Overview of Data Sources

by Sophia Tutorial

WHAT'S COVERED

This tutorial will cover an overview of data sources, discussing how economists use data to study the economy. We will define and explore examples of different economic indicators, including leading indicators, lagging indicators, and coincident indexes.

Our discussion breaks down as follows:

1. Business Cycle
2. Economic Indicators
3. Leading Indicators
4. Lagging Indicators
5. Coincident Indicators

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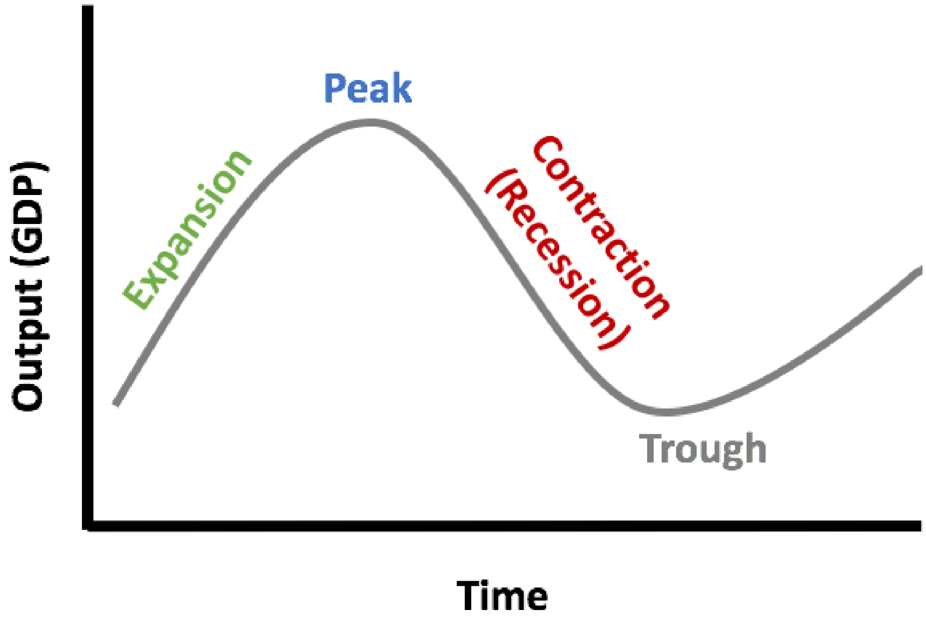
1. Business Cycle

Here is a business cycle. The rate of growth in the economy, which is measured by GDP or output, is on the y-axis, and time is on the x-axis.

You can see that it is normal for the economy to go through periods of growth and contraction.



We measure growth by our economy's gross domestic product or our output.

While it rises, we are in a period of expansion, then we peak and enter a period of contraction. It this period of contraction lasts a long time, we typically call it a recession.

Then, we hit a trough and the cycle starts over again.

As we go through this periods of expansion and contraction, most people are concerned about things such as the unemployment rate and inflation.

Economists use many different kinds of data to help them do the following:

- Predict where the economy is headed
- Explain what has just occurred in the economy
- Look at what is currently happening in the economy

2. Economic Indicators

Economists study economic indicators, which give them an overall view of the economy at any given point in time.

The three different categories of indicators are:

- Leading
- Lagging
- Coincident

Before we discuss each in further detail, let's briefly address whether this is micro or macro relevant.

Economic indicators are mostly studied in macroeconomics because they look at the economy overall as a whole. For instance, it will look at the overall unemployment rate or the overall inflation rate in the economy.

Microeconomics, though, is concerned with individuals--the individual consumer and the individual firm.

Some of these indicators are going to be studied in microeconomics because they can help to explain what is happening in individual markets or in certain industries. In addition, they can help to explain how a certain individual might be impacted by changes going on.

3. Leading Indicators

Leading indicators are trends, patterns or situations that assist in forecasting the economy. They help show us where we might be headed from here.

Here a several examples of leading indicators:

- *Unemployment insurance claims*. When people find themselves unemployed, they can file to collect unemployment. As the number of these claims rise, it tends to indicate that our economy is likely headed for a contraction. As they fall, we might be headed towards a period of growth.
- *Building permits*. When people are building new construction, they have to apply for a permit. As the number of these grow, it may indicate that the economy is headed for growth, and as they fall, it might indicate the opposite.
- *Stock market performance*. The stock market does tend to predict where the economy is going. It tends to rise before the economy grows and taper off before the economy shrinks.

TERM TO KNOW

Leading Indicators
Trends, patterns or situations that assist in forecasting the economy

4. Lagging Indicators

Lagging indicators are the opposite. These are trends, patterns, or situations that provide a clear indication of where the economy has been. These take a look back at where we have been and tend to happen after the fact.

Some lagging indicators are:

- Unemployment rate
- The consumer price index (which shows overall prices in the entire economy)
- Consumer credit

These are a few examples of indicators that reflect what has already happened in the economy.

TERM TO KNOW

Lagging Indicators
Trends, patterns or situations that provide a clear indication of where the economy has been

5. Coincident Indicators

A **coincident index** are indicators that provide a view of the current state of the economy. This will help explain, right now, what is going on.

One example of a coincident indicator is consumer confidence, which has a lot to do with our economy.

HINT

In a different tutorial, we will cover how this consumer confidence is measured.

When consumers are confident about the economy, it is generally because it is doing well. Conversely, when consumers are fearful of the economy, it is generally because the economy is not doing so well.

Therefore, consumer confidence is a coincident indicator that is studied by many economists.

TERM TO KNOW

Coincident Index
Indicators that provide a view of the current state of economy

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SUMMARY

We began today's lesson by reviewing the **business cycle** and discussing how economists use data to study the economy overall and individual markets. We learned that there are three different categories of **economic indicators**: **leading indicators**, **lagging indicators**, and **coincident indicators**.

Source: Adapted from Sophia instructor Kate Eskra.

TERMS TO KNOW

Coincident Index
Indicators that provide a view of the current state of economy.

Lagging Indicators
Trends, patterns or situations that provide a clear indication of where the economy has been.

Leading Indicators
Trends, patterns or situations that assist in forecasting the economy.