

ECON 5103 Unit 8 video 2

Oligopoly: Oh, the possibilities!

From zero competition to intense competition--an example

Example: In a fake country the demand for gasoline is : $Q = 20 - 2P$

"Q" is number of gallons demanded

"P" is price per gallon

There is only 1 method to produce gasoline in the country. It costs \$2 per gallon to produce and sell each gallon.

Case 1: A cartel produces all the gasoline and sets its price and production to maximize profits. What will the price and quantity of gasoline be?

See the table on the next page

P	Q=20 - 2P	Total revenue P x Q	Total cost \$2Q	Total profit
\$9.50	1	\$9.50	\$2	\$7.50
\$9	2	\$18	\$4	\$14
\$8.50	3	\$25.50	\$6	\$19.50
\$8	4	\$32	\$8	\$24
\$7.50	5	\$37.50	\$10	\$27.50
\$7	6	\$42	\$12	\$30
\$6.50	7	\$45.50	\$14	\$31.50
\$6	8	\$48	\$16	\$32
\$5.50	9	\$49.50	\$18	\$31.50
\$5	10	\$50	\$20	\$30
\$4.50	11	\$49.50	\$22	\$27.50
\$4	12	\$48	\$24	\$24

Case 2: The theory of contestable markets is correct. This means that prices will be set to equal the cost of producing each gallon. (\$2 per gallon).

If the price is \$2 per gallon then there will be no profit because the price per gallon = cost of producing each gallon. (This is sometimes called a **Bertrand** equilibrium.)

How many gallons will people buy?

$$Q = 20 - 2P$$

$$Q = 20 - 2(2) = 16 \text{ gallons}$$

Compare the two extremes:

Cartel (zero competition)

\$6 per gallon, 8 gallons sold, \$32 profit

Contestable markets (zero profits)

\$2 per gallon, 16 gallons sold, \$0 profit

Moral: Know your market and the amount of profit in the market.