Lecture 3 - Elasticity

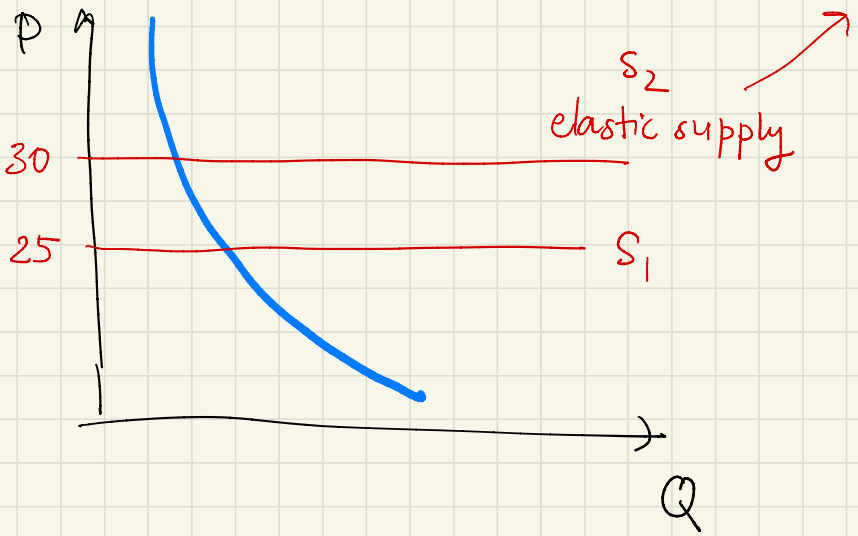
9/15/2020

1. Imagine you are the author of a book who gets a royalty payment of 10% of the total receipts (receipts = the number sold X the price) from the sale of the book. You get a phone call from your publisher telling you they are increasing the price of your book from $25 to $30. Should you be happy about this? Why or why not? What assumptions are you making about the change in quantity demanded in your answer? What elements of a good, in this case the book, will determine whether your assumption is valid?

Should you be happy?

Happy if demand is inelastic

Possibly unhappy if demand is elastic



2. How is a coupon different from just lowering the price of the good? What advantage is there to the seller from giving out coupons rather than lowering the price? What is probably true of those who look for and use the coupon? What is probably true of those who buy the good without a coupon?

Coupon differences

- temporary Δ to price
- pulls in people who would not have purchased

3. Why is it unusual to see coupons for products like a specific Harry Potter book?

very specific product ⇒ more inelastic

no substitute for specific book

unit elastic $\longrightarrow$ $\dfrac{\%\,\Delta Q}{\%\,\Delta I} = 1$

$\uparrow$

P

$\dfrac{\%\,\Delta Q}{\%\,\Delta P} = 1$ unit elastic

4. Give an example of a normal good, an inferior good, and a luxury good. Explain your reasoning.

normal good : takeout food (Laura)

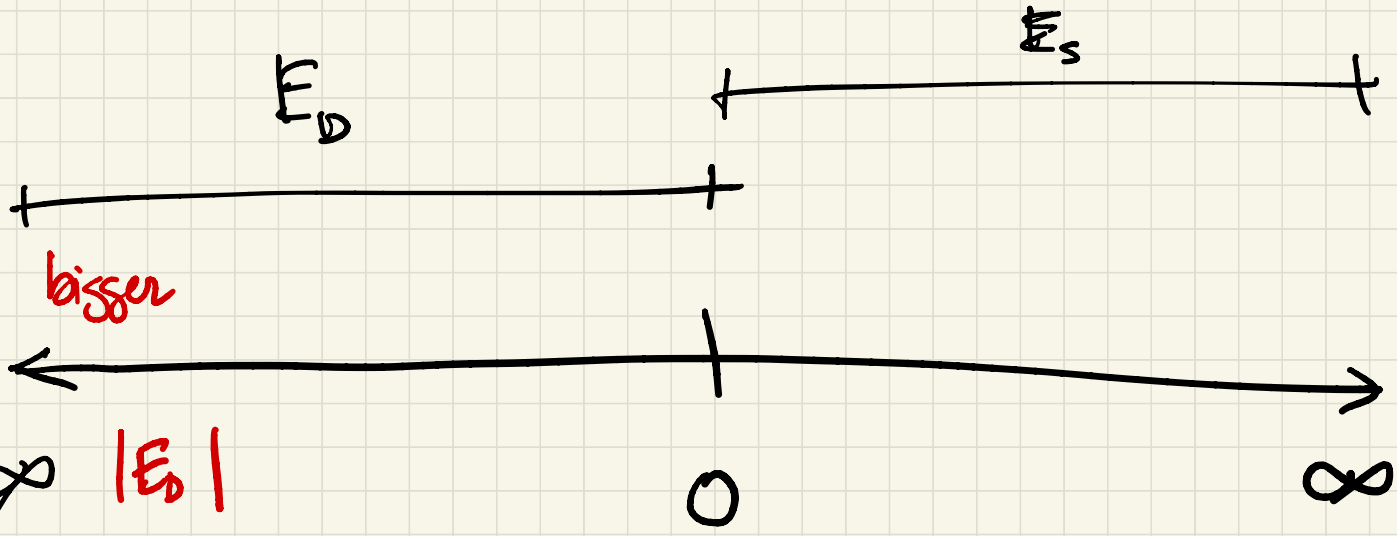
$\frac{\%\Delta Q}{\%\Delta I} > 0$ soul cycle (Sarah)

inferior good : top ramen, public transit (Trey)

$\frac{\%\Delta Q}{\%\Delta I} < 0$: boxed wine (Alexis L.)

luxury good : soul cycle (Sardh)

$\frac{\%\Delta Q}{\%\Delta I} > 1$: computer/gaming (Andres)



$$\frac{\%\Delta Q}{\%\Delta P} < 0$$

$$\left|\frac{\%\Delta Q}{\%\Delta P}\right| > 0$$

$$|-5| = 5$$

5. How does the discussion in questions 2 and 3 relate to why you can purchase a ticket to fly on the very same flight on the very same plane for less if you buy it a month in advance than if you buy it three days before, and if you stay over a Saturday night?

$$E_D = \frac{\%\,\Delta Q}{\%\,\Delta P}$$

$$E_D = \frac{-}{+} < 0$$

6. Chapter 2, Question 21 (2nd edition: Chapter 2, Question 19)

f. What sign might you expect the income elasticity to have if the good in question is table salt? Why?

21. Which of the following cases will result in the largest decrease in equilibrium price? The largest change in equilibrium quantity? Verify your answers by drawing graphs.

a. Demand is highly inelastic; there is a relatively large increase in supply.

b. Demand is highly elastic; there is a relatively small increase in supply.

c. Supply is highly inelastic; there is a relatively small decrease in demand.

d. Supply is highly elastic and demand is very inelastic; there is a relatively large increase in supply.

7. What do you think is the sign of the cross-price elasticity for peanut butter and jelly?