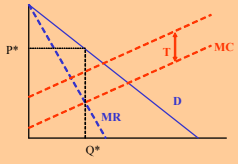
Miscellaneous Topics

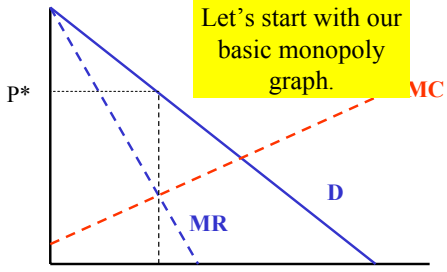


KENT STATE UNIVERSITY

Lectures in Microeconomics-Charles W. Upton

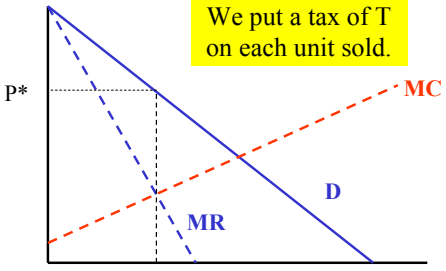
Taxing A Monopoly-1

Let's start with our basic monopoly graph.



Taxing A Monopoly-1

We put a tax of T on each unit sold.



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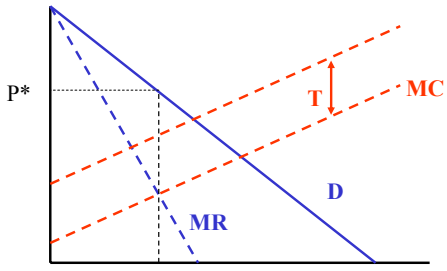

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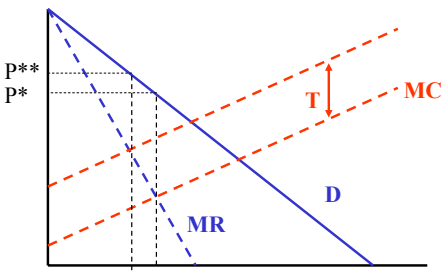
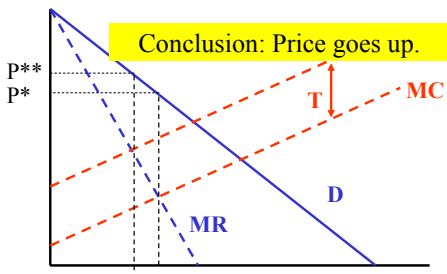


Taxing A Monopoly-1

Conclusion: Price goes up.



Taxing a Monopoly -2

- A tax is imposed on the firm's monopoly profits. That is, we collect a tax bill

$$\lambda(R-C)$$

- The firm's problem is now to maximize

$$\pi = (1-\lambda)(R-C)$$

Taxing a Monopoly -2

- Think of its problem as maximizing

$$\pi = R-C$$

- Where

$$R = (1-\lambda)R$$

- And

$$C = (1-\lambda)C$$

Taxing a Monopoly -2

- Obviously

$$MR = MC$$

- But that means

$$MR = (1-\lambda)MR = (1-\lambda)MC = MC$$

Taxing a Monopoly -2

$$\cancel{(1-\lambda)}MR = \cancel{(1-\lambda)}MC$$

$$MR = MC$$

Taxing a Monopoly -2

$$\cancel{(1-\lambda)}MR = \cancel{(1-\lambda)}MC$$

$$MR = MC$$

No change in price and quantity produced. Simply a reduction in monopolist's profits.

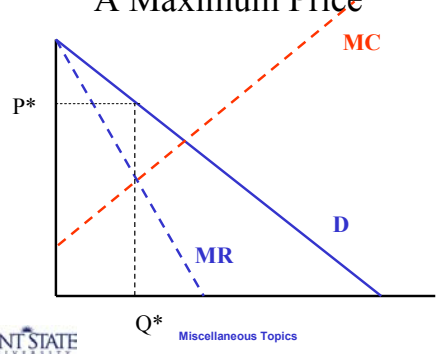
Taxing a Monopoly -2

$$\cancel{(1-\lambda)}MR = \cancel{(1-\lambda)}MC$$

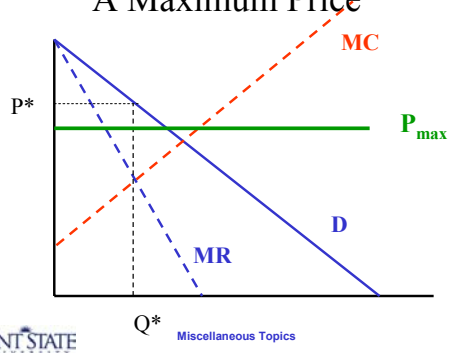
$$MR = MC$$

Be careful to place tax on economic profits, not accounting profits

A Maximum Price



A Maximum Price



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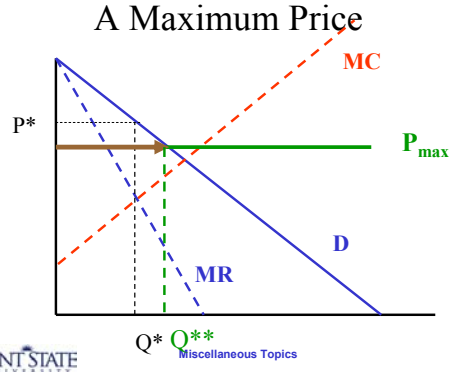

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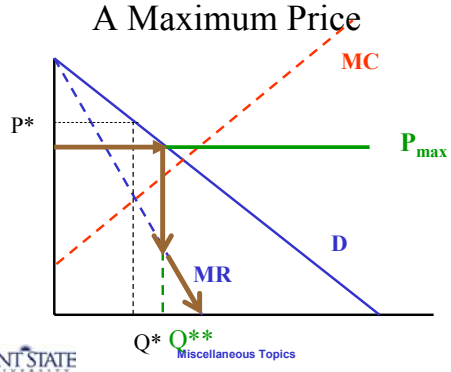

Regulating a Monopoly

- KSU is prepared to give Coke or Pepsi a monopoly on cola sales on the campus.
- How should it set up the bidding process?

Regulating a Monopoly

- KSU is prepared to give Coke or Pepsi a monopoly on cola sales on the campus.
- How should it set up the bidding process?
- Assumption

Coke≡Pepsi

Plan A

- Coke and Pepsi bid for contract. Highest bidder wins.

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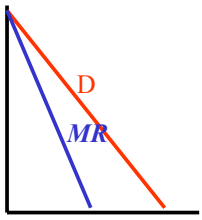
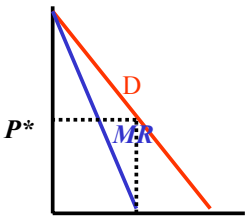


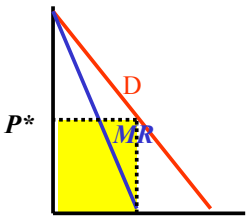
Plan A

- Coke and Pepsi bid for contract. Highest bidder wins.
- Assume MC =0.



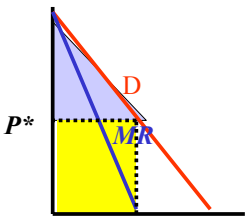
The Winning Bid

- Coke and Pepsi bid for contract. Highest bidder wins.
- Assume MC =0.



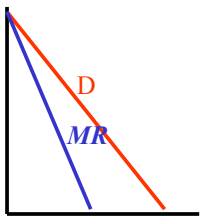
Consumer Surplus

- Coke and Pepsi bid for contract. Highest bidder wins.
- Assume MC =0.



Plan B

- Coke and Pepsi bid for contract in terms of price to be charged. Low bidder wins.



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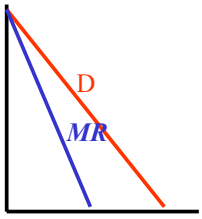
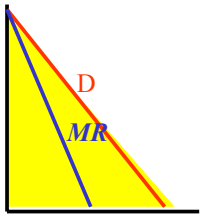
- Price will drop to zero.



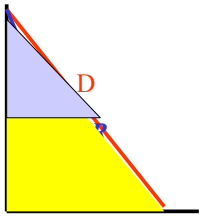
Plan B

- Coke and Pepsi bid for contract in terms of price to be charged. Low bidder wins.
- Price will drop to zero.
- Now look at the Consumer Surplus



Plan B

- Coke and Pepsi bid for contract in terms of price to be charged. Low bidder wins.
- Price will drop to zero.
- Now look at the Consumer Surplus
- Compare!

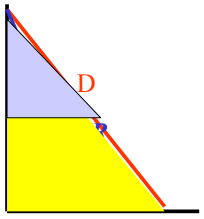


A Problem

- Coke and Pepsi bid for

If Coke or Pepsi is giving soda away, what are their incentives to deliver?

- Now look at the Consumer Surplus
- AND COMPARE



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