

CH-310-A Microeconomics - Theory and Policy

Chapter 14 of Krugman and Wells

Oligopoly

Oligopoly is a market structure characterized by:

- (a) independence in decision making.
- (b) a horizontal demand curve.
- (c) a small number of interdependent firms.
- (d) relatively easy entry and exit.

Herfindahl-Hirschman Index (HHI)

A monopoly will have a Herfindahl-Hirschman Index (HHI) equal to about:

- (a) 1.
- (b) 100.
- (c) 1000.
- (d) 10000.

Cartels

Collusive agreements are typically difficult for cartels to maintain because each firm can increase profits by:

- (a) producing more output than the quantity that maximizes joint cartel profits.
- (b) producing less output than the quantity that maximizes joint cartel profits.
- (c) increasing the price above the price that maximizes joint cartel profits.
- (d) engaging in less advertising than the level of advertising that maximizes joint cartel profits.

Payoff and price setting

		Zoe	
		High price	Low price
Jake	High price	Zoe earns \$1,000 per week Jake earns \$1,000 per week	Zoe earns \$1,500 per week Jake earns \$200 per week
	Low price	Zoe earns \$200 per week Jake earns \$1,500 per week	Zoe earns \$800 per week Jake earns \$800 per week

Jake and Zoe are the only producers of slushies in Vacatown. Each week, each firm decides whether to price high or price low for the following week. The figure shows the profit per week earned by the two firms. What is the Nash equilibrium for Jake and Zoe? (a) Jake prices high; Zoe prices high; (b) Jake prices high; Zoe prices low; (c) Jake prices low; Zoe prices high; (d) Jake prices low; Zoe prices low.

Payoff and production

		Gehrig	
		Produce 5,000 figurines	Produce 7,000 figurines
Gabriel	Produce 5,000 figurines	Gehrig earns \$100,000 Gabriel earns \$100,000	Gehrig earns \$110,000 Gabriel earns \$80,000
	Produce 7,000 figurines	Gehrig earns \$80,000 Gabriel earns \$110,000	Gehrig earns \$90,000 Gabriel earns \$90,000

Gehrig and Gabriel sell handmade figurines in San Antonio. Both Gehrig and Gabriel have two strategies available to them: to produce 5,000 figurines each month or to produce 7,000 figurines each month. For Gehrig and Gabriel, the dominant strategy is to:

(a) produce 5,000 figurines; (b) produce 7,000 figurines; (c) produce between 5,000 and 7,000 figurines; (d) collude and increase production to more than 14,000 figurines.

Advertising and Nash equilibrium

Suppose that each of two firms has the independent choice of advertising its product or not advertising. If neither advertises, each gets \$10 million in profit; if both advertise, their profits will be \$5 million each; and if one advertises while the other does not, the advertiser gets profit of \$15 million while the other gets profit of \$2 million. According to game theory, the Nash equilibrium is:

- (a) both may or may not advertise.
- (b) one will advertise and the other will not.
- (c) both will advertise.
- (d) neither will advertise.