Chapter 15

Monopoly

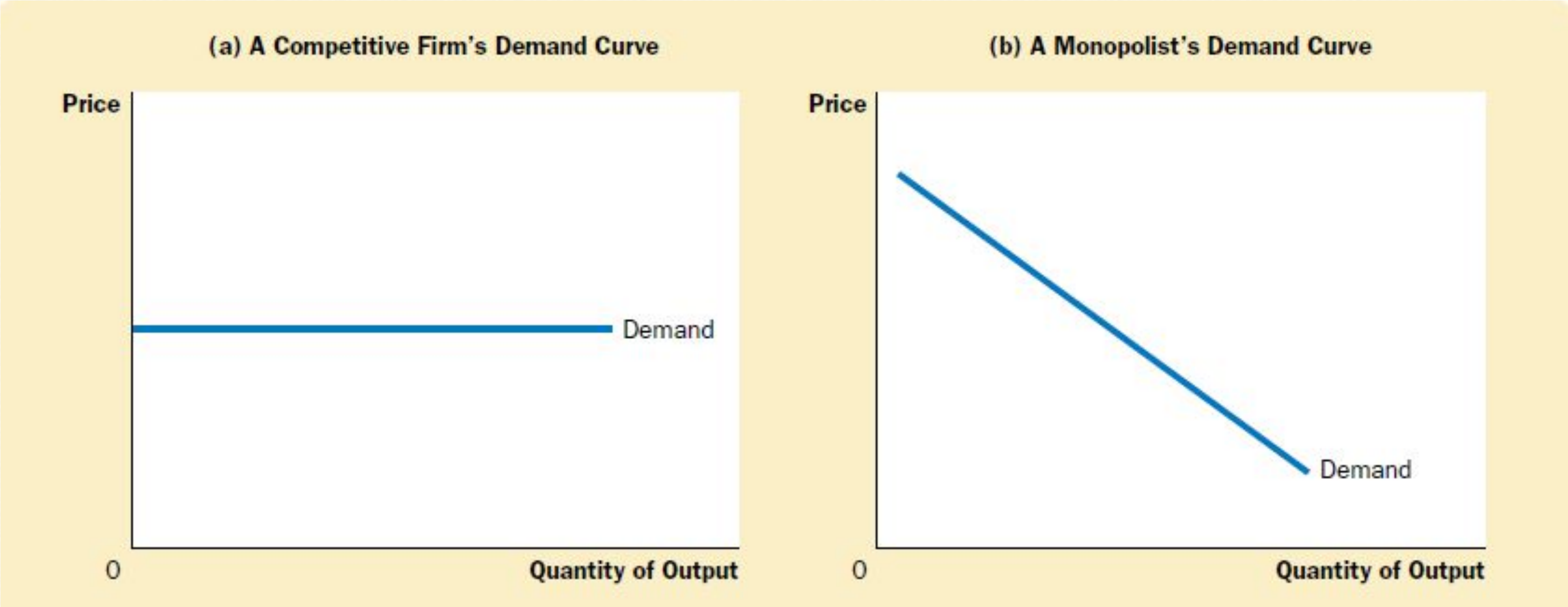
Introduction

- Mono=single; poly=seller
- Producing single product with no close substitute and seller is the price maker
- They have the market power and P>MC
- Example
  - Microsoft had a copyright to produce Windows

Why does monopoly arise

- **Barrier to entry**
  - A key **resource** is **owned** by a single firm
  - The **government** gives a single firm the **exclusive right** to produce some good or service
  - The **costs of production** make a single producer more efficient than a large number of producers (**natural monopoly**)

Demand curves



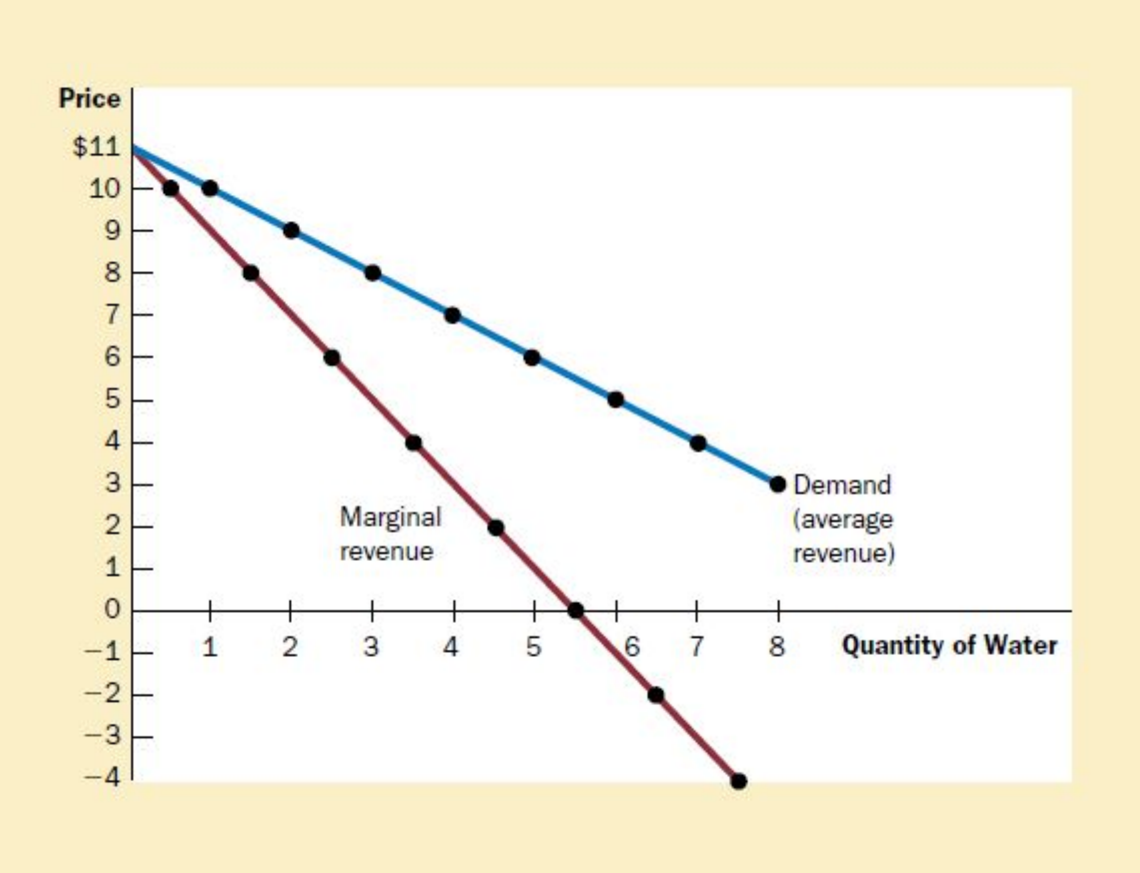
Numerical

Quantity of Water (Q)	Price (P)	Total Revenue ($TR = P \times Q$)	Average Revenue ($AR = TR/Q$)	Marginal Revenue ($MR = \Delta TR/\Delta Q$)
0 gallons	$11	$ 0	—	
1	10	10	$10	$10
2	9	18	9	8
3	8	24	8	6
4	7	28	7	4
5	6	30	6	2
6	5	30	5	0
7	4	28	4	−2
8	3	24	3	−4

AR and MR

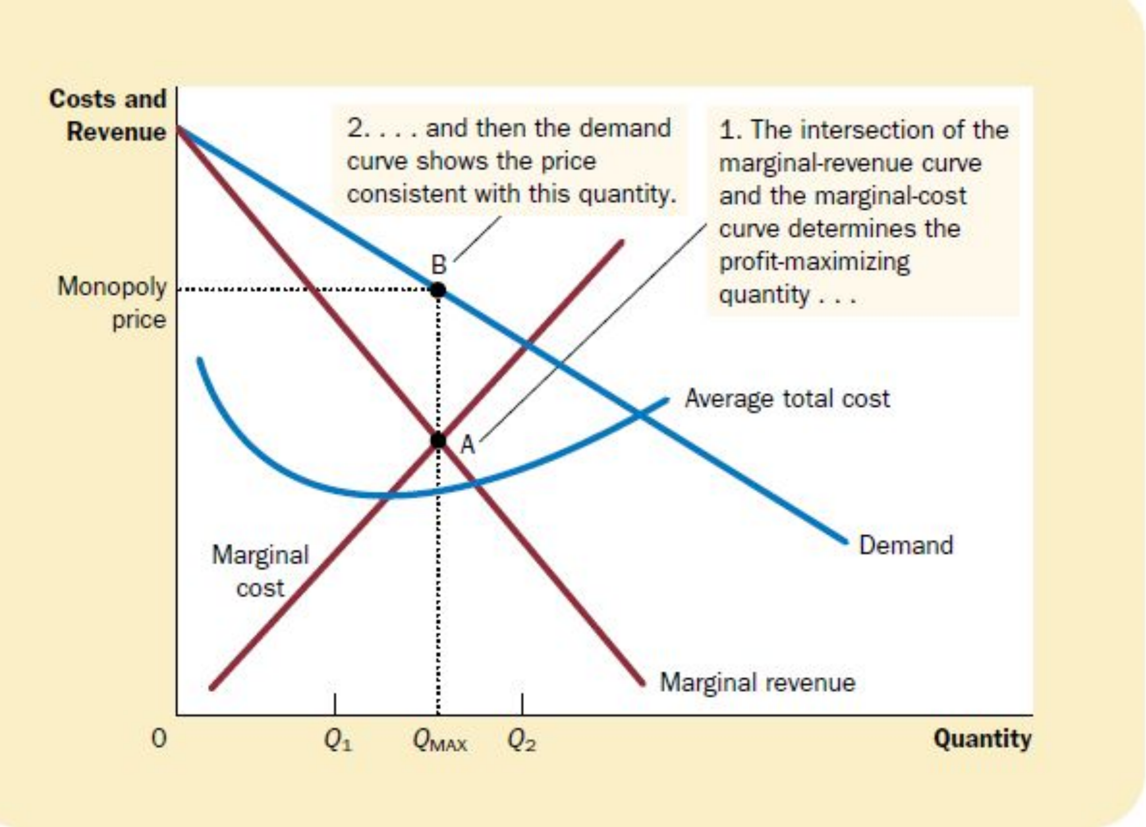
MR=(1/2)AR

Monopolist can operate at MR=0



Equilibrium

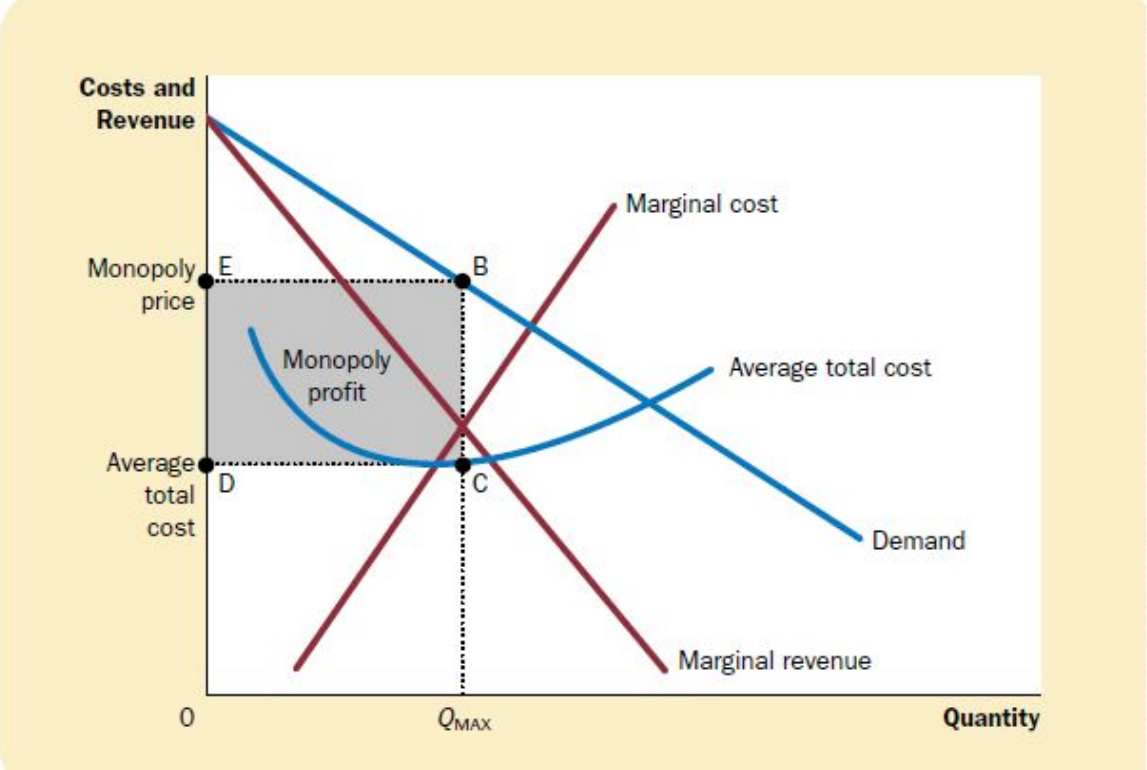
- Decision is taken for maximizing profit
- Condition
  - P>MR
  - MR=MC
  - d/dQ(MR)<d/dQ(MC)



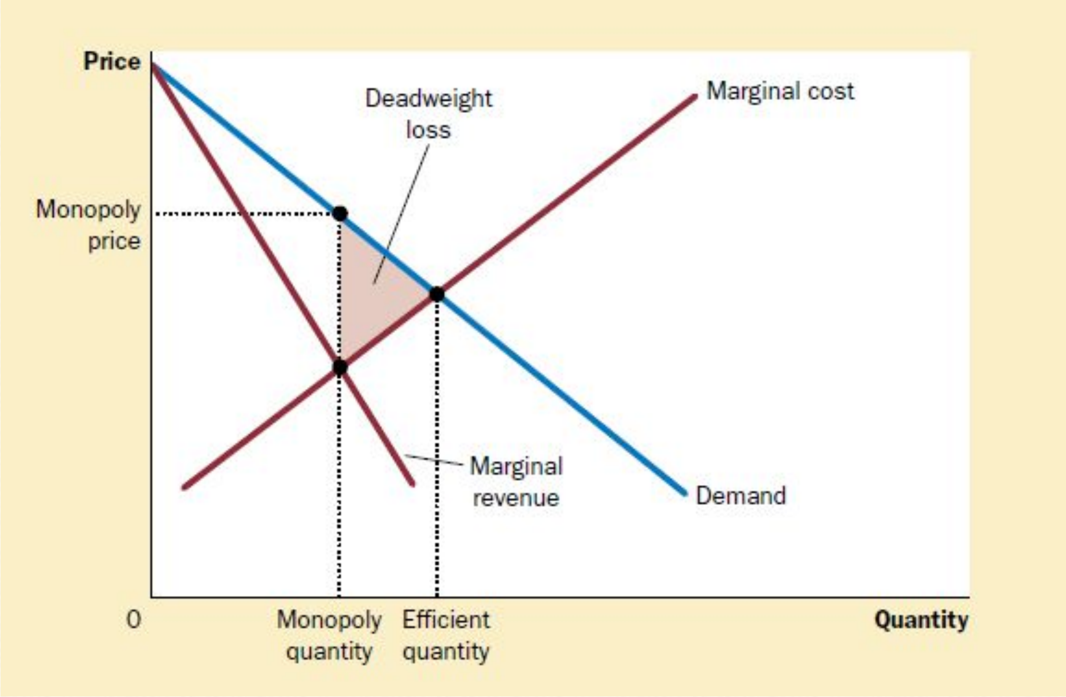
Profit

Monopolist does not have a supply curve

Monopolist can earn normal profit, super-normal profit or loss in the short-run



Social cost: Deadweight loss



Public policy towards monopolies

- Make monopolized industries more competitive
- Regulate the behavior of the monopolies
- Turn some private monopolies into public enterprises
- Do nothing

Cont…

- Anti-trust law (Pepsi and Coke)
- Regulating natural monopoly (water and electricity)
- Public ownership (water, telephone, and electricity)
- Do nothing (market failure is better than political failure)

Price discrimination

- First degree
- Second degree
- Third degree (different from multiplant monopolist)