

Principles of Economics, 10e

Chapter 24: Measuring a Nation's Income



Chapter Objectives (1 of 2)

By the end of this chapter, you should be able to:

- Describe the income approach to calculating GDP.
- Describe the expenditure approach to calculating GDP.
- Calculate GDP, given data on a country's expenditures or income.
- Identify which component of GDP is affected in a given scenario.
- Compare GDP and GNP for an economy.
- Calculate GNP, given data on a country's income.



Chapter Objectives (2 of 2)

- Explain the difference between real GDP versus nominal GDP.
- Calculate the GDP deflator, given data on a country's real and nominal GDP.
- Identify limitations of using GDP as a measure of quality of living in a given scenario.



24-1

The Economy's Income and Expenditure



Economics

Microeconomics*

 The study of how households and firms make decisions and how they interact in markets

Macroeconomics*

 The study of economy-wide phenomena, including inflation, unemployment, and economic growth

*Words accompanied by an asterisk are key terms from the chapter.



Income and Expenditure

- Gross Domestic Product (GDP) measures
 - Total income of everyone in the economy
 - Total expenditure on the economy's output of goods and services
- Income equals expenditure
 - For the economy as a whole
 - Because every dollar a buyer spends is a dollar of income for the seller



Active Learning 1: Income Equals Expenditure

- Nalah pays James \$50 to mow her lawn.
 - A. What happens with total expenditure?
 - B. What happens with total income?



Active Learning 1: Answers

- James is a seller of a service and Nalah is a buyer: James earns \$50, and Nalah spends \$50.
 - A. Total expenditure rises by \$50.
 - B. Total income rises by \$50.



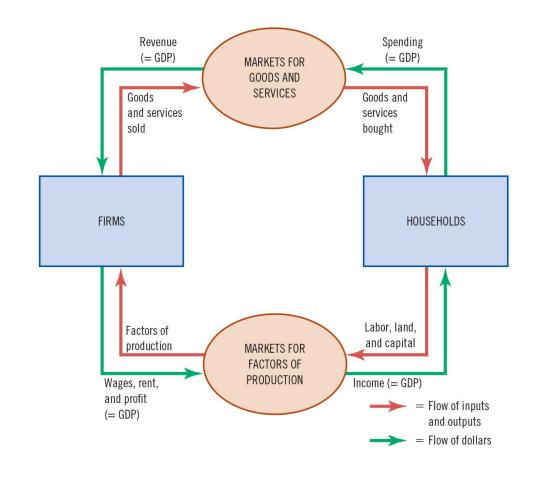
Circular-Flow Diagram

- Circular-flow diagram
 - Simple depiction of the macroeconomy
 - Illustrates GDP as spending, revenue, factor payments, and income
- Factors of production
 - Inputs like labor, land, capital, and natural resources
- Factor payments
 - Payments to the factors of production (e.g., wages, rent)



Figure 1 The Circular-Flow Diagram

- Households buy goods and services from firms, and firms use their revenue from sales for wages to workers, rent to landowners, and profit to firm owners. GDP equals the total amount spent by households in the markets for goods and services.
- It also equals the total wages, rent, and profit paid by firms in the markets for the factors of production.





What This Diagram Omits

- The government
 - Collects taxes, buys goods and services
- The financial system
 - Matches savers' supply of funds with borrowers' demand for loans
- The foreign sector
 - Trades goods and services, financial assets, and currencies with the country's residents



24-2

The Measurement of GDP



GDP: Expenditure Definition

- Gross domestic product* (GDP)
 - The market value of all final goods and services produced within a country in a given period

*Words accompanied by an asterisk are key terms from the chapter.



"GDP Is the Market Value . . . "

- Goods are valued at their market prices
 - All goods measured in the same units (for example, dollars in the U.S.)
- Things that don't have a market value are excluded
 - Things you do for yourself (for example, housework)



"... of All ..."

- GDP tries to be comprehensive
- Includes
 - All items produced in the economy and sold legally in markets
- Excludes
 - Most items produced and sold illicitly, e.g., illegal drugs
 - Most items produced and consumed at home, e.g., vegetables you u
 grow in your garden



"...Final..."

- Final goods
 - Goods intended for the end user
- Intermediate goods
 - Goods used as components or ingredients in the production of other goods
- GDP only includes final goods
 - Final goods already embody the value of the intermediate goods used in their production
 - E.g., microchip v.s. computer



"...Goods and Services Produced..."

- GDP includes tangible goods and intangible services
 - Tangible goods (e.g., food, mountain bikes, beer)
 - Durable goods (e.g., automobiles and appliances) and nondurable goods (e.g., food and clothing)
 - Intangible services (e.g., dry cleaning, concerts, haircuts)
- GDP includes goods and services currently produced, not goods produced in the past
 - Ford produces and sells a new car v.s. one person sells a used car to another



"...Within a Country in a Given Period"

- GDP measures the value of production
 - That occurs within a country's borders, whether done by its own citizens or by foreigners located there
 - That takes place within a specific interval of time
 - Usually a year or a quarter (3 months)



Active Learning 2: What Is included in GDP?

- Nalah pays James \$50 to mow her lawn.
 - A. What happens with GDP?
 - B. Will your answer to the previous question change if Nalah and James get married?



Active Learning 2: Answers

- A. When Nalah pays James \$50 to mow her lawn, that transaction is part of GDP.
- B. If James and Nalah get married, and James continues to mow Nalah's lawn, the value of the mowing is now left out of GDP because James' service is no longer sold in a market.



24-3

The Components of GDP



Composition of GDP

- Four components
 - Consumption (C)
 - Investment (/)
 - Government Purchases (G)
 - Net Exports (NX)
- Components add up to GDP (denoted Y)

$$Y = C + I + G + NX$$

This equation is an identity—an equation that must be true given the
definitions of the variables in the equation



Consumption (C)

Consumption*

- Spending by households on goods and services, with the exception of purchases of new housing
- By convention, household spending on education is also included in consumption of services
- Housing costs
 - For renters, C includes rent payments
 - For homeowners, C includes the imputed rental value of the house, but not the purchase price or mortgage payments



Investment (/)

Investment*

- Spending on business capital, residential capital, and inventories
- Purchase of (**capital**) goods that will be used to produce other goods and services in the future
 - Business capital: Business structures, equipment, and intellectual property products
 - Residential capital: Landlord's apartment building; homeowner's personal residence
 - Inventory accumulations: Goods produced but not yet sold

*Words accompanied by an asterisk are key terms from the chapter.



Government Purchases (G)

- Government purchases*
 - Spending on goods and services by local, state, and federal governments
- Excludes transfer payments
 - Such as Social Security or unemployment insurance benefits
 - They are not purchases of goods and services

*Words accompanied by an asterisk are key terms from the chapter.



Net Exports (NX)

Net exports*

- Spending on domestically produced goods by foreigners (exports) *minus* spending on foreign goods by domestic residents (imports)
- Exports: Foreign spending on the economy's goods and services
- Imports: Portions of C, I, and G that are spent on goods and services produced abroad
- This subtraction is made because other components of GDP include imports of goods and services
- NX = Exports Imports



Table 1 GDP and Its Components

- This table shows total GDP for the U.S. economy in 2021 and the breakdown of GDP among its four components.
- When reading this table,
 recall the identity Y = C + I
 + G + NX.

	Total (in billions of dollars)	Per Person (in dollars)	Percent of Total
Gross domestic product, Y	\$22,994	\$69,386	100
Consumption, C	15,750	47,528	68
Investment, I	4,108	12,396	18
Government purchases, G	4,052	12,226	18
Net exports, NX	-916	22,764	-4

Source: U.S. Department of Commerce. Parts may not sum to totals due to rounding.



Active Learning 3: GDP and Its Components

- What is the effect on GDP and its components?
 - A. Jahzara spends \$300 to buy her husband dinner at the finest restaurant in Boston.
 - B. Nylah spends \$1,200 on a new smartphone to use in her publishing business. The smartphone was built in China.
 - C. Joseph spends \$800 on a tablet to use in his editing business. He got last year's model on sale for a great price from a local manufacturer.
 - D. GM builds \$500 million worth of cars, but consumers only buy \$470 million worth of them.



Active Learning 3: Answers

- A. C rises by \$300; GDP rises by \$300.
- B. I rises by \$1,200; NX fall by \$1,200 (because Imports rise by \$1,200); GDP is unchanged.
- C. I and GDP are unchanged; I (Joseph's business) rises by \$800; I (inventories) fall by \$800
- D. C rises by \$470 million; I (inventory) rises by \$30 million; GDP rises by \$500 million.



24-4

Real versus Nominal GDP



Nominal GDP and Real GDP

Nominal GDP*

- The production of goods and services valued at current prices
- Nominal GDP uses current prices to value the economy's production of goods and services

Real GDP*

- The production of goods and services valued at constant prices
- Real GDP uses constant base-year prices to value the economy's production

*Words accompanied by an asterisk are key terms from the chapter.



The GDP Deflator (1 of 2)

GDP deflator*

- A measure of the price level calculated as the ratio of nominal GDP to real GDP times 100
- Measures the current level of prices relative to the level of prices in the base year
- Can be used to take inflation out of nominal GDP ("deflate" nominal GDP)

GDP deflator =
$$\frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$$

*Words accompanied by an asterisk are key terms from the chapter.



The GDP Deflator (2 of 2)

- Inflation
 - Economy's overall price level is rising
- Inflation rate
 - Percentage change in some measure of the price level from one period to the next

Inflation rate in year 2 =
$$\frac{\text{GDP deflator in year 2 - GDP deflator in year 1}}{\text{GDP deflator in year 1}} \times 100$$



Table 2 Real and Nominal GDP (1 of 4)

This table shows how to calculate real GDP, nominal GDP, and the GDP deflator for a hypothetical economy that produces only hot dogs and hamburgers.

Prices and Quantities

Year	Price of Hot Dogs	Quantity of Hot Dogs	Price of Hamburgers	Quantity of Hamburgers
2022	\$1	100	\$2	50
2023	\$2	150	\$3	100
2024	\$3	200	\$4	150



Table 2 Real and Nominal GDP (2 of 4)

Calculating Nominal GDP

2022	(\$1 per hot dog × 100 hot dogs) + (\$2 per hamburger × 50 hamburgers) = \$200
2023	(\$2 per hot dog × 150 hot dogs) + (\$3 per hamburger × 100 hamburgers) = \$600
2024	(\$3 per hot dog × 200 hot dogs) + (\$4 per hamburger × 150 hamburgers) = \$1,200

Calculating Real GDP (base year 2022)

2022	(\$1 per hot dog × 100 hot dogs) + (\$2 per hamburger × 50 hamburgers) = \$200
2023	(\$1 per hot dog × 150 hot dogs) + (\$2 per hamburger × 100 hamburgers) = \$350
2024	(\$1 per hot dog × 200 hot dogs) + (\$2 per hamburger × 150 hamburgers) = \$500



Table 2 Real and Nominal GDP (3 of 4)

Calculating the GDP Deflator

2022	(\$200/\$200) × 100 = 100
2023	(\$600/\$350) × 100 = 171
2024	(\$1,200/\$500) × 100 = 240



Table 2 Real and Nominal GDP (4 of 4)

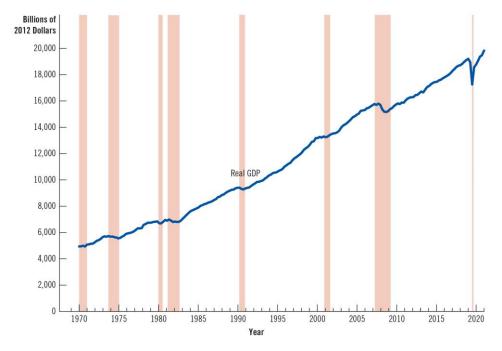
Calculating the Annual Inflation Rate

2023	(171 - 100)/100 × 100% = 71%
2024	(240 - 171)/171 × 100% = 40%



Figure 2 Real GDP in the United States

This figure shows quarterly data on real GDP for the U.S. economy since 1970. Recessions—periods of falling real GDP—are marked with the shaded vertical bars.



Source: U.S. Department of Commerce.



Active Learning 4: Computing GDP

	2021 (base year)	2021 (base year)	2022	2022	2023	2023
	P	Q	P	6	P	Q
Cookies	\$1	900	\$2	1,000	\$3	1,250
Smartphones	\$900	185	\$1,000	200	\$1,200	210

Use the above data to solve these problems:

- A. Compute nominal GDP in 2021
- B. Compute real GDP in 2022
- C. Compute the GDP deflator in 2023



Active Learning 4: Answers

	2021 (base year)	2021 (base year)	2022	2022	2023	2023
	P	Q	P	Q	P	Q
Cookies	\$1	900	\$2	1,000	\$3	1,250
Smartphones	\$900	185	\$1,000	200	\$1,200	210

- A. 2021 nominal GDP: $$1 \times 900 + $900 \times 185 = $167,400$
- B. 2022 real GDP: $$1 \times 1,000 + $900 \times 200 = $181,000$
- C. 2023 GDP deflator
 - Nominal GDP: \$3 × 1,250 + \$1,200 × 210 = \$255,750
 - Real GDP: $$1 \times 1,250 + $900 \times 210 = $190,250$
 - GDP deflator: 100 × (Nominal GDP)/(Real GDP) = 100 × (\$255,750)/(\$190,250) = 134.4



24-5

Is GDP a Good Measure of Economic Well-Being?



Senator Robert Kennedy, 1968

On GDP

• "... 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. It measures neither our courage, nor our wisdom, nor our devotion to our country. It measures everything, in short, except that which makes life worthwhile, and it can tell us everything about America except why we are proud that we are Americans."



GDP and Well-Being (1 of 2)

- "The single best measure of the economic well-being of a society"
 - Economy's total income
 - Economy's total expenditure
 - Larger GDP
 - Good life, better healthcare
 - Better educational systems
 - Measures our ability to obtain many of the inputs into a worthwhile life



GDP and Well-Being (2 of 2)

- Not a perfect measure of well-being
 - Does not include
 - Leisure
 - Value of almost all activity that takes place outside markets
 - Quality of the environment
 - Nothing about distribution of income



Table 3 GDP and the Quality of Life

The table shows GDP per person and three other measures of the quality of life for twelve major countries.

Country	Real GDP per Person	Life Expectancy	Average Years of Schooling	Overall Life (0 to 10 scale)
United States	\$54,941	80 years	13 years	7.0
Germany	46,136	81	14	7.1
Japan	38,986	84	13	5.9
Russia	24,233	71	12	5.6
Mexico	16,944	77	9	6.4
China	15,270	76	8	5.1
Brazil	13,755	76	8	6.3
Indonesia	10,846	69	8	5.1
India	6,353	69	6	4.0
Pakistan	5,311	67	5	5.8
Nigeria	5,231	54	6	5.3
Bangladesh	3,677	73	6	4.3

Source: Human Development Indices and Indicators: 2018 Statistical Update, United Nations. Real GDP is for 2017, expressed in 2011 dollars. Average years of schooling is among adults 25 years and older.



24-6

Conclusion



Conclusion

- Much of macroeconomics is aimed at revealing the long-run and shortrun determinants of a nation's gross domestic product
 - Economists and policymakers need concrete data
 - Quantifying the behavior of the economy with statistics such as GDP is the first step to developing a science of macroeconomics



Think-Pair-Share Activity

You are watching a news report with a friend. It states that a certain troubled Caribbean nation generates a GDP per capita of \$630. Your friend knows that U.S. GDP per capita is about \$63,000, so they state that we are materially 100 times better off in the U.S. than in the Caribbean nation.

- A. Is your friend's statement accurate?
- B. What are some examples of production not captured by GDP in both the United States and the Caribbean nation?
- C. Would the exclusion of this type of production affect the measurement of Caribbean output more than U.S. output?



Self-Assessment

 Does a larger GDP make it easier to lead better lives? What does GDP not measure?

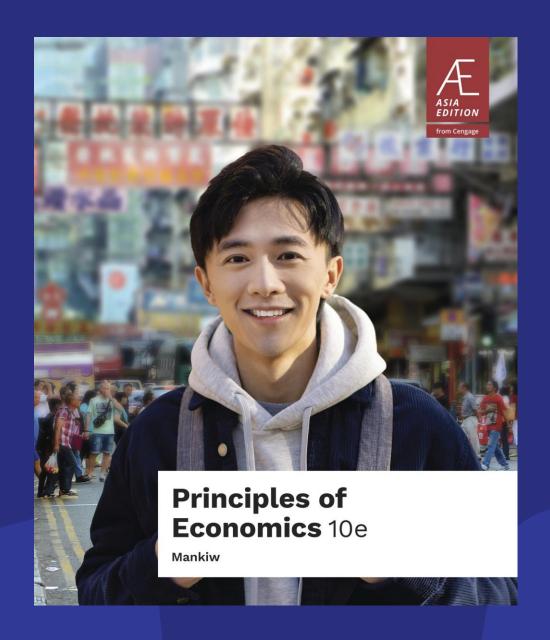


Summary

Click the link to review the objectives for this presentation.

Link to Objectives





Principles of Economics, 10e

Chapter 25: Measuring the Cost of Living



Chapter Objectives (1 of 2)

By the end of this chapter, you should be able to:

- Explain the welfare effects of inflation in a given scenario.
- Calculate the annual inflation rate for a specified year, given CPI data.
- Explain the differences between the GDP deflator and the CPI.
- Calculate the CPI, given pricing and consumption data on a fixed basket of goods.
- Explain why the producer price index is useful in predicting changes in the consumer price index.



Chapter Objectives (2 of 2)

- Determine how a scenario will cause the CPI to bias the true cost of living.
- Compare the value of a dollar in the past to the value of a dollar today.
- Describe the relationship between the nominal interest rate, inflation, and the real interest rate.



25-1

The Consumer Price Index



The Consumer Price Index (CPI)

Consumer price index*

- A measure of the overall cost of the goods and services bought by a typical consumer
- Monitors changes in the cost of living over time
- Computed and reported every month by the Bureau of Labor Statistics

*Words accompanied by an asterisk are key terms from the chapter.



How the CPI Is Calculated (1 of 2)

- 1. Fix the basket
 - The Bureau of Labor Statistics (BLS) surveys consumers to find the basket of goods and services bought by the typical consumer
- 2. Find the prices
 - The BLS collects data on the prices of all the goods in the basket
- 3. Compute the basket's cost
 - Use the prices to compute the total cost of the basket
 - Isolate the effects of price changes



How the CPI Is Calculated (2 of 2)

- 4. Chose a base year and compute the index
 - Designate a year as base year (benchmark)

$$CPI = \frac{\text{Price of basket of goods and services in current year}}{\text{Price of basket in base year}} \times 100$$

5. Compute the inflation rate (between two consecutive years)

Inflation rate in year
$$2 = \frac{\text{CPI in year 2} - \text{CPI in year 1}}{\text{CPI in year 1}} \times 100$$



Table 1 Calculating the Consumer Price Index and the Inflation Rate: An Example (1 of 3)

Calculate the CPI and the inflation rate for a hypothetical economy in which consumers buy only hot dogs and hamburgers

Step 1: Survey Consumers to Determine a Fixed

Basket of Goods Basket = 4 hot dogs, 2 hamburgers

Step 2: Find the Price of Each Good in Each Year

Year	Price of Hot Dogs	Price of Hamburgers
2022	\$1	\$2
2023	\$2	\$3
2024	\$3	\$4



Table 1 Calculating the Consumer Price Index and the Inflation Rate: An Example (2 of 3)

Step 3: Compute the Cost of the Basket of Goods in Each Year

2022	(\$1 per hot dog × 4 hot dogs) + (\$2 per hamburger × 2 hamburgers) = \$8 per basket
2023	(\$2 per hot dog × 4 hot dogs) + (\$3 per hamburger × 2 hamburgers) = \$14 per basket
2024	(\$3 per hot dog × 4 hot dogs) + (\$4 per hamburger × 2 hamburgers) = \$20 per basket

Step 4: Choose One Year as a Base Year (2022) and Compute the CPI in Each Year

2022	$(\$8/\$8) \times 100 = 100$
2023	(\$14/\$8) × 100 = 175
2024	(\$20/\$8) × 100 = 250

Table 1 Calculating the Consumer Price Index and the Inflation Rate: An Example (3 of 3)

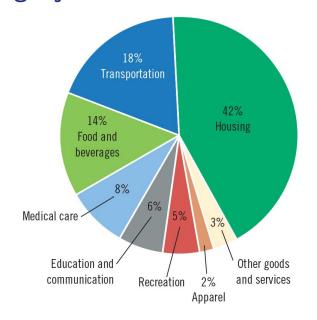
Step 5: Use the CPI to Compute the Inflation Rate from Previous Year

2023	$(175 - 100)/100 \times 100 = 75\%$
2024	$(250 - 175)/175 \times 100 = 43\%$



Figure 1 The Typical Basket of Goods and Services

This figure shows how the typical consumer divides spending among various categories of goods and services. The Bureau of Labor Statistics calls each percentage the "relative importance" of the category.



Source: U.S. Department of Labor; U.S. Department of Commerce.



Active Learning 1: CPI & Inflation Rate

Year	Price of Beef	Price of Chicken
2021	\$3	\$3
2022	\$4	\$4
2023	\$8	\$5

CPI basket: 10 lbs of beef, 20 lbs of chicken

Base year: 2021

A. Calculate CPI for all years.

B. What was the inflation rate from 2022-2023?



Active Learning 1: Answers

Year	Price of Beef	Price of Chicken	Cost of Basket
2021	\$3	\$3	$(\$3 \times 10) + (\$3 \times 20) = \$90$
2022	\$4	\$4	$(\$4 \times 10) + (\$4 \times 20) = \$120$
2023	\$8	\$5	$(\$8 \times 10) + (\$5 \times 20) = \$180$

A. CPI

 $2021: 100 \times (90/90) = 100$

 $2022: 100 \times (120/90) = 133.3$

 $2023: 100 \times (180/90) = 200$

B. Inflation rate 2022–2023: $\frac{200 - 133.3}{133.3} - 100 = 50\%$



Active Learning 2: New Basket, CPI & Inflation Rate

Year	Price of Beef	Price of Chicken
2021	\$3	\$3
2022	\$4	\$4
2023	\$8	\$5

New CPI basket for 2023: 5 lbs of beef, 25 lbs of chicken

Base year: 2021

- A. Calculate cost of new basket for 2023 and CPI for 2023.
- B. What is the new inflation rate from 2022-2023?



Active Learning 2: Answers

Year	Price of Beef	Price of Chicken	Cost of Basket
2021	\$3	\$3	\$90
2022	\$4	\$4	\$120
2023	\$8	\$5	$(\$8 \times 5) + (\$5 \times 25) = \$165$

A. CPI

2021: 100

2022: 133.3

 $2023: 100 \times (165/90) = 183.3$

B. Inflation rate 2022–2023: $\frac{183.3 - 133.3}{133.3} - 100 = 37.5\%$



Measures of Inflation

Inflation rate*

• The percentage change in the price index from the preceding period

Core CPI*

 Measure of the overall cost of consumer goods and services excluding food and energy

Producer price index (PPI)*

- Measure of the cost of a basket of goods and services bought by firms
- Changes in PPI are often thought to be useful in predicting changes in CPI

*Words accompanied by an asterisk are key terms from the chapter.



Problems in Measuring the Cost of Living

- Substitution bias
- Introduction of new goods
- Unmeasured quality change



Substitution Bias

- Over time, some prices rise faster than others
- Consumers substitute toward goods that become relatively cheaper, mitigating the effects of price increases
- The CPI misses this substitution because it uses a fixed basket of goods
- Thus, the CPI overstates increases in the cost of living



Introduction of New Goods

- The introduction of new goods increases variety, allows consumers to find products that more closely meet their needs
- In effect, dollars become more valuable
- The CPI misses this effect because it uses a fixed basket of goods
- Thus, the CPI overstates increases in the cost of living



Unmeasured Quality Change

- Improvements in the quality of goods in the basket increase the value of each dollar
- The BLS tries to account for quality changes but probably misses some, as quality is hard to measure
- Thus, the CPI overstates increases in the cost of living



The GDP Deflator versus the Consumer Price Index

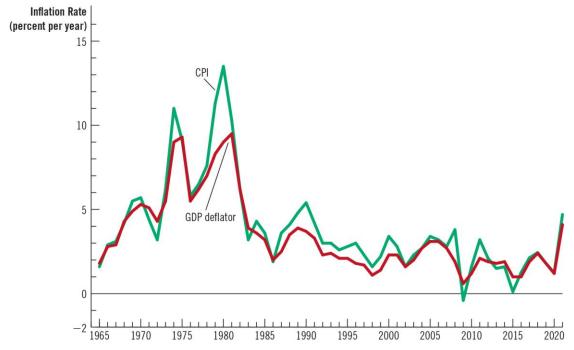
- GDP deflator
 - Ratio of nominal GDP to real GDP
 - Reflects prices of all goods & services produced domestically
 - Compares price of currently produced goods and services to price of the same goods and services in the base year

- CPI
 - Reflects prices of goods & services bought by consumers
 - Compares price of a **fixed** basket of goods and services
 to price of the basket in the
 base year



Figure 2 Two Measures of Inflation

This figure shows the inflation rate—the percentage change in the level of prices— as measured by the GDP deflator and the CPI using annual data since 1965. Notice that the two measures of inflation generally move together.



Source: U.S. Department of Labor; U.S. Department of Commerce.



25-2

Correcting Economic Variables for the Effects of Inflation



Dollar Figures from Different Times

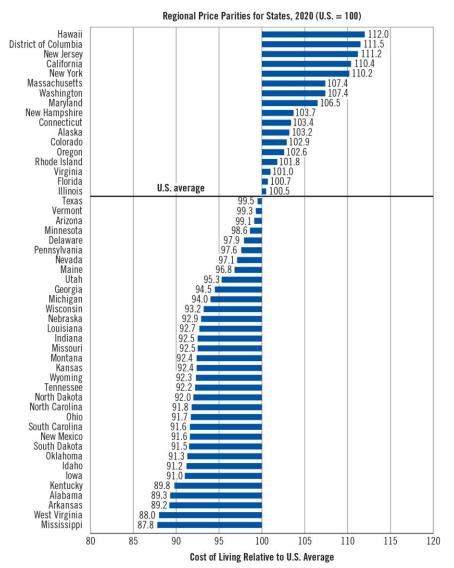
- A price index such as the CPI measures the price level and thus determines the size of the inflation correction
- We might use such an index to compare a dollar figure from the past with a dollar figure in the present
- The formula for turning dollar figures from year T into today's dollars is the following:

Amount in today's dollars = Amount in year T dollars $x \frac{\text{Price level today}}{\text{Price level in year T}}$



Figure 3 Regional Variation in the Cost of Living

This figure shows how the costs of living in the 50 U.S. states and the District of Columbia compare to the U.S. average.



Source: U.S. Department of Commerce



Indexation

Indexation*

- The automatic correction by law or contract of a dollar amount for the effects of inflation
- The increase in CPI automatically determines
 - The COLA (cost-of-living-allowance) in many multi-year labor contracts
 - Adjustments in Social Security payments and federal income tax brackets

*Words accompanied by an asterisk are key terms from the chapter.



Real and Nominal Interest Rates

Nominal interest rate*

 Interest rate as usually reported without a correction for the effects of inflation

Real interest rate*

Interest rate corrected for the effects of inflation

Real interest rate = Nominal interest rate - Inflation rate

*Words accompanied by an asterisk are key terms from the chapter.



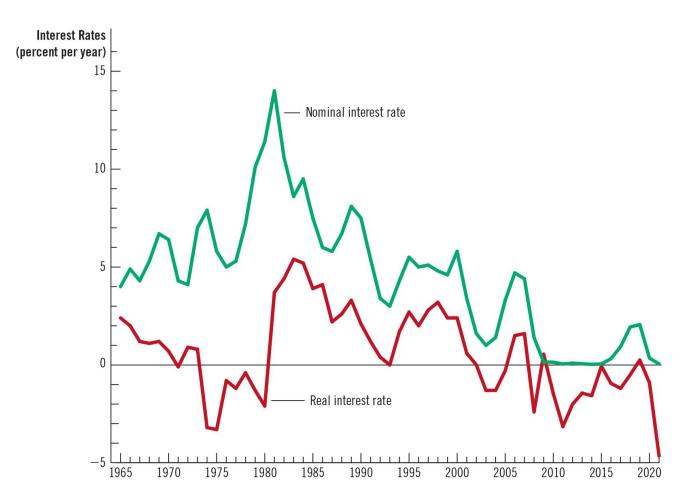
Figure 4 Real and Nominal Interest Rates

This figure shows nominal and real interest rates using annual data since 1965.

The nominal interest rate is the rate on a three-month Treasury bill.

The real interest rate is the nominal interest rate minus the inflation rate as measured by the CPI.

Notice that nominal and real interest rates often do not move together.



Source: U.S. Department of Labor; U.S. Department of Treasury.



25-3

Conclusion



Conclusion

- · Persistent increases in the overall level of prices have been the norm
- Such inflation reduces the purchasing power of each unit of money
- Price indexes allow us to compare dollar figures from different points in time and, therefore, get a better sense of how the economy is changing



Think-Pair-Share Activity

Your grandfather quit smoking cigarettes in 1995. When you ask him why he quit, you get a surprising answer. Instead of reciting the health benefits of quitting smoking, he says, "I quit because it was just getting too expensive. I started smoking in 1965 in Vietnam and cigarettes were only 45 cents a pack. The last pack I bought was \$2.00 and I just couldn't justify spending more than four times as much on cigarettes as I used to."

- A. In 1965, the CPI was 31.5. In 1995, the CPI was 152.4. While it is commendable that your grandfather quit smoking, what is wrong with his explanation?
- B. What is the equivalent cost of a 1965 pack of cigarettes measured in 1995 prices?
- C. What is the equivalent cost of a 1995 pack of cigarettes measured in 1965 prices?
- D. Do both methods give you the same conclusion?



Self-Assessment

• Does an increase in the price of imported goods affect the CPI or the GDP deflator more? Why?



Summary

Click the link to review the objectives for this presentation.

Link to Objectives

