



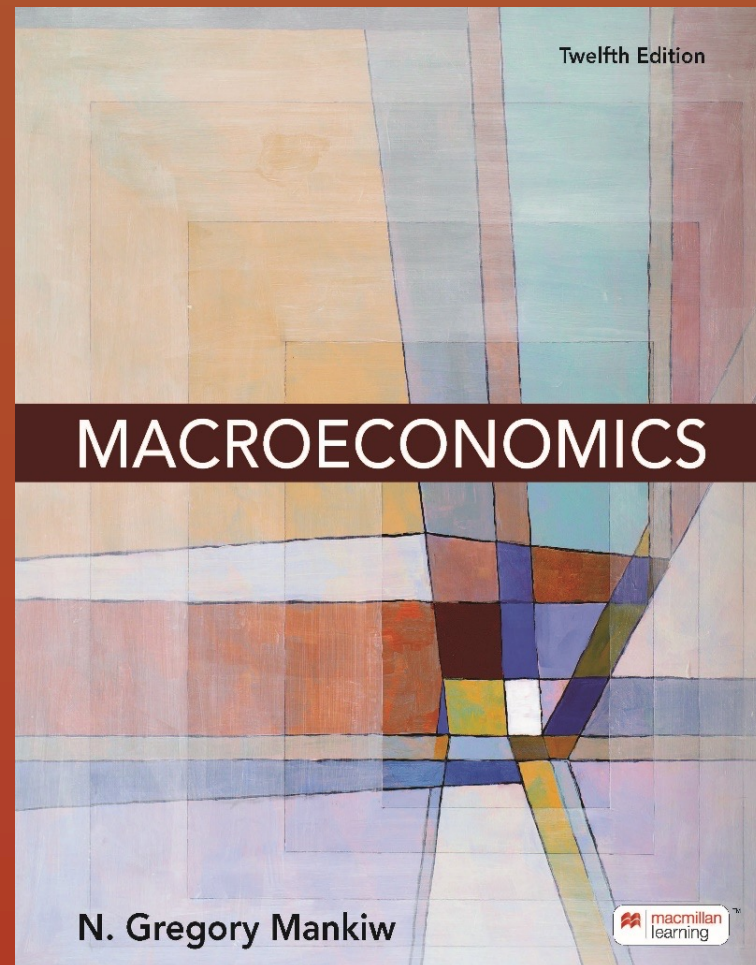
The Science of Macroeconomics

Presentation Slides

Modified for ECON 2204
by Bob Murphy

Macroeconomics

N. Gregory Mankiw



Important issues in macroeconomics

Macroeconomics—the study of the economy as a whole—addresses many topical issues, *e.g.*:

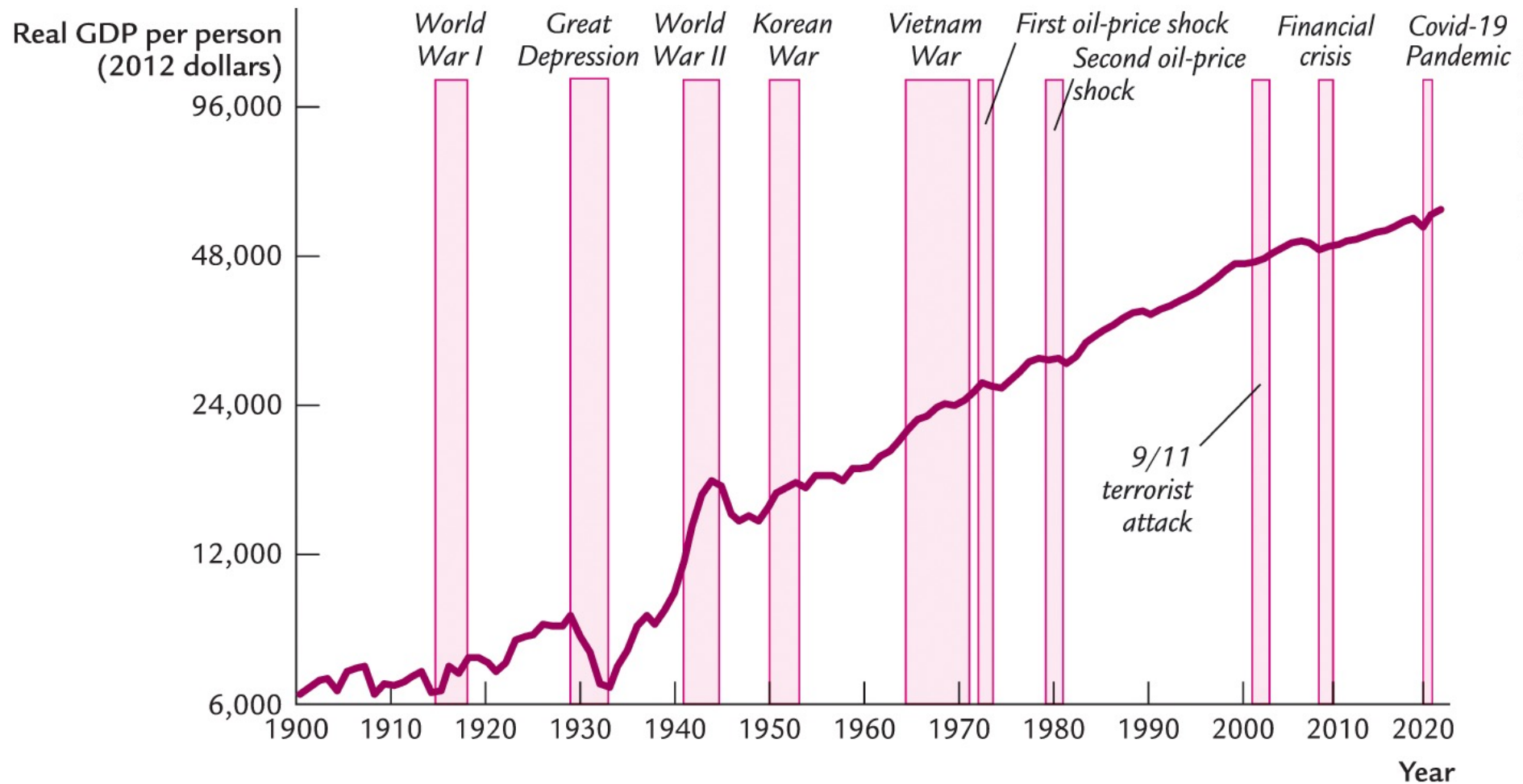
- What causes recessions? What is “government stimulus” and why might it help?
- How can problems in the housing market spread to the rest of the economy?
- What is the government budget deficit? How does it affect workers, consumers, businesses, and taxpayers?

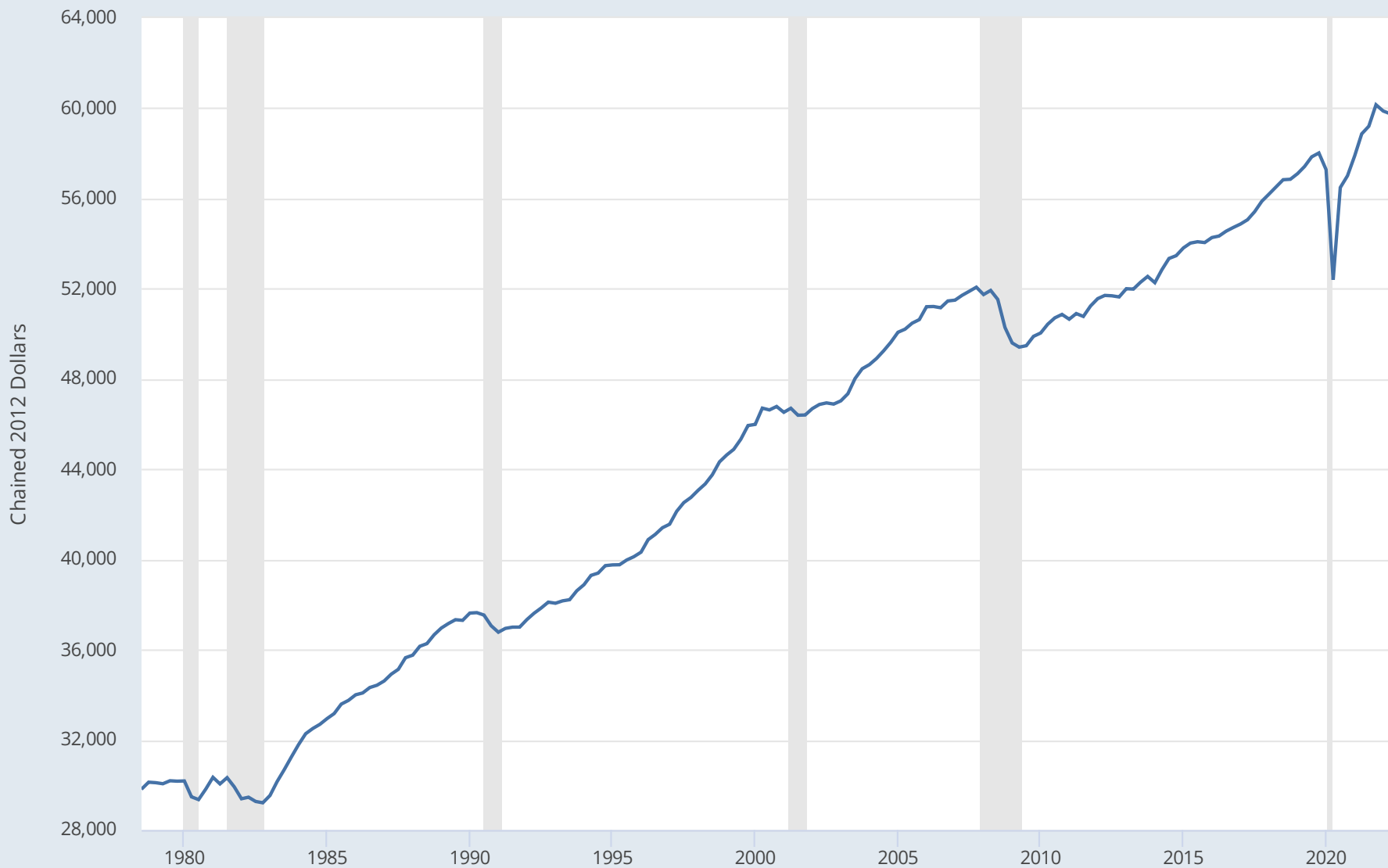
Important issues in macroeconomics

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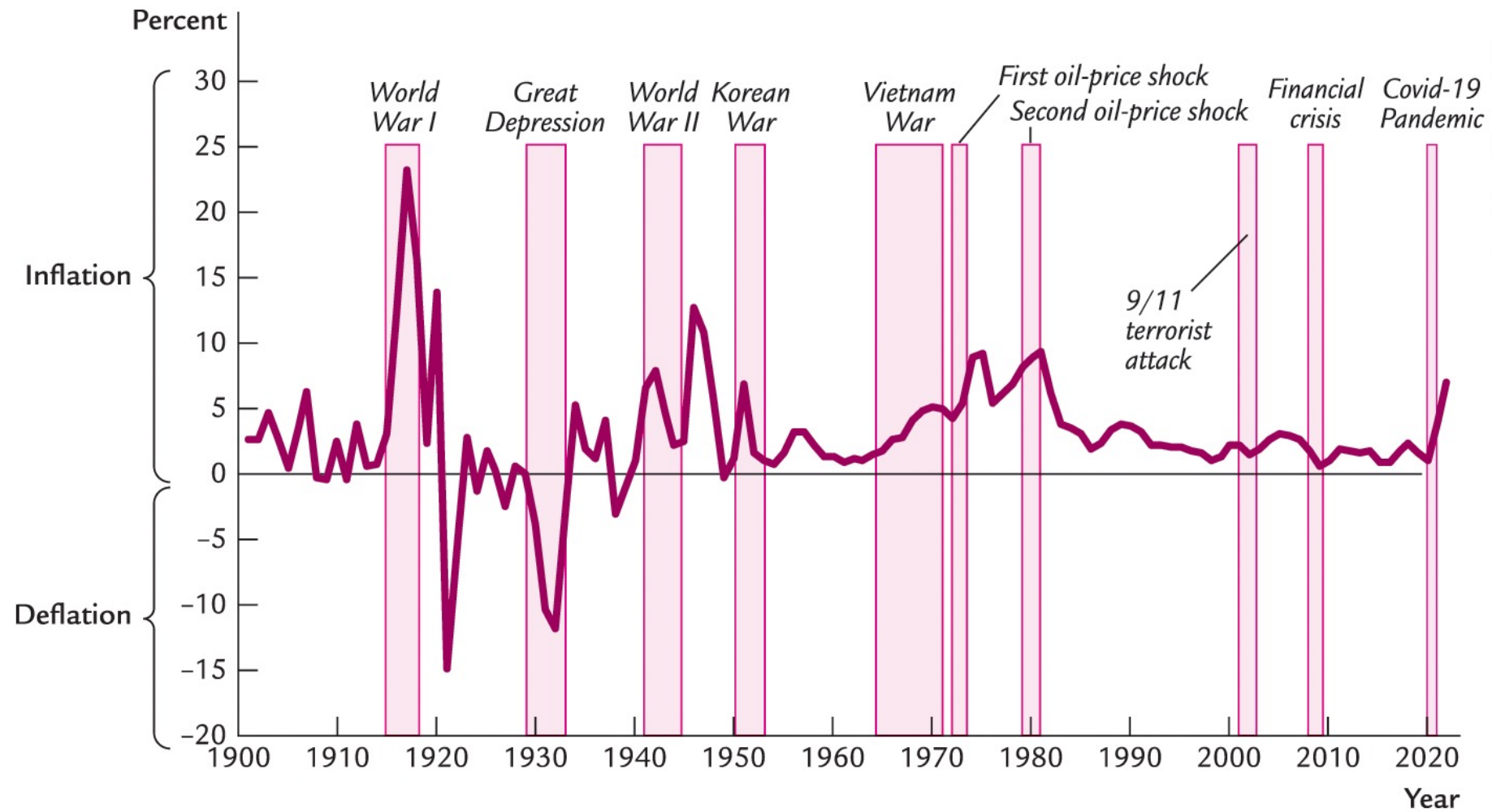
- Why does the cost of living keep rising?
- Why are so many countries poor? What policies might help them grow out of poverty?
- What is the trade deficit? How does it affect a country's well-being?

U.S. real GDP per capita (2012 dollars)



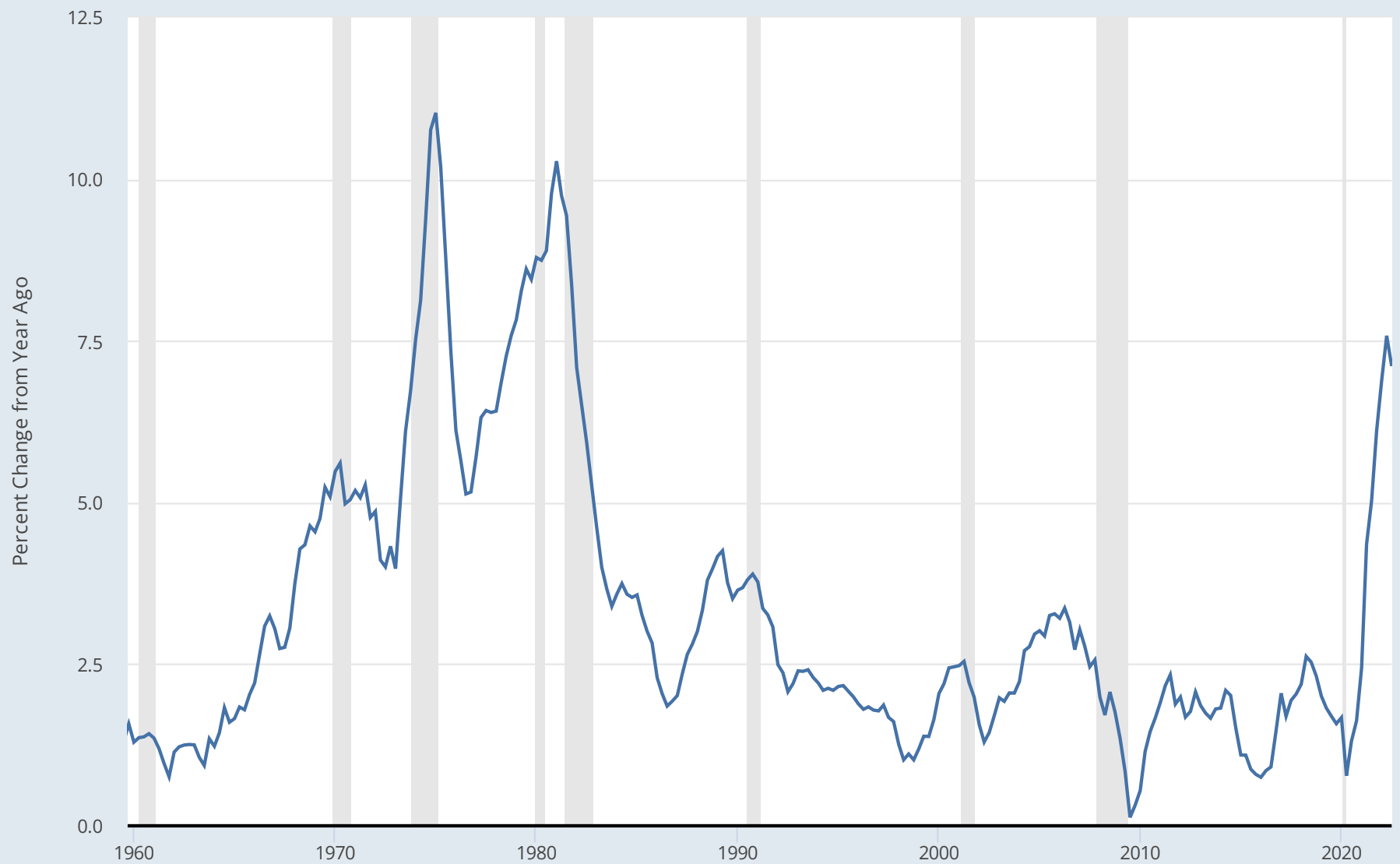


U.S. inflation rate (2012 dollars)





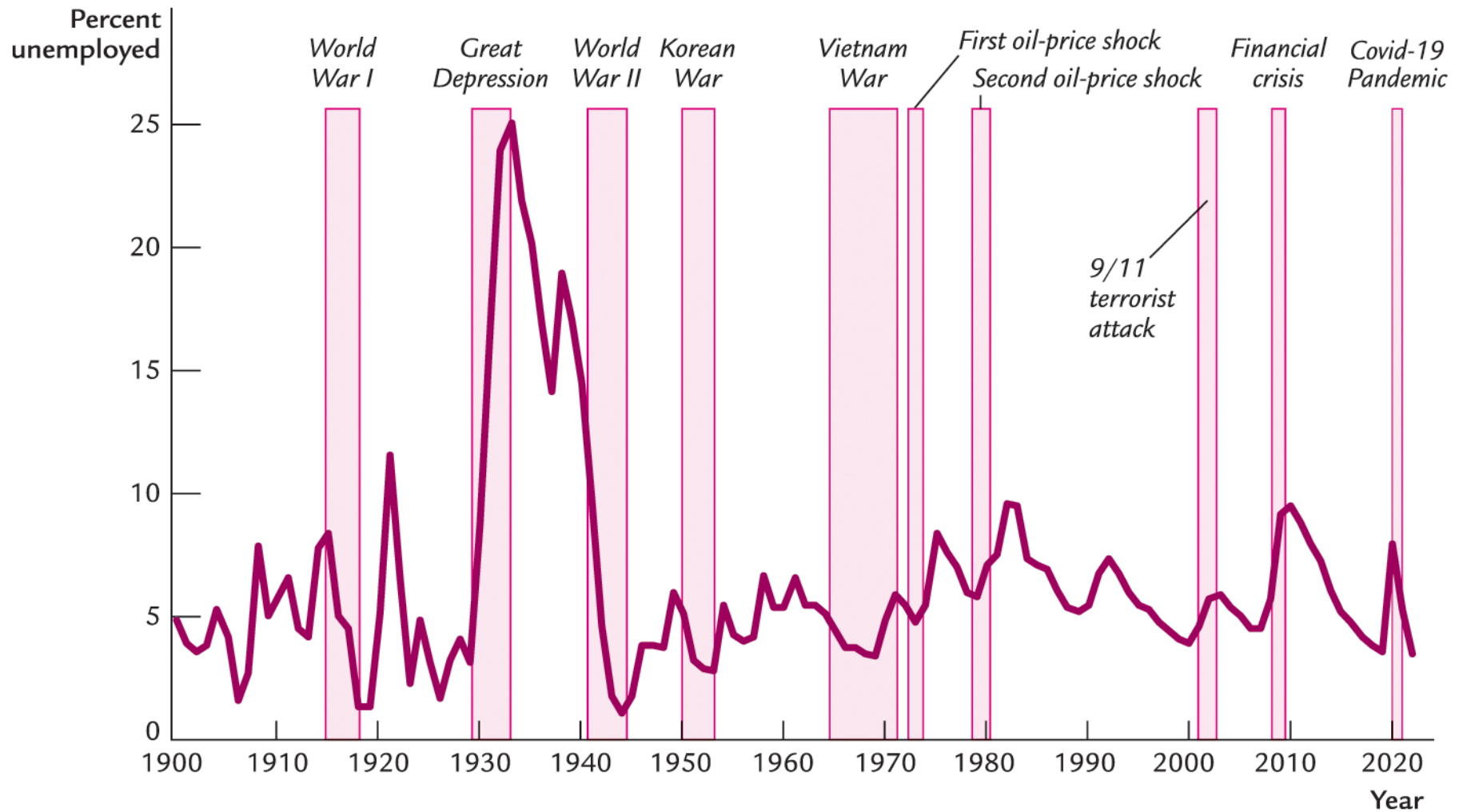
— Gross Domestic Product: Chain-type Price Index



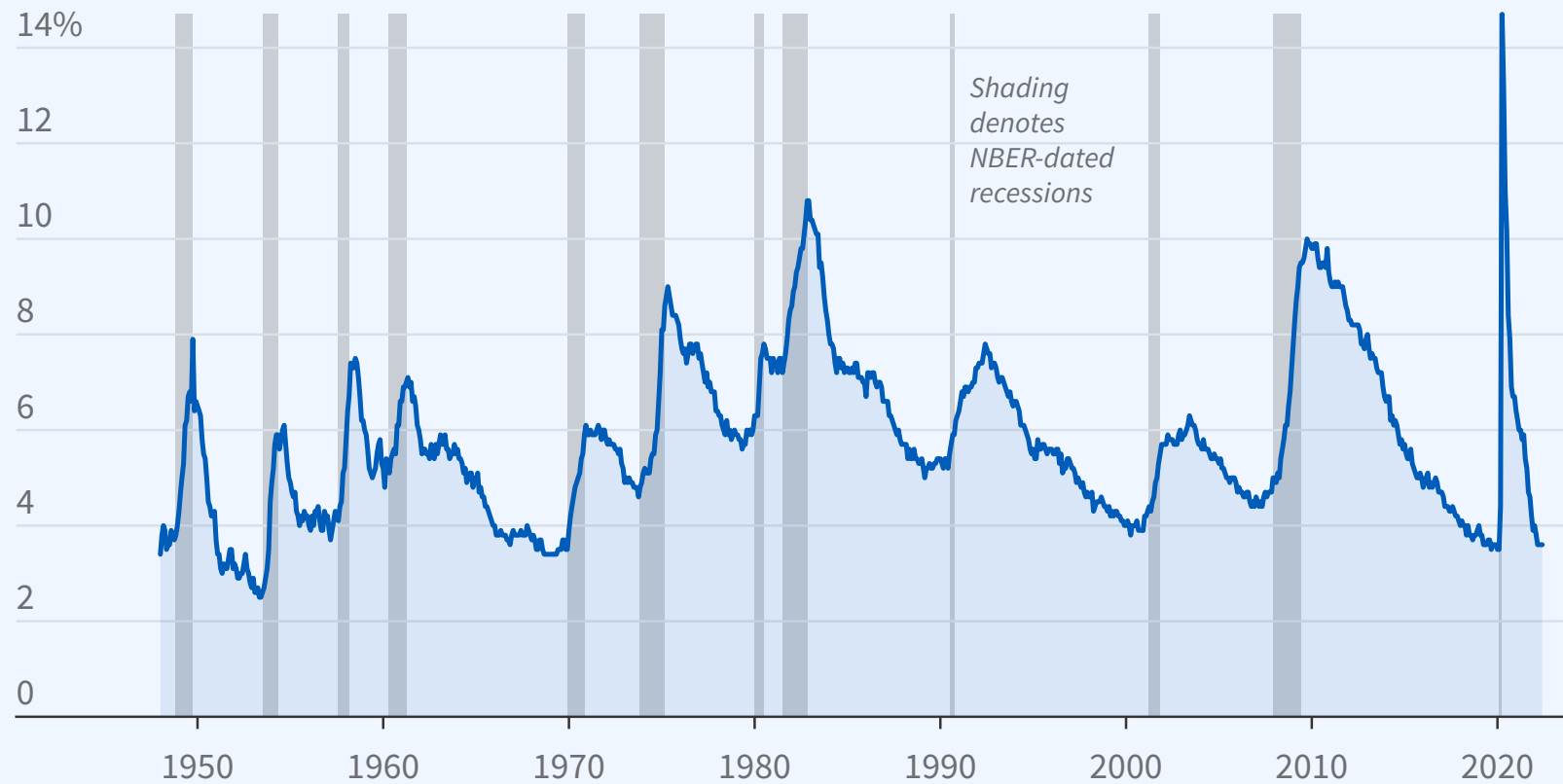
Source: U.S. Bureau of Economic Analysis

fred.stlouisfed.org

U.S. unemployment rate (percent of labor force)



Unemployment Rate and Recessions since 1948

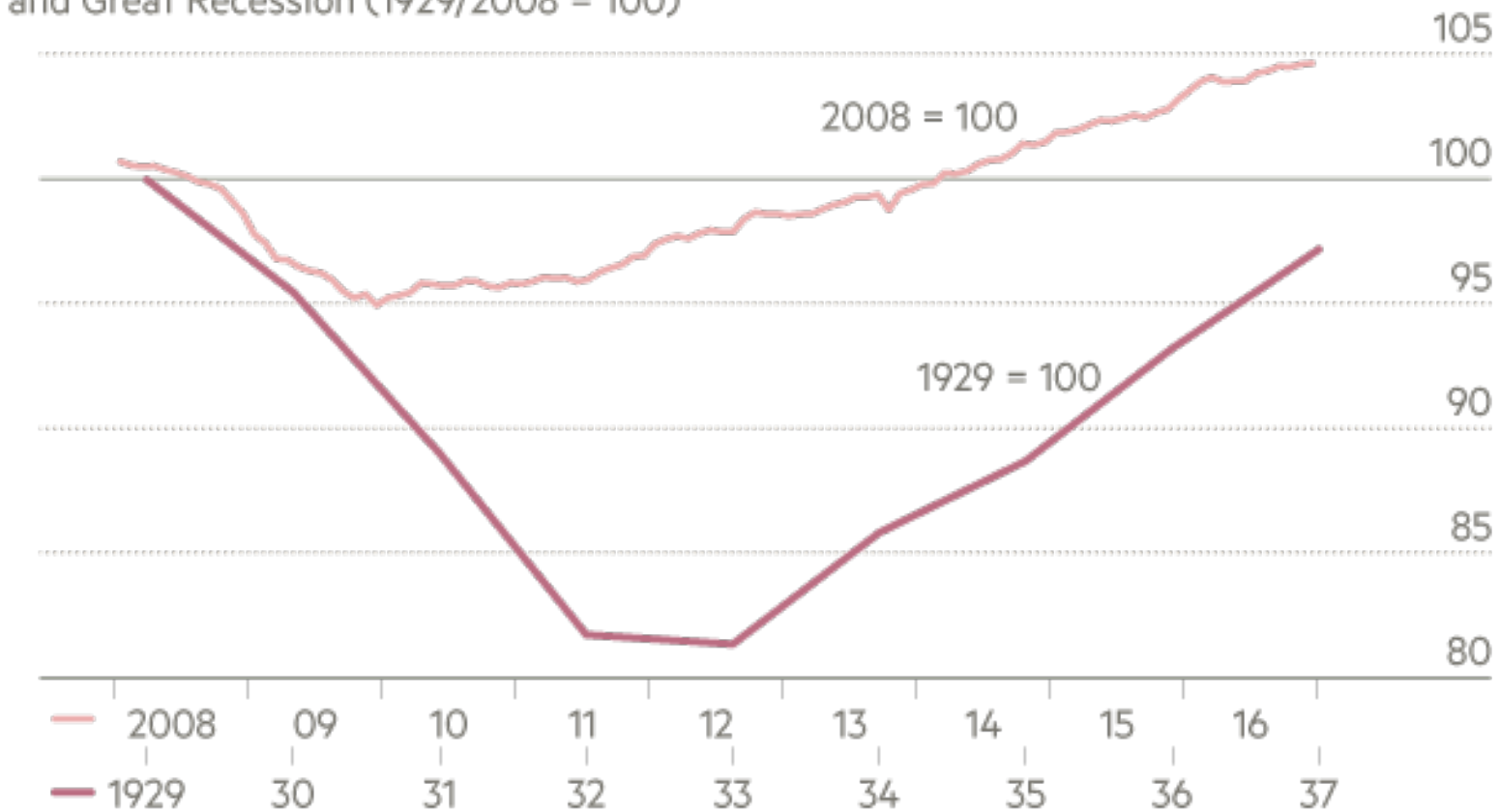


Source: Unemployment data is from the Federal Reserve Bank of St. Louis

The Great Recession

Historical view

Civilian employment in the Great Depression and Great Recession (1929/2008 = 100)



Sources: CEA; BLS; NBER

FT

Economic models

...are simplified versions of a more complex reality.

- irrelevant details are stripped away

...are used to:

- show relationships between variables
- explain the economy's behavior
- devise policies to improve economic performance

Endogenous vs. exogenous variables

- The values of **endogenous variables** are determined in the model.
- The values of **exogenous variables** are determined outside the model:
The model takes their values and behavior as given.
- In the model of supply & demand for cars,
endogenous: P, Q^d, Q^s
exogenous: Y, P_s

The use of multiple models

- No one model can address all the issues we care about.
- *E.g.*, our supply–demand model of the car market...
 - *can* tell us how a fall in aggregate income affects price & quantity of cars.
 - *cannot* tell us *why* aggregate income falls.

The use of multiple models

- So we will learn different models for studying different issues (e.g., unemployment, inflation, long-run growth).
- For each new model, you should keep track of:
 - its assumptions
 - which variables are endogenous, which are exogenous
 - the questions it can help us understand, those it cannot

Prices: flexible vs. sticky

- **Market clearing:** An assumption that prices are flexible, adjust to equate supply and demand.
- In the short run, many prices are **sticky**—adjust sluggishly in response to changes in supply or demand. For example:
 - many labor contracts fix the nominal wage for a year or longer
 - many magazine publishers change prices only once every 3 to 4 years

Prices: flexible vs. sticky

- The economy's behavior depends partly on whether prices are sticky or flexible:
 - If prices are sticky (short run), demand may not equal supply, which explains:
 - unemployment (excess supply of labor)
 - why firms cannot always sell all the goods they produce
 - If prices are flexible (long run), markets clear and economy behaves very differently.

Outline of this book (1 of 2)

Introductory material (Chapters 1, 2)

Classical theory (Chapters 3–8)

How the economy works in the long run, when prices are flexible

Growth theory (Chapters 9–11)

The standard of living and its growth rate over the very long run

Outline of this book (2 of 2)

Business cycle theory (Chapters 12–16)

How the economy works in the short run, when prices are sticky

Macroeconomic theory and policy (Chapters 17–22)

Macroeconomic dynamics, models of consumer behavior, theories of firms' investment decisions, stabilization policy, government debt and deficits, financial crises