

PEER GROUP PROBLEM SOLVING

Name:

Instructor:

Course:

The Bureau of Labor Statistics calculates the following six measures of labor underutilization:

- U-1 Persons unemployed 15 weeks or longer, as a percent of the civilian labor force
- U-2 Job losers and persons who completed temporary jobs, as a percent of the civilian labor force
- U-3 Total unemployed, as a percent of the civilian labor force (official unemployment rate)
- U-4 Total unemployed plus discouraged workers, as a percent of the civilian labor force plus discouraged workers
- U-5 Total unemployed, plus discouraged workers, plus all other persons marginally attached to the labor force, as a percent of the civilian labor force plus all persons marginally attached to the labor force
- U-6 Total unemployed, plus all persons marginally attached to the labor force, plus total employed part-time for economic reasons, as a percent of the civilian labor force plus all persons marginally attached to the labor force

Note: Discouraged workers are a subset of the marginally attached.

Suppose an economy has the following characteristics.

	Number (in thousands)
Total population	45,000
Non-institutionalized civilian working age population	25,000
Civilian labor force	20,000
Total employed	18,000
Total unemployed	2,000
Institutionalized population	800
Retired	6,000
Discouraged workers	700
Persons unemployed 15 weeks or longer	600
Job losers	200
Persons who completed temporary jobs	100
Persons marginally attached to the labor force	300
Total employed part-time for economic reasons	500

Use this information to calculate all six measures of labor underutilization for this economy.

IN-CLASS EXPERIMENT / ACTIVE EXERCISE

Have students form groups of three or four and consider the following exercise:

Each of the following ten individuals has a different employment situation. Discuss whether each individual would count as unemployed or not and explain why. If you believe the individual would count as unemployed, discuss whether you think the individual would be frictionally unemployed, cyclically unemployed, or structurally unemployed.

Eric, who is in prison after he posted a video of himself robbing a gas station on Facebook.

Tara, who just had an adorable baby girl and is on maternity leave.

Albert, who just retired after working for 50 years making artificial limbs.

Mary, who just graduated from college and is searching for her first job.

Lillian, who was recently laid off from her job as an accountant as a result of an economic downturn.

Matt, who works part-time for a home gutter cleaning company.

Scarlett, who lost her job two years ago and has not actively searched for a job in more than a year.

Jose, who lost his job last month after the manufacturing company that employed him went bankrupt.

Steven, who recently suffered a back injury and is on disability insurance.

Thomas, who is a part-time student and enjoys playing guitar.

SOLUTIONS AND INSTRUCTOR NOTES

Discussion Question

On June 05, 2015 the Bureau of Labor Statistics released the monthly employment situation report for May 2015. The report showed that the number of unemployed workers had increased by 125,000 and that the unemployment rate had increased from 5.4% to 5.5% from the previous month. Despite these statistics, the report was widely viewed as positive news for the economy, and most stock market futures increased when the report was released.

- a) Why can an increase in the unemployment rate be either good news or bad news for the economy?

The reason for the unemployment rate increase is important in determining whether or not it is good or bad news. If the unemployment rate increased due to job losses, then the increase is a bad economic signal. However, if the unemployment rate increase is attributable to an increase in labor force participation, this likely indicates that people are feeling better about the employment situation and choosing to re-enter the workforce. This is viewed as a positive economic signal.

- b) What other statistics besides the number of unemployed workers and the unemployment rate should be considered when evaluating the employment situation?

There are many other statistics that are relevant. The number of new jobs that were created and the labor force participation should be considered in addition to the unemployment rate. Every month, the Bureau of Labor Statistics reports six different measures of labor underutilization that provide a more comprehensive representation of the employment situation. These alternative measures include other relevant statistics like the number of long term unemployed, the number of discouraged workers, and the number of part-time and temporary workers, among others.

Peer Group Problem Solving

Suppose an economy has the following characteristics.

	Number (in thousands)
Total population	45,000
Non-institutionalized civilian working age population	25,000
Civilian labor force	20,000
Total employed	18,000
Total unemployed	2,000
Institutionalized population	800
Retired	6,000
Discouraged workers	700
Persons unemployed 15 weeks or longer	600
Job losers	200
Persons who completed temporary jobs	100
Persons marginally attached to the labor force	300
Total employed part-time for economic reasons	500

Use this information to calculate all six measures of labor underutilization for this economy.

U-1 Persons unemployed 15 weeks or longer, as a percent of the civilian labor force:

$$(600/20,000) \times 100\% = 3.0\%$$

U-2 Job losers and persons who completed temporary jobs, as a percent of the civilian labor force:

$$((400 + 100)/20,000) \times 100\% = 2.5\%$$

U-3 Total unemployed, as a percent of the civilian labor force (official unemployment rate):

$$(1,700/20,000) \times 100\% = 8.5\%$$

U-4 Total unemployed plus discouraged workers, as a percent of the civilian labor force plus discouraged workers:

$$((1,700 + 700)/(20,000 + 700)) \times 100\% = 11.59\%$$

U-5 Total unemployed, plus discouraged workers, plus all other persons marginally attached to the labor force, as a percent of the civilian labor force plus all persons marginally attached to the labor force:

$$((1,700 + 700 + 300)/(20,000 + 700 + 300)) \times 100\% = 12.86\%$$

U-6 Total unemployed, plus all persons marginally attached to the labor force, plus total employed part-time for economic reasons, as a percent of the civilian labor force plus all persons marginally attached to the labor force:

$$((1,700 + 700 + 500 + 300)/(20,000 + 700 + 300)) \times 100\% = 15.24\%$$

In-Class Experiment / Active Exercise

Have students form groups of three or four and consider the following exercise:

Each of the following ten individuals has a different employment situation. Discuss whether each individual would count as unemployed or not and explain why. If you believe the individual would count as unemployed, discuss whether you think the individual would be frictionally unemployed, cyclically unemployed, or structurally unemployed.

Eric, who is in prison after he posted a video of himself robbing a gas station on Facebook.

Tara, who just had an adorable baby girl and is on maternity leave.

Albert, who just retired after working for 50 years making artificial limbs.

Mary, who just graduated from college and is searching for her first job.

Lillian, who was recently laid off from her job as an accountant as a result of an economic downturn.

Matt, who works part-time for a home gutter cleaning company.

Scarlett, who lost her job two years ago and has not actively searched for a job in more than a year.

Jose, who lost his job last month after the manufacturing company that employed him went bankrupt.

Steven, who recently suffered a back injury and is on disability insurance.

Thomas, who is a part-time student and enjoys playing guitar.

The purpose of this activity is to get students to consider the different factors that are relevant in determining unemployment and the different types of unemployment.

After a few minutes, ask different groups to volunteer (or call on different groups) to read and explain their answers aloud.

The individuals who are unemployed (with the type) include Mary (frictional), Lillian (cyclical), and Jose (structural). Thomas could be unemployed depending on whether or not he is actively searching for a job.

For more in-class experiment and active learning ideas, visit www.econedactive.com.