

Introduction to Macroeconomics 5(16)

Chapter Overview

As an introduction to macroeconomics, this chapter begins the overview of macroeconomics with an examination of recent events, which leads into the material on the business cycle. The National Income and Product Accounts are then covered, as well as the two approaches to measuring GDP and the connection between GDP and the standard of living.

Chapter Outline

Business Cycles

- Defining Business Cycles

- Dating Business Cycles

- Alternative Measures of the Business Cycle

- National Activity Index

 - Leading Economic Index

 - Yield Curve

- Issue:* The End of the Recession . . . It Does Not Feel Like It

- Checkpoint:* Business Cycles

National Income Accounting

- The Core of the NIPA

 - The Circular Flow Diagram

 - Spending and Income: Looking at GDP in Two Ways

- Gross Domestic Product

- The Expenditures Approach to Calculating GDP

 - Personal Consumption Expenditures

 - Gross Private Domestic Investment

 - Government Purchases

 - Net Exports of Goods and Services

 - Summing Aggregate Expenditures

- The Income Approach to Calculating GDP

 - Compensation of Employees

 - Proprietors' Income

Corporate Profits
 Rental Income
 Net Interest
 Miscellaneous Adjustments
 National Income
 From National Income to GDP
 Net Domestic Product
 Personal Income and Disposable Personal Income
Checkpoint: GDP and Our Standard of Living

GDP and Our Standard of Living
 Population and GDP per Capita
 Environmental Quality
Issue: How Should Environmental Quality Be Incorporated Into GDP Measures?
 Nonmarket Activities and the Informal Economy
Checkpoint: National Income Accounting

Ideas for Capturing Your Classroom Audience

- Make the circular flow real. Begin a discussion in class about where students work. Find out if other students have ever made purchases at that store, restaurant, etc. You can even discuss students working to pay tuition, part of which pays faculty salaries, and part of which can end up as spending in those places where students work.
- Consider the economic impact of your college or university on the local community. Ask students to brainstorm about what the likely effects are. (For example, do employees live locally? Do employees spend at local merchants?) Use those ideas to illustrate the circular flow. For more background see the report on economic impact of public universities from the Association of Public and Land-grant Universities from 2011 at <http://www.aplu.org/document.doc?id=3716>.
- Show actual data on GDP in different countries by taking a look at the *CIA World Factbook* information for different countries. The Web site is [https:// www.cia.gov/library/publications/the-world-factbook/index.html](https://www.cia.gov/library/publications/the-world-factbook/index.html).

Chapter Checkpoints

Business Cycles

Question: Do you think the business cycle has a bigger impact on automobile and capital goods manufacturers or on grocery stores?

The point is to check that students can: explain why spending on some categories of goods (luxuries) changes more during the ups and downs of the macroeconomy than does spending on other goods (necessities).

National Income Accounting

Question: Each individual has a sense of how the macroeconomy is doing. Is it a mistake to extrapolate from one's own experience what may be happening in the aggregate? How might individual experience lead one astray in thinking about the macroeconomy? How might it help?

The point is to check that students can: understand that macroeconomics takes the aggregate or overall view, which is a different perspective from microeconomics. NOTE: You might want to relate this question to the idea that surveys (such as those of consumer confidence) are undertaken to provide some sense of how the economy is seen by groups of people.

GDP and Our Standard of Living

Question: Each summer, many of the campsites at America's favorite national parks sell out months in advance because of their limited supply, low prices, prime locations, and beautiful views. This has led entrepreneurial individuals to reserve these campsites well in advance and then sell them at a premium on sites such as Craigslist. Does the money earned by these campsite scalpers appear in the GDP? Why or why not? Suppose the government cracks down on campsite scalping by doubling the price of campsites. Would this affect GDP? Explain.

The point is to check that students can: identify this as an example of the informal economy. The money earned by the scalpers does not get counted in GDP because scalpers are not likely to report this income on their taxes.

Debate the Issues

Issue: The End of the Recession . . . It Does Not Feel Like It

According to the National Bureau of Economic Research, the most recent U.S. recession officially ended in July 2009. However, even as late as July 2013 most people probably would not say the economy was recovered—recovering, maybe, but not recovered. Use stories from local or national news outlets to develop descriptions of current economic conditions, or have students do “person on the street” interviews. Compare the economic data on most people's minds to the wide set of indicators used by the NBER.

Issue: How Should Environmental Quality Be Incorporated Into GDP Measures?

It is not easy to incorporate environmental quality in a numerical measure like GDP. Yet we probably all agree that environmental quality matters, that is, has value. Efforts to find a replacement for traditional GDP measures have begun. The World Resource Institute states that a macroeconomic indicator that values natural resources must include 1) genuine economic welfare, not just economic activity, and 2) an indicator of the sustainability of that welfare over time. Visit the WRI on the Web at <http://www.wri.org/> where, among other items of interest, you can find the April 14, 2010, story by John Talberth titled “Measuring What Matters: GDP, Ecosystems, and the Environment” (<http://www.wri.org/stories/2010/04/measuring-what-matters-gdp-ecosystems-and-environment>).

Under the Macroscope

The following is a short vignette that corresponds to the material covered in this chapter of the text. The multiple-choice question that accompanies the vignette can be assigned in LaunchPad. The correct answer is indicated and feedback is provided.

And I will always love you . . . but will it count in GDP?

In the timeless film *The Bodyguard*, superstar singer Rachel Marron (played by Whitney Houston) hires ex-Secret Service agent Frank Farmer (Kevin Costner) to be her bodyguard. As the events unfold they fall in love. Not to give away the entire plot (or the ending if you never saw the 1992 movie), consider the impact on GDP if Rachel and Frank married and he continued to protect her but purely for love and not money.

Q: Suppose that nothing else changes anywhere in the economy. If Rachel and Frank marry, the likely effect will be:

- a. a decrease in GDP.
- b. an increase in GDP.
- c. no change in GDP.
- d. a change in personal income but not GDP.

A: Correct answer is a. While Frank works for Rachel, his pay is part of GDP. If he did the same work without getting paid, it would no longer be counted. GDP does not include such “nonmarket” transactions.

Examples Used in the End-of-Chapter Questions

Questions 9, 10, and 11 reference the National Income and Product Accounts (NIPA). Visit the Web site at <http://www.bea.gov/National/Index.htm> to view the latest press release on GDP. Links to other data are also available.

For Further Analysis

How Can You Tell if It's a Recession?

The example in the student handout can be used as a small group exercise or as an individual exercise. It is designed to complement the text's material on the business cycle and also to provide a lead-in to the measurements of inflation and employment that will be covered in the next chapter. It requires students to find and begin to assess actual data on the economy.

Web-Based Exercise

This example can be used as an individual or small group research project. It requires students to evaluate well-being in terms of GDP and other criteria.

Can GDP Buy You Happiness?

About 35 years ago, the king of Bhutan decided that the well-being of his country was not best measured by its GDP, but rather by something he called its gross national happiness.

- 1) Learn more about GNH and compare it to GDP.
- 2) Assess both as measures of well-being. To do so, define your own criteria for well-being. You may agree or disagree with what is included in these measures and add your own indicators if you wish. In all cases provide a rationale for your choices.

Answer: Student responses will vary, but most will have an idea that happiness considers more than just material goods. Also make the point that GDP is blind to causes of spending; that is, if a home is destroyed by a natural disaster and is then rebuilt, it has the same impact on GDP as if a brand-new home were built on a previously empty piece of land. All that counts is the building, not the cause of it. Students are also likely to raise environmental concerns.

A very useful source is the article by Andrew C. Revkin in the New York Times (October 4, 2005) titled “A New Measure of Well-Being from a Happy Little Kingdom,” available at <http://www.nytimes.com/2005/10/04/science/04happ.html?pagewanted=all&r=0>.

Tips from a Colleague

Students may find it difficult to see why the two approaches to measuring GDP must result in the same answer. Try a simple story about production or a small business. Suppose you know someone who makes beaded bracelets and sells them at flea markets. Brainstorm about the person's revenues and then about the person's costs. The key point to make is that someone's spending becomes someone's income, and so on. . . .

HANDOUT 5(16)-1

Date_____ Name_____ Class_____ Professor_____

How Can You Tell If It's a Recession?

Visit the Web site of the National Bureau of Economic Research (NBER) (<http://www.nber.org/>) to answer the following:

- 1) Does the NBER define a recession as two successive quarters in which there is negative growth in GDP? Why or why not?
- 2) What problem does the NBER face in using data from the Bureau of Economic Analysis of the U.S. Department of Commerce?
- 3) Besides GDP, what important economic data does the NBER review for its reports?

ANSWERS TO HANDOUT 5(16)-1

How Can You Tell If It's a Recession?

Visit the Web site of the National Bureau of Economic Research (NBER) (<http://www.nber.org/>) to answer the following:

- 1) Does the NBER define a recession as two successive quarters in which there is negative growth in GDP? Why or why not?

Answer: No. The following is from the FAQ page of the NBER Web site (at http://www.nber.org/cycles/recessions_faq.html):

Q: The financial press often states the definition of a recession as two consecutive quarters of decline in real GDP. How does that relate to the NBER's recession dating procedure?

A: Most of the recessions identified by our procedures do consist of two or more quarters of declining real GDP, but not all of them. As an example, the recession, in 2001, did not include two consecutive quarters of decline. As of the date of the committee's meeting, the economy had not yet experienced two consecutive quarters of decline.

Q: Why doesn't the committee accept the two-quarter definition?

A: The committee's procedure for identifying turning points differs from the two-quarter rule in a number of ways. First, we do not identify economic activity solely with real GDP, but rather use a range of indicators. Second, we place considerable emphasis on monthly indicators in arriving at a monthly chronology. Third, we consider the depth of the decline in economic activity. Recall that our definition includes the phrase, "a significant decline in activity." Fourth, in examining the behavior of domestic production, we consider not only the conventional product-side GDP estimates, but also the conceptually equivalent income-side GDI estimates. The differences between these two sets of estimates were particularly evident in 2007 and 2008.

- 2) What problem does the NBER face in using data from the Bureau of Economic Analysis of the U.S. Department of Commerce?

Answer: According to the NBER Web site, "The committee views real GDP as the single best measure of aggregate economic activity. In determining whether a recession has occurred and in identifying the approximate dates of the peak and the trough, the committee therefore places considerable weight on the estimates of real GDP issued by the Bureau of Economic Analysis of the U.S. Department of Commerce. The traditional role of the committee is to maintain a monthly chronology, however, and the BEA's real GDP estimates are only available quarterly. For this reason, the committee refers to a variety of monthly indicators to determine the months of peaks and troughs."

- 3) Besides GDP, what important economic data does the NBER review for its reports?

Answer: The committee places particular emphasis on two monthly measures of activity across the entire economy: (1) personal income less transfer payments, in real terms and (2) employment. In addition, the committee refers to two indicators with coverage primarily of manufacturing and goods: (3) industrial production and (4) the volume of sales of the manufacturing and wholesale-retail sectors adjusted for price changes.