



So What?

For the last three years, Rosalie has worked as a babysitter for several different families. She enjoys being around children, and she is saving her earnings to help pay for college.

Unfortunately, Rosalie's income is not steady, and she has doubts about how much money she will have by the time she graduates from high school. Although there are months when she watches neighborhood children nearly every day, there are also stretches of time when she works only every couple of weeks.

Rosalie suspects that the parents who hire her don't have a very stable amount of spending money. Sometimes, they appear to have loads of disposable income. At other times, they don't go out at all—which means that they don't spend money, and they don't hire Rosalie to watch their kids.

Rosalie and these families aren't the only ones who go through economic ups and downs—everyone in our economy experiences them. In good times, work is plentiful, wages are high, and spending is up. During bad times, though, work is harder to find, wages drop, and spending goes down. Why? Because our economy is a giant rollercoaster (one that we are all riding) that never ends!

Objectives



1 Explain the phases of a business cycle.



2 Summarize causes of business cycles.

Cycle On



he economic fluctuations—ups and downs—that we all experience are known as **business cycles**. Each individual business cycle consists of a period of expansion (when we head uphill on our roller-coaster) and a period of contraction (when we go crashing back to the ground). These periods of expansion and contraction affect all four of the economic activities of production, consumption, exchange, and distribution. And, as these economic activities change, employment, prices, incomes, and production change as well. In fact, every aspect of our economy is affected in some way by business cycles.



When studying these ups and downs in economic activities, economists typically examine fluctuations in the level of our economy's total output. This total output is based on the economy's **real gross domestic product (GDP)**—GDP that has been adjusted for inflation. Generally, when real GDP increases, economic activities also increase, and the economy grows. And, as the economy grows, more jobs are created to produce goods and services to meet growing demand. However, when real GDP decreases, so do economic activities, and we experience an economic decline.

However, real GDP isn't the only economic indicator that economists look at when identifying business cycles. Some economists also reference changes in the unemployment and inflation rates when discussing the ups and downs in our economy. When our unemployment rate increases, our economy declines. When the number of unemployed persons decreases, on the other hand, our economy grows. The reverse is true of **inflation**, which is a rapid rise in prices. When the inflation rate goes up, it's an indication that our economy is booming, but inflation drops when economic activities slow down, and employers stop hiring or even eliminate jobs.



A growing economy greatly benefits a country's producers and consumers. Some of these benefits include:

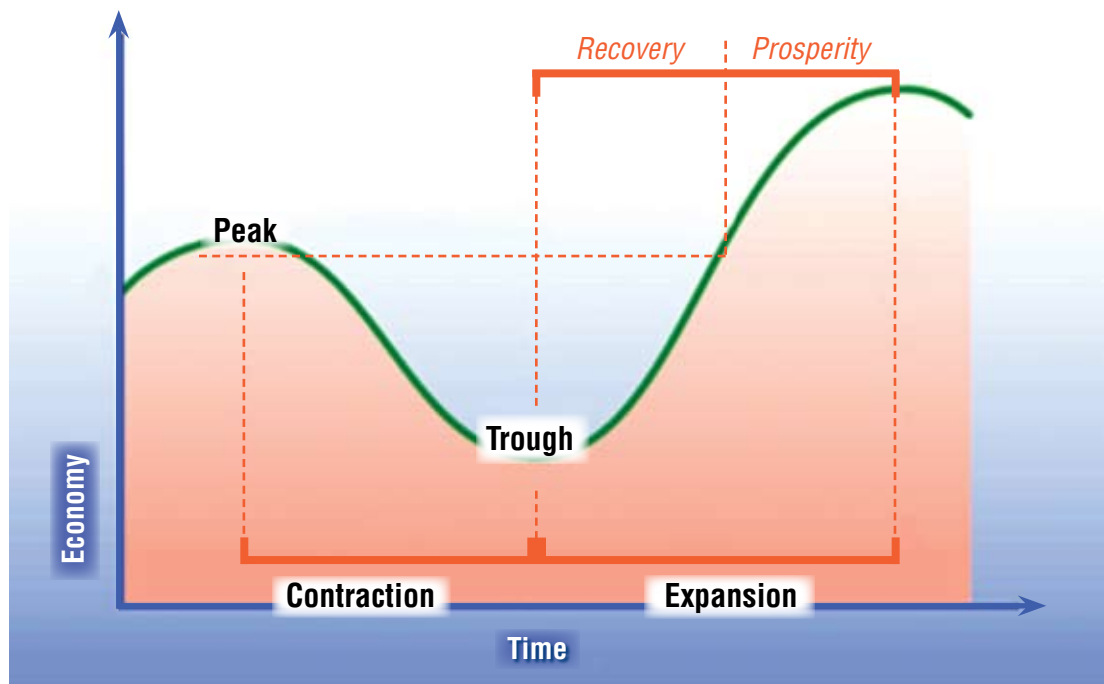
- Providing a higher standard of living
- Creating new and additional jobs
- Enabling the government to fulfill its duties more thoroughly
- Resolving domestic problems

By understanding whether business activities are getting ready to expand or contract, business leaders can take steps to avoid the extreme ups and downs of business cycles. In effect, they can make plans to help level, or smooth out, extreme fluctuations in the economy. For example, they can anticipate and plan accordingly for changes that will be needed in employment, production, pricing, and purchasing.

Unfortunately for industry leaders, there is no way to accurately predict the length or severity of business cycles. Some cycles have lasted just over two years, while others have been almost 10 years long. It's also difficult to predict the exact beginning and ending of a business cycle. Business cycles are inherently irregular. Unfortunately, this lack of precision in predicting business cycles heightens the uncertainty felt by producers and consumers.

To understand business cycles better, let's take a closer look at the components and characteristics of a business cycle.

Are business cycles really cycles?
Not really—not in the true sense of the word. Business cycles are sporadic and unpredictable. The lunar cycle, the daily sunrise/sunset cycle, and the seasonal cycle, on the other hand, adhere to a regular, periodic schedule like clockwork.





Phase Shifting

A business cycle consists of four phases: expansion, peak, contraction, and trough. Let's examine each phase in detail.

Expansion. Each business cycle begins with an expansion, or growth, in economic activities. It is a time of economic prosperity. During this phase, consumers and producers have a hopeful outlook about business. Consumers' incomes increase, and they begin to spend more money on durable goods such as cars, houses, and boats. As a result, business profits go up. New businesses open, and existing businesses invest in new equipment to produce more goods and services. The increased demand for goods and services requires more workers to be hired. Oftentimes, additional factories and business facilities must be built.

During an expansion, the Federal Reserve System puts more money into circulation. By doing so, the Fed indirectly causes interest rates on loans to decrease. Lower interest rates encourage consumers and producers to borrow more money and make even more purchases. Nevertheless, the Fed does not adjust the money supply haphazardly. Increasing the money supply too drastically can cause the economy to grow too fast or get out of control—either of which could be bad for consumers and business.

Peak. Economic prosperity eventually reaches a high point, or peak. At the peak, the demand for many different goods and services begins to exceed the supply, so producers and resource owners raise their prices. The demand for low-interest-rate loans also exceeds their availability. The result? Rising interest rates.

When the economy reaches its peak, consumers and producers begin to feel less hopeful about the future. They feel that they should begin saving more to prepare for "rainy days." They decrease their spending, which results in lower demand for the economy's goods and services. As spending and demand decline, economic activities level off.

Contraction. When the demand for goods and services starts to fall and unemployment rises, the peak has passed. The business cycle has entered its third phase, known as contraction. This is considered to be a bad time for consumers and businesses. Consumers are spending less and saving more—buying only necessary goods and services. Similarly, businesses postpone purchasing new equipment, and few new businesses are started. All of this belt-tightening results in fewer sales and less profit for businesses. Some businesses not only no longer make profits but, in fact, experience losses. Those businesses which are unable to cope with their losses are forced to close. As businesses close, many jobs are lost, and the economic situation becomes even worse.

A contraction is a period of diminishing economic activity.

As demand for goods and services continues to fall, businesses that remain open decrease production. Sales are sluggish, and inventories build up. When this happens, more workers lose their jobs and/or experience a drop in pay, further decreasing demand for goods and services. When demand falls, prices decrease so that businesses can attract more customers. Interest rates decrease, which increases the amount of money in circulation.

During a contraction, social problems often increase. The number of people living in poverty goes up, the crime rate jumps, and alcoholism becomes more prevalent. Marital problems become more common, and the number of suicides shoots up. Economic contractions do more than affect people financially; they affect people emotionally as well.

When a contraction in economic activity lasts for at least six consecutive months, or two quarters, a **recession** is said to exist. During a recession, the unemployment rate may rise to as much as 10 or 12 percent. If the recession continues and is severe, a **depression** exists. During that time, many businesses fail, and more people lose their jobs—up to 25% of the work force.

The early part of an expansion is sometimes called a recovery.

Some experts attempt to predict when a peak will occur by looking at leading economic indicators, such as manufacturers' new orders for consumer goods and materials, new building permits for private housing, and the average workweek in manufacturing. These economic statistics typically reach their peak three to 12 months prior to the peak of a business cycle.



Trough. When economic activities stop their decline, the fourth and final phase of a business cycle is reached. This trough is the low point of economic activity. Many more businesses fail, and unemployment is very high. The economy will remain at this low point until consumers and producers once again become hopeful about business and buy more goods and services. Believe it or not, a trough is sometimes seen as a positive sign—hitting rock-bottom implies that an economic recovery is on its way.

Summary

Our economy experiences both good and bad times. These changes in economic activity are known as business cycles. There are four phases in a business cycle: expansion, peak, contraction, and trough. By understanding a business cycle and its phases, business leaders can more effectively plan for the future.

While it's next to impossible to predict the precise beginning and ending of a business cycle, the National Bureau of Economic Research's Business Cycle Dating Committee (BCDC) is the recognized authority when it comes to determining the dates (month and year) of past peaks and troughs in business cycles. Remember, a peak signals the onset of a contraction, while a trough indicates that the economy is getting ready to expand. To pinpoint the dates of these events, the BCDC looks at real GDP as well as real income, employment, real sales, and industrial production.



1. What are business cycles?
2. Explain the relationship among real GDP, unemployment, inflation, and business cycles.
3. How does a growing economy benefit a country's producers and consumers?
4. Why should a business leader understand business cycles?
5. Explain the uncertainty associated with business cycles.
6. Explain the four phases of a business cycle.

The Gray Zone

What causes business cycles? According to some economists, politics do. These experts believe that government leaders manipulate the economy to achieve their own political goals. Supposedly, in the months leading up to an election, our elected leaders focus on economic expansion. They want to make sure people have work, plenty of money, lower taxes, and a positive feeling about the economy. Why? Because happy people are more likely to reelect the incumbent instead of voting someone new into office. But, after the election is over, the country is left with high inflation and large budget deficits. To combat the problems that developed during expansion, the administration is forced to raise taxes and cut back on government spending. The result? An economic contraction, complete with unemployment, less money, and more bankruptcies. Then, as another election approaches, the elected leaders start the cycle all over again.

Do you think this is possible? Do our elected leaders cause business cycles? If so, is it ethical for government officials to influence the direction of the economy prior to (and after) political elections? Why or why not?

What Causes Waves?

Economists have developed a variety of differing theories to explain the causes of business cycles. Which theory is best or most important, you might ask? Experts cannot agree. However, most economists do agree that multiple factors can cause business cycles. A change in one factor will eventually lead to changes in the others, too.

Causes of business cycles can be divided into two major categories: internal and external. Internal factors that cause business cycles include aggregate demand, money supply, investment in capital goods, and inventory levels. External factors that contribute to business cycles include political changes, climatic changes, international relations, discoveries and innovations, and psychological changes.

It's What Is Inside that Matters

Some factors are considered internal causes of business cycles because they take place within the economic system itself. Let's examine these internal factors.

Aggregate demand. The total demand for an economy's goods and services is known as **aggregate demand**. It can pull the GDP and employment up or down to cause business cycles.

Aggregate demand rises when consumers want more goods and services. When this occurs, businesses increase production. With increased production, more workers are hired to meet the demand, and employees earn more wages to spend on even more goods and services.

If aggregate demand continues to go up, production may not be able to meet the growing demand. If this happens, inflation may occur. As a result, consumers must pay more for the same goods and services. Inflation that occurs because aggregate demand exceeds the available supply is called **demand-pull inflation**.

If aggregate demand decreases, production and employment also decrease. During this time, unemployment becomes common. Businesses' product inventories are large, and production slows. If aggregate demand stays too low for a long time, there could be a recession or depression. When aggregate demand starts rising again, expansion and prosperity return.

Internal Causes of Business Cycles



Money supply. The total quantity of money which exists at one time in a nation is known as the **money supply**. If the money supply of a nation goes up or down, the economy soon follows suit.

The federal government can manipulate the nation's money supply in a couple of ways: through **monetary policy** and/or **fiscal policy**. The government uses monetary policy to determine the amount of money that is in circulation and the level of interest rates. On the other hand, fiscal policy involves using taxation and government spending to influence the flow of money.

The federal government restricts the flow of money by raising taxes, by raising the interest rates to borrow money, or by purchasing fewer goods and services with which to run the government. On the flip side, the government increases the amount of money in circulation by spending more, lowering interest rates, and lowering taxes.

When interest rates are low, more money is borrowed to build houses, office buildings, and industrial plants. Because of greater production, more work is available, and unemployment is low. As a result, economic activities grow or expand.

When money is in short supply, unemployment is high. Business activities slow down, and a period of contraction begins.

Investment in capital goods. When producers are hopeful about the future of business, they buy new equipment, build new business facilities, and/or expand their existing facilities. This increase in capital goods investment encourages the expansion of economic activities. There comes a time, though, when producers begin to decrease their investment in capital goods—eventually causing the economy to contract.

Inventory levels. Major changes in inventory levels can create changes in business cycles. When producers are optimistic about business activity, they increase their inventory levels to prepare for the expected increase in demand. This action expands economic activities. However, at some point, producers become less hopeful about business and become concerned that consumers will not purchase all of the products that they have in stock. As a result, they decrease their buying of new goods and focus more on selling the goods that they already have on hand. This action causes the economy to contract.



The World Beyond

Some factors are considered external causes of business cycles because they take place outside the economic system. To learn what they are, read on.

Political changes. A change in the political party in power can cause changes in economic activities. For example, with the election of officials who support business interests, the economic activities of the nation usually expand.

If the **money supply** of a nation goes up or down, the economy soon follows suit.



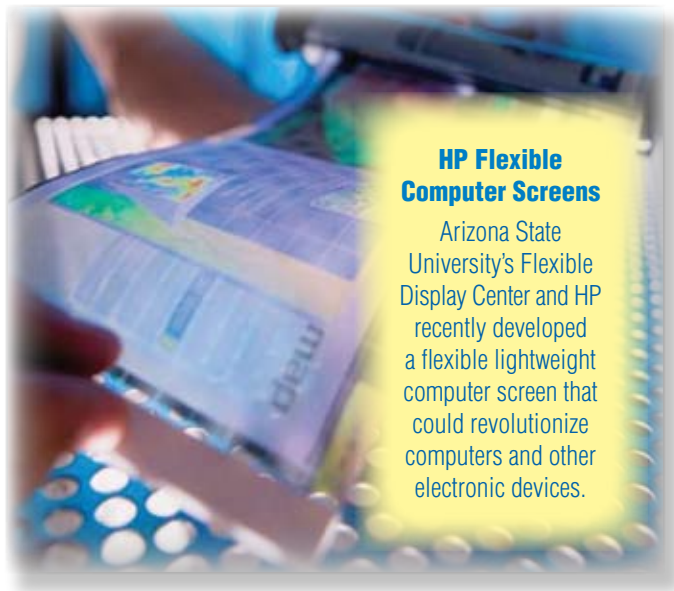
External Causes of Business Cycles



Climatic changes. Climatic changes can cause fluctuations in economic activities. Many jobs in the fields of agriculture and construction vary according to climatic conditions. Droughts, floods, and blizzards can negatively affect many economic activities.

International relations. The interaction of our nation with other countries can expand or contract economic activities. For instance, a war or international conflict may increase production of defense materials. This expands our economic activities. However, after the war or conflict ends, the production of these items decreases, and economic activities contract.

Discoveries and innovation. The discovery and/or development of new products, techniques, and resources often stimulates our economy. Imagine how much our economy has benefitted from such technological advances as the Internet, computers, and cellular phones! To create and improve these products, large sums of money must be invested. Furthermore, their development creates new jobs.



HP Flexible Computer Screens

Arizona State University's Flexible Display Center and HP recently developed a flexible lightweight computer screen that could revolutionize computers and other electronic devices.

Psychological changes. People's psychological—emotional—reactions to life-altering national or international events can also expand or contract economic activities. Consider the horrific events of September 11, 2001, when terrorists hijacked multiple airplanes to carry out an attack on America at New York City's World Trade Center and the Pentagon building in Washington, D.C. Life, as well as the economy, seemed to come to a standstill. In the months following September 11, consumers drastically cut back on their spending, which caused businesses to reduce their spending and production as well. As a result, the economy—already in decline—slipped into a long recession.



1. Explain how each of the following internal factors could affect business cycles:
 - a. Aggregate demand
 - b. Money supply
 - c. Investment in capital goods
 - d. Inventory levels
2. Discuss how each of the following external factors could affect business cycles:
 - a. Political changes
 - b. Climatic changes
 - c. International relations
 - d. Discoveries and innovations
 - e. Psychological changes



Summary

Business cycles have many causes. These causes can be grouped into internal and external causes. The internal factors are aggregate demand, money supply, investment in capital goods, and inventory levels. External causes are political changes, climatic changes, international relations, discoveries and innovations, and psychological changes.

Make It Pay!

Based on what you know about business cycles, which phase of the business cycle do you think our economy is presently experiencing? How have you, your family, and your community been affected by the current economic conditions? Are you doing better or worse economically than you were a year ago? What do you think our economy will look like a year from now? How can you prepare for that future?

