Aggregate Demand

Introduction and Description
Aggregate demand represents the sum of consumption \( (C) \), investment \( (I) \), government expenditures \( (G) \) and net exports \( (NX) \). The quantity of real GDP demand is the total of all final goods and services that households, businesses, governments and foreigners plan to buy. This lesson explains the factors that determine aggregate demand. Just as in microeconomics, the students should understand the difference between a shift in a curve and movement along a curve. This lesson helps the students differentiate the two situations when applied to the aggregate demand curve.

Activity 23 provides practice with the aggregate demand curve and distinguishing between movements along and shifts in the aggregate demand curve.

Objectives
1. Define aggregate demand.
2. Explain why the aggregate demand curve is downward sloping.
3. Describe the factors that affect aggregate demand.
4. Explain what factors will shift the aggregate demand curve.

Time Required
Two class periods or 90 minutes

Materials
1. Activity 23
2. Visuals 3.7 and 3.8

Procedure
1. Tell the students that this lesson begins to develop a more complex economic model. Define aggregate demand. It is the sum of planned consumption, investment, government and export minus import expenditures on final goods and services.
2. Project Visual 3.7. Explain that the aggregate demand function is an inverse function between the price level and output: As the price level rises, the level of output demanded decreases. Explain the three factors that affect aggregate demand: the interest-rate effect, the wealth effect and the net-export effect. Assume that nominal money supply is constant.
   (A) The interest-rate effect is defined as a decrease in households' and businesses' plans to buy capital and consumer durables because a price level increase will increase the interest rate. A price level increase decreases the purchasing power of money. With a smaller amount of real money available, financial institutions raise the interest rate.
   (B) The wealth effect is defined as a decrease in the real value of cash balances as the price level increases. Faced with this decrease in real wealth, people decrease consumption and increase savings to restore their real wealth to the desired level. An alternative term is the real balance effect.
   (C) The net export effect is defined as a decrease in domestic output demanded with an increase in the domestic price level because domestic products are more expensive to foreign buyers and foreign goods are less expensive to domestic consumers.
   These three effects combine to produce a downward sloping aggregate demand curve. Emphasize that these are different reasons than those that create a downward sloping demand curve for a single commodity.
3. Use Visual 3.8 to work through increases and decreases in aggregate demand. Discuss the following changes and their effects on aggregate demand.
   (A) Changes in expectations of future income, inflation or profits
   (B) Changes in government spending or taxes
   (C) Changes in the money supply
   (D) Changes in the foreign exchange rate or foreign income
4. Have the students do Activity 23. Review the answers with the students.
An Introduction to Aggregate Demand

Part A
Why Is the Aggregate Demand Curve Downward Sloping?

1. According to the AD curve, what is the relationship between the price level and real GDP?
   There is an inverse relationship: the lower the price level, the higher the real GDP or real national output.

2. Explain how each of the following effects helps explain why the AD curve is downward sloping.
   (A) Interest rate effect: A lower price level decreases the demand for money, which decreases the equilibrium interest rate and increases investment and interest-sensitive components of consumption and, therefore, the real output.
   (B) Wealth effect or real-balance effect: As the price level falls, cash balances will buy more so people will spend more, thus increasing the real output.
   (C) Net export effect: A lower U.S. price level means prices for goods produced in the United States are lower relative to the prices in foreign countries. Thus, people will buy more U.S.-produced goods and fewer foreign produced goods. This increases net exports, a component of real GDP.
3. In what ways do the reasons that explain the downward slope of the AD curve differ from the reasons that explain the downward slope of the demand curve for a single product? The demand curve for a single product is downward sloping because of diminishing marginal utility and income and substitution effects for the individual at a specified level of income. For macro aggregate demand, the reasons are the interest rate effect, the wealth effect and the net export effect.

**Part B**

**What Shifts the Aggregate Demand Curve?**

![Figure 23.2](image-url)

**Shifts in Aggregate Demand**

4. Using Figure 23.2, determine whether each situation below will cause an increase, decrease or no change in AD. Always start at curve B. If the situation would cause an increase in AD, draw an up arrow in column 1. If it causes a decrease, draw a down arrow. If there is no change, write NC. For each situation that causes a change in aggregate demand, write the letter of the new demand curve in column 2. Move only one curve.
### Situation 1. Change in AD  
### 2. New AD Curve

<table>
<thead>
<tr>
<th>Situation</th>
<th>1. Change in AD</th>
<th>2. New AD Curve</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) Congress cuts taxes.</td>
<td>↑</td>
<td>C</td>
</tr>
<tr>
<td>(B) Autonomous investment spending decreased.</td>
<td>↓</td>
<td>A</td>
</tr>
<tr>
<td>(C) Government spending to increase next fiscal year; president promises no increase in taxes.</td>
<td>↑</td>
<td>C</td>
</tr>
<tr>
<td>(D) Survey shows consumer confidence jumps.</td>
<td>↑</td>
<td>C</td>
</tr>
<tr>
<td>(E) Stock market collapses; investors lose billions.</td>
<td>↓</td>
<td>A</td>
</tr>
<tr>
<td>(F) Productivity rises for fourth straight year.</td>
<td>NC</td>
<td></td>
</tr>
<tr>
<td>(G) President cuts defense spending by 20 percent; no increase in domestic spending.</td>
<td>↓</td>
<td>A</td>
</tr>
</tbody>
</table>

**Note:** (F) does not shift the aggregate demand curve. We will see that productivity changes affect the aggregate supply curve.