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PRICE DISCRIMINATION IN A FORM OF DISCOUNTS: CATEGORIZATION AND IMPACT ON COMPETITION

This paper is aimed to clarify the definition and categorization of discounts as well as pro- and anticompetitive effects of discounts. The author applied qualitative methods to the research. The modern literature review unfolds the gap of proper discounts definition, which is proposed to be covered by five-dimensions approach to discounts categorization. Based on such aspects of discount scheme as time, product, threshold, distribution level and customer, the approach provides comprehensive and uniform characteristics of discount. It allows assessing effects of competition, which are classified in two groups. Pro-competitive effects include stimulation of demand, decreasing cost due to economy of scale, solving coordination problems within a supply chain. Anti-competitive effects encompass predation scheme, raising rival's cost, exclusive dealing, leverage and exclusionary bundling. The importance of correct assessment of the discounts by antitrust authorities is high as an overenforcement in this sphere may lead to adverse effect on total welfare.

Keywords: competition, price discrimination, discounts, antitrust.

1. INTRODUCTION

Most probably discounts as trade practices were widely used long before the competition law and economics began to be studied at universities. As a form of a price cut, a discount is intuitively welcomed by every customer. Being consumers, we see discounts everywhere: from buying a last-minute travel offer for a sea-side tour, then using an airline loyalty card in hopes to save some money or get benefits in duty-free on board, to haggling over a price of souvenirs on a local market. Shopaholics know that discounts usually lead rather to higher spending than to saving, so there should be profits for sellers. Distributors and retailers teach their staff the art of negotiation to get better price conditions. It is remarkable that in fact each non-linear pricing scheme seems like a discount to one group/concrete customer, and like an additional surcharge to another group of customers (Financial Conduct Authority, 2016). Customers perceive discounts as fair and premium as unfair. Therefore, on consumer's level companies underline discounts rather than a surcharge in communication. On upper level "unfairness" leads to claims to competition authorities which consequently have to distinguish between protecting competitors and protecting competition.

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Indeed, the conditional pricing is common for many companies regardless the degree of market dominance across various markets and is usually is a sign of a competitive behavior.

2. LITERATURE REVIEW

In various sources discounts are defined differently. According to the European Commission, “discounts are generally offered on individual transactions, whereas rebates are normally deductions or cash payments made to a customer in accordance with the latter’s purchases over a period of time” (European Commission, 2008) and “Conditional rebates are rebates granted to customers to reward them for a particular form of purchasing behavior” (European Commission, 2009). In 2005 OFT defined a fidelity rebate as “one that either explicitly or implicitly makes discounts conditional on the share of a buyer's needs taken from a supplier.” (Office of Fair Trade, 2005). The later definition by OECD combines discounts and rebates: “Fidelity rebates or loyalty discount schemes (sometimes referred to as exclusivity rebate schemes) allow sellers to price discriminate and offer buyers a better price that is conditional on the buyer demonstrating loyalty in the purchases they make. They therefore involve a discriminatory price reduction for loyal customers or reflect the introduction of a price penalty for disloyal customers.” (OECD, 2016).

Despite a number of related economic papers, “The terminology for different types of conditional pricing practices remains unsettled and different terms are often used to describe schemes that reward some definition of loyalty” (OECD, 2016).

In fact, various definitions and classifications of discounts describe different dimensions of the same pricing scheme. Thus, multi-product discount with quantity threshold and retroactive effect, offered to one specific customer, may be called a retroactive rebate, bundling discount, loyalty rebate and targeted discount. Therefore, the article proposes to classify discounts from the viewpoint of five different dimensions (time, product, threshold, distribution level and customer) and further analyze possible effects on competition based on this classification (Ahlborn, Bailey, 2006; Wright, 2013)². Terms “discounts” and “rebates” are used interchangeably in the article in a meaning of various forms of non-linear pricing.

3. METHODOLOGY

This study used a qualitative research paradigm. The method used is a descriptive-qualitative analysis technique, aimed to illustrate the lack of proper definition and categorization of discounts in modern economic literature. The content analysis of literature, competition authorities’ decisions and respective court judgments was used to find similarities and propose the discounts categorization approach, as well as to systemize the pro- and anticompetitive effects of discounts on competition.

² Classification of discounts by three dimensions are used in J.D. Wright “Simple but Wrong or Complex but More Accurate? The Case for an Exclusive Dealing-Based Approach to Evaluating Loyalty Discounts.” Speech delivered at the Bates White 10th Annual Antitrust Conference, Washington, DC, on 3 June 2013 as well as by C. Ahlborn and D. Bailey, ‘Discounts and Selective Pricing by Dominant Firms: A Trans-Atlantic Comparison’, 2 *European Competition Journal* (2006) 101, 1004.

4. RESULTS AND DISCUSSION

4.1. Discounts categorization

The article proposes a 5-dimension approach to the discount categorization. An application of this approach provides a possibility to analyze and classify discounts in aspects of time, product, threshold, distribution level and customer.

4.2. Time dimension: incremental and retroactive rebates

From time perspective there are two types of discounts. Incremental one provides the lower price on each unit above the certain threshold without affecting prices below the threshold. The retroactive rebate (also called as all-unit or roll-back discount), is calculated on total quantity or volume of trade when the threshold is reached. While the latter is an attractive instrument for sales boosting, it may lead to very low or even negative prices for units over the certain level of sales. In case of application by dominant company it may result in excluding even as efficient competitor from competition for the buyer, especially when the threshold covers substantial part of the market. That's why competition agencies are usually concerned about roll-back rebates rather than about incremental.

Furthermore, some sources define the duration rebate as a specific type of discounts where the threshold is not the quantity or market share, but a certain period of purchases made from the discount granter. Such period often exceeds normal contractual term for the industry. Also, the pricing scheme may include tacit prolongation clause and provide for a penalty in case the threshold period is not reached (Autorité de la concurrence, 2018). Such practice is relevant rather for distributors than end consumers as customers and in certain extend has effect of "tying" to a specific supplier. However, we would consider the duration of a rebate and termination fee as an important factor to look at under discounts assessment, rather than as a separate discount type, because duration rebate can also be a single- or multiproduct, given exclusively to one or to all customers.

4.3. Product dimension: single- and multi-product discounts

At first glance this classification looks simply: it distinguishes between a rebate given on one product or a list of products, and both variants are common practice. As a rule, a bundled discount stands for a bundle of products which may not be sold as separate units. Yet, this dimension is important due to different possible effects on competition. The mix of unique and non-unique products within one bundle or a list of products may leverage supplier's market power in a competitive market. A bundled discount provides a buyer with lower prices for one or several products, in this way shifting a part of purchases from a competing supplier and gaining customer loyalty. As a result, the entry of a new supplier to the market can be constrained as well as existing rivals may be forced to exit (Greenlee, Reitman, Sibley, 2006). Nevertheless, multiproduct discounts are generally beneficial for customers as they may capture customer groups with different demand elasticity for concrete products in a bundle, hence output is increased and cost per unit respectively declines. Another positive effect is competition by bundles which fierce the race between suppliers.

There is a wide variety of discount scheme designs based on a product mix. For instance, in one of the Antimonopoly Committee of Ukraine cases (AMCU, 2017) sophisticated multiproduct rebates were considered anticompetitive, when discount amount was calculated as a percentage of sales of a variety of products with no or limited number of

substitutes but allocated to sales of a short list of products which have a lot of competitive products from rival suppliers. Subsequently, the margin for this short list of products became quite high, and distributors were interested to sell these products instead of rivals' products due to substantially higher profitability. If the access to distribution chain is important due to the market structure, such multiproduct discount may have potentially exclusion effect.

4.4. Threshold dimension: quantity, market-share and slot-share rebates

Commonly, the rebate percentage or absolute amount is set under a condition of reaching a certain threshold (mainly as discrete steps) – in quantity of products, volume of sales, market shares or share in total customer purchases or other KPIs like shelf space. This dimension collects such discount type “tags” as conditional rebates, conditional pricing practices etc.

Discounts with quantity threshold, named as a “quantity discount” offered to all customers as a set of prices depending on purchased quantity and given incrementally, do not usually rise competition concerns even if a supplier is dominant as they are grounded on the efficiency reached by higher sales volume. However, the same “quantity discount”, given retroactively with customer-specific steps would be defined as a “loyalty rebate” or “retroactive rebate” (Niels, Jenkins, Kavanagh, 2016) with high probability of anticompetitive effect. This example confirms that intersection of proposed dimensions provides more accurate characteristic of a discount than any other definition.

Rebates with market-share threshold (also called as “exclusivity”, or “fidelity” rebates) are focused not solely on sales volume, but a concrete share of sales of the customer from dominant supplier which are necessary to keep in order to get a rebate as a reward for the loyalty. Discounts with market-share threshold are treated suspicious by antitrust authorities due to the potential to foreclose smaller rivals or even withhold the economy of scale, with further harm for consumers' welfare (Majumdar, Shaffer, 2007). At the same time, the non-exclusionary rationale for market share thresholds as an increase of distribution channel efficiency (Mills, 2009) and rent extraction independent on effect on rivals are not considered anticompetitive by some sources.

4.5. Distribution level dimension: discounts offered to distributors, retailers and consumers

On a retail level discounts are given to end consumers for various reasons: to build loyalty, to attract new customers, to increase sales and even to get rid of old stock. There are various ways to offer discounts to end consumers – from loyalty cards to collection of stamps. Normally, rebates on a retail level do not concern competition authorities as they are aimed to fierce price and intra-brand competition and increase output. However, certain retail practices may have anticompetitive impact. For example, loyalty programs may increase switching costs and make a “but for” indifferent customer a brand-loyal, decreasing elasticity of demand and possibly leading to higher prices and lower consumer's welfare (Kobayashi, 2005). Another example is so-called EDLP pricing (Every Day Low Price), a discount given to customer who confirms lower rival price to certain list of products. In certain cases, such practice may lead to coordination between retailers and finally higher prices for pretended to be low prices product list (Corstjens, Corstjens, 2005). Co-brand loyalty programs between a retailer and gasoline station (discounts for products on adjacent

markets) or a bank (special offers for an interchange fee or customer credit options) may maintain market power. But as functional loyalty instruments may be replicated by rivals, such actions usually increase competition and lead to consumer benefits.

Discounts offered to wholesalers and retailers are aimed to increase sales volume, to prevent switching to another supplier and could make coordination between rivals more difficult. At the same time rebates on this level may have exclusionary character, prevent access to distribution chain and customers and passing the discount to consumers, soften competition. Due to the above-mentioned effects and usually substantial volume of sales, rebates offered to distributors and retailers are in focus of antitrust agencies.

4.6. Customer dimension: uniformed and individualized rebates

All the above-mentioned rebates may be granted to a specific customer with special conditions. Such discounts offered by a dominant firm may have an exclusivity rationale and possible foreclosing effect on rivals. Contrary to exclusivity rebates, the transparent discount policy or loyalty program, developed by supplier and available equally to all buyers, is generally treated as less risky from antitrust perspective.

It is worth mentioning that accumulation of various types of discounts within one agreement in a complex or non-transparent way may increase the probability of anticompetitive effects.

Taking into account the above-mentioned information about various dimensions and other factors to be considered in definition and analysis of the discount scheme in terms of competition, we see that such analysis cannot be carried out from legal perspective only and requires the economic expertise.

4.7. Five dimensions approach to discounts categorization

The abovementioned aspects of discount categorization are shown on the Fig. 1.

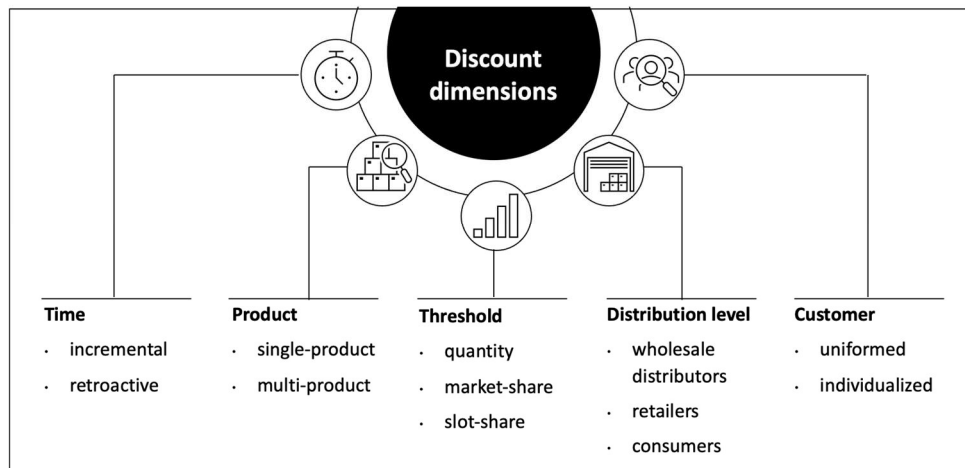


Figure 1. Five-dimensions approach to discounts categorization

Source: Author's work.

5. POSITIVE IMPACT OF DISCOUNTS ON COMPETITION

5.1. Discounts as a kind of price discrimination

Rebates as a price reduction instrument are generally beneficial to consumers. As a way of price discrimination, discounts may increase the output and therefore reduce unit cost and pass on economies of scale gains to customers. Discounts with volume thresholds are a common instrument of second degree price discrimination, providing self-selection options for customers (Ignatyuk, 2015). Rebates with individualized customer dimension may constitute a third degree price discrimination tool (Bishop, Walker, 2002). Rebates may optimize product pricing, enabling better price differentiation between customers and minimize double marginalization effect.

Discounts play an important role of price competition instrument and make collusion more difficult, notably when the total list price reduction is not profitable for a supplier.

In particular, bundled discounts are used as a price discrimination, however, the welfare effect of such practice is ambiguous (Motta, 2004) and depends on correlation with customer's preferences. In case of digital goods bundling may achieve an efficient allocation of products and benefit consumers (Jeon, Menicucci, 2009).

5.2. Stimulating demand discounts

Discounts may provide lower prices to customers with no experience of specific product consumption, thus stimulate demand, while allowing a seller to be profitable via discrimination of customers already familiar with a product. As a result, an output grows. Also, the value of some goods increases with more customers (network externalities) (Fletcher, Williams, Walker, 2016).

In addition, maximization of customer bargaining power due to discounts stimulates competition, too (Marvel, Yang, 2007).

Retro-active rebates with quantity threshold, fixed in contracts with big distributors, support the better production planning for supplier, thus contributing to better resources allocation.

5.3. Discounts as a way to solve coordination problems in the supply chain

Rebates may be used to align incentives between a buyer and supplier in order to solve a problem of moral hazard between producer, who is not able to track the distributor's actions, and the distributor (OECD, 2016).

Discounts are a convenient tool to prevent free-riding and hold-up problems, assuring the relationship-specific investments as well as top supply complementary services to consumers (Geradin, 2008).

5.4. Efficiency justifications

The abovementioned procompetitive effects of discount may be used as efficiency arguments by defendant. It should be noted that the main points of efficiency justification are the following:

- The case-specific and convincing evidence has to be provided by defendant to enable the evaluation of their actual extent;
- The efficiency gains can be achieved by application of discount scheme with the absence of less distortive alternative practice;

- The mere fact that a rebate is a common practice used by rivals is not sufficient justification associated with a competitive behavior, because the effect may vary upon market power degree (Autorité de la concurrence, 2018).

6. POSSIBLE NEGATIVE EFFECTS ON COMPETITION

Despite various positive effects which discounts as a form of price discrimination may cause on competition, under certain circumstances they may be used as an exclusionary power tool against competitors.

6.1. Loyalty discounts as predation

The predatory pricing is a costly and risky instrument to exclude rivals. First, it requires low pricing (usually below the cost) period in order to deter entry or force existing rivals to exit the market. On the second stage, when competitor is eliminated, the company recoups losses and enjoys additional profit increasing prices above the competitive level. The first period is beneficial for customers, the elimination of rival is not certain, the possibility that high prices on the second stage would attract new entries to the market is likely. This all makes an intervention of competition authorities difficult.

Discounts may also have a predatory pricing effect, but their application to selective customers or products may not require an overall profit sacrifice, thus, limiting the application of price-cost tests usually used to identify a predation behavior. When rebates are applied with a predatory intent, the profit sacrifice and recoupment may be done simultaneously across different customers and products range. Therefore, a price-cost test may be applied on a customer-by customer basis, or even to contestable units (Fumagalli, Motta, 2016). In practice such selective application is challenging due to assumptions of a contestable share and possible variation of a cost benchmark due to special conditions (e.g. logistics, packing etc.) between customers.

6.2. Analogy to exclusive dealing and raising rivals' cost

Rebates granted by a dominant firm may be aimed to induce a buyer not to buy from a rival supplier, as a result, having an exclusive dealing effect. Discounts with a retroactive time dimension and volume or market share thresholds reduce prices not only for incremental units, but also for all units purchased before, resulting in a so-called suction effect (European Commission, 2005). This effect means that a customer is motivated to obtain more of its incremental purchases from a specific supplier. Thereby, a contestable share of customer's purchases is decreased and the rival's access to customer is limited.

The rising rivals' cost paradigm (further – RRC) illustrates

the exclusionary conduct that totally or partially “forecloses” competitors from access either to critical inputs or customers, with the effect of causing them to raise their prices or reduce their output, thereby allowing the excluding firm to profit by setting a supracompetitive output price, with the effect of harming consumers (Salop, 2017).

In case of economy of scale, if a part of customers' sales is captured by discounts with market share thresholds, then rivals have to compete on a smaller market within a contestable share. Thus, fixed costs are spread within smaller sales quantity and average

costs may increase. So even an as efficient on the same sales volume competitor becomes less efficient on a remaining contestable share.

Apart from limiting the access to customers using rebates, a dominant firm may limit the access to the key input including raw materials, effective distribution channels or intellectual property (OECD, 2016). For instance, a recent decision of the Antimonopoly Committee of Ukraine describes how a discount scheme may soften competition with generic products by affecting the key distribution channels and, correspondingly, the access to customers (AMCU, 2017). If recipients of discounts are intermediaries within the exclusive dealing paradigm, then such discounts may “bribe” distributors to accept the exclusive dealing agreements (Federico, 2011).

The RRC foreclosure paradigm is more likely to be applied and affect customers than predatory pricing as RRC does not require a risky profit sacrifice before the possible recoupment. Moreover, under RRC conduct the foreclosure of a rival is not needed, because its rising cost is sufficient to stimulate higher prices and/or lower output.

However, under assumption of symmetrical firms, de-facto exclusive contracts may shift competition to the utility-space dimension where the products are homogeneous irrespective of their actual product differentiation. As companies would have an incentive to compete with exclusive contracts, this would lead to stronger competition and welfare increase. Notwithstanding, using the discounts with market share threshold for exclusivity purposes may lead to higher prices as they “penalize” competitors (Calzolari, Denicolo, 2009).

Yet, if firms are not symmetrical, the same practices applied by a dominant firm would lead to competition concern. As long as in real life firms are rather asymmetrical, the exclusive dealing paradigm of discounts is worth attention of competition authorities.

6.3. Tying and exclusionary bundling³

The characterization of anticompetitive effects caused by a bundled discount such as tying or exclusive dealing indicates that these two types of distribution restraint are closely related from an economic perspective (Gavil, Kovacic, Baker, Wright, 2017). In a bundle the product over which the company enjoys a market power is called a “linking” product and the rest are “linked” products. Thus, a bundle allows a company to extend its market power to otherwise competitive market for a linked product. If the unbundled price of a linked product is higher than its but-for price, then discounts have a tying effect. Profit-maximizing bundles reduce consumer welfare when the linked product market is competitive (Greenlee, Reitman, Sibley, 2006). If a buyer has to reach certain threshold to get a bundled discount, then such a discount would have a loyalty enhancing and exclusionary effect. As a consequence, competitors may be foreclosed (Geradin, Elhauge, 2011).

Multi-product rebates may be designed in a way to push a customer to buy the whole range of products, thus, having a tying or full-line forcing effect (Motta, 2004). In addition, bundled discounts may restrict a customer’s choice between tied and separate prices.

Considering that most of the described negative effects have nothing to do with pricing below cost, the application of a standard price-cost test may fail to identify a potential harm to competition.

³ Bundling discounts under certain circumstances may cause an exclusionary effect in a competitor foreclosure.

6.4. Rebates as an anti-competitive leverage

Although it sounds counterintuitive, in some cases discounts can maintain high prices. For example, if a company would like to divide the market and charge higher prices for loyal customers and thus avoid price reduction to compete for all customers including disloyal ones, it may offer discounts for the first customers group. Respectively, the price cut necessary for competition for a disloyal customer would require also an additional price cut for a loyal customer, especially, if the rebate is calculated from the list price for all customers. Hence, an incentive to compete for a disloyal customer is reduced and the market split between sellers is appealing. Under this scenario, the discount scheme may have a most-favoured-nation element (OECD, 2016). In contrary to overall low pricing, in application of discount scheme an efficient rival may have low incentive to cut prices to compete for free buyers, even if prices are above costs (Geradin, Elhauge, 2011).

Discounts may soften the interbrand competition due to uncertainty of buyers regarding the level of the final prices in the end of a reference period. Switching costs increase and a «penalty» for a lost discount in case of selecting another supplier may lead to higher prices (Faella, 2008).

6.5. Variety of effects on competition caused by discounts

The abovementioned impact of discount schemes on competition is summarized on Fig. 2.

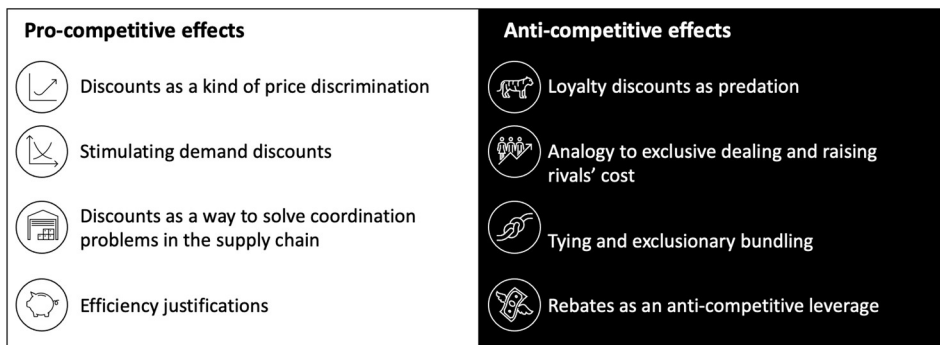


Figure 2. Effects of discounts on competition

Source: Author's work.

In practice the evaluation of pro- and anticompetitive effect on competition is not that black and white. Multiple effects of discounts require proper economic instruments to distinguish between negative and positive impact by competition practitioners.

7. CONCLUSION

In order to close the gap of clear definition of discount types in modern literature, the article proposes the holistic approach to the rebate scheme analysis based on five aspects such as time, product, threshold, distribution level and customer. The benefit of the proposed five-dimensions approach to the discount categorization is the uniform analysis of the discount design, applicable to various discount schemes, which provides clear criteria of discounts comparability and a basis for a competition effects evaluation. The limitation

lays in the necessity to have all information relevant to define 5 dimensions of the rebate scheme.

As a form of price discrimination, application of discounts may stimulate demand, decrease cost due to economy of scale, solve coordination problems within a supply chain. Still, under certain circumstances discounts may be used as a predation scheme, raised rival's costs, act as an exclusive dealing, leverage market power via exclusionary bundling.

Despite the possibility of using the rebates scheme as an exclusionary power tool against competitors, the over-enforcement of price discrimination in form of discounts by competition authorities may have even more harmful effect on total welfare. It may stimulate the non-dominant firms to avoid discounting practices and eliminate procompetitive effects of price discrimination. Therefore, respective economic instruments and transparent approach to price discrimination are required in modern competition authorities' toolkit.

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