Employment and Unemployment

What kind of job market will you enter when you graduate?

The class of 2014 had a tough time:

In July 2014, 10 million Americans wanted a job but couldn't find one and 8 more had given up looking for a full-time job and taken a part-time job

Employment and Unemployment

Why Unemployment Is a Problem

- Lost incomes and production
- Lost human capital

Where Do the Numbers Come from?

Current Population Survey

The U.S. Census Bureau conducts a monthly population survey to determine the status of the U.S. labor force

Population groups:

- The **working-age population**—the number of people aged 16 years and older who are not in jail, hospital, or some other institution
- People under 16 years of age

Labor Force

The working-age population is divided into two groups:

- People in the labor force
- People not in the labor force

Labor force = *employed workers* + *unemployed workers*

Unemployment Status Definition

To be counted as unemployed, a person must be in one of the following three categories:

- Without work but has made specific efforts to find a job within the previous four weeks
- Waiting to be called back to a job from which he or she has been laid off
- Waiting to start a new job within 30 days

Categories of Labor Force

In June 2014:

- Population: **318 million**
- Working-age population: **248 million**
- Labor force: **156 million**
- Employed: **146.3 million**
- Unemployed: **9.7 million**

Labor Market Indicators

- The unemployment rate
- The employment-to-population ratio
- The labor force participation rate

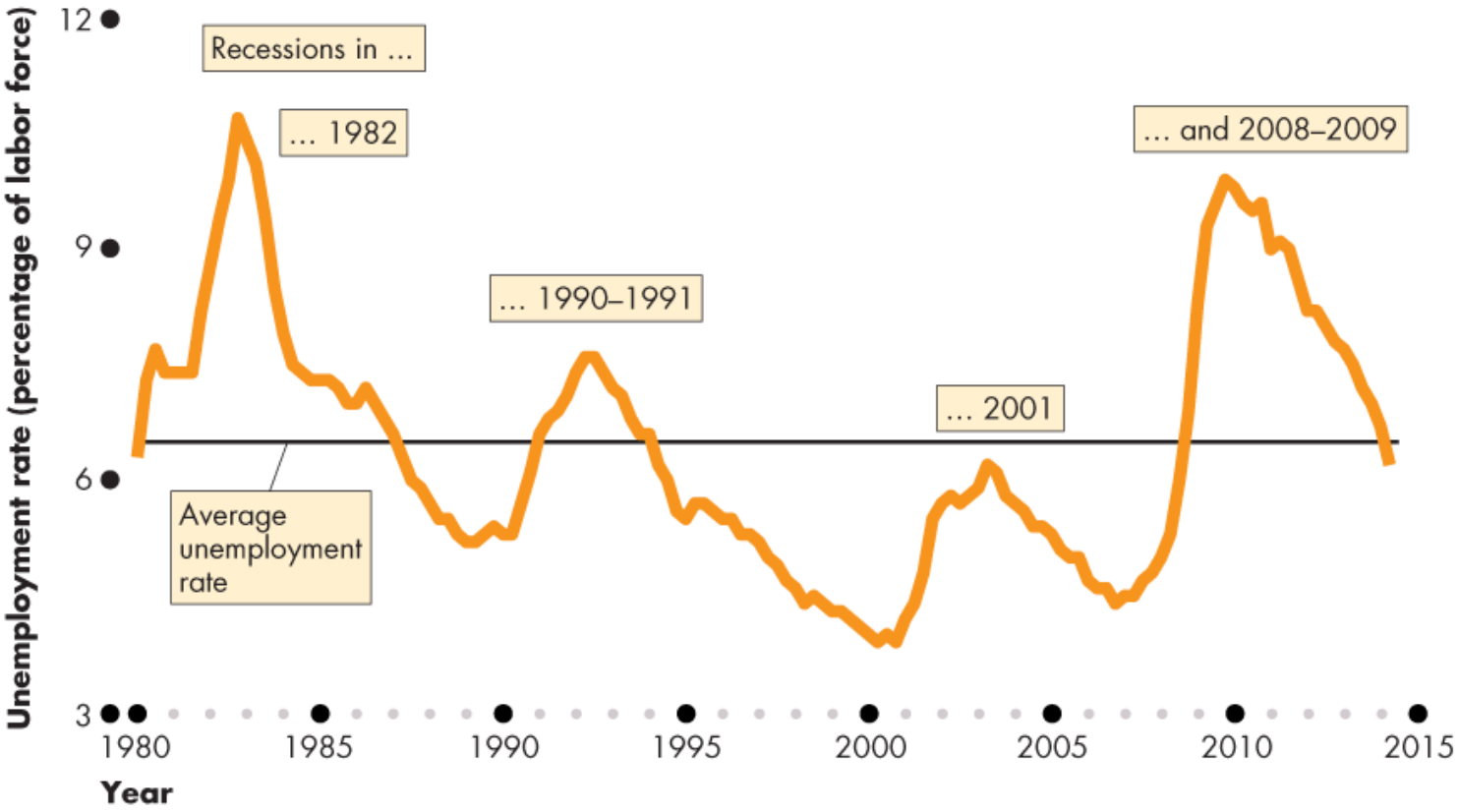
The Unemployment Rate

The percentage of the labor force that is unemployed:

$$u_t = \frac{\text{number of people unemployed}_t}{\text{number of people in the labor force}_t} \times 100$$

$$u_{june14} = \frac{9.7 \text{ million}}{156 \text{ million}} \times 100 = 6.2\%$$

The Unemployment Rate



Employment-to-Population Ratio

Percentage of working-age population with jobs:

$$EPR_t = \frac{\text{people employed}_t}{\text{working age population}_t} \times 100$$

$$EPR_{june14} = \frac{146.3 \text{ million}}{248 \text{ million}} \times 100 = 59\%$$

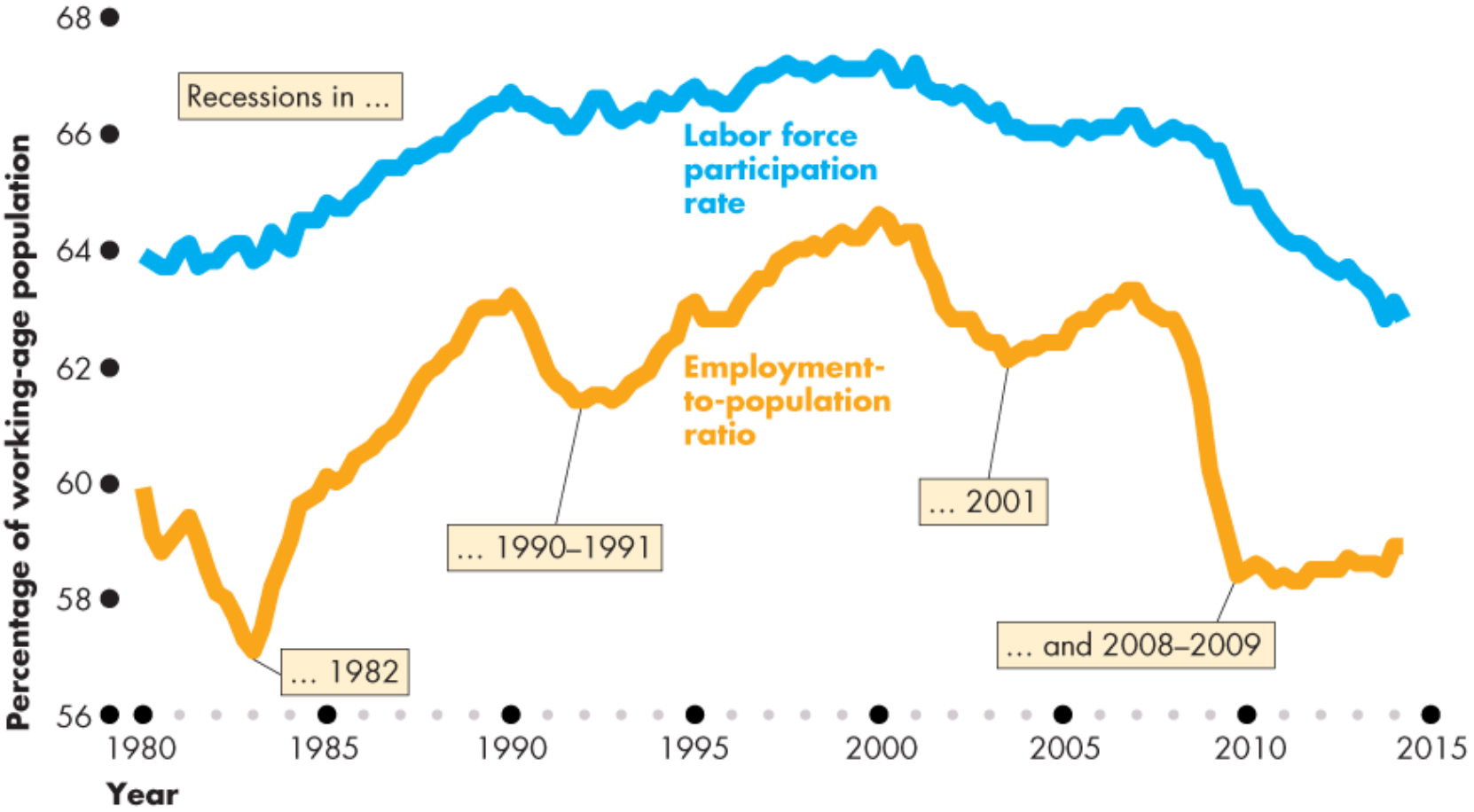
Labor Force Participation Rate

Percentage of the working-age population who are in labor force:

$$LFPR_t = \frac{\text{labor force}_t}{\text{working age population}_t} \times 100$$

$$LFPR_{june14} = \frac{156 \text{ million}}{248 \text{ million}} \times 100 = 62.9\%$$

Labor Market Indicators



Types of Unemployment

- Frictional unemployment
- Structural unemployment
- Cyclical unemployment

Frictional Unemployment

Unemployment that arises from normal labor market turnover

- The creation and destruction of jobs requires that unemployed workers search for new jobs
- Increases in the number of people entering and reentering the labor force and increases in unemployment benefits raise frictional unemployment
- Frictional unemployment is a permanent and healthy phenomenon of a growing economy

Structural Unemployment

Unemployment created by changes in technology and foreign competition that change the skills needed to perform jobs or the locations of jobs

Cyclical Unemployment

Cyclical unemployment *is higher in recessions and lower in booms*

- A worker who is laid off because the economy is in a recession and is then rehired when the expansion begins experiences cyclical unemployment

Natural Unemployment

Unemployment that arises from frictions and structural change when there is no cyclical unemployment

Natural unemployment = frictional + structural unemployment

The **natural unemployment rate** is natural unemployment as a percentage of the labor force

Unemployment and Full Employment

Full employment *is defined as the situation in which the unemployment rate equals the natural unemployment rate*

When the economy is at full employment, there is no cyclical unemployment

Unemployment and Full Employment

The natural unemployment rate changes over time and is influenced by many factors such as:

- The age distribution of the population
- The scale of structural change
- The real wage rate
- Unemployment benefits

Full Employment and Potential GDP

Potential GDP is the quantity of real GDP produced at full employment

- Potential GDP corresponds to the capacity of the economy to produce output on a sustained basis
- Real GDP minus potential GDP is the **output gap**

Over the business cycle, the output gap fluctuates and the unemployment rate fluctuates around the natural unemployment rate

Full Employment and Potential GDP