Lab 9 – Monopoly & Macroeconomics

Review

1. In perfect competition, firms face perfectly elastic demand curves
2. If firms are earning profits, more firms will enter the market. As more firms enter the market, what happens to the market supply curve?

Characteristics of Monopoly

1. Single sellers
2. No close substitutes
3. Barriers to entry

Monopolists Marginal Revenue

1. Recall, a competitive firm's demand curve is perfectly elastic and equal to the price set by the market
2. The monopolist faces a downward sloping demand curve
3. A competitive firm is a "price-taker" while a monopolist is a "price-maker"
4. For a linear demand curve:
    a. MR=0, Demand is unit elastic.
    b. MR>0, Demand is elastic
    c. MR<0, Demand is inelastic

Profit Maximization by a Monopoly

1. Look for MC=MR to determine quantity supplied
2. At the given quantity, determine price by the corresponding point on the demand curve
3. As long as the price exceeds the average cost at the output for which marginal revenue equals marginal cost, a monopoly will be profitable

Monopoly v.s. Perfect Competition

1. The monopoly price exceeds the competitive price, and the monopoly output falls short of the competitive equilibrium output
2. The price set by the monopolist exceeds the marginal cost of its product
    a. Price always exceeds the monopolist's marginal revenue
    b. When the monopolist chooses the output that sets marginal revenue equal to marginal cost, price will also exceed marginal cost
3. Monopoly firm earns economic profit by charging a price that exceeds the minimum possible average cost of production
    a. The absence of free entry into the market ensures that supply won't increase, thereby causing price to fall
    b. The monopoly firm enjoys economic profits, whereas firms in competitive equilibrium earn no economic profits.
4. Social Cost of Monopoly – measure of the loss in the potential net benefits that results from monopoly control of price and supply

GDP

1. Gross Domestic Product –

2. GDP does not include intermediate goods, illegal activities, homemaking activities, or the sale of used goods
3. GDP is calculated by multiplying the quantity of each individual type of final product by its market price. The dollar values of all final products derived in this way are then added to obtain a sum that equals the market value of the economy's aggregate production of final products
4. Components of GDP = C + I + G + NE
    a. Personal Consumption (C) –

    b. Gross Private Domestic Investment (I) –

    c. Government Purchases (G) –

    d. Net Exports (NE) –

5. Nominal verses Real
    a. Nominal –

    b. Real –

Business Cycles

1. Definitions
    a. Business Cycle –

    b. Expansion –

    c. Peak –

    d. Recession –

    e. Trough –

    f. Recovery –

2. Actual Unemployment = Frictional + Structural + Cyclical Unemployment
    a. Frictional Unemployment –

    b. Structural Unemployment –

    c. Cyclical Unemployment –

    d. Full Employment –

    e. Natural Rate of Unemployment = Structural + Frictional Unemployment
3. Potential GDP is the level of real GDP that would prevail if the economy achieved the natural rate of employment

Price Levels

1. Price Level –

2. Price Index –

3. Consumer Price Index –

    a. Index is based on a standard basket of goods and services purchased by a typical urban family
    b. CPI = $\frac{Cost\ of\ basket\ at\ current\ prices}{Cost\ of\ basket\ at\ base\ year\ prices} * 100$
4. Inflation –

    a. Measured by percentage change in a Price Index

Problems

1. Fill in the Total Revenue and Marginal Revenue columns:

Price	Quantity	Total Revenue	Marginal Revenue
$16	1		
$14	2		
$12	3		
$10	4		
$8	5		
$6	6		
$4	7		

   a. What happens to total revenue as the monopolist decreases price?

   b. Where is the elastic part of the demand curve and where is the inelastic part?

2. The Rossett Ruby Company has a monopoly on the supply of rubies. At its current level of output, the marginal cost of producing rubies is $1,000 per carat. If the firm maximizes profit, it will set the price of rubies at:
   a. $1,000 per carat
   b. more than $1,000 per carat
   c. a level that equals the minimum possible average cost of producing rubies
   d. less than $1,000 per carat

3. If a firm has a monopoly in the supply of an item, it
   a. will make economic profit no matter what the demand for the good
   b. can earn economic profit in the short run, but will earn zero economic profit in the long run
   c. will maximize profit by adjusting output until marginal revenue equals marginal cost
   d. will maximize profit by adjusting output until price equals marginal cost
   e. both (c) and (d)

4. The canned soup industry is monopolistically competitive and currently in long-run equilibrium. It follows that:
   a. the price of canned soup equals the marginal cost of canned soup
   b. the price of canned soup equals the average cost of canned soup
   c. the price of canned soup equals the minimum possible average cost of canned soup
   d. none of the above