

### 3-2: Bundling and Legal Treatment of Price Discrimination

**Bundling:** A tying arrangement in which “bundles” of goods or services are offered for sale in fixed proportions.

**Key concepts:**

- Pure bundling
- Mixed bundling
- Reservation prices – maximum willingness to pay

Bundling is a profit maximizing strategy when customers have *different relative valuations* – when their demands are said to be *negatively correlated*.

Bundling is not the same as anti-competitive tying – when a firm with market power seeks to extend that market power from one market to another by combining the sales of two goods together.

**Legal Considerations related to price discrimination:** Key U.S. statute is the Robinson-Patman Act, which was originally designed to prevent large chain store buyers from inducing suppliers to grant price concessions that were unavailable to small retailers.

**Non-linear pricing:**

- Primary line injury – discriminatory pricing that involves injury to a direct competitor
- Secondary line injury – discriminatory pricing that involves possible injury to a competitor of a buyer who receives a lower price.
- Basing point pricing systems (or “delivered price systems”) – in which standard freight charges are applied regardless of location.

**Relevant exercises:** Problem Set 3, exercise 4.

**Bundling**

- A pricing strategy in which several products are offered for sale as one combined product.
- Pure vs. Mixed bundling
- Economic rationale – selling to two distinct market segments with contrasting willingness to pay
- Not the same as using market dominance to force acceptance of related products
- Most successful when:
  - ✓ There are contrasting demand characteristics
  - ✓ Marginal costs of bundling are low
  - ✓ Production set-up costs are high and/or there are economies of scale in production
  - ✓ Customer acquisition costs are high

**Bundling – A simple example**

Theater Chain	Reservation Prices		
	<i>Chronicles of Narnia</i>	<i>Treasure Planet</i>	Sum
Regal Cinemas	800	250	1050
AMC Theaters	700	300	1000
<b>Revenue with:</b>			
Perfect Price Discrimination			2,050
Bundling			2,000

**Legal Treatment of Price Discrimination**

Section 2(a), Robinson-Patman Act (1936) -- which amended Section 2 of the Clayton Act (1914)

"It shall be unlawful for any person engaged in commerce, in the course of such commerce, either directly or indirectly, to discriminate in price between different purchasers of commodities of like grade and quality ... where the effect of such discrimination may be substantially to lessen competition or tend to create a monopoly in any line of commerce, or to injure, destroy, or prevent competition with any person who either grants or knowingly receives the benefit of such discrimination, or with customers of either of them ..."

**Legal Treatment of Price Discrimination**

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A seller charging competing buyers different prices for the same "commodity" or discriminating in the provision of "allowances" -- compensation for advertising and other services -- may be violating the Robinson-Patman Act. This kind of price discrimination may hurt competition by giving favored customers an edge in the market that has nothing to do with the superior efficiency of those customers.

Price discrimination also might be used as a predatory pricing tactic -- setting prices below cost to certain customers -- to harm competition at the supplier's level. Antitrust authorities use the same standards applied to predatory pricing claims under the Sherman Act and the FTC Act to evaluate allegations of price discrimination used for this purpose.

Promoting Competition, Protecting Consumers:  
 A Plain English Guide to Antitrust Laws  
<http://www.ftc.gov/bc/compguide/discrim.htm>

# Bundling

## Using Reservation Prices to Illustrate Bundling as a Profit-Maximizing Strategy

Case 1: Bundling is a profit-maximizing strategy

Customer	$r_1$	$\sigma(1)$	$TR(1)$	$r_2$	$\sigma(2)$	$TR(2)$	$r_1 + r_2$	$\sigma(1,2)$	$TR(1,2)$
A	15	1	15	4	12	48	19	11	209
B	14	3	42	8	8	64	22	2	44
C	14	3	42	5	11	55	19	11	209
D	13	4	52	7	9	63	20	8	160
E	12	5	60	9	7	63	21	5	105
F	10	6	60	6	10	60	16	12	192
G	9	7	63	10	6	60	19	11	209
H	8	9	72	12	5	60	20	8	160
I	8	9	72	14	4	56	22	2	44
J	6	10	60	15	3	45	21	5	105
K	5	11	55	16	2	32	21	5	105
L	4	12	48	16	2	32	20	8	160
Max TR			72			64			209

Case 2: Bundling is not a profit-maximizing strategy

Customer	$r_1$	$\sigma(1)$	$TR(1)$	$r_2$	$\sigma(2)$	$TR(2)$	$r_1 + r_2$	$\sigma(1,2)$	$TR(1,2)$
A	13	1	13	12	5	60	27	4	103
B	14	3	42	16	2	32	30	2	60
C	14	3	42	18	1	18	32	1	32
D	13	4	52	14	3	42	27	4	103
E	12	5	60	12	5	60	24	5	120
F	10	6	60	10	7	70	20	6	120
G	9	7	63	10	7	70	19	7	133
H	8	9	72	9	8	72	17	8	136
I	8	9	72	7	9	63	15	9	135
J	6	10	60	5	10	50	11	10	110
K	5	11	55	4	12	48	9	11	99
L	4	12	48	4	12	48	8	12	96
Max TR			72			72			136