

**Characteristics** 

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**<u>Oligopoly</u>** 

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**Three Oligopoly Models** 

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# Monopolistic Competition and Oligopoly



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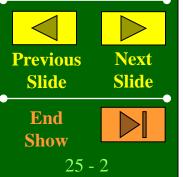
**Kinked-Demand Theory** 

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#### FOUR MARKET MODELS **Monopolistic Competition:** Relatively Large 2 **Number of Sellers** Differentiated Products Easy Entry and Exit **Pure** Monopolistic Pure Competition Competition Oligopoly Monopoly **Market Structure Continuum**



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# **CHARACTERISTICS Relatively Large Number** of Sellers Small Market Shares No Collusion Independent Action



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# CHARACTERISTICS Differentiated Products • Product Attributes

• Service

Location

Brand Names and

Packaging

Some Control Over Price

**Role of Advertising** 



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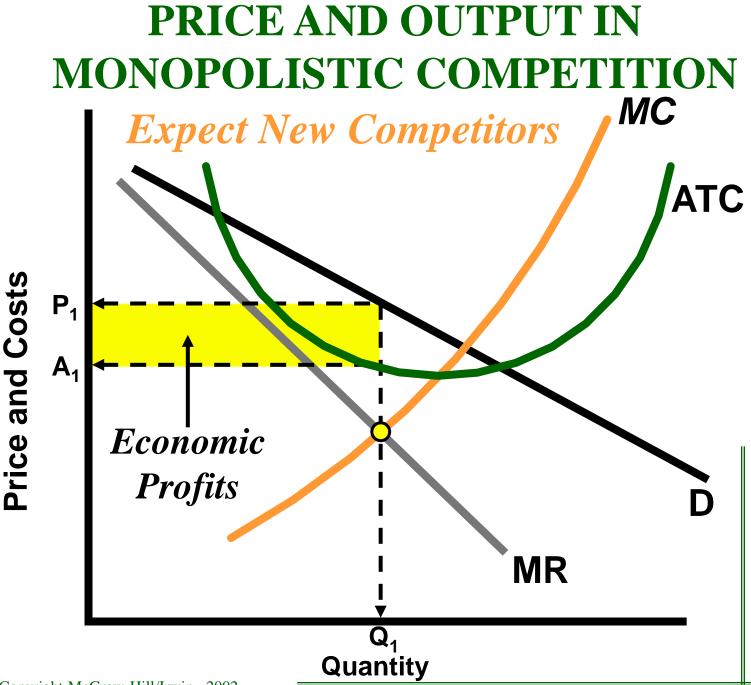
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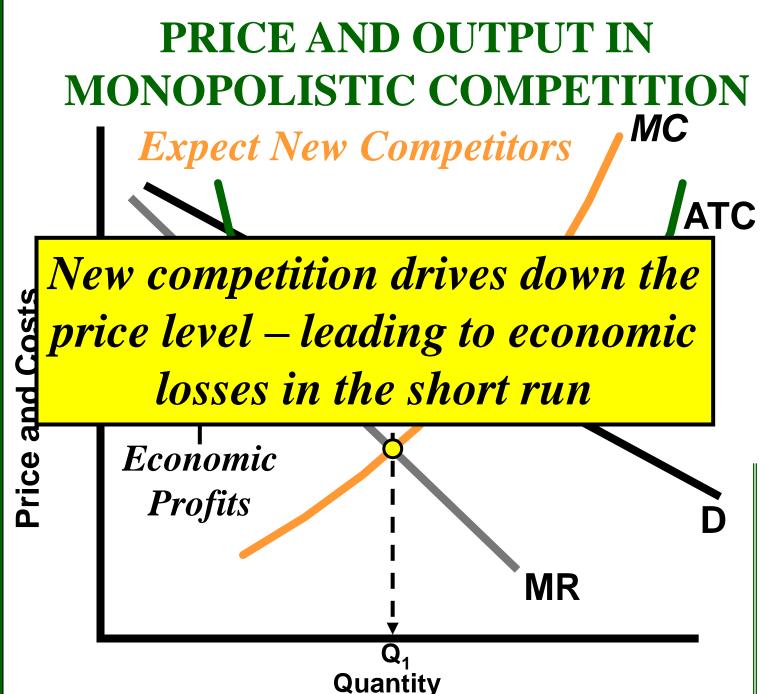
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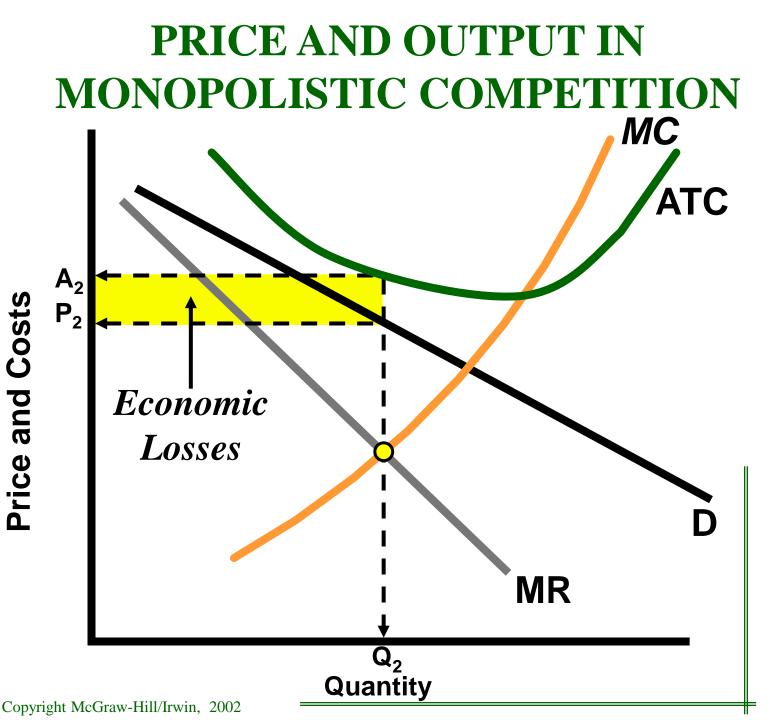
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Key TermsImage: Second stateImage: Previous<br/>SlideSlideEnd<br/>Show

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**PRICE AND OUTPUT IN MONOPOLISTIC COMPETITION** MC ATC With economic losses, firms will exit the market – Stability occurs when economic profits are zero JOSSES Price

Quantity

MR



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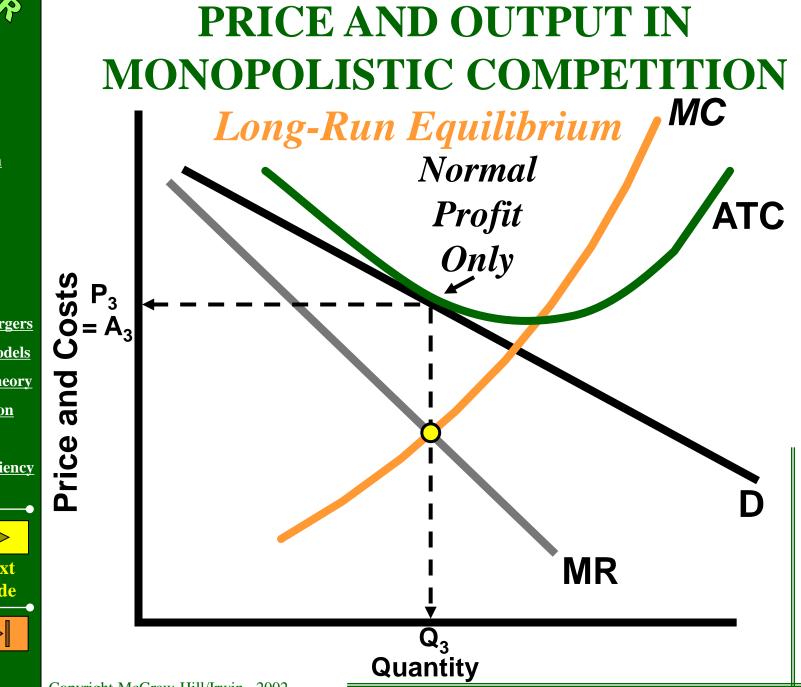
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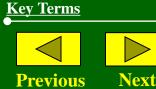
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### MONOPOLISTIC COMPETITION AND EFFICIENCY 🗾 • Not Productively Efficient

# ≠ Minimum ATC

# Not Allocatively Efficient

Price  $\neq$  MC

Graphically...





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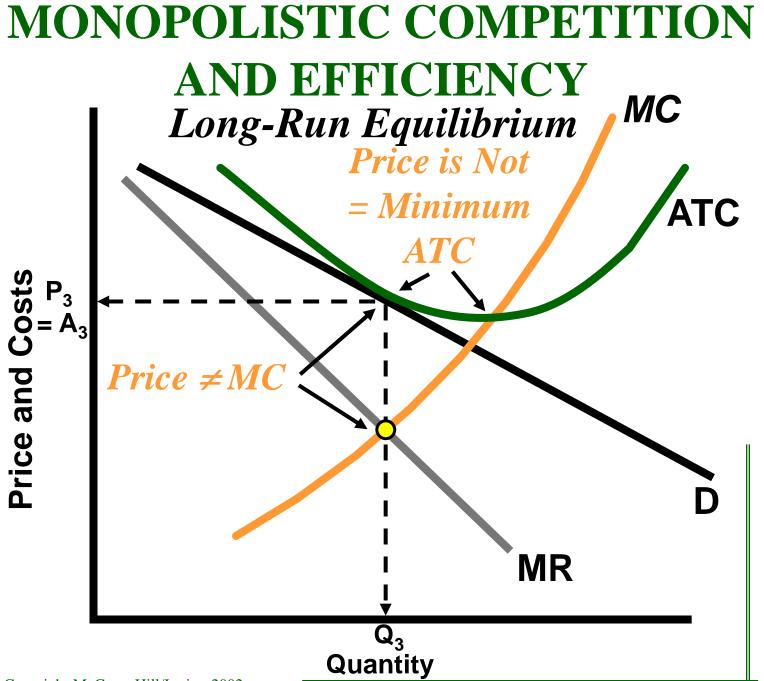
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## MONOPOLISTIC COMPETITION AND EFFICIENCY

# **Product Variety**

Benefits of Product Variety

Nonprice Competition

• Advertising Role

Trial & Error Search for

**Maximum Profits** 



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#### FOUR MARKET MODELS **Oligopoly:** A Few Large Producers Homogeneous or **Differentiated Products** Control Over Price, But **Mutual Interdependence** • Entry Barriers Pure Pure Monopolistic Oligopoly Monopoly Competition Competition **Market Structure Continuum** Copyright McGraw-Hill/Irwin, 2002



**Characteristics** 

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# **OLIGOPOLIES AND MERGERS** Mergers **Measures of Industry Concentration** Concentration Ratio Localized Markets Interindustry Competition World Trade Import Competition



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# **OLIGOPOLIES AND MERGERS Herfindahl Index**

Sum of the squared percentage market shares for all firms in the industry – Places greater weight upon the larger firms

 $(\%s_1)^2 + (\%s_2)^2 + (\%s_3)^2 + ... + (\%s_n)^2$ A greater Herfindahl Index indicates a greater concentration of market power in the industry (*Pure competition is near zero*)



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OLIGOPOLIES AND MERGERS Mutual Interdependence Collusive Tendencies •Collusion

!

**Incentive to Cheat** 



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THREE OLIGOPOLY MODELS No Standard Model due to... Diversity of Oligopolies Complications of Interdependence

# Alternative Models: 1 - Kinked Demand Curve 2 - Collusive Pricing 3 - Price Leadership



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#### KINKED DEMAND THEORY: NONCOLLUSIVE OLIGOPOLY

**MR**₁

The firm's demand and marginal revenue curves

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Quantity

Price



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#### KINKED DEMAND THEORY: NONCOLLUSIVE OLIGOPOLY

**MR**₁

The rival's demand and marginal revenue curves

 $\mathsf{D}_2$ 

MR<sub>2</sub>

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Quantity

Price



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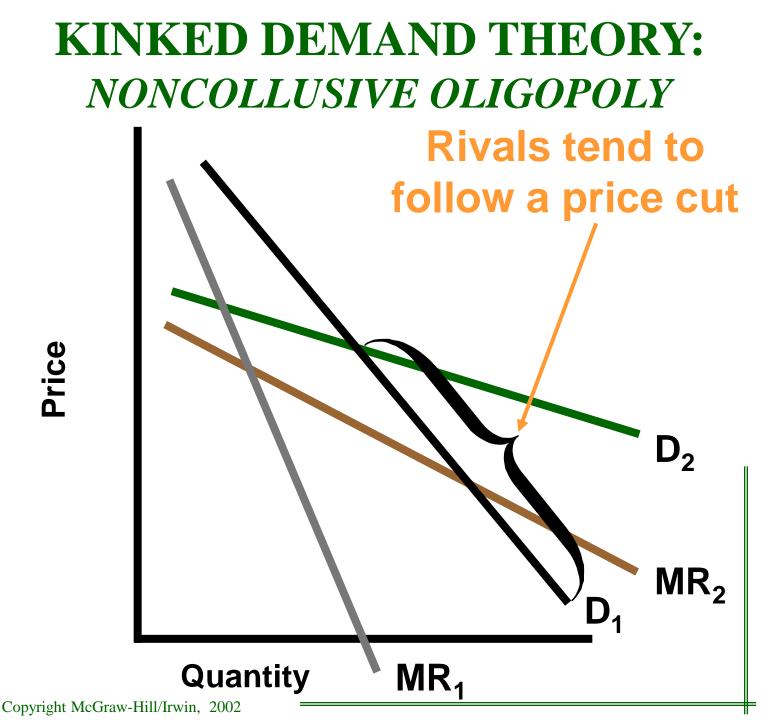
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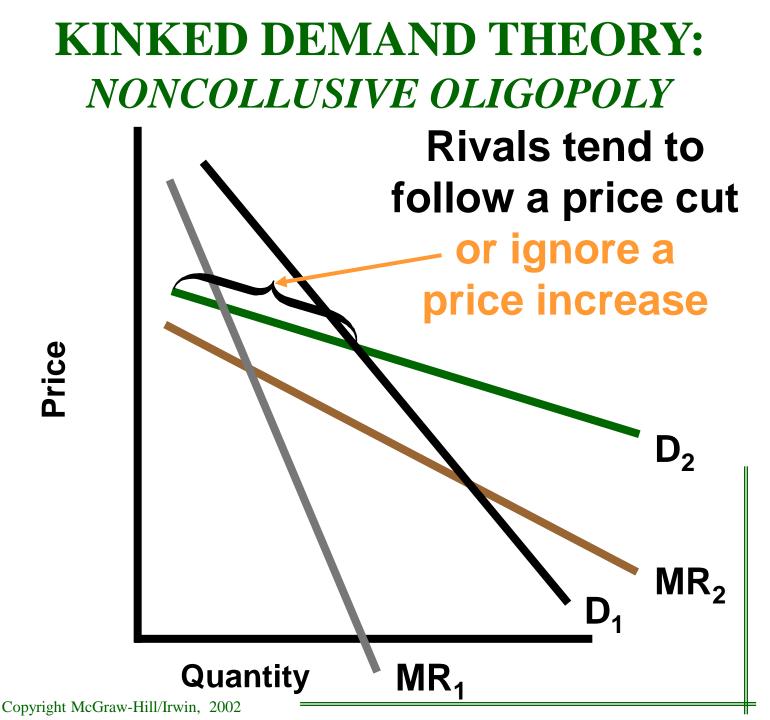
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#### KINKED DEMAND THEORY: NONCOLLUSIVE OLIGOPOLY

**MR**₁

Effectively creating a kinked demand curve

 $\mathsf{D}_2$ 

MR<sub>2</sub>

D,

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Quantity

Price



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#### **KINKED DEMAND THEORY:** *NONCOLLUSIVE OLIGOPOLY*

#### Effectively creating a kinked demand curve

Quantity



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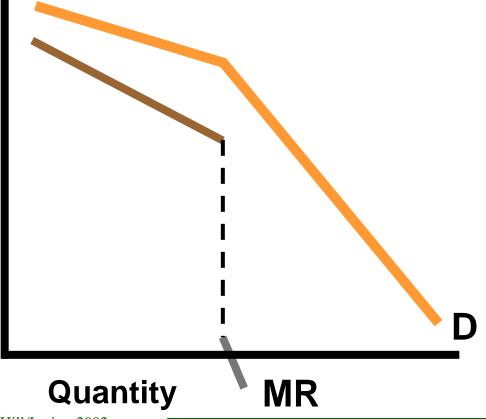
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#### **KINKED DEMAND THEORY:** *NONCOLLUSIVE OLIGOPOLY*

#### Effectively creating a kinked demand curve



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**KINKED DEMAND THEORY: NONCOLLUSIVE OLIGOPOLY Profit maximization** MR = MC occurs at the kink Price Quantity MR Copyright McGraw-Hill/Irwin, 2002



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KINKED DEMAND THEORY: NONCOLLUSIVE OLIGOPOLY

MR

#### This behavior can set off a price war



Quantity

Price



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# CARTELS AND OTHER COLLUSION Oligopoly is conducive to collusion

# If a few firms face identical or highly similar demand and costs...

# They will tend to seek joint profit maximization...

Graphically...



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**CARTELS AND OTHER COLLUSION Colluding Oligopolists Will** Split the Monopoly Profits **Economic** Profit Price and costs MC  $\mathbf{P}_{\mathbf{0}}$ ATC A<sub>0</sub> MR = MCMR Q<sub>0</sub>



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#### **CARTELS AND OTHER COLLUSION**

# **Overt Collusion** ! Cartel •OPEC **Covert Collusion** Recent Examples Tacit Understandings



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# **CARTELS AND OTHER COLLUSION Obstacles to Collusion** Demand and Cost **Differences** Number of Firms Cheating Recession Potential Entry • Antitrust Law



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#### PRICE LEADERSHIP MODEL

**Leadership Tactics**  Infrequent Price Changes Communications Limit Pricing **Breakdowns in Price** Leadership



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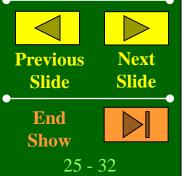
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# **OLIGOPOLY AND ADVERTISING Less Easily Duplicated Adequate Resources Positive Effects of** Advertising **Potential Negative Effects of Advertising Brand Development**



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# OLIGOPOLY AND EFFICIENCY Not Productively Efficient

# $\neq$ Minimum ATC

• Not Allocatively Efficient

**Price**  $\neq$  **MC**