ECONOMICS FOR BUSINESS 2

Lecture 1 – The costs of Production

1.1. Total revenue, total cost & profit

- A firms goal is the **maximize profit** and shareholders wealth
- Economic profit is smaller than accounting profit

Total Profit = Total Revenue – (Fixed Costs – Variable Costs)

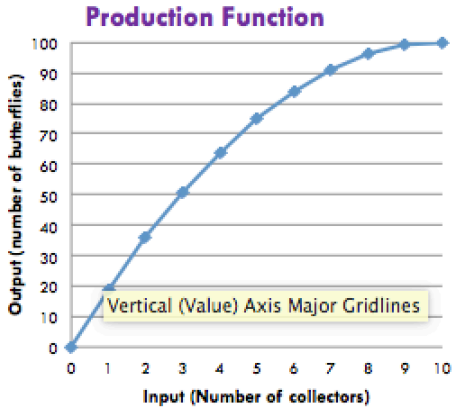
i.e. TP = TR – TC

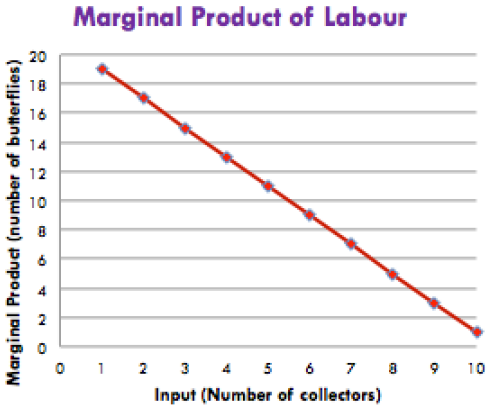
1.2. Explicit & Implicit Costs

- Explicit costs – input costs that require a money outlay
- Implicit costs – input costs that don't require a money outlay

1.3. Production Function

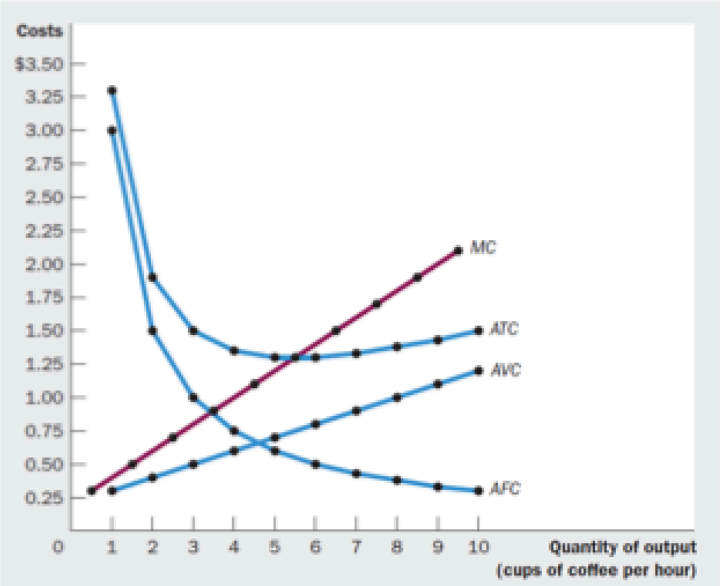
- Diminishing marginal product – marginal product of an input declines as the quantity of the input increases





*Note: The production function is increasing; marginal production function is decreasing.

1.4. Different Cost Curves

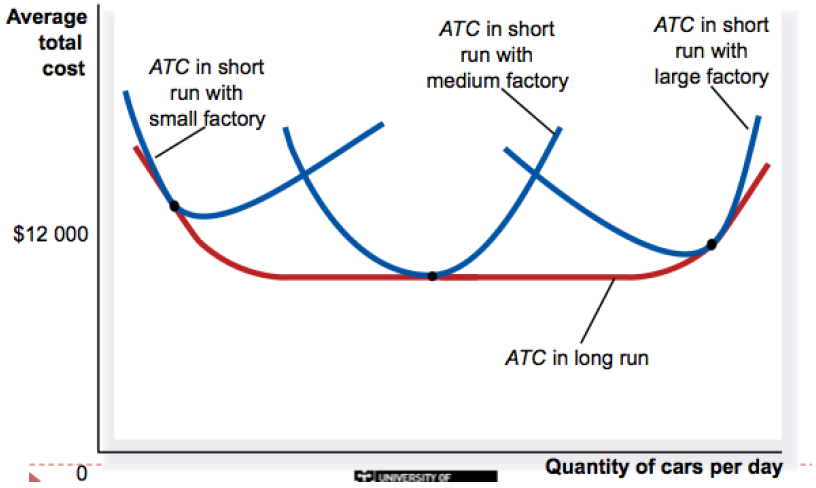


- ATC = AVC + AFC (ATC is U-shaped)
- MC curve is rising (as output rises, MC rises)
- MC curve crosses the ATC curve at the minimum of ATC
- Many costs are **fixed in the short run** but **variable in the long run**

Lecture 2 – Competitive Market

1.1. Costs in the Short Run & Long Run

- Short Run – many costs are fixed
- Long Run – fixed costs (FC) become variable

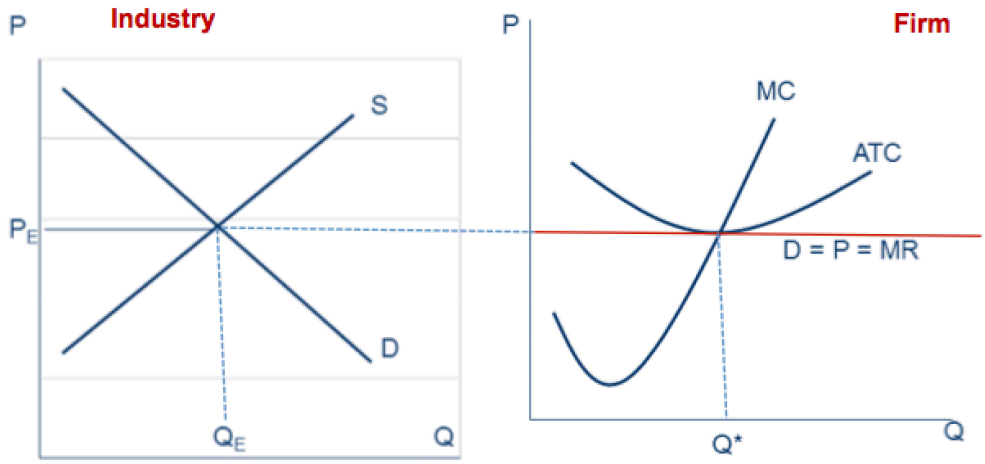


- Economies of scale – ATC falls as quantity of output increases
- Diseconomies of scale – ATC rises as quantity of output increases
- Constant returns to scale – ATC stays the same as quantity of output changes

1.2. Characteristics of a competitive market

- Low Barriers to entry (Firms can freely enter & exit the market)
- Homogeneous product (Various sellers offer the same product)
- Many buyers & sellers (A single buyer or seller has a **negligible impact** on the market price)
- **Price takers** (Firms decide on the quantity to produce)

1.3. Profit-maximisation

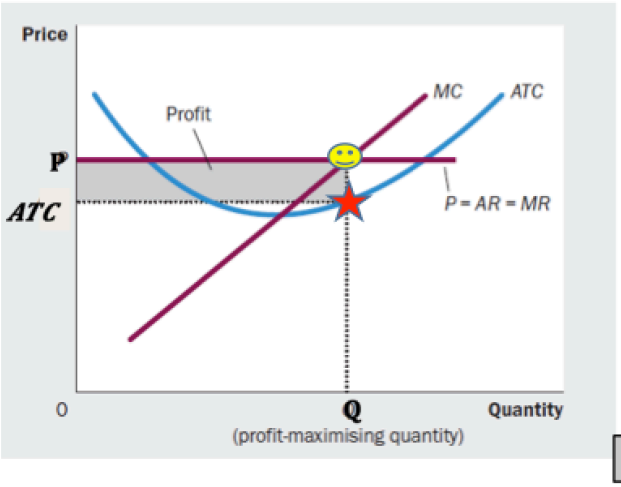


*note: in a competitive market price is fixed regardless of quantity

- MR = P = D (Since P is constant)
- If MR > MC then the firm can increase production & profit gets larger
- If MR < MC then the firm can decrease production & profit gets larger
- If **MR = MC** (Profit is maximised)

1.3. Profit & Loss in a Competitive Market

PROFIT OF A COMPETITIVE FIRM



Profit = Revenue – Total Cost

$\pi(Q)=R(Q)-C(Q)$

Profit = P*Q – ATC*Q

$\pi(Q)=(P-ATC)\times Q$

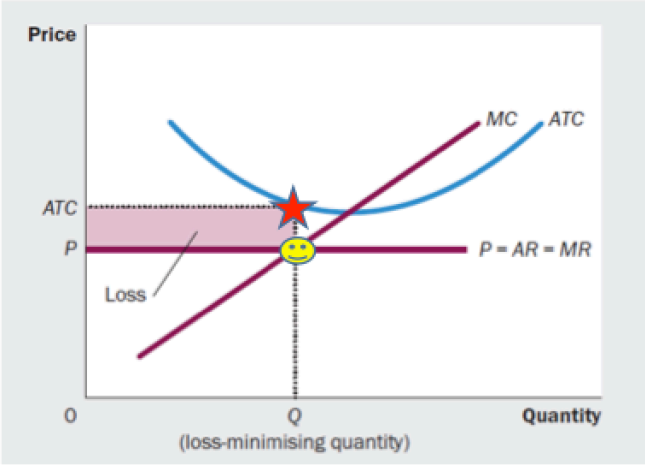
MC=MR= **P** which determines profit maximising **Q**

ATC of producing profit maximising **Q**

Profit is the area of a rectangle

- When ATC < P, firms make a PROFIT

LOSS OF A COMPETITIVE FIRM



Profit = (Price – ATC) x Output

Profit is the area of a rectangle?

… but now Price – ATC is negative and profit is negative

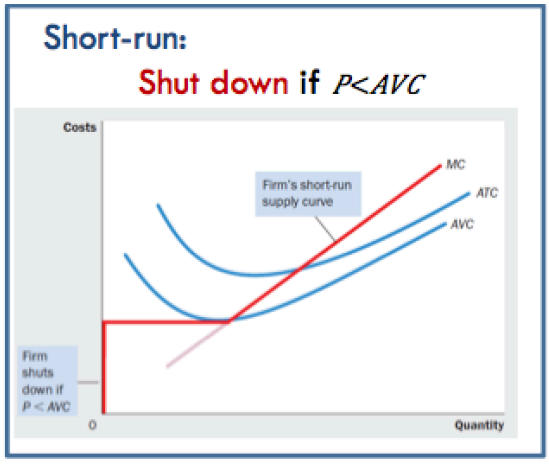
This firm has **losses.** Losses are equal to the area of rectangle.

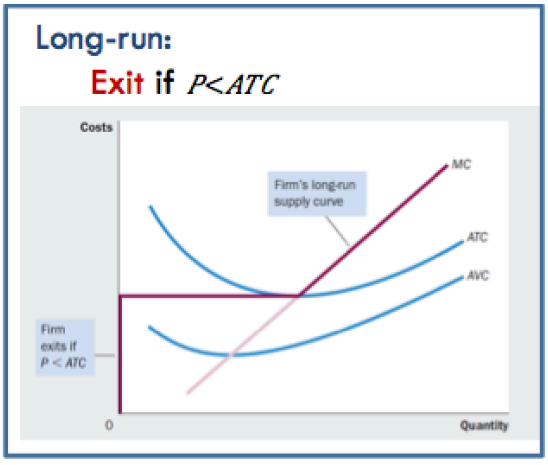
(but all other quantities would result in even bigger losses!)

- When ATC > P, firms have a LOSS

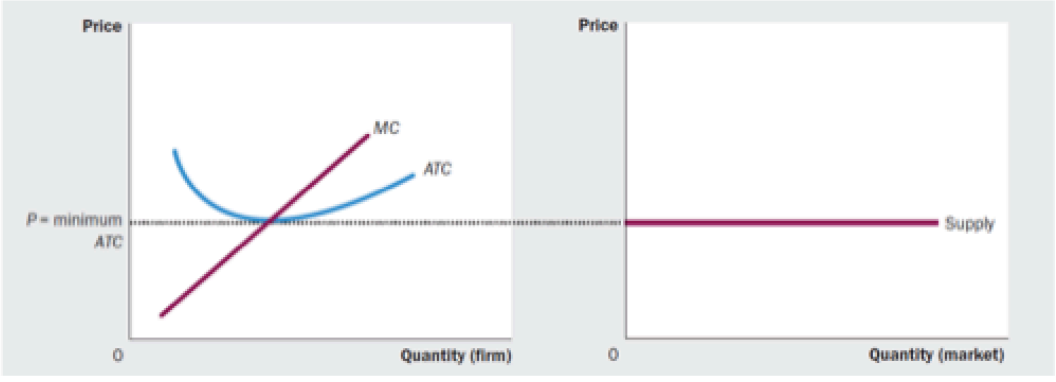
1.4. Shut down (Short Run) & Exit (Long Run)

- When firms are suffering LOSSES, they can either SHUT DOWN or EXIT the market
- Shut down is temporary closure (no production, no variable costs)
- Exit is permanent closure (no firm, no costs)





1.5. Long run (Produce at min ATC)



1.6. Increase in market demand