

THE FEDERAL RESERVE BANK OF ATLANTA

# Maximum Employment

How does the Fed measure labor market conditions?

MACROECONOMICS





## Maximum Employment Infographic Activity

The Federal Reserve System has a mandate from Congress to maximize employment and maintain price stability. Maximum employment is the state of the economy in which virtually all individuals who are willing and able to work have the opportunity to do so. In this activity, you will explore some methods the Federal Reserve uses to measure the health of the labor market.

### Understanding the labor force

For each of the following people described, identify who is in the labor force and who is out of the labor force. Provide a reason to validate each of your responses. Use the “Labor Force” section of the infographic to help you.

- Jordan’s friends are amazed when they find out he has a summer job at a local fast-food restaurant. Most employers do not hire 14-year-olds, but Jordan got lucky.  
Is Jordan **IN** or **OUT** of the labor force? \_\_\_\_\_ Explain your choice: \_\_\_\_\_  
\_\_\_\_\_
- Chloe sustained a serious knee injury two days ago while teaching her dance classes. She will not be able to go back to work for at least four weeks.  
Is Chloe **IN** or **OUT** of the labor force? \_\_\_\_\_ Explain your choice: \_\_\_\_\_  
\_\_\_\_\_
- Alice joined the Marines after high school. In her new career, she enjoys training canine units to find explosives.  
Is Alice **IN** or **OUT** of the labor force? \_\_\_\_\_ Explain your choice: \_\_\_\_\_  
\_\_\_\_\_
- Kory graduated from college last month. He has spent the last few weeks sending résumés to and interviewing with firms seeking a financial analyst.  
Is Kory **IN** or **OUT** of the labor force? \_\_\_\_\_ Explain your choice: \_\_\_\_\_  
\_\_\_\_\_

### U3 vs. U6: What is the difference?

- Using the Maximum Employment infographic, identify two groups of people included in the calculation of the U6 unemployment rate, but excluded from the U3 unemployment calculation.  
Group 1: \_\_\_\_\_  
Group 2: \_\_\_\_\_



6. With the aid of an Internet-connected device, navigate to the Labor Market Distributions Spider Chart (<https://bit.ly/labor-market-spider-chart>). Click on the tab labeled “Indicators.” Scroll down until you find descriptions of the two groups you identified in number 5. Describe these two groups below.

Group 1: \_\_\_\_\_

Group 2: \_\_\_\_\_

7. How important do you think it is to include these two groups in calculations of the unemployment rate? Explain your answer.

### Calculating the unemployment rate

Use the following data from the fictional country of Jobtopia and the Maximum Employment infographic to calculate labor market statistics.

Note: PTER stands for part-time for economic reasons.

Total Population	1,000,000	Number of Unemployed (16+ years)	24,255
Total Adult Population	770,000	Number of Marginally Attached:	38,419
Number of People Working for Pay	505,371	Number of PTER	47,116
Number of Employed (16+ years)	460,845		

8. How many people are there in the Jobtopian labor force? \_\_\_\_\_

9. What is the U3 unemployment rate for Jobtopia? \_\_\_\_\_

10. What is the U6 unemployment rate for Jobtopia? \_\_\_\_\_

### Types of unemployment

For each of the following people described, determine whether the person counts as unemployed in the U3 unemployment rate and, if so, identify which type of unemployment the person is experiencing.

Provide a reason to validate each of your responses. Use the “Types of Unemployment” section of the Maximum Employment infographic to help you.

11. Noreen quit her job as a construction worker two weeks ago to devote herself full-time to searching for a public relations job, a field in which she holds a bachelor’s degree.

a. Is Noreen unemployed? Yes or No \_\_\_\_\_

b. What information helped you determine whether she is employed or unemployed? \_\_\_\_\_

c. If she is unemployed, what type of unemployment is she experiencing? \_\_\_\_\_

d. What information helped you determine the type of unemployment? \_\_\_\_\_

#### Maximum Employment Activity (2020)

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12. Kevin lost his job as a cashier four months ago when his grocery store implemented a mobile app payment system for purchases. After two months of an unsuccessful job search, Kevin stopped looking and applied for a cybersecurity program at a local technical college. He starts next week and does not plan to work while attending his program.

- a. Is Kevin unemployed? Yes or No \_\_\_\_\_
  - b. What information helped you determine whether he is employed or unemployed?
  - c. If he is unemployed, what type of unemployment is he experiencing? \_\_\_\_\_
  - d. What information helped you determine the type of unemployment? \_\_\_\_\_
- 

13. A downturn in economic activity has many people worried about the future. In times like these, many people cut back on their spending. Due to this change in consumer behavior, automobile producers are selling fewer cars. Donna, a welder on the production line at a local car factory, lost her job three weeks ago and has been looking for a new position with other manufacturers in the state.

- a. Is Donna unemployed? Yes or No \_\_\_\_\_
- b. What information helped you determine whether she is employed or unemployed? \_\_\_\_\_  
\_\_\_\_\_
- c. If she is unemployed, what type of unemployment is she experiencing? \_\_\_\_\_
- d. What information helped you determine the type of unemployment? \_\_\_\_\_  
\_\_\_\_\_



## Job market health

The Federal Reserve measures the health of the labor market using many different statistics. For each of the following categories, identify and explain one of the statistics used by the Fed to measure the labor market. With the aid of an Internet-connected device, navigate to the Labor Market Distributions Spider Chart (<https://frbatlanta.org/chcs/labor-market-distributions.aspx?panel=1>). Click on the tab labeled “Indicators” and scroll down until you find descriptions of the indicators you selected for each category. For each indicator you chose, evaluate how important you think this indicator is to understanding the health of the labor market.

### 14. Category: Employer Behavior

- a. Indicator: \_\_\_\_\_
- b. Explanation of indicator: \_\_\_\_\_  
\_\_\_\_\_
- c. Evaluation of indicator: \_\_\_\_\_  
\_\_\_\_\_

### 15. Category: Confidence/Perceptions

- a. Indicator: \_\_\_\_\_
- b. Explanation of indicator: \_\_\_\_\_
- c. Evaluation of indicator: \_\_\_\_\_  
\_\_\_\_\_

### 16. Category: Utilization

- a. Indicator: \_\_\_\_\_
- b. Explanation of indicator: \_\_\_\_\_
- c. Evaluation of indicator: \_\_\_\_\_  
\_\_\_\_\_

### 17. Category: Labor Market Flows or Wages/Compensation

- a. Indicator: \_\_\_\_\_
- b. Explanation of indicator: \_\_\_\_\_
- c. Evaluation of indicator: \_\_\_\_\_  
\_\_\_\_\_

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## Maximum Employment Infographic Activity (Answer Key)

The Federal Reserve System has a mandate from Congress to maximize employment and maintain price stability. Maximum employment is the state of the economy in which virtually all individuals who are willing and able to work have the opportunity to do so. In this activity, you will explore some methods the Federal Reserve uses to measure the health of the labor market.

### Understanding the labor force

For each of the following people described, identify who is in the labor force and who is out of the labor force. Provide a reason to validate each of your responses. Use the “Labor Force” section of the infographic to help you.

- Jordan’s friends are amazed when they find out he has a summer job at a local fast-food restaurant. Most employers do not hire 14-year-olds, but Jordan got lucky.  
Is Jordan **IN** or **OUT** of the labor force? *OUT* Explain your choice: *Jordan is only 14 years old. He is not counted as part of the labor force until he is 16 years old.*
- Chloe sustained a serious knee injury two days ago while teaching her dance classes. She will not be able to go back to work for at least four weeks.  
Is Chloe **IN** or **OUT** of the labor force? *IN* Explain your choice: *Chloe worked within the last week. She is counted as employed if she has not been out of work for at least a week.*
- Alice joined the Marines after high school. In her new career, she enjoys training canine units to find explosives.  
Is Alice **IN** or **OUT** of the labor force? *OUT* Explain your choice: *Alice is in the military. People in the military are not counted in the labor force numbers.*
- Kory graduated from college last month. He has spent the last few weeks sending résumés to and interviewing with firms seeking a financial analyst.  
Is Kory **IN** or **OUT** of the labor force? *IN* Explain your choice: *Kory is not working and is actively looking for a job. He counts as unemployed in the labor force numbers.*

### U3 vs. U6: What is the difference?

- Using the Maximum Employment infographic, identify two groups of people included in the calculation of the U6 unemployment rate, but excluded from the U3 unemployment calculation.  
Group 1: *Marginally attached*  
Group 2: *Part-time for economic reasons (PTER)*
- With the aid of an Internet-connected device, navigate to the Labor Market Distributions Spider Chart (<https://bit.ly/labor-market-spider-chart>). Click on the tab labeled “Indicators.” Scroll down until you find descriptions of the two groups you identified in number 5. Describe these two groups below.  
Group 1: *Marginally attached workers are individuals not in the labor force who want and are available for work, and who have looked for a job sometime in the prior 12 months, but were not counted as unemployed because they had not searched for work in the four weeks preceding the survey.*  
Group 2: *The PTER category includes the number of persons who indicated they would like to work full-time but were working part-time (one to 34 hours a week) because of an economic reason, such as their hours were cut or they were unable to find full-time jobs.*



7. How important do you think it is to include these two groups in calculations of the unemployment rate? Explain your answer.

- a. *We should include the marginally attached and the PTER numbers. A large number of marginally attached workers indicate things might be worse than the U3 unemployment rate suggests, since they may have stopped trying to find work because they think their prospects are low. People who want full-time hours, but cannot receive them, are not achieving their full productive potential within the economy. This indicates the economy is producing at a level lower than its potential.*
- b. *We should not include these numbers. PTER people are working some hours and should count as employed. If we include them in the unemployment rate, we are overestimating unemployment. If the marginally attached people had actually looked for jobs within the last four weeks, they may have found them. We may overstate problems in the labor market by including them since we don't really know if they would have been successful finding work.*

### Calculating the unemployment rate

Use the following data from the fictional country of Jobtopia and the Maximum Employment infographic to calculate labor market statistics.

Total Population	1,000,000	Number of Unemployed (16+ years)	24,255
Total Adult Population	770,000	Number of Marginally Attached:	38,419
Number of People Working for Pay	505,371	Number of PTER	47,116
Number of Employed (16+ years)	460,845		

Note: PTER stands for part-time for economic reasons.

- 8. How many people are there in the Jobtopian labor force? *485,100*
- 9. What is the U3 unemployment rate for Jobtopia? *5%*
- 10. What is the U6 unemployment rate for Jobtopia? *19.2%*

### Types of unemployment

For each of the following people described, determine whether the person counts as unemployed in the U3 unemployment rate and, if so, identify which type of unemployment the person is experiencing.

Provide a reason to validate each of your responses. Use the “Types of Unemployment” section of the Maximum Employment infographic to help you.

- 11. Noreen quit her job as a construction worker two weeks ago to devote herself full-time to searching for a public relations job, a field in which she holds a bachelor’s degree.
  - a. Is Noreen unemployed? Yes or No *Yes*



- b. What information helped you determine whether she is employed or unemployed? *She has not worked in the last week and is actively seeking work.*
- c. If she is unemployed, what type of unemployment is she experiencing? *Frictional*
- d. What information helped you determine the type of unemployment? *She left her old position voluntarily to match herself with a job more suitable to her skills and interest.*

12. Kevin lost his job as a cashier four months ago when his grocery store implemented a mobile app payment system for purchases. After two months of an unsuccessful job search, Kevin stopped looking and applied for a cybersecurity program at a local technical college. He starts next week and does not plan to work while attending his program.

- a. Is Kevin unemployed? Yes or No *No*
- b. What information helped you determine whether he is employed or unemployed? *Although he does not have a job, he has not looked for a job in the last four weeks and has exited the labor force to be a full-time student.*
- c. If he is unemployed, what type of unemployment is he experiencing? *NA*
- d. What information helped you determine the type of unemployment? *NA*

13. A downturn in economic activity has many people worried about the future. In times like these, many people cut back on their spending. Due to this change in consumer behavior, automobile producers are selling fewer cars. Donna, a welder on the production line at a local car factory, lost her job three weeks ago and has been looking for a new position with other manufacturers in the state.

- a. Is Donna unemployed? Yes or No *Yes*
- b. What information helped you determine whether she is employed or unemployed? *Donna has not worked in the last week and has actively sought work.*
- c. If she is unemployed, what type of unemployment is she experiencing? *Cyclical*
- d. What information helped you determine the type of unemployment? *Donna lost her job because economic activity decreased.*

### Job market health

The Federal Reserve measures the health of the labor market using many different statistics. For each of the following categories, identify and explain one of the statistics used by the Fed to measure the labor market. With the aid of an Internet-connected device, navigate to the Labor Market Distributions Spider Chart (<https://frbatlanta.org/chcs/labor-market-distributions.aspx?panel=1>). Click on the tab labeled “Indicators” and scroll down until you find descriptions of the indicators you selected for each category. For each indicator you chose, evaluate how important you think this indicator is to understanding the health of the labor market. (Answers will vary based on the indicators selected, examples for each are provided below.)

14. Category: Employer Behavior

- a. Indicator: *Payroll employment*



- b. Explanation of indicator: *The monthly change in the level of employment reported in the payroll survey less the monthly change in federal government Decennial Census temporary and intermittent workers.*
- c. Evaluation of indicator: *This indicator is important because the economy must add a particular number of jobs each month to maintain or lower the unemployment rate. If the economy does not add this level of jobs, the unemployment rate may begin to rise.*

15. Category: Confidence/Perceptions

- a. Indicator: *Hiring plans*
- b. Explanation of indicator: *The share of surveyed firms that plan to increase total employment over the next three months.*
- c. Evaluation of indicator: *This indicator provides us with an idea about how optimistic firms are about their sales. Firms will be less likely to anticipate hiring if they are pessimistic about future business activity.*

16. Category: Utilization

- a. Indicator: *Employment-population ratio, ages 25–54 (CPS)*
- b. Explanation of indicator: *The proportion of the civilian noninstitutional population aged 25 to 54 years who are currently employed.*
- c. Evaluation of indicator: *The people in this age range in the population are of prime working age. They are more likely to be part of the labor force than the young or old. If we see a decline in the percentage of people in this age group currently employed, it may indicate trouble.*

17. Category: Labor Market Flows or Wages/Compensation

- a. Indicator: *Average hourly earnings growth*
- b. Explanation of indicator: *This category measures the 12-month percent change in average hourly earnings of private-sector production and nonsupervisory employees.*
- c. Evaluation of indicator: *A percentage increase in wages for production workers could indicate that manufacturers are having to compete in the market for labor. This could indicate strong sales in the industry, driving firms to hire more workers or the number of skilled workers in this labor market are more relatively scarce than in the previous time period.*

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**Maximum Employment Activity (Answer Key) (2020)**

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