

## Principles of Economics (Spring 2024)

## Lecture 19

## Unemployment

## Part I

## Measures of Unemployment

## • Employment Category for Adult (Age 16 and Older)

○ Employed

- Those who work
  - ❖ As paid employees
  - ❖ In their own business
  - ❖ As unpaid workers in a family member's business
- Both full-time and part-time are counted
- Those who are not working but have jobs from which they are temporarily absent, because of, for example:
  - ❖ Vacation
  - ❖ Illness
  - ❖ Bad weather

○ Unemployed

*don't have a job  
actively looking for a job  
actively*

- Those who are not employed
  - ❖ Available for work
  - ❖ Have tried to find employment during the previous four weeks
- Those waiting to be recalled to a job from which they had been laid off

○ Not in the Labor Force

- Neither employed nor unemployed, such as:
  - ❖ Full-time students *not have a job ⇒ Not Employed*
  - ❖ Homemakers *not looking for a job ⇒ Not Unemployed*
  - ❖ Retirees



- **Labor Force** – The total number of workers, including both the employed and the unemployed.

$$\text{Labor Force} = \text{Number of Employed} + \text{Number of Unemployed}$$

- **Unemployment Rate** – The percentage of the labor force that is unemployed.

$$\text{Unemployment Rate} = \frac{\text{Number of Unemployed}}{\text{Labor Force}} \times 100\%$$

- **Labor-Force Participation Rate** – The percentage of the adult population that is in the labor force.

$$\text{Labor-Force Participation Rate} = \frac{\text{Labor Force}}{\text{Adult Population}} \times 100\%$$

- **Discouraged Workers** – Individuals who would like to work but have given up looking a job.
  - Classified as “ not in the Labor force ” rather than “ Unemployed ”.

- Shortcomings of the Unemployment Rate – Not a perfect indicator of joblessness or the health of the labor market.
  - It excludes discouraged workers in unemployment statistics, even though they are truly perspective workers who can't find job.
  - It does not distinguish between full-time and part-time work, or people working part time because full-time jobs are not available.
  - Some people misreport their work status: some of those who report being unemployed
    - May not be trying hard to find a job.
    - May want to qualify for a Gov't help.
    - May work but paid "under the table" to avoid taxes on their earnings.
  - After all, the unemployment rate is still a very useful barometer of the labor market and the economy.



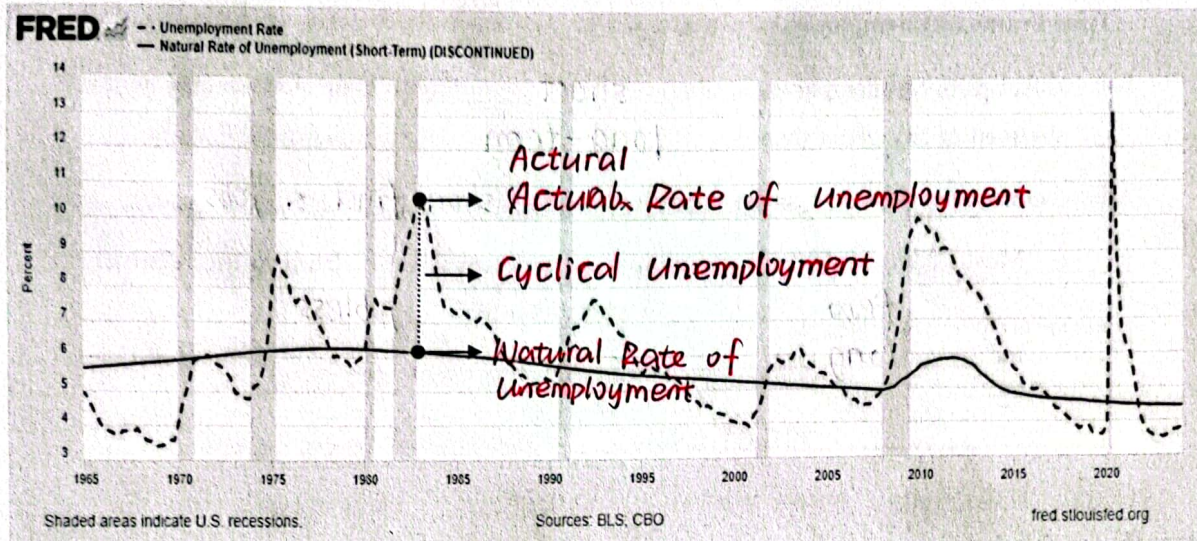
## Part II

## Different Types of Unemployment

- **Natural Rate of Unemployment** – The amount of unemployment that the economy normally experiences.  
It is the normal rate of unemployment around which the actual unemployment rate fluctuates.  
} Long-run Perspective
- Natural doesn't mean that this rate of unemployment is desirable, nor does it mean that it is constant over time or impervious to economic policy. It just means that this unemployment doesn't go away on its own even in the long-run.
- **Cyclical Unemployment** – The deviation of unemployment from its natural rate.  
It is the year-to-year fluctuations in unemployment around its natural rate and is closely associated with the short-run fluctuations in economic activity.  
} Short-run Perspective
- For this lecture, we will focus on the natural rate of unemployment and its determinants, examine why there is always some unemployment in the economy from a long-run perspective, and ignore the short-run fluctuations for now.



## Example 1: Unemployment Rate in the U.S., 1965(1) – 2024(1)



- The natural rate of unemployment is a series estimated by economists.
- For instance, in 2018 the estimated natural rate is 4.6 percent, slightly above the actual unemployment rate of 3.9 percent.
- Unemployment rate never falls to zero.



## Part III

## Time Frame of Unemployment

- Most spells of unemployment are short, but most unemployment observed at any given time is long-term.
  - Most people who become unemployed will soon find a jobs.
  - Most of the economy's unemployment problem is attributable to the relatively few workers who are jobless for long periods of time.

## Part IV

## Reasons for Unemployment in the Long-Run

- **Frictional Unemployment** – Unemployment that results because it takes time for workers to search for the jobs that best suit their tastes and skills. } Short-Spell  
for most  
workers

⇒ First explanation of why some people are always unemployed:

job search

- **Structural Unemployment** – Unemployment that results because the number of jobs available in some labor markets is insufficient to provide a job for everyone who wants one. } Longer-Spell  
for most  
workers

- This occurs when the quantity of labor supplied exceeds the quantity demanded, which results when wages are set above the level that brings supply and demand into equilibrium.

⇒ Next three explanations of why some people are always unemployed:

minimum-wage laws, unions,  
and efficiency wages

- Natural Unemployment = Frictional Unemployment +  
Structural Unemployment



## Part V

## Four Explanations for the Natural Rate of Unemployment of an Economy

- **Job Search** – The process by which workers find appropriate jobs given their tastes and skills. It takes time because:

- ① Workers differ in their tastes and skills.
  - ② Jobs differ in their attributes.
  - ③ Information about job candidates and job vacancies is disseminated slowly.
- Some frictional unemployment is inevitable
    - Changes in the demand for labor among different firms, e.g., when consumers decide that they prefer Ford cars to General Motors cars, Ford increases employment while General Motors lays off workers – the former General Motors workers must now search for new jobs while Ford must decide which new workers to hire, and this transition results in a period of unemployment.
    - Changes in the compensation of demand among industries or regions, i.e., sectoral shifts, e.g., when the world price of oil falls, oil-producing firms in Texas and North Dakota cut back on production and employment, while cheaper gasoline stimulates car sales, so auto-producing firms in Michigan and Ohio raise production and employment. It takes time for workers to search for jobs in the new sectors and results in temporary unemployment.
    - Changes in the pattern of international trade: nations export goods for which they have a comparative advantage, which need not be stable over time, and therefore, workers need to move among industries.
    - The economy is always changing, e.g., in the U.S. economy from 2006 to 2016, employment fell by 980,000 in construction while rose by 706,000 in computer systems design – workers in declining industries find themselves out of work and searching for new jobs.



○ Public Policy about Job Search

- Aim at reducing the time it takes unemployed workers to find new jobs  
⇒ Reduce the natural rate of unemployment of the economy
- Government programs to facilitate job search
  - ❖ Government-run employment agencies: give out information about job vacancies
  - ❖ Public training programs: ease workers' transition from declining to growing industries and help disadvantaged groups escape poverty

○ Unemployment Insurance – A government program that partially protects the incomes of workers who become unemployed.

⇒ Reduce the hardship of unemployment

⇒ Increase unemployment

- Benefits of unemployment insurance
  - ❖ Reduce income uncertainty
  - ❖ Unemployed workers have more time to search
  - ❖ Unemployed workers can look for jobs that better suit their tastes and skills
  - ❖ Improve the ability of the economy to match each worker with the most appropriate job
- Problems of unemployment insurance
  - ❖ Unemployment insurance benefits end when a worker takes a job, so workers have less incentive to search or take jobs while eligible to receive benefits

• Minimum-Wage Laws (Covered in Lecture 6)



- Union – A worker association that bargains with employers over wages, benefits, and working conditions.
  - A group acting together to exert their market power to negotiate higher wages for workers
  - Raise the wage above the equilibrium level  
⇒ Unemployment
- Efficiency Wages – The above - equilibrium wages paid voluntarily by firms to boost worker productivity and increase firm profitability.