

Measuring Unemployment

ECO 120: Global Macroeconomics

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1.1 Goals

Goals

- Specific Goals
 - Be able to explain the computation behind the unemployment rate.
 - Identify who is counted as employed and unemployed.
 - Identify different categories of unemployment.
- Learning Outcomes
 - LO 4: Define macroeconomic measures of production, prices, inflation, and employment. Students will be able to explain how each is measured and evaluate usefulness and limitations for each measure.
 - GELO 1: Students will be able to use mathematical and logical methods to solve problems.

1.2 Reading

Reading

- Modules 13 and 14

2 Labor Force and Unemployment

2.1 Labor Force

Labor force

- **Labor force:** people in the population who are willing and able to work.
- The labor force does *not* include:
 - Children
 - People who are institutionalized.

- People legally not allowed to work.
- People not employed who are not looking to be employed (eg. retired people).
- **Discouraged workers:** people who stopped looking for work (left the labor force) because they believed there were no jobs available for them.
- Labor force participation rate: percentage of people who are able to work who are in the labor force.

2.2 Unemployment Rate

Unemployment Rate

- **Unemployment rate:** percentage of people *in the labor force* who are not employed.
- This implies you must be *willing and able to work* but are not employed.
- According to the Bureau of Labor Statistics, this implies:
 - Survey respondent does not have a job,
 - has actively looked for work in the prior 4 weeks,
 - and is currently available for work.

2.3 Examples

Who is Unemployed?

1. Jack is not currently employed and was fired from his job one year ago. He continues to look for a job without any luck.
2. Joseph quit a job he hated during the height of the recession. He is trying to find another job without success.
3. Jeff is not employed, is 35 years old, single, lives in his mother's basement and eats her food, and has never thought about looking for a job.
4. Jackie was laid off from a full time job one year ago and continues to look for a new full time job. In the last week she was a babysitter for a friend, in which she worked for only 2 hours and at only minimum wage.

Who is Unemployed?

5. Julie was laid off when her employer closed her office. She looked for jobs unsuccessfully for one year, but recently stopped looking because she does not think any jobs are available. If a job opportunity presented itself, she would take it.
6. Jacob was recently laid off from his factory job. He has enough savings to get by, and is using the time instead to care for his elderly father.
7. Jonathan recently robbed a liquor store, was charged, tried, convicted, and put in prison. He was fired from his job at the liquor store.
8. Jessica saved very well over her career, and recently retired at the age of 55. She is enjoying life now traveling the world.

2.4 Stephen Colbert is Funny

Stephen Colbert is Funny

[Stephen Colbert, “The Audacity of Hopelessness,”](#)

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3 Types of Unemployment

3.1 Causes for Unemployment

Types of Unemployment

- **Frictional unemployment:** unemployment caused by delays in job search, job candidate search.
- **Structural unemployment:** caused by changes in demand for types of work.
 - Changes in technology makes some types of jobs obsolete.
 - Changes in international trade shrink some industries.
 - Changes in tastes and preferences.
- **Cyclical unemployment:** caused by declines in total spending in the economy.
 - Unemployment that increases during recessions, decreases during expansions.

3.2 Full Employment

Full employment

- **Natural rate of unemployment:** whatever unemployment rate that is associated with zero *cyclical unemployment*.
- “Full” employment: when there is zero *cyclical unemployment*.
- The Congressional Budget Office constructs a measure of the natural rate of unemployment:

<https://research.stlouisfed.org/fred2/series/NROU>