David Youngberg

Econ 280—Bethany College

**Lecture 06: Price Discrimination II**

1. Tying (aka Two-Part Pricing)
   1. What is the most expensive liquid commercially available (as in, no liquid gold)? (It costs about $7,400 a gallon.)
   2. Why does it cost so much?
   3. *Tying*—when the seller charges one price for a good that can only be used with another good charged at a lower price
      1. Crucially, the seller must be the only seller of the higher-priced good. The two goods must be tied together.
      2. This is why video game consoles are so cheap compared to video games themselves. You can’t use an X-Box game on a Nintendo Wii.
   4. It’s easy to see how this is price discrimination if you imagine the two goods—console and games, for example—as one good: ability to play video games.
      1. Those with a high willingness to pay are probably video game nerds and will buy many different games.
      2. Those with a low willingness to pay will only buy a few games and thus pay a much lower price for the ability to play.
   5. Tying can be thought as either 1st degree (if the fixed cost is high and the per-unit cost is low) or 3rd degree (if the fixed cost is low and the per-unit cost is high) price discrimination.
2. Block Pricing
   1. When items are sold only as a set of the same item that is block pricing.
      1. You can, at minimum, buy only 4 rolls of toilet paper
   2. Block pricing is a kind of 2nd degree price discrimination. The prices are just added together as one price.
3. Bundling (aka commodity bundling)
   1. This is kind of the opposite of tying. Instead of two goods being separately (one good and many goods), *bundling* is selling a good which can only be bought in a bundle of other goods (one-to-one).
      1. You only need to buy one Nintendo Wii to play many games. But you want more copies of Microsoft Excel, you’ll have to buy more copies of Word along with the Excel copies.
      2. Bundling examples: cable channels, Office software, buffets, traditional newspapers, politicians
   2. Companies bundle when groups of people value parts of the bundle differently. If the bundle is assembled correctly, lots of people should value the result the same even if they vastly disagree on how they value the parts of the bundle.
      1. Wilf and David both use Microsoft Office. Wilf tends to use Excel, using other software for word processing. David prefers Word, using Excel only in rare cases. Suppose each is willing to pay $90 for what they use often and $10 for what they use rarely.
      2. Even though they disagree on how much each component is worth, they agree on the bundle.
      3. Unbundled, Microsoft could charge $90 for each or $10 for each part (getting $180 or $40 in total revenue, respectively). With bundling, they charge $100 for each bundle, getting $200 in revenue.
   3. Bundling is price discrimination. In practice, David is being charged $90 for Word and $10 for Excel while Wilf is being charged $10 for Word and $90 for Excel. The same good, examined as separate for the bundle, is being charged different prices.
   4. In other words, the different prices functionally occur in the consumer’s own head.
   5. By *de facto* charging each person what that person is willing to pay, bundling is a form of 1st degree price discrimination.
4. Peak-load pricing
   1. Sometimes demand shifts in a predictable cycle, such as electricity throughout the day or airline travel throughout the week. This can cause the demand to exceed capacity, something that cannot be expanded in the short run. And since this spike in demand is short-lived, it may not be worth expanding capacity to meet these predictable cycles.
   2. *Peak-load pricing*—charging higher prices during peak times compared to off-peak times
   3. In a lot of ways, this is no different than normal shifts in demand. But because it is a regular expansion and contraction—without a movement along the supply curve—it becomes a form of price discrimination.
   4. By charging more when demand is higher (and thus charging more to the groups who purchase during this time), peak-load pricing is a form of 3rd degree price discrimination. (In essence, we have peak-times because during those times, there are fewer acceptable substitutes.)
5. Cross-subsidies
   1. Sometimes, two goods influence one another even if they are consumed separately.
      1. For example, some online games are free to play but if you want more content, you have to pay. Since games where lots of people play are more fun, and thus you are willing to pay more to get the full experience.
   2. A *cross-subsidy* is a pricing strategy where profits from the sale of one product are used to subsidize sales of a related product
   3. Note this is different from tying, where consumers have to buy both products to get the price discrimination to work. Here, some consumers buy one product and other consumers buy the other.
      1. What makes this unique is that the more the cheaper product is bought, the more valuable the original product is.
   4. Note also that while these products are different, usually the subsidized product is just a slim-downed version of the more expensive product. In other words, the marginal costs of production are identical.
   5. By charging two different prices—and in doing so make one product more inelastic—cross-subsidy is a form of 3rd degree price discrimination.
6. Price matching[[1]](#footnote-1)
   1. Often companies will declare they will not be undersold and give discounts to anyone who proves otherwise. Why? Is it just a credibility thing?
   2. Maybe, but also bear in mind that if you are showing one store that another sells Pepsi for less, you are demonstrating that you are the type of consumer that shops around.
   3. *Price matching*, or a firm advertising that it will match any lower price offered by a competitor, is form of 3rd degree price discrimination. Only those sensitive enough to bother seeking out a lower price will get the discount.

1. Your textbook addresses price matching in a different way than I do, focusing on how it can lock firms together at an artificially high price since one firm lowering its price automatically triggers a price war. For various reasons, I find this claim dubious and instead focus on the price discrimination aspect of price matching. [↑](#footnote-ref-1)