

Chapter 16

Oligopoly

Introduction

- Think of mobile, computers, online shopping platforms, and so forth...
- It is neither monopoly nor perfect competition
- Imperfectly competitive market: oligopoly
- Oligopoly: few sellers, selling identical products

Outcome variation

PC: outcome is 0 unit

Monopoly: 60 units

Oligopoly: form a cartel (collusive)
and produce 60 units

Nash equilibrium (non-collusive):
80 units

QUANTITY (IN GALLONS)	PRICE	TOTAL REVENUE (AND TOTAL PROFIT)
0	\$120	\$ 0
10	110	1,100
20	100	2,000
30	90	2,700
40	80	3,200
50	70	3,500
60	60	3,600
70	50	3,500
80	40	3,200
90	30	2,700
100	20	2,000
110	10	1,100
120	0	0

Size

- **Output effect:** at a given price, 1 unit increase in output will increase the profit
- **Price effect:** increase in output increases the total supply, hence, price will fall, and so as the profit
- **Net effect** depends on these
- As the number of firms increases, the price effect becomes negligible

Prisoners' dilemma

“Right now, we can lock you up for 1 year. If you confess to the bank robbery and implicate your partner, however, we’ll give you immunity and you can go free. Your partner will get 20 years in jail. But if you both confess to the crime, we won’t need your testimony and we can avoid the cost of a trial, so you will each get an intermediate sentence of 8 years.”

		Bonnie's Decision	
		Confess	Remain Silent
Clyde's Decision	Confess	Bonnie gets 8 years Clyde gets 8 years	Bonnie gets 20 years Clyde goes free
	Remain Silent	Bonnie goes free Clyde gets 20 years	Bonnie gets 1 year Clyde gets 1 year

Feasibility in oligopoly

		Iraq's Decision	
		High Production	Low Production
Iran's Decision	High Production	Iraq gets \$40 billion Iran gets \$40 billion	Iraq gets \$30 billion Iran gets \$60 billion
	Low Production	Iraq gets \$60 billion Iran gets \$30 billion	Iraq gets \$50 billion Iran gets \$50 billion

Cont...

		Decision of the United States (U.S.)	
		Arm	Disarm
Decision of the Soviet Union (USSR)	Arm	<div>U.S. at risk</div> <div>USSR at risk</div>	<div>U.S. at risk and weak</div> <div>USSR safe and powerful</div>
	Disarm	<div>U.S. safe and powerful</div> <div>USSR at risk and weak</div>	<div>U.S. safe</div> <div>USSR safe</div>

Cont...

		Marlboro's Decision	
		Advertise	Don't Advertise
Camel's Decision	Advertise	Marlboro gets \$3 billion profit Camel gets \$3 billion profit	Marlboro gets \$2 billion profit Camel gets \$5 billion profit
	Don't Advertise	Marlboro gets \$5 billion profit Camel gets \$2 billion profit	Marlboro gets \$4 billion profit Camel gets \$4 billion profit

Controversies over anti-trust policy

- Resale price maintenance
- Predatory pricing
- Tying