### Chapter 2 An Introduction to Economic Systems and The Workings of the Price System

#### What's in This Chapter and Why

Chapter 2 compares a market system to a planned system in the context of the collapse of the centrally-planned economies and their efforts to build a new economic system. Market economies are recognized as being superior in terms of production, distribution, and coordination.

The chapter introduces the market system as a coordinating mechanism for the economy. Two fundamental questions are discussed: What are the essential characteristics of a market economy, and why do they perform better than command systems? Specialization and the division of labor are examined, and it is shown, that together with comparative advantage, productivity and output can increase. Allowing for specialization increases the importance of coordinating the activities of thousands of firms and millions of people. Demand and supply analysis is introduced and shows how markets solve the coordination problem.

The importance of price is developed showing how the price system coordinates by providing information, motivation, and rationing. The coordination that naturally occurs in a market economy is compared to coordination in a command economy and in a market with price ceilings.

The chapter concludes with a discussion of some experiences of the transition economies. The idea is to convince students that choice of economic systems is important and relevant.

#### **Instructional Objectives**

After completing this chapter, your students should know:

- 1. The questions that an economic system must answer, the essential elements of a market economy, and the importance of coordination.
- 2. The meaning and importance of the division and specialization of labor and how specialization makes coordination more important.
- 3. The benefits of trade and comparative advantage.
- 4. The laws of demand and supply, the meaning of demand and supply prices, and how the laws of demand and supply interact to lead to market equilibrium.
- 4. The attributes of a price system--informing, motivating, and rationing--that allow it to coordinate.
- 5. The relative success of a market economy's price system, a command economy's planning system, and a price-controlled economy in achieving coordination.
- 6. The experiences of transition economies in attaining the five important elements of a market economy.

#### **Key Terms**

These terms are introduced in this chapter:

Relative price Quantity demanded Demand curve Demand price Law of demand Quantity supplied Supply curve Supply price Law of supply Excess demand Excess supply Equilibrium Scarcity Ration Economic profit

#### **Suggestions for Teaching**

This chapter introduces the idea of economic systems and how they coordinate the activities of specialized economic agents. To cover it thoroughly will require three or four class sections.

To begin, it is important to develop students' understanding of property rights; they are the key to efficient market exchange and incentives. Discuss with students how they treat things they own versus rent and the incentives of each.

Students are accustomed to thinking about markets in terms of the price paid for goods and services. Introduce them to the economists' ideas about price. Understanding relative prices will help students grasp the concept of opportunity cost. Also discuss the idea that price is a signal to producers and consumers, hence it helps coordinate markets.

Notice that the book does not provide a separate chapter or appendix on graphing. Instead, the first couple of chapters develop arithmetic examples and show how to graph the relevant schedules. Next, the demand and supply curves are presented with assumed numerical prices and quantities without the underlying tables. Finally, more abstract demand and supply curves are used alone. This allows students to move naturally to graphical analysis and to appreciate the simplification that it allows.

The collapse of the centrally-planned economies and the varying success that transition economies have experienced are defining events. Their importance cannot be overemphasized. Students quickly grasp this and are intrigued by it. Current examples about events in transition economies can make the analysis more concrete.

#### **Additional References**

In addition to the references in the text, instructors may wish to read or assign one or more of the following:

- 1. Olivier J. Blanchard, Kenneth A. Froot, and Jeffrey D. Sachs, eds., *The Transition in Eastern Europe*, National Bureau of Economic Research (Chicago: The University of Chicago Press, 1994).
- 2. Morris Bornstein, *Comparative Economic Systems: Models and Cases*, 7th ed. (Irwin: Boston, 1994).
- 3. Business Week, "21st Century Capitalism," Special Issue, 1994.
- 4. Paul R. Gregory and Robert C. Stuart, *Soviet and Post-Soviet Economic Structure and Performance*, 5th ed., (Harper Collins: New York, 1994).

#### Outline

#### I. MARKET ECONOMIC SYSTEMS: AN INTRODUCTORY LOOK

- A. Essential Features of a Market System
  - 1. There are three essential features of a market system: private ownership, market exchanges, and market incentives.
- B. Relative Price: The price of one good in terms of another good.
  - 1. Relative price measures what must be given up to purchase an item; the opportunity cost.
  - 2. Relative price is the exchange value of a good.
  - 3. In order for relative prices to provide information about exchange value to consumers, reasonable price stability is necessary.
- C. Private Property Rights and Laws
  - 1. In order for a market system to function well, private property rights must be defined, established, and protected by law.
    - a. Private property rights allow individuals to base their decisions on their own self interest.
    - b. Property owners realize the opportunity cost of their actions, hence realize the desires of others.
  - 2. A legal system must exist to include property, contract, criminal, tort, and other laws.
  - 3. Law enforcement must exist to enforce the laws.
- D. Characteristics of a Successful Market System
  - 1. Private ownership; a system of defined and established ownership rights that are protected by law.
  - 2. Market exchange; flexible prices that fluctuate in response to individuals' voluntary decisions.
  - 3. Market incentives; price system with rewards and penalties that motivate decision makers.
  - 4. Stable prices and a well-functioning monetary system.
  - 5. A culture of climate and trust.

#### II. WHAT DOES AN ECONOMIC SYSTEM DO? IT COORDINATES

- A. Economic Outcomes Determined by an Economic System
  - 1. The methods of production.
  - 2. The quantities of various goods and services produced in an economy.
  - 3. The distribution of goods and services.
  - 4. The stability of the economy and whether it produces at its capacity.
  - 5. The growth of the economy is determined.

- B. The Division and Specialization of Labor
  - 1. Division of labor implies specialization of economic activity.
  - 2. Division and specialization of labor results in greater levels of output:
    - a. It allows people to become highly skilled in particular tasks.
    - b. It reduces the time wasted as people shift from one task to another.
    - c. It can result in greater inventions and innovations as specialized workers see easier ways to perform tasks.
  - 3. Division of labor can result in overspecialization.
    - a. Worker discontent can ensue because workers may perform monotonous tasks.
- C. Comparative Advantage and Specialization
  - 1. Absolute advantage: the ability to produce more than another individual with a given set of resources.
  - 2. Comparative advantage: the ability to produce at a lower opportunity cost than another individual.
  - 3. Total output can increase by specializing according to comparative advantage and allowing for trade.
- D. Economic Coordination and the Market System
  - 1. Coordination of economic activity in a market system relies on voluntary exchange.
  - 2. Voluntary exchange occurs when all parties to the exchange expect to benefit.
  - 3. There are several conditions that must hold if trade is to be voluntary.
    - a. Both parties must be responsible individuals who can make rational decisions.
    - b. Both parties must have reasonable access to information.
    - c. Both parties must have reasonable alternatives to the exchange.
  - 4. The beneficial effects of voluntary exchange may disappear if there is an adverse external cost, or neighborhood effect, associated with the exchange.
    - a. An adverse neighborhood effect arises when a third party is negatively and involuntarily affected by the exchange.

#### III. THE PRICE SYSTEM AS COORDINATOR

- A. In competitive markets, the interaction of demand and supply determines the quantity of a good produced.
  - 1. Competitive markets are markets with many buyers and sellers.
- B. Demand: The law of demand says that quantity demanded is negatively related to price.
  - 1. A demand schedule shows the quantity of a good that people are willing to purchase in some given time period at alternative prices.
    - a. If any of the nonprice determinants of demand change, the demand schedule will change.
    - b. A demand curve is a visual depiction of the demand schedule.
      - i. The demand curve shows the quantity of a good that will be demanded in some given time period at alternative prices.
  - 2. Quantity demanded is the quantity of a good that consumers are willing to buy at each possible price, holding other factors that affect demand constant.

- 3. The demand price is the price at which a specific quantity will clear the market, the marginal benefit.
- C. Supply: The law of supply says that quantity supplied is positively related to price.
  - 1. A supply schedule shows the quantity of a good that producers are willing to supply in a given time period at alternative prices.
    - a. If any of the nonprice determinants of supply change, the supply schedule will change.
    - b. A supply curve is a visual depiction of the supply schedule.
      - i. The supply curve shows the quantity of a good that will be supplied in some given time period at alternative prices.
  - 2. Quantity supplied is the quantity of a good that producers will sell at each possible price, holding constant other factors that affect supply.
  - 3. The supply price is the price that is sufficient to get producers to supply a specific quantity, the marginal cost.
- D. Putting the Pieces Together: Demand and Supply
  - 1. In a market economic system, the decisions about what to buy and sell are coordinated through the laws of supply and demand, with no central direction.
  - 2. Equilibrium occurs in the market when quantity demanded and quantity supplied are equal where the demand and supply curves intersect.
    - a. Equilibrium refers to a situation that will continue indefinitely unless some outside force affecting the situation changes.
    - b. If price is below the equilibrium price, there will be excess demand in the market.
      - i. Excess demand is a situation in which quantity demanded exceeds quantity supplied.
      - ii. Excess demand puts an upward pressure on prices, which moves the market towards equilibrium.
    - c. If price is above the equilibrium price there will be excess supply in the market.
      - i. Excess supply is a situation in which quantity supplied exceeds quantity demanded.
      - ii. Excess supply puts a downward pressure on prices, which moves the market towards equilibrium.

#### IV. COMPARATIVE SYSTEMS: AN INTRODUCTORY SKETCH

- A. The Price System
  - 1. In a command economy, government plans what and how to produce.
  - 2. In a market economy, individuals plan.
  - 3. In a market economy, consumers attempt to maximize satisfaction and producers attempt to maximize profits.
    - a. Both consumers and producers are price takers.
    - b. Both consumers and producers base their plans on the prices of goods and services.
- B. Information, Rationing, and Motivation in a Market Economy
  - 1. The price system informs economic actors about underlying changes in the economy, motivates these actors to adjust to those changes, and provides incentives for economic actors to conserve and adjust production levels.

- 2. An increase in demand will have several effects upon the economy.
  - a. As demand increases, there will be an increase in price.
  - b. The increase in price tells consumers that the good is more costly, and consumers will ration consumption or reduce the quantity of the good they demand.
  - c. The increase in price will cause the profits of producers to go up, motivating them to produce a greater quantity of the good.
  - d. As producers increase production, price will begin to fall, motivating consumers to purchase greater quantities of the good.
  - e. The distinction between scarcity and excess demand is important.
    - i. Scarcity is an economic condition in which our wants exceed our ability to satisfy them.
    - ii. Excess demand means that at the market price the amount consumers want to buy exceeds the amount that producers want to supply.
    - iii. Excess demand will be eliminated as price adjusts to a new higher level and rations the good to those willing to pay the new, higher price.
- C. Information, Rationing, and Motivation in a Command Economy
  - 1. In a command economy, the price system does not provide producers and consumers with accurate and timely information about underlying changes in the market.
  - 2. Because of both the political and monetary cost, price changes are infrequent in a command economy.
  - 3. Since price changes are infrequent, there is no signal for producers and consumers to change their behavior and excess supply and demand do not disappear.
  - 4. Even if prices were allowed to change, this would probably not motivate producers to increase (decrease) the quantity supplied because they would not reap the profits (losses) associated with higher (lower) prices.
- D. Systems and Coordination
  - 1. A market system provides goods to people based on their willingness to pay.
  - 2. Command economies are much less successful in coordinating demand and supply.
    - a. This system does not have the ability to automatically and inexpensively collect information about consumer preferences and production capabilities.
    - b. This system does not have the capability to automatically and inexpensively provide incentives and motivation for people to make wealth-promoting decisions.
  - 3. A market system fosters the division of labor that is responsible for increasing the 'wealth of nations.'

#### V. TRANSITIONS TO A MARKET ECONOMY: SOME EXPERIENCES

- A. Factors Needed for Successful Transition to a Market Economy
  - 1. Reasonably stable prices and a well-functioning monetary system that facilitates voluntary exchange
  - 2. A system of private property and property rights defined, established, and protected by law.
  - 3. Market incentives that are generated by a price system whose rewards and penalties motivate decision makers.
  - 4. Flexible prices that fluctuate in response to individuals' voluntary decisions and exchanges.

- 5. A legal system that is broadly obeyed, and a culture that generates a climate of trust.
- B. Stable Prices and the Monetary System
  - 1. Centrally planned economies were abandoned partly due to stagnant growth.
  - 2. Prices under central planning were typically low because they were held down by law, plan, and inertia.
  - 3. As prices were freed, the suppressed inflation exploded, hidden unemployment became open, new unemployment arose, and production fell dramatically.
  - 4. Significant inflation damaged the information function of prices.
- C. Other Economic Reforms
  - 1. Flexible Prices
    - a. Most of the countries of Central and Eastern Europe have allowed the prices of many goods to adjust to demand and supply conditions.
    - b. Prices of essentials have been held down for humanitarian and political reasons.
    - c. Subsidies to state-owned enterprises have continued in order to prevent unemployment from increasing beyond its already high rates and to continue to provide social services.
  - 2. The Establishment of Private Property Rights
    - a. There are two aspects to privatization and the establishment of private property rights.
    - b. These rights must be created and new private business must be encouraged.
    - c. Large SOEs must be privatized.
  - 3. Incentives
    - a. Managers of large SOEs must be provided with the appropriate incentives.
  - 4. Culture that Encourages Honesty and Trust
    - a. Each country must develop and enforce a system of contract, criminal, property, and tort law to carry out its economic transformation.
    - b. Culture of honesty and trust must be promoted and corruption dealt with.
  - 5. Additional Thoughts on Transition Economies
    - a. The experiences of transition economies as they have moved toward market systems have been diverse.
    - b. Mounting evidence suggests that economies that have reformed the fastest have had the most economic growth since 1989.

#### **Answers to Review Questions**

#### 1. What are five essential features of a market economy? Explain.

In order to function well, a market economy must have a well-functioning monetary system, a well-defined system of private property rights, market incentives, flexible prices, and a legal system that is broadly obeyed. In order for a market system to function well, individuals must be willing and able to trust other individuals with whom they deal. The establishment of clear and understandable property rights is a step in this direction. Given property rights, individuals decide what to produce and consume based on their self-interest. They make career and production decisions considering their interests, opportunities, and talents, and in light of what other people will pay for their labor or products. If however, the legal system is not broadly

obeyed, the outcomes of decisions and agreements become unpredictable. Failure to follow contracts, for example, has become a major problem in Russia.

Allowing individuals to purchase from others rather than directly exchanging what they produce facilitates exchange. Prices provide information that simplifies exchange between individuals. They inform and motivate people in their economic decision-making. Prices inform by letting individuals know what must be sacrificed when a purchase is made. Prices give producers information about the relative value consumers place on their products. When an economy fails to have a well functioning monetary framework, problems such as inflation and barter activity may be the result.

Market incentives are important to the functioning of the market system. Households base decisions on the desire to maximize utility. The desire to maximize profits directs firms as they decide what goods to produce and how to produce them. Resources are allocated to their highest valued use. The goods consumers desire are produced at the lowest possible cost.

#### 2. Why is average price stability important in a market system?

In order to understand the importance of price stability, we must first understand the concept of relative prices. A relative price is the price of one good in terms of another good. It measures what must be given up to purchase an item. If prices do not change much over time, people become aware of prices as exchange values. This simplifies decision making because people know what they are sacrificing to get a good.

On the other hand, if the average of all prices is increasing rapidly over time, prices provide less information about exchange value. For example, if inflation is variable, people can no longer rely on experience to judge exchange values. As the variable inflation continues, people will have to reevaluate alternatives each time they plan a new purchase.

#### 3. What are five questions that an economic system must answer?

An economic system must answer five questions: 1) What quantities of various goods and services will be produced in an economy? A successful economic system must provide answers that satisfy a large part of the population. 2) How will the goods and services be produced? There are different methods by which goods and services can be produced. An economic system must determine which methods will be used. 3) For whom will the goods and services be produced? This is a difficult question to answer. On the one hand, people must be rewarded for their production so there is an incentive to increase production. On the other hand, compassion or justice requires that those who cannot produce an adequate amount be taken care of in some way. 4) Will people be fully employed so that the economy produces at its capacity? Periods of high unemployment and/or rapid inflation disrupt an economic system. Unemployment translates into lost output for the economy. Rapid inflation makes it more difficult for the economy to operate because relative prices provide less information to economic actors. 5) Will the economy grow, and if so how fast? Continued economic growth is important if more of people's unlimited desires are to be met.

## 4. Why is the division of labor important? Why does increased division of labor make the coordination problem more difficult?

Division of labor is important because it allows an economic system to produce a greater quantity and variety of goods and services at a lower cost. This occurs for three basic reasons.

First, the division of labor allows people to become highly skilled in particular tasks. Second, it reduces time that is wasted as people shift from one task to another. By reserving large blocks of time for each task, people avoid losing time because of mental shifting of gears, putting materials away, getting out new materials, etc. Third, the division of labor results in inventions and innovations.

Increased division of labor makes the coordination task more difficult because greater specialization means that more and more goods are exchanged rather than self-produced. If I, along with everyone else, prepare all of my own meals, there is no or little possibility of there being an excess demand or excess supply of meals. If many, or all, meals are purchased from specialized restaurants, there can easily be an excess supply (or excess capacity) of fast-food.

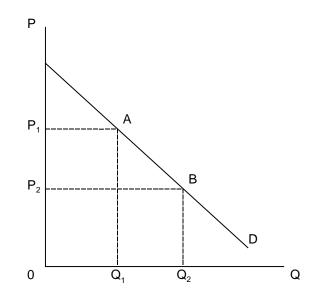
- 5. Define comparative advantage. Suppose Hugh can produce either four short stories per week or eight gallons of orange juice and Liz can produce either four short stories per week or four gallons of orange juice. At this time Hugh is producing four gallons of orange juice and two short stories per week and Liz is producing two short stories and two gallons of orange juice.
  - a. Who has an absolute advantage in producing short stories? In orange juice?
  - b. Who has a comparative advantage in producing short stories? In orange juice?
  - c. Is there a basis for specialization and trade between Hugh and Liz? Explain in detail why or why not.

Comparative advantage is the ability to produce at a lower opportunity cost than someone else.

- a. Both parties can produce the same number of short stories per week, hence neither has the absolute advantage. The absolute advantage is the ability to produce more than someone else with a given set of resources. Hugh has the absolute advantage in producing orange juice because he can produce more than Liz.
- b. Liz has the comparative advantage in producing short stories because she must give up only 1 gallon of orange juice per short story compared to Hugh's 2 gallons of orange juice. Hugh has the comparative advantage in orange juice because he must give up only <sup>1</sup>/<sub>2</sub> a short story per gallon of orange juice produced while Liz must give up 1 short story for each gallon of orange juice produced.
- **c.** Hugh should specialize in producing orange juice and Liz in short stories (where each has the comparative advantage). In doing so they can produce a total of 4 short stories and 8 gallons of orange juice whereas previously they were producing only 6 gallons of orange juice and 4 short stories. Through specialization and trade both paties can become better off.

### 6. State the law of demand and illustrate it with a diagram. Show an example of a demand price on your diagram and explain why it falls when quantity increases.

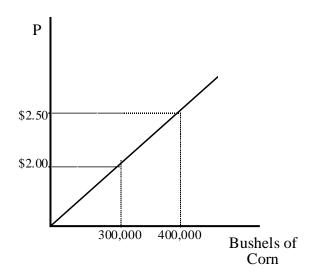
The law of demand states that quantity demanded is negatively related to price. Thus as the price of a good falls, quantity demanded will increase. As the price of a good increases, quantity demanded will fall. The law of demand is illustrated in the diagram below.



In the diagram above, if price is initially  $P_1$  then quantity demanded will be  $Q_1$ . If the price of the good falls to  $P_2$ , quantity demanded will increase to  $Q_2$ . Note that the increase in quantity demanded is represented as a movement along the demand curve from point A to point B. The figure above can also be used to illustrate the idea of demand price. The demand price is the price at which the market will clear. For example, suppose the quantity is  $Q_1$ . The demand price for  $Q_1$  is the maximum that consumers will pay for the last unit and is given by the height of the demand curve (from  $Q_1$  to A). By following the dashed line from quantity  $Q_1$  up to the demand curve at point A, and from point A to the vertical axis, we find the demand price is  $P_1$ . Demand price will fall, however, if quantity increases. Because consumers place a lower value on additional units of a good, the price must drop in order to induce consumers to purchase more of the good.

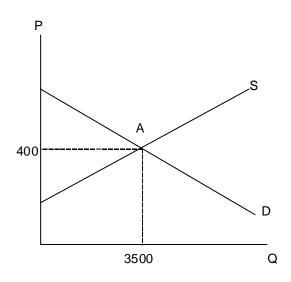
### 7. The supply price of corn increases as more corn is produced. Illustrate this fact with a diagram and explain why it happens.

The supply price is the price at which producers will just supply a given quantity. It is the minimum that producers must be paid in order to get them to supply a given quantity of some good or service. As the quantity of a good increases, the supply price will increase. This is illustrated in the diagram below. In this diagram, as the quantity of corn produced increases from 300,000 to 400,000 bushels, the supply price increases from \$2.00 to \$2.25 per bushel.

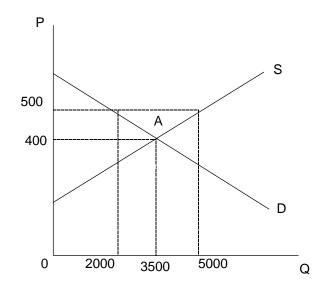


The supply price increases as quantity supplied increases because the opportunity cost per unit increases as quantity supplied increases. Opportunity cost increases as quantity supplied increases because inputs must be attracted from higher and higher valued uses. This relationship leads to the law of supply, which states that the quantity of a product supplied is positively related to its price.

- 8. The operation of the laws of demand and supply ensures that the market for apartments will be in equilibrium.
  - a. Define equilibrium.
  - b. Draw a diagram with demand and supply curves. Illustrate the equilibrium price and the equilibrium quantity exchanged.
  - c. Suppose the market price is above the equilibrium price. Show the quantity demanded and the quantity supplied on your diagram. What will happen to cause this market to return to equilibrium?
  - a. An equilibrium in economics is a situation that will continue indefinitely unless some outside force affecting the situation changes.
  - b. The diagram below shows the market for apartments in equilibrium. Equilibrium occurs at point A, the intersection of demand and supply. The equilibrium price is \$400 per month. The equilibrium quantity is 3500 units per month.



c. If price is greater than the equilibrium price of \$400 per unit, there will be an excess supply in the market. This will put a downward pressure on prices. Price will move towards equilibrium. This is shown in the diagram below.

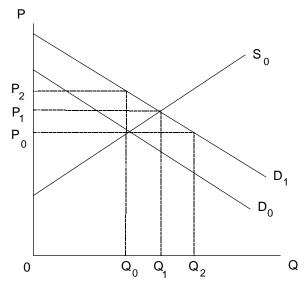


Suppose the price of renting a unit is currently \$500 per month. At this price, quantity supplied is 5000 units while quantity demanded is only 2000 units. There is an excess supply of rental units. Landlords have vacant units. They will try to entice renters by lowering rent. As rents fall, quantity demanded will increase and quantity supplied will decrease. The market price will adjust until rent for a unit is \$400 per month. At this price, the quantity demanded is equal to the quantity supplied, and the market is in equilibrium.

- 9. Use a diagram or diagrams to
  - a. explain how price acts as a signal for consumers and producers
  - b. explain how it acts as a motivator.

With the demand and supply curves D<sub>0</sub> and S<sub>0</sub>, the equilibrium price and quantity in the

apartment market are  $P_0$  and  $Q_0$ . An increase in demand to  $D_1$  disrupts the original equilibrium. The immediate effect may be no change in quantity and an increase in price to  $P_2$ . The increased price rations the original quantity of apartments to consumers who are willing to pay the most for them. The higher price motivates producers to expand output.



Thus, the price system informs both consumers and producers about underlying changes in the market. For example, a price increase tells both consumers and producers that a good is now valued more highly. For consumers, this means that the good will be more costly to buy. For producers, this means that the good will be more profitable to produce. This information then motivates consumers and producers to act. Because the good is more costly, consumers will be willing to purchase less of it than they did previously. Because the good is more profitable to produce, producers will be willing to supply more of it than they did previously. Eventually, the prevailing market price would be  $P_1$ , and not  $P_0$ , and the equilibrium quantity would be  $Q_1$  and not  $Q_0$ .

#### 10. Why is coordination difficult to achieve in a command economy?

Two major factors make the problem of coordination almost insoluble in a command economy. First, there is a high opportunity cost associated with setting prices. This opportunity cost is the output that could have been produced by the planners who set prices. Because of this opportunity cost, prices are changed on an infrequent basis. If prices could be changed in isolation, the planners could be more responsive to demand and supply; however, the prices of some products or resources depend upon the prices of other products or resources. This means that it is not possible to change the price of some products without also adjusting the price of others. As a result, prices tend to be inflexible and excess demands and supplies do not disappear. Another factor accounting for price inflexibility is the high political cost associated with changing prices. In a decentralized system, no single entity can be picked out as the cause of a price increase. In a command economy, on the other hand, the price increase is ordered by the central planners. It is these planners who take the blame for the price increase and bear the wrath of the citizens and other political leaders. In order to avoid potential conflict, the planners change prices on an infrequent basis. Thus, both high opportunity cost and high political cost mean that prices in a command economy tend to be relatively inflexible. As a

result, excess demand and supply do not disappear.

10. Draw a demand curve  $D_0$  and a supply curve  $S_0$  for apartments. Show the equilibrium. Now draw a new demand curve  $D_1$  to the right of  $D_0$ ; the new demand curve is caused by an increase in population. Explain how the price system will operate to signal and motivate producers and consumers to react to this new situation. What is the role of profits?



Suppose the market for apartments is initially in equilibrium as in the diagram above. The equilibrium price is  $P_0$  and the equilibrium quantity is  $Q_0$ . If demand increases to  $D_1$ , the market will eventually move to a new equilibrium. Price will increase to  $P_2$  and quantity will increase to  $Q_2$ , as shown above.

The market does not immediately adjust to the new equilibrium position. Instead, the immediate impact is excess demand in the market. At the original price, consumers would like to purchase  $Q_1$ , however producers are only providing  $Q_0$ . Consumers are willing to pay a price of  $P_1$  for this quantity ( $Q_0$ ). Note, that this exceeds the minimum price that producers must have. Economic profits emerge. These profits motivate producers to expand output. Quantity supplied increases. As output expands towards the equilibrium, the price consumers are willing to pay falls below  $P_1$ . Eventually, a new equilibrium price of  $P_2$  and a new equilibrium quantity of  $Q_2$  emerge.

### 12. What have transition economies had to do in their attempts to create market economic systems?

In order to create market economic systems, transition economies have had to undertake several steps. First, these nations have had to pursue price stability. Legal systems creating private property and defining the rules of economic transactions have had to be developed. In order to create a climate of trust, these economies have had to ensure that the legal system is broadly obeyed. Prices, which had been inflexible, were allowed to fluctuate in response to changes in demand and supply. Finally, it has been necessary to allow the rewards and penalties of the price system to encourage and motivate decision makers.

#### 13. Compare and contrast the effectiveness of the transition in Hungary with that of Ukraine.

Inflation in the former centrally-planned economies was low. However, these low prices were the reflection of laws, plans, and inertia. The low prices did not reflect the scarcity of goods and services in these countries. Once, prices were freed, the suppressed inflation exploded and unemployment (previously hidden) became a problem. Countries have had different experiences in getting inflation under control. The decline in output and the rise in unemployment are characteristics of an economy in transition from central planning to markets.

Hungary had an early start in the transition to a market economy. In the early part of the transition, its annual inflation rate rose to about 40 percent. Inflation at this rate damages the information function of prices, but the annual inflation rate dropped over the decade -- with one interruption -- to its current rate of about 10 percent. This rapid inflation, followed by a reduction in the inflation rate, is characterizes a successful transition. Hungary quickly removed most restrictions on prices and foreign trade and privatized its business firms. As a result prices increased and unemployment rose. The huge increase in its unemployment rate and the associated sharp reduction in output was a necessary part of instituting competition and establishing market incentives. For long-term growth, it was necessary to move resources into areas if the economy where they would be more productive. Since 1994, unemployment has continued to fall, output has continued to rise, and inflation has generally fallen. Hungary's output began to grow again by 1994 and its unemployment rate began to fall.

Ukraine has not attempted to reform its economy as quickly as the countries mentioned above. Nonetheless, its inflation rate is, literally, off the chart. Although Ukraine liberalized prices sufficiently to have inflation, its unemployment remained at command economy levels through the mid 1990s; the low reported unemployment rates indicate that much unemployment was disguised. Disguised unemployment, in turn, suggests that Ukraine has been slow in transition. Ukraine's output decline was much sharper and lasted much longer than Hungary's. Hungary is a "success" story and Ukraine an "adversity" story.

### 14. According to the Box, "Cowboy Capitalism," is the gang activity in Russia typical of the early stage of capitalism? Discuss.

According to the Box, "Cowboy Capitalism," chaotic criminal conditions are not just a stage of capitalism. Unlike Russia, early settlers in the American West exhibited a respect for the law that was based on a long history of established property law. Vigilante groups in the west attempted to enforce the law instead of victimizing honest citizens. This is contrary to the activities of Russian gangs. Further, prices in the early stages of capitalism of the United States were not regulated. As a result, there were few situations in which gangs could profit from unexploited gains from voluntary trade. Further, it was unnecessary to bribe officials in the United States as they did not have the power to prevent profitable activities from occurring.

The situation in Russia is similar to activity that occurred in the United States during Prohibition. Laws associated with Prohibition made gang activity profitable. This gang activity did not automatically end with Prohibition. In the same way, gang activity in Russia is unlikely to cease on its own.

### 15. In the comparison between FEMA and WalMart, it is suggested that WalMart (the private sector) does many things better than FEMA (the public sector) in disaster relief.

# Do you agree that the private has better knowledge about what needs to be done in disaster relief because of its profit motive. If so, why not turn all elements of disaster relief over to the private sector? If not, why not?

Private businesses, like Wal-Mart, and private charitable organizations often provide the necessary goods following a disaster. Businesses and charitable organizations of a regional or national scope may be large and nimble enough to predict what people will want to buy or will need and have it in stock or be able to deliver it quickly. The business firms have the distinct advantage that they will profit by being right in their decisions, reevaluated procedures that didn't previously work, and developed new procedures.

The citizens of the areas in distress have a tremendous advantage over the outsiders because they have much local knowledge about who might need help and about who can provide help. In some ways, the advantages of these private and nongovernmental agents are similar to the advantages of individuals in a market economy with a price system. People have incentives to help and they have the knowledge of local conditions that individuals have when they are making their normal economic decisions about buying and selling. It should not be surprising that this decentralized approach has advantages over the command economy approach that a government agency, be it the U.S. Army, FEMA (the Federal Emergency Management Agency) or a state Homeland Security Agency.

Government agencies and planners in coping with a disaster may require that special legal rules, such as curfews, traffic rules for evacuations, and the establishment of shelters, be imposed and certainly requires special attention to law enforcement. These actions are similar to those that government undertakes to establish and enforce a system of private property and exchange; government has a comparative advantage in these activities. These agencies also may have to deal with public health matters and other public safety matters. The restoration of order, the evacuation of New Orleans after it got underway, and the medical evaluations at the airport showed government agencies effectively undertaking large-scale projects. Releasing of petroleum from the strategic petroleum reserve provides another example of effective governmental action.

Our analysis of the market system, however, suggests where the command-economy nature of government action creates problems. When responding, government agents must follow rules that constrain their actions. Just like central planners, government agents do not have the same individual discretion as private individuals because they must consider the political implications of their actions. They are limited in their freedom to respond to unique situations. Government responses work well when one size fits all, but when the action is best tailored to an individual situation government responses are not as suitable.

16. Economic News Online-- http://www.swcollege.com/bef/econ\_news.html. Go to this site and choose the Comparative Economic Systems category under World Economy and choose an EconNews story that interests you. Read the full summary and answer the questions posed.

Choices of articles and answers will vary.