced mainly by labor are called *labor-intensive*. Goods produced largely by machinery and equipment are called *capital-intensive*. Some goods may be natural resource intensive, technology-intensive, energy-intensive, skill-intensive, and so forth. There are usually many different ways to produce a given product. Rice grown in China is both labor-intensive and water-intensive. But rice grown in California is capital-intensive as well as water-intensive. Similarly, cotton grown in the American South was labor-intensive while cotton grown in California is capital-intensive. Recently, California's main growth industries have been technology-intensive and skill-intensive rather than capital-intensive.

The goal here is called **productive efficiency**. In this case, we use the word efficiency as we do in ordinary language. *Production is efficient if we are getting the most possible goods and services from the factors of production (natural resources, labor, capital) being used. Or to say it differently: production is efficient if we are using the least possible quantity of factors of production to produce a given quantity of a good or service.*

A related question is "who will do what work?" This is sometimes called **the social division of labor**. We must decide how production will be organized. Will workers work independently or will they be asked to cooperate with other workers? Who will run a given machine, who will keep the records, and who will make the decisions? We shall consider this in Chapter 3.

## (3) For Whom to Produce?

Once it has been decided which goods and services are to be produced, it must be decided who will have these goods and services. Remember that goods and services are scarce; not every desire can be satisfied. Production of goods or services that will meet my desires may mean less of the goods or services that would meet your desires and vice versa. We are in conflict! Somehow, we must resolve this conflict in a manner that allows us to exist as part of the same society. In an economy such as that of the United States, our incomes determine which of our desires can be satisfied. In a later chapter, we shall discuss the factors that determine why some people have much higher incomes than others have.

It is harder to specify a goal for this question than it was for the previous two questions. We usually call our goal *equity, meaning fairness*. Yet, it is hard to know whether a given distribution of income is fair or not. People commonly disagree on this question. Economists differentiate between positive economics and normative economics. *Positive economics involves statements that can be tested and shown to be clearly true or false.* "If a product becomes more expensive, people will buy less of it" and "If I wear my blue shirt, it will rain today" are examples of positive statements. They can be tested and shown to be true or false. On the other hand, *normative economics involves value judgments and opinions.* "Economics teachers should be paid more" or "Economics is a fun subject" are examples of a normative statements. **Allocative efficiency and productive efficiency are examples of positive economics. Equity is an example of normative economics.**

## Economic Systems

Every society must answer these three questions. Usually people organize in some way to find the answers. Such an organization of people is called *an economy*. And, of course, the study of an economy is called Economics. **There are two extreme types of economies: command economies and market economies.** Most existing economies are combinations of the two types.

*A command economy, or hierarchy, describes itself. A commander, usually the government, decides what will be produced, how it will be produced, and who will get the goods and services that are produced.* The former Soviet Union was a good example of a command economy. The government decided which goods or services would be produced (for the most important products). This came as an annual plan. The plan would be very detailed. So, for example, if you managed a shoe company, the plan might specify how many size 6 shoes that were black you must produce, how many size 8 shoes that were green you must produce, and so forth! The plan was more than a goal; there were significant penalties to the company management for failing to meet the plan quotas and significant rewards for succeeding. The plan also specified how goods and services were to be produced. Again, if you were the manager of a shoe company, you might be told how much leather you could have and where you must get it, how many workers you may have, how much machinery you may have, and so forth. One feature of the former Soviet economy was that the "what" and the "how" often did not reconcile! For example, it might not have been possible to produce the number of size 6 shoes that you were required to produce with the amount of leather you were allowed to have. This led to behaviors that were not intended by the government. For example, the manager would have shoes produced that were actually size 3 but have size 6 labels put on them! Or the manager would record leather as "lost in shipment" and then hoard it for use at a later time when there would not be enough! Even in the former Soviet Union, the government did not decide the "for whom" question. Generally, people would stand in line for the goods and services; those in the line first would have their desires met first. However, there was one exception: if you were a member of the communist party, you came first!

In the United States, a good example of such a command economy is the military: the commanders give the orders on most matters and others are merely expected to follow. Many large companies in the United States and in Europe copied this military command principle. Another example of a command economy involves the control over land in the United States. In the eleven western states, more than 40% of all land is under the control of the United States government (most commonly the Forest Service or the Bureau of Land Management). These agencies determine who is allowed to graze animals on the land, how much grazing can be done, and what price is to be paid for grazing rights. The Forest Service also determines how many trees can be cut, who can cut them, and the price to be paid to cut them. Hunting, fishing, access to national parks, and so forth are also controlled mainly by this command economy principle.

The other extreme type of economy is *the market economy. Markets are merely places where buyers come to buy and sellers come to sell.* The market may be a physical place, such as the New York Stock Exchange. Or it may not be a physical place; for example, foreign exchange market transactions take place through communications via telephone and computers between banks and other dealers around the world. **It is through the interaction of the buyers**

**and the sellers that the questions of "what to produce", "how to produce", and "for whom to produce" are answered.** How markets do this is the main topic of this course. There has been a major change in the world since the late 1970s: market economies are replacing command economies! The former communist countries, including all of Eastern Europe as well as China, are substituting markets for command. This theme will be explored when we discuss the Russian economy in Chapter 28. Countries such as Mexico, the countries of South and Central America, and the countries of Asia are also increasing their use of markets. And, in the United States, large, hierarchical corporations are losing ground to smaller, more entrepreneurial companies.

Do not confuse the terms market economy and command economy with the terms **“capitalism” and “socialism”**. Literally, these latter terms refer to ownership of capital goods. *In capitalism, capital goods are owned by private individuals, called capitalists. In socialism, capital goods are owned by the government.* In both types of systems, private individuals own consumer goods, such as clothes and televisions. Most economies are mixtures of market and command and also are mixtures of capitalism and socialism. **But the United States is basically a market economy that is capitalist. The former Soviet Union was basically a command economy that was socialist. China today is becoming more and more of a market economy but is still basically socialist. Nazi Germany was basically a command, capitalist economy.** So there are many possible combinations.

To say that in capitalism, capital goods are owned by private individuals whereas in socialism, they are owned by the government seems a very clear distinction. However, the distinction becomes less clear if we explore what the word **"ownership"** actually means. I own my car. What does this mean? Certainly, it does not mean that I can do anything I desire with my car. I cannot legally drive it 100 miles per hour, I cannot park it along a curb painted red, I cannot operate it without proper smog control, and I certainly cannot drive it where you happen to be standing! However, I do have certain rights that go with the fact that I own my car. In the United States, there is very little socialism, as defined in the last paragraph; the government owns only a small portion of the capital goods. However, in the United States, there have been many disputes regarding the exact rights that one gets with private ownership. (So, while I have no right to operate my car without proper smog control now, I certainly had this right 25 years ago.) We shall examine these property rights and consider the importance of the way by which they are specified in Chapter 10.