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Chapter 15: Fiscal Policy

Lesson 3 Macroeconomic Equilibrium

ESSENTIAL QUESTION

How do we know if macroeconomic equilibrium has been achieved?

Reading HELPDESK

Academic Vocabulary

framework point of reference unduly too much

Content Vocabulary

macroeconomics the branch of economic theory focused on the economy as a whole and decision making by large units, such as governments and unions

equilibrium price price when quantity supplied equals quantity demanded; price that clears the market

aggregate supply the total value of all goods and services that all firms would produce in a specific period of time at various price levels

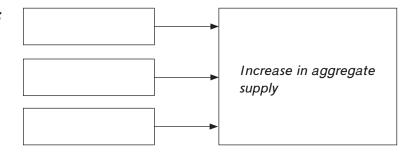
aggregate supply curve hypothetical curve showing different levels of real GDP that would be produced at various price levels

aggregate demand the total value of all goods and services demanded at different price levels aggregate demand curve hypothetical curve showing different levels of real GDP that would be purchased at various price levels

macroeconomic equilibrium amount of real GDP consistent with a given price level; intersection of aggregate supply and aggregate demand

TAKING NOTES: Key Ideas and Details

Use a graphic organizer like this one to list three factors that could lead to an increase in aggregate supply.



Aggregate Supply

Guiding Question How is the Aggregate Supply curve for the economy related to the supply curves of individual producers?

Macroeconomics focuses on the economy as a whole and decision making by large groups or organizations. It uses ideas you've studied before—supply and demand. When we study single markets, supply and demand determine the equilibrium price and how much is produced. When we study the economy as a whole, supply and demand perform in the same way.

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Lesson 3 Macroeconomic Equilibrium, Continued

The Aggregate Supply Curve

In another chapter, supply was defined as the amount of a particular product companies will offer for sale at all possible prices. When studying the economy as a whole, economists like to look at aggregate supply. This is the total value of goods and services that all firms would produce, in a specific period of time, at various price levels. Note that the price level is the price of everything produced. However, the word price refers to just one good or service.

Over one year, assuming all production takes place within a country's borders, aggregate supply is the same as gross domestic product (GDP).

The idea of aggregate supply assumes that the money supply is fixed, or will not change. It also assumes that the price level stays the same. If the price level changes, firms are likely to adjust their output. This leads to a different GDP. If it were possible to keep adjusting the price level to see how total output changed, we could make an **aggregate supply curve**. This would show the real GDP that would be produced at various price levels.

Figure 15.3 shows how an aggregate supply curve for the whole economy might look. Like the supply curve of one firm or the market supply curve, it slopes upward from left to right. To distinguish the aggregate supply curve from other supply curves, it is labeled **AS**.

In Figure 15.3, note that the vertical axis of the graph is labeled "Price level" rather than just "Price." Economists often use aggregate measures like the price level rather than one price to better explain changes in the economy. Finally, note that the horizontal axis is labeled "Real GDP." This is the value of all goods and services produced.

Changes in Aggregate Supply

Just like the supply of one firm or of a single product, aggregate supply can increase or decrease. It tends to go up when the cost of production declines. For example, when energy prices fall, most firms will produce more. Then real GDP rises. This increase in output would happen at all price levels. Therefore, it would shift the original aggregate supply curve **AS**° to the right, creating **AS**¹.

Increases in the cost of production tend to decrease aggregate supply. The cause could be higher oil prices or interest rates, or less productive labor. Any increase in cost that leads firms to offer fewer goods and services for sale at each and every price would shift the aggregate supply curve to the left.

Reading Progress Check	
Identifying What is the benefit of the aggregate supply economic measure?	

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Chapter 15: Fiscal Policy

Lesson 3 Macroeconomic Equilibrium, *Continued*

Aggregate Demand

Guiding Question How is Aggregate Demand related to individual demand?

In another chapter, you learned that demand is the desire, ability, and willingness to purchase a product. If we could add up everyone's demand for every good and service, we would have a measure of total demand. Economists call this concept, or idea, **aggregate demand**. You can also think of this as the total value of all goods and services that might be bought at different price levels.

The Aggregate Demand Curve

Like aggregate supply, aggregate demand can be shown as a graph. It can also increase or decrease. It shares many similarities with individual demand, so the concept is easy to understand.

The aggregate demand curve (AD) appears in Figure 15.4. It represents the sum of all consumer, business, government, and net foreign demand at various price levels. We measure how much people would buy at every possible price level in terms of real GDP. The curve slopes downward to the right, as individual and market demand curves do.

Changes in Aggregate Demand

Aggregate demand can increase or decrease depending on certain factors. For example, if consumers decide to spend more and save less, the increase in consumer spending also increases aggregate demand. This shifts the original aggregate demand curve AD^0 to the right and forms the new aggregate demand curve AD^1 .

A decrease in aggregate demand can occur if the same factors act in an opposite manner. If people were to spend less and save more, it would decrease aggregate demand and the curve would shift to the left. Higher taxes and lower transfer payments could also reduce aggregate spending. These shifts happen because all sectors of the economy collectively buy less GDP at all price levels.

Reading Progress Check
Comparing How do changes in AS and AD relate to the changes in individual supply and demand curves?

Macroeconomic Equilibrium

Guiding Question What is macroeconomic equilibrium?

Aggregate supply and demand curves are useful. Together they provide a **framework** for studying how proposed policies might affect growth and prices. They help us understand inflation and recessions. They also suggest how the economy might change, without any particular policy. However, they can't provide exact predictions, or guesses, on how the economy will perform.

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Lesson 3 Macroeconomic Equilibrium, Continued

Macro Equilibrium with AS-AD

Macroeconomic equilibrium is the intersection of the aggregate supply and aggregate demand curves, as is shown in Figure 15.5. At this point, the level of real GDP, Q, is consistent (steady) with a given price level, P. This equilibrium represents a specific situation at a particular point in time. It could change if either AS or AD changes.

Exploring the Essential Question

Suppose the economy represented in Figure 15.5 slips into recession.

- In which direction would the AD curve shift?
- What changes in government policy could bring the AD curve back to its original position?

AS and AD help us understand two of the major problems in macroeconomics: inflation and recessions. Inflation is a steadily increasing price level, which is measured on the vertical axis. Likewise, a recession is represented by steady decreases in real GDP. These are measured on the horizontal axis. Policy makers must decide whether to fuel, or support, changes in AD (demand side) or AS (supply side) to keep the economy growing and stable.

Demand-Side Policies Affect AD

These concepts help us see the effect of demand-side policy. **Figure 15.6** shows a single aggregate supply curve and two aggregate demand curves. When aggregate demand is weak, the economy is at point **a**, where **AD**⁰ intersects **AS**. Demand-side policies such as increases in government spending can shift aggregate demand to **AD**¹ and move the economy to point **b**. This is where both real GDP and the price level are higher.

Because aggregate demand basically is the sum of C + I + G + (X - M), it hardly matters which part of the economy spends more. In theory, the spending will spread through the economy with the help of the multiplier and the accelerator.

For example, if a new policy caused the aggregate demand curve **AD** to shift to the right, the new equilibrium would be at a higher level of real GDP and prices. This is one of the puzzles facing economic policy makers. They try to figure out how to make real GDP grow without causing rises in inflation. In other words, they don't want to **unduly** increase the price level.

Supply-Side Policies Affect AS

The aggregate supply and demand curves can also be used to show the impact of supply-side policies. As **Figure 15.7** shows, when aggregate supply is low, the economy is at point **a**. This is the point where the aggregate supply curve **AS**^o intersects with the aggregate demand curve **AD**.

If supply-side policies succeed, more output is produced at every price level. The aggregate supply curve shifts to **AS¹**, and the point of equilibrium moves to point **b**. As long as aggregate demand doesn't fall, real output will grow, and the price level will come down.

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Maintaining a Healthy Equilibrium

The economy needs both demand-side and supply-side policies. While both sides have their advantages, a combination of the two is best.

For example, some of the best policies used to prevent recessions are demand-side automatic stabilizers. They act quickly because the legislation has already been passed. If the stabilizers can cushion an early decline in real GDP, we can avoid more aggressive demand-side policies later.

Effective supply-side policies, such as less regulation, help the economy expand without increasing the price level. This is the situation shown in Figure 15.7. Less government intervention also means that people are less dependent on federal spending.

A stable macroeconomic equilibrium is difficult to reach, but we should try. Higher real GDP without more inflation has many benefits.

Reading Progress Check
Explaining How does the macroeconomic equilibrium work? How is it used?