

Objectives for Chapter 22: Main Events of the Period 1970 to 1990

At the end of Chapter 22, you will be able to answer the following:

1. Describe the most important economic events of the period 1970 to 1990.
2. What is the *Phillips Curve*?
3. How did the Phillips Curve **shift** in the 1970s? How did it shift in the 1980s?
4. How does the Phillips Curve relate to the **Aggregate Supply** curve?
5. Describe the *oil shocks* of the 1970s? What affects did they have?
6. Describe the *wage and price controls* of the 1970s? What affects did they have? Why were they ended?

Chapter 22: Main Events of the Period 1970 to 1990 (latest revision October 2004)

1. The Economic Record of the Period

Much of the story of the period from 1970 to 1990 has already been told in earlier chapters. The period begins in the middle of the Vietnam War and end with the beginning of the Gulf War. In between, economic events loomed very large. In particular, four occurrences were especially important. **First, the decade of the 1970s was a period of very high rates of inflation.** Between 1970 and 1981, prices more than doubled. In no other decade of the 20th century was inflation the problem that it was in the 1970s. The rates of inflation (using the CPI) are shown in the following table:

Table A Inflation Rates

1970	5.7%	1975	9.1%	1980	13.5%
1971	4.4%	1976	5.8%	1981	10.3%
1972	3.2%	1977	6.5%	1982	6.2%
1973	6.2%	1978	7.6%		
1974	11.0%	1979	11.3%		

Contrast these rates of inflation with the low rates of inflation existing today. In fact, since 1983, the rate of inflation of the CPI has exceeded 5% per year only once.

Second, for most of the 1970 to 1990 period, the country experienced recessionary gaps. Unemployment rates were persistently above the rate we now consider as full-employment. And the rate then considered to be full-employment was higher than it is today. Most economists of that time thought that full employment would exist if the unemployment rate were as low as 6%. Today, we think this is closer to 4%.

Table B Unemployment Rates

1970	4.9%	1975	8.5%	1980	7.1%	1985	7.2%
1971	5.9%	1976	7.7%	1981	7.6%	1986	7.0%
1972	5.6%	1977	7.1%	1982	9.7%	1987	6.2%
1973	4.9%	1978	6.1%	1983	9.6%	1988	5.5%
1974	5.6%	1979	5.8%	1984	7.5%	1989	5.3%

Again, contrast these unemployment rates with those of the later 1990s.

Third, 1970 to 1990 was a period of very slow rates of economic growth --- the period of the so-called “productivity problem”. We described this in Chapter 2. Whereas productivity had grown at an annual average rate of 3.2% between 1947 and 1972, it grew only at an annual average rate of about 1.5% between 1973 and 1990. As we saw in Chapter 2, **the slow growth of productivity meant that incomes grew unusually slowly.** The slow growth of incomes led to many social changes including more family members in the labor force, reduced savings, greater debt, later marriage, fewer children, and so forth.

Finally, 1970 to 1990 was a period in which the American trade surplus turned into a trade deficit. The trade balance has been in deficit ever since 1975. As we saw in Chapter 7, a trade deficit is accompanied either by international borrowing or by foreign direct investment into the United States. The trade deficits that have existed since 1975 have been accompanied by both.

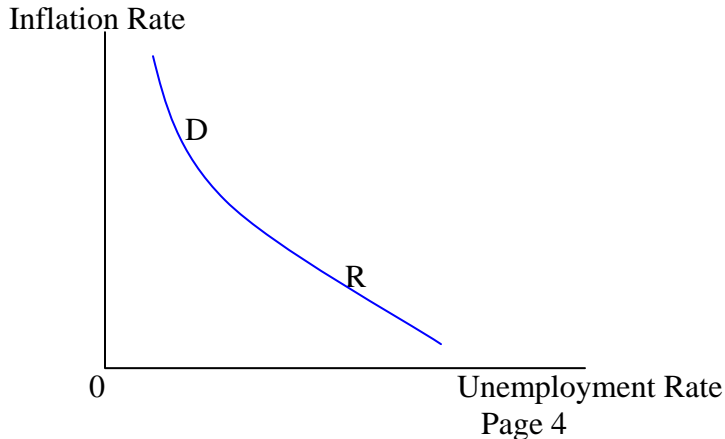
Table C Balance of Trade in Goods and Services () = Surplus

1970	(\$2.2 Billion)	1980	\$19.4 billion
1971	1.3	1981	16.1
1972	5.4	1982	24.1
1973	(1.9)	1983	57.7
1974	4.2	1984	109.1
1975	(12.4)	1985	121.8
1976	6.1	1986	138.5
1977	27.2	1987	151.6
1978	29.7	1988	114.5
1979	24.5	1989	93.1

So the period we are studying in this section of the course is not a good one from an economic point of view. It was a period of high rates of inflation, high amounts of unemployment, slow growth of incomes, and trade deficits necessitating international borrowing.

2. The Phillips Curve and its Shifts

To understand the period of the early 1970s, we need to begin with the *Phillips Curve*. The curve is named for the statistician who first developed it in the late 1950s, an Australian working in Great Britain. On the horizontal axis is plotted the unemployment rate. On the vertical axis is plotted the inflation rate. (Actually, Phillips plotted the percentage change in wages, not prices. But the two changes are related. And the most important conclusions of the Phillips Curve follow if we use prices instead of wages.) When the data are plotted and a line illustrating the trend is drawn the Phillips Curve looks as follows:



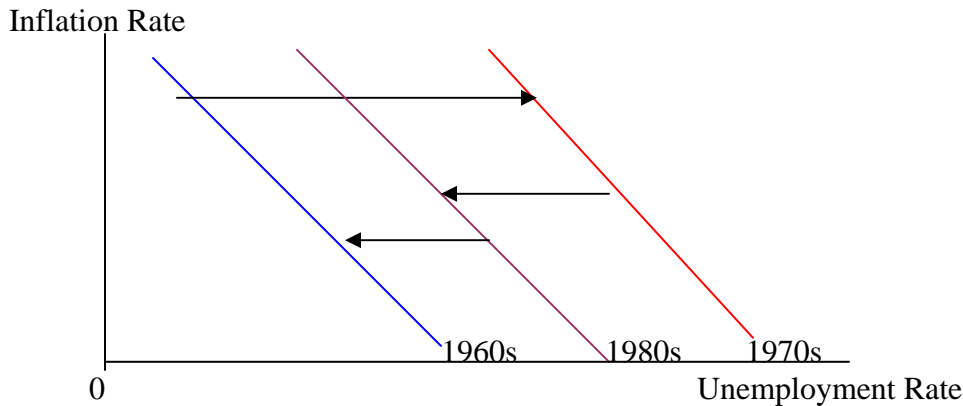
What does the Phillips Curve tell us? *It says that there is a trade-off between unemployment and inflation. When the inflation rate is falling, the unemployment rate is also rising. And when the inflation rate is rising, the unemployment rate is falling.* Policies that improve one of the issues will worsen the other issue.

What Phillips also discovered was that **this trade-off had been stable**. His data extended back nearly 100 years. Whatever the relation had been in the 1950s, the same relation had existed in the 1920s, the 1890s, and even the 1870s. This was an amazing discovery. Relationships in Economics rarely stay the same for even a few years. But Phillips had discovered a relation that seemed to have been the same for nearly 100 years. Phillips had used data for Great Britain. Data were then collected in more than 30 different countries. All studies, including ones done for the United States, found a stable trade-off between inflation rates and unemployment rates.

In the 1960s, people were very excited about this discovery. If the relation between inflation and unemployment were indeed stable, people could treat it as analogous to a **menu**. Just as one can have very good food but have to pay a high price, one can have very low rates of unemployment but have to pay the “price” of high rates of inflation. And just as one can have a low cost meal but pay the “price” of very poor food, one can have low rates of inflation but pay the “price” of high rates of unemployment. Or perhaps one might choose the middle --- moderate rates of inflation and unemployment. In any case, there was a political choice to be made. At the risk of some exaggeration, **one can say that Democrats would be more likely to make choices like D. These had lower rates of unemployment and somewhat higher rates of inflation. And Republicans would be more likely to make choices like R. These had lower rates of inflation and somewhat higher rates of unemployment.** However, there were limits; neither political party could let unemployment rates or inflation rates become too high.

Having discovered a relation that people thought was stable, it proceeded to change. When we plot the data for the 1970s and very early 1980s, it appears that **the Phillips Curve had shifted to the right**. This means that the trade-off worsened in this period. **The data showed combinations that had more unemployment and also more inflation** than had existed previously. Then, when one plots the data for the 1980s and 1990s, it appears that **the Phillips Curve had shifted back to the left**. This means that the trade-off improved in this period. **There were both lower rates of inflation and**

also lower rates of unemployment than existed in the 1970s. By 1999, the inflation rate (using the CPI) was 2.2% and the unemployment rate was 4.2%. **This combination was similar to combinations that existed in the 1960s and represented both lower rates of unemployment and lower rates of inflation than existed in the 1970s and 1980s.** The idea that there is a menu of policy choices has ceased to exist.

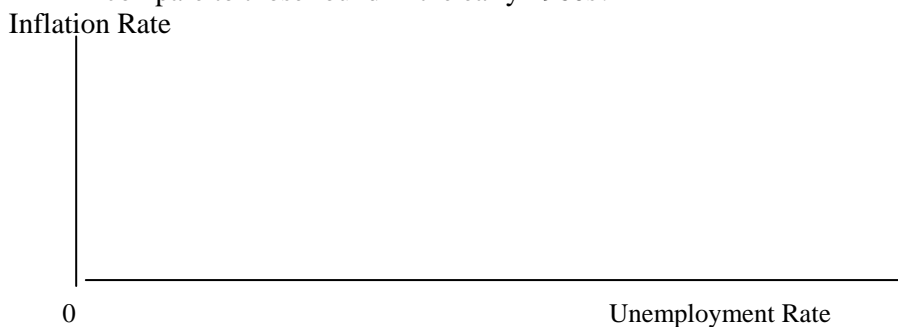


So we now have three facts that we need to explain. *First, why is there is Phillips Curve? That is, why is there a trade-off between inflation and unemployment? Second, why did the Phillips Curve shift to the right in the 1970s? And third, why did the Phillips Curve shift back to the left in the 1980s and 1990s?*

Test Your Understanding

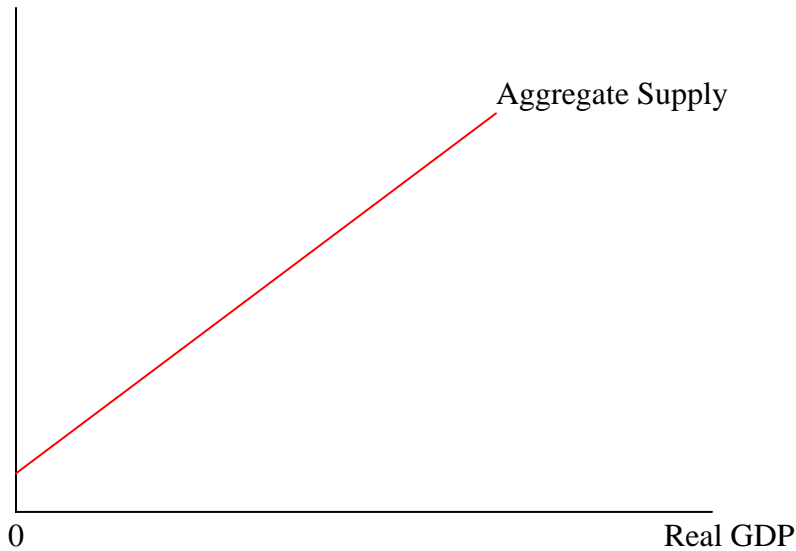
According to the Phillips Curve, there is an inverse relationship between inflation rates and unemployment rates. Go back to the Bureau of Labor Statistics site that you used before: <http://stats.bls.gov>. Or you may use the data given above. On the graph below, plot the inflation rate and the unemployment rate for each year from 1961 to 1999.

1. Was there an inverse relationship between inflation rates and unemployment rates between 1961 and 1969?
2. Did the Phillips curve shift to the right in the 1970s? (This would mean that the combinations were worse than in the 1960s --- more inflation together with more unemployment)
3. Did the Phillips curve shift to the left in the 1980s and 1990s? (This would mean that the combinations were better than in the 1970s --- less inflation together with less unemployment)
4. How does the combination of the inflation rate and the unemployment rate in 2000 compare to those found in the early 1960s?



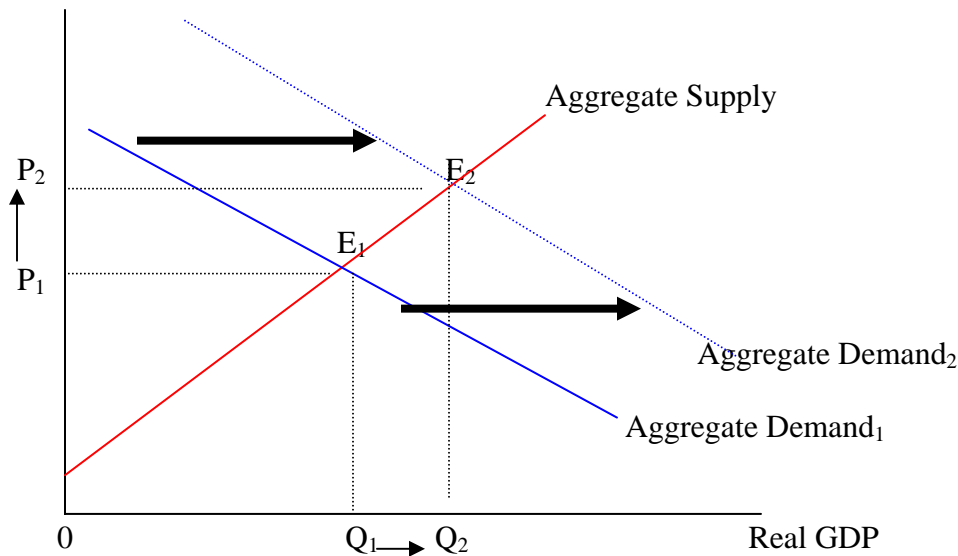
In a different framework, we encountered this trade-off previously in Chapter 9. Previously, on the horizontal axis, we plotted Real GDP. Real GDP and Unemployment are related. **If unemployment is rising, Real GDP must be falling. And if unemployment is falling, Real GDP must be rising.** They are inversely related. So instead of sloping down to the right, our curve sloped up to the right. We called it **Aggregate Supply**. (Ignore for now the fact that there is a difference between the inflation rate and the GDP Deflator on the vertical axis. This difference will not be significant for our purposes here.)

GDP Deflator

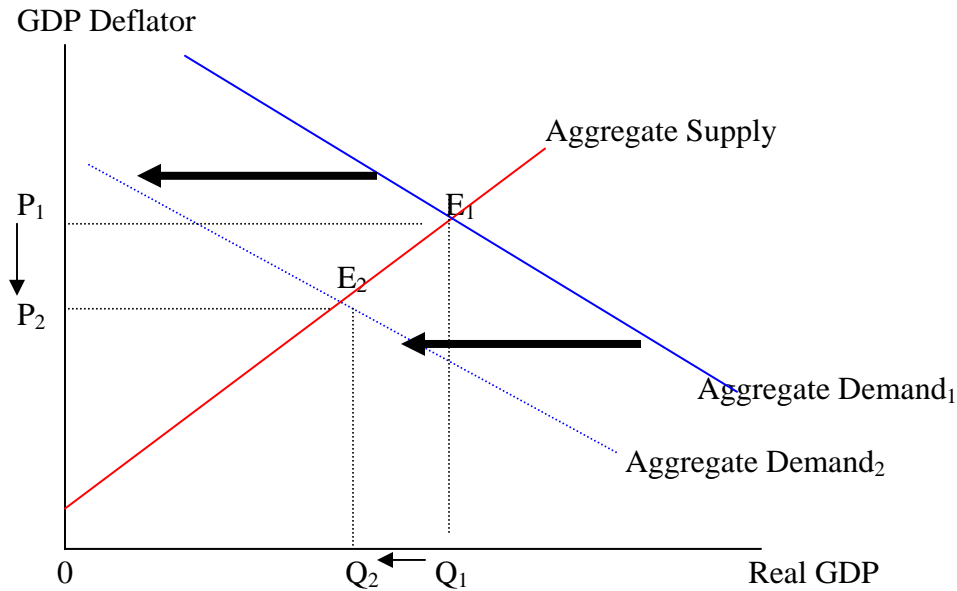


We encountered the trade-off when we shifted aggregate demand. **When aggregate demand shifted to the right, we saw that Real GDP rose and therefore unemployment fell. But the inflation rate also rose.**

GDP Deflator



And when Aggregate Demand shifted to the left, Real GDP fell and therefore unemployment rose. But prices fell.

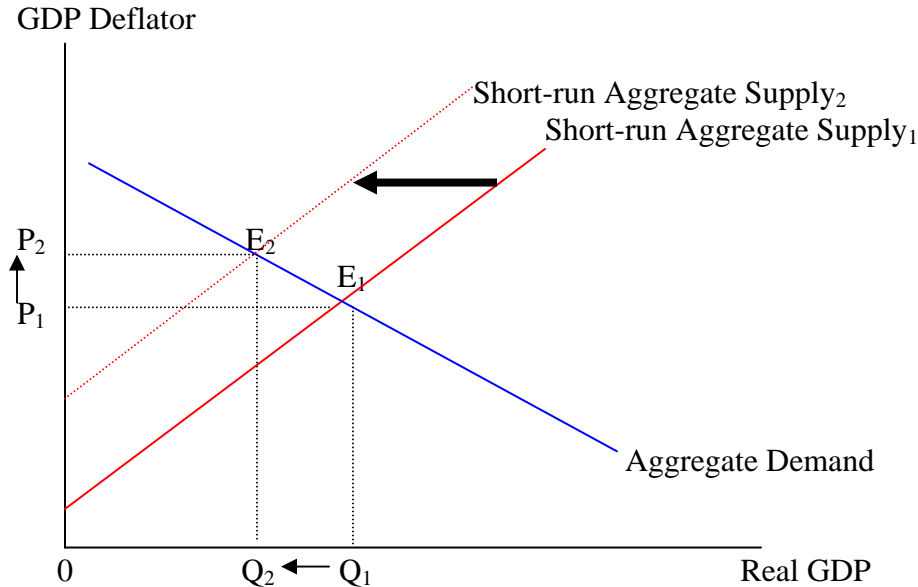


Therefore, in his studies, Phillips must have picked up the effects of changes in Aggregate Demand.

So again, we will have three questions to answer. We can state the questions in both frameworks. **First, why is there a Phillips Curve?** That is, why is there a trade-off between unemployment and inflation? **We can also ask why there is an Aggregate Supply.** That is, why is there a trade-off between Real GDP (production) and prices (the GDP Deflator)? **Second, why did the Phillips Curve shift to the right in the 1970s?** **We can also ask why the Short-run Aggregate Supply shifted to the left in the 1970s.** (Remember that the unemployment rate and the Real GDP are inversely related.) And third, **why did the Phillips Curve shift back to the left in the 1980s and 1990s?** **We can also ask why the Short-run Aggregate Supply shifted back to the right in the 1980s and 1990s.**

3. The Oil Shocks

We have previously encountered one of the reasons for the shift of the Short-run Aggregate Supply (and therefore the shift of the Phillips Curve) in the 1970s. **In 1973 and again in 1979, there were great rises in the price of oil.** These were called the *oil supply shocks*. Oil prices rose from \$4 per barrel in 1972 (a barrel equals 42 gallons) to \$14.50 by the end of 1973 and then to almost \$40 in 1979 before settling back at about \$28. Since oil is involved in the production of most goods (power, transportation, plastic materials, polyester materials, and so forth), this represented **a large rise in a cost of production.** As we know, a rise in costs of production will shift the short-run Aggregate Supply curve to the left (and therefore shift the Phillips Curve to the right).



Notice that there is a decrease in Real GDP (production) and a corresponding increase in unemployment. Notice also that there is inflation. *The combination of a recession (a decrease in Real GDP) and inflation is called stagflation.* With both unemployment and inflation rising, the trade-off is becoming worse. The shift of Aggregate Supply to the left corresponds to the shift of the Phillips curve to the right. So the oil supply shocks explain part of the reason for the shift of the Phillips curve in the 1970s. But as we shall see in a later chapter, there is more to the story.

Test Your Understanding

In early 2000, the price of oil was about \$20 per barrel. By summer of 2000, it had risen to over \$34 per barrel. Then, the price fell. By early 2002, the price of oil was close to \$20 per barrel once again. However, by spring of 2002, the price had risen back to about \$28 per barrel.

1. Based on this information, what would expect would happen to the American economy in 2001 and early 2002? Explain why.
2. Go to the Internet to get recent information. Look up the situation of the American economy in 2001 and 2002. Which of your predictions actually came true? Which of your predictions did not come true? For those that did not come true, try to explain why.

4. Wage and Price Controls

In this chapter, we have set the stage for our analysis of the most recent period in American economic history. But before we proceed to that analysis, there is one episode that needs to be discussed. In 1971, the country was experiencing high rates of unemployment. President Nixon was worried that the high rates of unemployment might hurt him in the next election (in 1972). So the Chair of the Federal Reserve System, a man who had been appointed to the position by President Nixon, chose to increase the money supply. As you know from Chapter 9, this causes Aggregate Demand to increase. As we saw in the graph above, an increase in Aggregate Demand causes Real GDP to rise and therefore causes unemployment to fall. But an increase in Aggregate Demand also causes inflation. President Nixon was worried about the inflation. So, as prices were

rising, President Nixon decided that he could stop the inflation by passing laws that limited price and wage increases. For 90 days, no one was allowed to raise a price or a wage at all. After that, **there were legal limits to the increases in prices and wages that were allowed**. These legal limits continued until early 1973.

To understand the effects of these wage and price controls, review the effects of price ceilings in Chapter 8. For wage and price controls are just **price ceilings**. What will result if wage and price controls are imposed? The answer, as you remember from Chapter 8, the result is the **existence of shortages**. Indeed, **the period was characterized by shortages of a large number of goods and services**. The country experienced rationing by first-come, first served. There were long gasoline lines. Grocery stores were empty by noon and often responded by closing down. The public was outraged. The country also experienced rationing by seller choice, with many sellers holding some of their product to sell to favored customers. The country experienced black markets and gray markets. This was a very difficult time.

In early 1973, wage and price controls were ended. The decision to have the government control wages and prices was widely condemned. Even those people responsible for the creation of the program have subsequently admitted that it was a mistake. The United States has had no other experience with wage and price controls since 1973.

5. Summary and Conclusion

This chapter has provided some background for understanding the economic events and the economic policies of a recent period in American economic history. The period of the 1970s was characterized by very high rates of inflation and by stagflation (recession coinciding with high rates of inflation). In the early 1970s, the United States government tried to control inflation by wage and price controls. The result was a disaster, with shortages rampant. The 1980s and 1990s saw a decline in the inflation rate to quite low levels. These decades also saw a gradual decline in the unemployment rate. By 2000, inflation was virtually non-existent and unemployment was around 4%.

The Phillips Curve demonstrated that policies that acted to lower unemployment rates would also act to raise inflation rates and vice versa. We need to explain why this is so. The combinations of inflation and unemployment became worse in the 1970s. This means that this decade saw both higher rates of inflation and also higher rates of unemployment than had been experienced before. The oil supply shocks were one reason that this occurred. But they were not the only reason, so there is still much to explain. The economic situation improved in the 1980s and the 1990s, with lower rates of both inflation and unemployment than had been seen in the 1970s. This also needs to be explained.

In order to explain the events of the period from 1970 to 2000, we need to examine **monetary policy**. As we saw earlier, fiscal policy has not been a major factor affecting either unemployment rates or inflation rates. As we shall see, monetary policy has been the main source of America's economic problems and also the main solution to these problems. And a philosophy called *Monetarism* became prominent beginning in the 1970s. **Monetary policy concerns policy that relates to the supply of money (the**

number of dollars in existence). In Chapter 21, we have explained what money is, what the American money supply is composed of, who the Federal Reserve System is, and how the Federal Reserve System changes the amount of money that exists. With that background, we turn to an examination of Monetarism and an attempt to explain the events of 1970 to 1990.

Practice Quiz for Chapter 22

1. Which of the following decades experienced high rates of inflation?
a. 1970 to 1980 b. 1980 to 1990 c. 1990 to 2000 d. all of the above
2. The **Phillips Curve** shows that there is a trade-off between
a. inflation and unemployment c. prices and Real GDP
b. demand and supply d. tax rates and tax revenues
3. In the 1970s, the Phillips Curve
a. shifted to the right b. shifted to the left c. stayed constant
4. The **Oil Supply Shocks** would cause the Phillips Curve to
a. shift to the right b. shift to the left c. stay constant
5. If Aggregate Demand is increased and there are **wage and price controls**, you would expect to see
a. shortages b. surpluses c. an increase in prices d. equilibrium

Answers: 1. A 2. A 3. A 4. B 5. A