

Lesson Plan:

Learn About Your State's Economy With GDP

Overview

The nation's multitrillion-dollar gross domestic product is a big concept to take in. Bring GDP closer to home with a lesson about your state's economy.

Students will analyze their own state's economy using state GDP data produced by the Bureau of Economic Analysis, the federal agency that estimates U.S. GDP. Students will use nominal GDP and real GDP growth to learn about their state economy and compare it with the economies of other states and the United States as a whole.

This state GDP lesson is designed to supplement and reinforce lessons about using GDP to measure nations' economic output. If students need a refresher on the basics of GDP and how it is calculated, see the optional handout, "What is GDP?"

Learning Objectives

At the end of this lesson, students should be able to:

- Define:
 - nominal GDP
 - real GDP
 - economic growth rate
- Differentiate between nominal GDP levels and real GDP growth rates
- Explain the importance of using inflation-adjusted (real) data to measure economic growth
- Apply their knowledge of nominal GDP and real GDP growth to analyze and compare state economies, including their own state's

Resources:

All materials are online at [bea.gov/classroom](https://www.bea.gov/classroom)

- Activities: Parts A, B, and C
- Quiz
- Glossary with definitions of gross domestic product, nominal GDP, real GDP, and economic growth rate
- "What Is GDP?" flyer (an optional refresher on GDP concepts)
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Process:

Remind students that GDP—gross domestic product—is one of the "vital signs" used to measure the health of a nation's economy. GDP measures the market value of the goods and services produced in a country. It's used to measure and compare economies around the world.

Tell students that the U.S. government also produces GDP statistics for states. They can use these statistics to learn about their own state's economy. They can also compare their state's economy to other states and the overall U.S. economy. This is important because economic conditions can vary greatly across the United States.

Part A: Nominal GDP

Discussion: Lead the students in a discussion of the **Nominal GDP data**. Tell them it's a quick way to get a rough idea of the relative sizes of states' economies.

Guide students through finding the state GDP data on BEA's website as directed on Part A of the handout. They should end up with a list showing GDP for all 50 states plus the District of Columbia.

Ask the students to find your state on the list. Ask for responses to these questions from the handout:

- What was our state's gross domestic product for the most recent year?
- Where did our state's GDP rank among all states?
- What does this list tell you about our state's economy? Answers will vary; students may say how big the state economy is, the value of the goods and services produced in the state, how your state ranks against other states, etc.
- What doesn't it tell you? Answers may be wide-ranging and could include: The current GDP level doesn't tell you whether the economy is growing or shrinking; why the economy is smaller or larger than that of other states; whether people in the state have good jobs, are paid well, are happy, etc.

Part B: Real vs. Nominal GDP

Discussion: Tell students they can use other types of GDP data to learn more about the state's economy. When using GDP data, it's important to understand the difference between current-dollar statistics and inflation-adjusted statistics.

Tell students that inflation-adjusted data is called "real" data. Data that have **not** been adjusted for inflation are called "nominal" or "current-dollar" data.

Explain that a state's real annual GDP statistics show the value of its production each year as if prices had stayed the same over time. The inflation adjustment allows you to see only the growth caused by increased production of goods and services, with the effects of rising prices stripped away.

Guide students through creating a graph showing both real and nominal GDP on the BEA website as directed on Part B of the handout.

Ask for responses to these questions from the handout:

- Did your state's economy shrink at any time in the last 5 years?

- Compare current dollar (**nominal**) GDP chart with **real GDP**. What differences do you notice between the two results?
- Which measure – **nominal GDP** or **real GDP** – do you think gives a more accurate picture of the changes in your state's economy over time? Why? *Real GDP. Students may say something like removing the effects of inflation makes it easier to see how the economy's output shrank or grew. Removing price changes lets you see the actual change in the state's production.*

To explain further, you may want to use an example: If you buy a gallon of milk for \$3.25 one year, and the next year you pay \$3.50 for a gallon of milk, did you get more milk? No. Yet the higher milk price would contribute to the calculation of a higher nominal GDP estimate for the second year, even if no more milk were produced. By adjusting for inflation, real GDP data counts the value of a gallon of milk the same from year to year.

Part C. GDP Growth Rate

Discussion: Tell students that when they hear politicians or newscasters talking about GDP, they are most often referring to growth rates. Ask your students to think about why economic growth is important.

Direct students to your state's BEARFacts page as shown on the handout.

Ask for responses to these questions from the handout:

- Find your state's **real (inflation-adjusted) GDP growth**. What was your state's real GDP growth rate for the most recent year shown?
- Is your state growing faster or slower than the nation as a whole?
- What are some possible industrial drivers of economic growth in your state? *(Note that BEARFacts for some states lists industrial drivers of growth. If they are not listed for your state, have the students brainstorm ideas.)*

Summary

1. You can sum up by saying that healthy economic growth in a state can help raise the standard of living of its residents. Economic growth also encourages businesses, individuals, and governments to invest more in physical and human capital (buildings, technology, education, job training, etc.) that can lead to more growth.

You may want to introduce BEA's industry data or personal income statistics, other economic statistics, or business news coverage, to discuss reasons why your state's economy grew faster or slower than the overall U.S. economy.

Quiz

2. Ask students to answer the quiz questions, or you may discuss them as a class. See answers below.
 1. What can GDP statistics be used to measure?
 - A. The size of a state's economy
 - B. The growth of a state's economy
 - C. The income of a state's workers
 - D. Both A and B**
 2. Which measure would you use to find the state with the largest economy?
 - A. A map of the United States
 - B. Nominal GDP levels**
 - C. Per capita GDP
 - D. Real GDP growth rates
 3. Which measure would you use to take inflation into account when comparing state economies?
 - A. Per capita GDP
 - B. Nominal GDP levels
 - C. Real GDP growth rate**
 - D. None of the above
 4. State X had the highest GDP growth rate among U.S. states. This tells you that State X was:
 - A. The largest state in square miles
 - B. The state with the largest economy
 - C. The state with the fastest growing economy**
 - D. All of the above
 5. The biggest state economies always grow at the fastest rate. True or False. **False**
- Questions? Ask BEA Public Affairs at 301-278-9004 or CustomerService@bea.gov.
 - Send feedback about this plan or suggestions for other BEA lessons that would benefit your class (U.S. GDP? The trade balance? Consumer spending?) to CustomerService@bea.gov.