Business Cycles - Expansionary/Recessionary (NBER)

by Sophia Tutorial

WHAT'S COVERED

This tutorial will cover the topic of business cycles, and how a business cycle is a depiction of GDP growth and contraction over time.

Our discussion breaks down as follows:

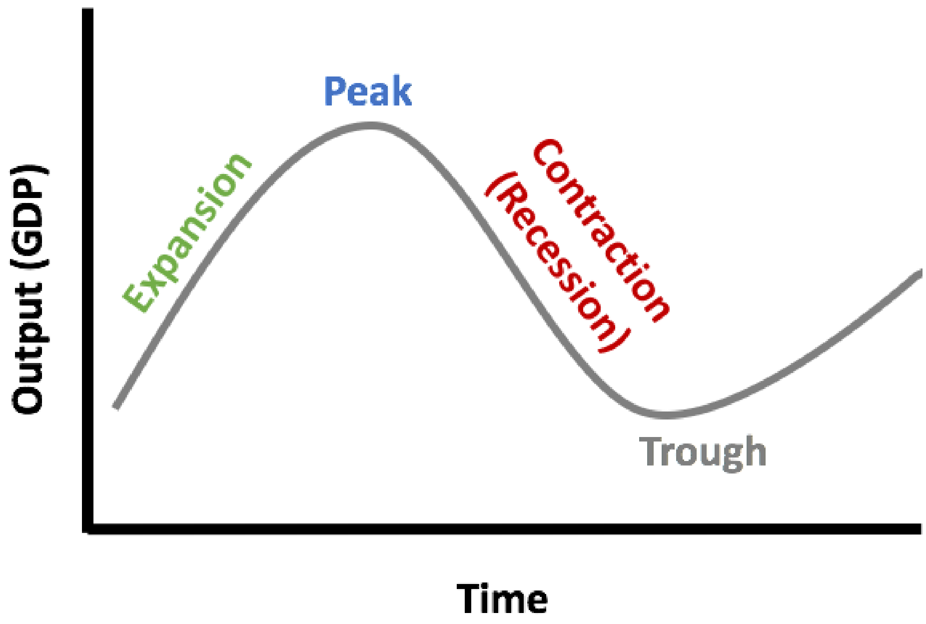
1. Business Cycles
2. Recessions
3. Expansions
4. Peaks and Troughs

1. Business Cycles

Before we begin, let's review the definition of **GDP**, which is Gross Domestic Product. GDP is the sum of all final goods and services being produced within a nation's domestic borders; it is how we measure economic activity in our country from one period to the next, whether it is from year to year or quarter to quarter.

The expectation, in theory, is that we are experiencing **GDP growth**, which is simply the measure of change in GDP over time.

Here is a representation of a business cycle. As you will notice, GDP, referring to the nation's output, is on the y-axis, and time is on the x-axis.



Over time, the hope is that there is a trend of GDP growth. In the short run, however, it is very reasonable for our economy to go through periods of growth, or expansion, and contraction.

As mentioned, this is just an example of one business cycle which shows that in the short run, there are times it grows quickly and other times it is shrinking. However, the idea is, again, that over time, we hope that the trend is one of growth.

So, the **business cycle** is basically defined as the movement of an economy through this process we just illustrated above--through expansion, peak, contraction, and trough over time. Business cycles provide an assessment of economic activity throughout time.

The **NBER** is the National Bureau of Economic Research, which is the organization that measures this business cycle activity. The NBER officially establishes the end and the start of the recessionary period.

TRY IT

To find out more, visit the NBER's website, at http://www.nber.org/cycles.html. The National Bureau of Economic Research lists all of its official data here, and you can actually see every single business cycle since 1854.

TERMS TO KNOW

GDP
Gross Domestic Product; the sum of all final goods and services sold within a nation's domestic borders; a measurement of economic activity.

GDP Growth
The measure of change in GDP over time

Business Cycles
The movement of an economy through expansion, peak, contraction, and trough over time; an assessment of economic activity through time

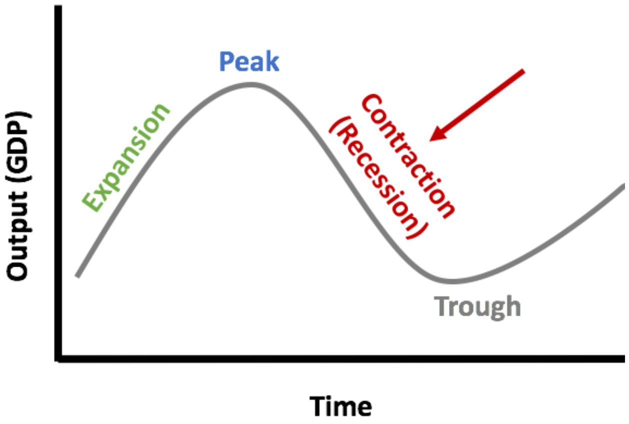
NBER

National Bureau of Economic Research; the economic research organization that is the barometer of business cycle activity. The NBER establishes the end and start of the recessionary period.

2. Recessions

A **recession** is defined as a decrease in economic activity as reflected in GDP, occurring during the contraction period of a business cycle. Basically, GDP is shrinking.

In our business cycle diagram, you can see this period where GDP is shrinking, which would be our recession.



According to the NBER:

> "A recession is a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales."

In other words, a recession is not something that happens for a couple of weeks. Generally, in most economics textbooks, the decline in economic activity would have to last about six months, or two quarters, in order to be considered a recession.

Recessions are visible in real GDP, meaning that real GDP would be shrinking:

- Real income, which is income adjusted for inflation, is decreasing, so people are making less money.
- Employment figures would drop, while unemployment figures would rise.
- Industrial production would start to fall.
- Wholesale-retail sales would also be falling.

As a general overview, during times of economic contraction, GDP is shrinking, and the unemployment rate tends to rise. We refer to this as cyclical, because the business cycle, as its name implies, is cyclical in nature.

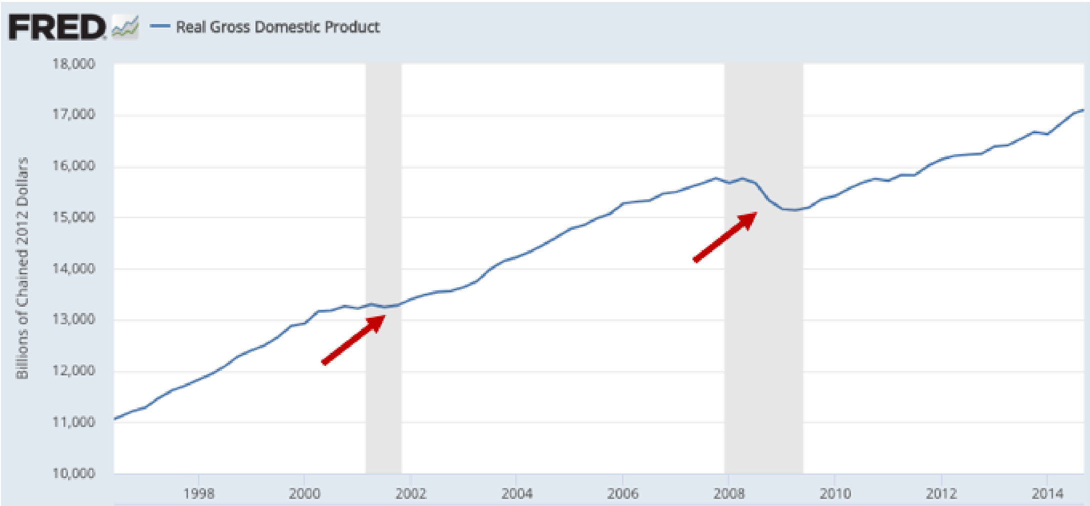
Unfortunately, once some workers begin to lose their jobs, then those people do not have as much money to put back into the economy.

THINK ABOUT IT

If you were laid off from your job, would you go out to eat? Would you spend a lot of money at Christmas time? Probably not. More likely, you would start cutting back on your expenditures.

Now, this cutting back on expenditures hurts businesses even further, and in turn, businesses lay off more workers, because they have noticed that demand has fallen off for their goods and services.

Thus, the cycle continues, and it gets worse and worse, as shown in the graph below. This graph shows GDP from 2000 to 2013. Note that the gray periods are official recessions, and you can see that during recessions, GDP does tend to shrink.



Shaded areas indicate US recessions

Notice in particular that the recession in 2001 was right after 9/11, though it was not as significant as the recession experienced at the very end of 2007, where GDP was declining much more significantly.

HINT

Part of macroeconomics involves what the government, or Federal Reserve System, can do to intervene during recessions, which we will cover later in this course.

BIG IDEA

During times of economic contraction such as a recession, GDP is shrinking and unemployment tends to rise.

TERM TO KNOW

Recession
A decrease in economic activity as reflected in GDP and occurring during the contraction period of a business cycle

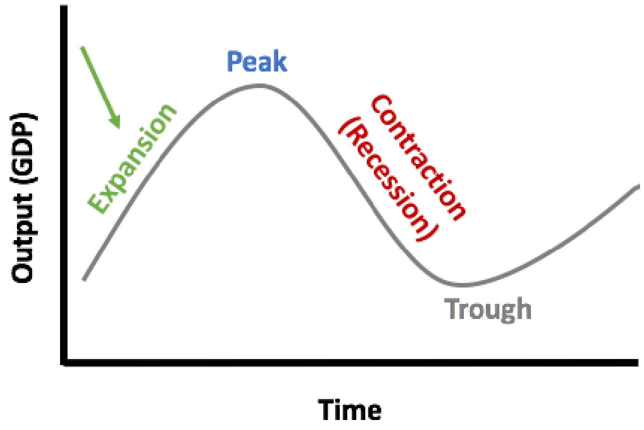
3. Expansions

Conversely, an **expansion** is the business cycle period that coincides with growth in an economy. According to the NBER:

> "Converse to a recession, if GDP is growing at a rate faster than the overall time trend, we're said to

be in an expansion."

Then, expansion is this period where output, or GDP, is growing.



TERM TO KNOW

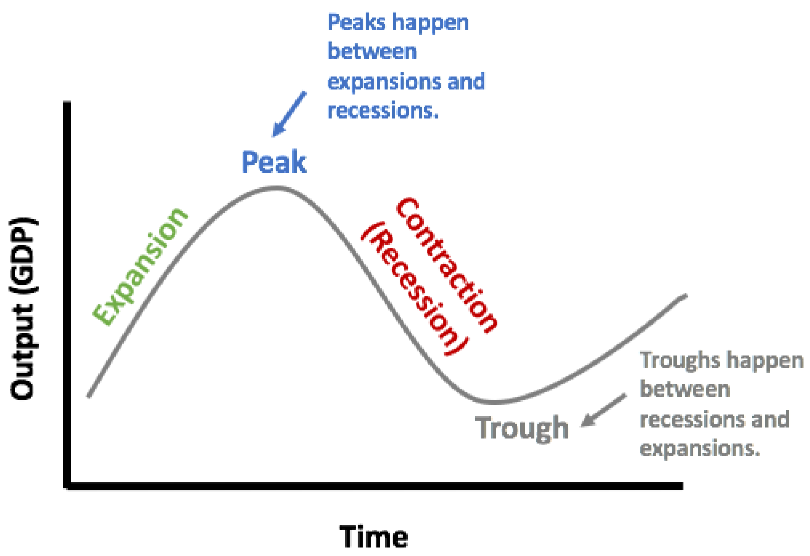
Expansion
The business cycle period that coincides with growth in an economy

4. Peaks and Troughs

Now, the **peak** labeled on the business cycle is defined as the business cycle period that coincides with the maximum obtainable GDP growth rate for a given point in time.

Remember, this is one business cycle--it is a short run. Therefore, this would be the maximum ability to be produced by our economy at any given point in time in the short run.

Peaks are going to happen between expansions and contractions, or recessions, whereas the**trough** is that business cycle period that coincides with the lowest GDP growth rate for a given point in time.



A trough would happen between recessions and the next period of expansion.

It follows that when things are quite bad in an economy and we are also in a recession, we are always hoping that we are actually at the trough because this means we have experienced the worst of it, and are ready to turn things around again.

TERMS TO KNOW

Peak
The business cycle period that coincides with the maximum obtainable GDP growth rate for a given point in time

Trough
The business cycle period that coincides with the lowest GDP growth rate for a given point in time

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SUMMARY

Today we learned about the **business cycle** as a depiction of GDP growth and contraction over time. We learned how to identify an **expansion** and contraction on a business cycle, as well as the**peaks and troughs**. Lastly, we learned about how the NBER, or National Bureau of Economic Research, measures **recessions** and expansions.

Source: Adapted from Sophia instructor Kate Eskra.

TERMS TO KNOW

Business Cycles
The movement of an economy through expansion, peak, contraction, and trough over time; an assessment of economic activity through time.

Expansion
The business cycle period that coincides with growth in an economy.

GDP
Gross Domestic Product; the sum of all final goods and services sold within a nation's domestic borders; a measurement of economic activity.

GDP Growth
The measure of change in GDP over time.

NBER
National Bureau of Economic Research; the economic research organization that is the barometer of business cycle activity. The NBER establishes the end and start of the recessionary period.

Peak
The business cycle period that coincides with the maximum obtainable GDP growth rate for a given point in time.

Recession

A decrease in economic activity as reflected in GDP and occurring during the contraction period of a business cycle.

Trough
The business cycle period that coincides with the lowest GDP growth rate for a given point in time.