

(After Mid)

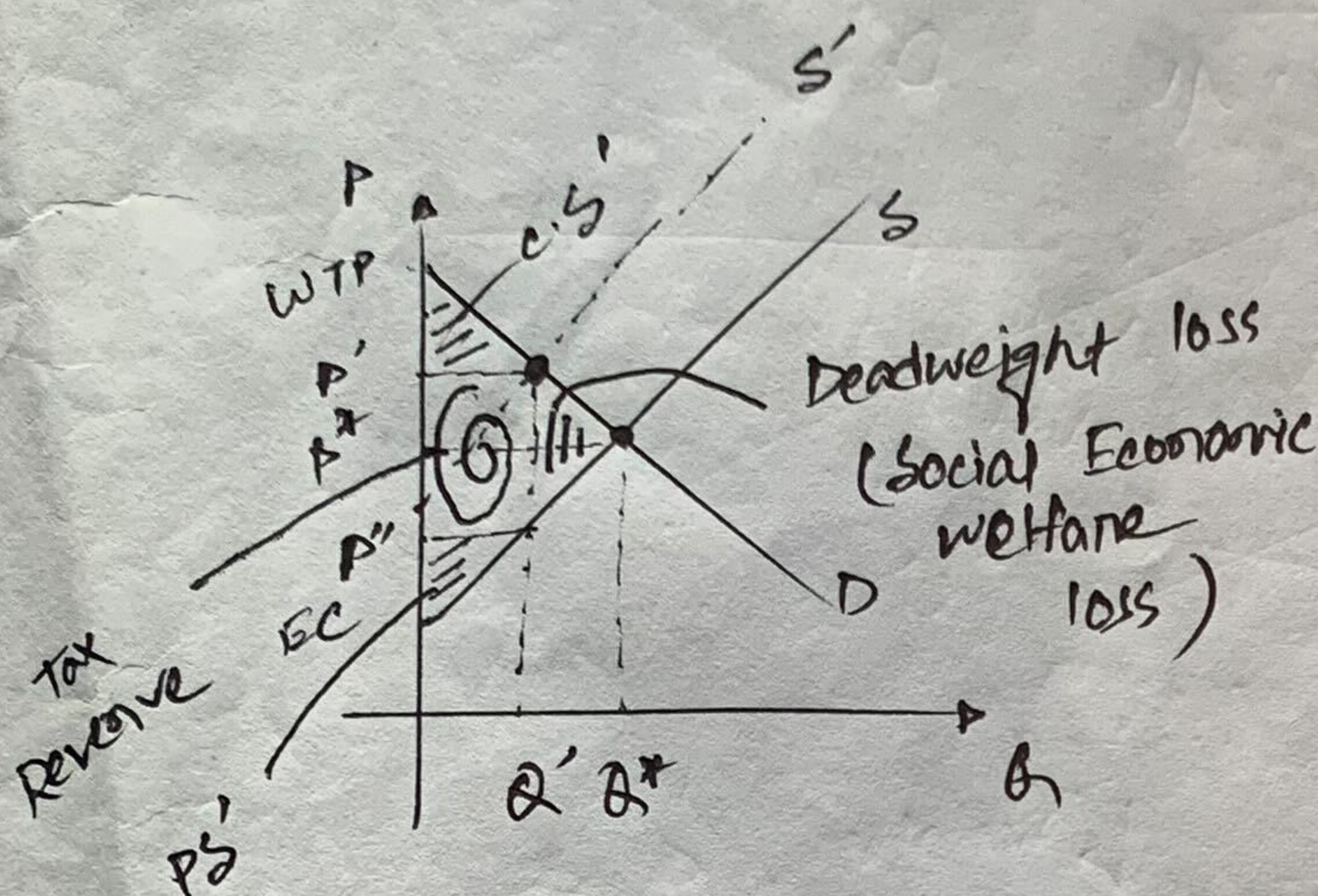
Eco-101

16.11.23

# Tax :

→ For Any Kind of Taxation both buyers & consumers are affected. This effect depends on the elasticity.

After tax ( $S'$ ) → tax effects the supply Negatively.

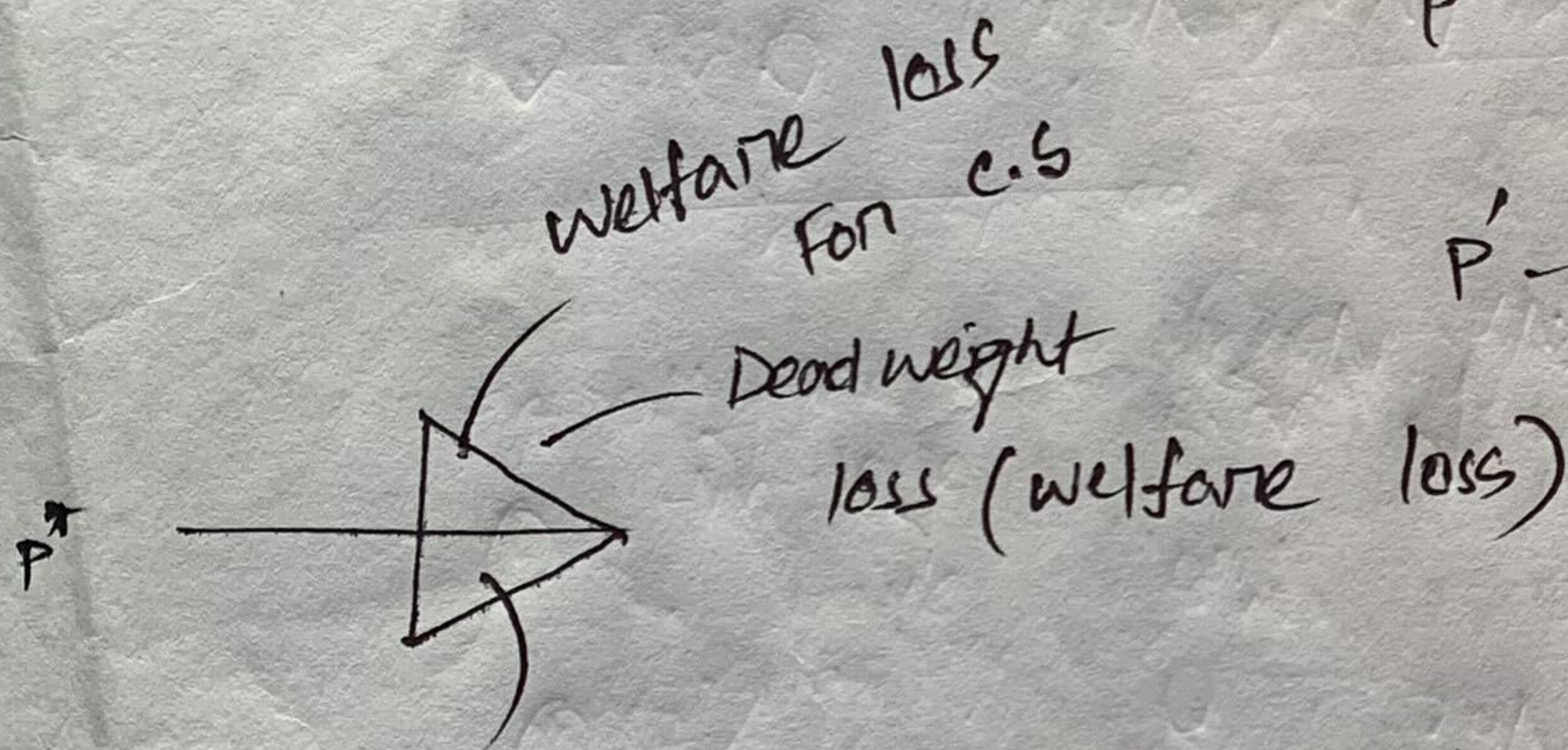


$P' \rightarrow$  New Price

as  $P' > P^*$  that's why Quantity Demand Falls. ( $Q'$ )

$P' \rightarrow$  Buyer gets for 1 unit.

$P' - P'' \rightarrow$  Tax Amount.



welfare loss for P.S

$$P = 100 - 2Q$$

$$P = 10 + Q$$

$$P = 10 + 30$$

$$= 40$$

$$P_{max} = 100$$

$$EC = 10$$

$$P = P$$

$$\Rightarrow 100 - 2Q = 10 + Q$$

$$\Rightarrow 90/3 = Q \Rightarrow Q = 30$$

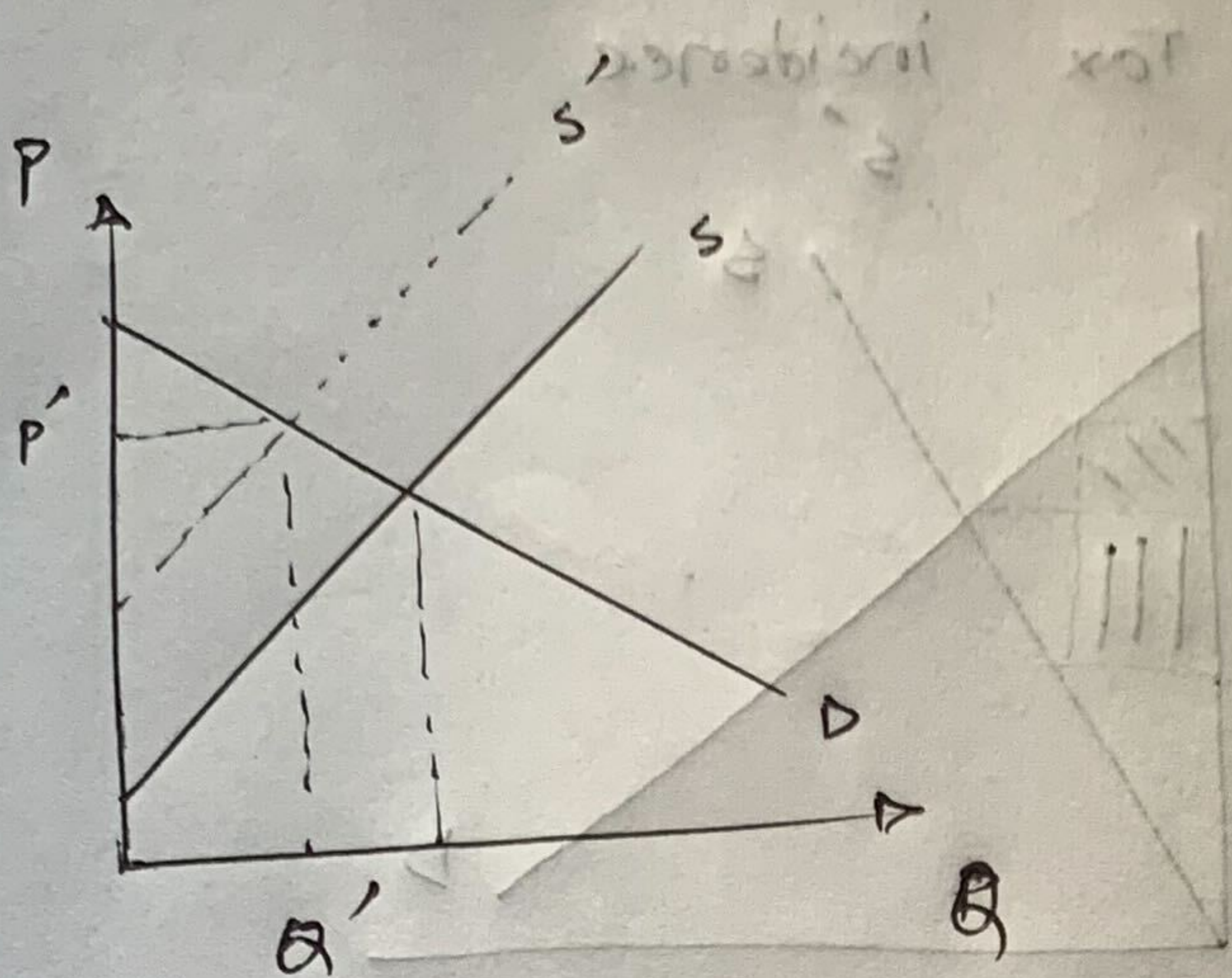
$$P.S = 450$$

$$C.S = 900$$

$$T.S = 1350$$



Now Tax applied  $\rightarrow$  5 tk/unit



New supply

$$S': P = 10 + Q + 5$$

$$= 15 + Q$$

$$100 - 2Q = 15 + Q$$

$$\Rightarrow Q = \frac{85}{3} = 28.33$$

$$P' = 15 + Q$$

$$= 43.33$$

$$P'' = 10 + Q'$$

$$= 10 + 28.33$$

$$= 38.33$$

$$P.S' = 401.29$$

$$DWL = 0.5 \times 5 \times (Q^* - Q')$$

$$= 12.5$$

$$\text{Tax Rev} = (P' - P'') \times Q'$$

$$= 141.65$$

$$TS' = CS' + PS' + \text{Tax Rev}$$

$$= 1345.68$$

① quantity (Before and After)  
② surplus

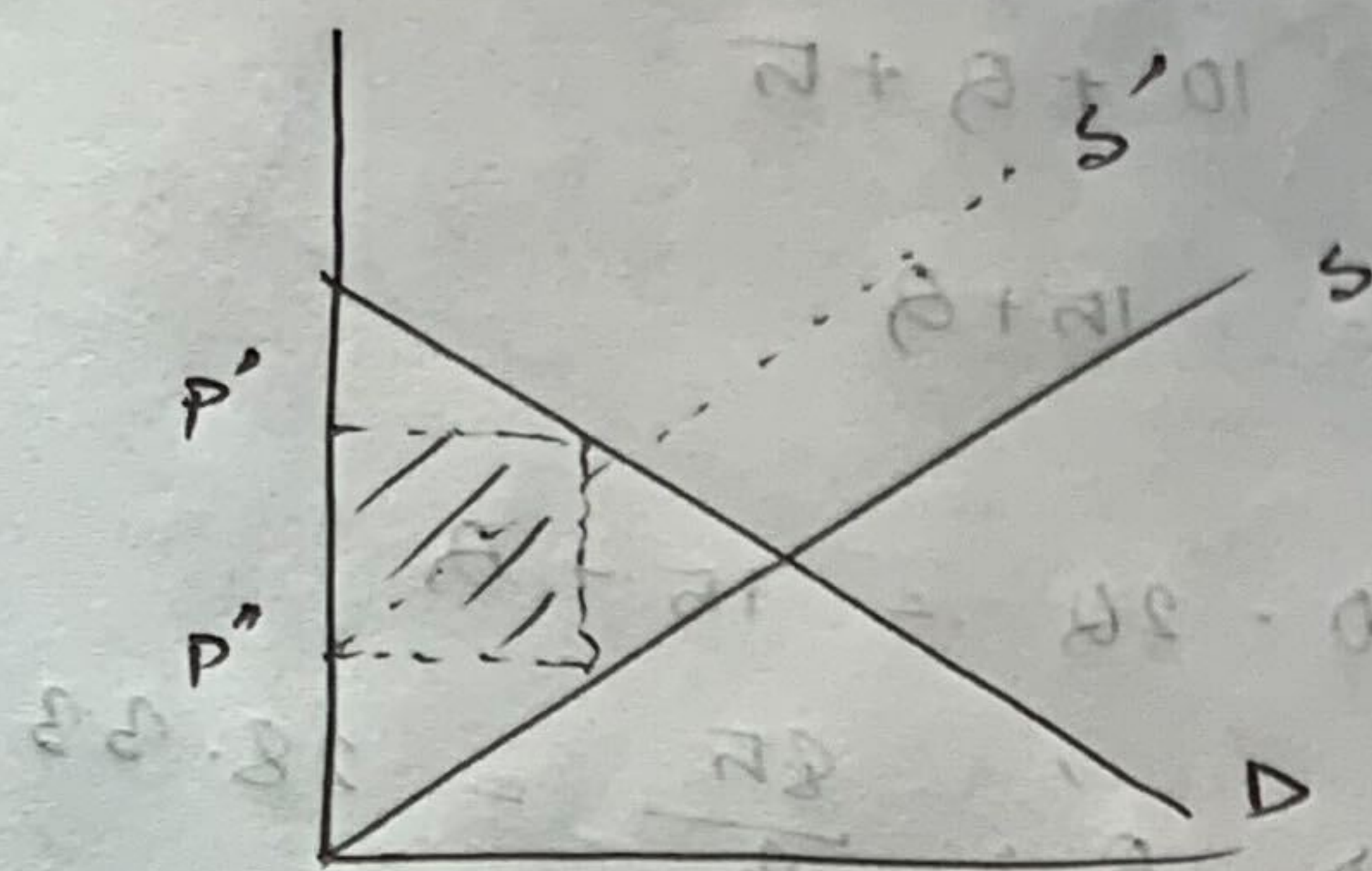


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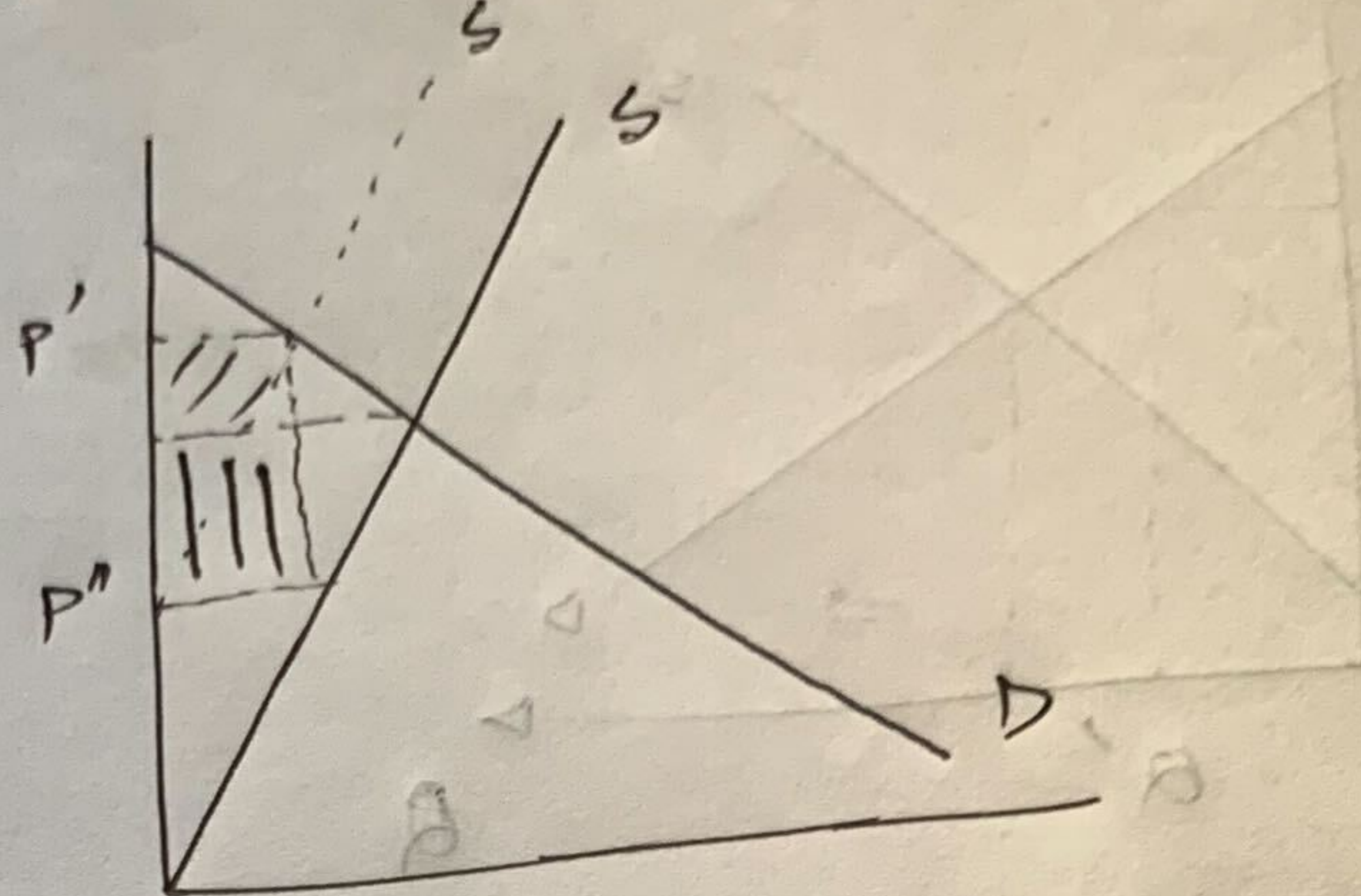
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## # Share Burden:



⇒ Tax incidence

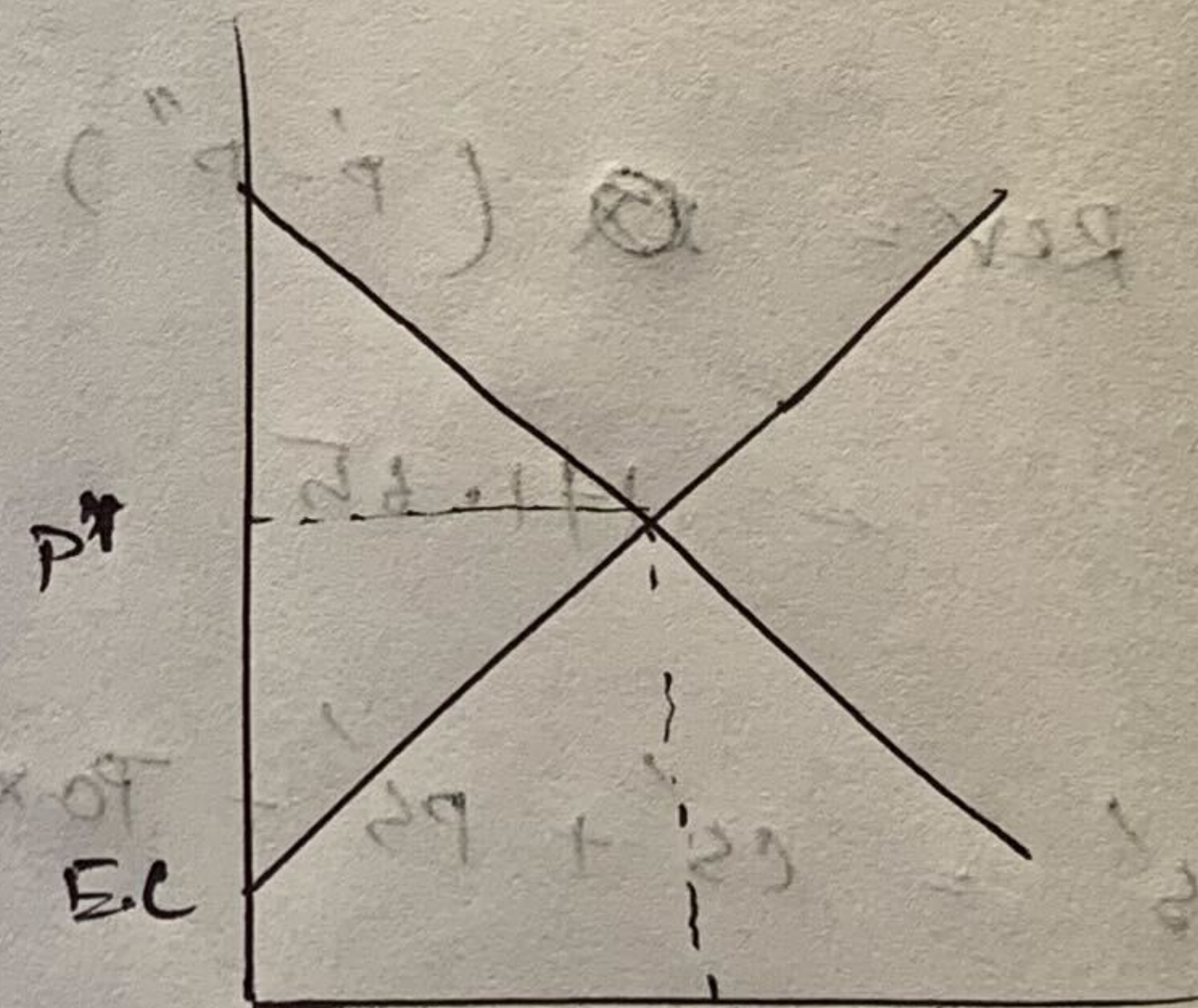


S, D relatively Elastic.  $\therefore$  Tax burden will be shared equally.

D is relatively more elastic than S. That's why burden of Tax is more on the sellers.

## # Price controls:

- price ceiling (Max price)
- price floor (Min price)



- ⊕ shortage Quantity (Before mid Math)
- ⊕ Surplus "

→ Max price must be set less than  $P^*$

→ OR Min price must be set upper than  $P^*$

⇒ Then the market will be forced to exchange.