Review Notes - Introduction

- Market for Labor
  - How do we know a market for labor exists?
  - Labor as an input
    - \( Q = f(K, L, N, E) \)
  - Why/how is labor different than other inputs?
- Factors important in labor markets
  - Work environment
  - Risks
  - Personalities
  - Equity
  - Etc.

- Concepts/Definitions
  - What is labor economics?
    - The study of the workings and the outcomes of labor markets
  - How to study labor markets
    - Normative analysis
    - Positive analysis
    - Economic models and the scientific method
    - Efficiency (is this normative or positive?) – define them all.
      - Total or Economic Efficiency
      - Allocative efficiency and inefficiency
        - MSB and MSC (what are those?)
        - Efficiency occurs where?
      - Technological efficiency and inefficiency
      - Other possible goals besides efficiency?
    - Normative analysis – intervene when markets fail (when does that happen?)
      - Lack of or asymmetric information
      - transaction barriers
      - price distortions – taxes, subsidies, etc.
      - transaction costs
      - externalities
      - monopoly/monopsony
• and so forth

■ Public Policy and Government Intervention
  • When should the government intervene (is this normative?)?
  • How should the government intervene?
    • Intervene using the methods that disrupts markets the least and is therefore more efficient (is this normative?)
    • What if many efficient outcomes exist – which is best?

■ Labor markets
  • What is a labor market?
  • Labor Force?
  • Labor force participation rate?
  • Unemployment rate?
  • Price of labor?
    • Nominal vs. real wage rate

• Demand Defined (what is a derived demand?)
  ▪ definition
  ▪ the law of demand (as w increases => $Q^L$ decreases) why?
  ▪ market demand

• Other influences on Demand (besides the wage)
  • the price of related inputs
    • substitutes: as $P_s$ increases => $D_L$ increases and reverse
    • complements: as $P_c$ increases => $D_L$ decreases and reverse
  ▪ the number of demanders (buyers) in a market: as # increases => $D_L$ increases and reverse
  ▪ demand for the output that labor produces => if $D$ for the output labor produces increases then $D_L$ increases also.
    ▪ Etc.

• Change in Demand ($D$) vs. change in Quantity Demanded ($Q_d$)

• Supply Defined
  ▪ definition
  ▪ the law of supply (as w increases => $Q_s^L$ increases ) why?
  ▪ market supply

• Other influences on Supply (besides the wage)
  • Wages in other labor markets
  • Population
- Labor force participation rates
- Preferences (about labor/leisure tradeoffs)
- Change in Supply (S) vs. change in Quantity Supplied (Qs)

- Market equilibrium
  - Definitions
    - equilibrium
    - stable equilibrium
  - How does the market attain equilibrium?
- Predictions about equilibrium W and L
  - increase in D => what happens to equilibrium W and L?
  - decrease in D => what happens to equilibrium W and L?
  - increase in S => what happens to equilibrium W and L?
  - decrease in S => what happens to equilibrium W and L?
  - increase in D and increase in S => what happens to equilibrium W and L?
  - increase in D and decrease in S => what happens to equilibrium W and L?
  - decrease in D and increase in S => what happens to equilibrium W and L?
  - decrease in D and decrease in S => what happens to equilibrium W and L?

- Elasticity
  - Definition of 4 different types
    - Wage Elasticity of the Demand for labor
    - Wage Elasticity of the Supply of labor
    - Elasticity of substitution

- Consumer Choice
  - Simple two good model
  - Budget constraint
    - \( p_1X_1 + p_2X_2 \leq M \)
    - meaning? graphically?
  - Budget Line
    - \( p_1X_1 + p_2X_2 = M \)
    - meaning? graphically?
    - intercepts of the BL?
    - slope of the BL?
    - what shifts the BL?
    - opportunity cost of the two goods?
Preferences

- define consumption bundle, preferred, and indifferent
- rationality
  - completeness (what's that?)
  - transitivity (what's that?)
- indifference curves
  - how are points on, and off, an indifference curve related?
    - two points on the same indifference curve?
    - a point above and a point on an indifference curve?
    - a point below and a point on an indifference curve?
  - what do they look like?
  - how many are there?
  - in which direction is the consumer better off?
  - can indifference curves cross?
  - what do different examples of indifference curves look like?
- utility
  - what does utility measure?
  - what happens to utility as we move to a higher indifference curve?
  - assume individuals want to maximize utility given prices, income, and preferences
  - what is marginal utility?
  - how do you derive a demand curve, graphically, from indifference curve analysis?

Statistical Tools

- What is a hypothesis? How do we test it?
- How do we test whether two means are different?
  - Focus on definitions of terms - variance, standard deviation, standard error, normal distribution, etc.
  - What is the general idea of how one would test whether the means of two groups are different? What is statistical significance?
- Regression analysis
  - Define regression analysis, multiple regression analysis, and Ordinary Least Squares (OLS) regression.
  - What is the basic idea behind regression analysis, multiple regression analysis?
  - How do you use/interpret the coefficient estimates from regression analysis?
  - How do you test the coefficients - when are they statistically significant?