BUSINESS ECONOMICS

Slides by CAO Thi Hong Vinh

Chapter 5:

MARKET STRUCTURE & PRICING STRATEGIES

- Required: ***Business Economics and Managerial Decision Making***,C.9-10
- Recommend: ***Economics for Business and Management***, C.6

STRUCTURE

1. Market structure
2. Pricing strategies

1. Market structure

1.1 Perfect competition

1.2 Monopolistic competition

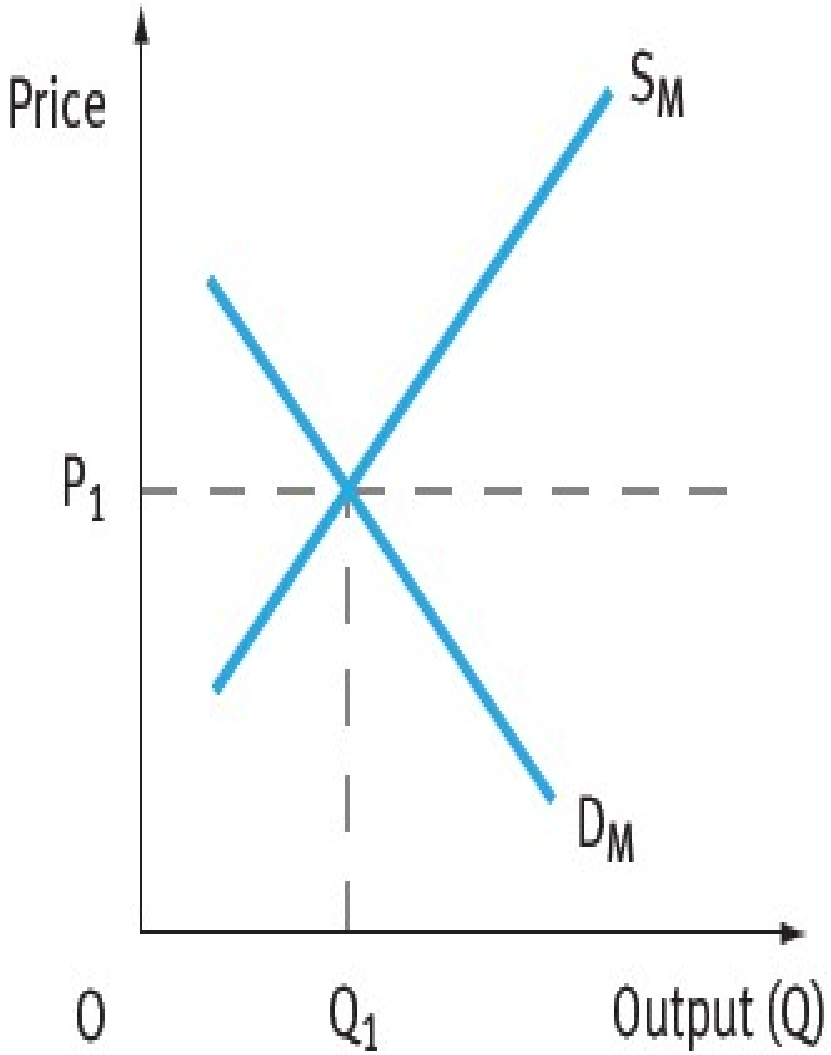
1.3 Oligopoly

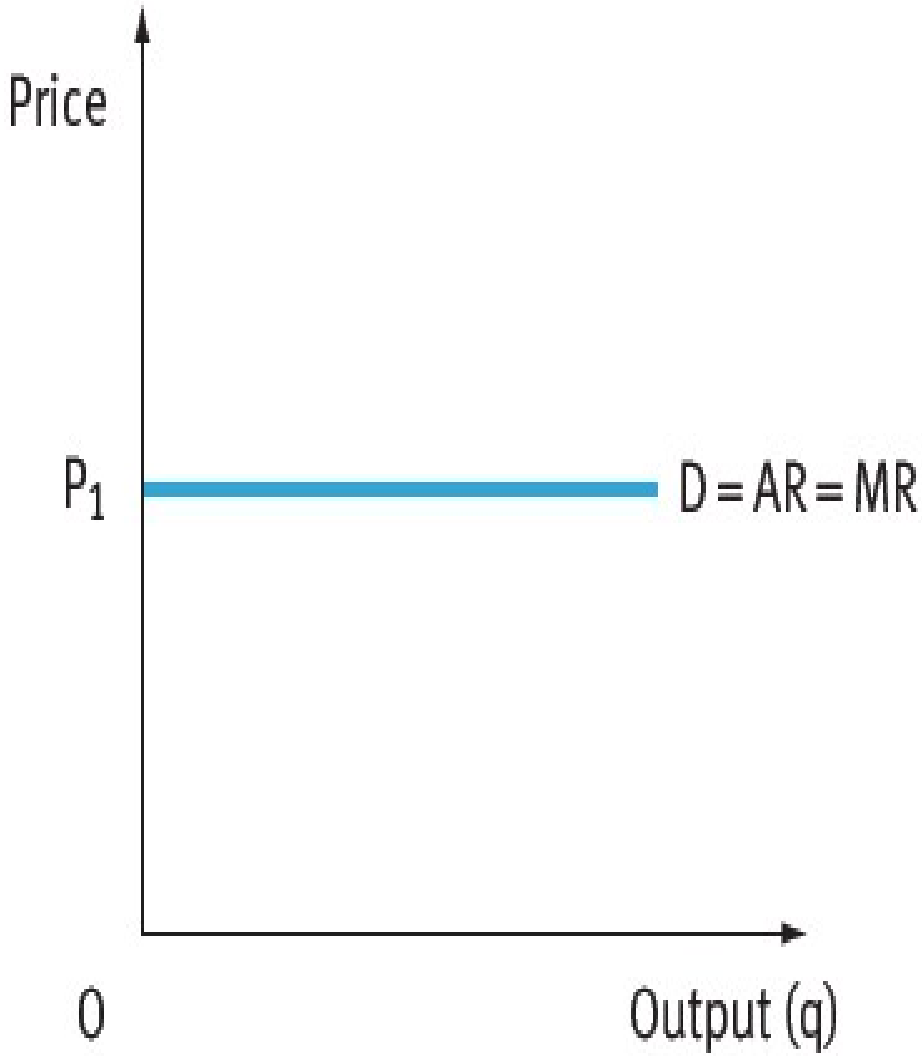
1.4 Monopoly

1.1 Perfect competition

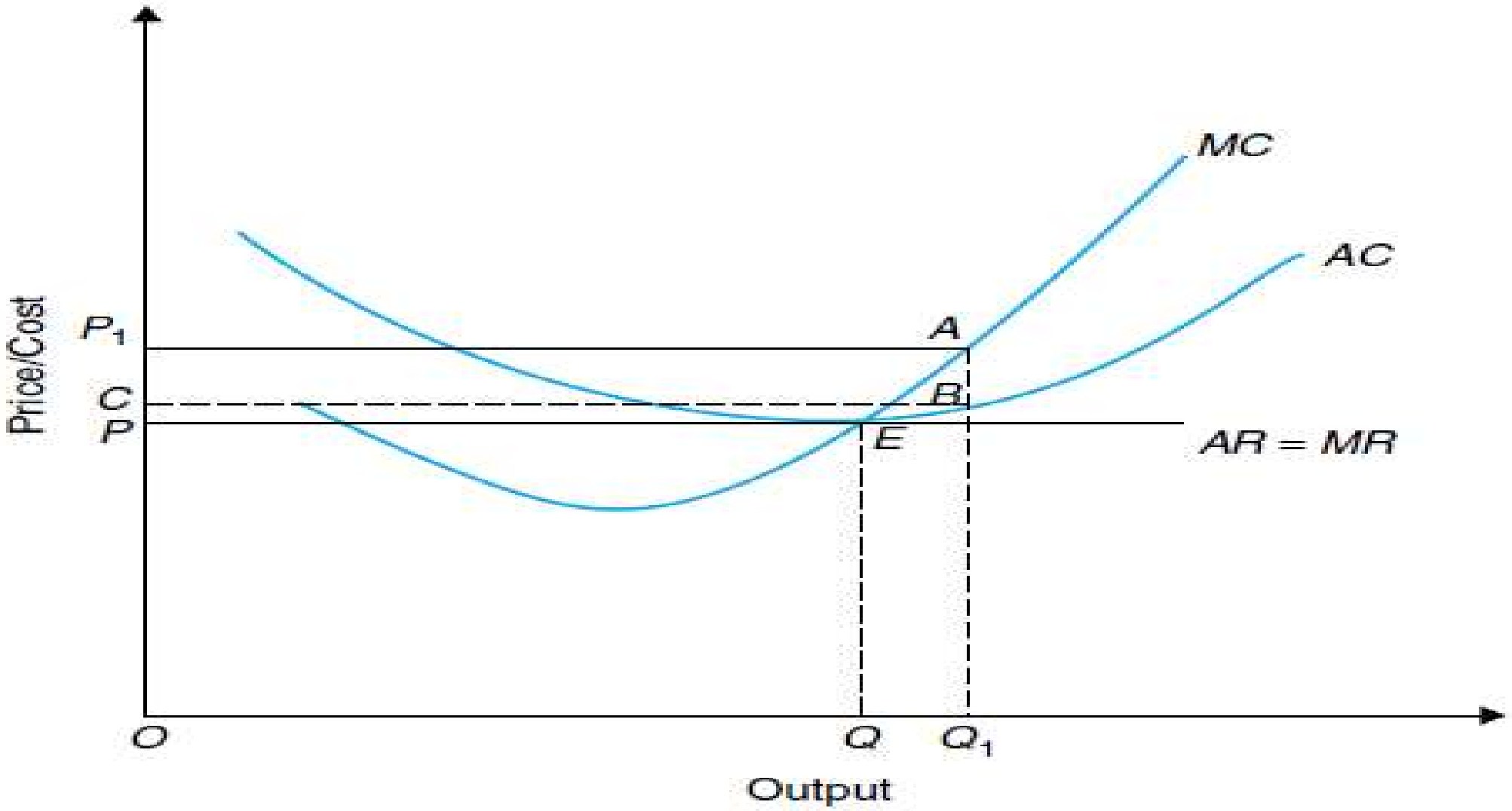
+ Large no. of small buyers, sellers
+ ***Homogeneous products***
+ Perfect information
+ No transaction costs
+ Free entry into and exit
+ Profit and utility maximization

1.1 Perfect competition





1.1 Perfect competition



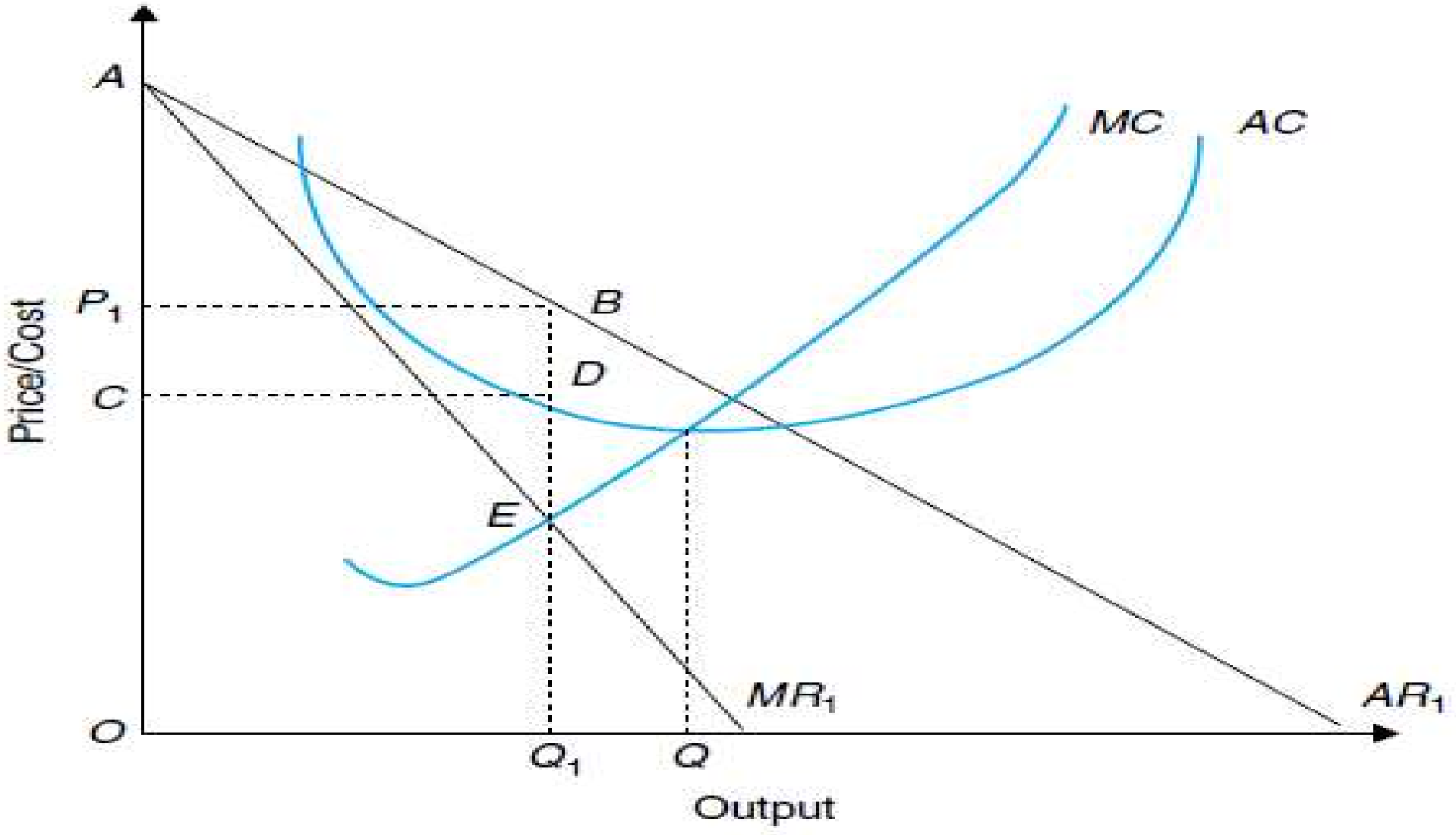
Market power?

1.2 Monopolistic compe.

+ Many small buyers, sellers
+ ***Differentiated products***
+ Perfect information
+ No transaction costs
+ Free entry into and exit
+ Profit and utility maximization

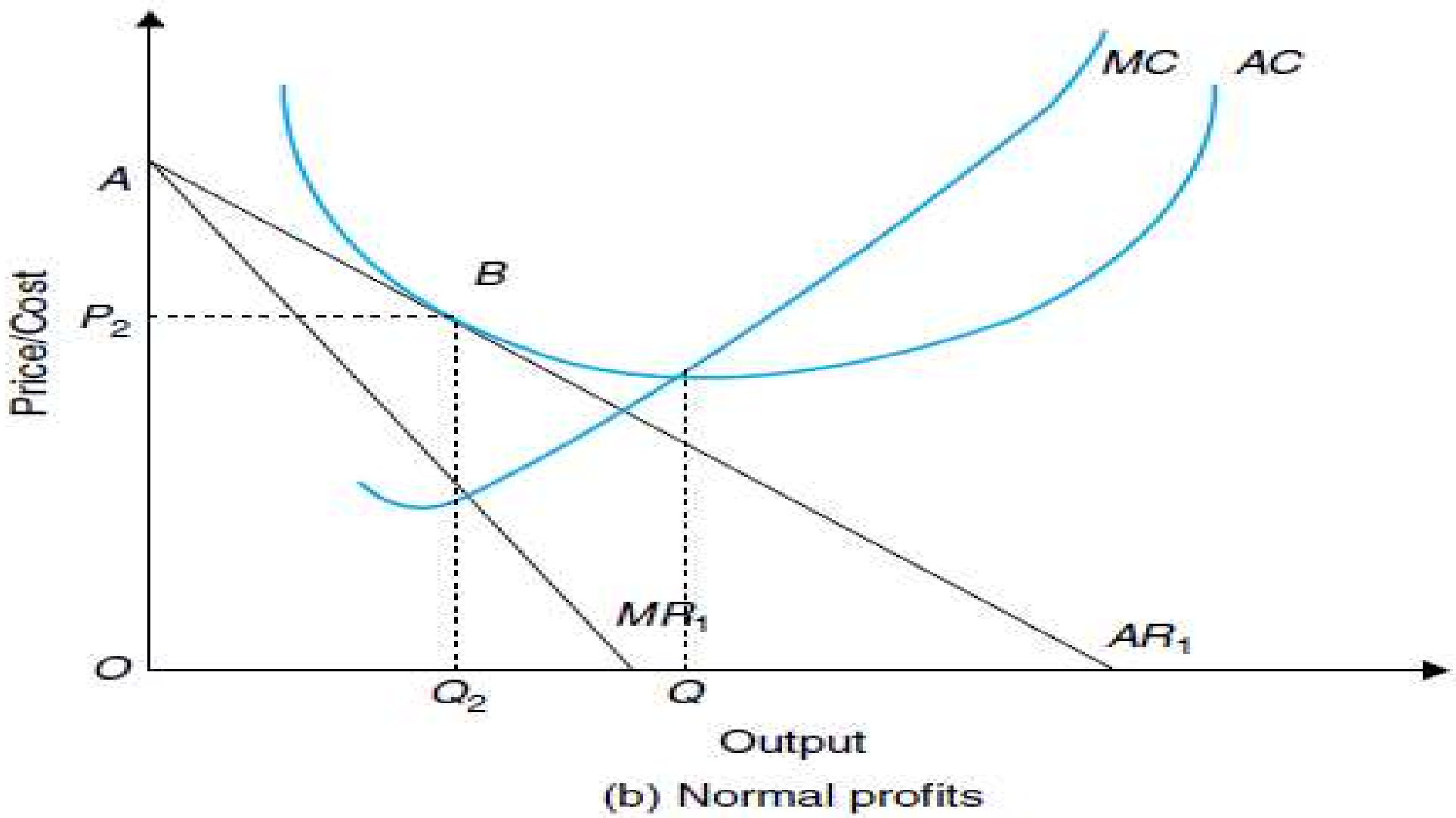
1.2 Monopolistic compe.

In short run → Market power?



1.2 Monopolistic compe.

In long run → Market power?



1.3 Oligopoly

+ Small number of firms

+ **Interdependence of firms' actions**

→ Collusion/cheating (cartel vs. tacit collusion)

→ ***Models***

1.3 Oligopoly

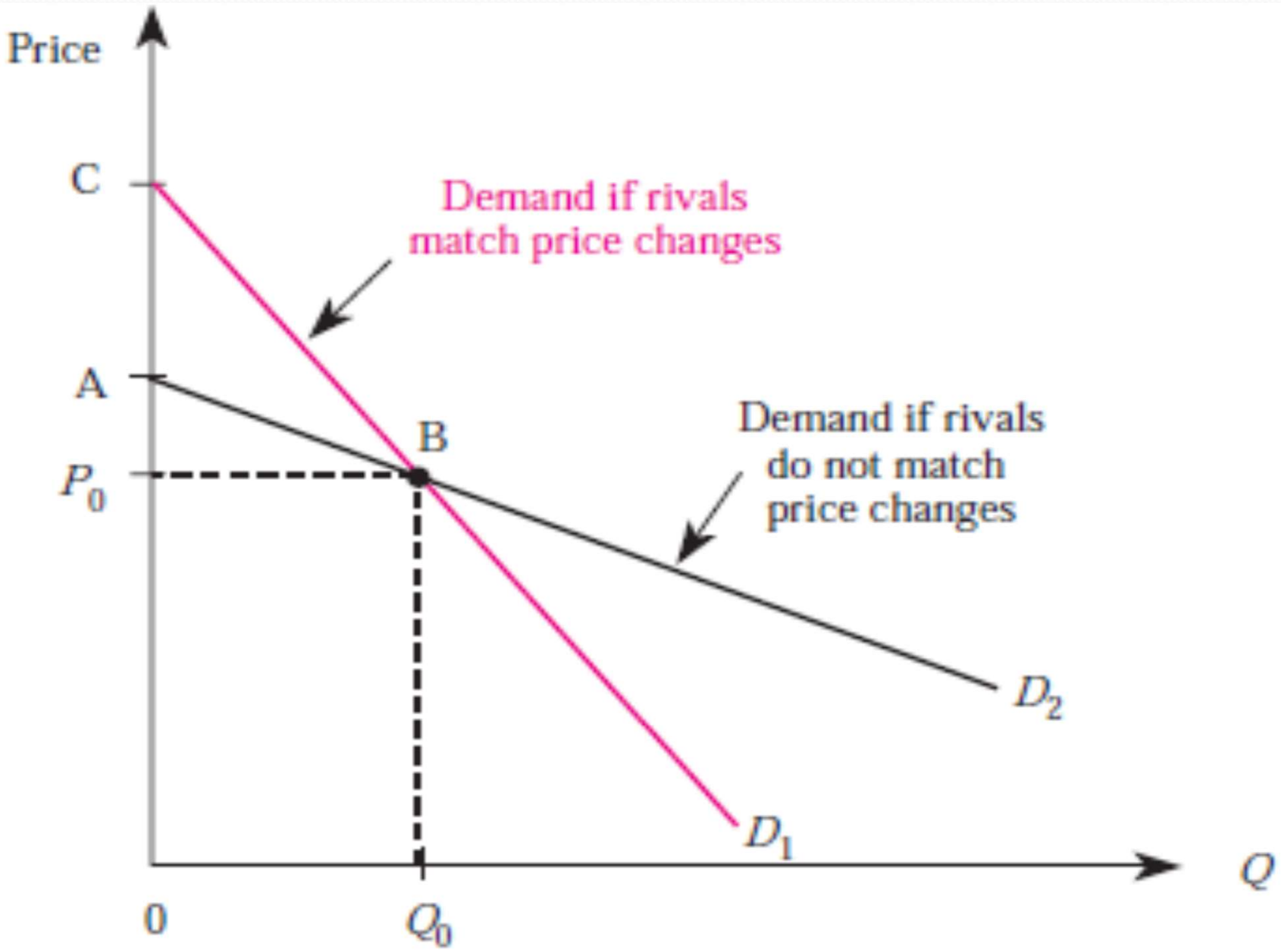
Models:

1.3.1 Kinked demand curve

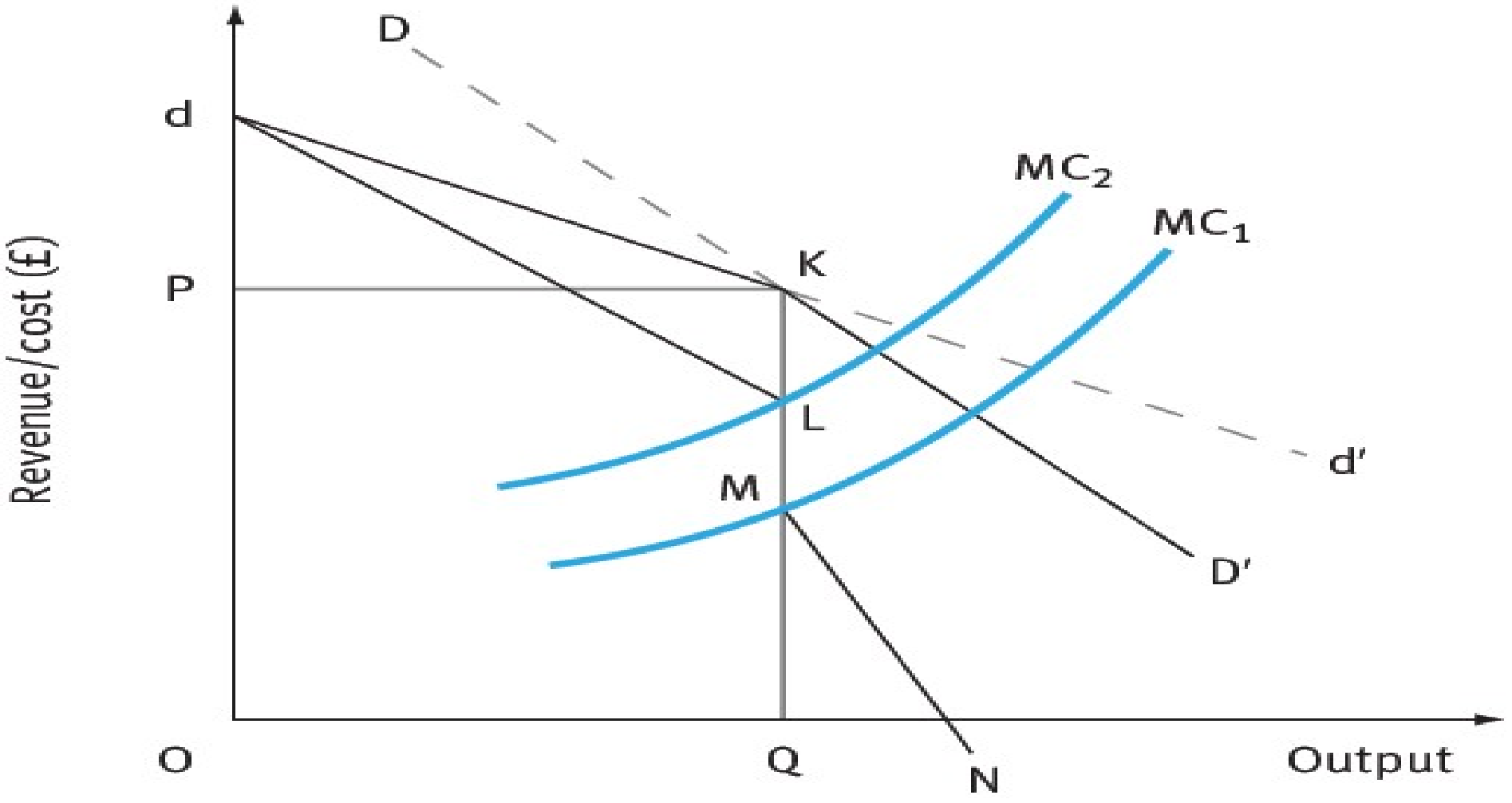
1.3.2 Bertrand

1.3.3 Cournot

1.3.1 Kinked demand cur.



1.3.1 Kinked demand cur.

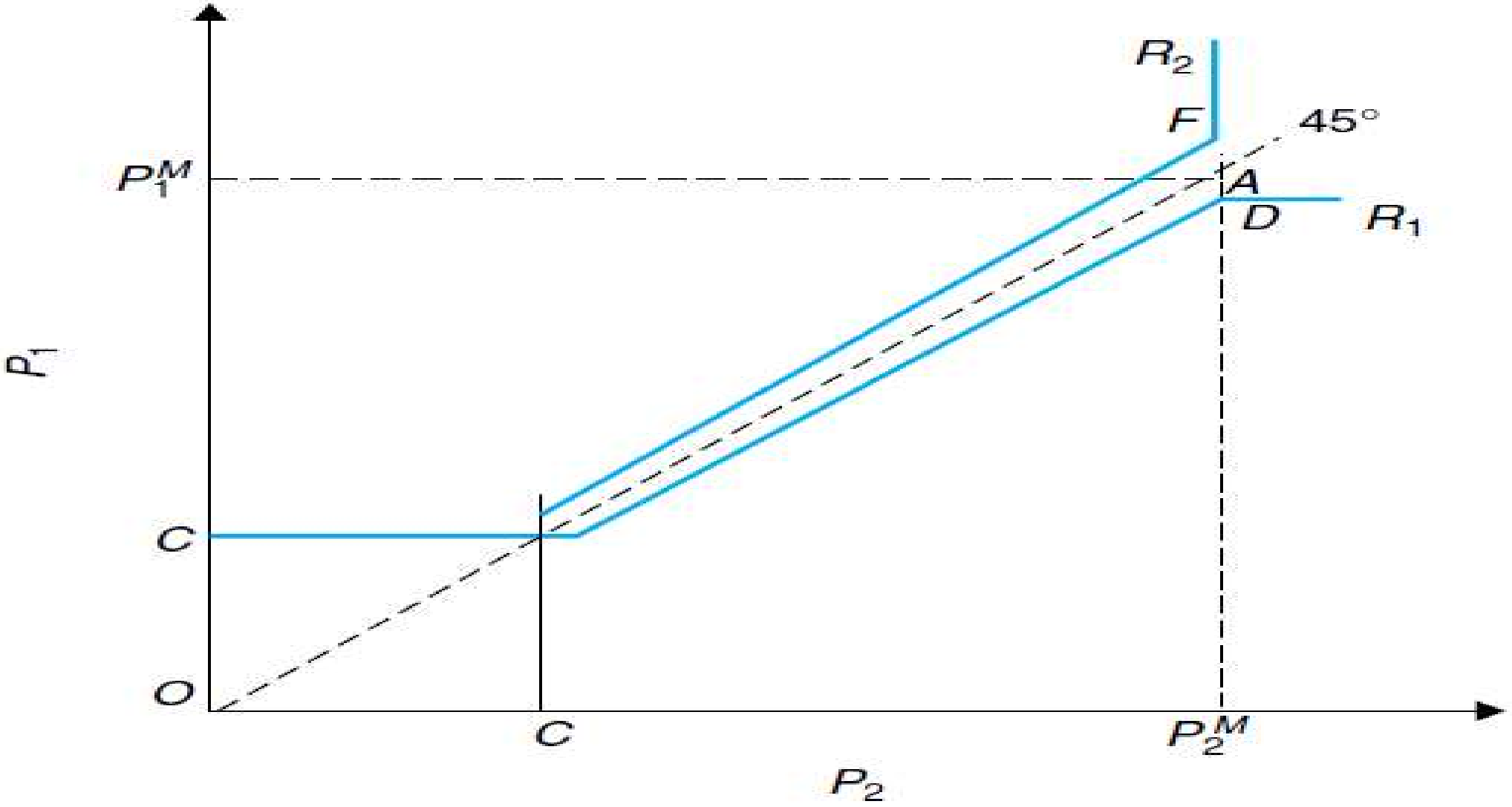


? Incentive to change price?

1.3.2 Bertrand model

- A few firms
- Identical products (constant MC)
- **Price competition** → ***Reaction function*** (best response curve)
- Perfect information
- Barriers to entry, exist

1.3.2 Bertrand model

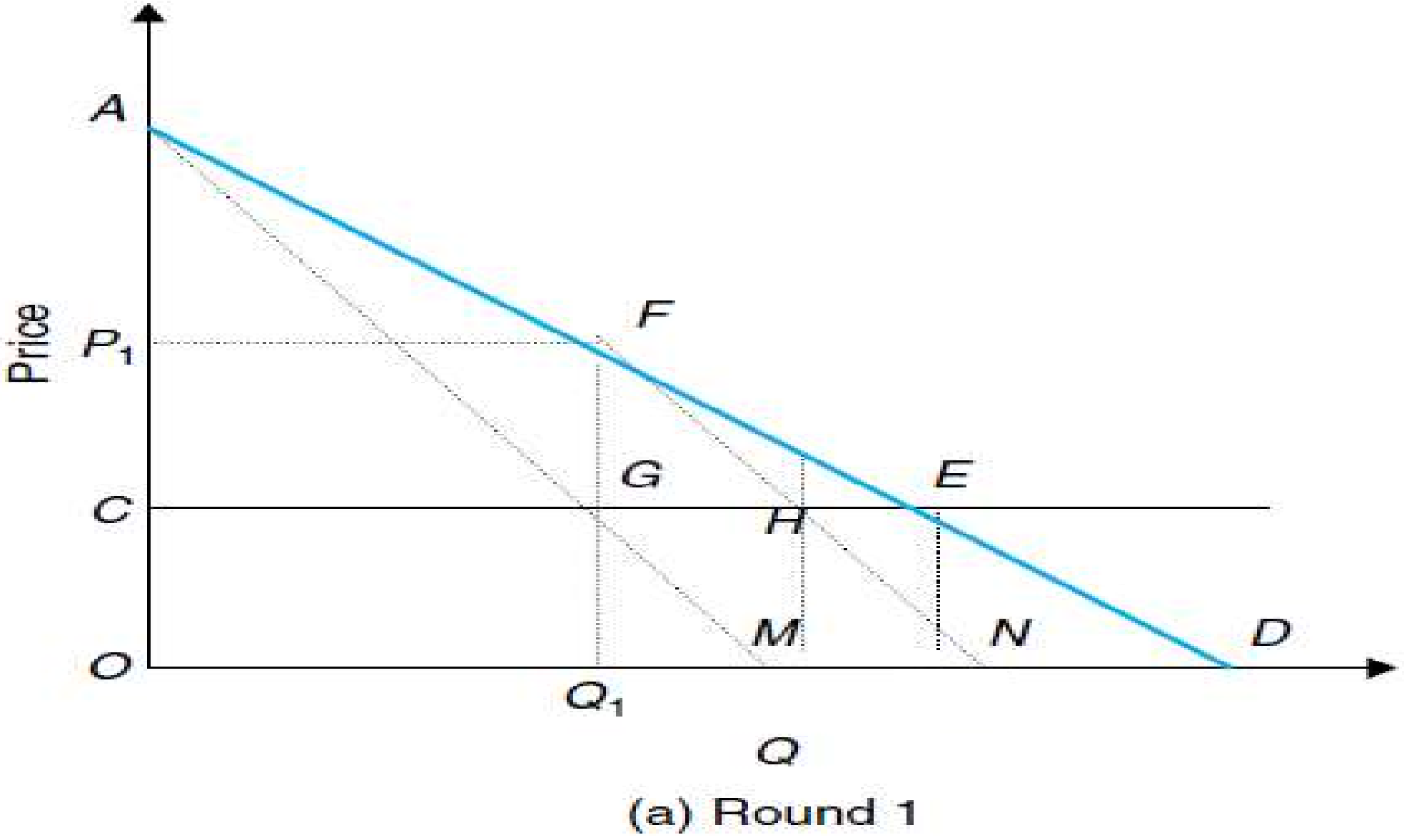


Equilibrium?

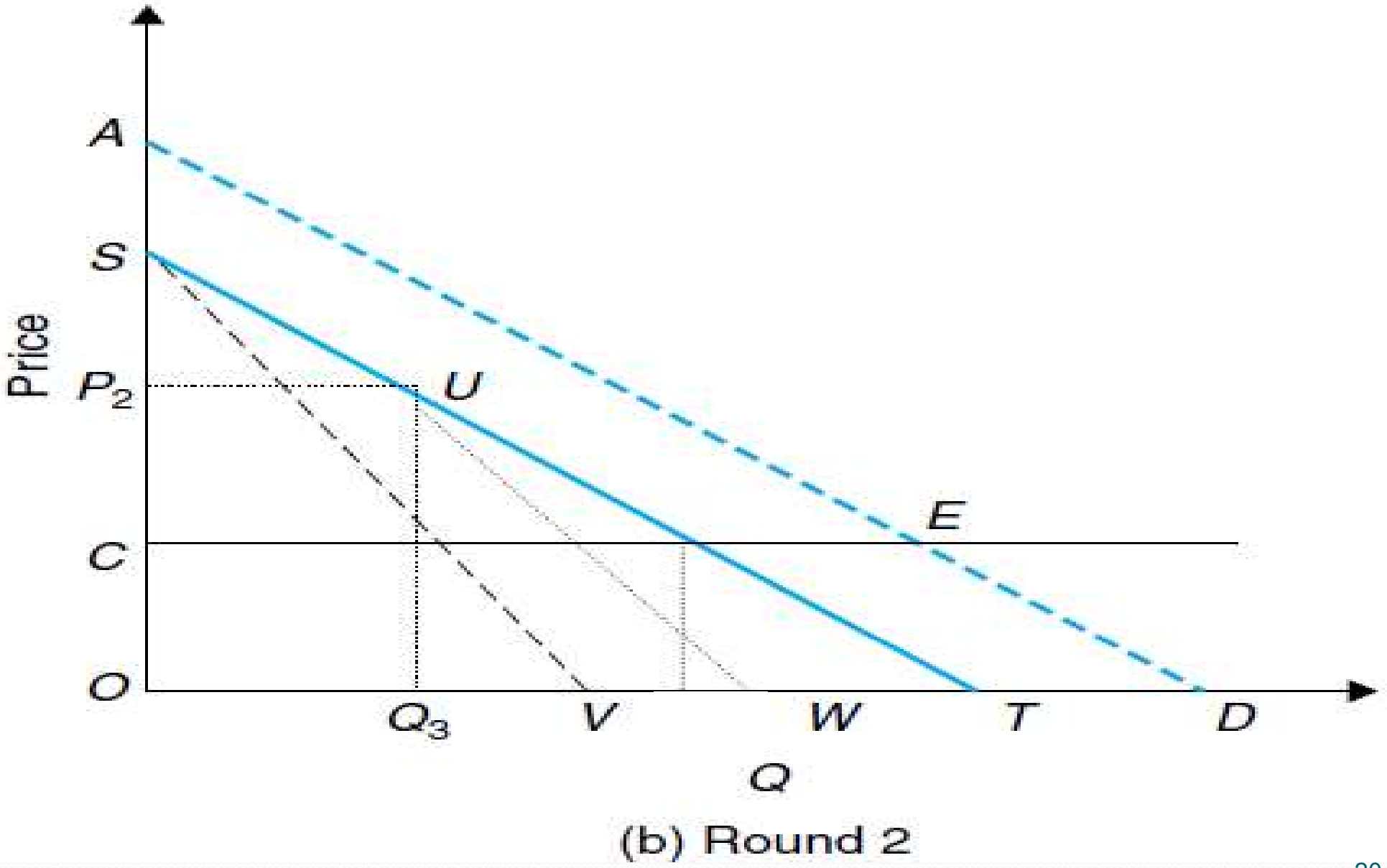
1.3.3 Cournot model

- A few firms
- **Quantity competition** → Reaction function (given others' response): **Q= r(Q')**
- Barriers to entry, exit

1.3.3 Cournot model

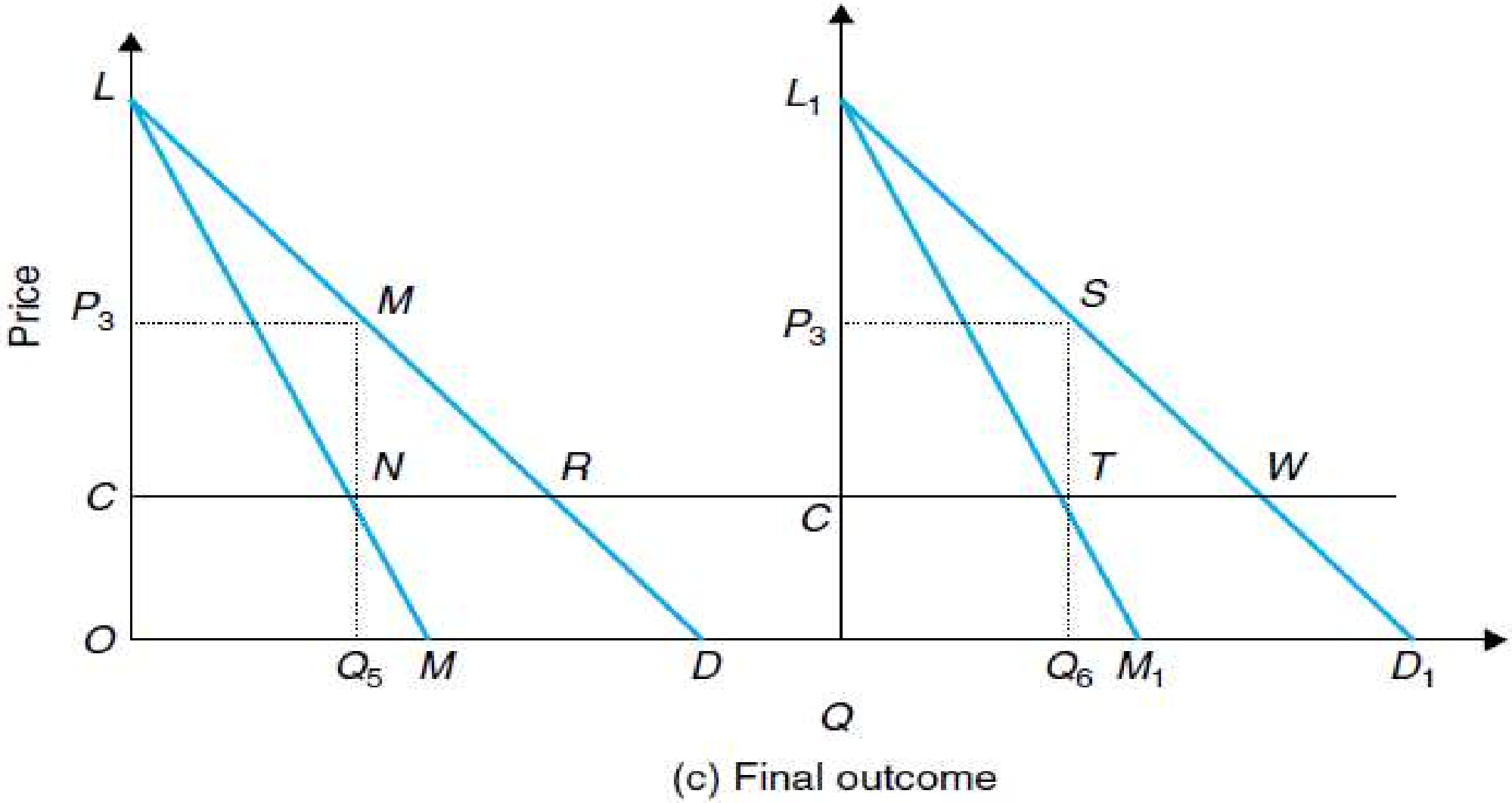


1.3.3 Cournot model



(b) Round 2

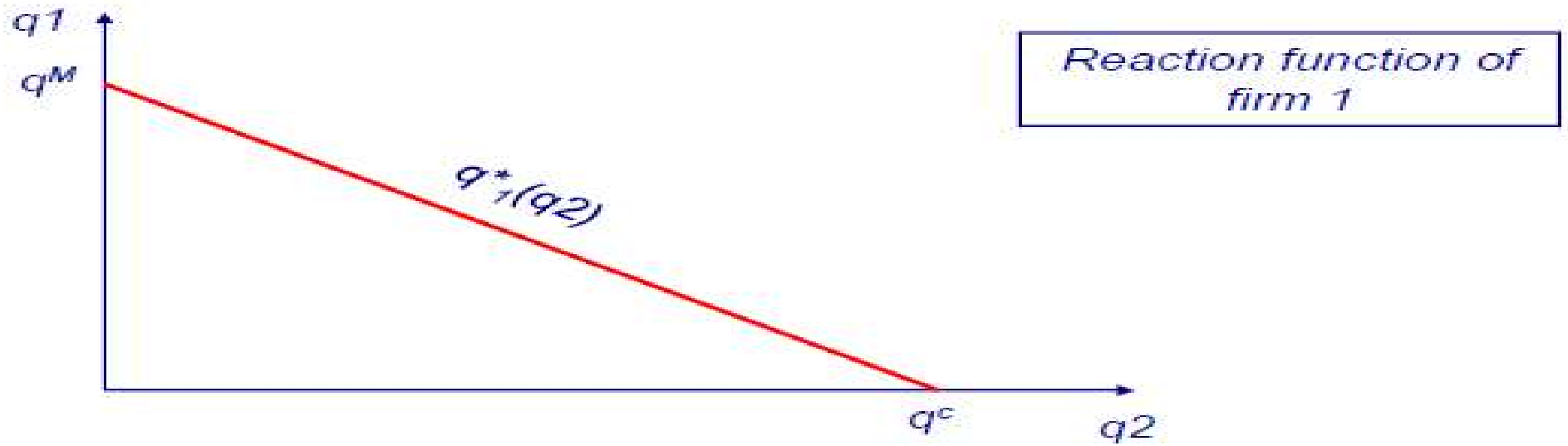
1.3.3 Cournot model



(c) Final outcome

Incentives for changes?

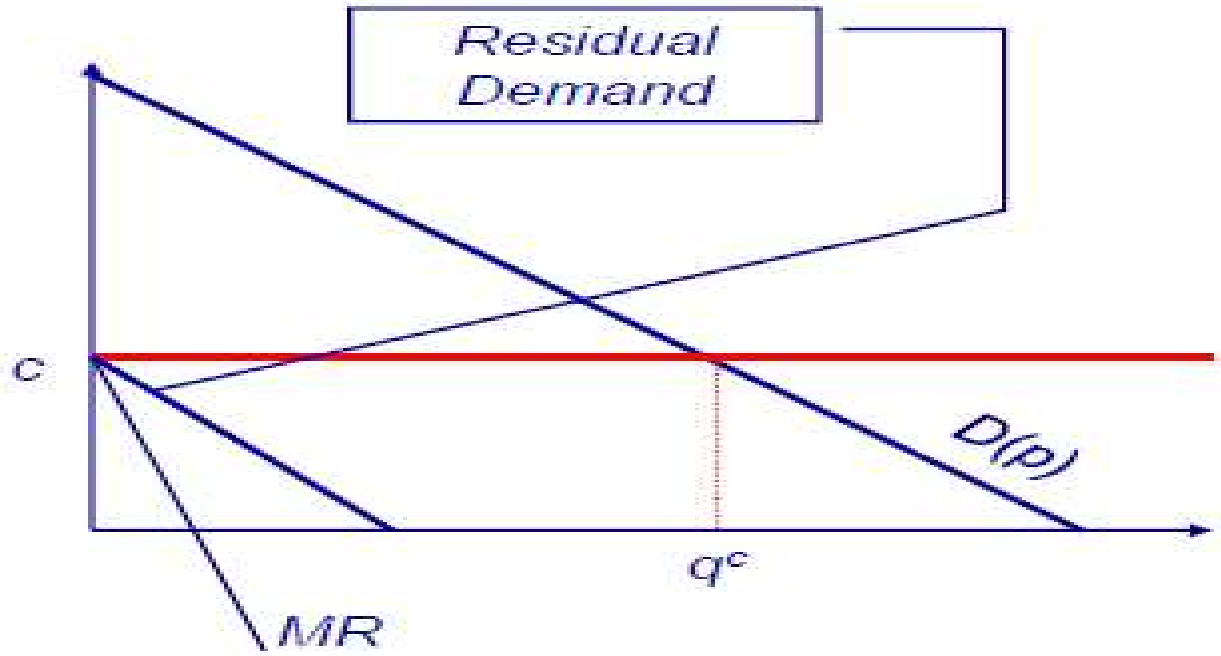
1.3.3 Cournot model



Firm 1's belief:

a. $q_2=0 \rightarrow q_1=?$

b. $q_2= q_c \rightarrow q_1=$



1.3.3 Cournot model

Ex. 1

A market demand curve: **P =120-Q**

Cost function: **TC(Q)=30Q** for each firm

For Cournot competition

a. Response function?

b. Optimum quantity and price → profits?

For Bertrand competition

1.3.3 Cournot model

Ex. 2

A market demand curve: **P =120-Q**

Cost function: **TC(Q)=30Q²** for each firm

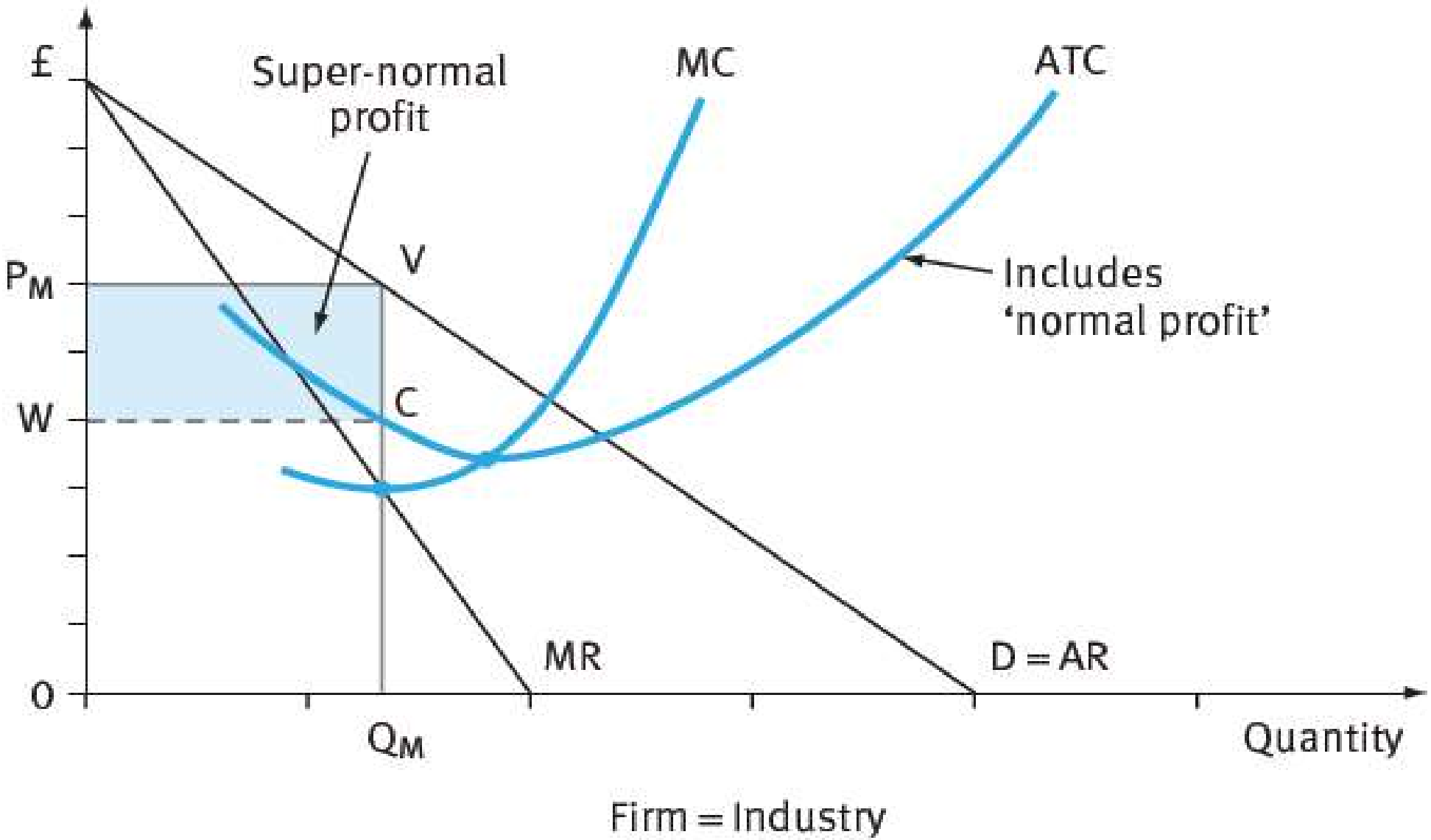
For Cournot competition

a. Response function?

b. Optimum quantity and price → profits?

For Bertrand competition

1.4 Monopoly


£
Super-normal profit
MC
ATC
V
P_M
Includes 'normal profit'
W
C
MR
D = AR
0
Q_M
Quantity
Firm = Industry

2. Pricing strategies

2.1 Basic Pricing Strategies

2.2 Strategic Pricing for greater profits

2.3 Pricing Strategies for special structure of cost and demand

2.1 Basic pricing

- Perfect competition: P =MC
- Monopoly and Monopolistic:

$$P = (1 - \frac{1}{1 + \varepsilon})MC$$

- Cournot: $P = (1 - \frac{1}{1 + n})MC$

2.2 Strategic pricing

a. Price discrimination

b. Two-part pricing

c. Block pricing

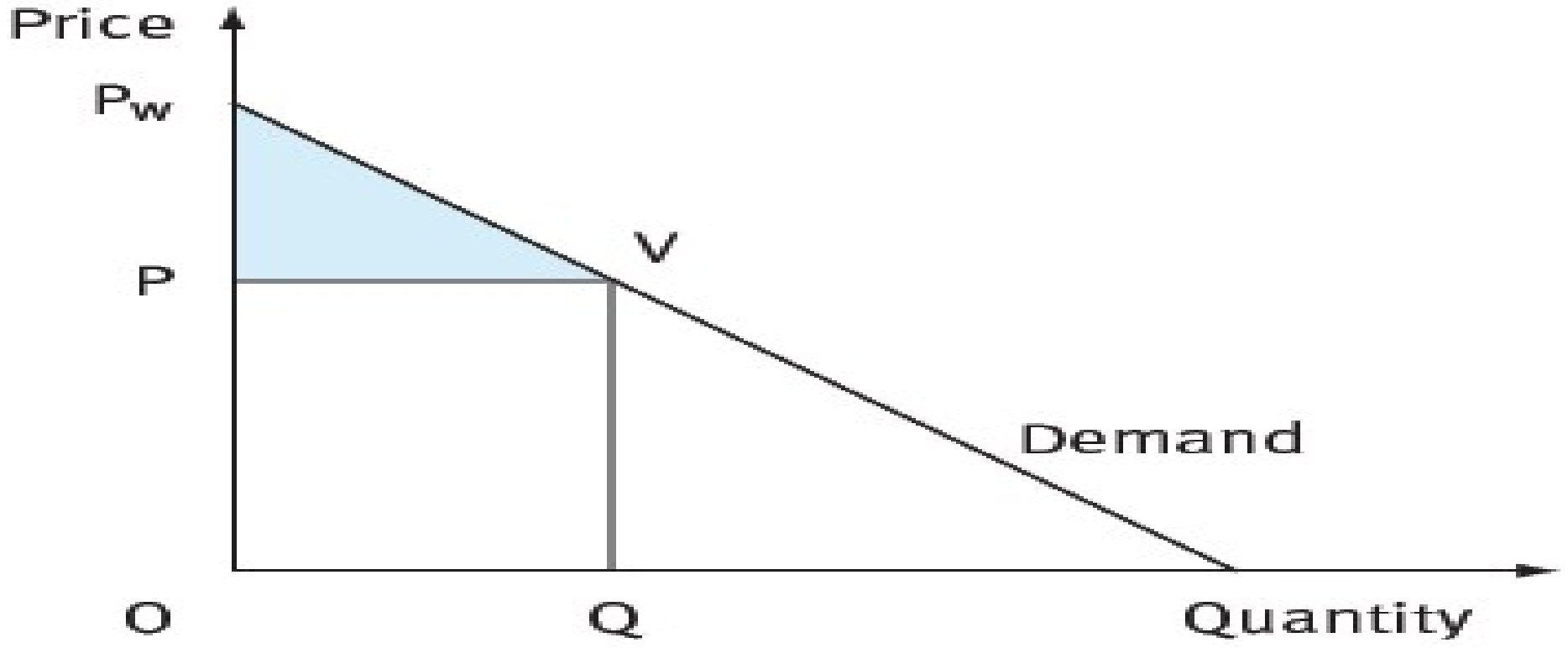
d. Commodity bundling

a. Price discrimination

Same products, different prices

–First – degree price discrimination:

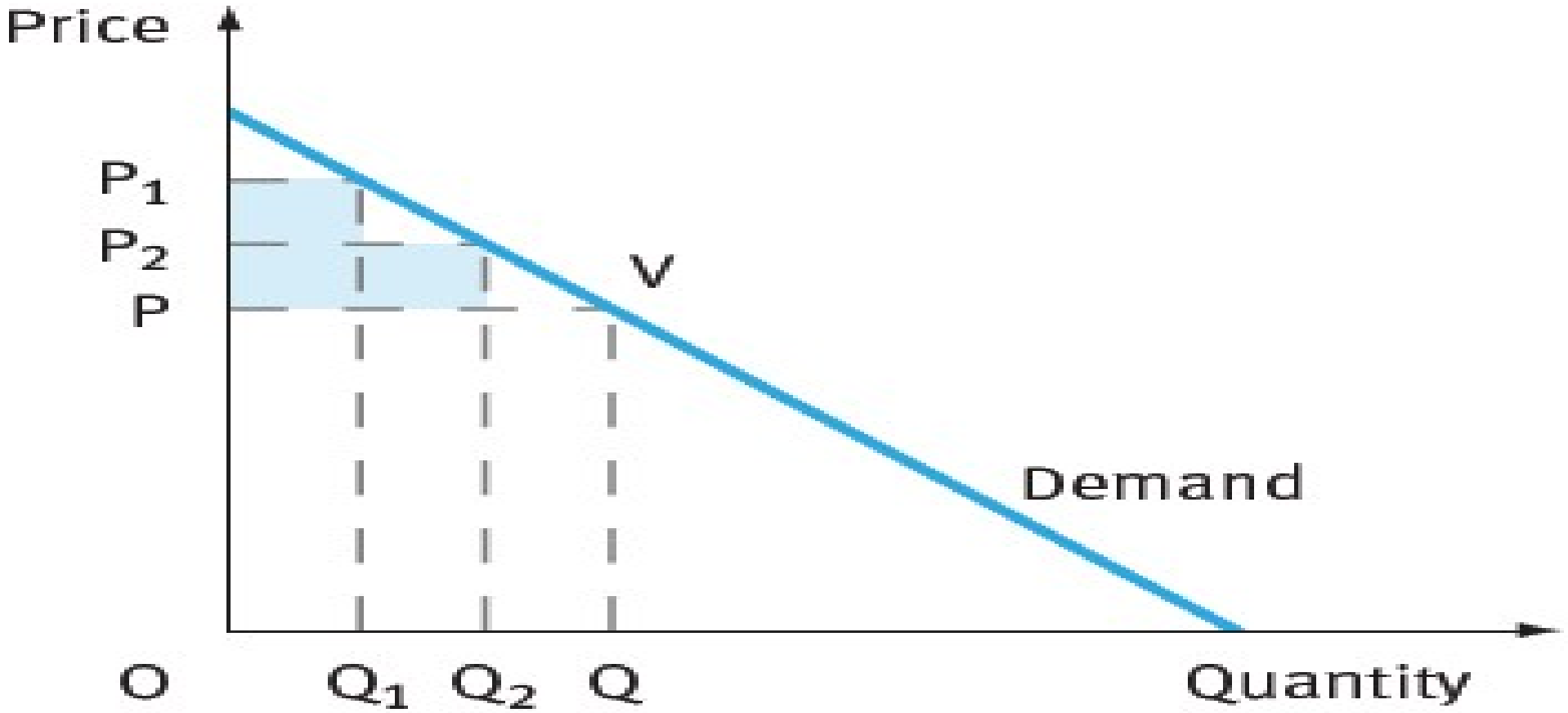
max willing price for each unit



a. Price discrimination

– *Second – degree price discrimination:*

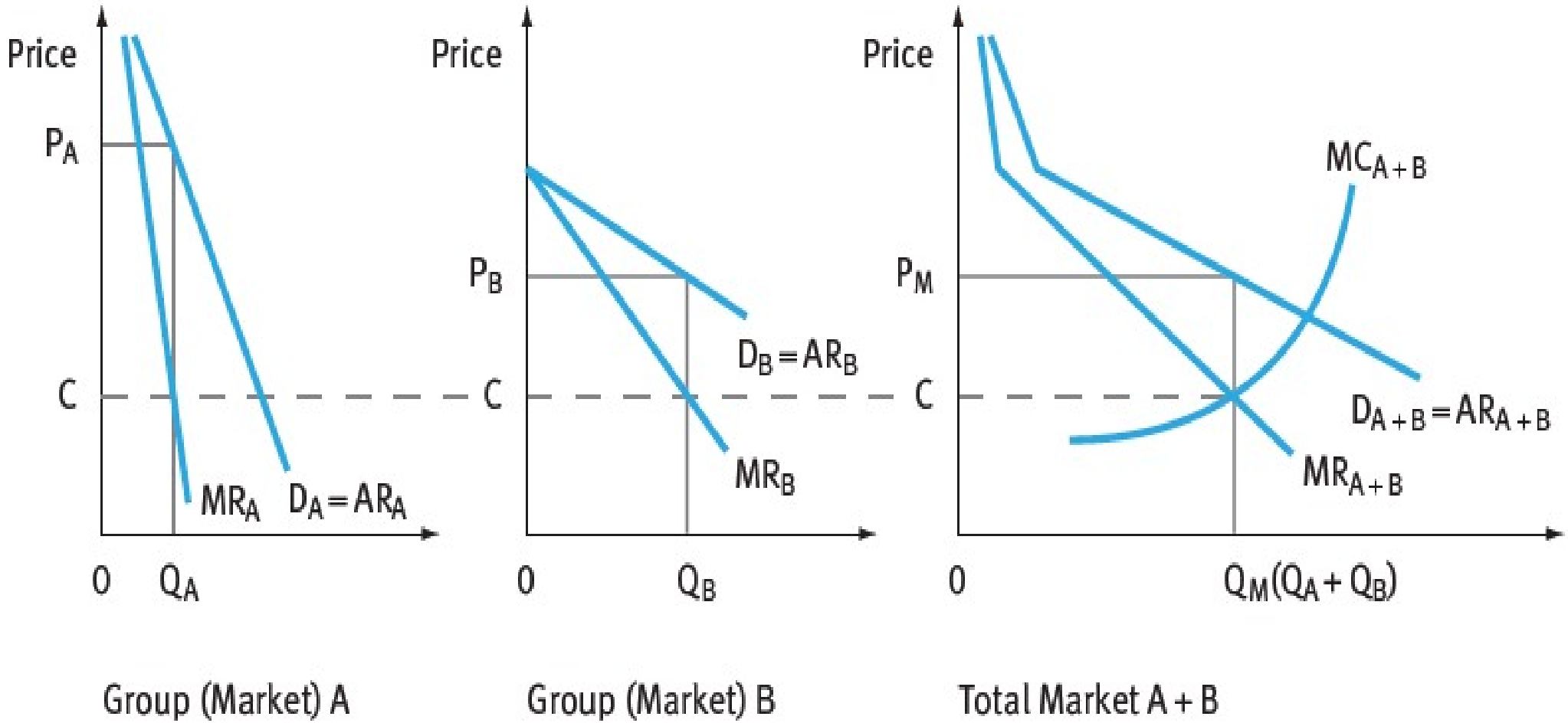
Different prices for different ranges



a. Price discrimination

– *Third – degree price discrimination:*

Different prices for different groups



a. Price discrimination

– ***Third – degree price discrimination:***

$$MC = MR_1 = MR_2 \leftrightarrow P_1(1+\frac{1}{\varepsilon_1}) = P_2(1+\frac{1}{\varepsilon_2})$$

2.2 Strategic pricing

b. Two-part pricing

Fixed fee + per-unit charge

c. Block pricing

Packing identical products

d. Commodity bundling

2.3 Special structure pricing

- Peak – load pricing
- Cross – subsidization
- Price matching
- Brand loyalty
- Random pricing