Unemployment

- Looking at GDP per capita misses a lot
  - Income inequality (among those with income)
  - Unemployment (those with no income)
- Before we can talk about it, need to know how it’s measured
- Today: Unemployment and focused on the US
- Focus: What does it really tell us? What does it leave out?
“The purpose of studying economics is to avoid being deceived by economists.”

-Joan Robinson
Common News Item

- January 2016: Headline Unemployment is 4.9%
- Unemployment has something to do with how many people are out of work
- What exactly does this number measure, and how is it computed?
UNEMPLOYMENT
Labor Force Statistics

- Produced by Bureau of Labor Statistics (BLS), in the U.S. Dept. of Labor
- Based on regular survey of 60,000 households
- Based on “adult population” (16 yrs or older)
Labor Force Statistics

BLS divides population into 3 groups:

- **Employed**: paid employees, self-employed, and unpaid workers in a family business

- **Unemployed**: people not working who have looked for work during previous 4 weeks

- **Not in the labor force**: everyone else
Labor Force Statistics

The labor force is the civilian population 16 years and over. Excluded are:

- persons confined to institutions (nursing homes, prisons)
  - prison/jail population in 2008: 2.3 million (source: BJS)

- persons on active duty in the armed forces
  - 1.4 million in army, navy, air force, and marine corps as of December 2009 (source: DOD)
  - 42,000 in coast guard as of August 2009 (source: USCG)
Labor Force Statistics

**Unemployment rate** ("u-rate"): % of the labor force that is unemployed

\[
u\text{-rate} = 100 \times \frac{\text{# of unemployed}}{\text{labor force}}\]

**Labor force participation rate:** % of the adult population that is in the labor force

\[
\text{labor force participation rate} = 100 \times \frac{\text{labor force}}{\text{adult population}}
\]
Compute the labor force, u-rate, adult population, and labor force participation rate using this data:

<table>
<thead>
<tr>
<th>Adult population of the U.S. by group, June 2008</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td># of employed</td>
<td>145.9 million</td>
</tr>
<tr>
<td># of unemployed</td>
<td>8.5 million</td>
</tr>
<tr>
<td>not in labor force</td>
<td>79.2 million</td>
</tr>
</tbody>
</table>
Labor force $= \text{employed} + \text{unemployed}$

$= 145.9 + 8.5$

$= 154.4 \text{ million}$

U-rate $= 100 \times \frac{\text{unemployed}}{(\text{labor force})}$

$= 100 \times \frac{8.5}{154.4}$

$= 5.5\%$
Population = labor force + not in labor force

= 154.4 + 79.2

= 233.6

LF partic. rate = 100 x (labor force)/(population)

= 100 x 154.4/233.6

= 66.1%
Labor Market Statistics for Different Groups

- The BLS publishes these statistics for demographic groups within the population.
- These data reveal widely different labor market experiences for different groups.
BLS Report

Limitations of the u-rate

In each of the following, what happens to the u-rate? Does the u-rate give an accurate impression of what’s happening in the labor market?

A. Sue lost her job and begins looking for a new one.

B. Jon, a steelworker who has been out of work since his mill closed last year, becomes discouraged and gives up looking for work.

C. Sam, the sole earner in his family of 5, just lost his $80,000 job as a research scientist. Immediately, he takes a part-time job at McDonald’s until he can find another job in his field.
A. Sue lost her job and begins looking for a new one. 

u-rate rises

A rising u-rate gives the impression that the labor market is worsening, and it is.
B. Jon has been out of work since last year, becomes discouraged, stops looking for work.

Discouraged workers
- would like to work but have given up looking for jobs
- classified as “not in the labor force” rather than “unemployed”

U-rate falls because Jon is no longer counted as unemployed.

A falling u-rate gives the impression that the labor market is improving, but it is not.
Answers

C. Sam lost his $80,000 job, and takes a part-time job at McDonald’s until he finds a better one.

U-rate unchanged because a person is “employed” whether they work full or part time.

Things are worse, but the u-rate fails to show it.
What Does the U-Rate Really Measure?

- The u-rate is not a perfect indicator of joblessness or the health of the labor market:
  - It excludes discouraged workers.
  - It does not distinguish between full-time and part-time work, or people working part time because full-time jobs not available.
  - Some people misreport their work status in the BLS survey.
- Despite these issues, the u-rate is still a very useful barometer of the labor market & economy.
- ...but is it very good?
Employment-Population Ratio
Unemployment Rate

![Graph showing the trend of the Civilian Unemployment Rate from 1950 to 2010. The graph indicates fluctuations in unemployment rates over the years.](image-url)
Employment – Population Ratio
Female Labor Force Participation
Comparison
Possible explanation?

- Early Retirement
- Staying in school longer
- A new normal?
- Changes in the way people work
- Long-term unemployed
Cyclical Unemployment vs. the Natural Rate

There’s always some unemployment, though the u-rate fluctuates from year to year.

Natural rate of unemployment

- the normal rate of unemployment around which the actual unemployment rate fluctuates

Cyclical unemployment

- the deviation of unemployment from its natural rate
- associated with business cycles, which we’ll study in later chapters
Explaining the Natural Rate: An Overview

Even when the economy is doing well, there is always some unemployment, including:

**Frictional unemployment**
- occurs when workers spend time searching for the jobs that best suit their skills and tastes
- short-term for most workers

**Structural unemployment**
- occurs when there are fewer jobs than workers
- usually longer-term
Why does unemployment matter?

- Unemployment makes the effects of economic events very uneven across people.
- Being unemployed has obvious bad effects while out of work:
  - Loss of income
  - Need to get new training
  - Uncertainty
- Also has very important long run consequences:
  - Graduating in a recession year has a negative effect on wages lasting >15 years.
Unemployment by State

Unemployment rates by state, seasonally adjusted, December 2013
(U.S. rate = 6.7 percent)

SOURCE: Bureau of Labor Statistics
Local Area Unemployment Statistics
Unemployment by State

Unemployment rates by county, January 2013 - December 2013 averages

(U.S. rate = 7.4 percent)

SOURCE: Bureau of Labor Statistics
Local Area Unemployment Statistics
## Highest and Lowest Unemployment

<table>
<thead>
<tr>
<th>State</th>
<th>Rate</th>
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<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHODE ISLAND</td>
<td>9.1</td>
<td>NORTH DAKOTA</td>
<td>2.6</td>
</tr>
<tr>
<td>NEVADA</td>
<td>8.8</td>
<td>NEBRASKA</td>
<td>3.6</td>
</tr>
<tr>
<td>ILLINOIS</td>
<td>8.6</td>
<td>SOUTH DAKOTA</td>
<td>3.6</td>
</tr>
<tr>
<td>MICHIGAN</td>
<td>8.4</td>
<td>UTAH</td>
<td>4.1</td>
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<tr>
<td>CALIFORNIA</td>
<td>8.3</td>
<td>IOWA</td>
<td>4.2</td>
</tr>
<tr>
<td>DISTRICT OF COLUMBIA</td>
<td>8.1</td>
<td>VERMONT</td>
<td>4.2</td>
</tr>
<tr>
<td>KENTUCKY</td>
<td>8</td>
<td>WYOMING</td>
<td>4.4</td>
</tr>
<tr>
<td>MISSISSIPPI</td>
<td>8</td>
<td>HAWAI I</td>
<td>4.5</td>
</tr>
<tr>
<td>TENNESSEE</td>
<td>7.8</td>
<td>MINNESOTA</td>
<td>4.6</td>
</tr>
<tr>
<td>ARIZONA</td>
<td>7.6</td>
<td>KANSAS</td>
<td>4.9</td>
</tr>
</tbody>
</table>
Unemployment rates by state, 2009 annual averages

(U.S. rate = 9.3 percent)

SOURCE: Bureau of Labor Statistics
Local Area Unemployment Statistics
Unemployment rates by county, 2009 annual averages

(U.S. rate = 9.3 percent)
## Highest and Lowest Unemployment

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<tbody>
<tr>
<td>Michigan</td>
<td>14.2</td>
<td>Virginia</td>
<td>7.1</td>
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<tr>
<td>Nevada</td>
<td>12.3</td>
<td>Wyoming</td>
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<tr>
<td>California</td>
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<td>Louisiana</td>
<td>7</td>
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<td>South Carolina</td>
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<td>Vermont</td>
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<tr>
<td>Oregon</td>
<td>11.3</td>
<td>New Hampshire</td>
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</tr>
<tr>
<td>Rhode Island</td>
<td>11.3</td>
<td>Iowa</td>
<td>6.3</td>
</tr>
<tr>
<td>Tennessee</td>
<td>10.9</td>
<td>Montana</td>
<td>6.3</td>
</tr>
<tr>
<td>Florida</td>
<td>10.8</td>
<td>South Dakota</td>
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<td>10.8</td>
<td>Nebraska</td>
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</tr>
<tr>
<td>Indiana</td>
<td>10.7</td>
<td>North Dakota</td>
<td>4.1</td>
</tr>
</tbody>
</table>
Unemployment rates by state, 2008 annual averages

(U.S. rate = 5.8 percent)

SOURCE: Bureau of Labor Statistics
Local Area Unemployment Statistics
Normal Times

Unemployment rates by county, 2008 annual averages

(U.S. rate = 5.8 percent)

SOURCE: Bureau of Labor Statistics
Local Area Unemployment Statistics
# Highest and Lowest Unemployment

<table>
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<tr>
<th>State</th>
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<tr>
<td>Michigan</td>
<td>7.3</td>
<td>New Mexico</td>
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<td>Alaska</td>
<td>6.2</td>
<td>Alabama</td>
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<td>Hawaii</td>
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<td>Illinois</td>
<td>5.3</td>
<td>Utah</td>
<td>2.7</td>
</tr>
</tbody>
</table>
Source: New York Times
Next Lecture

- Class on Thursday is canceled
- Class next Tuesday is a review session
- Midterm on October 6\textsuperscript{th}
- Please begin studying to have questions at the review session