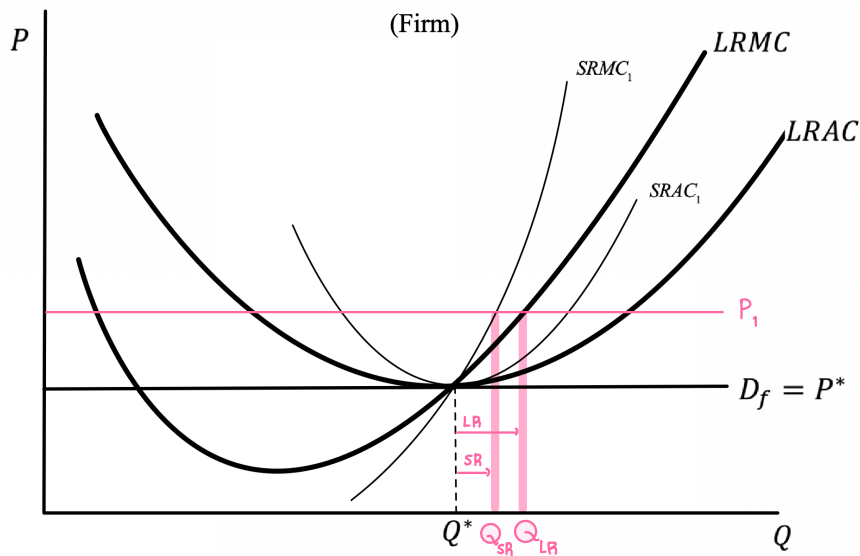


HW#13 Due May 13, 2021

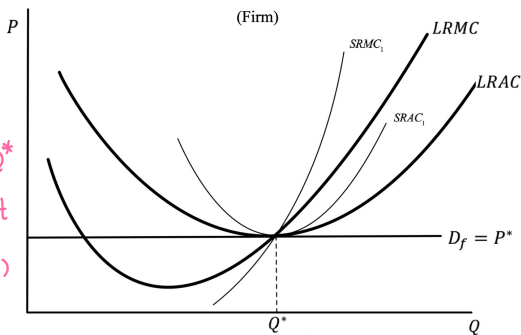
Suppose that the market is in a Long-Run equilibrium where the price is at P^* and each firm produces Q^* . With the given $SRMC_1$ and $SRAC_1$ and $LRMC$ and $LRAC$, the market price increases from P^* to P_1 ,

- Show how the firm will change its output in Short Run and Long Run.
- Indicate the profit the firm receives in Short Run and Long Run.
- Explain why the profit in Long Run is bigger than profit in Short Run. → In SR, there is fix cost : Capital (K)

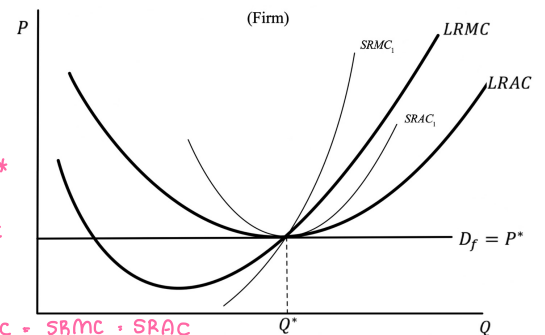


In LR: K & L both are variable cost
so firm can adjust minimise cost

SR:
 $P^* = MC$
∴ produce at Q^*
& no profit
(normal profit)

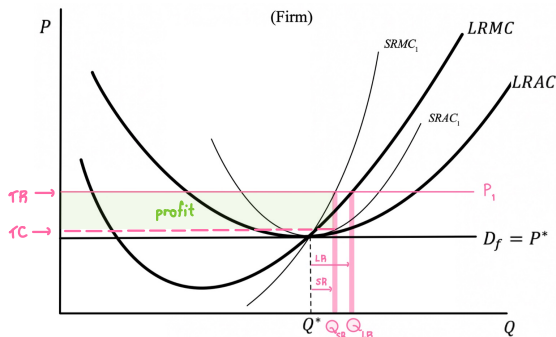


LR:
 $P^* = MC$
∴ produce at Q^*
& no profit
(normal profit)



$$P = LRMC = LRAC = SRMC = SRAC$$

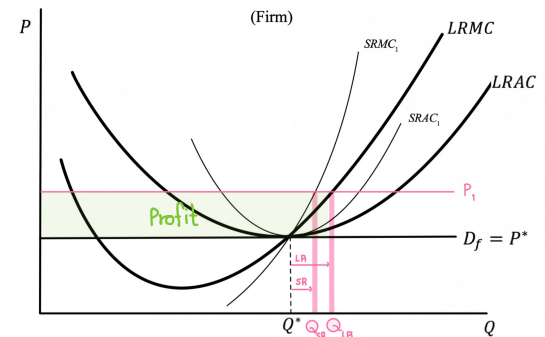
after $P \uparrow$:



note: $TR = P \times Q$
 $TC = AC \times Q$
 $\pi = (P - AC) \times Q$

$P \uparrow \rightarrow Q \uparrow$ from Q^* to Q_{SR}
→ profit increase : $P > SRAC$
∴ excess profit

after $P \uparrow$:



$P \uparrow \rightarrow Q \uparrow$ from Q^* to Q_{LR}
→ profit increase : $P > LRAC$
∴ excess profit

but not long if new entry ↑, P will drop to P^* again