

Economic Systems

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- COMMAND ECONOMY
- CAPITALISM
- ALLOCATIVE EFFICIENCY
- MIXED ECONOMY
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FUNDAMENTAL ECONOMIC ISSUES

In every nation there are a variety of issues that demand attention: What can be done about poverty and unemployment? Pollution? The national debt? Inflation? And so on. Yet before these questions can be addressed—indeed, before these problems even crop up—there are some fundamental economic questions that each and every country will have to contend with.

Even Robinson Crusoe had to deal with economic issues on his deserted island. What resources were on hand to provide food and shelter? Was clothing necessary? Crusoe had to decide how to best employ his meager resources to ensure his survival. In the same manner, each nation must decide what is the best way to use the resources at its disposal.

Would it be wise for Crusoe to spend all his time keeping a signal fire burning and searching the horizon for a rescue ship? Or should the same wood that might be used in the signal fire be used to build a shelter? Should the United States use its resources to explore Mars or to build low-income housing? One of the most fundamental questions any economy will have to address, whether it is one man trapped on an island or a highly industrialized nation, is what should be produced given its resources.

In Cuba it is virtually impossible to get cosmetic surgery, while the United States devotes a significant amount of its resources to this. Part of the reason why this is so has to do with the fact that the United States has so many resources compared to Cuba, but another reason why Cuba spends hardly any resources on plastic surgery is because of the way the decision is made about what will be produced in Cuba.

Opportunity Costs

Before exploring further the differences in the way economic decisions are undertaken in Cuba versus in the United States, let us consider some other fundamental economic questions. Once it is decided to produce a certain set of goods and services, how much of each item should be produced? The concept of opportunity cost comes into play here. If it is decided to produce more than one item, then some amount of another item must be sacrificed.

Not only that, but many goods and services are related to one another. For instance, if it is decided to produce more wheat, this will require an increase in the production of tractors, seed, fertilizer, and other products needed to produce wheat. Considering opportunity costs and the fact that many products are related, the decision of how much to produce of each good and service becomes an extremely complex issue.

WHO GETS WHAT?

After having decided what and how much of each item is to be produced, there is still another basic question: Who is going to get how much of each good and service? In the United States, a medical doctor can obtain more and higher-quality goods and services than a school teacher. In Cuba doctors and teachers have roughly equal living standards. Certainly a person's income is important in determining how many goods and services can be obtained. But why do doctors receive so much more income than teachers in the United States and not in Cuba? The answer to that question involves how each economy responds to the basic economic issue of "who gets what?"

So there are two fundamental economic questions that any society will have to address:

1. How much, if any, of each good and service should be produced?
2. Who will get how much of each good and service?

In order to appreciate the complexity of these questions, imagine yourself shipwrecked on a desert island with 11 other people. It is possible to produce only a limited number of items with the resources on hand. The necessities of life will have to be produced: food, clothing, and shelter.

Should you attempt to build a boat large enough to take 12 people back to civilization? Or is a signal fire more logical? It would be possible to provide haircuts, and makeup could be manufactured, however crude. Exactly what should be produced?

If the production of cosmetics and haircuts is forsaken in order to produce more food, it will be necessary to produce more tools for working the land and harvesting the crops.

Who will get how much of each item produced? Should the doctor get more than the food production manager? Should the sick people get more or less than the others?

Now try and imagine coping with these questions when there are 350 million people and the array of goods and service encompasses everything from rubber bands to super computers. The organization of large economies is a mind-boggling task. How is it accomplished?

STRATEGIES FOR ADDRESSING ECONOMIC QUESTIONS

There are three basic ways to address the economic questions that are imposed upon a society: (1) government commands, (2) capitalism, and (3) a blend of government commands and capitalism.

The Command Economy

A command economy is one in which the central government dictates what will or will not be produced. The government also stipulates how much of each item is to be produced and who is to get how many of the final products. Cuba and North Korea are examples of nations that rely heavily on the command system. The terms *communism* and *socialism* are sometimes used to describe economies that use central commands to address the fundamental economic questions.

Cosmetic surgery is not available in Cuba because the central government does not allow resources to be used on this service. Through the use of quotas and production plans, the Cuban government dictates how much of each good and service will be available. This is no simple task since thousands of items are produced.

Moreover, the production levels of the various goods and services must be coordinated so that if more sugar is to be produced, then more arable land, fertilizer, farm labor, and so on must be provided.

Finally, by setting the prices on almost all goods and services, and by setting the wage rates for almost all citizens, the Cuban government can dictate who gets what share of these products.

Setting prices and wages and stipulating how much of each item is to be produced for the whole economy are Herculean tasks. It is done with the help of computers by a large bureaucracy. Often, mistakes are made. The quota of sugar cannot be met because not enough tractors are available. Without sugar, the rum quota cannot be met.

On the other hand, the command system has some commendable features. Wages can be set so that there is no lower class. However, if everyone makes about the same income, incentives to work hard and develop new lines of business are discouraged. Still, the price of alcohol can be set high to curtail alcoholism, while the price of textbooks can be established artificially low to encourage education.

The Cuban economy is not a pure command economy. There is some experimentation with households and firms being allowed to sell their excess production in markets where prices are not fixed by the government. And there are many transactions between households that the government cannot control. Some products and a variety of services are provided in the "underground economy."

Capitalism

Capitalism has been defined by different writers in remarkably different ways. Some point to the importance of private property in capitalist economies, while others note the emphasis on risk-taking and entrepreneurial skills. The best definition of capitalism, however, is in regard to how the basic economic questions are addressed. Capitalism is an economic system where supply and demand determine prices. These prices coordinate the economy by resolving what and how much will be produced. Supply and demand will also determine a person's income and therefore how much of the production the person can obtain for his or her own use.

In this type of system, the government does not run the economy but, instead, attempts to create an environment where prices can be determined in free markets. Amazingly, these prices coordinate the economy.

In a capitalist economy, prices determine how much of each item will be produced. If consumers want more baggy, pleated pants instead of blue jeans, then the price of baggy, pleated pants increases and the price of jeans falls. Producers, with an eye on profit possibilities, then manufacture more baggy, pleated pants and fewer jeans. In fact, textile manufacturers who do not respond to the price changes could go out of business.

Consumers, not the government, determine how much of each item will be produced. They do this by purchasing the products they like. When consumers demand and purchase products, they are voting for those products. The prices of consumers' favorite products rise and this sends a signal to suppliers to provide more of that product.

An individual's income determines how much of the production he can obtain and enjoy, but income is largely determined by the wages an individual receives. And the wage rate is just another price in the economy: the price of labor.

Notice that the government does not have to get involved in setting prices and wages in capitalist economies. Prices and wages are determined in free markets and these prices serve to coordinate the economy and answer the basic economic questions. Prices govern the behavior of consumers and producers who seek to make the most out of their respective resources. Just the right goods and services are produced in just the right amounts. This is known as "allocative efficiency" in economic jargon.

ALLOCATIVE EFFICIENCY

A market is a mechanism that allows buyers and sellers to exchange a good or service. A free market is unfettered by interference from anyone not directly involved in the exchange. The hallmark of a capitalist economy is prices determined in free markets. Markets that are regulated by the government or any other agency are not truly free. By this definition, the market for beef in the United States is not free because it is regulated by several agencies including the U.S. Department of Agriculture. However, because Americans mostly want to buy inspected beef, we can argue about whether or not the market for inspected beef in America is truly free.

In the next chapter, we shall see in great detail how prices are determined in perfectly competitive markets—free markets with many buyers and sellers. The more perfectly competitive markets there are in an economy, the closer the economy is to perfect capitalism.

When the prices of products are determined in perfectly competitive markets, an amazing thing happens: The economy's fundamental problems are answered. Consider the question of how much of a particular good is to be produced. In the market for tulips, if the most any buyer is willing to pay is two cents per tulip, then none will be produced. But if buyers have a mania for tulips and are willing to pay a lot, then many will be produced, and the amount of resources devoted to tulip production will be vast.

The other fundamental question is: *Who will get how much of each good or service?* If our tulip-crazed society is capitalist, then competitive markets will answer this question as well. A person's income will determine how many tulips he gets, and those incomes are determined in competitive markets. Labor is another product, and if the most any buyer is willing to pay is two cents an hour, then little or no labor will be supplied. But if buyers (or shall we call them employers?) are willing to pay quite a bit for an expert in tulip production, then a lot of experts will step forward offering their labor services in this industry. Indeed, a lot of resources will be devoted to tulip production in this society, and those with agricultural skills or fertile land or greenhouses will be handsomely rewarded.

Not only does capitalism answer the fundamental economic questions, it does so in a decentralized way. No authority has to be on the lookout that enough tulips are produced. When buyers offer high prices, sellers respond to the profit motive and bring a bounty to market. But sellers are discouraged from bringing too much because in that case they would not be able to sell all their stock. They would begin to lower their asking price. The new lower price would caution others from entering the market as sellers, and current sellers would have less incentive to work over a period of time to bring so many tulips next time.

Capitalist societies respond very well to changes in the population's preferences. Imagine that tulips become passé and now people want roses. Buyers offer low prices for tulips and

high prices for roses. Sellers respond to the profit motive by bringing fewer tulips to market and more roses. In this way, resources are switched from tulip production to rose production.

When all of the prices in an economy are determined in competitive markets, resources will be deployed in the optimal way to ensure the right products are made in just the right amounts to satisfy the buyers. This result is truly amazing since it is the result of decisions made by buyers and sellers across the economy in a decentralized way. No central planning is required. The only necessity is that people pursue their own self-interest.

This fascinating result of competitive markets is known as allocative efficiency. The mathematical proof that capitalism results in allocative efficiency is attributed to Léon Walras, but Adam Smith understood the concept well and put it in a very memorable way in 1776:

Every individual . . . neither intends to promote the public interest, nor knows how much he is promoting it . . . he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention.

The Wealth of Nations, Book IV, Chapter II, p. 758, para. 9.

The fact that allocative efficiency follows from free markets leads some people to conclude that the government should not interfere in economic matters. Government intervention can only interfere with the working of the invisible hand. Once again, Adam Smith pointed out that there will always be a need for government. Who will ensure that markets are indeed competitive? Who will settle disputes between buyers and sellers? Who will protect people, their products, and their money while they are conducting market exchanges? In the next section, we explore why no economy can be purely capitalist.

The Mixed Economy

All of the countries in the world today use a blend of government commands and capitalism to address the fundamental economic questions that arise. In the United States, capitalism is emphasized, but government commands are used when free markets break down. For instance, society benefits when people pursue education beyond high school. The government promotes higher education by providing scholarships, grants, and loans. Private colleges have competition from state schools. Our government doesn't trust the production of higher education to the market. It gets involved and increases the equilibrium quantity of college degrees granted.

Similarly, there is no pure command economy on the planet; even Cuba and North Korea have some free markets. It is best to view the economies of the world on a spectrum with pure capitalism on the right and pure command economies on the left. The United States is closer to pure capitalism than France, and France is closer to pure capitalism than Cuba.

As we go forward we will focus on the fundamental macroeconomic concepts of capitalist economies such as the United States where the decentralized decision making of the price system predominates.

TIP

There are several other instances where competitive markets break down. You will need to know these well only if you are taking the Microeconomics exam.

THE CIRCULAR FLOW DIAGRAM

In capitalist economies, most of the resources are owned by individuals and households. The government and business enterprises will own some resources in such a system, but not the lion's share. Moreover, since most of the large firms are owned by stockholders (individuals and households) and most government resources, such as Yosemite National Park, are considered to be jointly owned by everyone, it is fair to assume that all of the resources are owned by individuals and households.

The circular flow diagram portrayed in Figure 3.1 shows these resources (land, labor, and capital) flowing from households to firms. In return, households receive wages and profits. This exchange of resources for money is known as the market for resources.

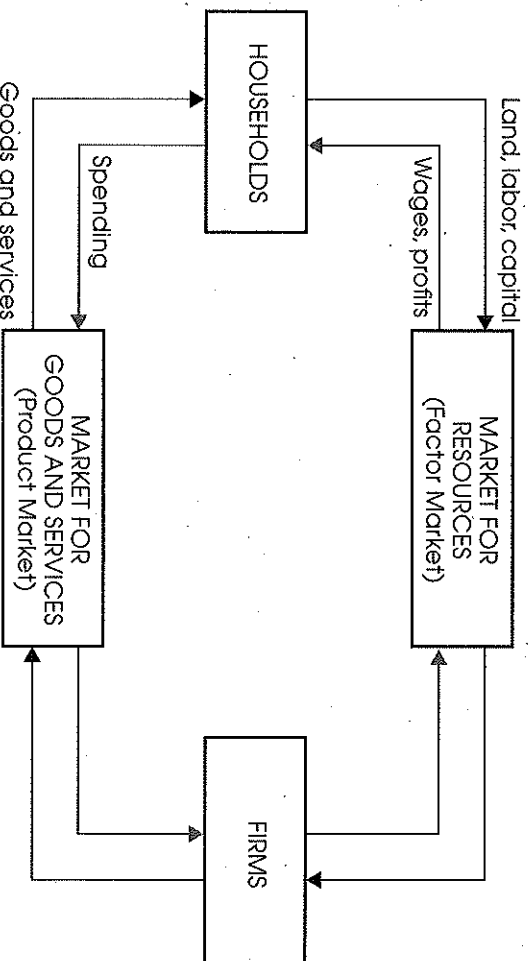
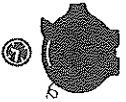


Fig. 3.1 The Circular Flow Diagram

Households spend their money income to purchase the goods and services supplied by firms. This exchange of income for products is known as the *market for goods and services*.

The circular flow diagram shows how resources are used to produce goods and services and how these goods and services are distributed. Essentially, individuals and households sell their resources to firms that use the resources to produce goods and services. Individuals and households use the proceeds from the sale of their resources to purchase the output of the firms.

The circular flow diagram can be expanded to include the government and banks. There would be more boxes and more lines representing flows of money and products, but no matter how complicated or simple, the circular flow diagram shows how institutions in capitalist economies are tied together.



SUMMARY

Even if you drop out of society and go to live as a hermit on an isolated mountaintop, you will have to cope with the fundamental economic questions: What should be produced with the resources on hand and how much of each item should be produced? Hermits, however, do not have to deal with the other fundamental economic question: How much of the production should each member of society get?

- Government commands and capitalism are two general ways to address the fundamental economic questions. Each approach has its strengths and weaknesses. Basically, an economy organized by government commands can be more equitable while a market economy is more efficient.
- When supply and demand are allowed to determine prices in competitive markets, just the right amount of goods and services will be produced to satisfy society's wants. This is known as *allocative efficiency*. Resources are deployed in the production of the things society desires.
- No country in the world is purely capitalistic. Even in the United States the government does not allow free markets to determine all prices. Similarly, no nation is a pure command economy. Even Cuba has some free markets.



TERMS

Allocative Efficiency when resources are deployed to produce just the right amount of each product to satisfy society's wants

Capitalism an economic system where supply and demand determine prices

Circular Flow Diagram diagram that shows how households and firms are related by the exchange of resources and products

Command Economy economy in which the central government dictates what will or will not be produced and who gets what

Law of Demand law that states that when the price of a product increases, the quantity demanded decreases, *ceteris paribus* (Chapter 4)

Law of Supply law that states that when the price of a product increases, the quantity supplied increases, *ceteris paribus* (Chapter 4)

Market a mechanism that allows buyers and sellers to exchange a good or service

Mixed Economy a blend of government commands and capitalism

MULTIPLE-CHOICE REVIEW QUESTIONS

- Which of the following is a fundamental economic question?
 - Who will get how much of each good and service?
 - Who should pay taxes?
 - Who will work?
 - Who will make the economic decisions?
 - Who will be allowed into the economy?
- In a command economy
 - the market dictates the answers to the fundamental economic questions.
 - competition helps answer the fundamental economic questions.
 - state and local governments respond to the fundamental economic questions.
 - the central government dictates the answers to the fundamental economic questions.
 - laws are set up to answer the fundamental economic questions.
- Market economies
 - rely on markets to coordinate economic activity.
 - rely on the government to address the fundamental economic questions.
 - rely on elected officials to make the most important economic decisions.
 - rely on courts to ensure people and firms get what they deserve.
 - are more equitable than command economies.
- Prices in capitalist economies are
 - unfair.
 - determined in competitive markets.
 - determined, in most cases, by the federal government.
 - a reflection of our basic values.
 - a means to achieve equality.
- If the market for corn is competitive, then
 - it is difficult for new suppliers to join in.
 - buyers will get all they want at a good price.
 - the market favors buyers.
 - the market is fair.
 - there must be many buyers and sellers.
- Compared to a command economy, a capitalist economy emphasizes
 - equity.
 - planning.
 - efficiency.
 - centralization.
 - human rights.
- Allocative efficiency
 - implies optimal resource deployment.
 - means no inferior products will be produced.
 - ensures the distribution of output is equitable.
 - can only occur in pure command economies.
 - defies the idea of the invisible hand.

8. Scarcity
- (A) implies nonoptimal resource deployment.
 - (B) applies to some, but not all, resources.
 - (C) is an issue in every economy.
 - (D) exists in command economies only.
 - (E) is eradicated by the invisible hand.
9. If buyers bid up the price of a good, then
- (A) sellers will try to bring more of it to market.
 - (B) sellers will bring less to market anticipating less demand at the higher price.
 - (C) fewer resources will be devoted to its production.
 - (D) they must not want it.
 - (E) its price will eventually fall back to normal.
10. If a capitalist society wants more coffee, then the relative price of coffee will
- (A) fall.
 - (B) rise.
 - (C) not necessarily change.
 - (D) remain unchanged.
 - (E) change indeterminately.
11. If the relative price of coffee rises due to a change in tastes in a capitalist society, then
- (A) less coffee will be consumed.
 - (B) more resources will be devoted to coffee production.
 - (C) less tea will be consumed.
 - (D) suppliers will bring less to market.
 - (E) the price will eventually return to where it was prior to the change in tastes.
12. The invisible hand
- (A) works in command economies as well as capitalist economies.
 - (B) works in capitalist societies.
 - (C) is concerned with resource allocation when markets are regulated.
 - (D) refers to regulation in command economies.
 - (E) requires altruism.
13. In the market for resources in the circular flow diagram, households
- (A) get goods and services from firms.
 - (B) send only labor to firms.
 - (C) send only land and labor to firms.
 - (D) send land, labor, and capital to firms.
 - (E) send spending to firms.
14. In the market for goods and services in the circular flow diagram, households
- (A) get wages and profits from firms.
 - (B) get goods and services from firms.
 - (C) send only land and labor to firms.
 - (D) send land, labor, and capital to firms.
 - (E) send labor to firms.
15. Suppose we observe the price of a product rising and more of the product being bought and sold. This could be a result of
- (A) a decrease in the supply of the product.
 - (B) an increase in the supply of the product.
 - (C) an increase in demand for the product.
 - (D) a decrease in demand for the product.
 - (E) a shortage.

FREE-RESPONSE REVIEW QUESTIONS

1. What are the fundamental economic questions?
2. Contrast how the fundamental economic questions are addressed in command versus capitalist economies.
3. Cite the advantages and disadvantages of command economies.

Multiple-Choice Review Answers

- | | | | |
|--------|--------|---------|---------|
| 1. (A) | 5. (E) | 9. (A) | 13. (D) |
| 2. (D) | 6. (C) | 10. (B) | 14. (B) |
| 3. (A) | 7. (A) | 11. (B) | 15. (C) |
| 4. (B) | 8. (C) | 12. (B) | |

Free-Response Review Answers

1. There are two fundamental economic questions that any society will have to address:
(1) How much, if any, of each good and service should be produced? and (2) Who will get how much of each good and service?
2. In command economies the central government stipulates what and how much of most products will be produced. By setting prices and wages the central government can also dictate how much of the production is allotted to each household. In short, the central government controls production and income in command economies.
In capitalist economies free markets coordinate output and income. Supply and demand, which depend upon the decentralized decision making of all consumers and producers, determine what and how much will be produced. Supply and demand also determine incomes and, therefore, who gets how much of each good and service.
3. One disadvantage of command economies is that there can be a lack of incentive to work hard to get ahead. Since the government decides one's income level, it may not pay to put one's nose to the grindstone—the government may reward you all the same, anyway. One advantage of command economies is that prices can be set to achieve social goals. For example, the price of textbooks could be set low to promote education. Another advantage of command economies is that incomes can be set more equitably than capitalist economies.
Capitalist economies are typically more allocatively efficient than command economies; also, they do not require the large bureaucracy of command economies.