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Module 3: Supply

Supply

- a relationship between the price of a good & the quantity of that good firms are willing to sell
- express this using the equation: $Q_S = mP + b$
- quantity supplied: the amount of the good (Q_S) supplied for a given price P

Law of Supply

- as price increases, so does Q_S
- as price decreases, so does Q_S

Perect Competition

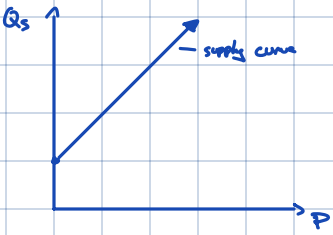
- a modeling assumption used to simplify math
- assumes:
  (1) all firm sell identical goods
  (2) many buyers & many sellers (no market power)
  (3) firms are price-takers, meaning the firm can only charge the market price
  ↳ means price (P) = Marginal Revenue (MR)
  ↳ we say total Revenue (TR) = $P \cdot Q_S$

Supply Schedule + Curve

- the supply schedule is a table showing how much of a product firms will sell at different prices
- graphing gives us the supply curve (upward sloping)

ex

Q_S	P
0	2
20	4
40	6
60	8



Applying the Marginal Principle

- asking how many units should I supply
- to solve, use the marginal principle, and keep supplying if $MR \geq MC$
- recall, under perfect Comp, $MR = P$

ex Imagine you are a corn farmer. The market price for a corn is $4. How much corn should produce?

corn	Tot. Rev. (MR·Q)	Tot. cost	MR	MC	Profit (TR−TC)	
10	40	10	4	1	30	
20	80	30 (10·2 = 20)	4	2	50	
30	120	60 (10·3 = 30)	4	3	60	
40	160	100 (10·4 = 40)	4	4	60	MR = MC ✓
50	200	150	4	5	50	
60	240	210	4	6	30	

Why Is Supply Curve Upward Sloping?

- due to increasing marginal costs
- as we increase the quantity we produce the marginal cost increases because
  (1) diminishing marginal product, which says we become less productive as we produce more (requires more input to produce same # of goods)
  (2) rising input costs