## **Review Notes - Introduction**

- Market for Labor
  - How do we know a market for labor exists?
  - Labor as an input
    - $\bullet$  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
        - o MSB and MSC (what are those?)
        - o 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  $=> Q_D^L$  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<sub>L</sub> increases and reverse
  - demand for the output that labor produces => if D for the output labor produces increases then D<sub>L</sub> increases also.
  - Etc.
- Change in Demand (D) vs. change in Quantity Demanded (Q<sub>d</sub>)
- Supply Defined
  - definition
  - the law of supply (as w increases  $\Rightarrow$   $Q_S^L$  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 (Q<sub>s</sub>)
- 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
    - $p_1X_1 + p2X2 \le M$
    - meaning? graphically?
  - Budget Line
    - $p_1X_1 + p2X2 = M$
    - 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
  - o completeness (what's that?)
  - o transitivity (what's that?)
- indifference curves
  - o 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?
  - o what do they look like?
  - o how many are there?
  - o in which direction is the consumer better off?
  - o can indifference curves cross?
  - o what do different examples of indifference curves look like?

## utility

- o what does utility measure?
- o what happens to utility as we move to a higher indifference curve?
- o assume individuals want to maximize utility given prices, income, and preferences
- o what is marginal utility?
- o 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?