Firms in a Competitive Market

Competitive Markets - Many buyers and sellers
- Similar goods
- Free entry/exit
- Firms are price takers

e.g. Stock market/ Farmer's markets

Price Taker - Has no control over market price
- "Takes" as price is given

Goal of a firm - maximize profits (+ revenues and costs)

Profit Maximizing Rule - To maximize profits, the firm should use a marginal analysis

Q	Quantity	MR	Marginal Revenue $\Delta TR / \Delta Q$ (Competitive firm, MR = P)
P	Price	MC	Marginal Cost $\Delta TC / \Delta Q$ (Additional costs of producing additional units)
TR	Total Revenue $P \times Q$		
TC	Total Cost		
π	Profit $TR - TC$		

Change in Profit
- Δ Profit = MR - MC

Profit is maximized by choosing the level of output (Q) such that MR = MC

If MR > MC, firm can ↑ profits by producing more Q
If MR < MC, firm has produced too much Q and profits not maximized

Calculating Profit

To find profit, need to know revenue and costs.
For a perfectly competitive firm, revenue can be found by looking at price and quantity sold.
Costs determined by the quantity sold.

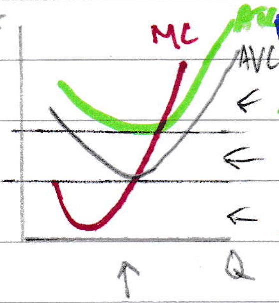
$$\pi = q \times (P - ATC)$$

profits = (units sold) × (average profit per unit)

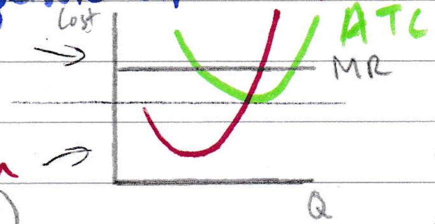
Firms can't always make a profit, e.g. ski resort in summer
thus will shut down if can't cover variable costs.

Shutting down != going out of business and exiting industry

MC curve is short-run supply curve as long as firm is operating



MR curves operate at -
firm profit
firm loss
firm shut down
(Supply curve)



Firms will enter into a perfectly competitive market

Short term Firms

P > ATC ✓
ATC > P > AVC ✓
AVC > P ✓

Long term Firms

making a loss = exit market

P > ATC ✓
P < AVC ✓

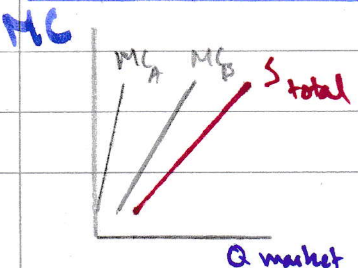
If short-run supply curve & demand curve intersect BELOW long-run supply curve, firms ↓ profit, so price below min ATC

P = AVC, indifferent about shutting down/producing
P = ATC, break even

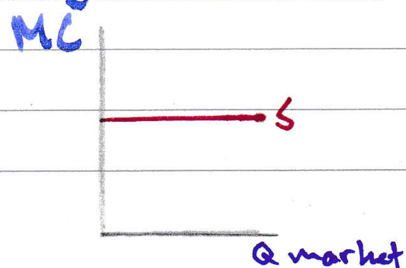
Sunk costs

Costs that have already been incurred and is unrecoverable
" " fallacy - considering sunk costs when making new decisions
- can lead to using old facilities and incurring large opportunity costs

Short term Firms (Market supply)



Long term Firms



incur economic loss, supply curve is above the point where the short-run supply curve and demand curve intersect

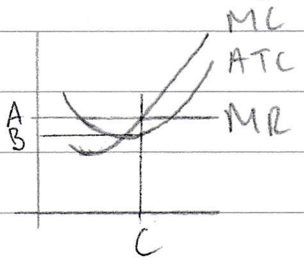
Economic Profits

If can't maintain long-term economic profits, why join?
Difference between accounting profits : revenues - explicit costs
and
economic profits : revenues - all costs
include opportunity costs

Zero profits mean that your opportunity costs == accounting profits

Opportunity costs of labour -
when ↑ expanding, may have to ↑ wages to attract more workers

Long run supply graph line may upward slope due to resources being limited (land)



If firm is maximizing profits
$A \times C$ = total revenue
$(A-B) \times C$ = profit