Price Discrimination

# Presentation 1 – Intro and conditions

Take notes. Your notes should cover the following questions:

* What is meant by price discrimination?
* What conditions are required for price discrimination to take place?

# Task: Applying the Conditions for PD

**Instructions:**

Recall the three conditions necessary for price discrimination to succeed:

* Market power in order to vary prices
* Identifiable sub-markets each with a different PED
* No possibility of arbitrage

Now apply these criteria to the following markets to determine whether price discrimination is feasible:

1) Bus and rail travel 2) Dental Treatment 3) Apples

4) Building materials 5) Hairdressers 6) Books

7) Newspapers 8) Gym membership 9) Beer

10) Designer Jewellery 11) Pharmaceuticals 12) Music CDs

13) Supermarket food 14) Branded Jeans 15) Sports cars

# Presentation 2 – First Degree Price discrimination

Take notes. Your notes should cover the following questions:

* What is meant by First Degree Price Discrimination? Explain its impacts.

# Article Task: eCommerce and Perfect PD

**Instructions:**

* Read the article and answer the key discussion question

**Article**

*For what it’s worth – the future of personalised pricing*

While not as widely known as you might expect, personalised pricing in the world of e-commerce is well established. Airlines, hotels and digital retailers such as Amazon have for many years used price discrimination to maximise the revenue they can generate from individual customers. What’s changing now is the prospect that personalised pricing will extend to the bricks and mortar retail environment, as mobile and connected store environments enable retailers to identify and value customers in store. Personalised pricing is as old as commerce itself. A market trader would size up a prospective customer based on a range of signals (how they speak, dress or carry themselves), determine the potential value of the sale and then deliver the killer line: “For you, £5.”

The digital revolution and online shopping gave retailers a new set of signals to play with in understanding how much a prospective customer would pay. Device type, IP address and previous interest are all data sets that help set a price at a level to maximise revenue. Now, we’re starting to see the information asymmetry of the online world tip into offline retail, where 85% of sales still take place. The smartphone and its interaction with the connected store environment, through Bluetooth beacons, in-store wireless or some other means of identification, is the catalyst for this new level of personalisation. By identifying the customer on arrival, the retailer is able to offer both a more personalised experience and pricing designed to maximise the chances of a sale. In many retail sectors, the platform for delivering this personalisation will be the smart shelf. This is likely to incorporate sophisticated sensors enabling it to react to the consumer to provide reviews, suggestions and, of course, pricing and offers, in a way that is natural, comfortable and useful. These shelves will not only know what products they have loaded on them, but also understand and interact intelligently with the consumer.

At the very least, in the more commoditised sectors, smart shelves will allow retailers to implement dynamic pricing, reacting to competitors’ pricing changes or costs in real time. But the potential is there for prices to change dependent on the individual customer profile in a way that maximises the chances of a sale. B&Q are already testing electronic price tags that change price based upon the profile of the customer. In high-end categories, such as fashion or electronics, the identification of the customer is likely to be used in a more discreet way to help sales assistants tailor their approach. Knowing what the customer has bought before or whether they have responded to promotions could enable the sales assistant to ascertain whether a discount or a bundled offer would be most appropriate. The technical challenges of surfacing the right price, for the right person, for the right product, in store, in real time, are not insignificant. What’s more challenging is managing the consumer perception of personalised pricing. How consumers and the media will react when it becomes well known that some individuals end up paying more for the same item in store remains to be seen. As the Competition & Markets authority has said: “Businesses need to be clear if they are using personalised pricing. If they are using it and it’s not clear, that could erode trust.” Retailers will need to be transparent and on the front foot about the practice, in order for it be perceived as personalised discounts for loyalty and not another example of “rip-off Britain.” Either way, as the blurring of the online and offline worlds continues, the rise of personalised pricing seems assured.

**Question**

How do features of eCommerce promote the ability of a firm to carry out perfect price discrimination?

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How might these features be used by high street stores to personalise prices?

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Is price discrimination (PD) a good or a bad thing for society?

(In other words, when firms charge different prices to different customers for essentially the same product, does this promote consumer welfare or does it go against the public interest?)

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# Presentation 3 - Second Degree Price discrimination

Take notes. Your notes should cover the following questions:

* What is meant by Second Degree Price Discrimination? Explain its impacts.

# Northern-Lights-Adult-Edition-His-Dark-Materials-Philip-PullmanNorthern-Lights-His-Dark-Materials-by-Pullman-Philip-Paperback-Book-The-CheapArticle Task: The Adult Book Premium

**Instructions:**

* Read the article and answer the key discussion question

**VS**

**Article:**

AT THE end of the week I'm heading off on a much-needed holiday. I'm intent on reading fiction while I'm gone. I've chosen parts two and three of the His Dark Materials trilogy by Philip Pullman. For those who unfamiliar, imagine Harry Potter, minus Quidditch, plus a plot. Having visited a bookstore to obtain said books, I walked to the counter and inquired about their location. "They're in teen fiction on the second floor", I was told by the assistant. The manager then put in, "The adult copies are in science fiction, first floor", to which I responded, "Are they the same book?". "All except the cover", he answered. "Same price?" "No the children's books will be cheaper", came the reply.

Sure enough, the children's books were cheaper in both hardcover and paperback, by 17%. The logic of having two separate editions is simple enough; by targeting two markets, teen and adult fiction, the publisher may increase sales. But how to explain the different prices?

One might suspect that production costs vary enough to justify different sticker prices. The teen edition has a bright mysterious cover, for instance, while the adult version looks like something I could knock together. Yet the adult version is the more expensive.

On average teen fiction is cheaper than adult fiction, suggesting that price discrimination may be at work. By selling two editions in two places, the publisher may be better able to extract more surplus by getting buyers to reveal their consumer-type. People shopping in the teens section are likely to be teens, to therefore have less income, and to therefore be more price sensitive. If there is little overlap between customers browsing the teen and adult section, this kind of price discrimination might be possible.

But consumers are pretty savvy. The internet makes price discovery incredibly easy. This can hardly be the whole story.

The shop assistant offered yet another explanation: "Adult readers are prepared to pay a premium so that strangers on the train don't think they're reading children's books." I like this because it allows us to put a price on people's self-image, or at a minimum shows they're willing to pay more to appear more intellectual.

Out of interest I bought the teen version, either because I'm price sensitive or because I know trying to hide my childish tastes is futile.

**Questions:**

How does this illustrate 2nd degree price discrimination?

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What are the conditions necessary for publishers to implement and use 2nd degree PD?

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Is it ever rational for a customer to purchase the adult version?

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# Presentation 4 - Third Degree Price discrimination

Take notes. Your notes should cover the following questions:

* What is meant by Third Degree Price Discrimination? Explain its impacts.

# Article Task: UBER and ‘Surge Pricing’

**Instructions:**

Read the article and answer the key discussion question

**Article task**

*Pricing the surge: The microeconomics of Uber’s attempt to revolutionise taxi markets*

NEW competitors always ruffle a few feathers. The unique thing about Uber, a new taxi-market player, is that it seems to have annoyed some of its customers as much as the incumbent cabbies it threatens. The problem is its “surge pricing”, which can make the cost of Uber rides jump to many times the normal fare at weekends and on holidays. Gouging customers like this, critics reckon, will eventually make them flee, denting Uber’s business. Microeconomics suggests that although Uber’s model does have a flaw, its dynamic pricing should be welcomed.

Taxi markets have long needed a shake-up. In theory, entry should be easy—all that is needed is a car and a driving licence—with new drivers keeping cab fares close to costs. Yet in many cities, cabs are far from that competitive ideal. Decades of regulation conspire to keep entrants out. In New York a pair of taxi medallions sold at a 2013 auction for $2.5m; many other cities have similar schemes. In London “the knowledge”, a test of familiarity with the city’s streets which GPS has made redundant but drivers still have to pass, can take four years to complete. Taxi markets often end up suspiciously clubby, with cabs in short supply and fat profits for the vehicle owners. Antitrust concerns have been raised in Australia, Ireland and Bulgaria among others.

Uber aims to change all this. Launched in San Francisco in 2010 it lets passengers hail drivers from their smartphones—a move requiring even less effort than extending your arm. Some vehicles are not so much taxis as private cars that Uber has vetted. The convenience of hailing a cab from the comfort of a sofa or bar stool has given the service a loyal fan-base, but it comes at a cost. Most of Uber’s prices are slightly cheaper than a street-hailed cab. But when demand spikes, the surge prices kick in: rates during the busiest times, such as New Year’s Eve, can be seven times normal levels, and minimum fares of up to $175 apply.

Critics of Uber’s pricing are treading a well-worn path: setting tailored prices for the same good—price discrimination—often causes howls from consumer groups. It seems unfair when the charges for drugs vary across countries, the price of train tickets varies with the buyer’s age, or, as in Uber’s case, the price varies depending on the time that the journey is booked.

But price discrimination is not necessarily a bad thing, as a 2006 paper by Mark Armstrong of Oxford University explained. A firm offering a single price to all customers faces a trade-off: lowering prices raises sales but means offering a cut to customers prepared to pay more. Maximising profits can often mean lowering supply: goods are not provided to cheapskate shoppers so that more can be made from high-rollers. Customers who value the good at more than it costs to produce might miss out in a one-price-fits-all system—as many punters who have tried to find a regular cab on New Year’s Eve will know.

Uber’s price surge aims to solve this. Like many technology companies Uber is a middleman. It links independent cab drivers with customers wanting a ride in the same way that Google links searchers and advertisers or eBay links sellers and bidders. The business model only works when successful matches are made. Because price spikes raise the pay Uber’s drivers receive (they get 80% of any fare, if they drive their own car) more cars are tempted onto the roads at times of high demand. Prices are high at 2am at the weekend not just because punters are willing to pay more, but also because drivers don’t want to work then.

This strategy is common for firms that operate platforms or “two-sided” markets which link buyers and sellers, according to a 2006 paper by Jean-Charles Rochet and Jean Tirole of Toulouse University. Firms often tilt the market to give one side a particularly sweet deal: nightclubs let women in free to justify charging men a hefty fee, telephone directories are given away to create a readership which advertisers pay to access. The theory predicts each side’s deal depends on two things: price sensitivity and how well-stocked each side of the market is. Uber’s price surge fits perfectly: Friday-night revellers are hit by a double whammy since they are willing to pay up precisely when the pool of cabs is low.

**The real pricing problem**

There is some evidence Uber’s surge pricing is improving taxi markets. The firm says drivers are sensitive to price, so that the temptation to earn more is getting more Uber drivers onto the roads at antisocial hours. In San Francisco the number of private cars for hire has shot up, Uber says. This suggests surge pricing has encouraged the number of taxis to vary with demand, with the market getting bigger during peak hours.

However, the inflexibility of Uber’s matchmaking fee, a fixed 20% of the fare, means that it may fail to optimise the matching of demand and supply. In quiet times, when fares are low, it may work well. Suppose it links lots of potential passengers willing to pay $20 for a journey with drivers happy to travel for $15. A 20% ($4) fee leaves both sides content. But now imagine a Friday night, with punters willing to pay $100 for a ride, and drivers happy to take $90: there should be scope for a deal, but Uber’s $20 fee means such journeys won’t happen.

Despite the revenues a matchmaking fee generates, it may not be Uber’s best strategy. A fixed membership charge is often firms’ best option in two-sided markets. By charging drivers a flat monthly fee Uber would generate revenue without creating a price wedge that gets in the way of matches. Since stumping up cash might put infrequent divers off, they could be offered a cheaper category of membership. Uber should keep its surge pricing in place. But to make the market as big as possible, and really revolutionise taxi travel, it might need to retune its fees.

**Questions**

How does ‘Surge Pricing’ illustrate 3rd degree price discrimination?

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What are the conditions necessary for Uber to implement and use 3rd degree PD?

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What other examples of price discrimination are given in the text?

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How can PD be good?

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# Assignment: Price Discrimination & Pricing Strategies

**SECTION A**

1. In July 2017, Air China quoted the following prices for a flight from London to Beijing, China:

|  |  |
| --- | --- |
| **Date of flight** | **Price** |
| 1st August 2017 | £785 |
| 1st March 2018 | £560 |

Explain **one** reason why Air China are able to charge different prices in August and March.

[3]

1. A monopolist supplier of ski holidays operates in a small, fashionable resort in the Alps. It splits the market into two sub-markets: A for school holiday time and B for term time. The diagrams show the average revenue (AR) and the marginal revenue (MR) curves for holidays in the two sub-markets.



If the marginal cost of providing one holiday is £200 at any time of the year, what prices should the ski holiday firm charge in each of the two sub-markets to maximise profits? You should annotate the diagrams in your answer.

[4]

**SECTION C**

1. Critically examine the benefits to a large business and its consumers as a result of the business adopting a price discrimination strategy. Refer to at least one example in your answer.

[25]