

Lesson plan

Are You Going to Eat That Final Good?

Intermediate Inputs vs. Final Goods

Overview

Need a bell ringer? Are your students confused about the role of intermediate inputs in GDP? This explanation with multiple examples can help clear it up. Assess students' understanding by having them name a final good in your classroom and its intermediate inputs.

Learning Objectives

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

- Define and give examples of:
 - Final users
 - Final goods and services
 - Intermediate inputs
- Explain why the GDP formula specifies goods and services produced *for final users*

Resources

A copy of the Quick Lesson & Activity from bea.gov/classroom for each student.

Process

Ask students to read the lesson and complete the quick activity at the end. Alternatively, first use the lesson to guide a classroom discussion, then hand out the activity for students to complete.

The lesson:

Gross domestic product, or GDP, measures the value of goods and services produced in the United States for **final users**. Why specify “for final users”? To avoid counting some goods and services more than once.

If a baker uses flour to make a cupcake, then sells the cupcake to a hungry customer, the customer is the final user. The cupcake is a **final good**. The flour, however, is something else. It's an **intermediate good** – a good used up in the process of making something else. The value of the flour is automatically included in the price the customer paid for the cupcake.

That's why, when using expenditures to calculate GDP, spending on intermediate goods isn't included. If you included both bakers' spending on flour and customers' spending on cupcakes, the value of all that cupcake flour would be counted twice.

A bakery might also use intermediate services, such as Internet access and package delivery. The term **intermediate inputs** refers to both goods and services that are used up in production.

Other examples:

Tires that a consumer buys to replace the worn tires on her car are final goods. The same tires, if bought instead by an automaker, would be intermediate inputs for new cars.

Electric power to your home is a service for a final user. What is electricity sold to an auto factory? An intermediate input for new cars.

Activity:

Look around your classroom and notice some of the final goods used there. Think about intermediate inputs that might have been used to produce them. For example, you might write with a pen that was made using ink, plastic, and electricity.

1. Choose another example of a final good used in your classroom.
2. Think about how that good was produced.
3. Write down the final good and at least three intermediate goods or services you think were used to make it.
4. Challenge question:
 - Can you think of any businesses that might use up your type of final good as an intermediate input in the production of goods or services? Give an example.
 - If not, can you find a different final good in your classroom that might be used up as an intermediate input by a business? Which good and what type of business?

Students' answers will vary, but many final goods in the classroom – such as various types of office supplies – may also serve as intermediate inputs used by some businesses. For example, pencils, pens, or paper may be used up by workers in a private office (or private school) as they produce goods or services.

Some final goods in the classroom are unlikely to be used as an intermediate input, however. (Note that fixed assets that last more than a year – such as an office's furniture or computers – are not intermediate inputs, because they aren't used up in production. They are business investments.)