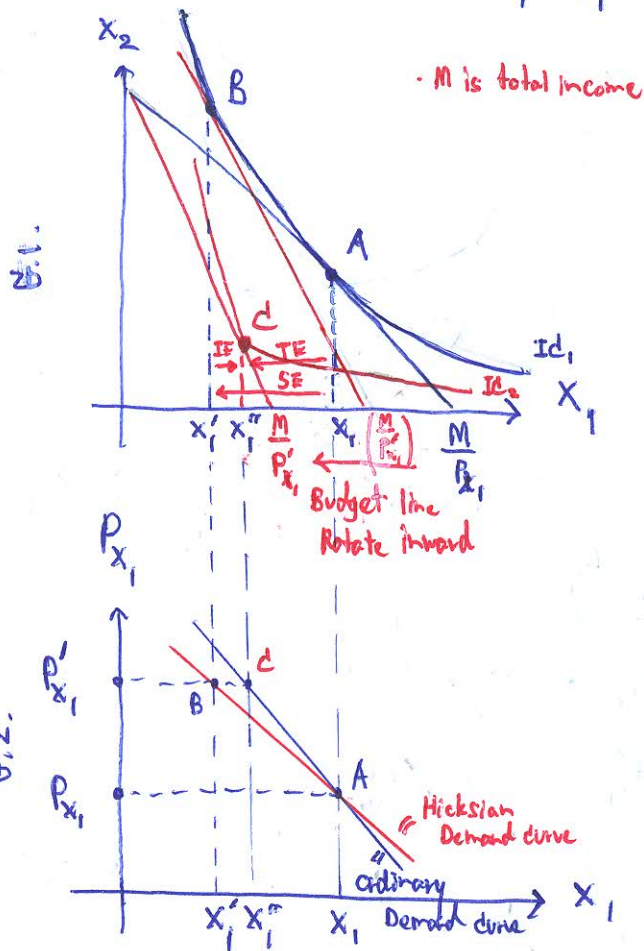


Solution Guide for HW, 2

Q<sub>1</sub>  $X_1$  is Inferior Goods and  $P_{X_1}$  is increased ( $P_{X_1} < P'_{X_1}$ )



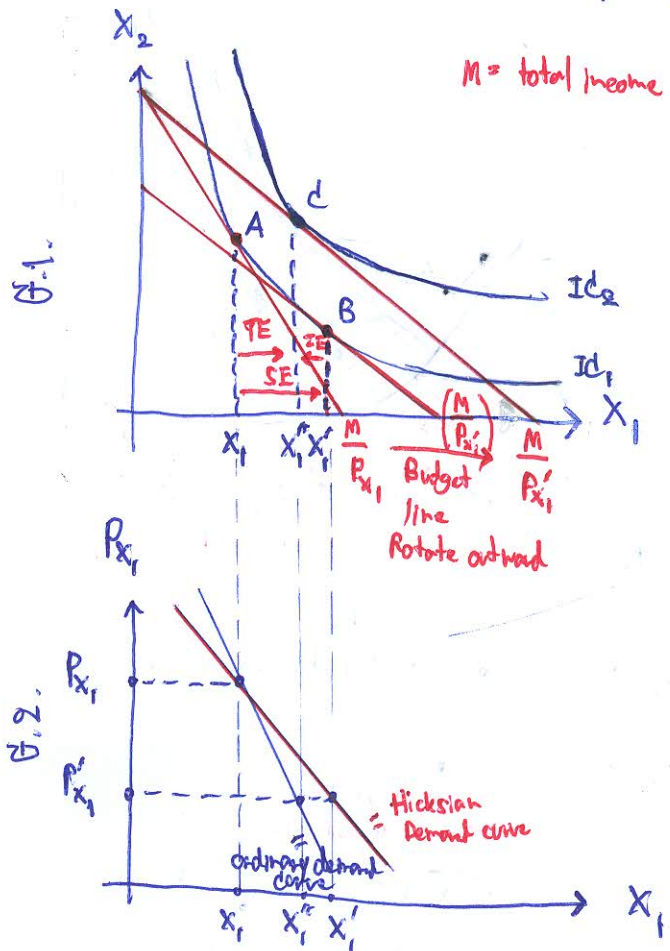
G.1 - Key message in explanation

- rotation inward of budget line ( $\frac{M}{P_{X_1}}$  to  $\frac{M}{P'_{X_1}}$ ) with new utility-maximizing basket (A to C)
- shift the new budget line tangent to the old IC to get SE and IE separately
- IE opposite to SE, and IE is smaller than SE. In this case, SE is  $x_1$  to  $x'_1$  and IE is  $x'_1$  to  $x''_1$ . The total effect is  $x_1$  to  $x''_1$ .

- G.2
- corresponding to G.1, the Hicksian demand curve will be flatter than the ordinary demand curve.
  - This is because ordinary demand curve incorporate both effects, while the Hicksian demand curve only incorporate SE

HICK - To make real income constant, the consumer must get back to the original IC when he faces with the new relative price

Q<sub>1</sub>  $X_1$  is Inferior Goods and  $P_{X_1}$  is decreased ( $P_{X_1} > P'_{X_1}$ )



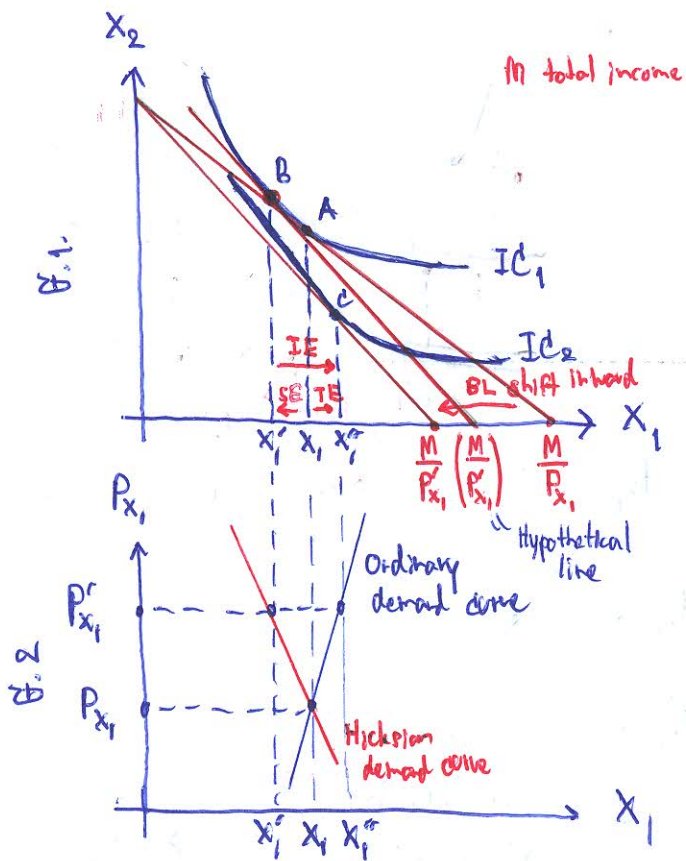
G.1 - Key message in explanation

- rotation outward of budget line ( $\frac{M}{P_{X_1}}$  to  $\frac{M}{P'_{X_1}}$ ) with new utility-maximizing basket (A to C)
- shift the new budget line tangent to the old IC to get SE and IE separately
- IE opposite to SE, and IE smaller than SE. In this case, SE is  $x_1$  to  $x'_1$  and IE is  $x'_1$  to  $x''_1$ . The total effect is  $x_1$  to  $x''_1$ .

- G.2
- corresponding to G.1, the Hicksian demand curve will be flatter than the ordinary demand curve.
  - This is because ordinary demand curve incorporate both effects, while the Hicksian demand curve only incorporate SE

# Solution Guide for HW. 2

Q<sub>2</sub>  $X_1$  is Giffen Goods and  $P_{X_1}$  is increased ( $P_{X_1} < P'_{X_1}$ )



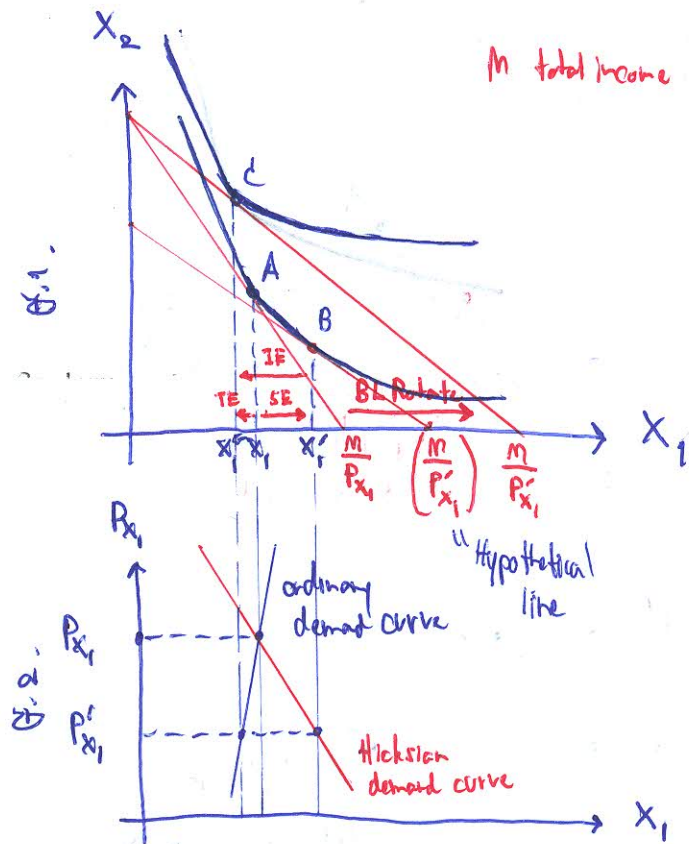
G.1 - key message in explanation

- Rotation inward of budget line ( $\frac{M}{P_{X_1}}$  to  $\frac{M}{P'_{X_1}}$ ) with new utility-maximizing basket (A to C)
- Shift the new budget line tangent the old IC to get SE and IE separately.
- IE opposite to SE, and IE is larger than SE. In this case, SE is  $X_1$  to  $X'_1$  and IE is  $X'_1$  to  $X''_1$ . The total effect is  $X_1$  to  $X''_1$

- G.2
- corresponding to G.1, the Hicksian demand curve will have negative slope, while the ordinary demand curve will have positive slope.
  - This is because ordinary demand curve incorporate both effects, while the Hicksian demand curve only incorporate SE.

HICK - To make real income constant, the consumer must get back to the original IC who he faces with the new relative price.

Q<sub>2</sub>  $X_1$  is Giffen Goods and  $P_{X_1}$  is decreased ( $P_{X_1} > P'_{X_1}$ )



G.1 - key message in explanation

- Rotation outward of budget line ( $\frac{M}{P_{X_1}}$  to  $\frac{M}{P'_{X_1}}$ ) with new utility-maximizing basket (A to C)
- Shift the new budget line tangent the old IC to get SE and IE separately.
- IE opposite to SE, and IE is larger than SE. In this case, SE is  $X_1$  to  $X'_1$  and IE is  $X'_1$  to  $X''_1$ . The total effect is  $X_1$  to  $X''_1$

- G.2
- corresponding to G.1, the Hicksian demand curve will have negative slope, while the ordinary demand curve will have positive slope.
  - This is because ordinary demand curve incorporate both effects, while the Hicksian demand curve only incorporate SE.