## Price strategies

## Cost plus pricing

The firm calculates its price by adding to its average variable costs (AVC) a percentage mark-up that includes a contribution to the fixed costs and a profit margin.
Advantages:
It's simple and it requires a limited amount of information;
2. It may lead to a greater price stability;
3. The firm can claim to allow for a reasonable profit margin (and not to the maximum one).
The challenge of this methodology is to decide the mark-up, and in particular the profit percentage.
In practice:

| Pricing method | All | Manufacturing | Construction | Retail | Other services |
| :--- | ---: | :---: | :---: | :---: | :---: |
| Reference to market conditions | 39 | 41 | 51 | 18 | 48 |
| Competitor prices | 25 | 26 | 11 | 30 | 23 |
| Direct cost + variable mark-up | 20 | 20 | 22 | 21 | 17 |
| Direct cost + fixed mark-up | 17 | 16 | 19 | 24 | 14 |
| Customer set | 5 | 6 | 3 | 0 | 6 |
| Regulatory agency | 2 | 1 | 0 | 0 | 3 |

Source: Adapted from Hall, S., Walsh, M. and Yates, A. (1996) How do UK companies set prices?, Bank of England Quarterly Bulletin, May, 36, 180-92, Table A, 13.

## Price discrimination

In most of the theoretical models it is assumed that firms set a uniform price for all consumers.
In practice, a firm with some degree of market power might consider discriminating prices, i.e. to adopt a policy of selling different units of output at different prices.

## Conditions:

1. Firm must enjoy some degree of market power (i.e. to determine the price: no perfect competition);
2. It must be possible to divide the market into sub-markets with different demand conditions or different price elasticity;
3. The sub-markets must be separated, so that secondary trade or resale between consumers of different submarkets is not possible (ex. simultaneity between production and consumption, excessive transaction costs, high transportation costs)

## Price discrimination different types

## 1. FIRST-DEGREE PRICE DISCRIMINATION

The monopolist is able to set for each customer the highest price he is willing to pay for the good/service


In this way the monopolist can appropriate the deadweight loss and all the consumer surplus that exists in the non-discriminating case.

## Price discrimination different types

1. FIRST-DEGREE PRICE DISCRIMINATION

## IS THIS BAD?

NO

- No deadweight loss
- For allocative efficiency consumers=producers
- All consumers are satisfied

Very difficult to apply in practice: the monopolist should know the demand function of all of his customers

## Price discrimination different types

## 2. SECOND-DEGREE PRICE DISCRIMINATION

The price per unit depends on the purchased quantity.

PROBLEM: how to "drive" the consumer in the right category? Self selection: every consumer chooses his optimal pricequantity combination from a menu of options designed by the producer.

```
SKU ecwid-t-shirt1
In stock
$24.99
    3-4 items $20.99
    12+ items $11.99
    Save up to 52%
Qty (20 available)
1

\section*{Price discrimination different types}
3. THIRD-DEGREE PRICE DISCRIMINATION

The producer offers different prices to different consumers. Consumers are here divided into groups according to quite easily identifiable characteristics. Within each group the price per unit charged is the same.

Consultando la sezione Promozioni, potrai scoprire come risparmiare sul prezzo del biglietto!
\begin{tabular}{llll}
\hline & BIGLIETTI & \\
\hline & & Film 2D & Film 3D \\
\hline \begin{tabular}{l} 
SABATO, DOMENICA, FESTIVI E \\
PREFESTIVI
\end{tabular} & tutto il giorno & \(€ 8,50\) & \(€ 11,00\) \\
\hline DA MARTEDÌ A VENERDÌ & prima delle ore 19,00 & \(€ 6,50\) & \(€ 9,30\) \\
\hline DA MARTEDÌ A VENERDÌ & dopo le ore 19.00 & \(€ 8,50\) & \(€ 11,00\) \\
\hline LUNEDÌ & non festivo e prefestivo & \(€ 6,50\) & \(€ 9,30\) \\
\hline BAMBINI FINO A 8 ANNI & tutti i giorni & \(€ 6,50\) & \(€ 9,30\) \\
\hline OVER 65 & tutti i giorni & \(€ 6,50\) & \(€ 9,30\) \\
\hline MATINÉE & proiezione domenica mattina & \(€ 4,70\) & \(€ 9,30\) \\
\hline PROMO DONNA & ogni martedi, non festivo, prefestivo e & \(€ 5,00\) & \(€ 7,00\) \\
\hline
\end{tabular}

\section*{Price discrimination: an example}

Es. air transport:
- Potential passengers: 4.000 (2000 students, 2000 businessmen);
- Students only fly if the cost is below \(150 €\);
- Businessmen only fly if the cost is below \(550 €\);
- Marginal costs are assumed to be fixed: \(125 €\).
> Without price discrimination there are two options:
1. Ticket price: 550€ \(\rightarrow 2000\) sold.

Total revenues are \(550 \times 2000=1,1 \mathrm{mln} €\), total costs \(125 \times 2000=250.000 €\), profits \(=850.000 €\).
2. Ticket price: \(150 € \rightarrow 4000\) sold.

Total revenues are \(150 \times 4000=600.000 €\), costs amount to \(125 \times 4000=500.000 €\) and profits \(=100.000 €\).
\(>\) With price discrimination, the 2000 students pay \(150 €\) and the 2000 businessmen pay \(550 €\). Total profits are: \((550 \times 2000)+(150 \times 2000)-\) \((125 \times 4000)=900.000 €\)


Students' elasticity of demand is higher than businessmen's.


\section*{Price discrimination: different mechanisms}
1. Intertemporal price discrimination

The market is segmented according to the purchase moment (buy earlier, pay more): no-reselling possibility is strategic.


\section*{Price discrimination: different mechanisms}
2. Brand labels

Different prices for the same goods with different brands.


Is it always price discrimination?

\section*{Price discrimination: different mechanisms}

\section*{3. Loyalty discounts}

They are an example of second degree price discrimination


\section*{Price discrimination: different mechanisms}

\section*{4. Price discounts coupons}

In theory the discount is for all consumers, but in reality only those willing to collect, cut, ... send .. will enjoy the discount.
It favours those consumers that have more time or lower opportunity costs.
\begin{tabular}{|c|c|}
\hline  &  \\
\hline
\end{tabular}


\footnotetext{
15 \% Discount
Valid for any TAXI TRIP over 25 miles one way
I Present to driver at time of service for discounted fare off the metered rate. Not vaid for Flat Rate Trips.

For Taxi Reservations call: Toll free 1-877-628-0005 Local Number: 281-857-2079

}

\section*{Price discrimination: different mechanisms}
5) Stock clearance (Dutch auctions)

The price of merchandise is successively reduced until all sale items have been purchased. It is price discrimination if it results in different customers paying different prices for the same good.


\section*{Price discrimination: different mechanisms}

\section*{6) Metering}

Consumers are charged a relatively low price for a primary product and a relatively high price for a secondary product tied to the primary one. One can buy only the primary product (low margin for the producer) or the two combined (with high margin on the secondary product).


\section*{Price discrimination: different mechanisms}
7) Free on board pricing

Same price for products sold in different areas (transport costs are absorbed by the producer/distributor)

Free Shipping
FREE SHIPPING



\section*{Price discrimination: different mechanisms}

\section*{8. Peak-load Pricing}

In some markets the demand varies according to the time of the day, of months, of seasons, etc. .

Firms can use the price discrimination to try to level peaks and falls.


\section*{Summary}
- Price discrimination

Typologies
- First, second and third degree
- Mechanisms
- Intertemporal
- Brand labels
- Loyalty discounts
- Price discount coupons
- Stock clearance
- Metering
- Free on board pricing
- Peak-load pricing

\section*{Reading list}
- Chapter 13 (exl. 13.4, 13.5, 13.6) Lipczynski et al., 2013```

