

# Chapter 5 Unemployment

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# I Definitions and computing method

## **Definitions**

Employed is the People who work

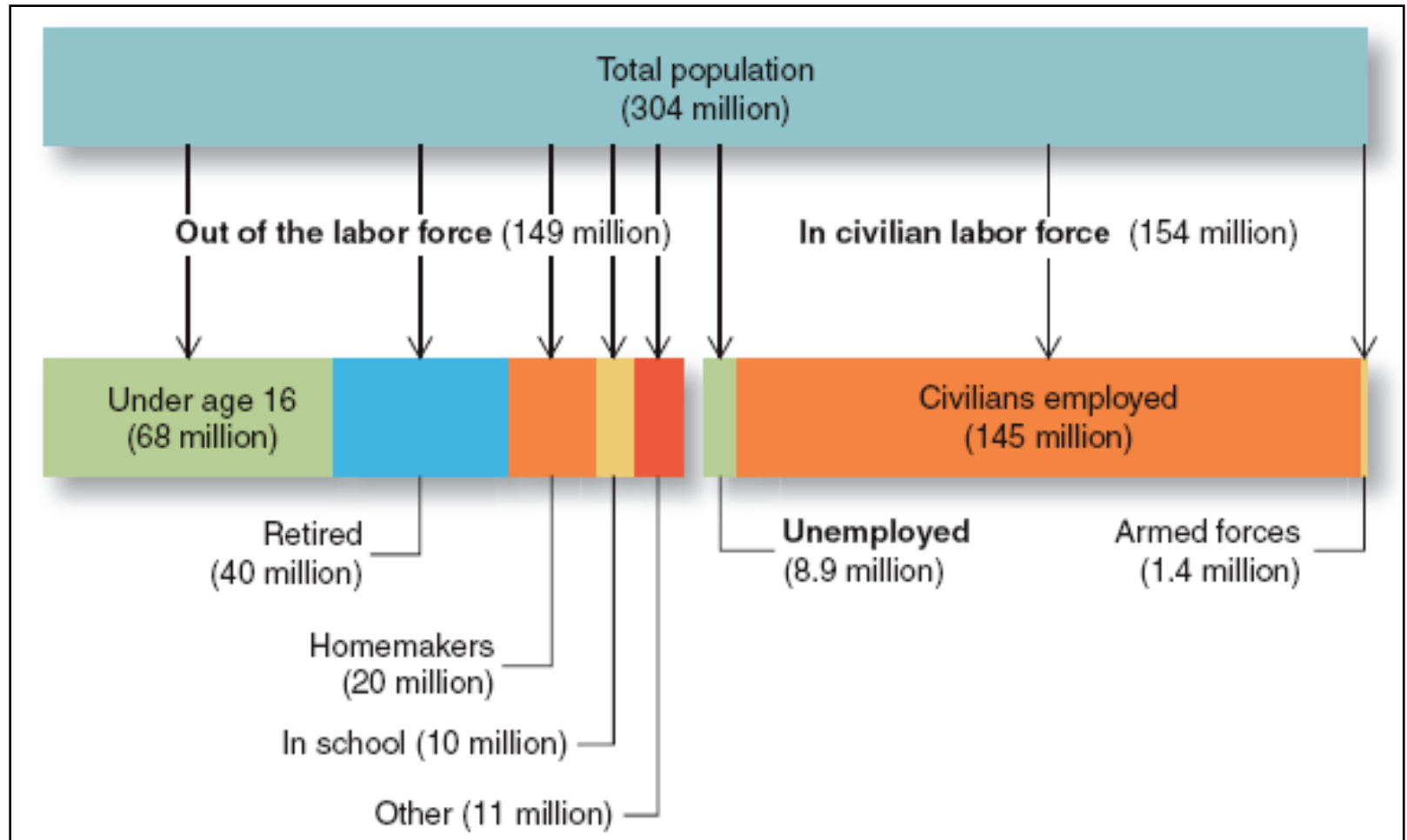
Unemployed is the People who are Not employed but Want to work and are Looking for a job

Labor force = Number of employed + Number of unemployed

Not in the labor force (non-labor force): Not employed Not unemployed. It includes children, elders, students, disable...

Adult population is the proportion of population that is within working – age (includes labor force and a part of non – labor force)

# I Definitions and computing method



# I Definitions and computing method

## Computing method

- Unemployment rate: Percentage of labor force that is unemployed

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

- Labor-force participation rate: Percentage of adult population that is in the labor force

$$\text{Labor - force participation rate} = \frac{\text{Labor force}}{\text{Adult population}} \times 100$$

# method

## **Computing method**

### Math problems

1. Population of Vietnam is 90 million people. The employed is 43 million people, the unemployed is 1.5 million people. There are 4.5 million people in working – age but out of labor force. Calculate unemployment rate, labor participation rate?
2. FTU city has adult population of 100 thousand people. Labor force participation is 90% and the employed are 70 thousand people. Calculate unemployment rate?
3. The employed is greater than the unemployed 70 million people. Adult population is 90 million people. Labor participation rate is 25 time higher than unemployment rate. Calculate unemployment rate?

## II Unemployment classification

There are two fundamental types of unemployment

- Natural rate of unemployment
  - Normal rate of unemployment that exists even at the equilibrium of labor market by objective reasons
  - Around which the unemployment rate fluctuates
  - Existence in the long run
- Cyclical unemployment
  - Deviation of actual unemployment from its natural rate
  - Non-existence in the long run when the economy adjusts itself

# Unemployment rate of the US since 1960



This graph uses annual data on the U.S. unemployment rate to show the percentage of the labor force without a job. The natural rate of unemployment is the normal level of unemployment around which the unemployment rate fluctuates



# II Unemployment classification

## 1 Natural rate of unemployment

There are four categories of natural unemployment

+ ***Frictional unemployment***: Results because it takes time for workers to search for the jobs that best suit their tastes and skills

E.g. The graduate who just leave university is finding a job

+ ***Structural unemployment***: occurs when a labor market is unable to provide jobs for everyone who wants one because there is a mismatch between the skills of the unemployed workers and the skills needed for the available jobs

E.g. Farmers who were reclaimed land try to be workers

+ ***Seasonal unemployment***: occurs at seasonal jobs which require working in certain moments of a year

# II Unemployment classification

## 1 Natural rate of unemployment

+ ***Classical unemployment***: occurs when real wages for a job are set above the market-clearing level, causing the number of job-seekers to exceed the number of vacancies.

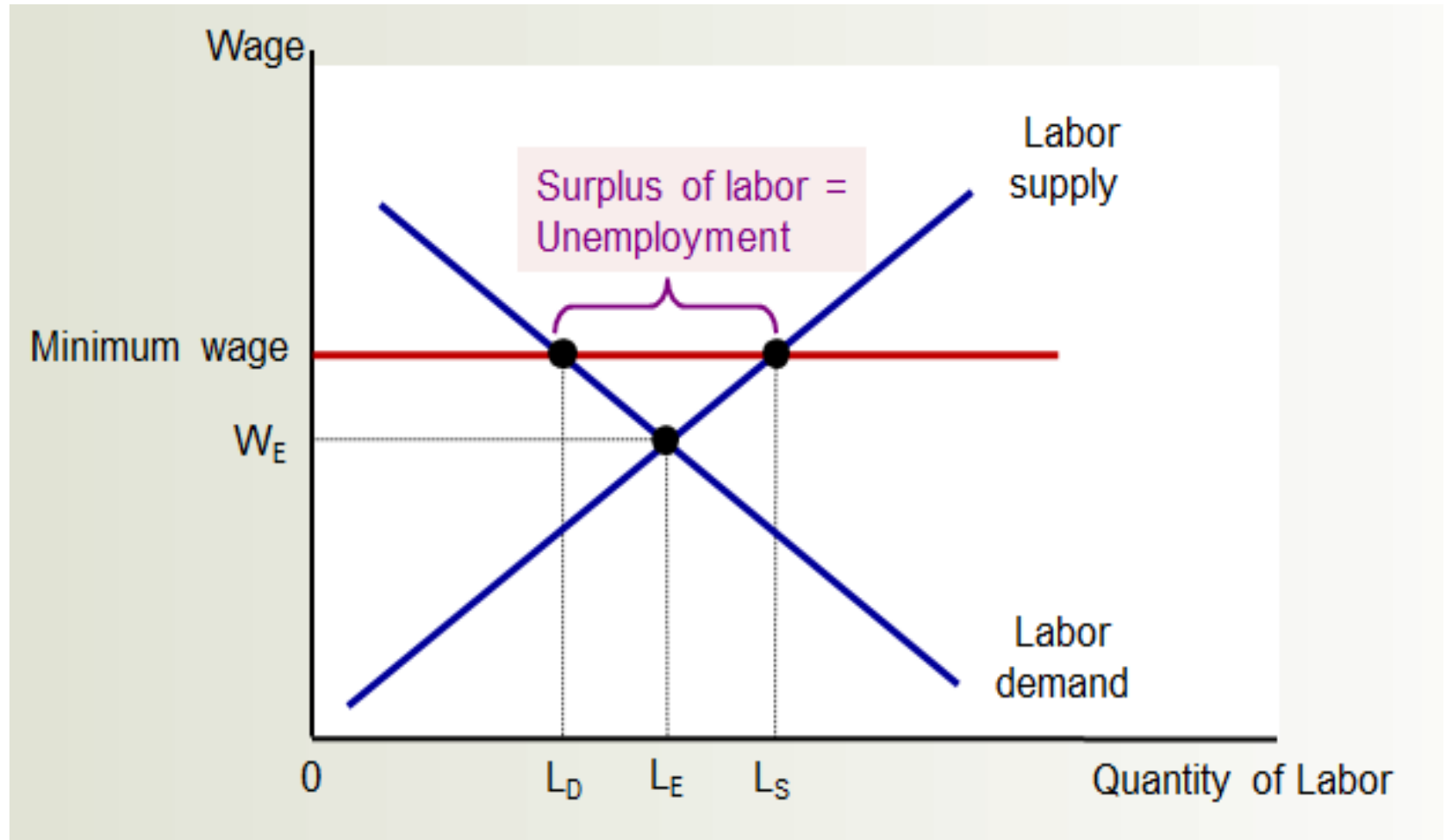
E.g. Unskilled worker who only graduates from high school

*Reasons for classical unemployment*

- Minimum wage law
- Efficiency wages
- Labor unions

# II Unemployment classification

## 1 Natural rate of unemployment + *Classical unemployment*



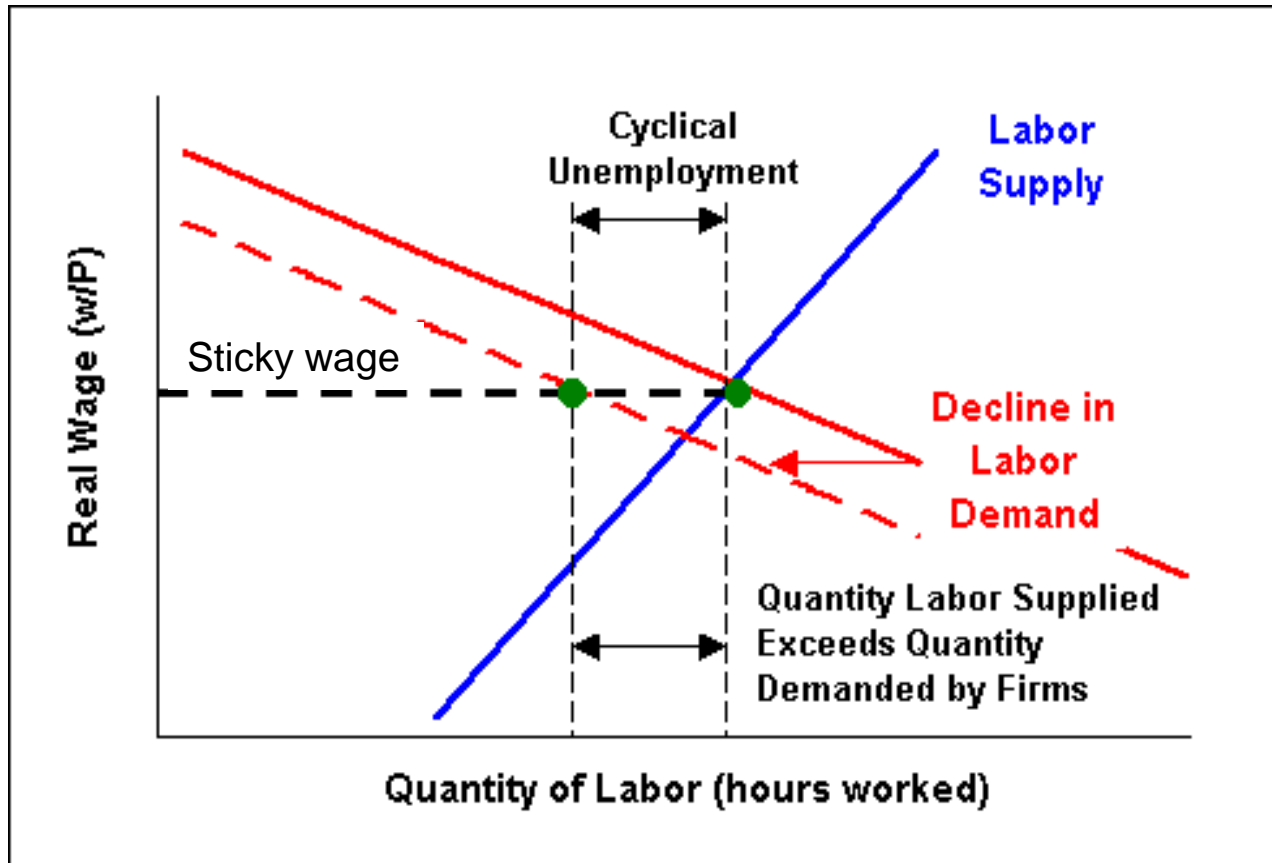
# II Unemployment classification

## **2 Cyclical rate of unemployment**

Cyclical, deficient-demand, or Keynesian unemployment, occurs when there is not enough aggregate demand in the economy to provide jobs for everyone who wants to work. Demand for most goods and services falls, less production is needed and consequently fewer workers are needed, wages are sticky and do not fall to meet the equilibrium level, and mass unemployment results

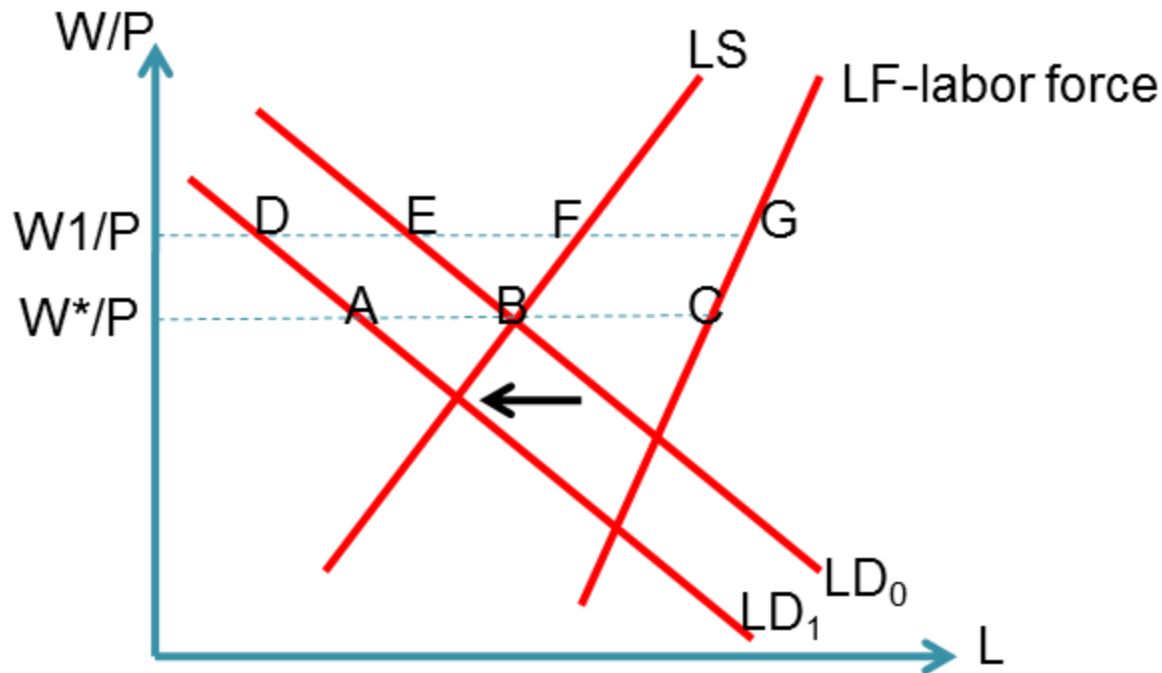
# II Unemployment classification

## 2 Cyclical rate of unemployment



# II Unemployment classification

All types of unemployment illustrated in labor market model



At  $W^*/P$ :  $AB$  cyclical unemployment,  $BC$  natural unemployment (without classical unemployment)

At  $W_1/P$ :  $DE$  cyclical unemployment,  $EG$  natural unemployment includes  $EF$  classical unemployment and

# III Impacts of unemployment on the economy

## 1 Negative impacts

- Waste of labors not used to produce goods and services → output decline – supply side (Okun's law)
- Demand for goods and services declines → production decrease – demand side
- Burden of society in supporting unemployed → ineffective resource allocation
- Unemployment time mitigates labor's skill → productivity decrease
- Unstable mentality of individuals who can not find a job and related person → unstable for the whole society

# III Impacts of unemployment on the economy

## **2 Positive impact**

- Job seekers have enough time to find appropriate job
- Labors who just lost their jobs have time to relax
- Someone has time to acquire necessary skills to do a new job



## IV Solutions to reduce unemployment

- 1 Government – run employment agencies: reduce time for unemployed to find jobs
- 2 Public training programs: equip quickly necessary skill for unemployed to find jobs
- 3 Labor movement facilitation: reduce frictional unemployment
- 4 Income tax reduction: incentivize more economic activities
- 5 Unemployment insurance cut: encourage unemployed to find jobs quickly
- 6 Demand side stimulus: promote manufacture, thereby creating more jobs

# Key concepts

- Unemployment
- Labor force
- Unemployment rate, labor-force participation rate
- Natural rate of unemployment
- Cyclical unemployment
- Frictional unemployment, structural unemployment, seasonal unemployment, classical unemployment