ACTIVITY 19.1

GDP: Does It Measure Up?

We can measure our national progress in many ways. But even if we restrict our measurement to the economy—and set aside social, cultural, and political progress for a moment—the total value of the goods and services produced in the economy can be mind-boggling. Think of all the goods (shoes, oranges, computers . . .) and services (haircuts, doctor visits, car repairs . . .) produced in the United States. Even more intimidating is trying to capture that production in a single number. One common and fairly comprehensive measure is gross domestic product (or GDP), which is a statistic calculated by the U.S. Department of Commerce; it measures the total market value of all final goods and services produced in an economy in a given year.

Simply put, GDP measures the size of the economy. It is among the most important and widely reported pieces of economic data. A variety of people, from business owners to policymakers, use GDP in their decisions. And, while the National Bureau of Economic Research[1] uses a comprehensive method of determining the phases of the business cycle, the general rule of thumb says two consecutive quarters of negative real GDP constitutes a recession. In short, GDP is central to our understanding of the state of the economy.

What happens to the goods and services produced? U.S. consumers, businesses, and the government—and those same groups in foreign countries—buy them. The largest portion of GDP is consumer spending, the money you and I spend on goods and services. This portion has grown from 59 percent of GDP in 1951 to its current level of just over 70 percent. Because spending on output by one group of people becomes income for others, GDP can be described in terms of either expenditures or income. The bookkeeping system used to calculate GDP is referred to as national income accounting.

Let's Get Real

Even though GDP is a valuable measurement tool, prices are used in calculating the value of output. This causes difficulty with calculating changes in GDP over time because an increase in GDP could mean any of the following: (i) The country has produced more goods and services. (ii) The country has produced the same amount of goods and services, but the prices of those goods and services are

 Wolla, Scott A. *Page One Economics Newsletter, May 2013. http://research.stlouisfed.org/pageone-economics/pages/newsletter_summary.php?id=89&title=What+Are+the+%22Ingredients%22+for+Economic+Growth%3F*

higher. Or (iii), some combination of higher production levels and higher prices has caused GDP to increase. If we want to use GDP to measure the "real" increase or decrease over time in the level of final goods and services produced, we must remove the effect of price changes from the data. Therefore, real GDP controls for inflation and more accurately reflects actual economic growth. When economists discuss GDP, they are usually referring to real GDP. When GDP is presented in its unadjusted form, it is often labeled nominal GDP.

Growth Is Good, but Is It Everything?

Just as your parents measured your growth by comparing your height today with your height last year, economists measure economic growth by comparing real GDP over time. Economic growth is usually presented as a percentage increase or decrease from an earlier period. For example, it might be useful to know that nominal GDP in the fourth quarter of 2012 was $15.864 trillion, but it is probably more meaningful to know that *real* GDP increased by 0.4 percent from the fourth quarter of 2011 to the fourth quarter of 2012; in other words, the economy grew, but only by a fraction of 1 percent. To put that number in context, real GDP has grown at an average annual rate of 3.3 percent since 1950. Economists expect some slowing of future U.S. GDP growth as the labor force grows more slowly. The Federal Open Market Committee has projected real GDP growth of 2.3 to 2.5 percent (central tendency)[2] in the longer run.[3] Why is economic growth important? A growing economy produces more goods and services for its population, including more health care and education. And, generally speaking, more is better. But greater production of goods and services is only one factor that contributes to well-being.

Many meaningful aspects of life cannot be quantified in GDP. An evening walk on the beach or an afternoon playing Frisbee in the park may bring you satisfaction; in fact, you might value either activity greatly. But GDP does not include the kind of value that Robert Kennedy referred to when he said, "The gross [domestic] product does not allow for the health of our children, the quality of their education or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages, the intelligence of our public debate or the integrity of our public officials." What Kennedy said is accurate, but GDP is not designed or intended to measure well-being; it is meant to measure output/production in terms of dollars. Simon Kuznets, the economist who pioneered the national income accounting process, warned, "The welfare of a nation can scarcely be inferred from a measure of national income."

In addition, GDP does not measure economic activity that occurs outside markets. So, if you mow your own lawn, the value of that activity does not show up in

GDP, but if you hire a lawn service it does. Another category not captured by GDP includes the nonmarket by-products of market production, such as pollution. Finally, GDP does not capture illegal activities in the underground economy or the "black market" because such transactions are not recorded.

Conclusion

GDP data are among the most important economic data available, but measuring the output of a large, dynamic economy is a complex task. GDP measures production levels during a period of time, which can be adjusted for inflation and compared with earlier periods as an indication of economic growth. And, in general, growth is good. Finally, while GDP measures market activity, it doesn't capture well-being; it's not meant to.

NOTES

1. See National Bureau of Economic Research. "The NBER's Business Cycle Dating Committee." September 20, 2010; http://www.nber.org/cycles/recessions.html.

2. The central tendency excludes the three highest and three lowest projections.

3. See "Economic Projections of Federal Reserve Board Members and Federal Reserve Bank Presidents." March 2013; http://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20130320.pdf.

QUESTIONS

1. What is gross domestic product?

2. What is real GDP?

(See more questions next page.)

3. Why is real GDP rather than nominal GDP used when comparing growth over time?

4. Why is a country like the United States concerned over economic growth?

5. What did Simon Kuznets mean when he said, "The welfare of a nation can scarcely be inferred from a measure of national income"?

6. What examples does Robert Kennedy mention that are not included in GDP?

7. According to the article, what are some economic activities that are not included in GDP?

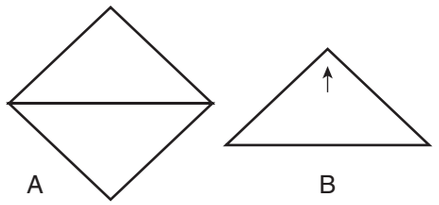
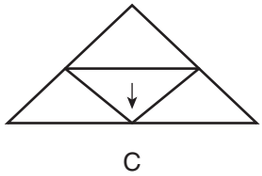
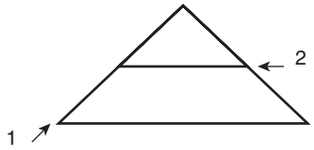
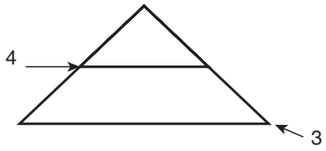
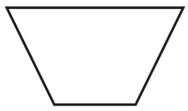
ACTIVITY 19.2

Cup Materials

ACTIVITY 19.3

Directions for Making a Cup

Cut out the square piece of paper from Activity 19.2. Follow the directions below.

1. Place your square paper like Figure A. 2. Fold the paper in half so that the bottom point meets the top point. 3. Crease along the fold so your paper looks like Figure B.	
4. Using the top triangle, fold the top point down to the bottom fold as in Figure C. 5. Make a good crease in the fold, then open up to the top again to look like Figure B.	
6. Fold point 1 up to point 2, crease the fold, and open back up.	
7. Fold point 3 up to point 4 and crease the fold well. 8. Refold the other side again (point 1 to point 2).	
9. Fold the top point down as you did in step 4. 10. Turn the cup over and make a similar fold, folding the top point down. 11. Open up, and you have a drinking cup!	

ACTIVITY 19.4

Assessment

The table below shows data for two countries. Use the information to answer the questions.

Country	**A**	**B**
Population (millions)	20.8	22.7
Annual % population growth	3.0	1.6
Gross savings as % of GDP	20.0	25.0
Index of Economic Freedom	46.7	83.1
Inflation rate (%)	10.3	1.8
Life expectancy (years)	54.95	81.98
Literacy rate (%)	70.1	99.0

1. Which of these two countries do you think has the higher GDP per capita? Support your answer using data from the table.

2. How will this higher GDP per capita affect the country's standard of living? Support your answer using data from the table.

Sources: The World Bank, Data, Indicators, http://data.worldbank.org/indicator; Index of Economic Freedom, www.heritage.org; The World Factbook, https://www.cia.gov/library/publications/the-world-factbook/.