

Competition Policy and Strategy

Assignment 12

Exercise 12.1 (3rd Degree Price Discrimination)

A firm produces a good at constant marginal cost of $c = 0$. The firm sells this good to customers in country A and customers in country B . In both markets, the firm is a monopolist. The demand functions are:

$$Q_A = a - P_A$$

$$Q_B = b - P_B.$$

It holds that $a > b$ and $a < 3b$. Assume for now that there are no fixed costs in production nor costs in transporting the good.

- a) Suppose that the monopolist can price discriminate. What prices will they set in country A and in country B ? What are the production quantities, profits and consumer surplus in both markets?
- b) Now assume that competition law prohibits the monopolist from this price discrimination, so that they must set the same price P in both countries. Determine the price that the firm will set. What are the quantities, profits, and consumer surpluses in this case? Evaluate the intervention from the point of view of consumers in country A and in country B .
- c) Show that in the case of the prohibition of price discrimination, market B is not served if the willingness to pay of consumers in country B is sufficiently small compared to that in country A .
- d) Assume the following values: $a = 40$, $b = 10$. Furthermore, costs of $F = 420$ are now incurred in production. Show that the company can profitably serve both markets if price discrimination is allowed. What will be the market outcome when price discrimination is prohibited? Give reasons for your answer.

Exercise 12.2 ((optional) Retroactive Rebates)

You may choose between (in your eyes) identical goods of two producers *A* and *B*. The producers produce these goods for 2 Euro per unit. For one unit of the good you pay 5 Euro at both producers. Manufacturer *A* also offers a retroactive quantity discount of 20% if you buy at least 50 units of the good.

- a) Determine the cost of goods from producers *A* and *B* for a number of 40, 49, and 50 pieces.
- b) Above what quantity will you definitely not switch to manufacturer *B*?
- c) Assume the following 4 situations: A customer has already purchased a quantity of 0, 40, 41, or 42 units of the good from company *A* and knows that a total of 50 units are to be purchased. Determine the effective price of a producer *B* that will cause the customer to purchase the remaining units of the good from producer *B*.
- d) What do you need to consider in order to determine the effective price at which a significant amount of customers switch? What economic conclusions can you draw from the level of this effective price with regard to the competitive effects of discounts?

Exercise 12.3 ((optional) Essential Facilities)

The publisher of the leading newspaper in a country has a nationwide distribution service which allows them to deliver their newspaper to subscribers every morning. Now a regional newspaper expands its portfolio to include nationwide news and, thus, plans to offer their newspaper nationwide as well. The publisher of the regional newspaper quickly realizes that nationwide distribution is very difficult without an established distribution service to the households. However, setting up such a distribution service is very costly and risky. Therefore, the publisher of the regional newspaper asks the publisher of the national newspaper if the latter would also deliver the regional newspaper in exchange for fair compensation. However, the publisher of the nationwide distributed newspaper refuses. Should a judge to whom this case is referred decide in favor of the regional newspaper or the nationally distributed newspaper?

Exercise 12.4 ((optional) Secondary Markets)

What is a secondary market? Should secondary markets be considered separately from primary markets when defining markets and determining market power? What criteria should be paid particular attention to here?

Exercise 12.5 ((optional) Selective Distribution)

The bicycle manufacturer “Red“ is the market leader in the British market with a market share of 60%. Two other bicycle manufacturers “Green“ and “Yellow“ have a market share of 15% and 10% respectively. The remaining 15% are distributed among a large number of small companies. “Red“ offers a wide range of models. The model “Red Star“ is their high-end product. This model is made with the best materials and includes all the relevant technical innovations in the bicycle market in recent years. Therefore, “Red Star“ is more than twice as expensive as average bikes. Further, it is offered for sale only in certain specialized stores. The supermarket chain “Everything“ repeatedly asks “Red“ to be allowed to distribute the model “Red Star“, especially since it already distributes the other models of this manufacturer. “Red“ refuses this request. “Everything“ asks the European Commission for an opinion, which finds a violation of Article 102 TFEU. “Red“ appeals this decision to the European Court of Justice. You are the economic expert of the court. Evaluate this case.