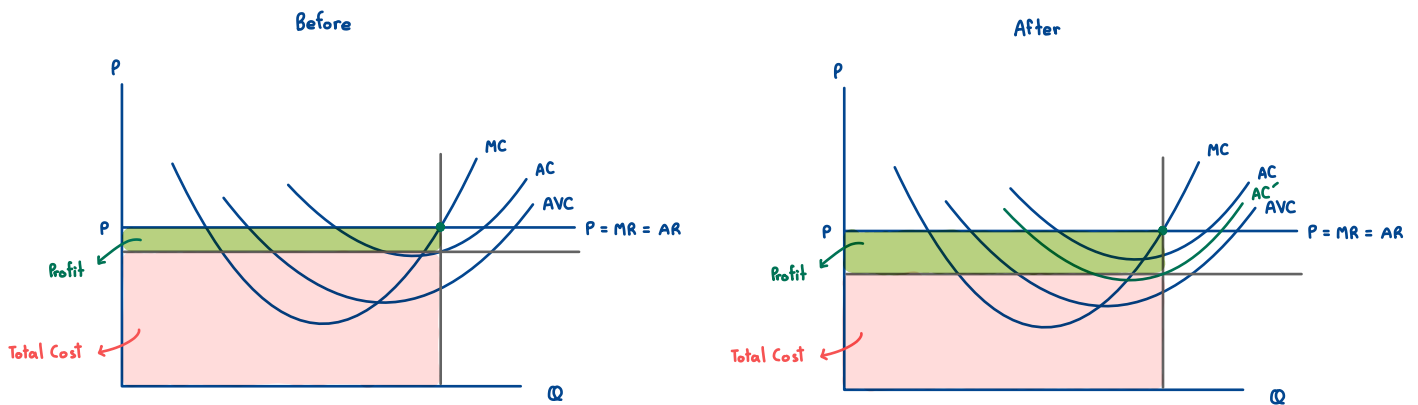


HW#11, Due May 6, 2021 Analyze the case the firm receives subsidy for the following two different cases to find out how the firm's quantity and profit change.

- The government gives a lump sum subsidy of 20,000 bahts to each firm.
- Suppose that the firm was producing 1,000 units and the government gives a subsidy of 20 bahts/unit so the total subsidy is also 20,000 bahts if the firm does not change its production of 1,000 units. Do you think, to maximize its profit with the subsidy of 20 bahts/unit, the firm will increase/decrease its production from 1,000 units? Does the firm receive higher profit? Does the firm receive more/less subsidy than 20,000 bahts?

a) Gov. gives subsidy 20,000



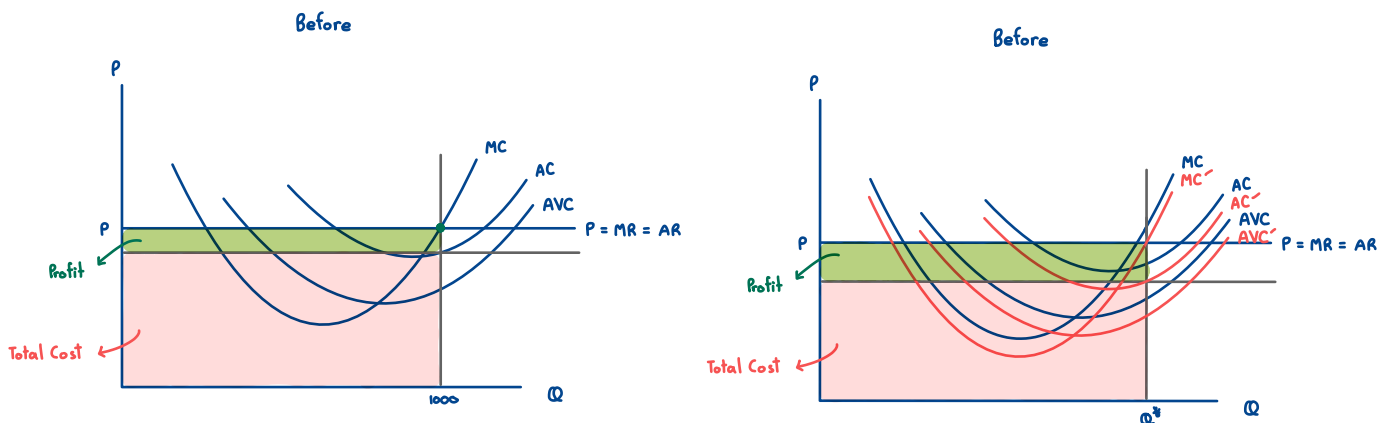
When there is subsidy it lower the fixed cost

$$TC = TFC + TVC$$

$$TC' = TFC - 20,000 + TVC$$

$$ATC = \frac{TC}{Q}, \text{ So when } TC \text{ change } ATC \text{ also change}$$

b) Firm produce 1,000 unit with 20 baht/unit
Subsidy 20,000 on TVC



- To maximize profit firm should increase quantity from 1,000 to Q^*
- Firm receive higher profit
- Firm receive more subsidy than 20,000 B, because they produce more quantity