

MODULE
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13 Defining Unemployment

14 Categories of Unemployment

15 The Costs of Inflation

16 Measuring Inflation

The Aggregate Price Level

- The **aggregate price level** is a measure of the overall level of prices in the economy.
- To measure the aggregate price level, economists calculate the cost of purchasing a **market basket**.
- A **price index** is the ratio of the current cost of that market basket to the cost in a base year.

$$\text{Price index in a given year} = \frac{(\text{Cost of market basket in a given year})}{(\text{Cost of market basket in base year})} \times 100$$

Market Baskets and Price Indexes

Calculating the Cost of a Market Basket

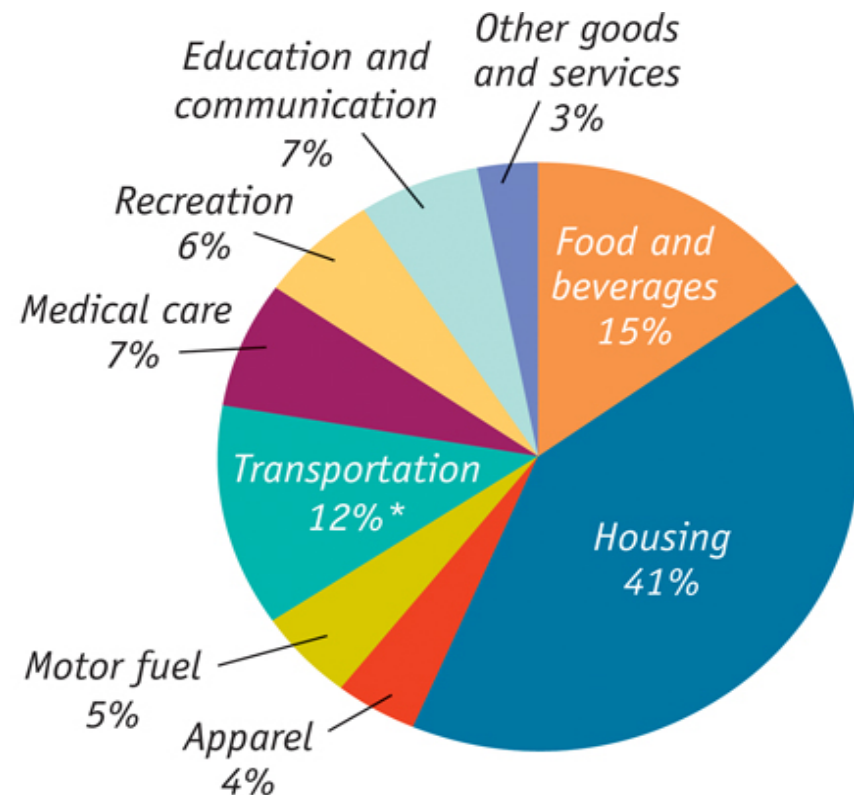
TABLE 16-1

Calculating the Cost of a Market Basket

	Pre-frost	Post-frost
Price of orange	\$0.20	\$0.40
Price of grapefruit	0.60	1.00
Price of lemon	0.25	0.45
Cost of market basket (200 oranges, 50 grapefruit, 100 lemons)	$(200 \times \$0.20) +$ $(50 \times \$0.60) +$ $(100 \times \$0.25) = \95.00	$(200 \times \$0.40) +$ $(50 \times \$1.00) +$ $(100 \times \$0.45) = \175.00

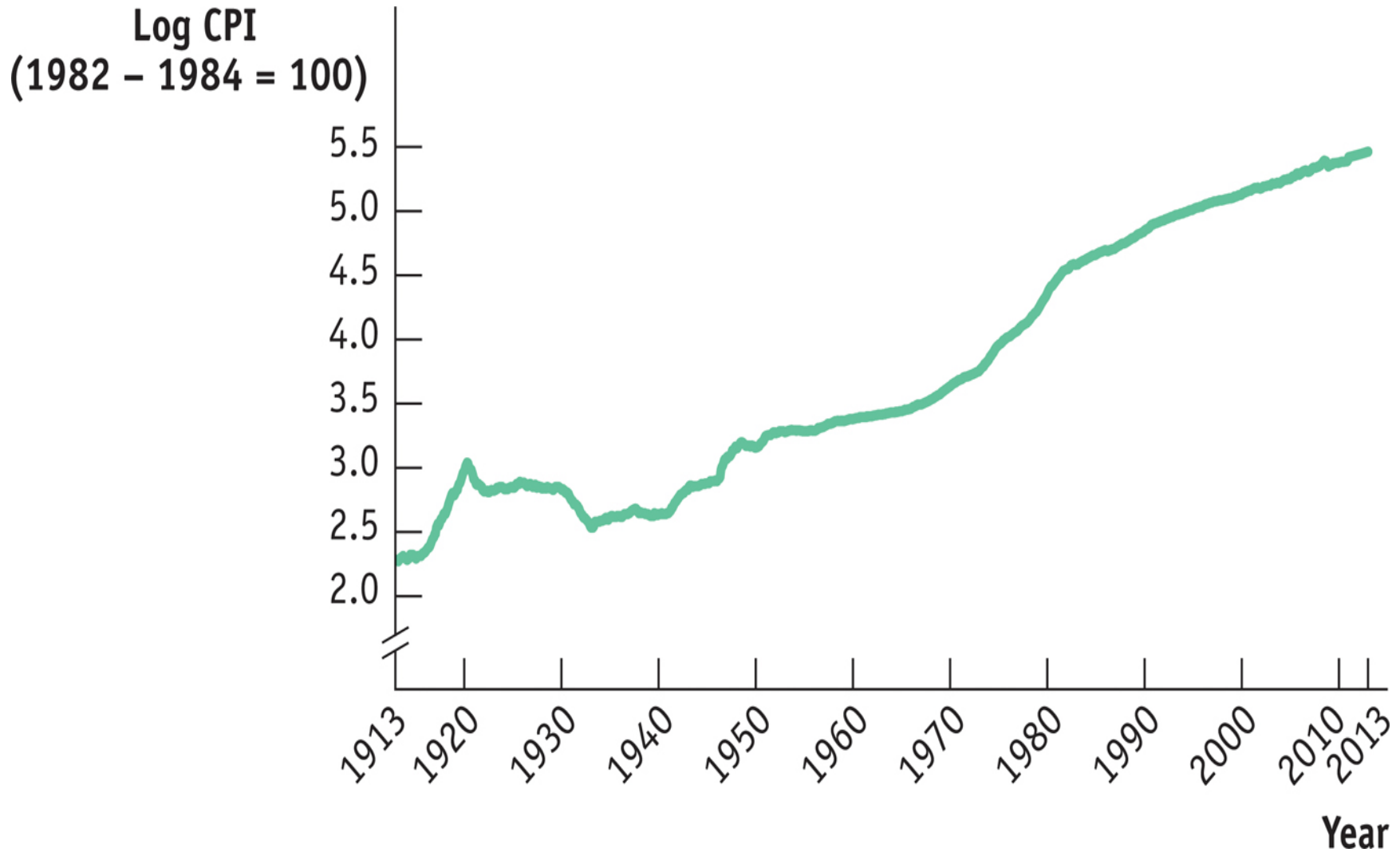
Market Baskets and Price Indexes

- The **inflation rate** is the percentage change in a price index.
- The most common is the **Consumer Price Index** or **CPI**.
- The **CPI** measures the cost of the market basket for a typical urban American family.



*Excludes motor fuel.

The CPI, 1913 – 2013



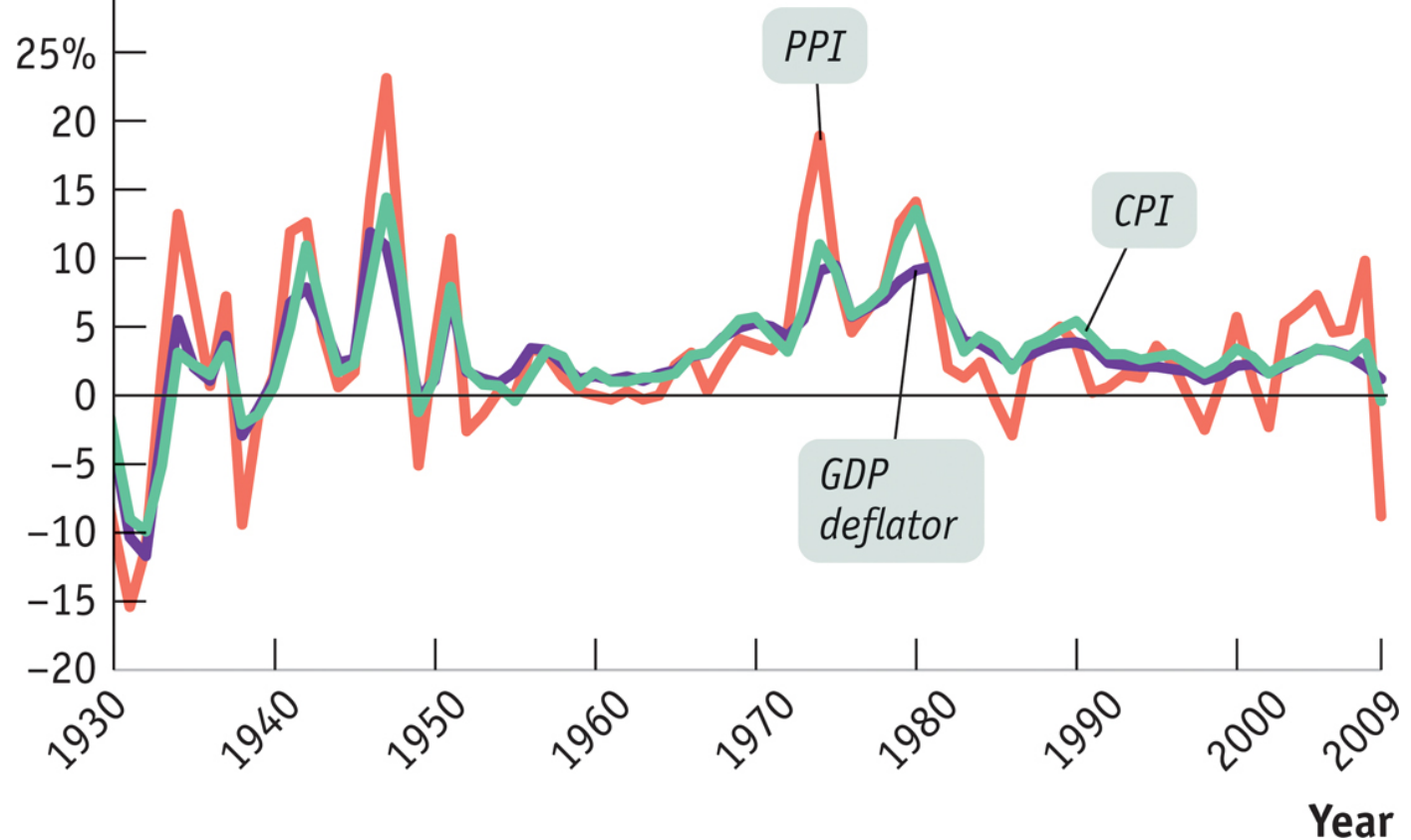
Other Price Measures

- A similar index to CPI for goods purchased by firms is the **producer price index**.
- Economists also use the **GDP deflator**, which measures the price level by calculating the ratio of nominal to real GDP.

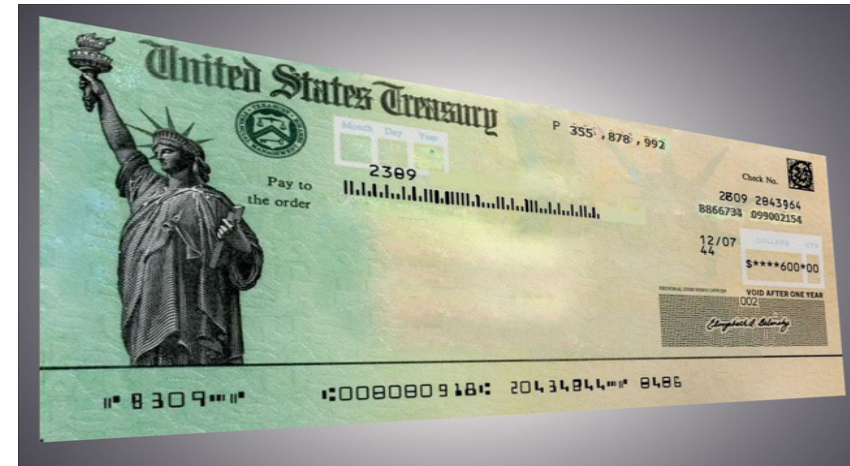
$$GDP \text{ Deflator} = \frac{\textit{Nominal GDP}}{\textit{Real GDP}} \times 100$$

The CPI, PPI, and the GDP Deflator

Percent change in
the CPI, PPI, GDP
deflator



Economics in Action: Indexing to the CPI



- The CPI has a direct and immediate impact on millions of Americans.
- Many payments are tied or “indexed” to the CPI.
- Today, 55 million people receive checks from Social Security which are indexed to CPI inflation.