

Exercício simulação de fusão

PRÉ-FUSÃO

$$\max_{P_1} (168 - 2P_1 + P_2)P_1 - c_1(168 - 2P_1 + P_2)$$

$$\max_{P_1} (P_1 - c_1)(168 - 2P_1 + P_2)$$

$$\frac{\partial \pi_1}{\partial P_1} = 168 - 4P_1 + P_2 + 2c_1 = 0$$

$$P_1 = \frac{168 + 2c_1 + P_2}{4}$$

$$P_1 = \frac{168 + 2C_1 + P_2}{4} = R_1(P_2)$$

$$P_1 = 80, \quad P_2 = P_2$$

$$320 = 168 + 72 + 2C_1$$

$$320 - 240 = 2C_1$$

$$C_1^{\text{Per}} = 40$$

$$\max_{P_2} (P_2 - c_2) (168 + P_1 - 2P_2)$$

$$\frac{\partial \pi_2}{\partial P_2} = 168 + P_1 - 4P_2 + 2c_2 = 0$$

$$P_2 = \frac{168 + 2c_2 + P_1}{4} = R_2(P_1)$$

$$4 \times 72 = 168 + 2c_2 + 80$$

$$288 - 168 - 80 = 2c_2$$

$$\overset{R_2}{c_2} = 20$$

POŠ · FUSÃO

$$\max_{P_1, P_2} (P_1 - c_1)(168 - 2P_1 + P_2) + (P_2 - c_2)(168 - 2P_2 + P_1)$$

$$\frac{\partial \pi}{\partial P_1} = 168 - 4P_1 + P_2 + 2c_1 + P_2 - c_2 = 0 \quad (1)$$

$$\frac{\partial \pi}{\partial P_2} = P_1 - c_1 + 168 - 4P_2 + P_1 + 2c_2 = 0 \quad (2)$$

$$\begin{aligned} \text{OP}_2 \\ (1) \quad 168 - 4P_1 + 2P_2 &= c_2 - 2c_1 \\ 168 - 4P_1 + 2P_2 &= -60 \Leftrightarrow \frac{228 + 2P_2}{4} = P_1 \end{aligned}$$

$$P_1 - C_1 + 168 - 4P_2 + P_1 + 2C_2 = 0$$

$$2P_1 - 4P_2 + 168 = C_1 - 2C_2$$

$$2P_1 - 4P_2 + 168 = 40 - 40$$

$$2P_1 - 4P_2 = -168$$

$$P_1 = \frac{4P_2 - 168}{2} = 2P_2 - 84$$

$$\frac{228}{4} + \frac{2P_2}{4} = P_1$$

$$57 + \frac{P_2}{2} = P_1$$

$$57 + \frac{P_2}{2} = 2P_2 - 84$$

$$57 + 84 = \frac{4P_2 - P_2}{2}$$

$$\rightarrow 141 = \frac{3P_2}{2}$$

$$141 \times \frac{2}{3} = P_2^{\text{POS}}$$

$$\frac{282}{3} = \boxed{P_2^{\text{POS}} = 94}$$

$$P_1^{\text{POS}} = 2 \times 94 - 84 = 104 //$$

$$(1) \quad 168 - 4P_1 + 2P_2 = C_2 - 2C_1$$

$$(2) \quad 2P_1 - 4P_2 + 168 = C_1 - 2C_2$$

$$\Rightarrow \begin{cases} 168 - 4P_1 + 2P_2 = 10 - 2 \times 20 \\ 2P_1 - 4P_2 + 168 = 20 - 20 \end{cases}$$

$$-4P_1 + 2P_2 = -30 - 168$$

$$P_2 = \frac{-198 + 4P_1}{2}$$

$$2P_1 - 4P_2 + 168 = 0$$

$$P_1 = \frac{4P_2 - 168}{2} = 2P_2 - 84$$

$$P_1 = 2 \times \frac{4P_1 - 198}{2} - 84$$

$$-3P_1 = -282$$

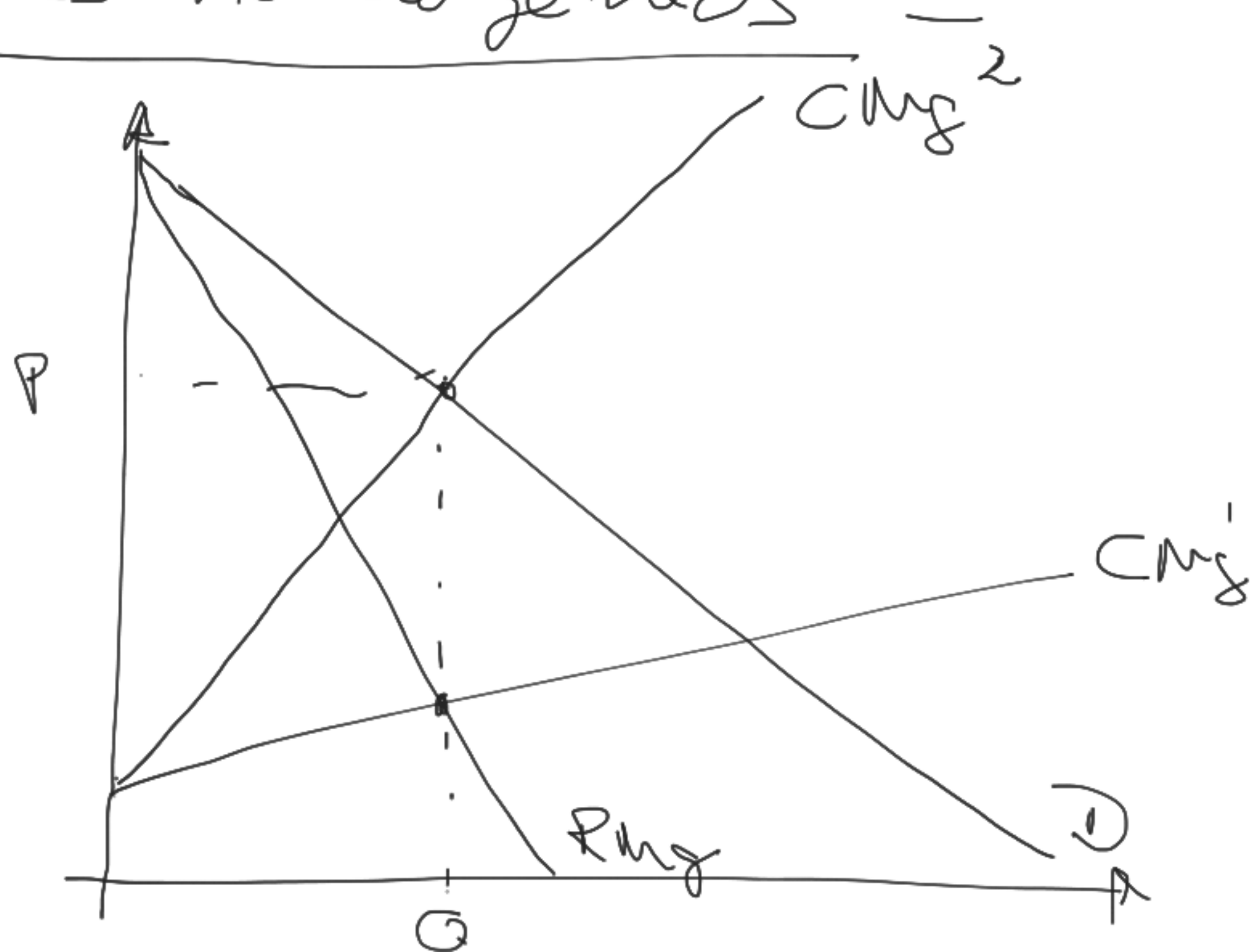
$$P_1^{\text{pos}} = 94$$

$$P_2^{\text{pos}} = \frac{-198 + 4 \times 94}{2}$$

$$P_2^{\text{pos}} = 89$$

Estimação de Poder de Mercado -

Bens Homogêneos



Questão
fundamental
do
autitruste

"The Oligopoly Selection Concept
is Identified" Timothy Busna Hanu (1982)

NOTE

Qual o poder de mercado dessa
indústria?

Modelo

Demanda: $Q = \alpha_0 + \alpha_1 P + \alpha_2 Y + \varepsilon$ (1)

Custo mg: $CMg = \beta_0 + \beta_1 Q + \beta_2 W + \eta$ (2)

(if) however, ~~cor~~ perfecta:

$$P = CMg = \beta_0 + \beta_1 Q + \beta_2 W + \eta$$

(::i) Se houver poder de mercado

$$R_{mg} = CMg$$

$$R = P(Q) \cdot Q$$

$$R_{mg} = \frac{dR}{dQ} = \frac{dP}{dQ} \cdot Q + P = CMg$$

$$P = \frac{Q - \alpha_0 - \alpha_2 Y - \epsilon}{\alpha_1}$$

→ Demanda
inversa

$$RM_g = \frac{1}{\alpha_1} Q + P$$

$$RM_g = CM_g$$

$$P = - \frac{Q}{\alpha_1} + \beta_0 + \beta_1 Q + \beta_2 W + \eta$$



$= 0 \Rightarrow$ conc

$\neq 0 \Rightarrow$ poder

per feita

de mercado

$$P = \theta \left(-\frac{Q}{\alpha_1} \right) + \beta_0 + \beta_1 Q + \beta_2 W + \eta$$

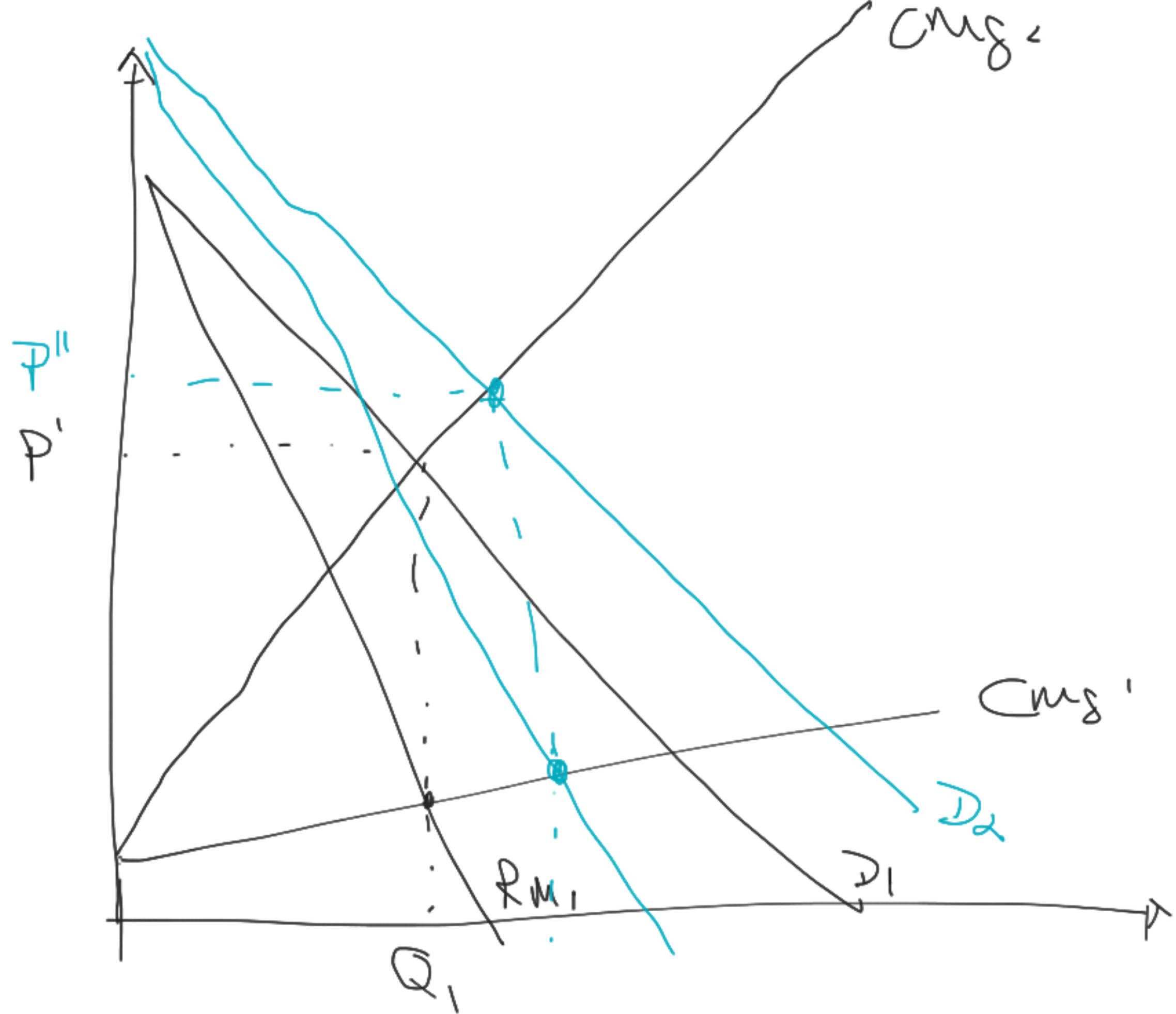
$\theta = 0 \Rightarrow$ conc perfeita

$\theta = 1 \Rightarrow$ monopolístico/cartel perfeito

$0 < \theta < 1 \Rightarrow$ poder de mercado intermediação

$$P = \left(-\frac{\theta}{\alpha_1} + \beta_1 \right) Q + \beta_0 + \beta_2 W + \eta$$

→ Não consigo estimar.



4 y