

BS2243 – Lecture 8

Strategic pricing decisions

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(Dr. Sumon Bhaumik)

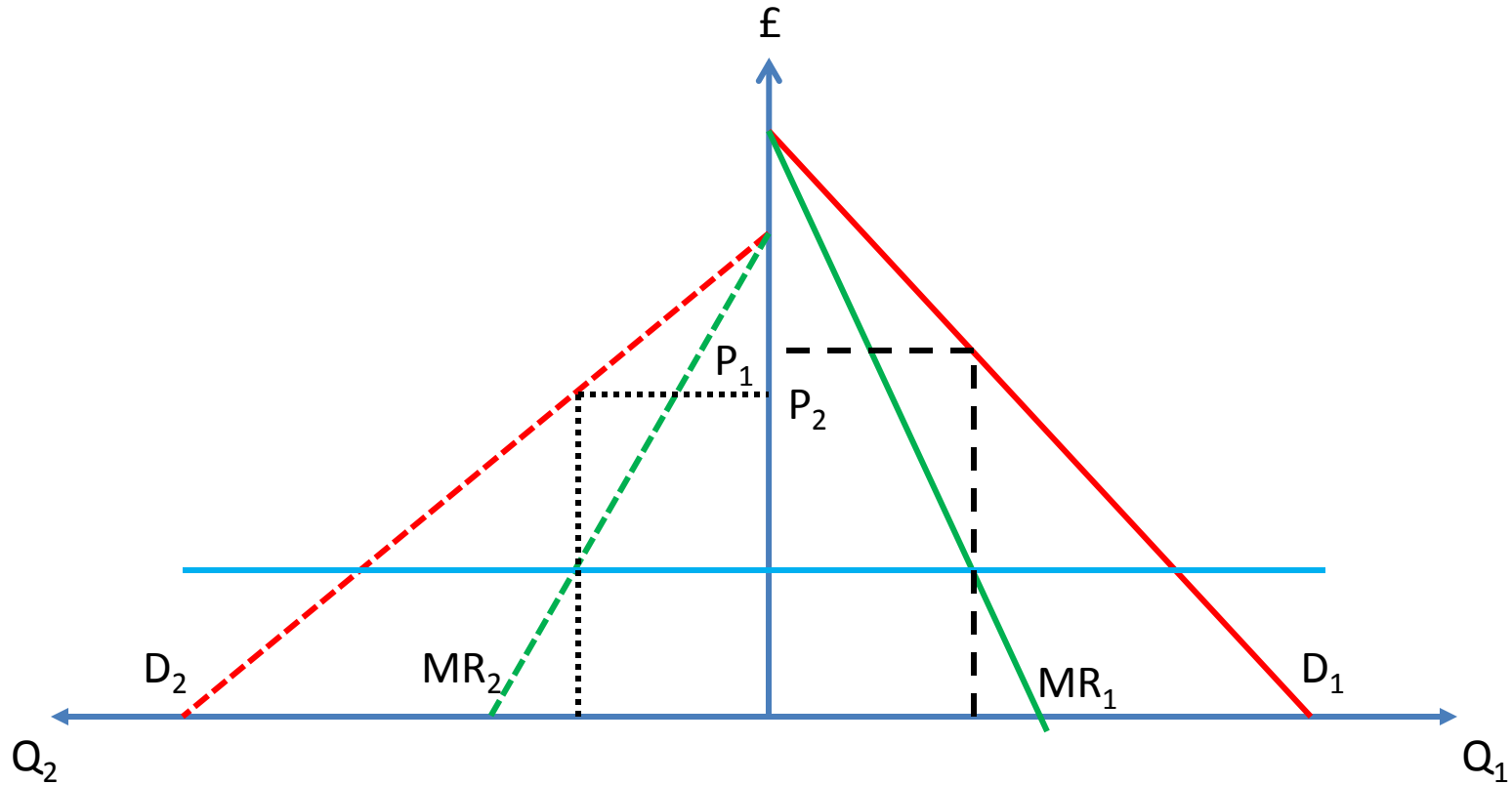
Strategic pricing

- Simple price discrimination
- Two-part tariff
- Tie-in sales
- Quantity and quality choice

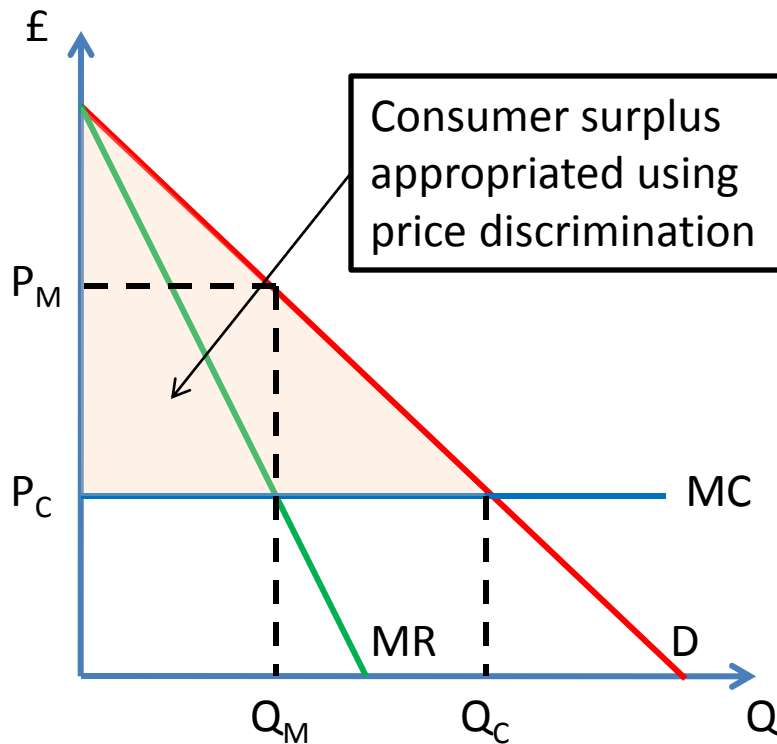
Simple price discrimination - conditions

- Firm must have market power to set price
- Firm must be able to infer willingness to pay
- Firm must be able to prevent resales
 - Services
 - Warranties
 - “Adulteration” of product
 - Transactions cost
 - Government/contractual intervention

Simple price discrimination – opportunity

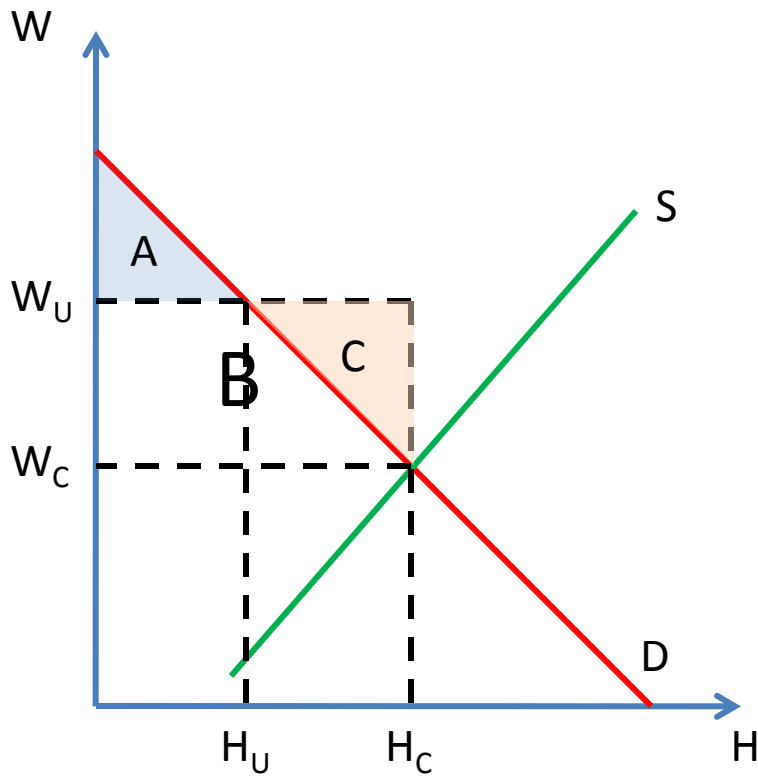


Simple price discrimination – gains



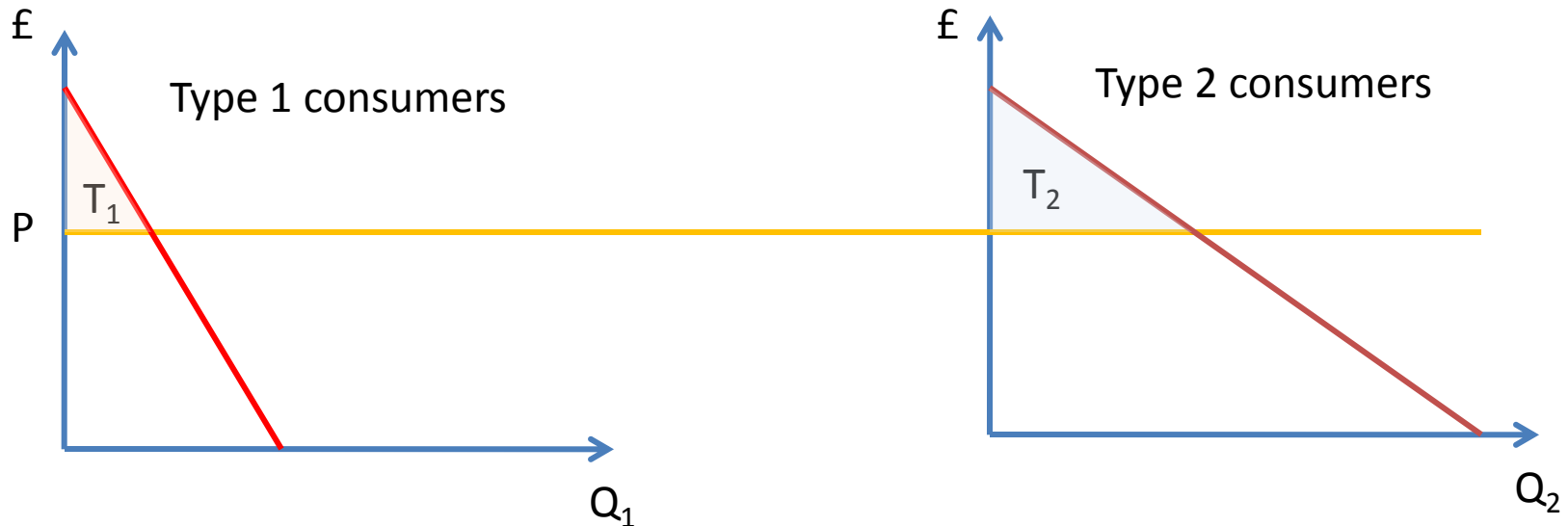
- Competition: (P_C, Q_C)
- Monopoly: (P_M, Q_M)
- Discriminating monopolist:
 - D is the MR curve
 - $MC = MR$ at Q_C
 - Appropriates the consumer surplus generated in a competitive market

Simple price discrimination – example



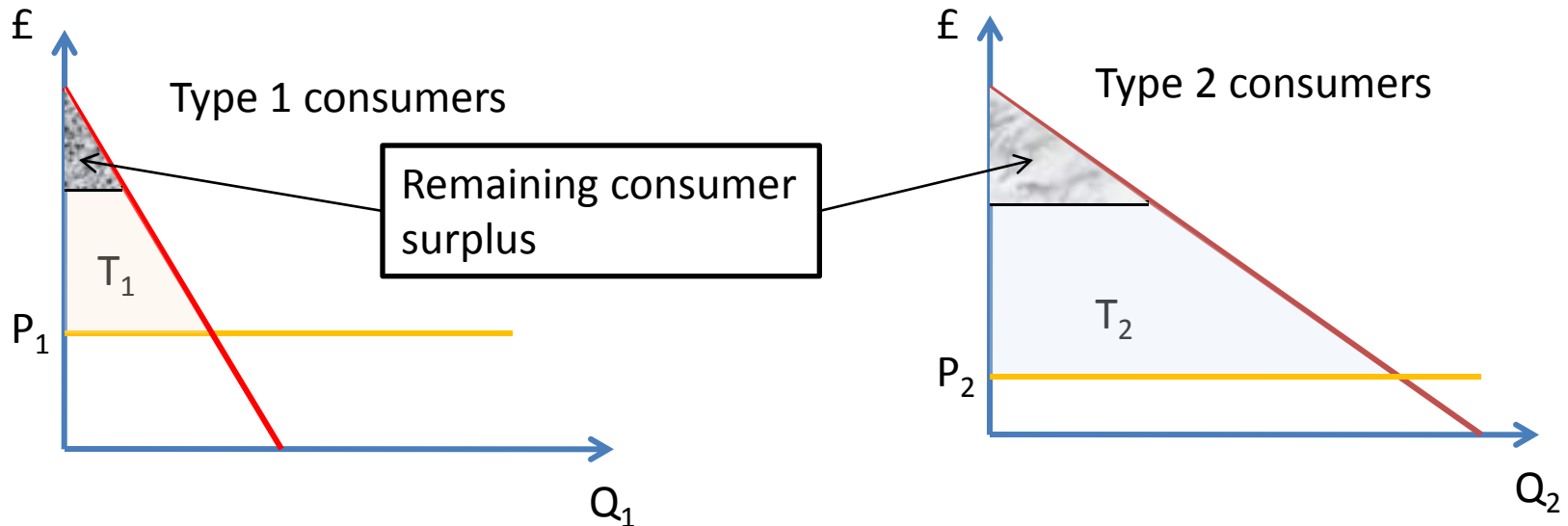
- Market: (W_C, H_C)
 - If labourers are not unionised, firm's surplus is $(A + B)$
- Labourers are unionised
 - Either fully price discriminate, charging W_C for the last hour of labour supplied
 - Or set wage at W_U and simultaneously set H_C as the minimum number of hours

Two-part tariff – basics



- A fixed charge for one product and a marginal charge for another
- If the firm reduces price, it can charge a higher lump sum fee
- If it cannot distinguish between the two types of customers, it will not be able to charge more than T_1 as lump sum fee
- Strategy would have two components: (1) the trade off between price and lump sum fee, and (2) whether or not to focus on Type 2 consumers only

Two-part tariff – strategy



- The firm offers two combinations (T_1, P_1) and (T_2, P_2) : $T_1 < T_2$ and $P_1 > P_2$
- Type 1 consumers choose (T_1, P_1) because the lump sum fee is low and they do not lose all their consumer surplus
- Type 2 consumers choose (T_2, P_2) because the low price generates a lot of consumer surplus, not all of which is lost to the lump sum fee
- The consumers self select themselves, revealing their type to the firm

Tie-in sales – justifications

- Efficiency
- Evade regulations
- Hidden price discounts
- Quality assurance

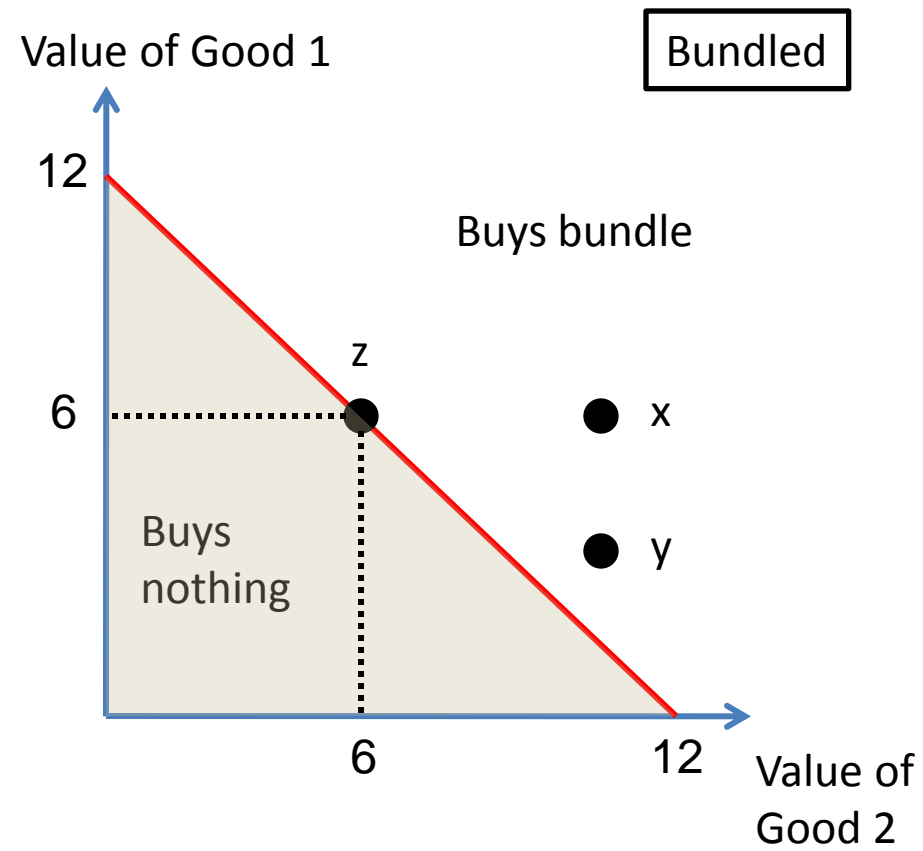
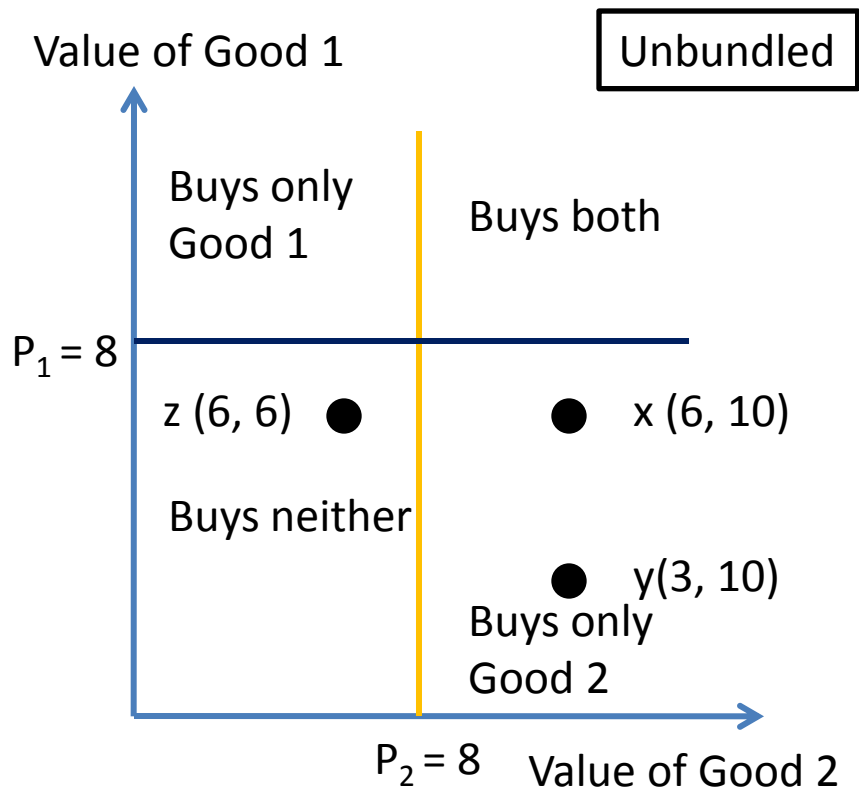
Tie-in sales – monopolised products

	Type 1 consumers	Type 2 consumers
Amount willing to pay for Good A	£ 9,000	£ 10,000
Amount willing to pay for Good B	£ 3,000	£ 2,000
Amount willing to pay for Goods A and B	£ 12,000	£ 12,000
<i>Revenue from separate sales = $(9,000 \times 2) + (2,000 \times 2) = £22,000$</i>		
<i>Revenue from tied-in sales = $(12,000 \times 2) = £24,000$</i>		

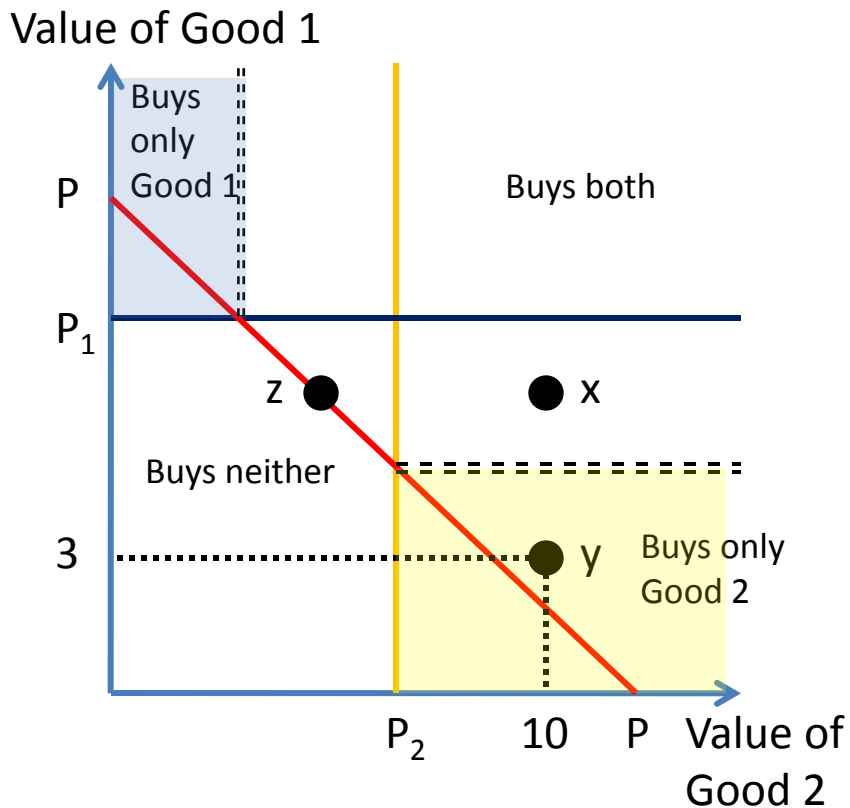
	Type 1 consumers	Type 2 consumers
Amount willing to pay for Good A	£ 9,000	£ 10,000
Amount willing to pay for Good B	£ 500	£ 2,000
Amount willing to pay for Goods A and B	£ 9,500	£ 12,000
<i>Revenue from separate sales = $(9,000 \times 2) + (500 \times 2) = £19,000$</i>		
<i>Revenue from tied-in sales = $(9,500 \times 2) = £19,000$</i>		

Lesson: Tie-in sales work when the willingness to pay for different goods is inversely correlated for different consumer types.

Tie-in sales – mixed bundling – I



Tie-in sales – mixed bundling – II



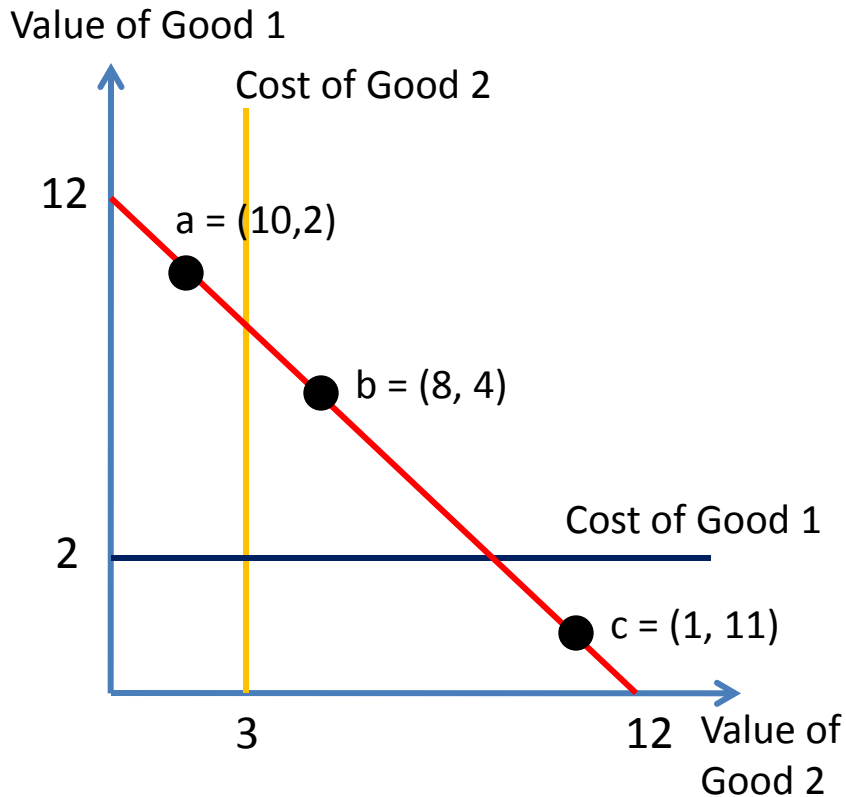
- Prices:
 $P_1 = 8, P_2 = 8, P = 12$

Consumers:

- At y (3, 10):
 CS of Good 2 = $10 - 8 = 2$
 CS of bundle = $13 - 12 = 1$
 Buy only Good 2
- At x (6, 10):
 CS of Good 2 = $10 - 8 = 2$
 CS of bundle = $16 - 12 = 4$
 Buys fixed price bundle

Mixed bundling

Tie-in sales – mixed bundling – III



- Three types of consumers: a, b, c
- Cost:
Good 1 = 2, Good 2 = 3
- Pricing separately:
 $P_1 = 8$, Profit = $(8 - 2) \times 2 = 12$
 $P_2 = 11$, Profit = $(11 - 3) = 8$
Total profit = 20
- Bundling:
 $P = 12$, Profit = $(12 - 5) \times 3 = 21$
- Mixed bundling:
 $P_1 = 9.99$, $P_2 = 10.99$, $P = 12$
 a buys only Good 1, b buys bundle, c buys only Good 2
Profit = 7.99 (from a) + 7 (from b) + 7.99 (from c)
= 22.98

Mixed bundling

Quantity and quality choice

- Purchasing a minimum quantity
- Selection of price schedules before demand is realised
- Premium for priority
- Auctions
- Quality choice