

## Module B. What Is the Unemployment Rate and How Is It Measured?

**Note:** This feature provides supplementary analysis for the material in Part 2 of *Common Sense Economics*.

Employment matters. Employment generates income, and income funds spending, saving, investing, and charitable giving. During periods of unemployment, people must draw down savings, withdraw investments, depend on transfer payments like unemployment compensation or welfare, reduce spending, or turn to other means to finance their daily expenses. So, it is important to know what the rate of unemployment or joblessness is and how it is measured.

### LABOR MARKET STATISTICS

The term “unemployment” is often misunderstood. It is important to note that unemployment is different from not working. Many people without a job are not seeking employment. Therefore, they are not included in the labor force. Some are retired. Others are working in their own households or attending school. Still others are not working because they are ill or disabled. Although many of these people are quite busy, they are not included in the labor force because they are neither employed nor seeking employment.

In order to better evaluate labor market conditions, economists often focus on three important statistics: (1) the labor market participation rate, (2) the unemployment rate, and (3) the employment population ratio. Let’s take a closer look at each.

The **labor force participation rate** is the number of persons in the civilian labor force (including both the employed and unemployed) as a percentage of the civilian non-institutionalized population 16 years of age and over. To calculate this percentage simply divide the total civilian labor force by the total number in the civilian non-institutionalized population, multiply by 100 and express as a percentage. Consider the data for 2015 presented in Table 1 below. In November 2015, there were 251.7 million people in the civilian non-institutionalized population, of whom 157.3 million were in the labor force. Thus, the labor force participation rate was 62.5 percent ( $157.3/251.7*100$ ).

The labor force includes both employed and unemployed workers. In order to be classified as unemployed, one must be either (1) not working and seeking employment or (2) on layoff from a previous job and waiting to return. Part-time as well as full-time workers are counted as

employed members of the labor force. The rate of unemployment is the number of persons unemployed expressed as a percentage of the labor force. In November 2015, the rate of unemployment in the United States was 5 percent (7.9 million out of a labor force of 157.3 million).

In addition to the rate of unemployment, many economists also use the **employment/population ratio**—the number of persons employed expressed as a percentage of the population sixteen years old and over—to monitor labor market conditions. Both the number of people employed and the population age sixteen and over are well defined and readily measurable. Their measurement does not require a subjective judgment as to whether a person is actually “available for work” or “actively seeking employment.” Thus, some believe that the employment/population ratio is a more objective measure of job market conditions than the rate of unemployment. In November 2015, the employment/population ratio was 59.3 percent ( $149.4/251.7*100$ ).

**Table 1: Labor Market Data, November 2015**

	<b>2015</b> (In millions)
Civilian Non-Institutional Population (Age 16 and over)	251.7
Not in Civilian Labor Force	94.4
Civilian Labor Force	157.3
Employed	149.4
Unemployed	7.9
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Labor Force participation rate	62.5 percent
Unemployment rate	5.0 percent
Employment/population ratio	59.3 percent

Source: <http://www.bls.gov/>

Each month, the Bureau of Labor Statistics (BLS) contacts a sample of 50,000 households that reflects the population characteristics of the United States. Specially trained interviewers pose identical questions designed to determine whether each of the approximately 90,000 adults in these households is employed, unemployed, or not in the labor force. This survey provides a comprehensive set of information on the employment experience of the U.S. population, classified by age, sex, race, and a variety of other characteristics. The BLS also surveys approximately 150,000 businesses and government agencies, representing approximately

390,000 individual work sites. Each month, data from these sources are used to derive the unemployment rate and other key labor market statistics.

### **DYNAMIC CHANGE AND THREE DIFFERENT TYPES OF UNEMPLOYMENT**

Although some unemployment is consistent with economic efficiency, this is not always the case. High rates of unemployment generally reflect counterproductive policies that undermine the operation of the labor market and/or business cycle conditions that reduce the demand for labor. To clarify matters, economists divide unemployment into three categories: frictional, structural, and cyclical. Let us take a closer look at each of these three classifications.

**Frictional Unemployment.** Unemployment that is caused by dynamic changes that alter labor market conditions is called frictional unemployment. It occurs because (1) employers are not fully aware of all available workers and their job qualifications and (2) available workers are not fully aware of the jobs being offered by employers. In other words, the main cause of frictional unemployment is imperfect information.

We live in a dynamic world. As new products are introduced and new technologies developed, some businesses expand while others contract. This process results in the creation of some new jobs and destruction of others. Similarly, some employees will quit their jobs in order to pursue more attractive employment, additional education, or other opportunities. Thus, employers are constantly “shopping” for better employees and workers are constantly searching for better employment alternatives. In a world of imperfect information, this search process will result in frictional unemployment. It is important to note that there is a positive side to frictional unemployment. The job search process helps pair individuals and their skills, talents, education and preferences with the employers that value them the most. In turn, improvements in the matches between the skills of employees and the job requirements of employers will lead to both higher productivity and earnings.

**Structural Unemployment.** The structural characteristics of the labor market can push the unemployment rate upward. For example, as youthful workers become a larger share of the labor force, the unemployment rate will tend to rise because these workers do more job shifting and move back and forth between schooling and the labor force than older workers. Thus, they experience more unemployment and, as a result, they will increase the overall unemployment rate when they are a larger share of the labor force.

Institutional factors can also make it difficult for some workers to find jobs. For example, minimum-wage legislation may push the wages of low-skilled workers above their productivity levels and thereby severely retard the job opportunities available to them. High unemployment benefits reduce the opportunity cost of unemployment and may also lead to higher levels of structural unemployment.

It is not always easy to distinguish between frictional and structural unemployment. The key point is that structural unemployment reflects characteristics of the labor force or the economy that make it difficult to match the available jobs with available workers.

**Cyclical Unemployment.** The unemployment rate fluctuates with the cyclical conditions of the economy. During an economic expansion, the unemployment rate will tend to decline and reach a low point during an economic boom. In contrast, unemployment will rise during a contraction and reach a high point during and immediately after a recession. Unemployment resulting from weak business conditions and economic recession is called cyclical unemployment.

During a severe recession, cyclical unemployment will be high and it will push the overall rate of unemployment to exceedingly high levels. This is what happened in the aftermath of the financial crisis during 2008-2009. The unemployment rate in 2009 was 9.2 percent, substantially higher than during recent years. By way of comparison, the unemployment rate averaged around 5 percent during 1986-2007.

## **WHY UNEMPLOYMENT MATTERS**

The unemployment rate and other labor market statistics are monitored by economists, business decision-makers, investors, financial planners, policy-makers and the media. They are important because they help gauge the overall health of a country's economy.

## Exercises

1. Indicate whether the following people are employed, unemployed or not in the labor force. Explain.
  - a. An Air-Force officer stationed in Colorado Springs, CO
  - b. A consultant who works out of her home for a medical group
  - c. A full-time student who does not work
  - d. A new college graduate looking for work
  - e. A stay-at-home dad
  - f. A waiter in Detroit who is laid off as a result of the recession
  - g. A retired grandfather

2. Calculation of Labor market indicators

Use the following September 2015 data (in millions) for the United States to calculate (a) the labor force participation rate, (b) unemployment rate, and (c) the employment/population ratio.

### September 2015 Data

Civilian Non-Institutional Population (Age 16 and over)	251.3 million
Employed	148.8
Not in labor force	94.6
Unemployed	7.9

**The answer key is available to instructors who adopt *Common Sense Economics* (St. Martin's Press). Details on how to adopt are provided at:**

**<http://commonsenseeconomics.com/adopt>**