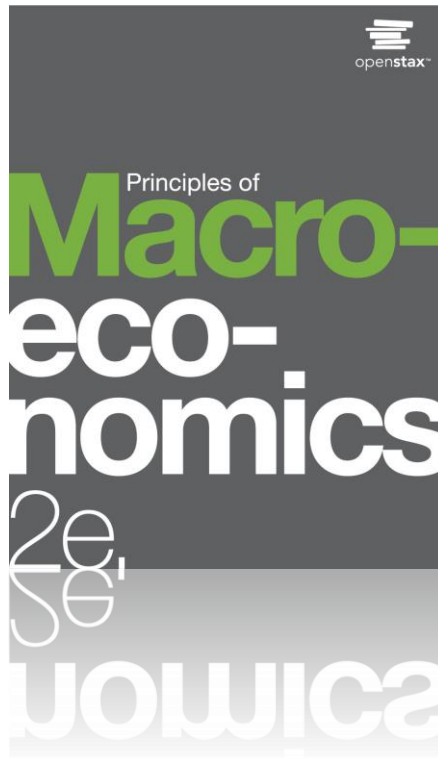


PRINCIPLES OF MACROECONOMICS 2e

Chapter 8 Unemployment

PowerPoint Image Slideshow

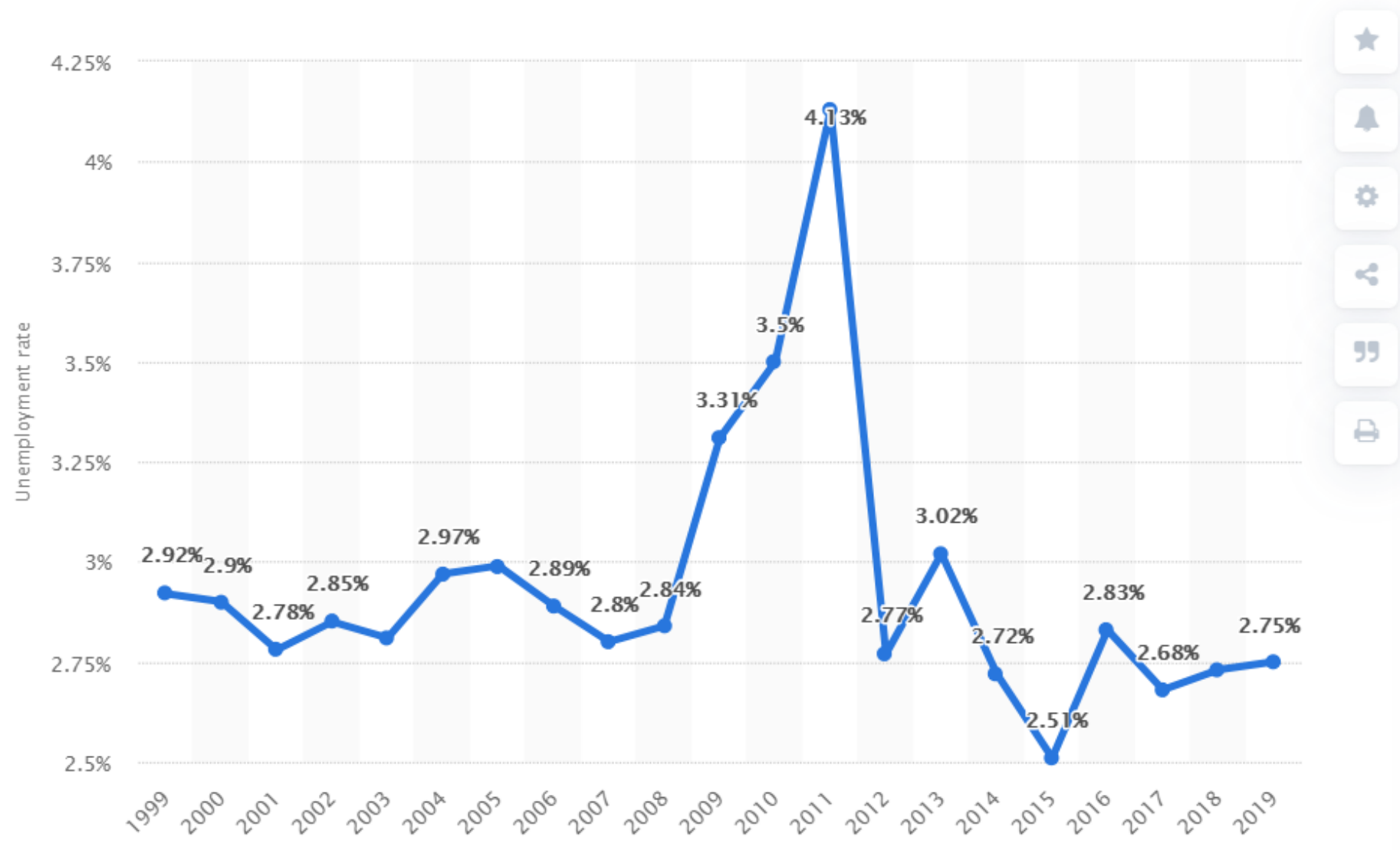


8.1 How the Unemployment Rate is Defined and Computed

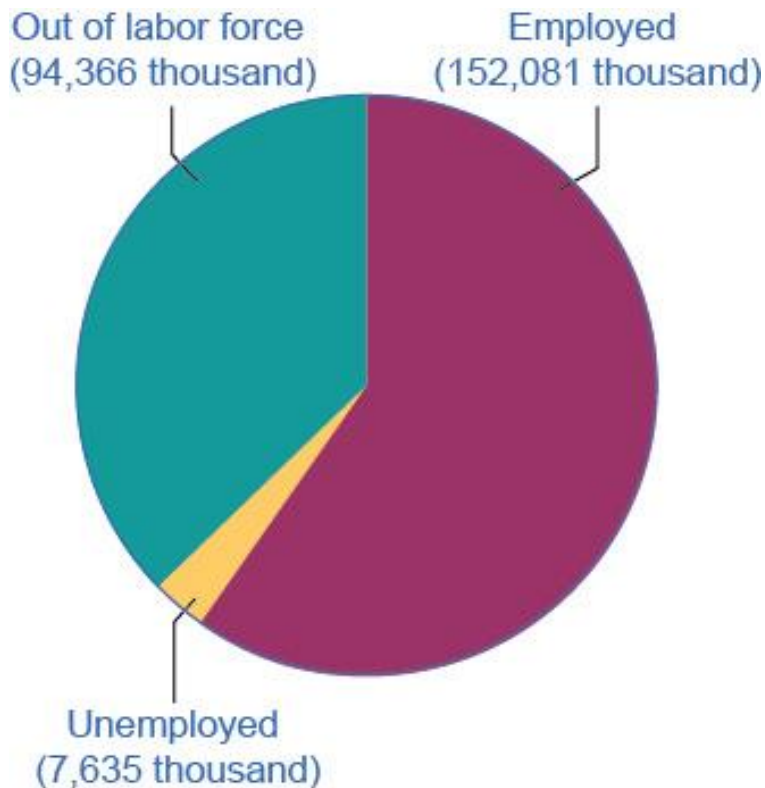
- The adult population consists of:
 - Employed - currently working for pay.
 - Unemployed - out of work and actively looking for a job.
 - **Out of the labor force** - those who are not working and not looking for work, whether they want employment or not.
 - also termed “not in the labor force”
- Labor force - the number of employed plus the unemployed.
- **Unemployment rate** - the percentage of adults who are in the labor force and thus seeking jobs, but who do not have jobs.

$$\text{Unemployment rate} = \frac{\text{Unemployed people}}{\text{Total labor force}} \times 100$$

Guatemala: Unemployment rate from 1999 to 2019



Employed, Unemployed, and Out of the Labor Force Distribution of Adult Population 16 and older), January 2017



- The total adult, working-age population in January 2017 was 254.1 million.
- Out of this total population, 152.1 million were classified as employed, and 7.6 million were classified as unemployed.
- The remaining 94.4 million were classified as out of the labor force.
- As you will learn, however, this seemingly simple chart does not tell the whole story.
- Discussion Question: What is the unemployment rate?

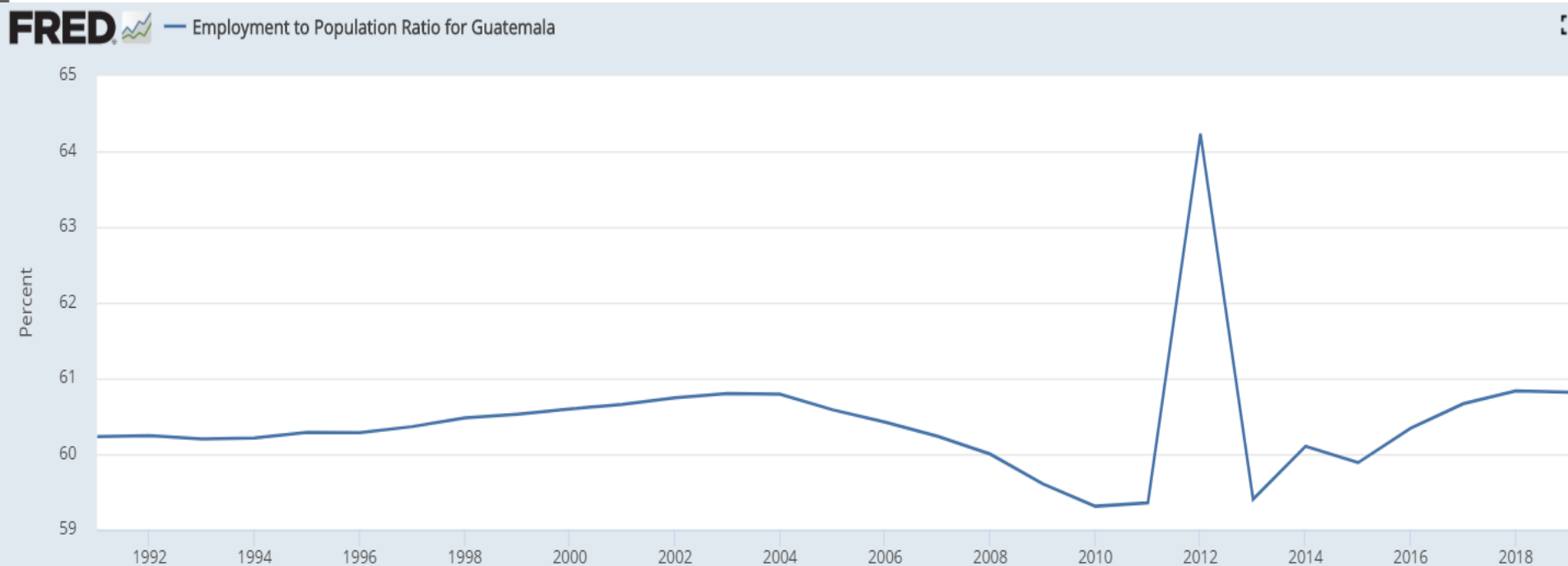
Hidden Unemployment

- “Hidden unemployment” - people who are mislabeled in the categorization of employed, unemployed, or out of the labor force.
 - Part-time or temporary workers looking for full-time or permanent work.
 - **Underemployed** - individuals who are employed in a job that is below their skills.
 - **Discouraged workers** - those who have stopped looking for employment due to the lack of suitable positions available.

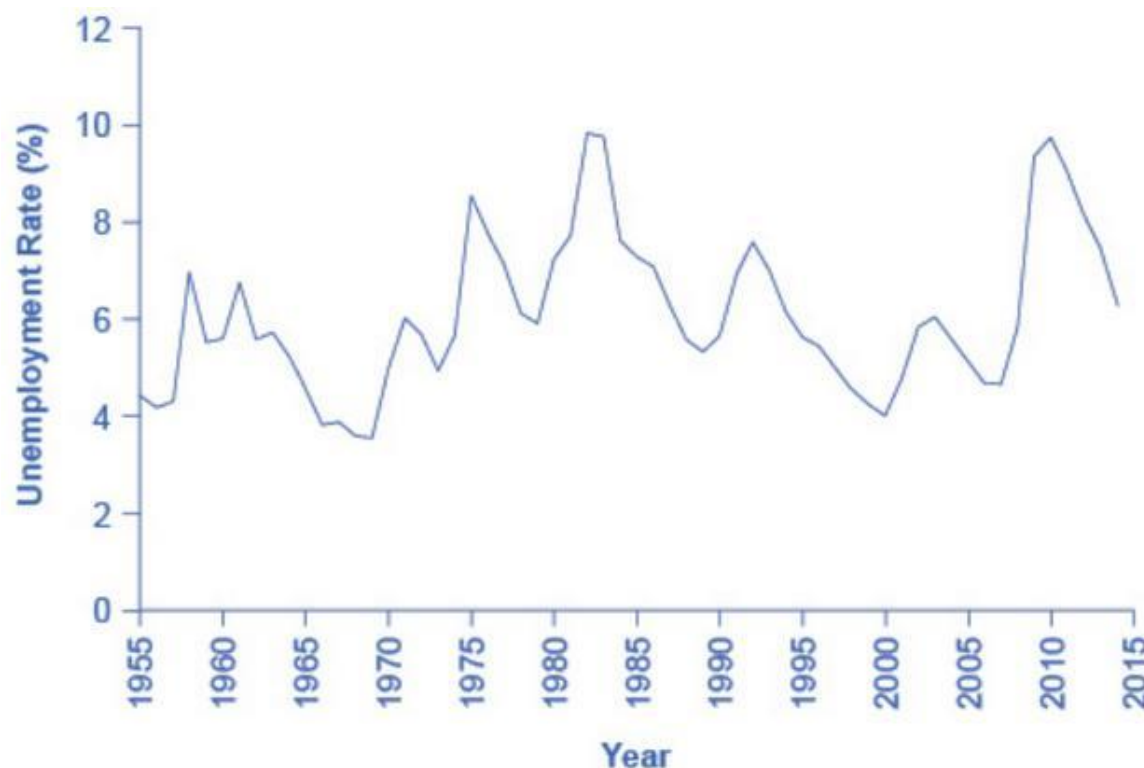
Labor Force Participation Rate

- **Labor force participation rate** - the percentage of adults in an economy who are either employed or who are unemployed and looking for a job.

$$\text{Labor force participation rate} = \frac{\text{Total labor force}}{\text{Total adult population}} \times 100$$

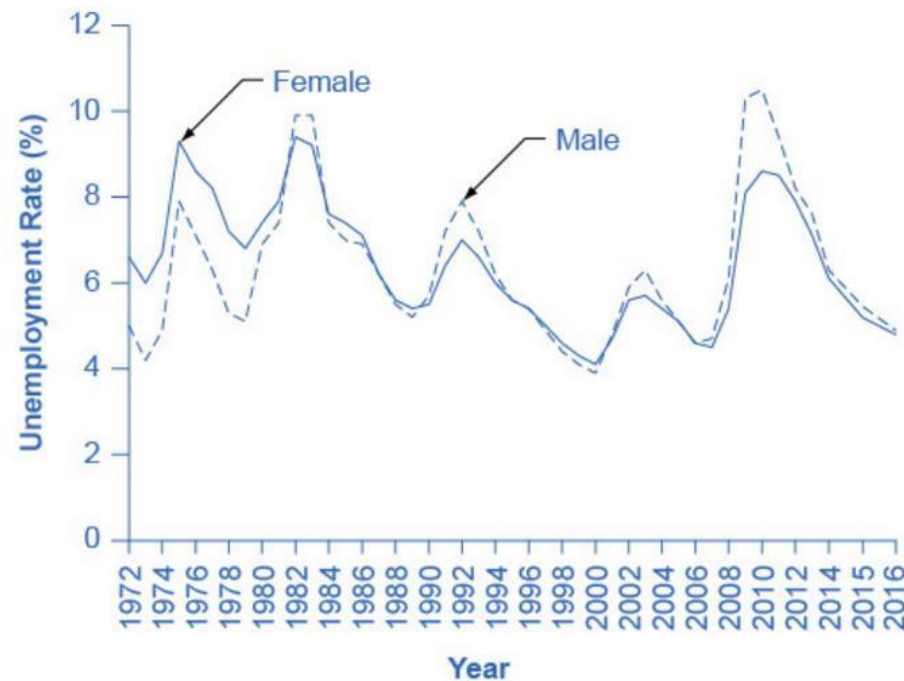


8.2 Patterns of Unemployment



- The U.S. unemployment rate moves up and down as the economy moves in and out of recessions.
- However, over time, the unemployment rate seems to return to a range of 4% to 6%.
- There does not seem to be a long-term trend toward the rate moving generally higher or generally lower. (Source: Federal Reserve Economic Data (FRED) <https://research.stlouisfed.org/fred2/series/LRUN64TTUSA156S0>)

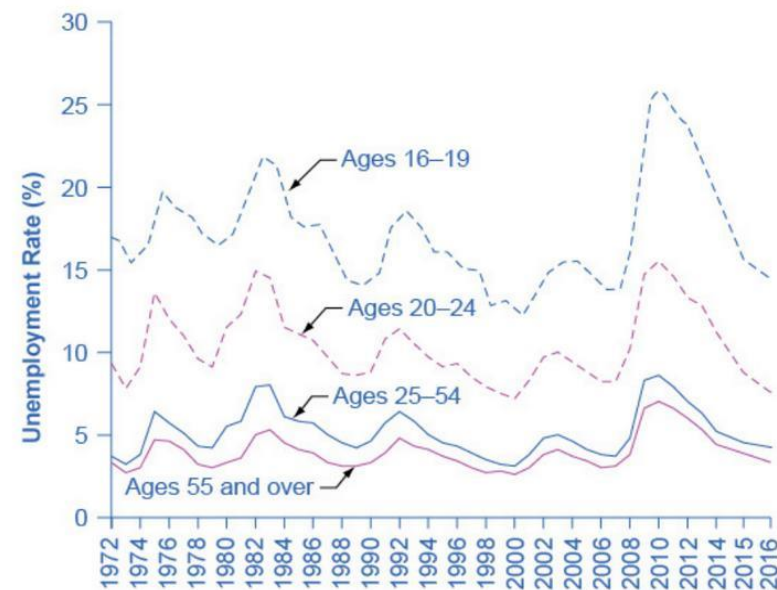
Unemployment Rates by Group - Gender



(a) Unemployment rates by gender

- Unemployment rates for men used to be lower than unemployment rates for women.
- In recent decades, the two rates have been very close, often with the unemployment rate for men somewhat higher. (Source: www.bls.gov)

Unemployment Rates by Group - Age



☆ Youth Unemployment Rate for Guatemala (SLUEM1524ZSGTM)

DOWNLOAD

Observation:
2019: 4.98500 (+ more)
Updated: Apr 10, 2020

Units:
Percent,
Not Seasonally Adjusted

Frequency:
Annual

1Y | 5Y | 10Y | Max

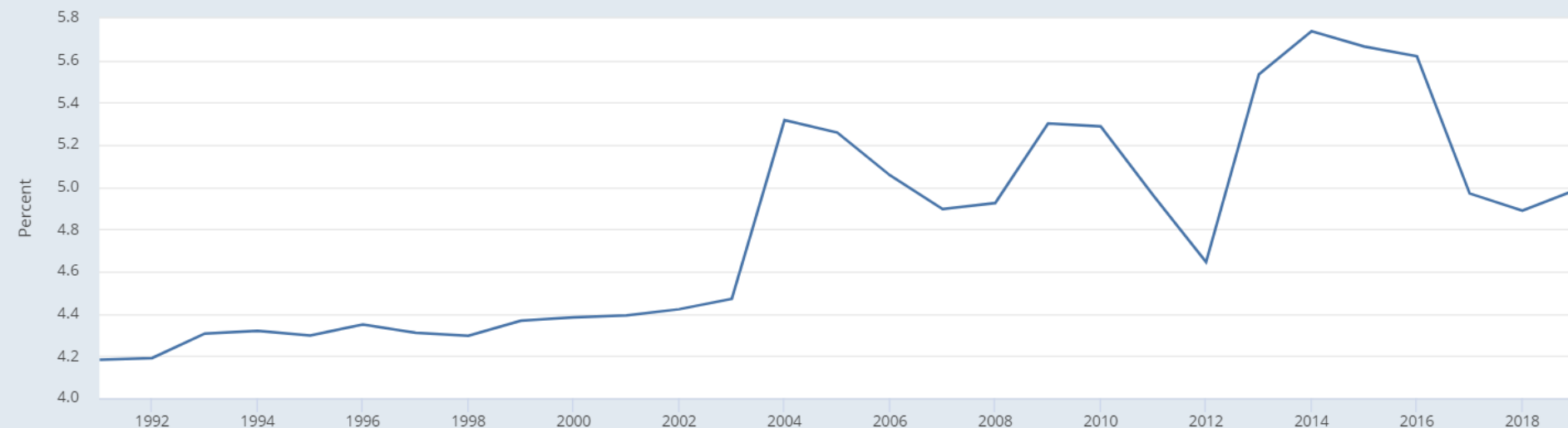
1991-01-01

to

2019-01-01

EDIT GRAPH

FRED — Youth Unemployment Rate for Guatemala

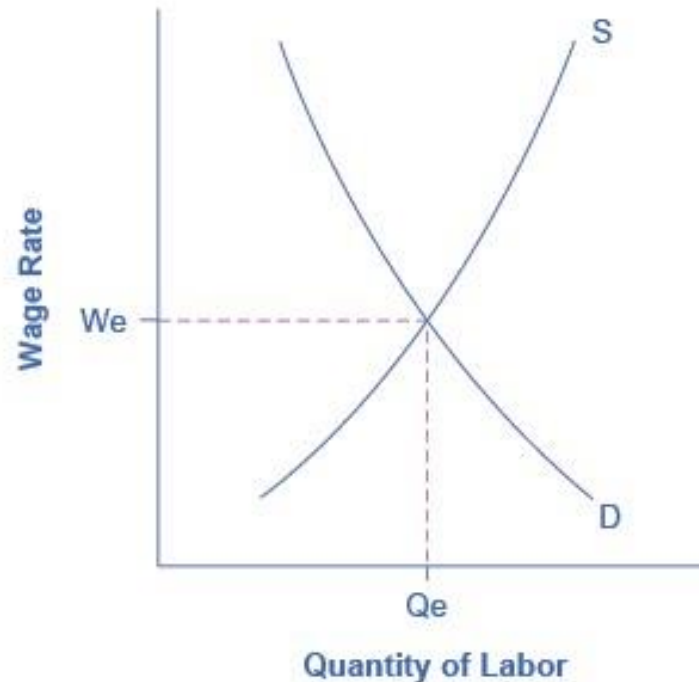


8.3 What Causes Changes in Unemployment over the Short Run



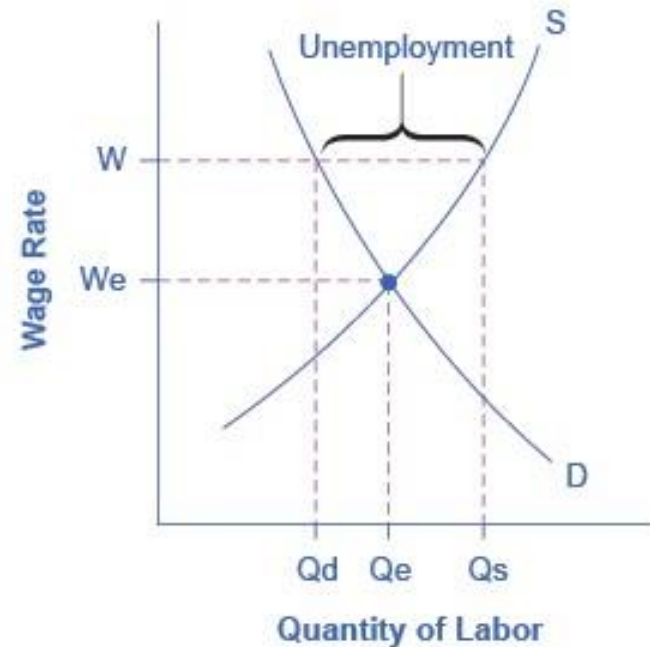
- **Cyclical unemployment** - unemployment closely tied to the business cycle, like higher unemployment during a recession.
- From the standpoint of the supply-and-demand model of competitive and flexible labor markets, unemployment represents something of a puzzle.

Unemployment and Equilibrium in the Labor Market



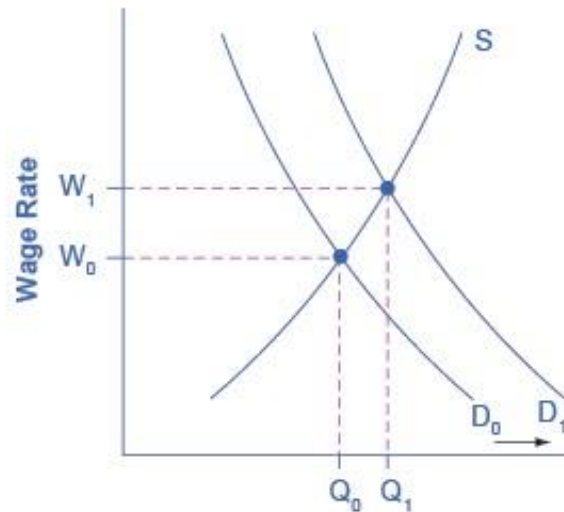
- In a labor market with flexible wages, the equilibrium will occur at wage W_e and quantity Q_e ,
- Here the number of people who want jobs (shown by S) equals the number of jobs available (shown by D).

Sticky Wages in the Labor Market



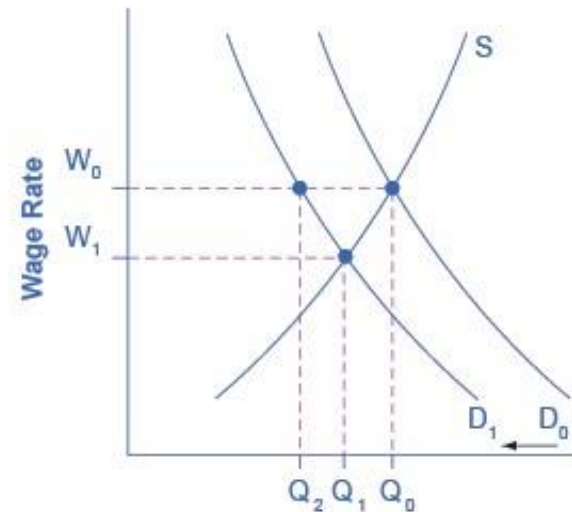
- Because the wage rate is stuck at W , above the equilibrium, the number of those who want jobs (Q_s) is greater than the number of job openings (Q_d).
- The result is unemployment, shown by the bracket in the figure.

Rising Wage and Low Unemployment: Where Is the Unemployment in Supply and Demand?



Quantity of Labor

(a) Rising demand for labor, wages rise

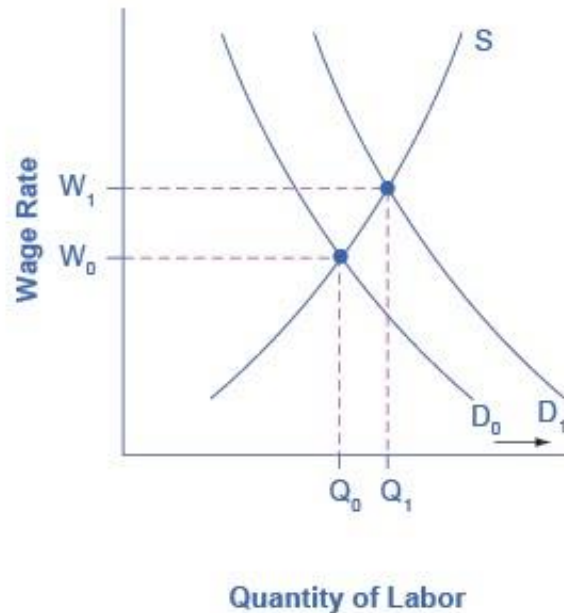


Quantity of Labor

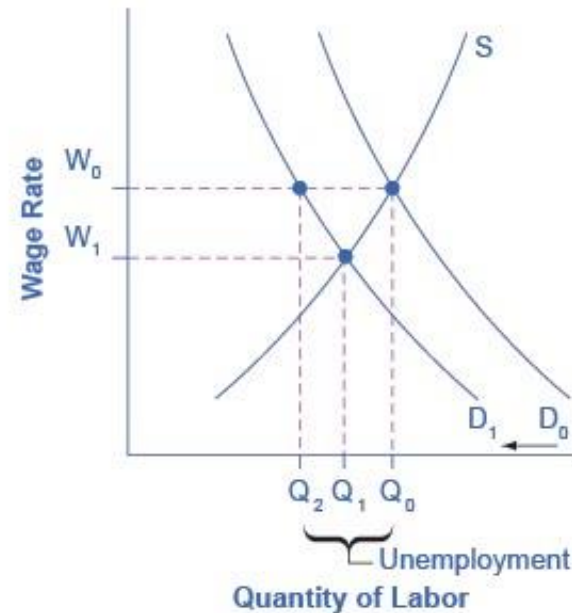
(b) Falling demand for labor, sticky wages, and unemployment

- (a) In a labor market where wages are able to rise, an increase in the demand for labor from D_0 to D_1 leads to an increase in equilibrium quantity of labor hired from Q_0 to Q_1 and a rise in the equilibrium wage from W_0 to W_1 .

Rising Wage and Low Unemployment: Where Is the Unemployment in Supply and Demand?



(a) Rising demand for labor, wages rise



(b) Falling demand for labor, sticky wages, and unemployment

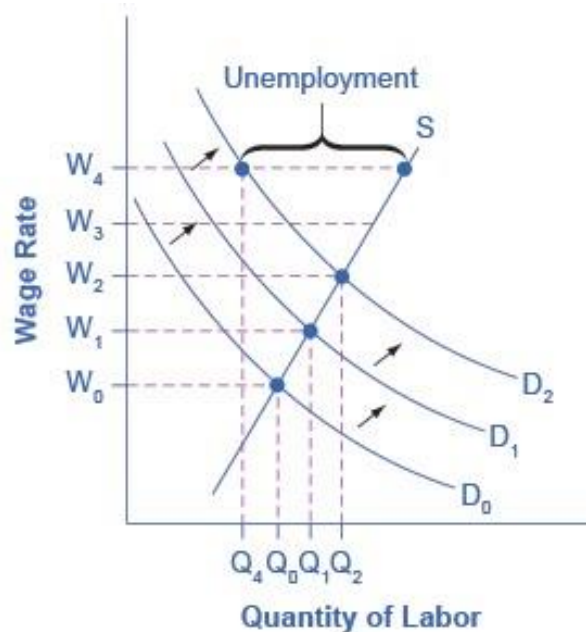
- (a) In a labor market where wages do not decline, a fall in the demand for labor from D_0 to D_1 leads to a decline in the quantity of labor demanded at the original wage (W_0) from Q_0 to Q_2 . These workers will want to work at the prevailing wage (W_0), but will not be able to find jobs.

8.4 What Causes Changes in Unemployment over the Long Run

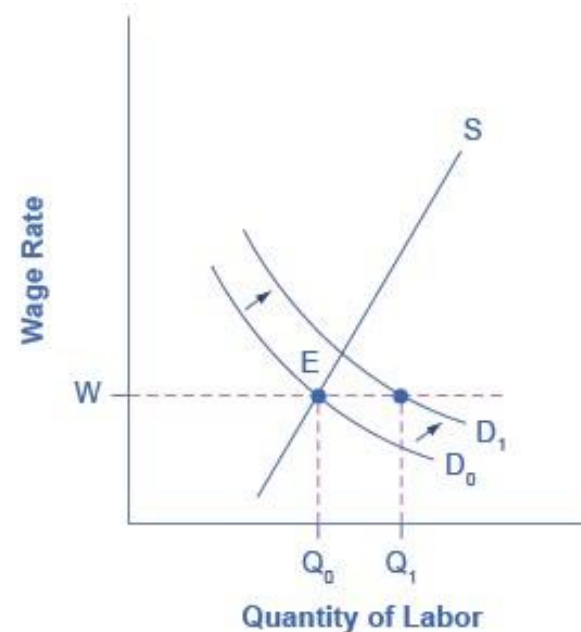


- **Natural rate of unemployment** - the unemployment rate that would exist in a growing and healthy economy from the combination of economic, social, and political factors that exist at a given time.
 - **Frictional unemployment** - unemployment that occurs as workers move between jobs.
 - **Structural Unemployment** - unemployment that occurs because individuals lack skills valued by employers.
- Economists consider the economy to be at full employment when the actual unemployment rate is equal to the natural unemployment rate.

Productivity Shifts and the Natural Rate of Unemployment



(a) Productivity rises, and then stops rising



(b) Productivity doesn't change, and then rises

- a)
- Productivity is rising, increasing the demand for labor. Employers and workers become used to the pattern of wage increases.
 - Then productivity suddenly stops increasing.
 - The expectations of employers and workers for wage increases do not shift immediately, so wages keep rising as before.
 - However, the demand for labor has not increased, so at wage W_4 , unemployment exists where the quantity supplied of labor exceeds the quantity demanded.

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