

8.7: Shifts in Aggregate Demand

Learning Objectives

- Describe the causes and implications of shifts in aggregate demand

Shifts in Aggregate Demand

Demand shocks are events that shift the aggregate demand curve. We defined the AD curve as showing the amount of total planned expenditure on domestic goods and services at any aggregate price level. As mentioned previously, the components of aggregate demand are consumption spending (C), investment spending (I), government spending (G), and spending on exports (X) minus imports (M). A shift of the AD curve to the right means that at least one of these components increased so that a greater amount of total spending would occur at every price level. This is called a **positive demand shock**. A shift of the AD curve to the left means that at least one of these components decreased so that a lesser amount of total spending would occur at every price level. This is called a **negative demand shock**. The next module on the Keynesian Perspective will discuss the components of aggregate demand and the factors that affect them in more detail. Here, the discussion will sketch two broad categories that could cause AD curves to shift: changes in the behavior of consumers or firms and changes in government tax or spending policy.

Try It

We have seen that the formula for aggregate demand is $AD = C + I + G + X - M$, where M is the total value of exported goods. Why is there a minus sign in front of imports? Does this mean that more imports will result in a lower level of aggregate demand?

Actually, imports are already included in the formula in the form of consumption (C) or investment (I). When an American consumer or business buys a foreign product, it gets counted along with all other consumption and investment. Since the income generated does not go to American producers, but rather to producers in another country, it would be wrong to count this as part of domestic demand. Therefore, imports added in consumption or investment are subtracted back out in the M term of the equation.

Because of the way in which the demand equation is written, it is easy to make the mistake of thinking that imports are bad for the economy. Just keep in mind that every negative number in the M term has a corresponding positive number in the C or I terms, and they always cancel out.

How Changes by Consumers and Firms Can Affect AD

When consumers feel more confident about the future of the economy, they tend to consume more. If **business confidence** is high, then firms tend to spend more on investment, believing that the future payoff from that investment will be substantial. Conversely, if consumer or business confidence drops, then consumption and investment spending decline.

The [ConferenceBoard](http://www.conferenceboard.com), a business-funded research organization, carries out national surveys of consumers and executives to gauge their degree of optimism about the near-term future economy. The Conference Board asks a number of questions about how consumers and business executives perceive the economy and then combines the answers into an overall measure of confidence, rather like creating an index number to represent the price level from a variety of individual prices. For **consumer confidence**, the overall level of confidence in 1985 is used as a base year and set equal to 100, and confidence in every other year can be compared to that base year. Measured on this scale, for example, consumer confidence rose from 100 in August 2006 to 111 in February 2007, but had plummeted to 56 by early 2010. As of October 2017, the index had a value of 125.9.

The University of Michigan publishes a survey of consumer confidence and constructs an index of consumer confidence each month. The survey results are then reported at <http://www.sca.isr.umich.edu>, which break down the change in consumer confidence among different income levels. According to that index, consumer confidence averaged around 90 prior to the Great Recession, and then it fell to below 60 in late 2008, which was the lowest it had been since 1980. Since then, confidence has climbed from a 2011 low of 55.8 back to a level of 98.5 in October 2017 which is considered healthy.

The OECD, an group consisting of the major developed countries, publishes the **Business Confidence** Index. After sharply declining during the Great Recession, the measure has risen above 100 again and is back to long-term averages. Of course, none of

these survey measures are very precise. They can however, suggest when confidence is rising or falling, as well as when it is relatively high or low compared to the past.

Because a rise in confidence is associated with higher consumption and investment demand, it will lead to an outward shift in the AD curve, and a move of the equilibrium, from E_0 to E_1 , to a higher quantity of output and a higher price level, as you can see in the following interactive graph (Figure 1):

A link to an interactive elements can be found at the bottom of this page.

Figure 1 (Interactive Graph). Shifts in Aggregate Demand.

Consumer and business confidence often reflect macroeconomic realities; for example, confidence is usually high when the economy is growing briskly and low during a recession. However, economic confidence can sometimes rise or fall for reasons that do not have a close connection to the immediate economy, like a risk of war, election results, foreign policy events, or a pessimistic prediction about the future by a prominent public figure. U.S. presidents, for example, must be careful in their public pronouncements about the economy. If they offer economic pessimism, they risk provoking a decline in confidence that reduces consumption and investment and shifts AD to the left, and in a self-fulfilling prophecy, contributes to causing the recession that the president warned against in the first place. A shift of AD to the left, and the corresponding movement of the equilibrium, from E_0 to E_1 , to a lower quantity of output and a lower price level, can be seen in the following interactive graph (Figure 2):

An interactive or media element has been excluded from this version of the text. You can view it online here: <http://pb.libretexts.org/mlum/?p=363>

Figure 2 (Interactive Graph). Shifts in Aggregate Demand.

How Government Macroeconomic Policy Choices Can Shift AD

Government spending is one component of AD. Thus, higher government spending will cause AD to shift to the right, as in Figure 1, while lower government spending will cause AD to shift to the left, as in Figure 2. For example, U.S. government spending declined by 3.6% of GDP during the 1990s, from 22.2% of GDP in 1992 to 18.6% of GDP in 1999. However, from 2008 to 2009, U.S. government spending increased from 20.7% of GDP to 24.7% of GDP. If changes of a few percentage points of GDP seem small to you, remember that since GDP exceeded \$14 trillion in 2009, a seemingly small change of 1.0% of GDP in annual spending is equal to more than \$140 billion.

Tax policy can affect consumption and investment spending, too. Tax cuts for individuals will tend to increase consumption demand, while *tax increases* will tend to diminish it. Tax policy can also pump up investment demand by offering lower tax rates for corporations or tax reductions that benefit specific kinds of investment. Shifting C or I will shift the AD curve as a whole.

During a *recession*, when unemployment is high and many businesses are suffering low profits or even losses, the U.S. Congress often passes tax cuts. During the recession of 2001, for example, a tax cut was enacted into law. Figure 3 illustrates the effect of tax cuts using the AD-AS model. The original equilibrium during a recession is at point E_0 , relatively far from the full employment level of output. The tax cut, by increasing consumption, shifts the AD curve to the right. At the new equilibrium (E_1), real GDP rises and unemployment falls and, because in this diagram the economy has not yet reached its potential or full employment level of GDP, any rise in the price level remains muted. Read the following feature to consider the question of whether economists favor tax cuts or oppose them.

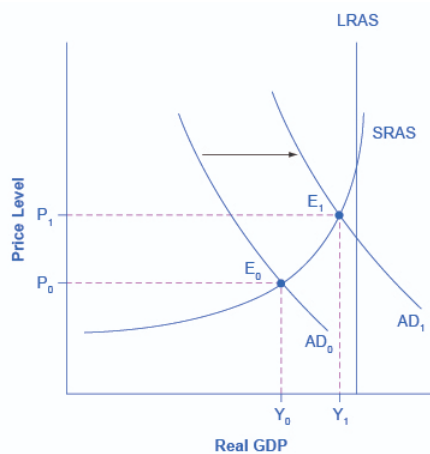


Figure 3. Recession and Full Employment in the AS–AD Model.

Whether the economy is in a recession is illustrated in the AS–AD model by how close the equilibrium is to the potential GDP line. In this example, the level of output Y_0 at the equilibrium E_0 is relatively far from the potential GDP line, so it can represent an economy in recession, well below the full employment level of GDP. In contrast, the level of output Y_1 at the equilibrium E_1 is relatively close to potential GDP, and so it would represent an economy with a lower unemployment rate.

Try It

One of the most fundamental divisions in American politics over the last few decades has been between those who believe that the government should cut taxes substantially and those who disagree. Ronald Reagan rode into the presidency in 1980 partly because of his promise, soon carried out, to enact a substantial tax cut. George Bush lost his bid for reelection against Bill Clinton in 1992 partly because he had broken his 1988 promise: “Read my lips! No new taxes!” In the 2000 presidential election, both George W. Bush and Al Gore advocated substantial tax cuts and Bush succeeded in pushing a package of tax cuts through Congress early in 2001. Disputes over tax cuts often ignite at the state and local level as well.

What side are economists on? Do they support broad tax cuts or oppose them? The answer, unsatisfying to zealots on both sides, is that it depends. One issue is whether the tax cuts are accompanied by equally large government spending cuts. Economists differ, as does any broad cross-section of the public, on how large government spending should be and what programs might be cut back. A second issue, more relevant to the discussion in this chapter, concerns how close the economy is to the full employment level of output. In a recession, when the intersection of the AD and AS curves is far below the full employment level, tax cuts can make sense as a way of shifting AD to the right. However, when the economy is already doing extremely well, tax cuts may shift AD so far to the right as to generate inflationary pressures, with little gain to GDP.

With the AS–AD framework in mind, many economists might readily believe that the Reagan tax cuts of 1981, which took effect just after two serious recessions, were beneficial economic policy. Similarly, the Bush tax cuts of 2001 and the Obama tax cuts of 2009 were enacted during recessions. However, some of the same economists who favor tax cuts in time of recession would be much more dubious about identical tax cuts at a time such as 2017 when the economy is performing well and cyclical unemployment is low.

Government Policy Options

Changes in government spending and tax rates can be useful for influencing aggregate demand. Other policy tools can shift the aggregate demand curve as well. For example, the Federal Reserve can affect interest rates and the availability of credit. Higher interest rates tend to discourage borrowing and thus reduce both household spending on big-ticket items like houses and cars and investment spending by business. Conversely, lower interest rates will stimulate consumption and investment demand. Interest rates can also affect exchange rates, which in turn will have effects on the export and import components of aggregate demand.

Spelling out the details of these alternative policies and how they affect the components of aggregate demand can wait until we learn about the Keynesian Perspective in greater detail. Here, the key lesson is that a shift of the aggregate demand curve to the right leads to a greater real GDP and to upward pressure on the price level. Conversely, a shift of aggregate demand to the left leads

to a lower real GDP and a lower price level. Whether these changes in output and price level are relatively large or relatively small, and how the change in equilibrium relates to potential GDP, depends on whether the shift in the AD curve is happening in the relatively flat or relatively steep portion of the AS curve.

Try It

<https://assessments.lumenlearning.co...sessments/7519>

<https://assessments.lumenlearning.co...sessments/7520>

Watch It

Watch this video to review aggregate demand and think about other things that may cause the aggregate demand curve to shift. Note that the video only mentions two reasons for a downward sloping AD curve (the wealth effect and the interest rate effect.) There is also a relative, or foreign, price effect, which says that as the aggregate price level rises, domestic goods and services become more expensive relative to imports. The result is a decrease in net export expenditures.

A link to an interactive elements can be found at the bottom of this page.

Any changes in C, I, G, or X_n (another way of depicting net exports) will shift demand. The video helped you consider the following situations. What will happen to the aggregate demand curve in each situation?

1. A significant boom in the stock market.
[reveal-answer q="272672"]Show Answer[/reveal-answer]
[hidden-answer a="272672"]C up, AD up[/hidden-answer]
2. A decrease in government spending.
[reveal-answer q="86345"]Show Answer[/reveal-answer]
[hidden-answer a="86345"]G down, AD down[/hidden-answer]
3. Widespread fear of recession.
[reveal-answer q="283836"]Show Answer[/reveal-answer]
[hidden-answer a="283836"]C down, I down, AD down[/hidden-answer]
4. Increase in incomes of trading partners.
[reveal-answer q="545826"]Show Answer[/reveal-answer]
[hidden-answer a="545826"]X up, AD up[/hidden-answer]

Try It

These questions allow you to get as much practice as you need, as you can click the link at the top of the first question ("Try another version of these questions") to get a new set of questions. Practice until you feel comfortable doing the questions.

[ohm_question]152966-152967-152906-152133[/ohm_question]

Learning Objectives

[glossary-page] [glossary-term]business confidence: [/glossary-term]
[glossary-definition]If businesses feel more confident, ceteris paribus, then firms tend to spend more on investment, believing that the future payoff from that investment will be substantial; if business confidence drops, then investment spending declines[/glossary-definition][glossary-term]consumer confidence:[/glossary-term][glossary-definition] when consumers feel more confident about the future of the economy, ceteris paribus, they tend to increase spending; when they feel less confident they tend to decrease spending[/glossary-definition][glossary-term]demand shocks: [/glossary-term][glossary-definition]events that shift the aggregate demand curve[/glossary-definition][glossary-term]positive demand shock: [/glossary-term][glossary-definition]a rightward shift in AD[/glossary-definition][glossary-term]negative demand shock:[/glossary-term][glossary-definition] a leftward shift in AD[/glossary-definition] [/glossary-page]

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