

Price Discrimination

A Level Economics

Students should be able to:

- Explain and evaluate the potential costs and benefits of monopoly to **both firms and consumers**
- Explain the conditions necessary for price discrimination to take place and give relevant examples
- Diagrams should also be used to support the understanding of price discrimination

What is Price Discrimination?

- **Price discrimination is defined as a business charging different consumers different prices for the same product**
- Price variations do not fully reflect the marginal cost of supplying a product e.g. higher costs for parcels delivered over short and long-haul distances in the UK and overseas
- There are several types of price discrimination
 1. 1st degree discrimination
 2. 2nd degree discrimination
 3. 3rd degree discrimination
 4. The Hurdle Model of price discrimination
- **Price discrimination is not the same as product differentiation** where the quality / characteristics of the good/service vary by the type of customer

Types of Price Discrimination

1st degree

- Charging different prices for each individual unit purchased – i.e. people pay their own individual willingness to pay

2nd degree

- Prices varying by **quantity sold** e.g. bulk purchase discounts
- Prices varying by **time of purchase** e.g. peak-time prices

3rd degree

- Charging different prices to **groups of consumers** segmented by price elasticity of demand, income, age, sex

Main Aims of Price Discrimination



Extra Revenue



Higher Profit



Improved Cash Flow

Providing that extra units of a good or service can be sold for a price above the marginal cost of supply, price discrimination is an effective way to increase revenue and profits



Use Up Spare Capacity

Price discrimination takes us away from the standard assumption in theory of the firm that there is a single profit-maximising price for the same good or services

Hurdle Model of Price Discrimination

- The **hurdle model** is associated with economist Professor Robert Frank
- The hurdle method separates buyers with low willingness to pay from those happy to pay a premium price – often to be the first to use it
- To take advantage of a lower price, the consumer must be prepared to **overcome or jump over some kind of hurdle** which acts as an **inconvenience**. For example:
 1. They might have to **delay a purchase** until a product is remaindered, sold off at lower prices when a more advanced version is available e.g. second edition paperbacks, older DVDs
 2. They may have to **risk not getting the product** at a time and place of their choosing e.g. relying on stand-by tickets for shows and airlines
 3. They may get a deeper discount if the product is **mildly damaged or once used** e.g. dented household appliances - “seconds”
 4. Discounts may require customers to **collect & redeem coupons**
- Customers prepared to do this tend to be more **price sensitive** ($P_{ed} > 1$)

Hurdle Model of Price Discrimination



Cheaper prices for nearly new products



Discounts for those prepared to collect coupons



Cheaper paperback prices published after the hardback release



Once used or remainder stocks of computer games



Discount ticket booths for stand-by / last-minute purchasers



Discounts only for customers who visit the store on a given day

Conditions for Price Discrimination

Firms must have sufficient monopoly (market) power

- Monopolists always have pricing power – price makers not takers

Identifying different market segments

- I.e. consumers with different price elasticities of demand

Ability to separate different groups

- Requires information / sufficient market intelligence

Ability to prevent re-sale (arbitrage)

- No secondary markets where arbitrage can take place at intermediate prices e.g. limiting sales, age-restrictions, ID cards

Price Discrimination in Action



Market haggling



Mobile phone contracts / tariffs



Taxi fares at peak times of the day

MARKET TYPE	OFF-PEAK PRICES	PEAK PRICES
Adult	£7.29	£8.49
Child	£5.29	£6.49
Teen	£5.79	£6.79
Student	£5.99	£7.29
Senior	£5.29	£6.49
Family of 4	£21.16	£25.96

Cinema ticket prices



Hairdresser discounts



Educational bursaries

Recent Examples of Price Discrimination

- Jan 2016: The popular online fashion retail site **Asos** has decided to introduce zonal pricing – i.e. charging varied, more competitive, prices in different parts of the world
- Dec 2015: **Nurofen** was found guilty by an Australian court of misleading customers by selling the same painkillers at different prices.
- Dec 2015: More **airlines** decide to use online auctions using emails to existing customers to sell premium seats rather than giving them to loyal customers for free
- Nov 2015: **Airbnb** introduces a **smart pricing model** - Airbnb announced a pricing tool that will adjust to changing supply and demand conditions in a local area
- Oct 2015: **WH Smith** accused of **price gouging** – i.e. selling products such as bottled water for significantly higher prices in their hospital outlets than in nearby high street stores

Hyper-Targeting: Personalised Pricing



B&Q testing
electronic price tags



Targeted deals for
online customers



Personalised loyalty
cards /user profiles

E-Commerce and the Rise of Personalised Pricing

Now more than ever businesses have the potential to harness information contained in **digital profiles of customers** to offer **bespoke, personalised prices** for different goods and services. The costs of market and consumer segmentation are coming down. On some websites, different deals and prices appear as per the location, browsing history and operating system used by the potential buyer. Is this form of hyper-price targeting legal and/or ethical?

Nurofen and Price Gouging Allegations



Nurofen was found guilty in December 2015 by an Australian court of misleading customers by **selling the same painkillers at different prices**. Labels on the packs of its analgesic drugs suggest they target types of pain such as migraines, period pain and sore backs. In fact, they all contain the same ingredient – ibuprofen lysine

Ticket Prices at Vue Cinema (Leeds)

1. DATE	2. FILMS*							
Friday 18th December to Thursday 24th December inclusive	Crimson Peak Hotel Transylvania 2 Pan Paranormal Activity: Ghost Dimension The Perfect Guy Victor Frankenstein		Black Mass Christmas With The Coopers Hunger Games: Mockingjay Part 2 Sisters SPECTRE The Good Dinosaur The Lady in the Van All Other Films*		Bridge of Spies Charlie Brown: A Peanuts Movie		Star Wars: The Force Awakens	
Friday 25th December to Thursday 8th January inclusive	Christmas With The Coopers Hotel Transylvania 2 Pan Paranormal Activity: Ghost Dimension The Night Before The Perfect Guy Victor Frankenstein		Charlie Brown: A Peanuts Movie Daddy's Home Hunger Games: Mockingjay Part 2 Sisters SPECTRE The Good Dinosaur All Other Films*		In The Heart of The Sea		Joy Star Wars: The Force Awakens The Danish Girl	
Advance Sales (from Friday 9th January 2015)			Dad's Army All Other Films*		Creed		Deadpool, Spotlight, The Big Short, The Hateful Eight, Trumbo	
3. TICKET TYPE	OFF-PEAK PRICES		PEAK PRICES		OFF-PEAK PRICES		PEAK PRICES	
Adult	£7.29	£8.49	£7.79	£8.99	£8.29	£9.49	£8.79	£9.99
Child	£5.29	£6.49	£5.79	£6.99	£6.29	£7.49	£6.79	£7.99
Teen	£5.79	£6.79	£6.29	£7.29	£6.79	£7.79	£7.29	£8.29
Student	£5.99	£7.29	£6.49	£7.79	£6.99	£8.29	£7.49	£8.79
Senior	£5.29	£6.49	£5.79	£6.99	£6.29	£7.49	£6.79	£7.99
Family of 4	£21.16	£25.96	£23.16	£27.96	£25.16	£29.96	£27.16	£31.96

* Excludes Event Cinema, Mini Mornings, Seniors Club and Special Screening

Menu Prices at Jimmy Chung's



DUBLIN • ABERDEEN • DUNDEE
EDINBURGH • INVERNESS • STIRLING

all you can eat

Lunch
Mon - Thur 11:45am to 4:30pm
€8.90 per person
€5.50 Children *

Fri - Sun 11:45am to 4:30pm
€9.90 per person
€6.50 Children *

Evening rates will apply if you vacate your table after 5:00pm

**KIDS UNDER 3 YEARS OLD
EAT FREE !**

* Children's Price :
Children must be not taller than 4'5"

Dinner
Mon - Thur 5:00pm to 10:30pm
€13.90 per person
€8.50 Children *

Fri - Sun 5:00pm to 10:30pm
€15.90 per person
€9.50 Children *

for reservations
Tel: 01 8740 888
Fax: 01 8740 999
8 Eden Quay, Dublin 1
jimmychung@ireland.com
www.jimmychung.ie

Jimmy Chung's Edinburgh

Lunch

Monday - Thursday - (12.00 - 16.30)

£6.49 per person

(children under 11 years £3.99)

Friday - Sunday - (12.00 - 16.30)

£6.99 per person

(children under 11 years £4.49)

Dinner

Sunday - Thursday - (17.00 - 22.30)

£10.49 per person

(children under 11 years £4.99)

Friday - Saturday - (17.00 - 23.00)

£11.49 per person

(children under 11 years £5.49)

Prices may vary during

Local/Public/ School holidays ,
Easter, and December period.

Entry Charges for York Minster

ADMISSION

There are a range of ticket options to suit every visitor, from families to individuals and those wanting to visit more of York's brilliant attractions. For those travelling in a group of 10 or more people, find out about [Group Visits](#).

Plus, your admission ticket to York Minster is valid for 12 months! A free [guided tour](#) is included in your admission price, subject to availability. Adult admission starts from just £10 and children under-16 can visit the Minster for free with an adult!

COMBINED TICKET (MINSTER AND TOWER)

Adult - **£15**

Seniors and Students - **£14**

Child (ages 8-16*) - **£5**

*To climb the tower you must be 8+

MINSTER ONLY

Adult - **£10**

Seniors and Students - **£9**

Child - Free with paying adult*

*valid for up to 4 children visiting the Minster with one adult (excluding groups of 10+).

UK tax payers may ['Gift Aid'](#) their entrance fee which means that we can claim back 25% of your entrance fee from HM Revenue and Customs.

Product Differentiation at Work?

[ABOUT US](#)[SERVICES & PRICES](#)

HAIRCUTS

Our team of talented stylists interpret the latest trends for women, men and children, adapting them to suit your individual style.

	Stylist	Top Stylist	Style Director	Senior Style Director	Art Director/Manager
	From	From	From	From	From
Ladies Cut & Blow Dry	£42.00	£46.00	£50.00	£56.00	£60.00
Mens Cut & Blow Dry	£32.00	£35.00	£37.00	£39.00	£42.00

Differentiation and Price Discrimination

*Hair cut

Shampoo & hair cut

Excluding blow dry

Supercuts

Including shampoo, conditioner & blow dry

Wash & blow dry

Buzz cut

Treatment

Child hair cut

8 years & under, Mon to Fri (Sat & Sun from £10.95)

Colour packages

Choose from 3 colour packages including slices, half head of hi or low lights and a cut.

(Selected salons only) Patch test is required 48 hours before colour service

£14.95

from £17.45

from £21.45

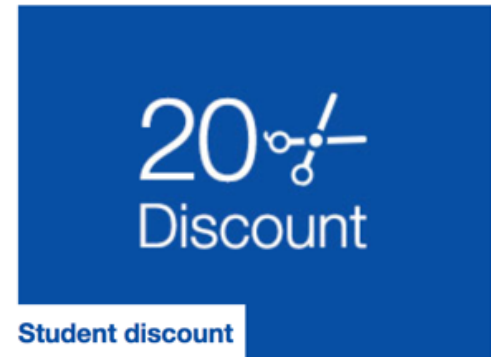
from £14.45

from £9.95

from £3.95

from £9.95

from £42.95



* All prices are subject to quotation depending on length and style of hair. Terms & Conditions apply.
Please ask your stylist to find out more.

2nd Degree Price Discrimination at Work

<p>500MB data</p> <p>4G ready 250 minutes 1000 texts</p> <p>Our sims fit all devices</p> <p>50% extra data, for three months. Ends 31 Dec.</p> <p>Top up £10 in exchange for your allowance</p> <p>Select</p>	<p>1GB data</p> <p>4G ready 750 minutes 2000 texts</p> <p>Our sims fit all devices</p> <p>50% extra data, for three months. Ends 31 Dec.</p> <p>Top up £15 in exchange for your allowance</p> <p>Select</p>	<p>2GB data</p> <p>4G ready 1500 minutes 4000 texts</p> <p>Our sims fit all devices</p> <p>50% extra data, for three months. Ends 31 Dec.</p> <p>Top up £20 in exchange for your allowance</p> <p>Select</p>	<p>4GB data</p> <p>4G ready 3000 minutes 4000 texts</p> <p>Our sims fit all devices</p> <p>50% extra data, for three months. Ends 31 Dec.</p> <p>Top up £25 in exchange for your allowance</p> <p>Select</p>
--	--	---	---

Select the best tariff and your free sim will be sent to you. Your free sim will be ready to use once you have added the right amount of credit, and you can switch from different tariffs without being tied down.

Heavy Users Pay Less for Gas & Electricity

Fuel	Size of consumer (non-household users)	Pence per kWh
Electricity	Very Small	13.19
	Small	12.24
	Small/Medium	10.96
	Medium	10.04
	Large	9.60
	Very Large	9.48
	Extra Large	9.23
	Average	10.45
Gas	Very Small	4.949
	Small	3.198
	Medium	2.578
	Large	2.024
	Very Large	1.716
	Average	2.749

Spot the Half Term Holiday!



[Conferences & Events](#) [Careers](#) [About Us](#) [Aqua Sana Spa](#) [Contact Us](#)



To Us 03448 267 723



[Book Now](#)

[My Booking](#)

[Locations](#)

[Things To Do](#)

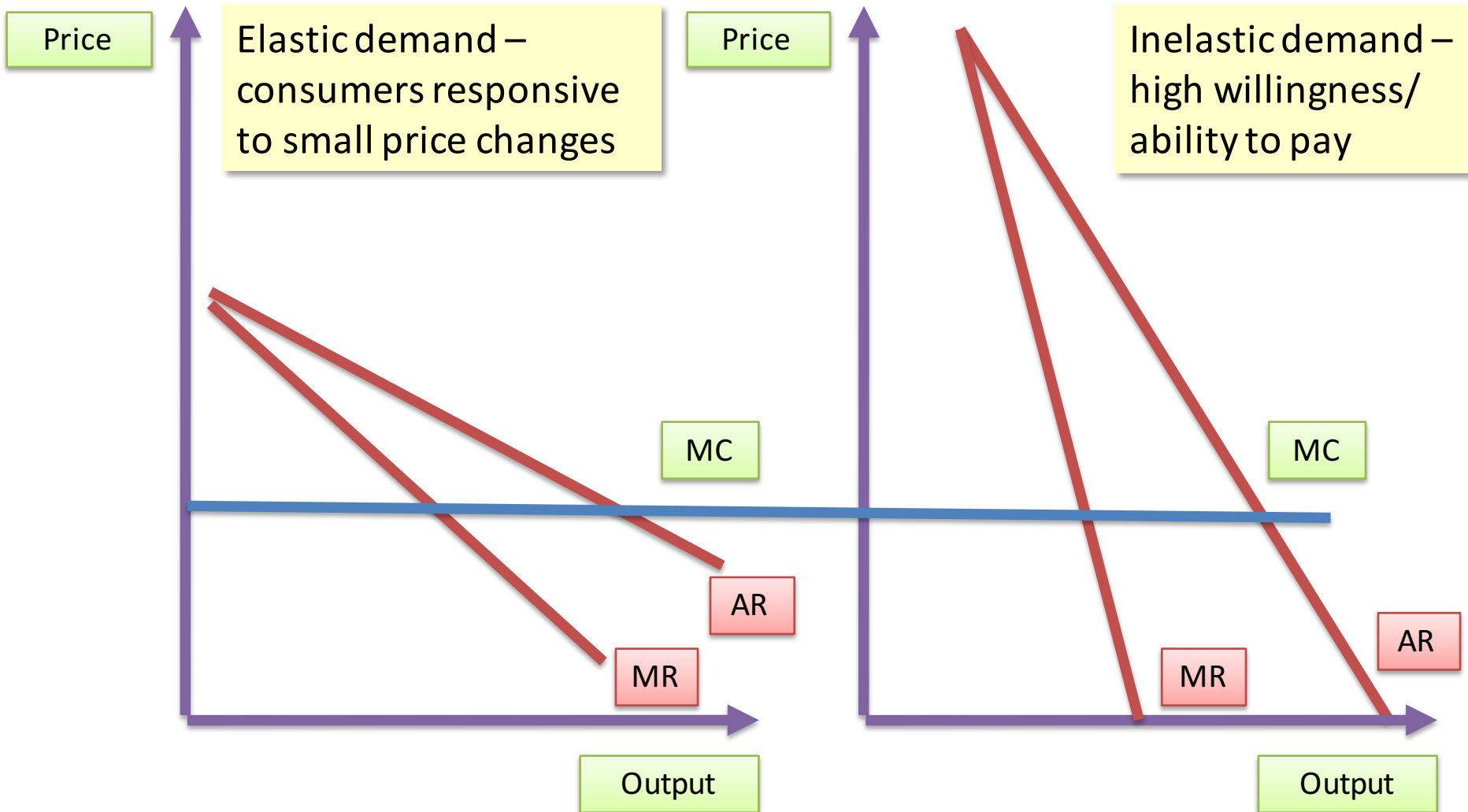
[Accommodation](#)

[Offers](#)

Arrival Date ▲	Break Type ▼	Accommodation Type ▼	Per Person Per Night ▼	Price Per Lodge ▼	
18 Jan 2016	Midweek (Mon-Fri)	3 Bedroom Woodland Lodge	£12	£279	details
25 Jan 2016	Midweek (Mon-Fri)	3 Bedroom Woodland Lodge	£12	£279	details
29 Jan 2016	Weekend (Fri-Mon)	3 Bedroom Woodland Lodge	£28	£499	details
01 Feb 2016	Midweek (Mon-Fri)	4 Bedroom Executive Lodge	£13	£399	details
05 Feb 2016	Weekend (Fri-Mon)	3 Bedroom Woodland Lodge	£28	£499	details
08 Feb 2016	Midweek (Mon-Fri)	3 Bedroom Woodland Lodge	£20	£479	details
12 Feb 2016	Weekend (Fri-Mon)	2 Bedroom Woodland Lodge	£59	£699	details
19 Feb 2016	Weekend (Fri-Mon)	2 Bedroom Woodland Lodge	£45	£539	details
22 Feb 2016	Midweek (Mon-Fri)	4 Bedroom Woodland Lodge	£10	£299	details

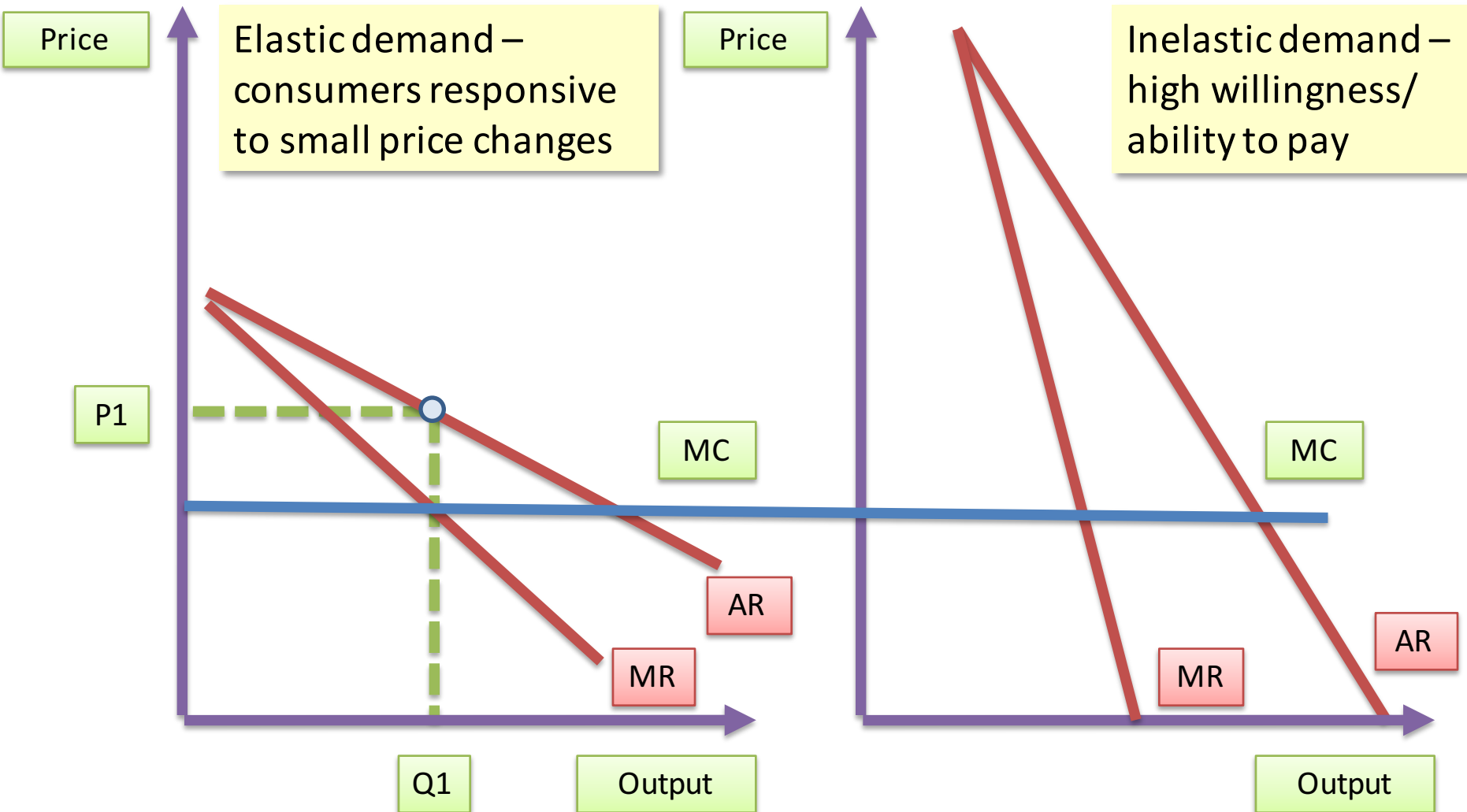
3rd Degree Price Discrimination Analysis

3rd degree price discrimination involves segmenting consumers into groups



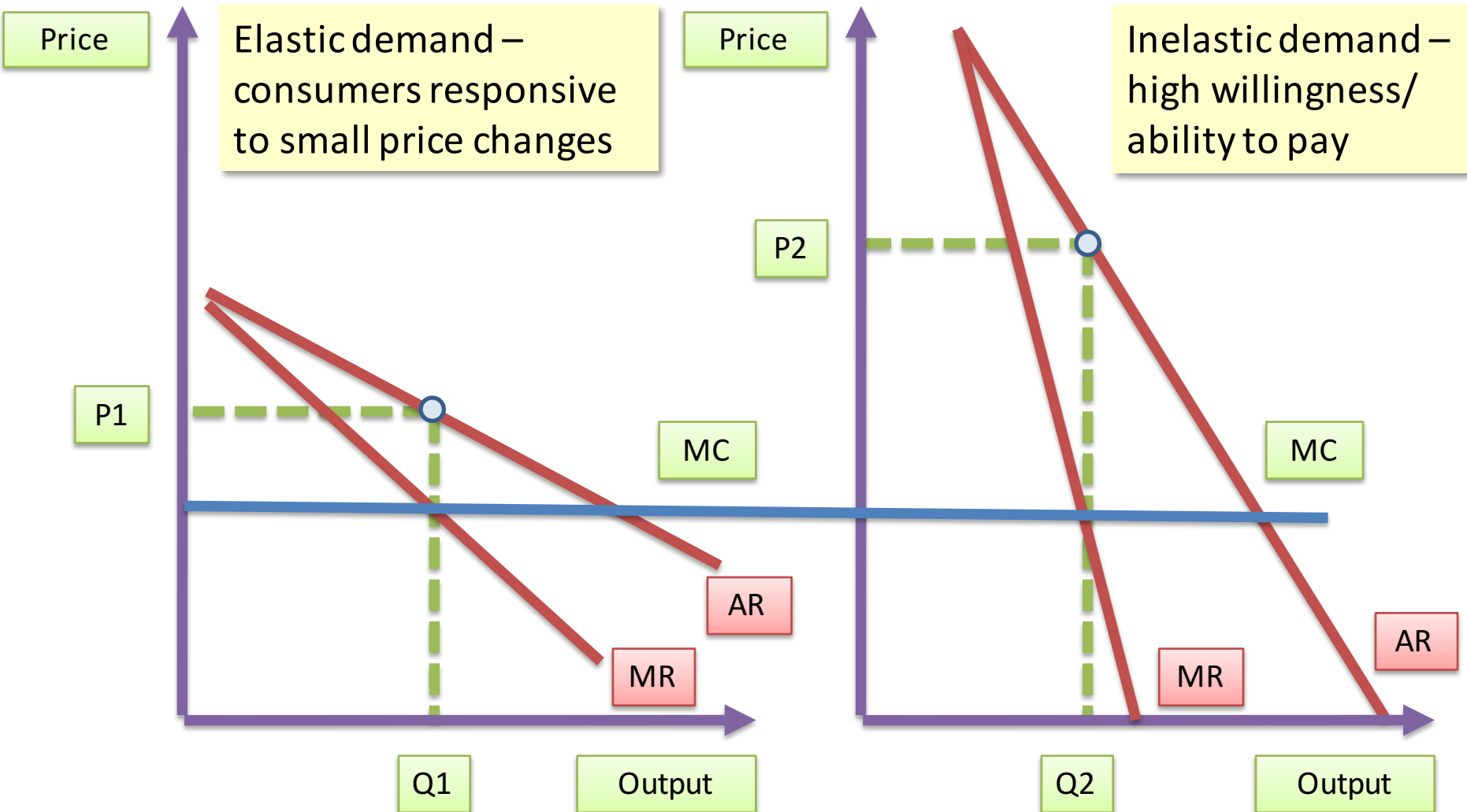
3rd Degree Price Discrimination Analysis

Price sensitive consumers with lower willingness to pay are charged less



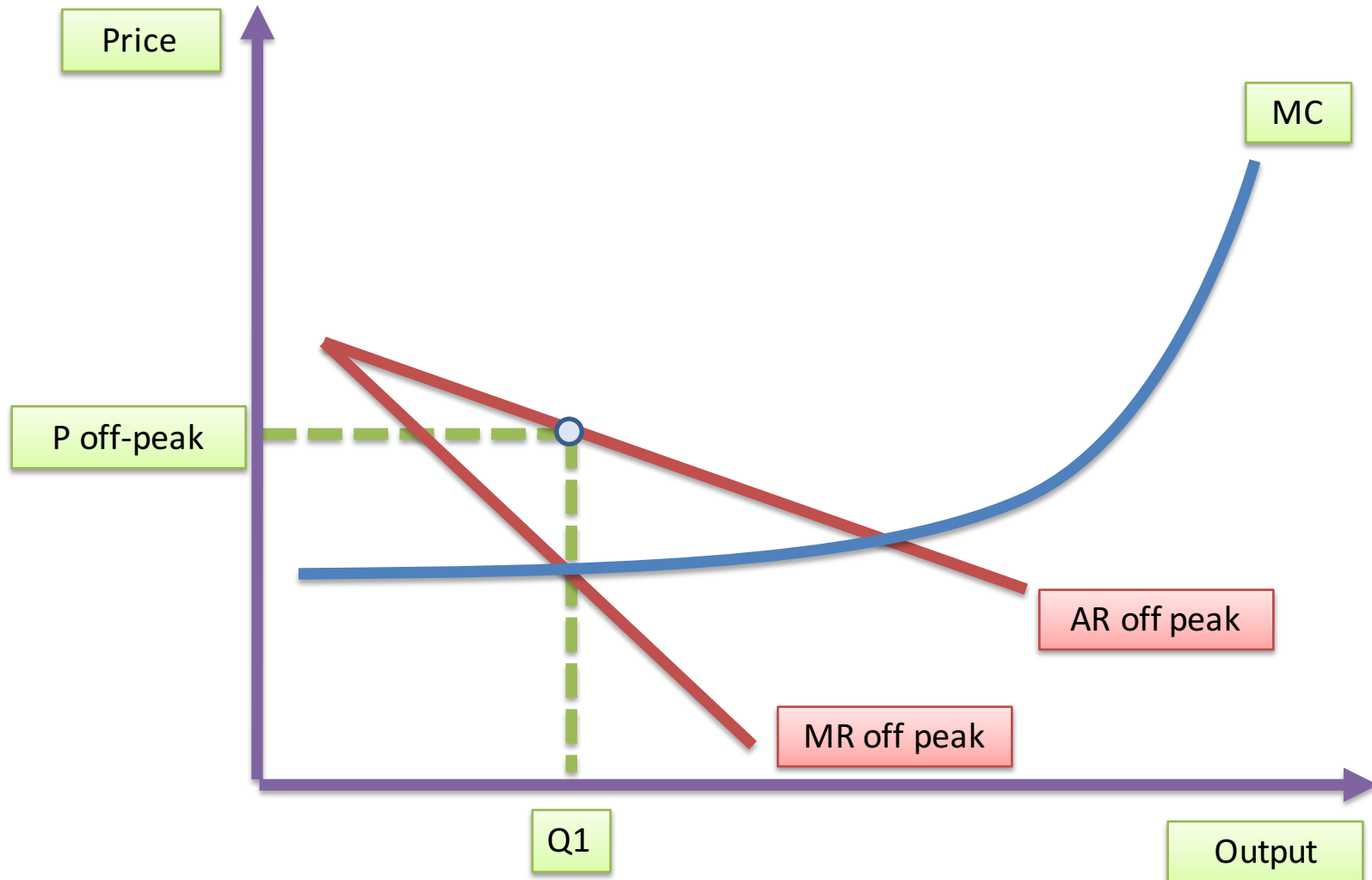
3rd Degree Price Discrimination Analysis

When $P_{ed} < 1$ firms can raise their price and extract consumer surplus



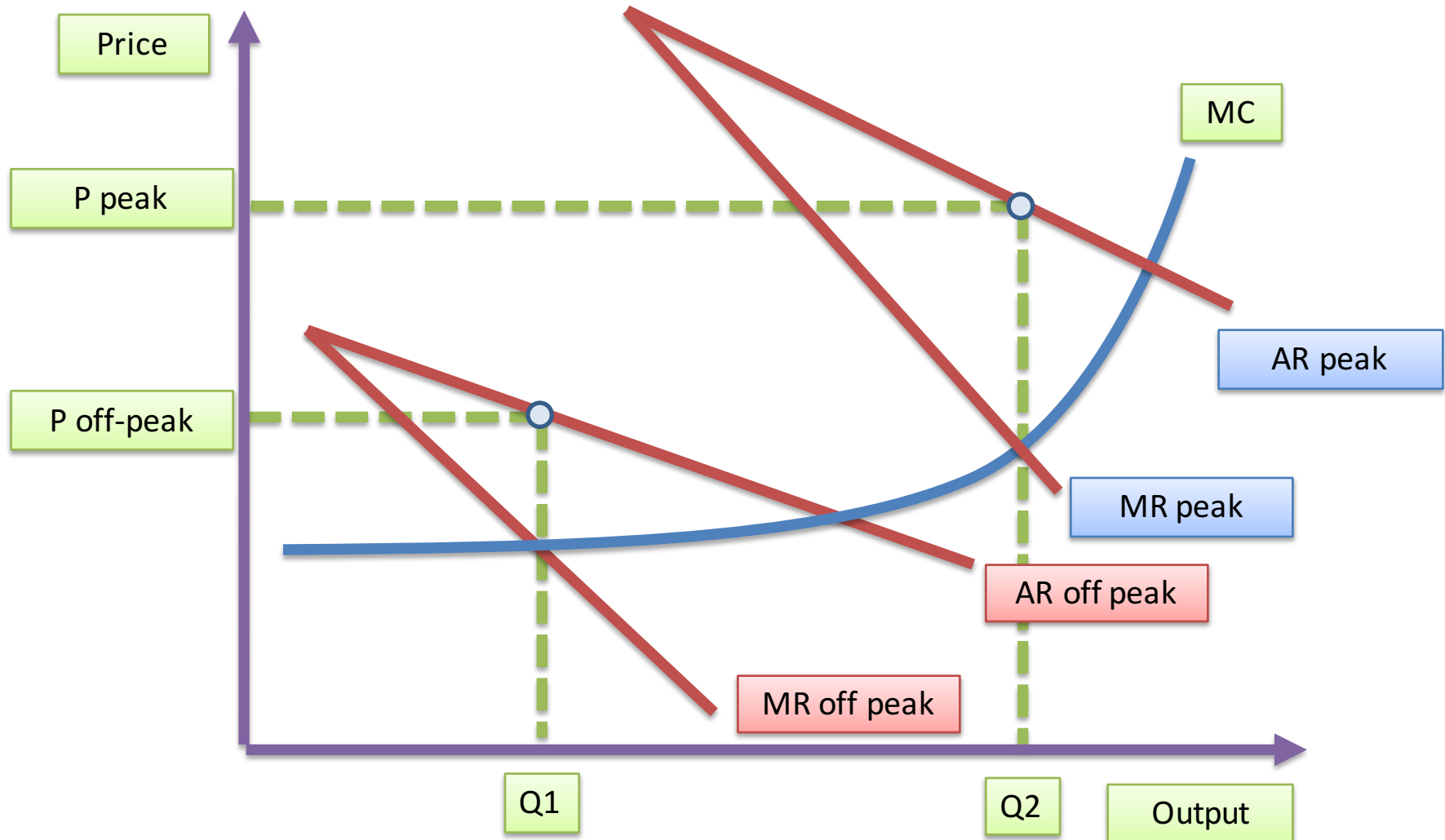
Peak and Off Peak Demand and Pricing

At off-peak times, market demand is low and firms will have spare capacity

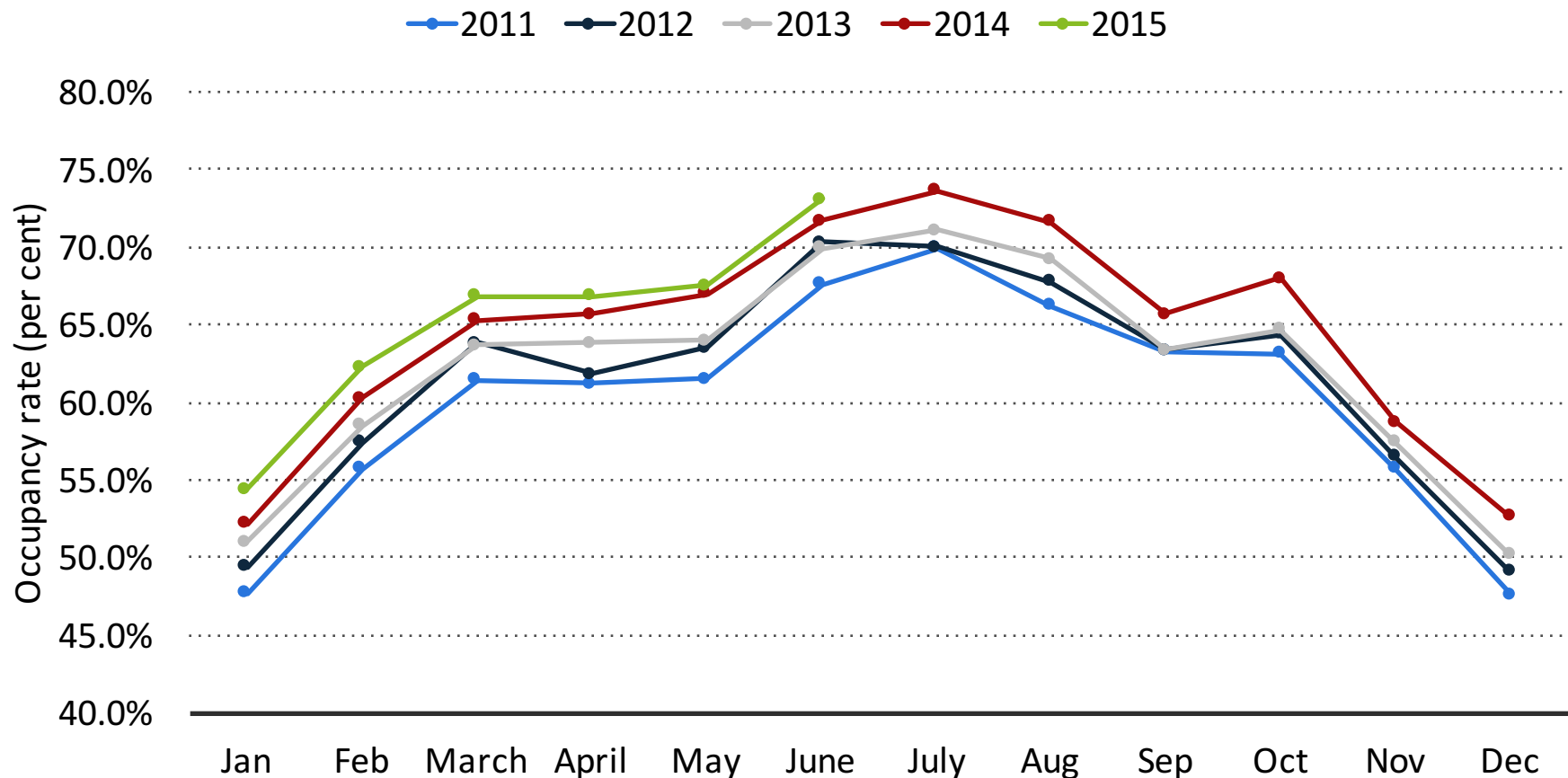


Peak and Off Peak Demand and Pricing

At peak times, marginal cost may also be higher as capacity limits are reached



Seasonal Demand for Hotels in the USA



The **occupancy rate of hotels** follows a season pattern reaching a peak during the summer months. At off-peak times, the occupancy rate can decline to less than 50% i.e. there is plenty of **spare capacity**

Uber and Price Discrimination

- Uber is a fast-growing taxi service app that now operates in more than 50 countries
- In May 2015, Uber was valued at about 41 billion U.S. dollars by venture-capital firms
- Uber engages in **surge pricing** – also known as **dynamic pricing**
- When market demand out-strips available supply e.g. at peak times, then Uber raises the average fare on their app
- The aim is to encourage more drivers to take to the roads to expand supply
- The business is taking advantage of **low price elasticity of demand** at busy times
- Some economists have criticised this policy especially during emergencies such as freak weather events and terrorist attacks



Surge Pricing



Peak Demand

The Welfare Case Against Price Targeting



Exploitation of the consumer – the majority of consumer still pay more than marginal cost



Extraction of consumer surplus turned into higher producer surplus / supernormal profit



Possible use of discrimination as a limit pricing tactic / and a barrier to entry to rival firms



Ultimately, if successful, it reinforces the monopoly power / dominance of existing firms

Arguments in Support of Price Targeting



Potential for cross subsidy of activities that bring social benefits i.e. charging much lower prices for drugs in lower & middle-income countries



Making better use of spare capacity – this can have environmental benefits – less waste etc



It brings new consumers into market – who would otherwise be excluded by a 'normal' higher price



Use of monopoly profit for research – this is a stimulus to innovation / dynamic efficiency gains

Price Discrimination

EdExcel A2 Micro Topic 3.3.9

Students should be able to:

- Explain and evaluate the potential costs and benefits of monopoly to **both firms and consumers**
- Explain the conditions necessary for price discrimination to take place and give relevant examples
- Diagrams should also be used to support the understanding of price discrimination