

Lecture 5

Market power – part III



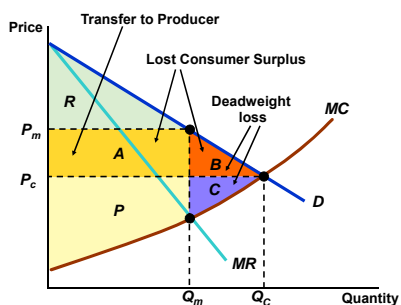
microeconomics II
first module

Efficiency of non-competitive markets

- ★ Market power results in **higher prices** and **lower quantities**
- ★ However, does market power **improve or worsen** market **efficiency**?
- ★ We can **compare CS** and **PS** under PC and under monopoly.

Efficiency under market power

Efficiency



Social costs of monopoly

Efficiency

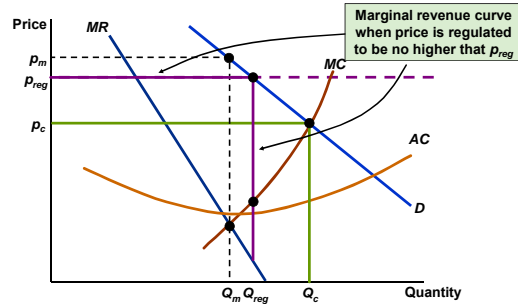
- ★ The **social cost** of monopoly is likely to **exceed** the deadweight loss
- ★ **Rent Seeking**: firms may use resources to gain market power instead of using them in the production process
lobbying, advertising, building excess capacity
- ★ The **incentive** to engage in monopoly practices is determined by the profit to be gained
the transfer from consumers to the firm.

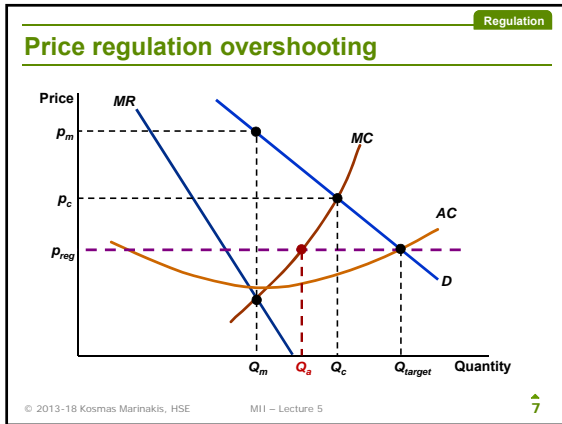
Price regulation

- ★ Government can **regulate** market power through price regulation
 - ◆ In competitive markets, price regulation **creates** a deadweight loss
 - ◆ In monopoly, price regulation can **eliminate** a deadweight loss
- ★ Lets see the effect graphically...

Price regulation

Regulation



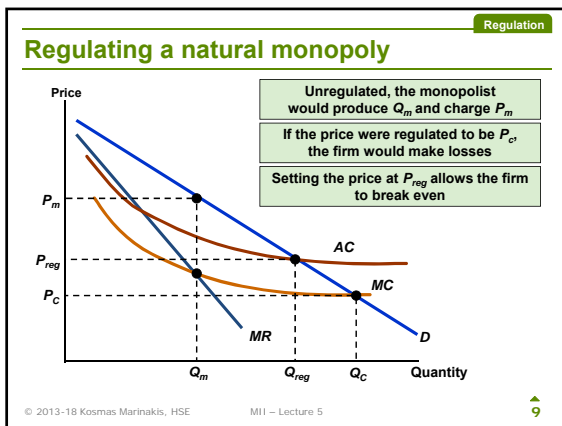


Regulation

Natural monopoly

- ★ In some markets, it is possible that a single firm can produce the entire output at a **significantly lower cost** than if there were several firms
 - ◆ This happens when there are large **economies of scale**
 - ◆ **Splitting** the monopoly into two firms results in considerably higher AC
 - ◆ **Examples:** metro, airports, utility companies

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Regulation

Regulation in practice

- ★ Regulation is **not easy** in reality
- ★ Government has no clue about the firm's **cost**
- ★ **Demand** may change with evolving market conditions
- ★ Government usually sets price caps based on **past prices** taking into account inflation and productivity growth

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Monopsony

- ★ A **monopsony** is a market in which there is a single buyer
- an **oligopsony** is a market with only a few buyers
- ★ So, **buyers** may also possess **market power**
 - the ability to **affect** the price of the good and **pay less** than the competitive price
- ★ We must derive the **surplus maximization condition** for a consumer with market power

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Monopsony

Marginal value

- ★ A consumer **would buy** an extra unit if
 - $value\ of\ this\ unit \geq expenditure\ for\ this\ unit$
- ★ The **marginal value (MV)** of a unit is the additional benefit derived from purchasing this unit
- ★ The valuation for each unit for a consumer is given by the consumer's **demand curve**
- ★ Therefore, the MV curve **coincides** with the demand curve

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Monopsony

Marginal expenditure and supply

- ★ **Marginal expenditure (ME)** is the additional cost of buying one more unit of a good
- ★ The market **supply curve** is not the marginal expenditure curve
- ★ This is because decision to buy an extra unit raises the price **for all units** you have to **pay more per unit**, so that the producer **will produce** an extra unit (positive sloped supply).

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Monopsony

Marginal expenditure

- ★ Expenditure

$$E = p(q) \cdot q$$

$p(q)$ is the supply curve now
- ★ Then

$$ME = \frac{dE}{dq} = \frac{d(p(q) \cdot q)}{dq} = \frac{dp(q)}{dq} \cdot q + p(q)$$
- ★ Because $p(q)$ has **positive slope**, it follows that the ME curve must be **above it**.

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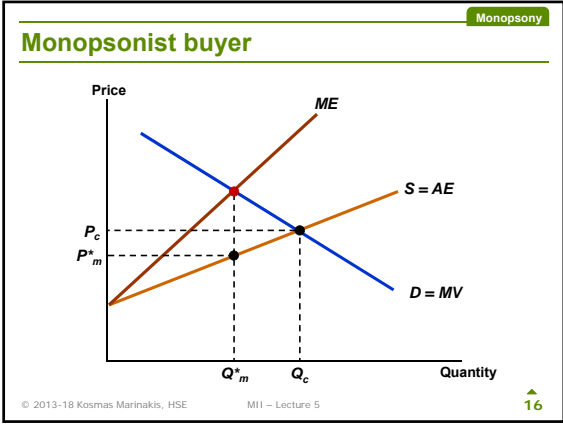
Monopsony

Equilibrium

- ★ Equilibrium will be when

$$ME = MV$$
- ★ That is, you **stop buying when** the price you need to pay to the producer for a unit more exceeds how much the additional unit is worth to you
 you **will not buy** a unit if its price is higher than the value you receive from this unit.

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Monopsony

Monopoly vs. monopsony

| | |
|---|---|
| <ul style="list-style-type: none"> ★ Monopsony is easier to understand if we compare it to monopoly ★ Monopolist <ul style="list-style-type: none"> ◆ Faces <u>downward</u> sloping demand ◆ MR <u>below</u> demand ◆ Charges price above MC ◆ MR = MC yields quantity less than PC | <ul style="list-style-type: none"> ★ Monopsonist <ul style="list-style-type: none"> ◆ Faces <u>upward</u> sloping supply ◆ ME <u>above</u> supply ◆ Negotiates price below MC ◆ MV = ME yields quantity lower than PC |
|---|---|

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Monopsony

Monopsony power

- ★ You **do not need** to be the **only buyer** in the market to have monopsony power
- ★ It is common a **few firms** to compete among themselves as buyers
 - ◆ Each firm has **some** monopsony power
 - ◆ **Example:** super-markets
- ★ **Monopsony power** may give them the **ability** to pay a **price less** than marginal value.

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Monopsony

Factors affecting monopsony power

- * **Elasticity** of market supply
 - ◆ Extent to which $p < MV$ depends on *elasticity of supply*
 - ◆ If supply is very *elastic*, mark-down will be small
 - ◆ The more *inelastic* the supply, the more monopsony power
- * **Number** of buyers
 - ◆ fewer buyers make *total supply less elastic* and this increases monopsony power
- * **Interaction** among buyers
 - ◆ when *buyers collude* they can exploit the sellers more effectively

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Monopsony

Elastic vs. Inelastic supply

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Monopsony Efficiency

Social costs of monopsony

- * Monopsony yields *lower prices* and *lower quantities* purchased
- * We should expect:
 - ◆ *Sellers* to be *worse off*
 - ◆ *Buyers* to be *better off*
- * We can show the effects of monopsony power *graphically*
 - ◆ using *PS* and *CS* and *comparing* them to the PC market

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Monopsony Efficiency

Deadweight loss from monopsony

| |
|------------------------|
| Consumers gain A – B |
| Producers lose A and C |
| DWL is B and C |

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Bilateral monopoly

- * Market with only *one buyer* and *one seller*
 - ◆ Pure bilateral monopoly is *rare*
 - ◆ Markets with a *small number* of sellers and buyers, both with market power are common
- * What is the *equilibrium* in a bilateral monopoly?
 - ◆ The *monopoly* equilibrium (MR = MC)?
 - ◆ The *monopsony* equilibrium (MV = ME)?

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Bilateral monopoly

Bilateral monopoly graph

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Limiting market power

- ★ Market power **harms** some players in the market – buyer or seller
 - ◆ Reduces output
 - ◆ Creates **deadweight loss**
 - ◆ Raises issues of **equity** and **fairness**
- ★ It is **hard to fix** such failures after the fact
to **measure the losses** and **find those who lost** so that the monopolist or monopsonist can compensate them
- ★ It is **preferable** to **prevent** the creation of excess market power from the beginning
create **Antitrust** legislation

Antitrust laws

- ★ **Rules** and **regulations** designed to promote a competitive economy by
 - ◆ Prohibiting **actions** that restrain or are likely to restrain competition
 - ◆ Restricting the **forms** of allowable market structures
- ★ Market power arises in a **number of ways**, each of which is **covered** by the antitrust laws

Sherman Act (1890) – section 1

- ★ Prohibits contracts, combinations, or conspiracies in **restraint of trade**
 - ◆ Explicit agreement to **restrict output** or **fix prices**
 - ◆ Implicit collusion through **parallel conduct**
 - ◆ **Example**: In 1999, four of the world's largest drug and chemical companies were found guilty of fixing prices of vitamins sold in US

Sherman Act (1890) – section 2

- ★ Makes it illegal to **“monopolize”** a market and prohibits conspiracies that result in monopolization
 - ◆ It is OK if a firm gets the entire market because of **superior skill and intelligence** when nobody else could do it as well as this firm
 - ◆ It is not OK if a firm gets the entire market by the **use of means** which made it impossible for other firms to engage in fair competition

Clayton Act (1914)

1. Makes it unlawful to require a buyer or lessor **not to buy** from a competitor
2. Prohibits **predatory pricing**
3. Prohibits **mergers** and **acquisitions** if they “substantially lessen competition” or “tend to create a monopoly”

Federal Trade Commission Act (1914)

1. Created the Federal Trade Commission (FTC)
 2. Supplements the Sherman and Clayton Acts by fostering competition through a set of prohibitions against unfair and **anticompetitive practices**
- ★ Prohibitions against
 - ◆ Deceptive **advertising**
 - ◆ Deceptive **labeling**
 - ◆ **Agreements** to exclude competing brands from retailing

Antitrust

Robinson - Patman Act (1936)

- ★ Prohibits **price discrimination** if it causes buyers to suffer economic damages and competition is reduced
- ★ Prevents unfair price discrimination, by requiring that the seller offer the **same price terms** to customers at a given level of trade
 - provided for **criminal penalties**, but contained a specific exemption for "cooperative associations"

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Antitrust Russia

Antitrust legislation in Russia

- ★ Antitrust issues in Russia are regulated by one law: **Federal Law No. 135-FZ**, "On the Protection of Competition" (2006)
- ★ The "**3rd antimonopoly package**", which entered into force in January 2012, is indicative of a general trend of liberalization of antimonopoly regulation
 - indeed, its **stated** aim was to bring Russia more in line with European competition regulations
- ★ The **Code of Administrative Offences** includes measures

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Antitrust Russia

Federal Law No. 135-FZ

- ★ Defines thresholds for **excess market power** (dominance)
 - ◆ A company is "presumed dominant" if it has **more than 50%** of market share
 - ◆ Dominance must be established by Federal Antimonopoly Service (Федеральная антимонопольная служба России, ФАС России) if a company has **more than 35%** of market share
 - ◆ A company with **less than 35%** of market share is generally not considered dominant
- ★ The law places restrictions on **aids from the government** that discourage competition

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Antitrust Russia

Code of Administrative Offences

- ★ Amended to increase **liability** of anti-competitive practices and now includes **measures** against such practices
- ★ Company directors can be **criminally liable** in cases of a repeated offense (7 years in prison)
- ★ **Practices** that are considered illegal include
 - ◆ **Establishing monopoly** prices
 - ◆ Unjustified evasion from the **execution of contracts** with individual customers
 - ◆ Creation of **obstacles** for other entities entering the market

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Antitrust

Enforcement of Antitrust Laws

- ★ US antitrust laws are **stricter** and more **far reaching** than the rest of the world
 - some have claimed this has hindered US **competing in international markets**
- ★ With growth of European Union, methods of antitrust enforcement have **evolved**
 - ◆ Similar to US laws with some procedural and substantive differences
 - ◆ Europe only imposes civil penalties

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Antitrust

Case

- ★ Microsoft
 - ◆ Market power
 - ◆ Predatory actions
 - ◆ Collusion

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Thank you!



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