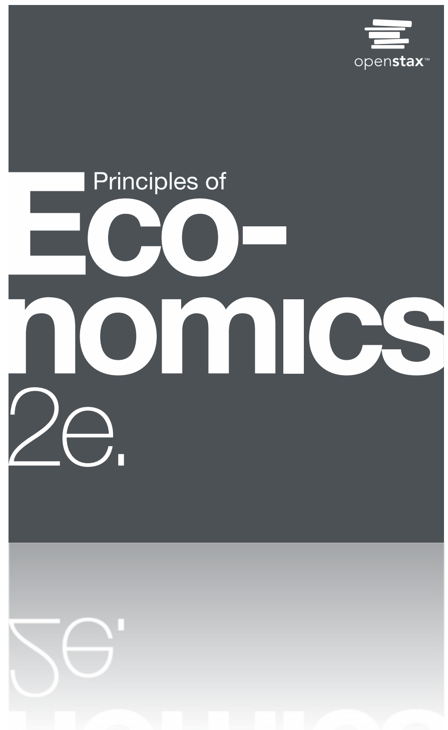
PRINCIPLES OF ECONOMICS 2e

Chapter 25 The Keynesian Perspective



CH.12 OUTLINE

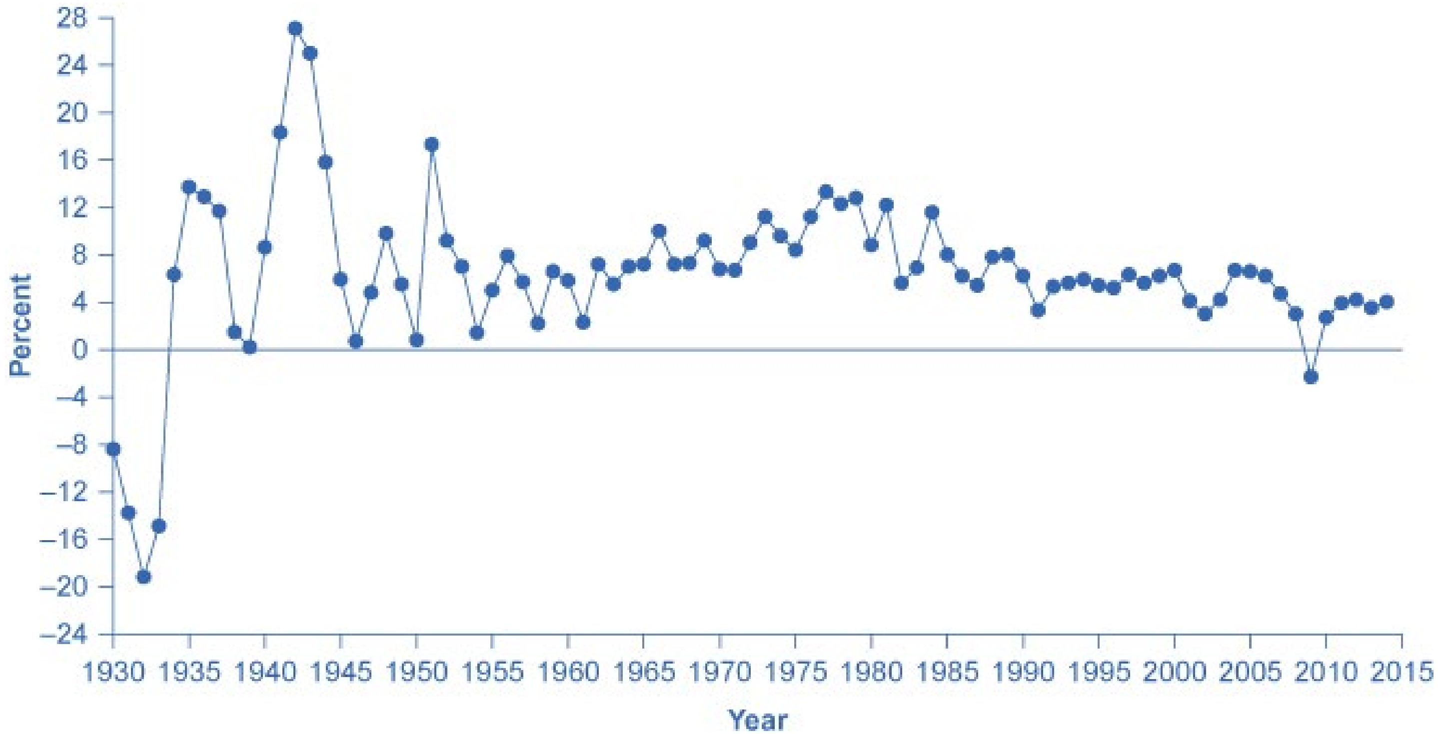
25.1: Aggregate Demand in Keynesian Analysis

25.2: The Building Blocks of Keynesian Analysis

25.3: The Phillips Curve

25.4: The Keynesian Perspective on Market Forces

U.S. Gross Domestic Product, Percent Changes 1930–2014



- The chart tracks the percent change in GDP since 1930.
- The magnitude of both recessions and peaks was quite large between 1930 and 1945. (Source: Bureau of Economic Analysis, "National Economic Accounts")

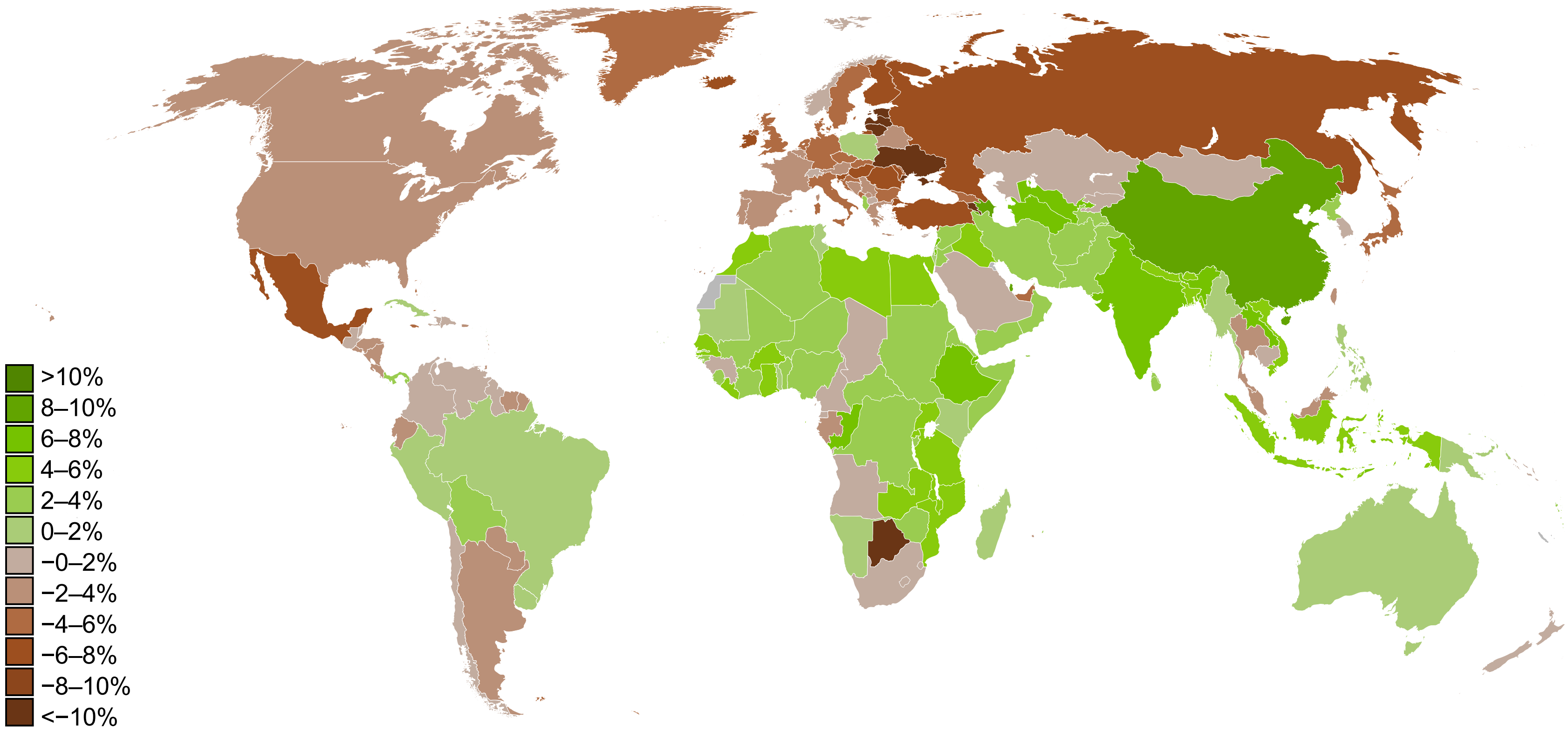
Definition of Recession

US: a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales. Details: https://www.nber.org/research/business-cycle-dating

UK: recessions are measured by the adjusted quarter-on-quarter figures for real GDP; commonly defined as two consecutive quarters of negative economic growth ("Glossary of Treasury terms", 2018; https://web.archive.org/web/20121102095705/http://www.hm-treasury.gov.uk/junebudget_glossary.htm).

The UK definition is often used as a "rule of thumb" in US discussions.

GDP Growth Rates (2009)



Source: https://en.wikipedia.org/wiki/Great_Recession#/media/File:GDP_Real_Growth_in_2009.svg

Great Recession: US (NBER) dates are Dec 2007-June 2009
Global consequences were diverse.

25.1 Aggregate Demand in Keynesian Analysis

Keynes argued that aggregate demand is not stable - that it can change unexpectedly.

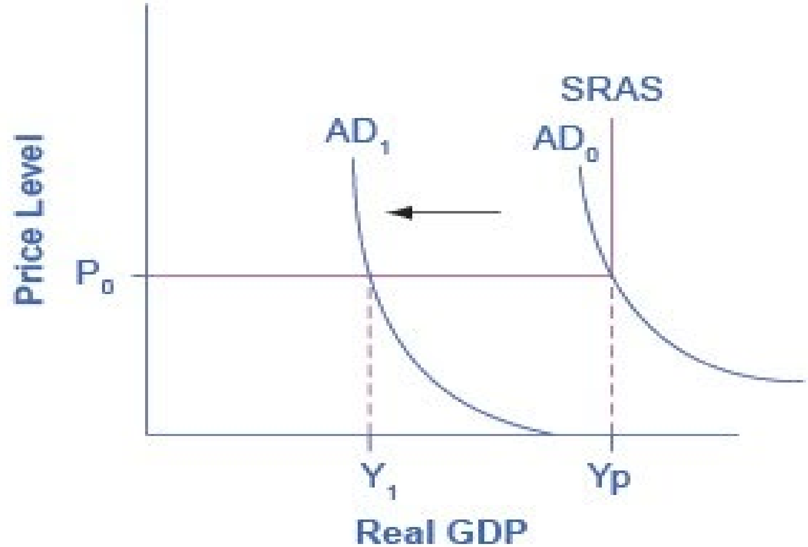
- Aggregated demand by expenditure category: C+I+G+(X-M)
- The Keynesian perspective focuses on the idea that firms produce output only if they expect it to sell.

Price Pressures

- **Recessionary gap:** equilibrium at a level of output below potential GDP.
    - unemployment
    - downward price pressures

- **Inflationary gap:** equilibrium at a level of output above potential GDP.
    - overemployment
    - upward price pressures

The Keynesian AD/AS Model



- The **extreme Keynesian** view of the AD/AS Model
  - SRAS curve is **horizontal** at levels of output below potential and **vertical** at potential output.
- Thus, when beginning from potential output:
  - any decrease in AD affects only output, but not prices.
  - any increase in AD affects only prices, not output.

Determinates of Consumption Expenditure

- Consumption expenditure is spending by households
  - durable goods, nondurable goods, and services.

- Keynes identified three factors that affect consumption:
  - **Disposable income** (income after taxes).
  - Expected future income
  - Wealth or credit

Determinates of Investment Expenditure

- Spending on new capital goods is called investment expenditure.
  - producer's durable equipment and software
  - nonresidential structures (such as factories, offices, and retail locations)
  - changes in inventories
  - residential structures (such as single-family homes, townhouses, and apartment buildings)

- When a business decides to make an investment in physical or intangible assets, the firm considers both:
  - investment costs (including interest rates)
  - expected investment benefits (future profit expectations)
    - "animal spirits"

Determinates of Government Spending

- Federal, state, and local government
    - includes public services such as national defense, transportation infrastructure, and education.

- Keynes believed that the government budget offered a powerful tool for influencing aggregate demand.
    - More government spending could stimulate AD (or less government spending reduce it).
    - Lowering or raising tax rates could influence consumption and investment spending.

- Keynes concluded that during extreme times like deep recessions, only the government had the power and resources to move aggregate demand.

Determinates of Net Exports?

- Export expenditures add to AD, while our expenditures on imports of foreign goods and services subtract from AD. Affected by:
  - relative growth rates between countries
  - relative prices between countries
    - -> a possible role for exchange rates

25.2 The Building Blocks of Keynesian Analysis

- Keynesian economics focuses on explaining why recessions and depressions occur and offering a policy prescription for minimizing their effects.

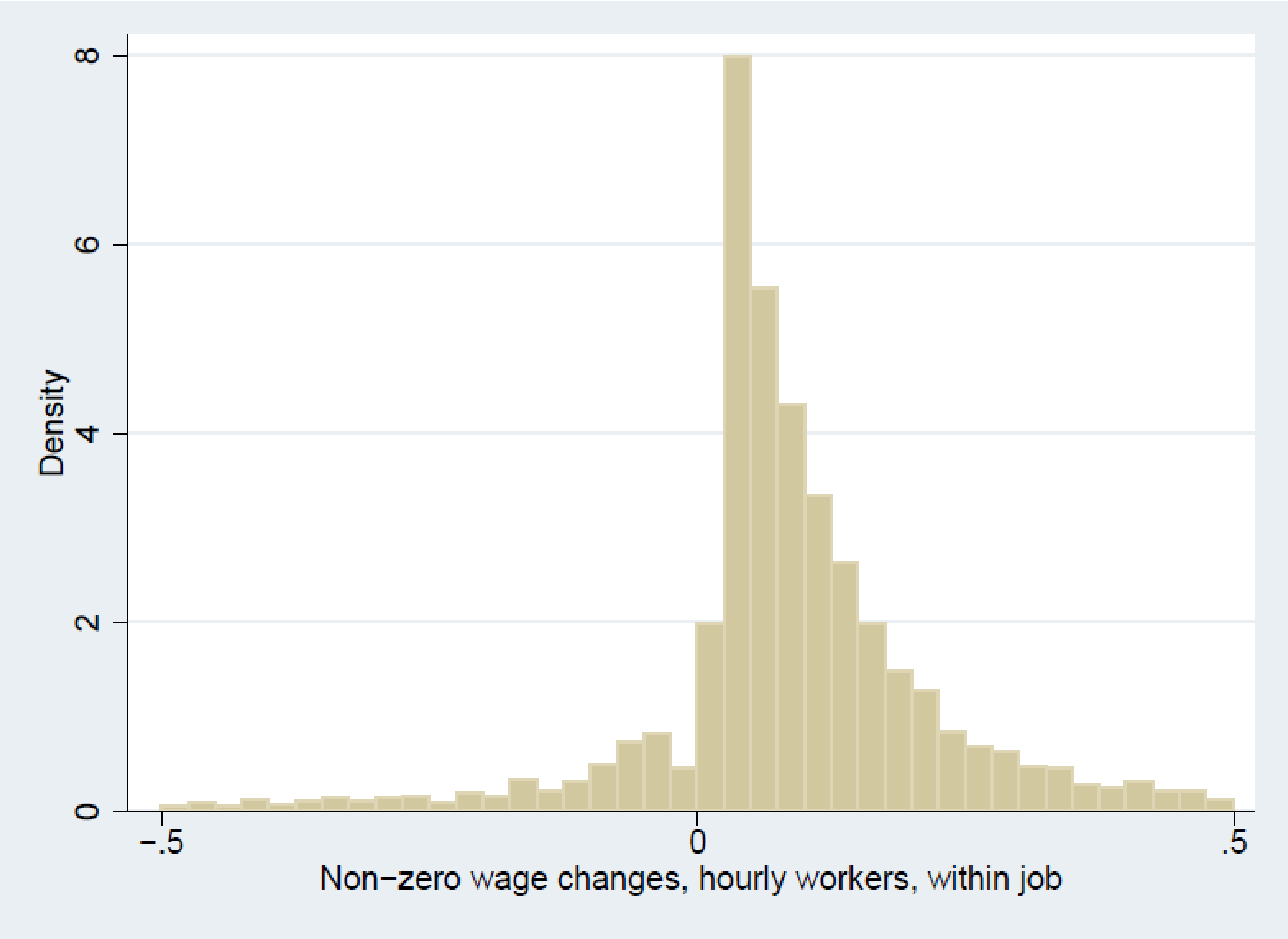
- The Keynesian view of recession is based on two key building blocks.
  - Aggregate demand is not always automatically high enough to provide firms with an incentive to hire enough workers to reach full employment.
  - The macroeconomy may adjust only slowly to shifts in aggregate demand because of sticky wages and prices.

- **Sticky wages and prices** - a situation where wages and prices do not fall in response to a decrease in demand, or do not rise in response to an increase in demand.

Wage and Price Stickiness

- Keynes pointed out that although AD fluctuated, prices and wages did not immediately respond as economists often expected.
- Instead, prices and wages are “sticky,” making it difficult to restore the economy to full employment and potential GDP.
- Keynes emphasized one particular reason why <u>wages</u> were sticky: the coordination argument.
- **Coordination argument** - downward wage and price flexibility requires perfect information about the level of lower compensation acceptable to other laborers and market participants.

Sticky Wages



Source: Barattieri et al (2014 AEJ)

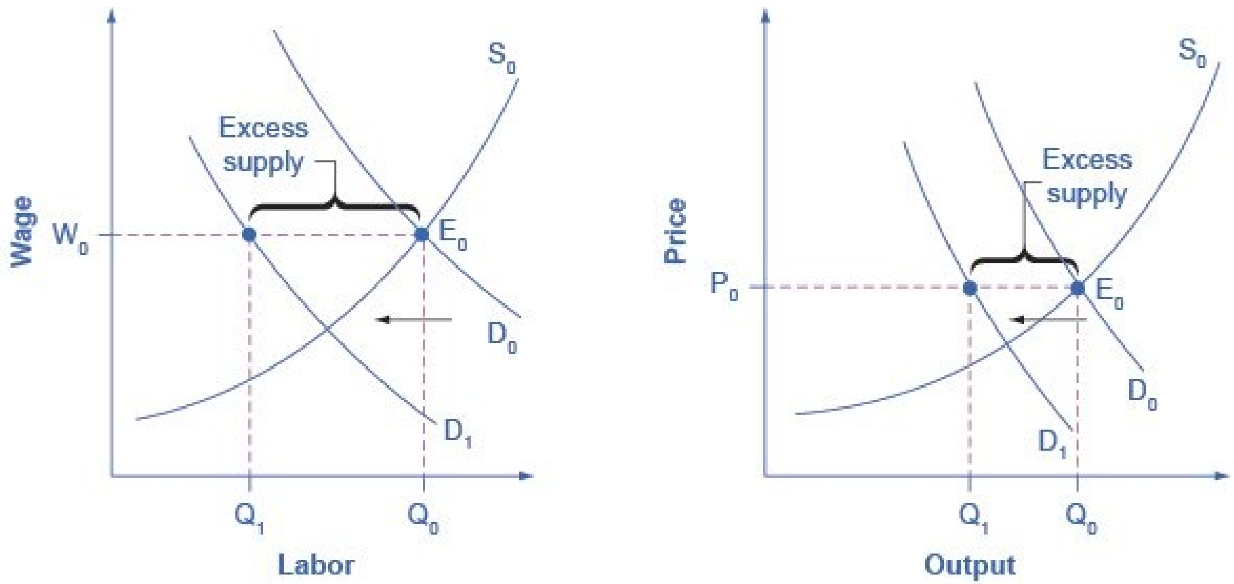
Wage and Price Stickiness, Continued

- Some modern economists have argued that along with wages, other prices may be sticky too.

- When a firm considers changing prices, it must consider two sets of costs.
  - changing prices uses company resources
  - frequent price changes may leave customers confused or angry

- **Menu costs** - costs firms face in changing prices.

Sticky Prices and Falling Demand in the Labor and Goods Market

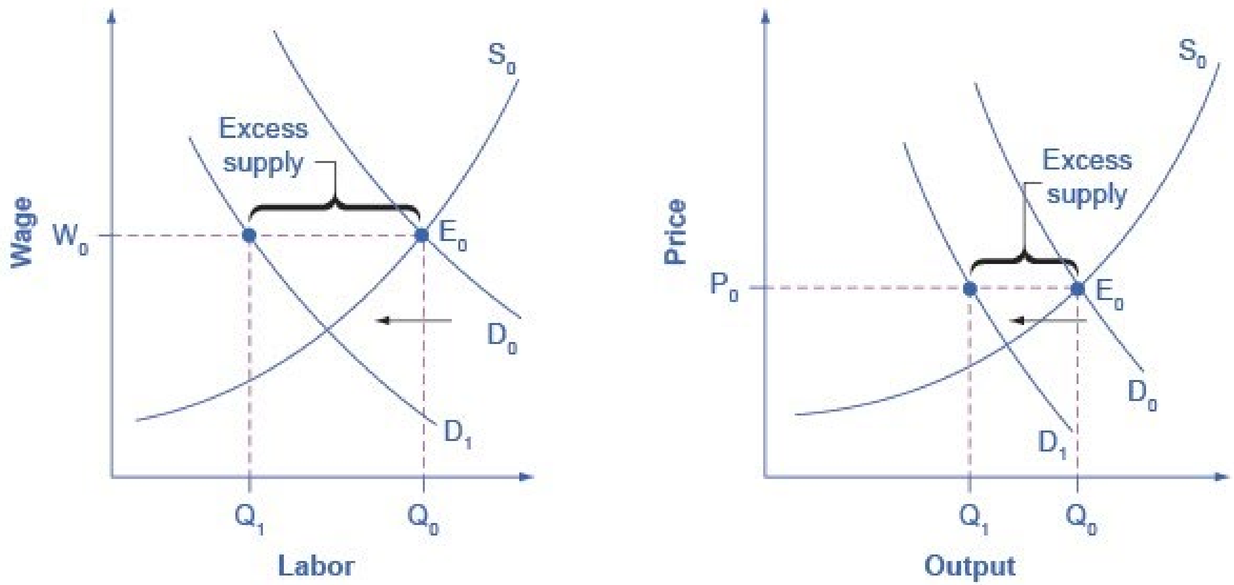


(a) Sticky wages in the labor market

(b) Sticky prices in the goods market

- In both (a) and (b), demand shifts left from D_0 to D_1.
- However, the wage in (a) and the price in (b) do not immediately decline.
- In (a), the quantity demanded of labor at the original wage (W_0) is Q_0, but with the new demand curve for labor (D_1), it will be Q_1.
- Similarly, in (b), the quantity demanded of goods at the original price (P_0) is Q_0, but at the new demand curve (D_1) it will be Q_1.

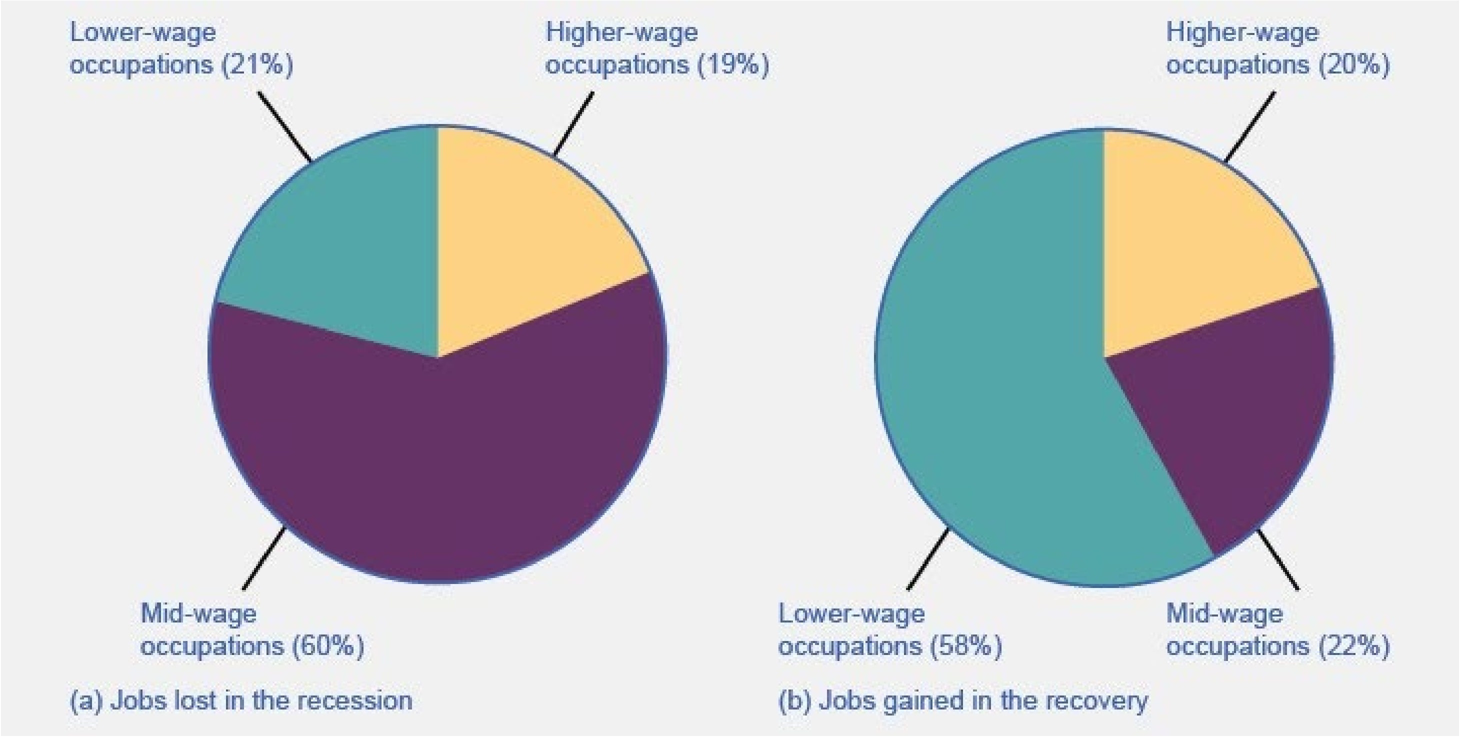
Sticky Prices and Falling Demand in the Labor and Goods Market, Continued



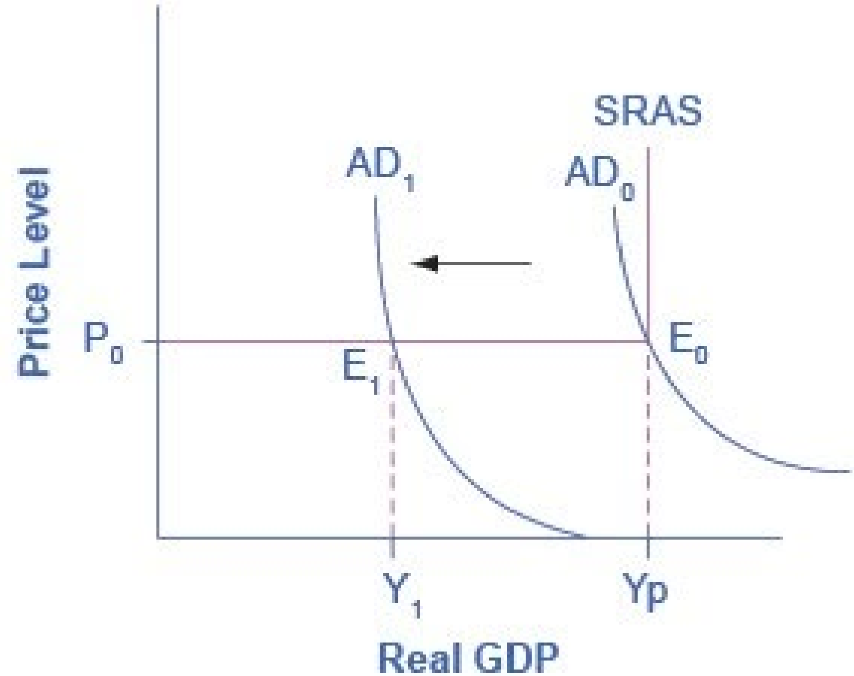
(a) Sticky wages in the labor market (b) Sticky prices in the goods market

- An excess supply of labor will exist, which we call unemployment.
- An excess supply of goods will also exist, where the quantity demanded is substantially less than the quantity supplied.
- Thus, sticky wages and sticky prices, combined with a drop in demand, bring about unemployment and recession.

Jobs Lost/Gained in the Recession/Recovery

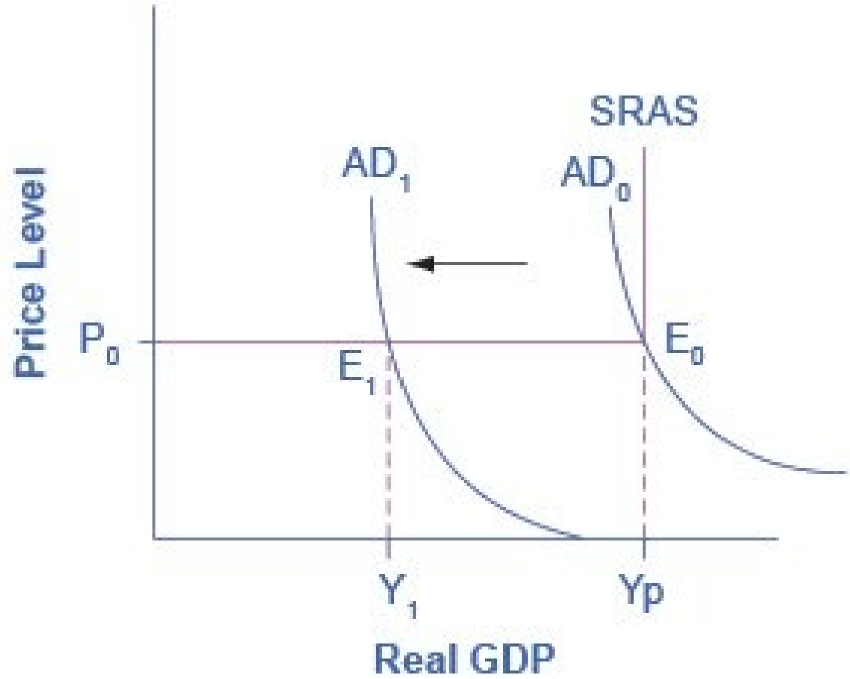


A Keynesian Perspective of Recession



- The figure illustrates the two key assumptions behind Keynesian economics.
- A recession begins when aggregate demand declines from AD_0 to AD_1.

A Keynesian Perspective of Recession, Continued



- The recession persists because of the assumption of fixed wages and prices, which makes the SRAS flat below potential GDP.
- If that were not the case, the price level would fall also, raising GDP and limiting the recession.
- Instead the intersection E_1 occurs in the flat portion of the SRAS curve where GDP is less than potential.

The Expenditure Multiplier

- **Macroeconomic externality:**
  - macroeconomic consequences of microeconomic occurs when what happens at the macro level is different from
  - can be inferior to what happens at the micro level (negative macroeconomic externality).
    - paradox of saving

- **Expenditure multiplier:** Keynesian concept that a change in autonomous AD causes a more than a proportionate change in real GDP.
  - Not only does spending affect the equilibrium level of GDP, but that spending is powerful.

$$\frac{\Delta Y}{\Delta \text{ Spending}} > 1$$

- The reason for the expenditure multiplier is that one person's spending becomes another person's income, which leads to additional spending and additional income
  - The cumulative impact on GDP is larger than the initial increase in spending.

The MONIAC

monetary national income analogue computer (MONIAC)

Video from Reserve Bank of New Zealand:

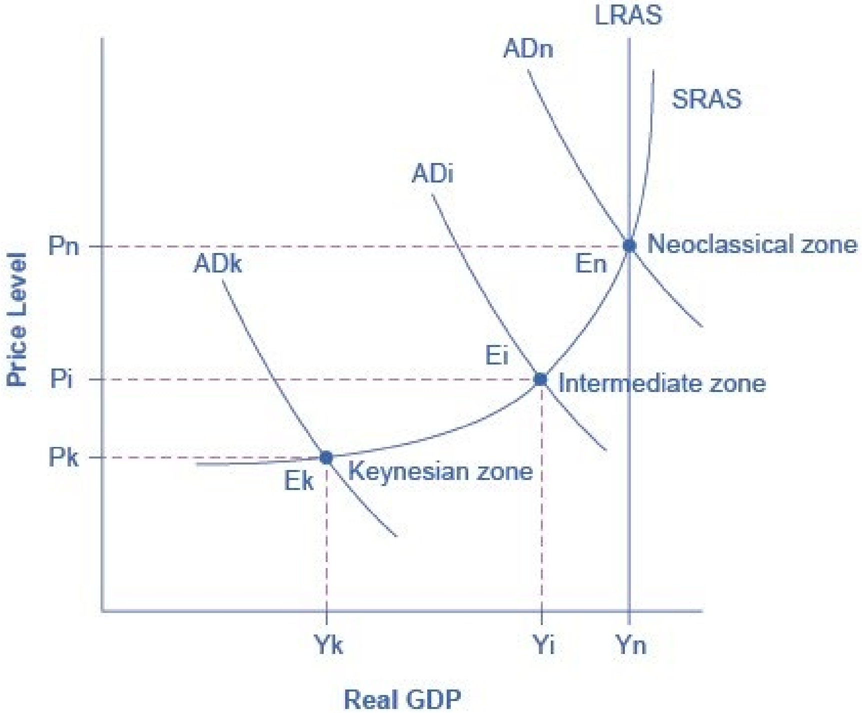
https://www.youtube.com/watch?v=rAZavOcEnLg

Source: https://upload.wikimedia.org/wikipedia/commons/6/6f/MONIAC_computer.jpg

25.3 The Phillips Curve

- **Phillips curve:** the tradeoff between unemployment and inflation.
    - If one is higher, the other must be lower (ceteris paribus).

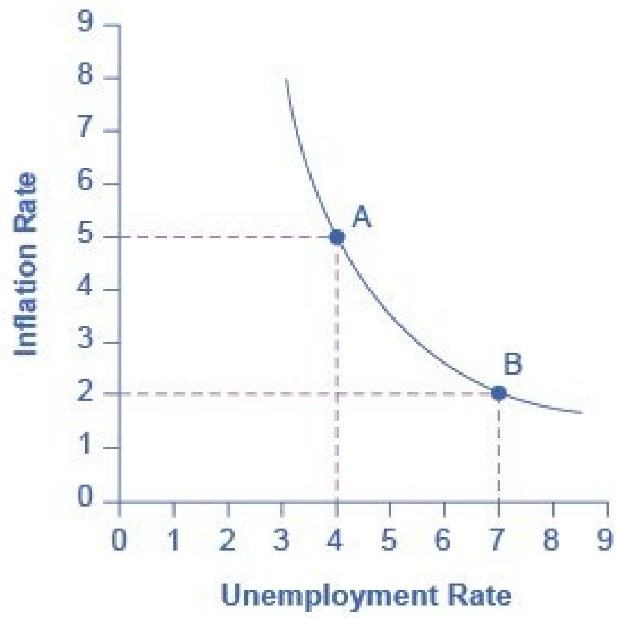
Phillips Curve Background



Recall the different zones in the AS curve.

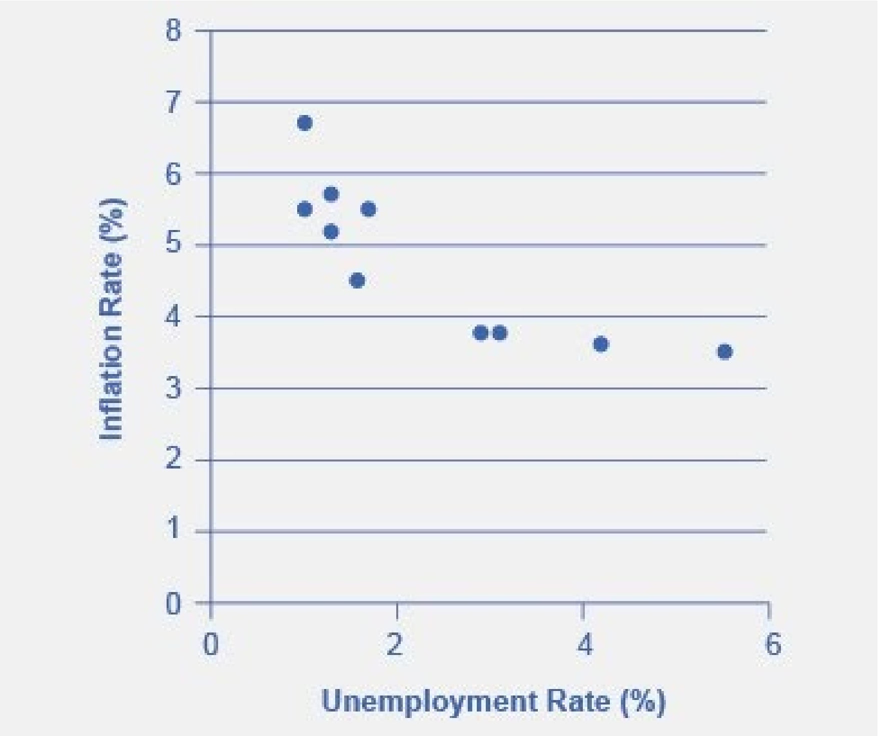
Price pressures differ in each zone.

A Simple Keynesian Phillips Curve: Tradeoff between Unemployment and Inflation



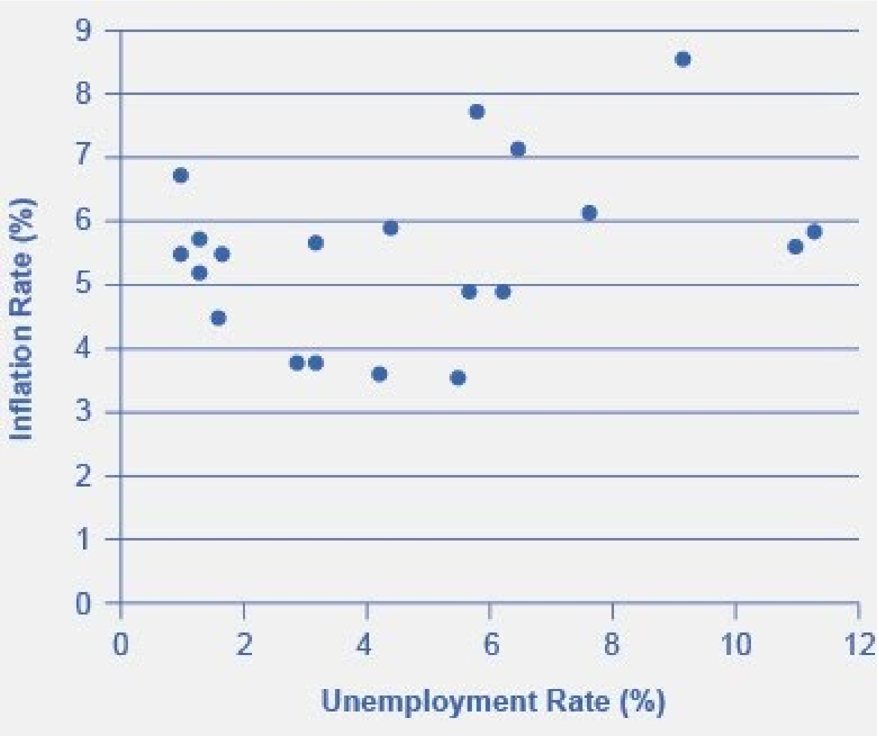
- A Phillips curve illustrates a tradeoff between the unemployment rate and the inflation rate.
- Point A: 5% inflation rate and a 4% unemployment rate.
- Point B: The government attempts to reduce inflation to 2%, but then it experiences a rise in unemployment to 7%.

The Phillips Curve from 1960–1969



- This chart shows the negative relationship between unemployment and inflation.

U.S. Phillips Curve, 1960–1979



- The tradeoff between unemployment and inflation appeared to break down during the 1970s
    - interpretation: the Phillips Curve shifted out to the right.

Keynesian Policy for Fighting Unemployment and Inflation

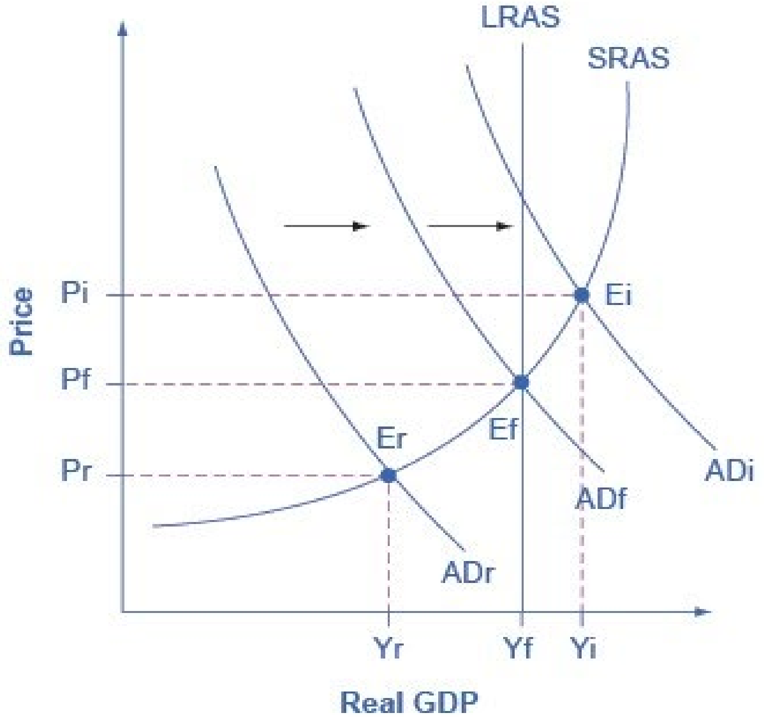
- Keynesian macroeconomics argues that the solution to a recession is expansionary fiscal policy.

- **Expansionary fiscal policy** - tax cuts or increases in government spending designed to stimulate aggregate demand and move the economy out of recession.

- When the economy is operating above potential GDP, unemployment is low, but inflationary rises in the price level are a concern.
    - The Keynesian response would be contractionary fiscal policy, using tax increases or government spending cuts to shift AD to the left.
    - The result would be downward pressure on the price level, but very little reduction in output or very little rise in unemployment.

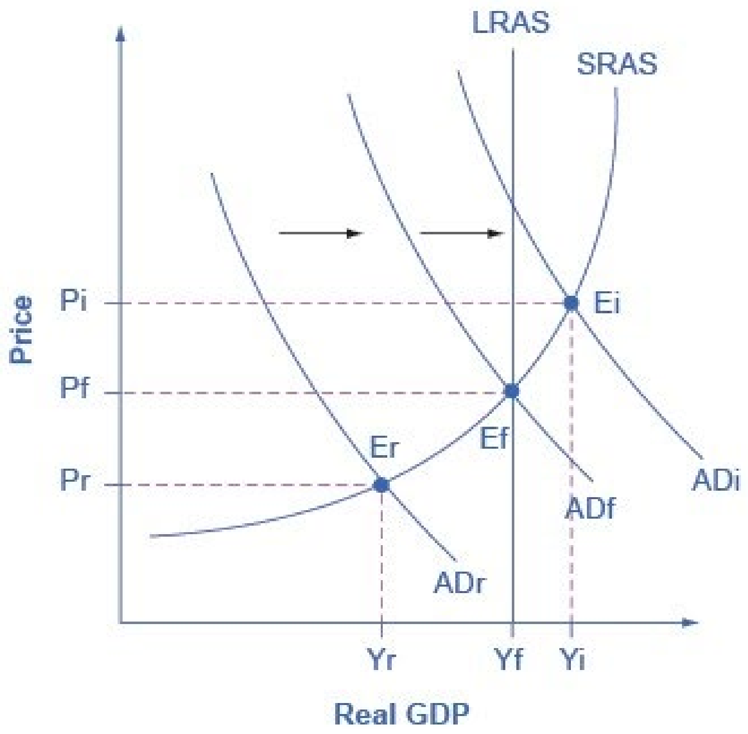
- **Contractionary fiscal policy** - tax increases or cuts in government spending designed to decrease aggregate demand and reduce inflationary pressures

Fighting Recession with Keynesian Policy



- Consider an economy in recession at equilibrium at E_r,
  - then the Keynesian response would be to enact a policy to shift aggregate demand to the right from AD_r toward AD_f.
    - for example: increase G or cut Tx

Fighting Inflation with Keynesian Policy



- Consider an economy experiencing inflationary pressures at equilibrium at E_i,
  - the Keynesian response would be to enact a policy response to shift aggregate demand to the left, from AD_i toward AD_f.
    - for example, cut G or increase Tx

25.4 The Keynesian Perspective on Market Forces

- Controversy has simmered over the extent to which government should play an active role in managing the economy.

- Some supporters of Keynesian economics advocated a high degree of government planning in all parts of the economy.

- However, Keynes was careful to separate the issue of aggregate demand from the issue of how well individual markets worked.

The Keynesian Perspective on Market Forces, Continued

- Keynes argued that individual markets for goods and services were appropriate and useful, but that sometimes that level of aggregate demand was just too low.
  - For example, when making their investment decisions, firms were subject to “animal spirits”.

- He also believed that, while government should ensure that overall level of aggregate demand is sufficient for an economy to reach full employment, this task did not imply that the government should attempt to set prices and wages, nor to take over and manage large corporations or entire industries directly.

END