

Understanding the Circular Flow of the Macroeconomy

Firms provide goods and services to households through the product market. Households pay firms for these goods and services.

Households supply firms with the factors of production (also called resources) through the factor market. Firms pay households for resources (land, labor, capital, and entrepreneurial skill).

The income firms pay to households includes rent, wages, interest, and profits. It equals the dollar value of the output sold as shown in the circular flow diagram in Figure 2-1.1. The flow on the diagram that includes expenditures for goods and services produced and sold in the product market represents gross domestic product (GDP). The approach to measuring GDP using this flow is called the *expenditures approach*.



Student Alert: Using the expenditures approach,

$$\text{GDP} = C + I + G + X_n.$$

The details about this equation for GDP are developed in a later activity. For now, make sure you understand how the expenditures approach measures GDP, and that this equation forms the basis for models developed throughout the rest of the course.

The flow on the diagram that includes payments for the resources used to produce goods and services in the factor market is another way to represent GDP. The approach to measuring GDP using this flow is called the *income approach*.

In addition to the basic flow of economic activity illustrated by the flows between the product and factor markets shown on the outside of the diagram, there are leakages from the flow and injections into the flow that affect its size. The leakages and injections happen through the government, financial institutions (e.g., banks), and international trade. These are shown using the boxes in the center of the circular flow diagram.

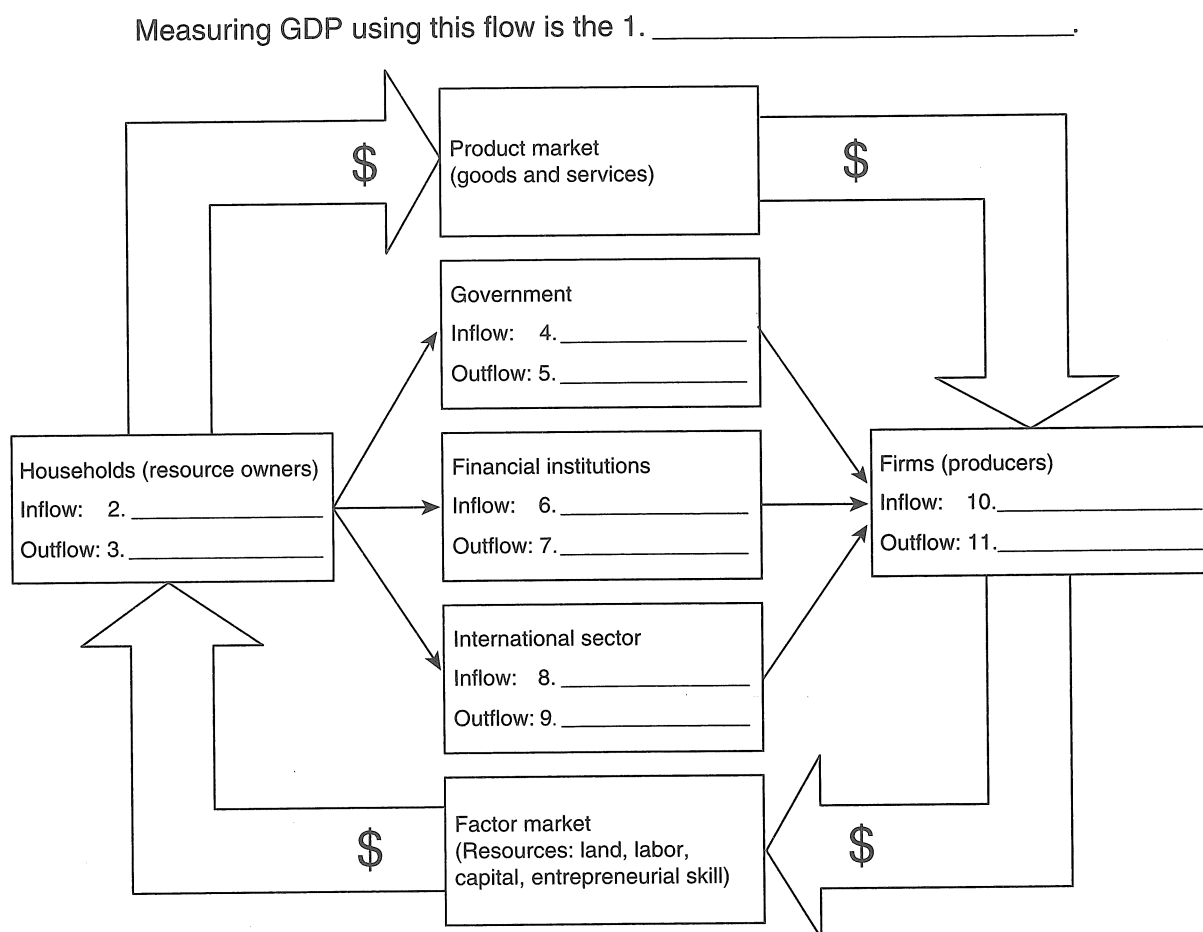
Identify which of the following terms belongs in each of the numbered blanks in the circular flow diagram, and fill in the blanks.

Expenditure approach	Exports	Payments for goods and services
Income approach	Government spending	Income (rent/wages/interest/profit)
Taxes	Imports	
Saving	Payments for resources (rent/wages/interest/profit)	Revenue from selling goods and services
Investment		



Figure 2-1.1

The Circular Flow of Resources, Goods, Services, and Money Payments



Measuring GDP using this flow is the 12. _____.

Gross Domestic Product

Measuring Short-Run Economic Growth

Fluctuations in output are measured by increases or decreases in the quantity of goods and services produced in the economy over time. The *gross domestic product*, or GDP, is commonly used to measure economic growth. The GDP is the dollar value of all *final* goods and services produced in the economy during a stated period.

Final goods are goods intended for consumers. For example, gasoline is a final good purchased by consumers but crude oil, used to make gasoline, is not.

Note that GDP does not count the purchase of secondhand goods or stocks and bonds because these do not represent new production during the year. GDP also does not include items that are not exchanged in a legal market (e.g., mowing your own lawn, caring for your own children, or purchasing illegal goods).

Is This Counted as Part of GDP?

Determine if each of the following is included or excluded when calculating GDP. Briefly explain why.

1. A monthly check received by an economics student who has been granted a government scholarship
2. A farmer's purchase of a new tractor
3. A plumber's purchase of a two-year-old used truck
4. Cashing a U.S. government bond
5. The services of a barber cutting his own hair
6. A Social Security check from the government to a retired store clerk
7. Chevrolet's purchase of tires to put on the cars they are producing
8. The government's purchase of a new submarine for the Navy
9. A barber's income from cutting hair
10. Income received from the sale of Nike stock

GDP: Is It Counted and Where?

For each of the following items, write one of the following in the space provided:

C if the item is counted as *consumption spending*.

I if the item is counted as *investment spending*.

G if the item is counted as *government spending*.

Xn if the item is counted as *net exports*.

NC if the item is *not counted* in GDP.

- ____ 11. You spend \$10.00 to see a movie.
- ____ 12. A family pays a contractor \$150,000 for a house he built for them this year.
- ____ 13. A family pays \$75,000 for a house built three years ago.
- ____ 14. An accountant pays a tailor \$175 to sew a suit for her.
- ____ 15. The government increases its defense expenditures by \$1,000,000,000.
- ____ 16. The government makes a \$300 Social Security payment to a retired person.
- ____ 17. You buy McDonald's stock for \$1,000 in the stock market.
- ____ 18. At the end of a year, a flour-milling firm finds that its inventories of grain and flour are \$10,000 higher than its inventories at the beginning of the year.
- ____ 19. Parents work hard caring for their two children.
- ____ 20. Ford Motor Company buys new auto-making robots.
- ____ 21. You pay \$800 a month to rent an apartment.
- ____ 22. Consumer electronics corporation Apple Inc. builds a new factory in the United States.
- ____ 23. R.J. Reynolds buys control of Nabisco.
- ____ 24. You buy a new Toyota that was made in Japan.
- ____ 25. You pay tuition to attend college.