

Figure 1: Uniform monopoly pricing

Marginal revenue equals marginal cost for  $q^m = \frac{(a-bc)}{2}$ , and the corresponding price is  $p^m = \frac{\left(a + bc\right)}{2b}.$ 

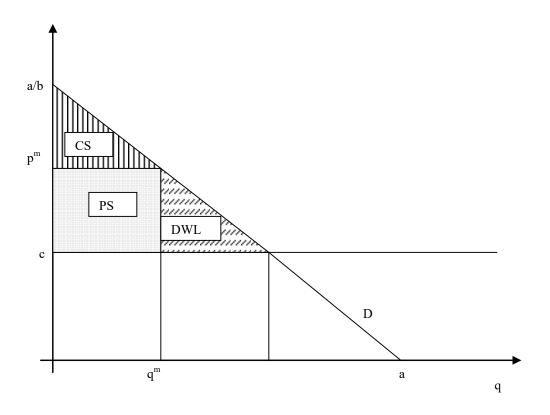


Figure 2: Surpluses and Deadweight Loss

CS: consumer surplus (triangular area with vertical stripes between the inverse demand curve, D, and price p<sup>m</sup>; PS: producer surplus (rectangular area in dots above marginal cost); DWL: deadweight loss (triangular area with horizontal ticking)

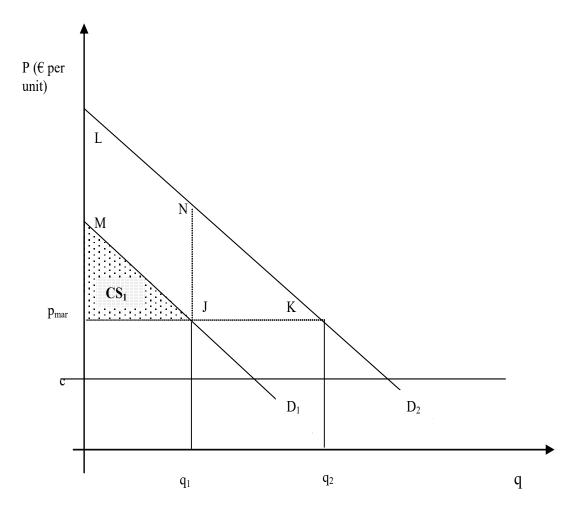


Figure 3 : Sub-optimality of two-part pricing  $CS_1$ : Consumer surplus for Type 1 (triangular area in dots between the inverse demand curve  $D_1$  and price P.

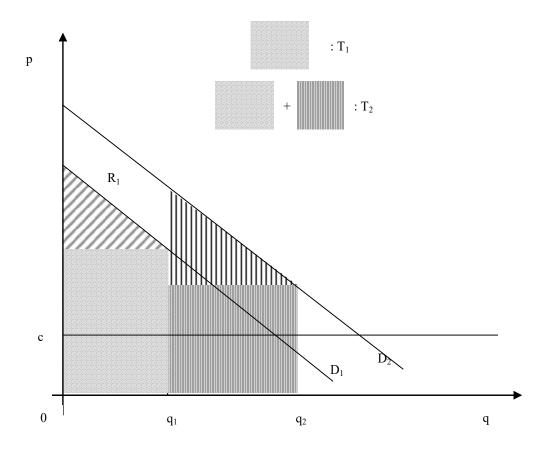


Figure 4: Tariffs and informational rents

The tariff  $T_1$ , paid by Type 1 buyers, is their gross surplus, the area under demand curve  $D_1$ . The informational rent is the area between the two demand curves, from quantity 0 to  $q_1$ . The tariff  $T_2$ , paid by Type 2 buyers, is their gross surplus minus the informational rent.

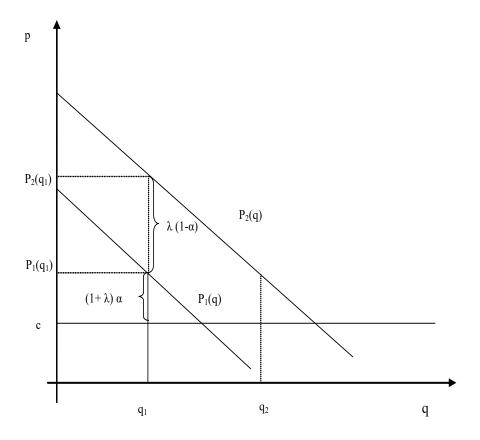


Figure 5: Optimal nonlinear pricing The vertical distance between c and  $P_1(q)$  is proportional to  $(1+\lambda)a$ , and the vertical distance between  $P_1(q_1)$  and  $P_2(q_2)$  is proportional to  $\lambda(1-a)$ .

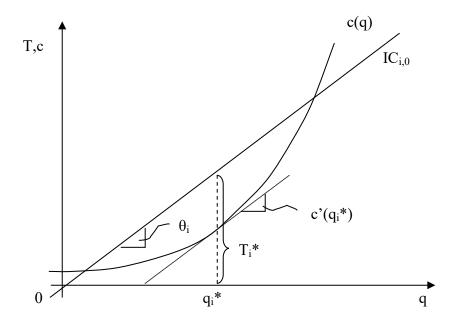


Figure 6: Price and quality with perfect discrimination

 $IC_{i,0}$  is an indifference curve with slope  $\theta_i$  going through the origin, and corresponds to zero surplus; c(q) is marginal cost where q stands for quality.

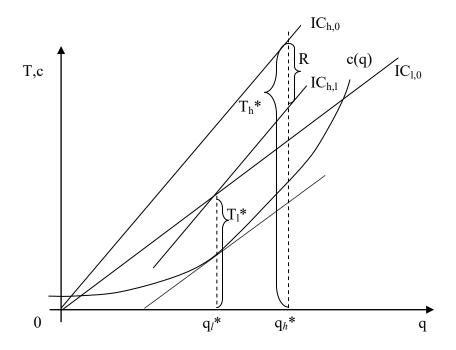


Figure 7: Prices and qualities under individual arbitrage The informational rent R corresponds to the vertical distance between the indifference curve  $IC_{2,0}$  and the indifference curve  $IC_{2,1}$ .