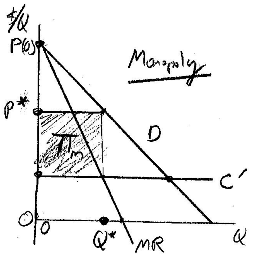

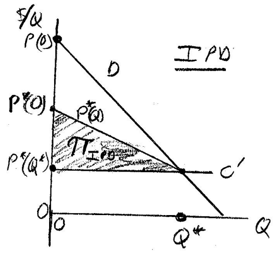

Posted Prices vs. Haggling: The Economics of Isoperfect Price Discrimination , 2 April 2009
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A monopolist's marginal cost at output z is $c(z)$.

Demand arises from a unit mass of consumers, where a consumer's willingness to pay v for a single unit is drawn from $F(\cdot)$ with positive density $f(\cdot)$ over a support bounded above by $\overline{v} > c(0)$.

The price p yields demand quantity $z(p) = 1 - F(p)$.

The monopolist may sell either by posting a single price or by bargaining with individual consumers. Bargaining splits the surplus, with fraction λ going to the monopolist and $(1 - \lambda)$ to the consumer.

All functions and parameters are common knowledge. The monopolist knows each consumer's reservation price, can identify each consumer, and can prevent resale.

In the basic model, transaction costs are zero, bargaining power is equal, marginal cost is constant, demand is linear, and consumers are fully informed of their tastes: $t_p = t_b = 0$, $\lambda = .5$, $c(z) = c$, and $p''(z) = 0$.

Definition: Under **"monopoly pricing"** : the monopolist posts a single price, which buyers may only accept or reject. Under **"Pigouvian perfect price discrimination"** : the monopolist bargains with each buyer separately, and captures the entire surplus. Under **"isoperfect price discrimination" or "IPD"** : the monopolist bargains with each buyer separately, and captures half of the surplus from each buyer. Under **"generalized isoperfect price discrimination"** : the monopolist bargains with each buyer separately, and captures fraction λ of the surplus from each buyer.

Proposition 1: *In the basic model the monopolist is indifferent between monopoly pricing and isoperfect price discrimination, earnings profits in each case of half of the total surplus.*

Proposition 2:*If marginal cost is increasing ($c'(z) > 0$), the monopolist prefers balanced isoperfect price discrimination to monopoly pricing. If marginal cost is decreasing ($c'(z) < 0$), he prefers monopoly pricing.*

Corollary. *Isoperfect price discrimination is more profitable than monopoly pricing if demand is convex, and less profitable if demand is concave.*

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