Econ 522

Oct. 9, 2017

Review: Status Definitions

- <u>Employed</u> (E) = have a job
- <u>Unemployed</u> (U) = don't have a job & actively searching
- Not in the Labor Force (N) = no job & not actively searching
- <u>Labor Force</u> (LF) = E + U

Review: Rate Definitions

- Unemployment Rate = # U / # LF
- Labor Force Participation Rate (LFPR) = # LF / # Pop

Review: Related Concepts

- <u>Marginally Attached</u>: people who are not currently looking for work or working, but want to work, are available for work, and have looked for work within the last year
- <u>Discouraged Worker</u>: people who are marginally attached and who stopped looking for a job because they believed none were available
- Part Time for Economic Reasons: people who want and are available for a full time job, but who have had to settle for a part time job

Labor Underutilization Measures

U1	# unemployed 15 weeks of longer / # in LF
U2	(# of people who lost job + # who completed temporary jobs) / # in LF
U3	# unemployed / # in LF
U4	(# unemployed + # discouraged) / (# in LF + # discouraged)
U 5	(# unemployed + # marginally attached) / (# in LF + # marginally attached)
U6	(# unemployed + # marginally attached + # part-time for economic reasons) / (# in LF + # marginally attached)

A Model to Explain Unemployment in the Long Run (the Natural Rate of Unemployment)

Natural Rate of Unemployment Model

- Assume the labor force is fixed.
- Then the only reason for unemployment is job separation, and the only reason for leaving unemployment is job finding.

Unemployment in the Long Run



Explaining the natural rate

- <u>Rate of job separation</u>, s = the fraction of employed individuals who lose or leave their job each month
- <u>Rate of job finding</u>, *f* = the fraction of unemployed individuals who find a job each month
- Labor market steady state when the rate of unemployment is neither rising nor falling
 - Number of people finding jobs = number of people losing jobs
 - f x U = s x E

Explaining the natural rate

- f x U = s x E
 - Substitute in (E = L U); true by definition
 - Divide both sides by L
 - Solve for the unemployment rate U/L
 - => U / L = s / (s + f) = 1 / (1 + f/s)
- The steady state unemployment rates depends on the job finding and job separation rates
 - *Higher separation rate => higher unemployment rate*
 - Higher job finding rate => lower unemployment rate

Reasons for Unemployment in the Long Run

- Job search takes time leading to <u>frictional</u> <u>unemployment</u>
- Wage rigidity leads to <u>structural unemployment</u>

Types of Unemployment in a Long Run Model

- <u>Natural Rate of Unemployment</u>: the average rate of unemployment around which the economy fluctuates; rate of unemployment toward which the economy gravitates in the long-run, given the labor-market imperfections that impede workers from instantly finding jobs
- Frictional Unemployment: unemployment caused by the time it takes workers to find a job; more commonly associated with short term unemployment
- <u>Structural Unemployment</u>: represents a mismatch between the number of jobs available and the number of people who want to work; more commonly associated with long term unemployment

Explanations for Wage Rigidity

- Minimum wages
- Unions and collective bargaining
- Efficiency wages
 - Increase worker productivity
 - Reduce turnover
 - Concern over average workforce quality
 - Improve worker effort