

Introduction

1 Basic Concepts

- A. Positive vs Normative Economics
- B. Assumptions
 - 1) Scarcity - Opportunity costs
 - 2) Rationality
 - a) Maximization
 - b) Information usage
- C. Model Building
 - 1) Simplification
 - 2) Examples from physics
 - a) Falling object
 - b) Playing pool
- D. Market Failures with examples
 - 1) Departures from rationality - people don't solve difficult math problems every time they make a decision
 - 2) Transactions barriers - students give example
 - 3) Lack of information - students give example
 - 4) Nonexistent markets - problem of slavery
 - 5) Public goods - students give example
 - 6) Capital market imperfections - human capital problems

2 Definitions, Facts, and Trends

- A. Labor Force Categories (discuss definition and why people would be in each)
 - 1) Population: 196,814,000 (≥ 16 yrs old)
 - 2) Labor force: 131,056,000
 - 3) NILF: 65,758,000
 - 4) Employed: 123,060,000
 - 5) Unemployed: 7,996,000
- B. Ratios and rates
 - 1) Labor force participation rate
 - 2) Unemployment rate
- C. Labor markets
 - 1) Definition of labor market: market where people (workers) trade labor for compensation
 - 2) Types
 - a) Local vs. national
 - b) Internal vs. external
 - c) Primary vs. secondary
 - d) Industry vs. national

- D. Unemployment rates: Figure 2.2 (p30, v6)
- E. Changes in industrial and occupational structure: Tables 2.2 and 2.3 (p27, v4)
- F. Earnings
 - 1) Concepts
 - a) Nominal wage/unit
 - b) Nominal earnings = wage \times # units
 - c) Real wages and earnings
 - i) Price indices
 - ii) Nominal price indices
 - d) Fringe benefits
 - e) Discuss Table 2.4 (p31, v4)

3 Market Mechanism

- A. Demand
 - 1) Production function
 - 2) Factors of production
 - 3) Prices of factors
 - 4) Declining demand curve
 - a) Scale effect
 - b) Substitution effect
 - 5) Firm vs. industry demand curves
 - 6) Shifts in demand curves
 - a) Increase in demand for output
 - b) Decrease in price of capital
 - c) Increase in rainfall
 - d) Increase in price of oil
 - 7) Long run vs short run
- B. Supply
 - 1) Utility function with leisure and goods consumption
 - a) Leisure is good
 - b) Consumption is good but costs money

$$\begin{aligned} & \max U(L, X_1, X_2) \\ \text{st } & p_1 X_1 + p_2 X_2 \leq (T - L)w \end{aligned}$$

- 2) Upward sloping supply curve
 - a) More hours
 - b) More workers
- 3) Industry vs Market vs Firm supply curve
- 4) Shifts in curve

- a) Shift in wage in other industry
 - b) Increase in price of oil
 - c) Extra child
 - d) Increase in job search costs
- C. Wage and equilibrium determination
- 1) Equilibrium wage
 - a) Draw picture
 - b) Explain deviations from equilibrium
 - 2) Changes in equilibrium
 - a) Increase in price of oil
 - b) Baby boom
 - c) Black plague
 - d) Increase in interest rate
 - 3) Estimation
 - a) Lack of identification (draw picture)
- D. Application: Equilibrium across two industries
- 1) Variables:

$$L_A = \text{labor in Alaska}$$

$$L_C = \text{labor in California}$$

Demand equations:

$$D_A = D_A(w_A);$$

$$D_C = D_C(w_C).$$

Supply equations:

$$S_A = S(w_A, w_C), \quad S_1 > 0, S_2 < 0;$$

$$S_C = L - S_A.$$

Equilibrium conditions:

$$S_A = D_A;$$

$$S_C = D_C.$$

Simplify to

$$D_A(w_A) = S(w_A, w_C);$$

$$D_C(w_C) = L - S(w_A, w_C).$$

Draw each curve in $w_A - w_C$ space. First draw $D_A(w_A) = S(w_A, w_C)$. To do so, draw supply and demand in $L_A - w_A$ space and consider how they shift with w_C . Then do the same for California. For each state, draw equilibrium combinations of (w_A, w_C) . Look for equilibrium. Consider how one moves toward an equilibrium when away from it.

How do we know there exists a unique equilibrium?

How do we know there exists any equilibria?

Why is there likely to be an equilibrium at $w_A = w_C = 0$? How could we change the model to get rid of the equilibrium at $w_A = w_C = 0$?