

Unemployment



Assessment Objectives

Specific Expectations	
1.C	Define the labor force, the unemployment rate, and the labor force participation rate.
1.C	Explain how changes in employment and the labor market affect the unemployment rate and the labor force participation rate.
1.C	Calculate the unemployment rate and the labor force participation rate.
1.D	Define the limitations of the unemployment rate.
1.E	Define the types of unemployment and the natural rate of unemployment.
1.E	Explain changes in the types of unemployment.

Unemployment

- **Unemployment** refers to people of working age who are actively looking for a job but who are not employed.
 - ▶ The unemployment rate is the percentage of the total labour force (TLF) that is unemployed.

$$\begin{aligned}\text{Unemployment rate} &= \frac{\text{Number of workers unemployed}}{\text{Total labor force}} \\ &= \frac{\text{Number of workers unemployed}}{\text{Unemployed} + \text{Employed}}\end{aligned}$$

- ▶ The labor force is the number of people who are employed (working) plus the number of people of working age who are unemployed (not working but seeking work).

$$\text{Labour Force} = \text{Unemployed} + \text{Employed}$$

Unemployment

- ▶ The labour force includes non-institutionalized, civilian adult population who are working part-time or full-time or that are unemployed.
- ▶ Adults who are not seeking jobs or who are engaged in other activities such as pursuing education, volunteering, travelling, or voluntarily taking time off from work are not part of the labour force.
- ▶ **Underemployment** is the condition of a worker who is technically employed, but is either over-qualified for the type of work or is working part-time when full-time work is desired.
- ▶ **Discouraged workers** are unemployed workers who gave up looking for a job, because after trying unsuccessfully to find work for some time, they became discouraged and stopped searching.
 - These people in effect drop out of the labor force

Importance of Unemployment Rate

- A country's unemployment rate is a barometer of the economy's health.
 - ▶ A high unemployment rate could be the result of either a negative macroeconomic shock, or evidence that the economy is underutilizing its resources.
 - ▶ Rising unemployment usually accompanies falling GDP and indicates that an economy is in a recession.
 - ▶ A low unemployment rate is evidence the economy is utilizing its resources more efficiently or has experience a positive economic shock. Low unemployment indicates an economy is producing close to or on its PPC.
 - ▶ Falling unemployed usually accompanies rising GDP and either a recovery from a past economic downturn or economic growth.

Labor Force Participation Rate (LFPR)

- **Labor force participation rate (LFPR)** measure the percentage of the eligible population that is participating in the labour force.

$$\text{LFPR} = \frac{\text{Total Labor Force}}{\text{Eligible Adult Population}} = \frac{\text{Employed} + \text{Unemployed}}{\text{Eligible Adult Population}}$$

- ▶ When an economy is performing well people who might have chosen not to participate are drawn to the labour market by rising wages.
- ▶ During recessions, LFPR tends to decline as unemployed workers become discouraged & give up on the job search, or those who might have joined the labour force choose to stay in school or retire early.
- ▶ An increase in LFPR may also result from more opportunities for groups that were historically discriminated against by employers.

Difficulties measuring unemployment

- The unemployment rate is one of the most widely reported measures of economic activity, used extensively as an indicator of economic performance.
 - ▶ It is difficult to obtain an accurate measurement of unemployment.
- Official statistics often underestimate true unemployment because of **hidden unemployment** arising from the following:
 - ▶ Unemployed figures include unemployed persons who are actively seeking work. This excludes “discouraged workers”.
 - ▶ Unemployment figures do not make a distinction between full-time and part-time employment. This neglects the problem of underemployment.
 - ▶ Unemployment figures make no distinction on the type of work done.
 - ▶ Unemployment figures do not include people on retraining programmes who previously lost their jobs, as well as people who retire early although they would rather be working.

Difficulties measuring unemployment

- ▶ As output increases in a country coming out of a recession, it is possible that the unemployment rate increases due to eligible adults entering the labour force.
- Official statistics may overestimate true unemployment because:
 - ▶ Unemployed figures do not include people working in the underground economy or informal economy. This is the portion of the economy that is unregistered, legally unregulated and not reported to tax authorities.
- A disadvantage of the unemployment rate is that it is an average over the entire population and therefore does not account for differences in unemployment that often arise among different population groups
 - ▶ **Region**– regions with declining industries may have higher unemployment than other regions

Difficulties measuring unemployment

- ▶ **Gender**– women sometimes face higher unemployment rates than men
- ▶ **Ethnic groups**– some ethnic groups may be disadvantaged due to discrimination, or due to lower levels of education and training
- ▶ **Age**– youth often face higher unemployment rates than older populations, often due to lower skill levels
- ▶ **Occupation and education attainment**– people who are relatively less skilled may have higher unemployment rates than more skilled workers.

Costs of Unemployment

- Unemployment has the following economic consequences:
 - ▶ **A loss of real output (real GDP)**– Since fewer people work than are available to work, the amount of output produced is less than the level the economy is capable of producing.
 - ▶ **A loss of income for unemployed workers**– People who are unemployed do not have an income from work.
 - ▶ **A loss of tax revenue for government**– Unemployed people do not pay income tax which results in less tax revenue for government.
 - ▶ **Costs to the government of unemployment benefits**– Reduces the tax revenue left over to pay for government-provided goods and services such as public goods and merit goods.
 - ▶ **Costs to the government of dealing with social problems resulting from unemployment**

Costs of Unemployment

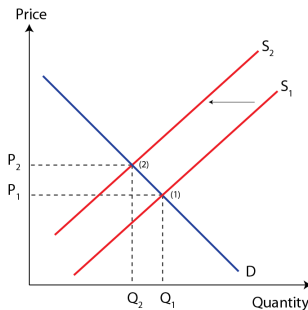
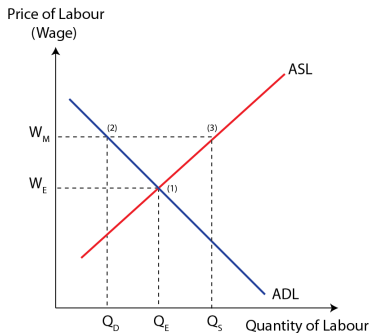
- ▶ **Larger budget deficit or small budget surplus**– Unemployment leads to a loss of tax revenue and greater expenditures for unemployment benefits.
- ▶ **More unequal distribution of income**– Some people (unemployed) become poorer while others are able to maintain their income levels.
- ▶ **Unemployed people may have difficulties finding work in the future**– When people remain out of work for long periods, they may not find work easily at a later time in the future.
- Unemployment has the following personal social consequences:
 - ▶ **Personal problems**: Being unemployed and unable to secure a job involves a loss of income, increased indebtedness as people must borrow to survive, as well as a loss of self-esteem.
 - ▶ **Greater social problems**– Including increased crime and violence, drug use and homelessness, arising from growing poverty.

Types of Unemployment

- There are several types of unemployment that economists measure:
 1. **Structural unemployment**– is a type of unemployment that occurs as a result of technological changes and changing patterns of demand (causing changes in demand for labour skills), as well as changes in the geographical location of jobs, and labour market rigidities (lack of labour market flexibility).
 - ▶ The two main causes of structural unemployment are improvements in production technologies and globalization of supply chains.
 - ▶ **Changes in demand for particular labour skills**– Mismatches between labour skills demanded by employers and labour skills supplied by workers.
 - ▶ **Changes in the geographical location of jobs**– Mismatches between labour demanded and labour supplied within a geographical region.
 - ▶ **Labour market rigidities**– Factors preventing the forces of supply and demand from operating in the labour market.

Types of Unemployment

- **Minimum wage legislation** – leads to higher than equilibrium wages
- **Labour union activities and wage bargaining with employers**
- **Employment protection laws** – make it costly for firms to fire workers (because they must pay compensation), thus making firms more cautious about hiring
- **Generous unemployment benefits** – increase the attractiveness of remaining unemployed and reduce the incentives to work



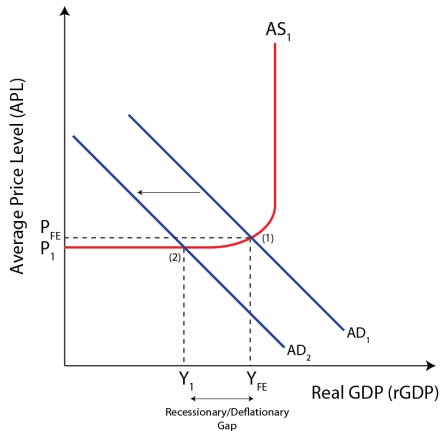
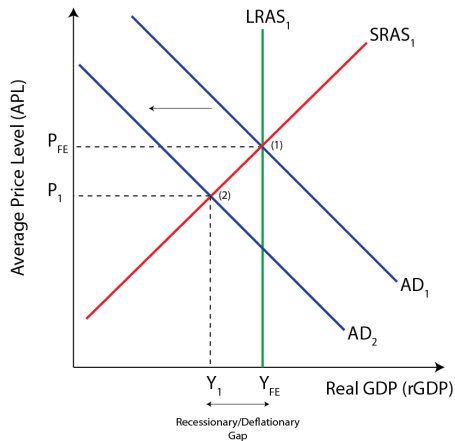
Types of Unemployment

- 2. **Frictional unemployment**– A type of unemployment that occurs when workers are between jobs; workers may leave their job because they have been fired, or because their employer went out of business, or because they are in search of a better job, or they may be waiting to begin a new job; tends to be short-term.
 - ▶ Frictional unemployment is typically short-lived and often voluntary.
 - ▶ A certain amount of frictional unemployment is inevitable in any growing, change economy.
- 3. **Seasonal unemployment**– A type of unemployment that occurs when the demand for labour in certain industries changes on a seasonal basis because of variation in need.
 - ▶ Some seasonal unemployment is unavoidable in any economy, as there will always be some industries with seasonal variations in labour demand.

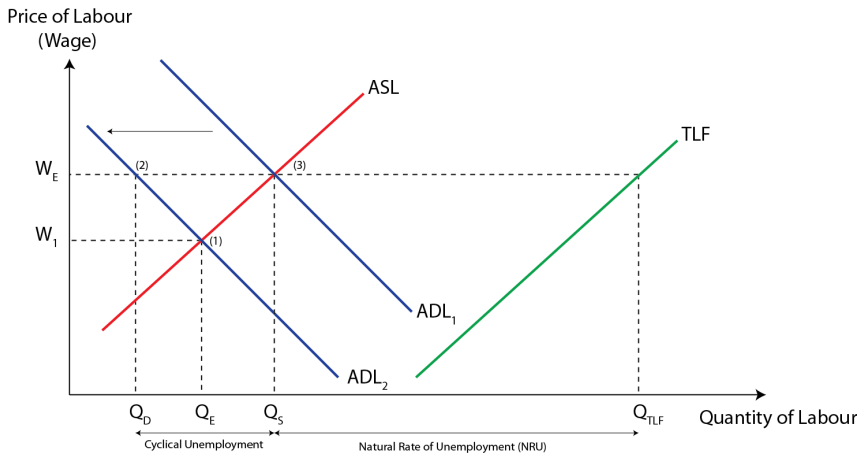
Types of Unemployment

4. **Cyclical unemployment**— A type of unemployment that occurs during the downturns in of the business cycle, when the economy is in a recessionary gap; the downturn is seen as arising from declining or low aggregate demand, and therefore is known as “demand-deficient” unemployment.
- ▶ Assuming labour markets were perfectly flexible, a fall in demand for labour would cause the wage rate workers are paid to fall, leading some workers to leave the labour market mitigating the decline in labour demand.
 - ▶ Wages tend to stabilize in the short-run , as a result a fall in labour demand does not always cause a fall in the wage rate, causing a disequilibrium in the labour market.

Types of Unemployment: Cyclical Unemployment



Types of Unemployment: Cyclical Unemployment



Natural Rate of Unemployment (NRU)

- **Natural rate of unemployment (NRU)**– Unemployment that occurs when the economy is producing at its potential or full employment level of output (real GDP), and is equal to the sum of structural, frictional, plus seasonal unemployment.
 - ▶ Even in a robust economy, a country will experience some unemployment. Full employment does not correspond with zero unemployment

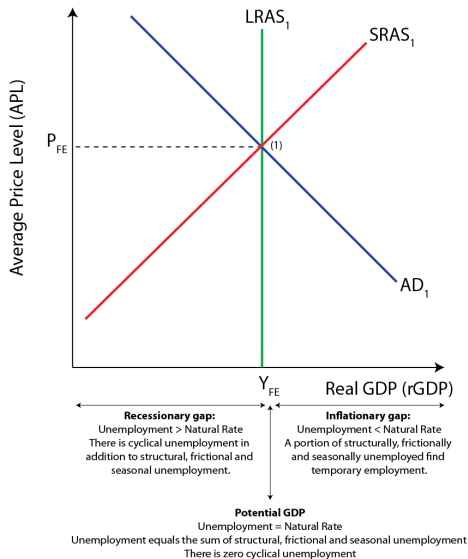
$$\text{NRU} = \frac{\text{Structural} + \text{Frictional} + \text{Seasonal Unemployment}}{\text{Total Labour Force (TLF)}}$$

- ▶ Cyclical unemployment is not part of the NRU. When workers lose their jobs because of a fall in aggregate demand and a recession, it is a sign that a country's economy is producing below its full employment level.
- ▶ The country suffers from a lack of demand and inflexible wages, meaning that there is a disequilibrium in the labour market.

Natural Rate of Unemployment (NRU)

- ▶ The “ideal” level of unemployment for a country to target is its NRU. The percentage varies from country to country.
- The natural rate of unemployment can gradually change over time.
 - ▶ Factors that cause the level of frictional or structural unemployment to change will cause the natural rate of unemployment to change.
 - ▶ Changes in the quality &/or quantity of the factors of production (land, labour, capital, and entrepreneurship) will change the natural rate of unemployment.

Natural Rate of Unemployment (NRU)



- **Enduring Understanding**

- ▶ An economy's performance can be measured by different indicators such as gross domestic product (GDP), the inflation rate, and the unemployment rate.

- **Essential Knowledge**

- ▶ The unemployment rate is the percentage of the labor force that is out of work.
- ▶ The labor force participation rate is another measure of the labor market activity in an economy. The labor force participation rate is the percentage of the adult population that is in the labor force.
- ▶ The measured unemployment rate is often criticized for understating the level of joblessness because it excludes groups such as discouraged workers and part-time workers.
- ▶ Economists primarily focus on three types of unemployment: cyclical, frictional, and structural.

Summary (Continued)

- ▶ The natural rate of unemployment is the unemployment rate that would exist when the economy produces full-employment real output. It is equal to the sum of frictional and structural unemployment.
- ▶ The deviation of the actual unemployment rate from the natural rate is cyclical unemployment.
- ▶ The natural rate of unemployment can gradually change over time because of such things as changes in labor force characteristics.