

pinpoint the exact time a contraction or expansion begins or ends, the economy experienced approximately eight cycles of expansion and contraction over the period illustrated in Figure 4-4.

### 4.3 Unemployment

As we have already mentioned, unemployment is one important aspect of recessions. Unemployment is not just confined to recessions, however, but is a normal part of a functioning economy at all times. Labour is one of the primary resources used in producing Canada's GDP and accounts for about 70 percent of the income created from producing that GDP. Not using labour, then, represents a major loss to the economy.

#### Why Do We Care about Unemployment?

First, most people depend on labour income. We know unemployment creates personal hardship and results in lost GDP. Second, the loss of GDP when workers are unemployed can be very large and ultimately affects us all, even if we are not personally unemployed.

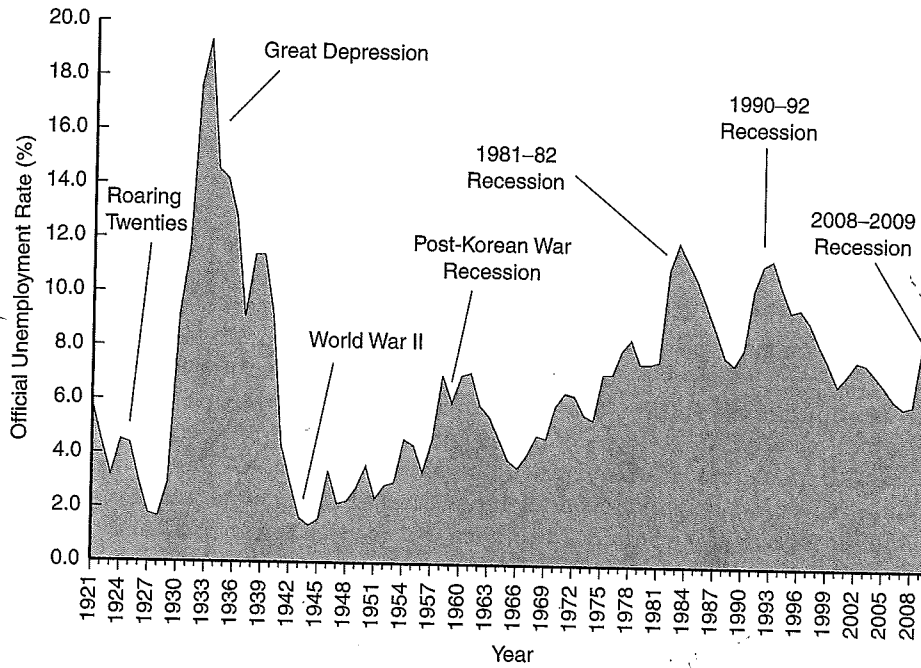
In the recession of 2009, Canada lost over 400 000 jobs. This meant that people who had been producing goods and services (such as construction workers, factory workers and so on) and the factories that they used in production were no longer making those goods and services. Idling those resources represents about \$200 billion worth of schools, houses, restaurant meals, cars, and movies that *could have been produced* but were not. (In other words, Canada was somewhere inside the production possibilities curve that we talked about in Chapter 2). It also represents a huge loss to the government in terms of lost taxes as well as a big increase in support payments for the unemployed, all of which affects even those of us who are not unemployed. In 2009, when the recession hit, the government of Canada went into a deficit of about \$54 billion, the largest such deficit on record for the federal government. It is no wonder that policy makers closely watch the unemployment figures published by Statistics Canada.

On a more personal level, being unemployed often results in hardship and failed opportunities as well as a loss of self-respect. Psychology researchers believe that being fired creates as much stress as the death of a close friend. Because of the difficulties to individuals and to society that accompany unemployment, it is very important both politically and economically to try to minimize unemployment. As many politicians have found to their regret, a declining economy at the time of an election can result in a change in government! Statistics about unemployment can never fully convey its true cost.

**HISTORICAL UNEMPLOYMENT RATES.** Figure 4-5 shows what happened to the unemployment rate over most of the 20th century. The actual data is found at the end of this chapter. The 1920s were boom years for Canada, and unemployment rates were quite low. Unfortunately, the economy rapidly reversed direction from 1929 through 1933. The highest level of unemployment recorded occurred during the Great Depression, with a staggeringly high rate of about 20 percent in 1933. While unemployment fell during the later 1930s, it never really recovered until well into the war years. In the post-war years, unemployment rates did rise, but it was not until the 1980s and 1990s that there were two major recessions and unemployment rates once again reached double digits. Unemployment in 2010 was lower than it has been for most of the last 25 years, even though we had just come through a recession.

#### Measuring Employment, Unemployment, and the Labour Force

In order to measure unemployment, Statistics Canada breaks down Canada's population of about 33.87 million people into various subgroupings. First, Statistics Canada identifies that many millions of people are too young to participate in the production of GDP, and so it defines the number of people of working age as being those 15 years of age and older,



**FIGURE 4-5**  
**Ninety Years of Unemployment**

Unemployment reached a high of almost 20 percent during the Great Depression and a low of less than 2 percent during World War II. In the past three decades, the average unemployment rate has been much higher than in the post-World War II years.

Sources: Adapted from the Statistics Canada CANSIM database, Table 282-0086 July 2007, and from the Statistics Canada publication *Historical Statistics of Canada*, Second Edition, Catalogue 11-516, 1983, Series D129, D132, D233.

which (in February 2010) represents about 27.5 million people (this group is called the “**working age population**”). This group is further subdivided as shown in Figure 4-6.

Figure 4-6 presents the working age population of individuals 15 years of age or older broken into three subgroups: (1) employed, (2) unemployed, and (3) not in the labour force.

Those who have work of any sort (as little as one hour per week) are considered **employed**. **Unemployed** are those who are willing and able to work, and who are actively looking for work. The **labour force** is the total of these two groups—the number of employed plus the number of unemployed. Anyone 15 years of age or older who is neither unemployed or employed is referred to as “not in the labour force.” This group includes people like homemakers, full-time students, and retired persons.

In February 2010, the labour force amounted to 18.46 million people: 16.95 million were employed and 1.519 million were unemployed. To calculate the unemployment rate, we simply divide the number of unemployed by the number of people in the labour force and multiply by 100:

$$\text{Unemployment rate} = \frac{\text{Number of unemployed}}{\text{Labour force}} \times 100$$

In February 2010, the unemployment rate was  $(1.519 \div 18.4) \times 100 = 8.2$  percent.

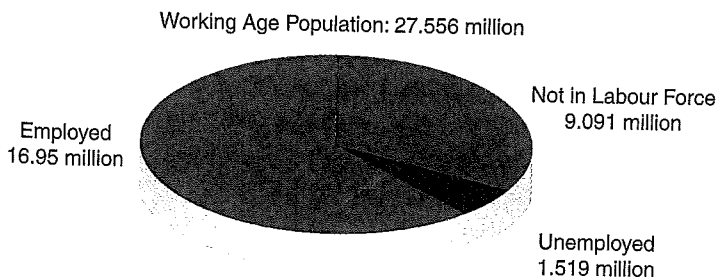
**THE ARITHMETIC DETERMINATION OF UNEMPLOYMENT.** Knowing the rate of unemployment at a given moment does not really tell us why people are unemployed. During any single year, more than 1.3 million of the 18 million people in the labour force

**Working age population** The number of people 15 years of age and older.

**Employed** The number of adults aged 15 years or older who have work.

**Unemployed** The total number of adults aged 15 years or older who are willing and able to work, and who are actively looking for work but have not found a job.

**Labour force** The total number of adults aged 15 years or older who either have a job or are looking and available for a job; the number of employed plus the number of unemployed.



**FIGURE 4-6**  
**Composition of the Working Age Population and Unemployment**

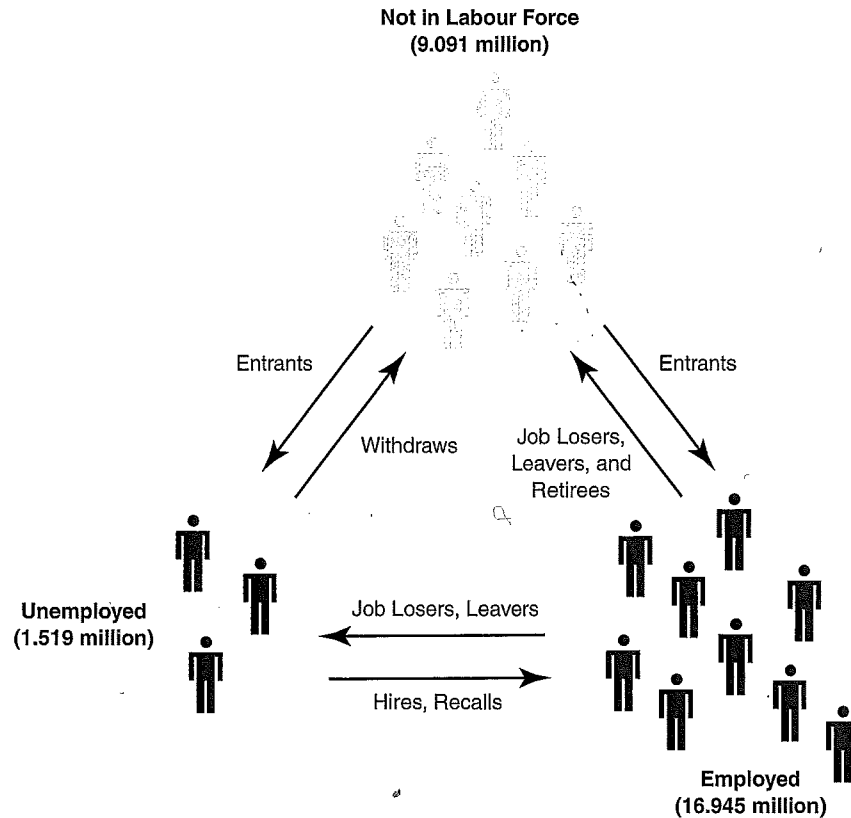
The working age population of 27,556 million can be broken down into three groups: people who are employed, those who are unemployed, and those not in the labour force. The blue and orange areas represent the labour force—those employed and unemployed. The numbers are for February 2010.

Source: Adapted from the Statistics Canada CANSIM database, Table 282-0001.

**FIGURE 4-7**  
**Understanding the Working Age Population and Unemployment**

The working age population is in constant flux among the three subgroups. People are moving among the various groups as they move through their working life and as they enter and leave the workplace for a variety of reasons.

Source: Adapted from the Statistics Canada CANSIM database, Table 282-0001.



will either change jobs or take new jobs. In every single month, about 785 000 workers will quit, be laid off (told that they will be rehired later), or be permanently fired; another 940 000 will go to new jobs or return to old ones. In the process, more than 3 million persons will report themselves unemployed at one time or another during any single year. Because there are continually people in transition among employment, unemployment, and not being in the labour force at any point in time, the relationship between the unemployment rate and employment is not simple. People leaving their job are shown in Figure 4-7 as two arrows pointing away from the employed group, toward the pool of unemployed, or out of the labour force entirely. In the same way, people “not in the labour force” or unemployed have two choices about where to go.

It is possible that people may choose to leave the labour force when they leave their jobs, such as when people quit their jobs to go back to school. In this case, it would appear that the unemployment rate has risen slightly, even though the number of people unemployed has remained the same. In the same way, it is possible for both employment and the unemployment rate to rise. This has happened in the past at the ends of recessions. People who have not been looking for work during the recession notice that employment prospects are rising, and so they begin to search for work. Those that find work may go directly from being “not in the labour force” to being employed, while those that do not immediately find work now count as unemployed. The latter two groups are entrants to the labour force.

The number of unemployed can be expressed as some number at any given point in time. It is a stock of individuals who do not have a job but are actively looking for one. The number of employed can be expressed the same way. The number of people departing jobs, whether voluntarily or involuntarily, is a flow, as is the number of people finding jobs.

**CATEGORIES OF INDIVIDUALS WHO ARE WITHOUT WORK.** Once defined as unemployed, unemployed workers now fall into one of four categories on the basis of their transition from one of the other two categories:

1. A **job loser**, whose unemployment was involuntarily terminated or who was laid off.
2. A **job leaver**, who voluntarily ended employment.
3. A **re-entrant**, who has worked a job before but has been out of the labour force.
4. A **new entrant**, who has never worked at a job.

**Job loser** One whose employment was involuntarily terminated or who was laid off.

**Job leaver** One who voluntarily ended employment.

**Re-entrant** One having worked a job before but having been out of the labour force.

**New entrant** One who has never worked at a job.