3 Marzo 2018   P1 Abierta

$$A \longrightarrow U_A = h_A C_A^2 \qquad \bar{L}_A = 1$$

$$B \longrightarrow U_B = h_B^2 C_B \qquad \bar{L}_B = 1$$

$$f_e(L) = 2 L^{1/2} \qquad \text{Cada Consumidor Dueño}$$

$$\tfrac{1}{2} \text{ Empresa}$$

a) DEF Una Asignacion Factible T.Q.

No Exista otra Asignacion Factible

∅' La Pareto Domine.

∅ Todo Individuo este Igual o

mejor

A TODO INDIVIDUO ESTE IGUAL O
MEJOR

Y AL MENOS UN INDIVIDUO ESTE
ESTRICTAMENTE MEJOR.

a) ② $\underset{h_B, C_B, h_A, C_A, L}{MAX}$ $h_B^2 C_B$ S.t. ① $\overset{Q^i}{}$ NADIE EMPEORE:
$$h_A C_A^2 \geq \overline{U_A}$$

② FACTIBLE.

$$h_B + h_A + L \leq Z = L_A + L_B$$

$$\underbrace{C_A + C_B}_{DEMANDA} \leq \underbrace{Z L^{1/2}}_{OFERTA}$$

b) UN EQ es $\left(\overset{*}{h_A}, \overset{*}{C_A}, \overset{*}{h_B}, \overset{*}{C_B}, \overset{*}{L}\right); \left(\overset{*}{P_C}, \overset{*}{W}\right)$ T.G.

① FIRMAS MAXIMIZAN:

$$L^* = ARG\ MAX\ \Pi = Z L^{1/2} \cdot P_C^* - L W^*$$

$$L^{\alpha} = \text{ARG MAX}_{L} \; \Pi = 2 L^{1/2} \cdot \underbrace{P_c}_{\text{CANTIDAD}} - LW$$

(2) Consumidores maximizan:

(A) $(h_A^{\alpha}, C_A^{\alpha}) = \text{ARG MAX}_{h_A, C_A} \; h_A C_A^2 \quad$ s.e. $\; P_c^{\alpha\alpha} C_A + \overset{\alpha}{W} h_A \leq \overset{\alpha}{W} \cdot L + \frac{1}{2} \Pi^{\alpha}$

(B) $(h_B^{\alpha}, C_B^{\alpha}) = \text{ARG MAX}_{h_B, C_B} \; h_B^2 C_B \quad$ s.e. $\; P_c^{\alpha} C_B + \overset{\alpha}{W} h_B \leq \overset{\alpha}{W} \cdot 1 + \frac{1}{2} \Pi^{\alpha}$

(3) Mercados yacen:

$$h_A^{\alpha} + h_B^{\alpha} + L^{\alpha} = \bar{L}_A + \bar{L}_B = 2$$

$$C_A^{\alpha} + C_B^{\alpha} = 2(L^{\alpha})^{1/2}$$

$$\underline{\hspace{3cm}} \; // \; \underline{\hspace{4cm}} \; // \; \underline{\hspace{4cm}} \; // \; \underline{\hspace{2cm}}$$

(C) $\Pi = 2 L^{1/2} P_c - WL$

CPO

$$L^{-1/2} P_C - W = 0$$

$$L^{-1/2} = \frac{W}{P_C}$$

$$L^{1/2} = \frac{P_C}{W}$$

$$L = \left(\frac{P_C}{W}\right)^2$$

$$\Pi = 2\left(\left(\frac{P_C}{W}\right)^2\right)^{1/2} P_C - W\left(\frac{P_C}{W}\right)^2$$

$$\Pi = 2\left(\frac{P_C^2}{W}\right) -$$