

 **W07a: Labor Market Indicators**

- Population groups
- Definition of unemployment
- Labor market indicators
- Types of unemployment
- Full employment and potential GDP

**Readings: Ch5 pg.108-116**

**HW04: assigned 2/25, due 03/04**

© 2016 Pearson Education

---

---

---

---

---

---

---

---

 **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

© 2016 Pearson Education

---

---

---

---

---

---

---

---

 **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

© 2016 Pearson Education

---

---

---

---

---

---

---

---

## 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

© 2016 Pearson Education

---

---

---

---

---

---

---

---

## U.S. Population Categories

In June 2014:

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



© 2016 Pearson Education



---

---

---

---

---

---

---

---

## Labor Market Indicators

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

© 2016 Pearson Education

---

---

---

---

---

---

---

---

## The Unemployment Rate

The percentage of the labor force that is unemployed:

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

$$u_{\text{June14}} = \frac{9.7 \text{ million}}{156 \text{ million}} \times 100 = 6.2\%$$

© 2014 Pearson Education

---

---

---

---

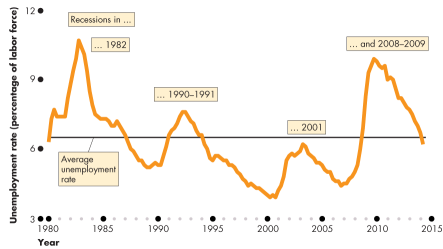
---

---

---

---

## The Unemployment Rate



© 2014 Pearson Education

---

---

---

---

---

---

---

---

## Employment-to-Population Ratio

Percentage of working-age population with jobs:

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

$$EPR_{\text{June14}} = \frac{146.3 \text{ million}}{248 \text{ million}} \times 100 = 59\%$$

© 2014 Pearson Education

---

---

---

---

---

---

---

---

## Labor Force Participation Rate

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

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

$$LFPR_{\text{June 14}} = \frac{156 \text{ million}}{248 \text{ million}} \times 100 = 62.9\%$$

© 2016 Pearson Education

---

---

---

---

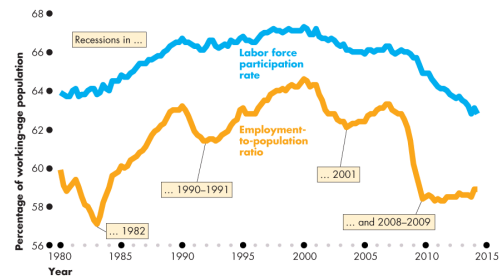
---

---

---

---

## Labor Market Indicators



© 2016 Pearson Education

---

---

---

---

---

---

---

---

## Types of Unemployment

- Frictional unemployment
- Structural unemployment
- Cyclical unemployment

© 2016 Pearson Education

---

---

---

---

---

---

---

---



## 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

© 2016 Pearson Education

---

---

---

---

---

---

---

---



## Structural Unemployment

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

© 2016 Pearson Education

---

---

---

---

---

---

---

---



## 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

© 2016 Pearson Education

---

---

---

---

---

---

---

---

## 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

© 2016 Pearson Education

---

---

---

---

---

---

---

---

## 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

© 2016 Pearson Education

---

---

---

---

---

---

---

---

## 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

© 2016 Pearson Education

---

---

---

---

---

---

---

---

## 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

© 2016 Pearson Education

---

---

---

---

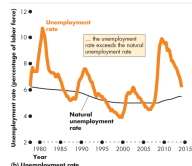
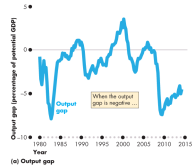
---

---

---

---

## Full Employment and Potential GDP



© 2016 Pearson Education



---

---

---

---

---

---

---

---