UNEMPLOYMENT

- The macroeconomic problem that affects people most directly and severely.
- There is always some unemployment! (fig. 6-1, p.156)
- The rate of unemployment: the percentage of the labor force unemployed
- The natural rate of unemployment: the average level around which the unemployment rate fluctuates

→ The determinants of the natural rate of unemployment (not SR fluctuation)

1) Job Loss, Job Finding, and the Natural Rate of Unemployment

- A model of labor-force dynamics that shows what determines the natural rate of unemployment
- \( L = E + U \), where \( L \): labor force, \( E \): the employed, \( U \): the unemployed
  → the unemployment rate \( (u) = U/L \)

- \( L \) is assumed to be fixed
  → the transition of individuals in the labor force between employment and unemployment

  • Rate of job separation \((s)\): fraction of employed individuals who lose their job
  • Rate of job finding \((f)\): fraction of unemployed individuals who find a job
- $s$ and $f$ determine the rate of unemployment
- In a steady state,
  \[
  \text{the number of people finding jobs (} fU \text{) = the number of people losing jobs (} sE \text{)}
  \]
  \[
  \Rightarrow \text{steady-state unemployment rate?}
  \]
  \[
  \text{Since } E=L-U, fU=s(L-U)
  \]
  \[
  \text{Solving for } U/L \text{ gives } U/L=s/(s+f)
  \]
- The higher the rate of job separation, the higher the unemployment rate
- The higher the rate of job finding, the lower the unemployment rate

\[
\Rightarrow \text{Any policy aimed at lowering the natural rate of unemployment must either reduce the rate of job separation or increase the rate of job finding}
\]

**(2) Job Search and Frictional Unemployment**

- Frictional unemployment: the unemployment caused by the time it takes workers to search for a job
  - Sectoral shift
  - Change in nature of economy
e.g., when worker’s characteristics do not fit with employers’ requirement
- Public policy
  - Government employment agency
  - Unemployment insurance
(3) **Real-Wage Rigidity and Wait Unemployment**

- Wage rigidity: the failure of wage to adjust until labor supply equals labor demand (fig. 6-3, p.162)

  → reduces the rate of job finding and raises the level of unemployment (= “Wait Unemployment”)

- Minimum-Wage

- Unions and Collective Bargaining

- Efficiency Wages → how wages affect productivity
  - reduce labor turnover
  - average quality of a firm’s workforce
  - increase a worker’s effort level

*Therefore, a firm may find it profitable to keep wages above the equilibrium wage rate, b/c the firm operates more efficiently if it pays its workers a high wage.*