

ECO402: Intermediate Macroeconomics

Homework 5

Covers Chapter 7

Due: Saturday May 30, 2020 at 7:00pm

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Instructions: Please upload an answer document on Canvas by the due date above, preferably a PDF document or clear pictures of your handwritten assignment. For handwritten submissions, you are not required to print out the questions to submit the answers. You can just use a separate piece of paper.

Total Points: 21

Using figure 6-2 in the textbook (also in the notes and earlier in this presentation) answer the following:

1. (T/F): Each month, the flows into and out of employment are very small compared to the size of the labor force?
2. (T/F): Fewer than 10% of all unemployed workers exit the unemployment pool each year.
3. As a percentage of workers what is the size of the flows into and out of employment each month?
4. As a percentage of the unemployed workers what is the size of the total flows out of unemployment each month? What is the average duration of unemployment?
5. As a percentage of the labor force what is the size of the total flows into and out of the labor force each month.
6. We learned that only 400,000 new workers enter the labor force each month. What percentage of the total flows into the labor force do new workers constitute?
7. (T/F) Most workers are typically paid their reservation wage.
8. (T/F) Workers who do not belong to unions have no bargaining power.
9. (T/F) The natural rate of unemployment is unaffected by policy changes.
10. Suppose that the markup of goods is 5%, and that the wage-setting equation is:

$$W = P(1 - u)$$

- (a) What is the real wage, as determined by the price setting equation?
- (b) What is the natural rate of unemployment?

- (c) Suppose that the markup of prices over marginal cost increases to 10%. What happens to the natural rate of unemployment? Explain the logic behind your answer.
11. Even in the absence of collective bargaining, workers do have some bargaining power that allows them to receive wages higher than their reservation wage. Each worker's bargaining power depends both on the nature of the job and on the economy-wide labor market conditions.
- (a) Compare the job of a delivery person to a computer network administrator. Which of these jobs does a worker have more bargaining power? Why?
- (b) For any given job, how do labor market conditions (like high or low unemployment) affect a worker's bargaining power?
12. The current situation with the COVID-19 crisis is likely to decrease bargaining power of workers in the U.S. List down two reasons as to why this is so.
13. In what ways can firms lower employment costs?
14. How does the hiring and firing decision of firms affect the labor market?
15. Explain, with the help of graphs, how unemployment benefits and markups affect the equilibrium natural rate of unemployment in the labor market.

16. Suppose that you live in the economy of Genovia. You are trying to find a job but you want to know more about the labor market conditions in Genovia. You have a low chance of losing your job $s = 0.2$ and a very high chance of finding a new one $f = 0.9$. Find the natural rate of unemployment.
17. What is the average duration of unemployment if the monthly rate of unemployed workers leaving unemployment, l , equals 0.25? What about when l is equals 0.1? How are monthly rate of unemployed workers leaving unemployment and average duration of unemployment?