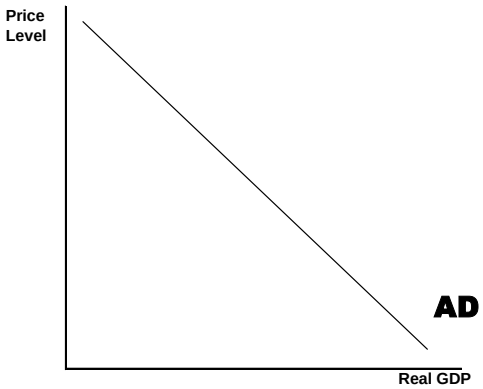
Aggregate Demand & Aggregate Supply

Aggregate Demand

The aggregate demand (AD) curve shows the total amounts of goods and services that consumers, businesses, governments, and people in other countries will purchase at each and every price level. It represents all the demand in the economy.



The aggregate demand curve looks a lot like a demand curve for a single product. However, there are big differences. The vertical axis is labeled "Price Level" The price level is a measure of the average weighted price of all goods and services. An increase in the price level indicates inflation. A decrease in the price level indicates deflation.

The horizontal axis is labeled "Real GDP." It represents the value of all final goods and services produced, adjusted for inflation. Think-of real GDP as the quantity of the nation's output.

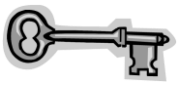
The AD curve is downward-sloping. This means that consumers, businesses, governments, and people in foreign countries together will buy more goods and services at a lower price level than they will at a higher price level.

Shifts in Aggregate Demand

Shifts in aggregate demand show the effects of events and government policies on the price level and real GDP.

Anything that causes an increase in consumer, business, or government spending, or in net exports, will increase AD. For example, higher incomes increase consumer spending and therefore increase AD. More business investment increases AD. Higher government spending increases AD. If U.S.-made goods and services become more desirable in other countries, AD increases.

Anything that decreases consumer, business, or government spending, or net exports, will decrease AD. If higher taxes decrease people's net income, AD decreases. If business profits are down, businesses may invest less, and AD decreases. If government spending decreases, AD decreases. If U.S.-made goods and services are selling less in other countries, AD decreases. Expectations of change also affect AD. For example, if consumers feel there is going to be a recession soon, they may save more and spend less. This behavior decreases AD.

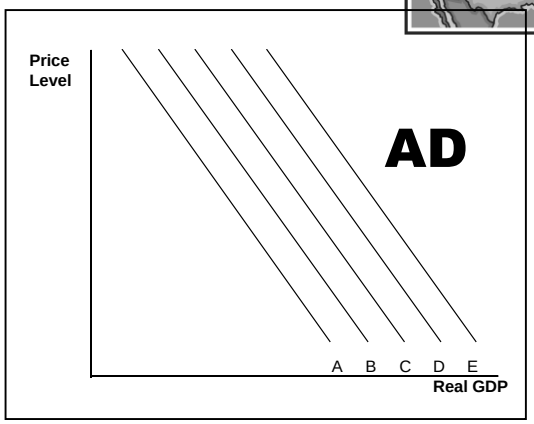


Analyzing events that affect aggregate demand is easy. The key is **SPENDING**. Now look on the next page to see if you can analyze how events shift the AD curve.

Aggregate Demand & Aggregate Supply

Questions

For each situation described below, determine whether the event will increase or decrease AD.



Start with AD Curve C. If you think the first situation would increase AD, write "increase" and move to curve D. If you think the first situation would decrease AD, write "decrease" and move to curve B. Move only one curve at a time. Do not skip a curve even if you think the situation will cause a huge increase or decrease in AD. If you think an event will not cause AD to shift, write "no change."

Do not go beyond the five curves. If you need to go beyond the five curves, you need to rethink your answer!

Start at Curve C

1. Congress cuts taxes.

   AD _____ AD Shifts to Curve ____

2. A survey shows business investment spending decreased last month.

   AD _____ AD Shifts to Curve ____

3. Government spending will increase next fiscal year; the President promises no increase in taxes.

   AD _____ AD Shifts to Curve ____

4. A survey shows consumers are confident about the future economy.

   AD _____ AD Shifts to Curve ____

5. Business leaders feel the economy is headed for recession.

   AD _____ AD Shifts to Curve ____

6. The stock market collapses - investors lose billions.

   AD _____ AD Shifts to Curve ____

7. The President cuts defense spending by 20 percent.

   AD _____ AD Shifts to Curve ____

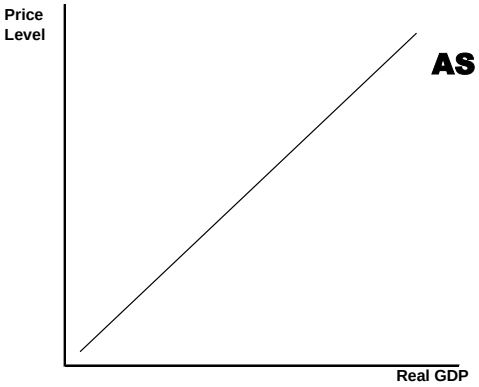
8. The productivity of suppliers rises for the fourth straight year.

   AD _____ AD Shifts to Curve ____

Aggregate Demand & Aggregate Supply

Aggregate Supply

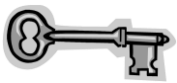
The aggregate supply (AS) curve shows the total amounts of goods and services that suppliers will produce at each and every price level. In the short run, the aggregate supply curve is upward-sloping. This means that during a period of a year or two, a higher price level increases the quantity of goods and services supplied. A decrease in the price level reduces the quantity of goods and services provided.



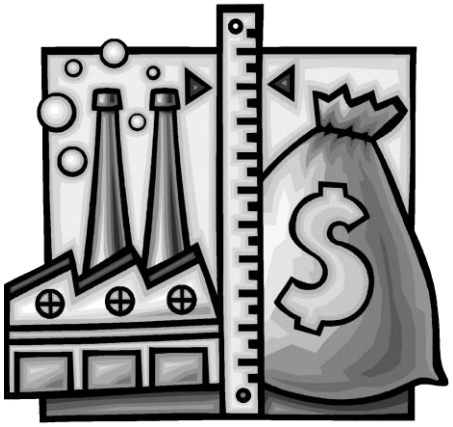
Economists and textbooks illustrate short-run aggregate supply in different ways. In general, short-run aggregate supply becomes more vertical at higher price levels. This is because at higher levels of real GDP, businesses have more difficulty in increasing their output even if the price level is higher.

Shifts in Aggregate Supply

Many events can shift short-run AS, but here is a simple way to analyze the effects of these events. Anything that changes production costs shifts aggregate supply. An increase in production costs decreases AS, and a decrease in production costs increases AS. For example, an increase in the price of oil would increase the cost of energy, an important production cost. This would decrease AS. An increase in productivity reduces the costs of production, which would increase AS.



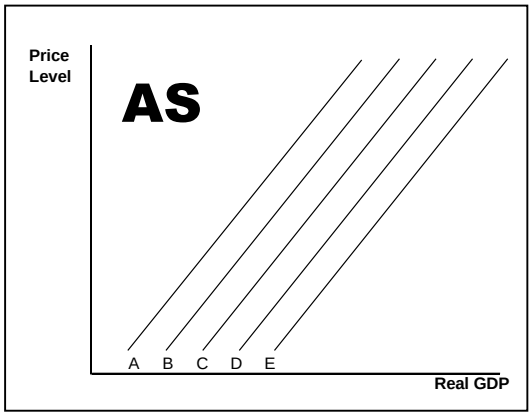
Now see if you can analyze how events shift the AS curve. The key is whether the event increases or decreases the **COSTS OF PRODUCTION**. Now look on the next page to see if you can analyze how events shift the AS curve.



Aggregate Demand & Aggregate Supply

Questions

This Activity is similar to Activity 1, but it shows shifts in aggregate supply. For each situation described below, determine whether the event will increase or decrease AS. **Start with AS Curve C**.



If you think the first situation would increase AS, write "increase" and move to curve D. If you think the first situation would decrease AS, write "decrease" and move to curve B. Move only one curve at a time. Do not skip a .curve even if you think the situation will cause a huge increase or decrease in AS. If you think a situation will not cause AS to shift, write "no change."

Do not go beyond the five curves. If you need to go beyond the five curves, you should rethink your answer!

Start at Curve C

1. The minimum wage rate is increased by Congress.

   AS _____ AS Shifts to Curve ____

2. OPEC successfully increases oil prices.

   AS _____ AS Shifts to Curve ____

3. Labor productivity increases dramatically.

   AS _____ AS Shifts to Curve ____

4. A giant natural gas discovery decreases energy prices.

   AS _____ AS Shifts to Curve ____

5. Computer technology brings new efficiency to industry.

   AS _____ AS Shifts to Curve ____

6. The low birth rate will decrease the labor force in the future.

   AS _____ AS Shifts to Curve ____

7. Research shows that improved schools have increased the skills of American workers and managers.

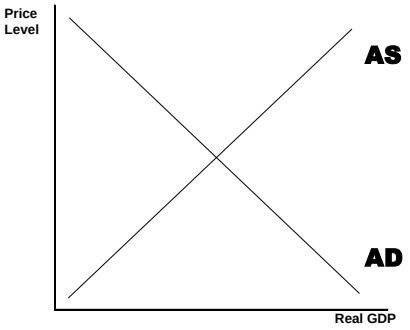
   AS _____ AS Shifts to Curve ____

8. Government spending increases.

   AS _____ AS Shifts to Curve ____

Aggregate Demand & Aggregate Supply

Effects of Shifts in Aggregate Demand and Supply



When aggregate demand is equal to aggregate supply, the economy is in equilibrium. The equilibrium price level and the equilibrium real GDP are determined by the point at which the AD curve and AS curve intersect.

Shifts in AD and AS cause the equilibrium level of real GDP and the price level to change in the following ways:

- An increase in AD increases the price level and increases real GDP. There is a trade-off between higher inflation and higher GDP. During a recession, real GDP increases more than inflation. If the economy is near full employment, the price level will increase more than real GDP. Stimulating AD has different effects depending on whether the economy is in a recession or near full employment.

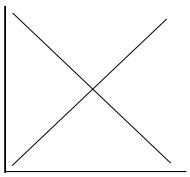
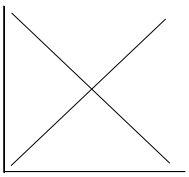
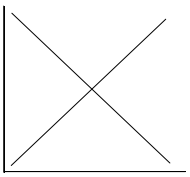
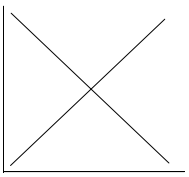
- A decrease in AD will decrease the price level and decrease real GDP. If the economy is in full employment, inflation will decrease more than real GDP. If there is a recession, real GDP will decrease more than the price level.

- An increase in AS decreases the price level and increases real GDP. This is the best of all possible situations - a lower price level, higher output, and less unemployment.

- A decrease in AS increases the price level and decreases real GDP. This is the worst of all possible situations - a higher price level, lower output, and higher unemployment.

Questions

For each of the four events below, draw the resulting changes on the charts. Then indicate the change to the AS curve or AD curve as a result (only one curve will shift) and the effect on real GDP and price level.

	1. Increase in labor productivity due to technological change.	2. Increase in the cost of inputs used by many manufacturing firms.	3. Consumers feel optimistic about the future and begin spending more.	4. A major reduction in business investment spending.
Does it affect AD or AS?	**AD AS** *(Circle one)*	**AD AS** *(Circle one)*	**AD AS** *(Circle one)*	**AD AS** *(Circle one)*
LABEL <u>GRAPH</u> **Then draw the new curve** *(Only one curve shifts)*				
Real GDP *(Circle one)*	+ —	+ —	+ —	+ —
Price Levels *(Circle one)*	+ —	+ —	+ —	+ —

Aggregate Demand & Aggregate Supply

Economist For A Day

Aggregate demand and aggregate supply are used to analyze the causes and effects of economic problems. Changes in aggregate demand and aggregate supply also provide guidance in analyzing the effects of government monetary and fiscal policies on inflation, unemployment, and economic growth. Understanding these macroeconomic forces helps you anticipate and respond intelligently to economic events. This allows you to predict the economic consequences of proposed government policies and to make informed choices among alternative political candidates and public-policy proposals.

Questions

Let's put on our economist hats and begin our analysis of the economy. For each situation described, illustrate the change on the AD / AS diagram and describe the effects on the equilibrium price level and real GDP by circling the correct symbol:

+ for increase **-** for decrease **=** for unchanged.

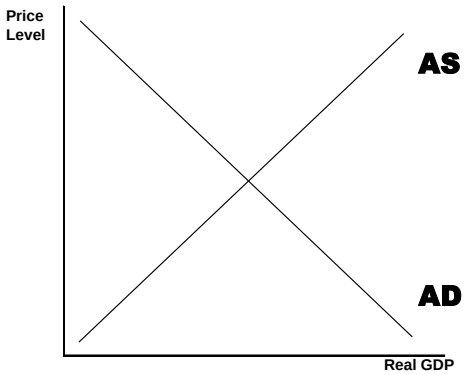
NOTE: ONLY ONE CURVE WILL MOVE IN EACH SITUATION. DRAW THE NEW CURVE AND INDICATE THE CHANGE IN PRICE LEVEL AND REAL GDP.

1. **Increase in Government Spending**

   During a recession, the government increases spending on schools, highways and other public works.

   Price Level: **+** **-** **=**

   Real GDP: **+** **-** **=**

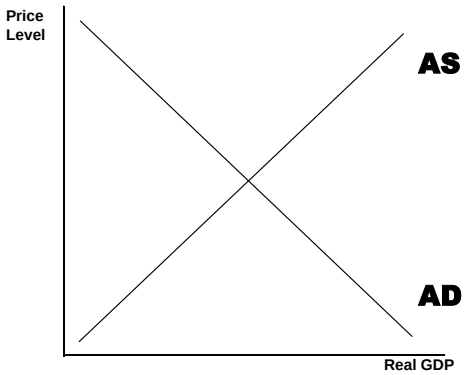


2. **New Oil Discoveries**

   New oil discoveries cause large decreases in energy prices.

   Price Level: **+** **-** **=**

   Real GDP: **+** **-** **=**



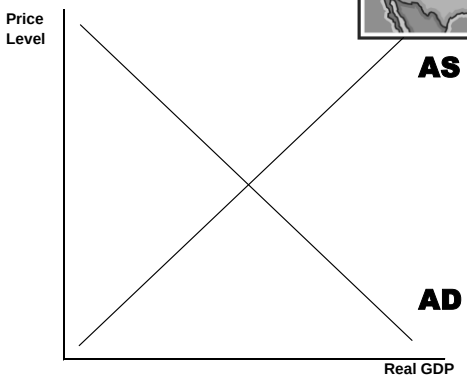
Aggregate Demand & Aggregate Supply

3. **Effects of New Technology and Better Education**

   New technology and better education increase productivity..

   Price Level: + - =

   Real GDP: + - =

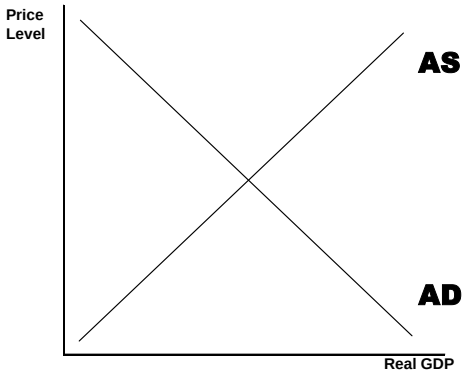


4. **Increased Confidence in Future Economy**

   A new President makes consumers and businesses more confident about the future economy. *Note: show the change in AD only.*

   Price Level: + - =

   Real GDP: + - =



5. **Income Tax Cut**

   Congress passes a tax cut, and the President signs it.

   Price Level: + - =

   Real GDP: + - =