## Chapter 9 Monopoly

These slides supplement the textbook, but should not replace reading the textbook What are the four types of markets?

- Perfect competition
- Monopoly
- Monopolistic competitionOligopoly

What is a monopoly firm? The only seller of a good or service with no close substitutes

### What is a monopoly market? A market in which the monopoly firm operates



What is a barrier to entry? Any impediment that prevents new firms from competing on an equal basis with existing firms in an industry



What are some examples of a barrier to entry? Legal restrictions Economies of scale Control of essential resources

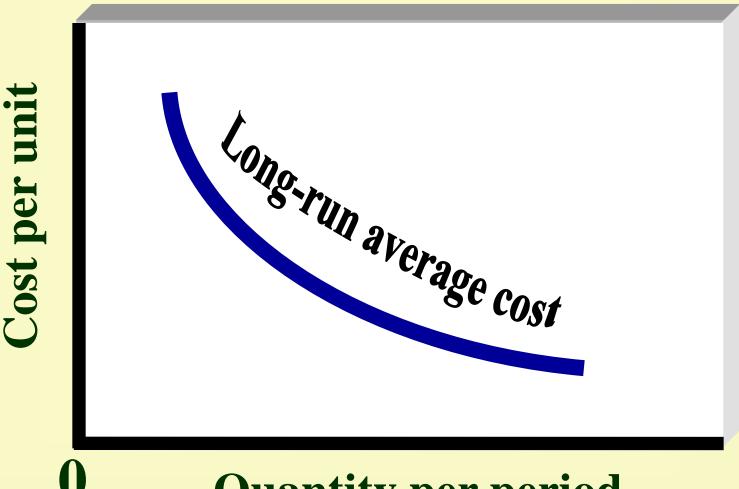
## Can a monopoly make an economic profit in the long run? Yes! Because of these barriers to entry

What is a patent? A legal barrier to entry that conveys to its holders the exclusive right to supply a product for 20 years

What is an innovation? The process of turning an invention into a marketable product

When does a firm experience economies of scale? When a firm increase resources in the long run and efficiency increases

#### **Economies of Scale as Barriers to Entry**



**Quantity per period** 

Exhibit 1

# What is a price searcher?

A firm that has some control over the price it charges because its demand curve slopes downward

What is a single price monopoly? A Monopoly firm that is limited to charging the same price for each unit of output sold

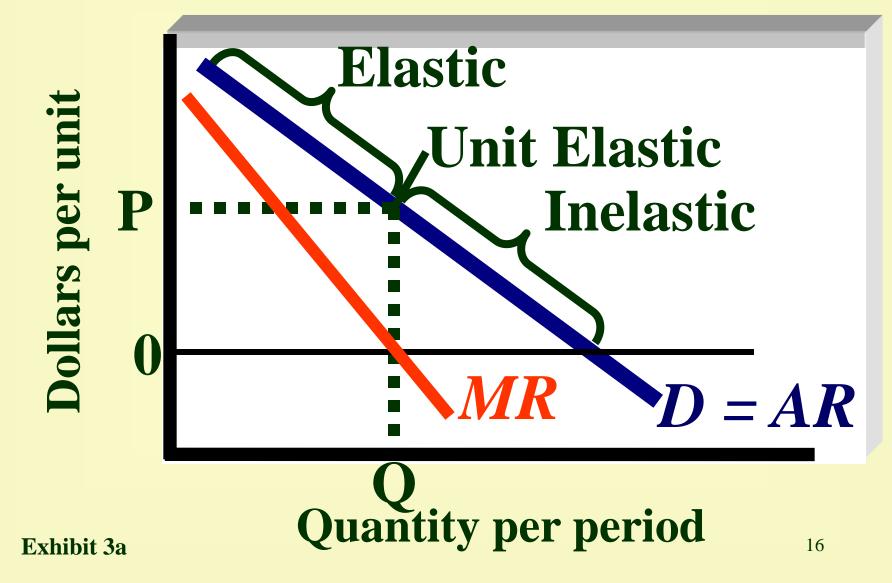
# What is the monopolist's demand curve?

The market demand curve

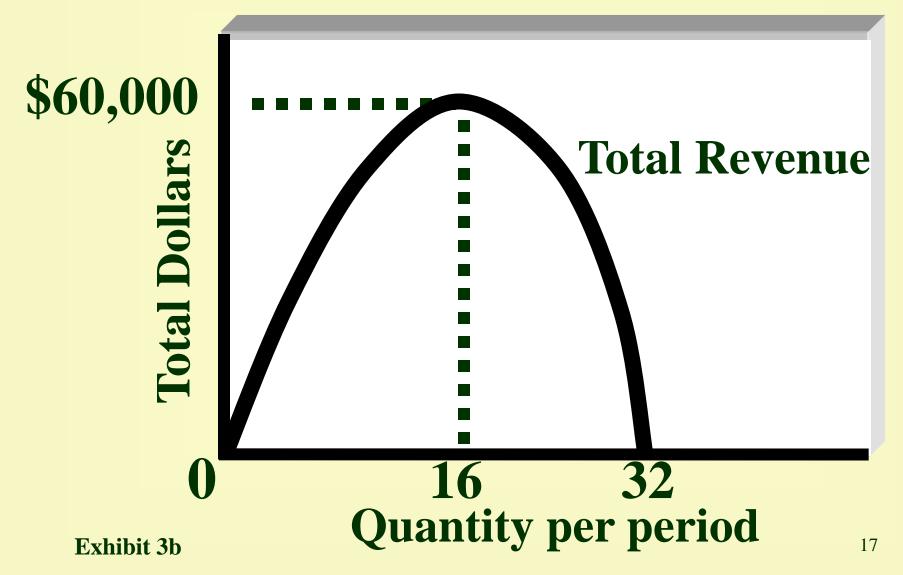
## How is the demand curve derived for the single price monopoly?

It's average revenue curve

### Monopoly Demand Loss & Gain in Total Revenue from Selling One More Unit



### Monopoly Demand Loss & Gain in Total Revenue from Selling One More Unit



What is a natural monopoly? Due to economies of scale, one firm can operate at lower average cost than can two or more firms

How does the government foster monopolies? Patents, trademarks, copyrights Exclusive government franchises

What is the purpose of patents and copyrights? To give people and firms the incentive to invest their time and money into new products and creative works

What is a government franchise? A government granted right to be the sole seller of a product or service

When does the government grant a franchise?

When it thinks the market in question is a natural monopoly

What are examples of a government franchise? The U.S. Postal Service Local telephone service Local electric, gas, water utilities, garbage collection, cable TV

## Is a government franchise a win-win deal for the protected company? Most often the government regulates its prices and profits

What is the government's objective? For the monopoly to make a normal profit



### Why is MR < P for all but the first unit of output for a single price monopoly? In order to sell additional units the firm not only has to

lower price on the *last* unit, but on all *previous* units

# MR is less than price for all<br/>but the first unit of outputQPTRMR

| 10 | 5.25 | 52.50 | 3.00 |
|----|------|-------|------|
| 11 | 5.00 | 55.00 | 2.50 |
| 12 | 4.75 | 57.00 | 2.00 |
| 13 | 4.50 | 58.50 | 1.50 |
| 14 | 4.25 | 59.50 | 1.00 |

Exhibit 2

#### What is TR at the 3rd unit? Price \$50 2 . \$40 3 \$120 \$30 \$20 5 \$10 6

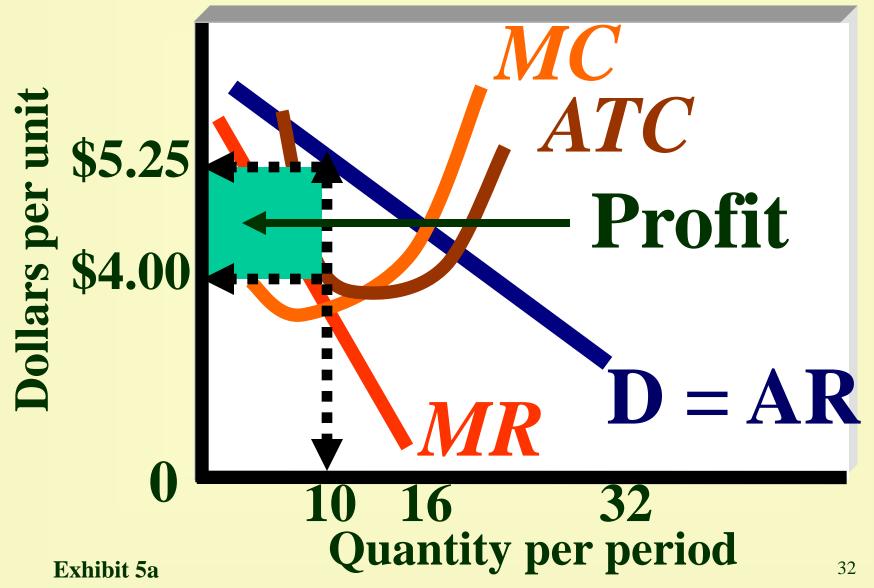
### What is MR at the 3rd unit? Price 2 \$50 <u>\$</u>40 3 4 \$20 \$30 \$20 5 \$10 6

### What is MR at the 5th unit? Price 2 \$50 \$40 3 \$20 **\$**30 \$20 5 \$10 6

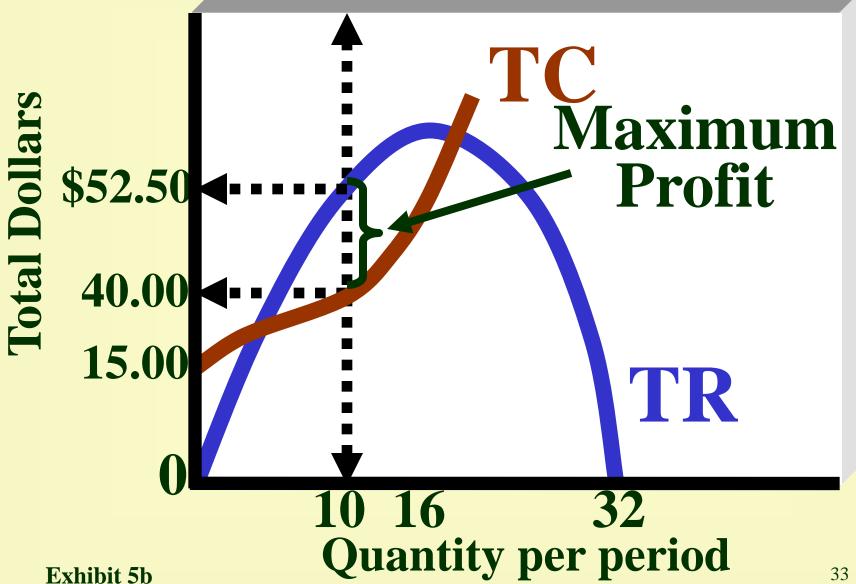
### Short-Run Cost & **Revenue for a Monopolist** TR MR TC MC +, -P 8 5.75 46.00 4.00 35.25 1.50 10.75 9 5.50 49.50 3.50 37.25 2.00 12.25 10 5.25 52.50 3.00 40.00 2.75 12.50 11 5.00 55.00 2.50 43.25 3.25 11.75 12 4.75 57.00 2.00 48.00 4.75 9.00

Exhibit 4

### (a) Per Unit Cost & Revenue



### (b) Total Cost & Revenue



### **Minimizing Losses**

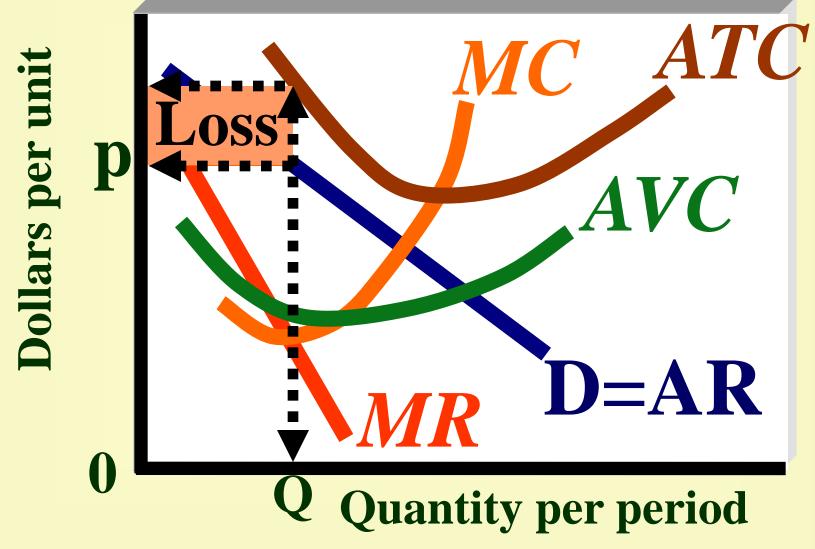


Exhibit 6

## When will a monopolist shut down?

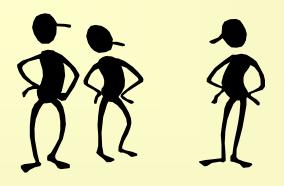
If no price covers average variable cost

# Can a monopolist earn an economic profit?



# Why do monopolies often earn zero economic profit?

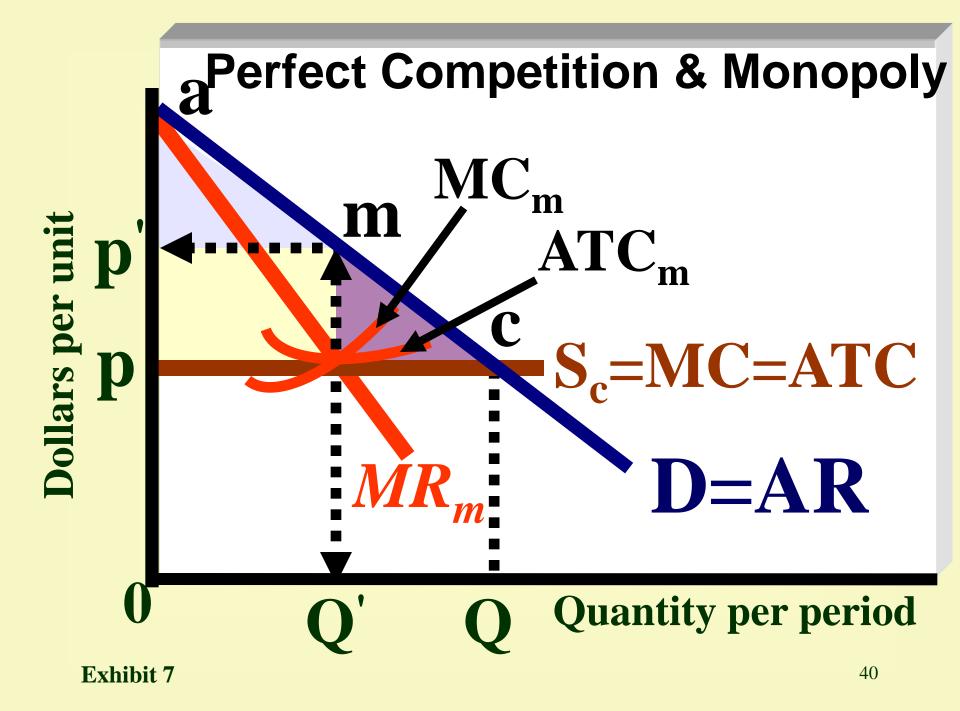
#### Government regulation



## How to compare perfect competition & monopoly?

 Higher prices & less output under monopoly
Resource allocation Why does a monopoly charge a higher price and produce a lower quantity than perfect competition?

Because of the different slopes of their demand and MR curves

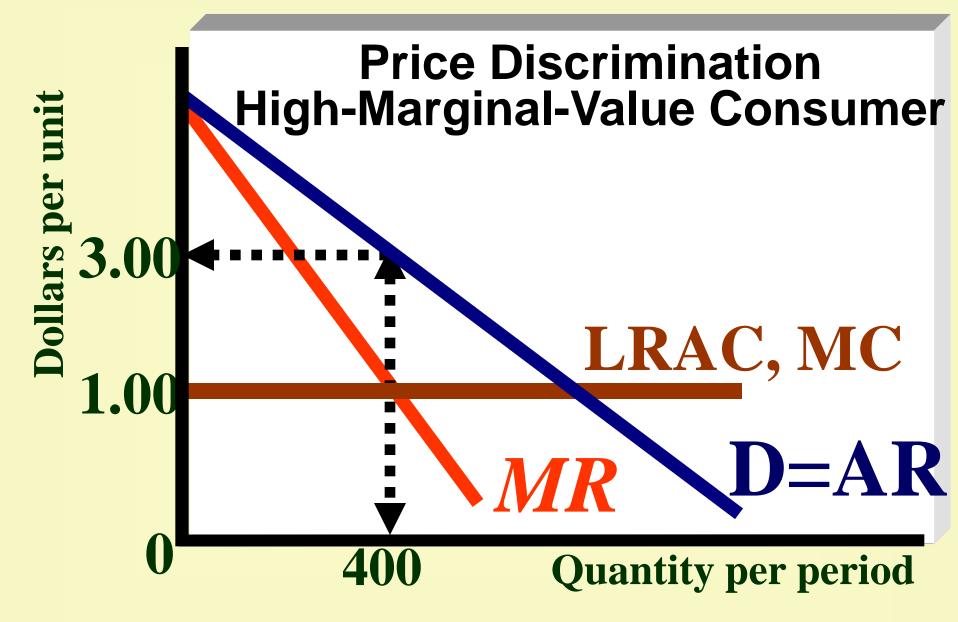


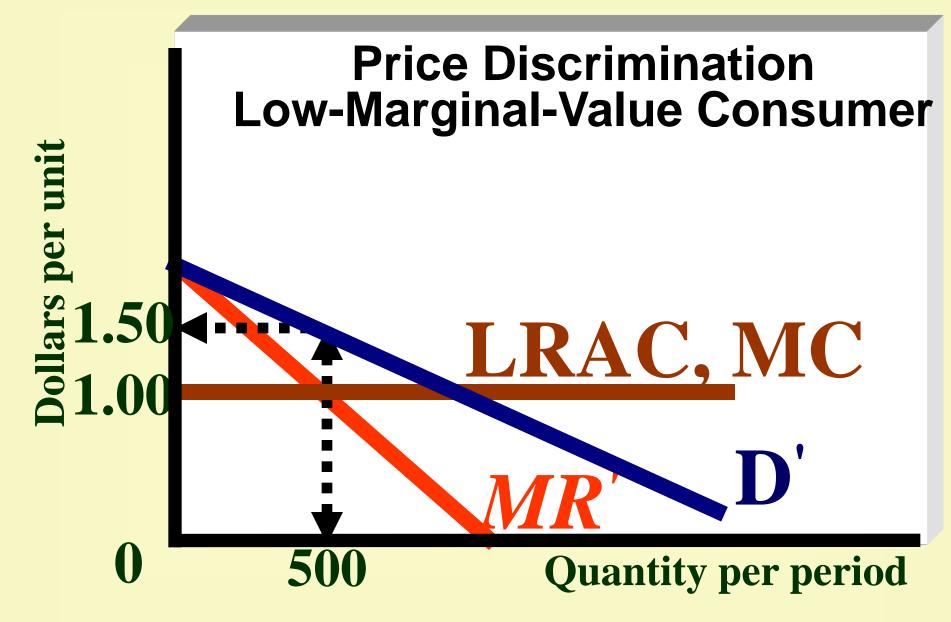
What is rent seeking? Activities undertaken by individuals or firms to influence public policy in a way that will distribute income to them

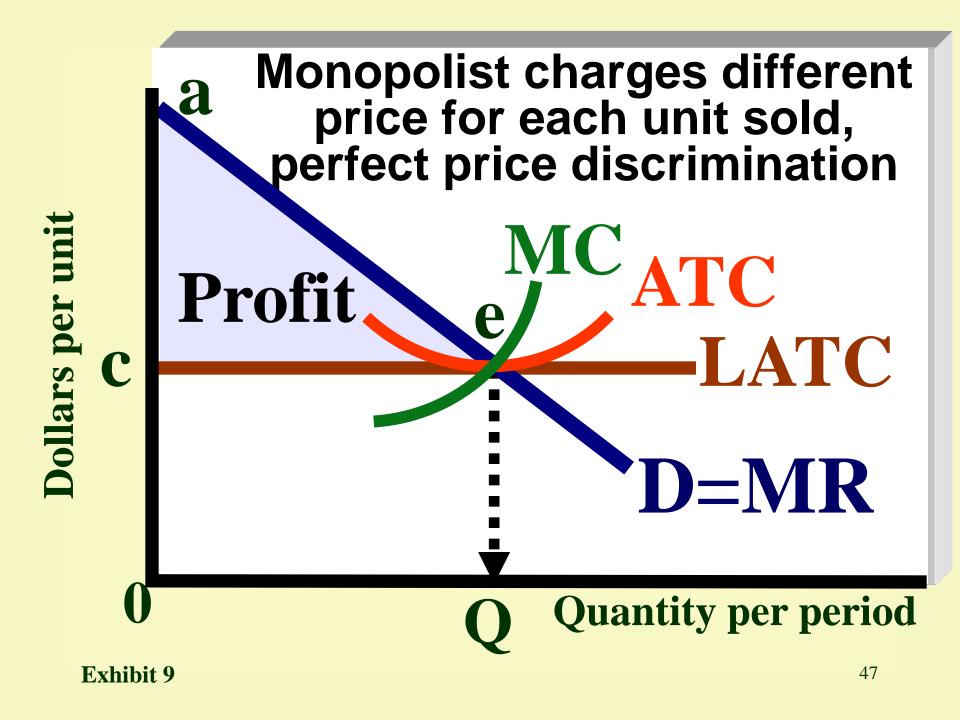
### END

#### Appendix

What is price discrimination? Selling the same good for different prices to different consumers as a way to increase profit







What does producer surplus represent for the perfectly discriminating monopolist? **Economic profit** 

What is deadweight loss? A loss of consumer and producer surplus that is not transferred to anyone else; it can result from the monopolization of an industry