

## Note on Price Discrimination

The traditional classification of the forms of price discrimination is due to Pigou (1920).

### **First degree (or perfect) price discrimination:**

The seller charges a different price for each unit of the good in such a way that the price charged for each unit is equal to the maximum willingness to pay for that unit.

### **Second degree price discrimination (or nonlinear pricing):**

Prices differ depending on the number of units of the good bought, but not across consumers. That is, each consumer faces the same price schedule, but the schedule involves different prices for different amounts of the good purchased. Quantity discount and two part tariffs (in mobile phone, taxi, printers etc) are the obvious examples.

### **Third degree price discrimination:**

Different purchasers are charged different prices, but each purchaser pays a constant amount for each unit of the good bought. This is perhaps the most common form of price discrimination; examples are student discounts, or charging different prices on different regions, countries, days of the week, and so on.

#### **Limitation**

##### **Arbitrage (re-sell)**

=> Arbitrage must be impossible or costly so that price discrimination is possible.

##### **Hidden information**

=> The firm usually does not know the willingness to pay of each consumer. The second degree tries to extract the private information by asking consumers to self-select menus, while the third degree makes use of rough group information, instead of personalized information.

##### **Limited commitment power**

=> The firm may need to commit price schedule, especially in dynamic pricing setting.