IESE Business School
University of Navarra
SP-SP

Occasional Paper
OP-186
February, 2011

THE ANTITRUST TREATMENT OF LOYALTY DISCOUNTS IN EUROPE: TOWARDS A MORE ECONOMIC APPROACH

Giulio Federico

IESE Occasional Papers seek to present topics of general interest to a wide audience.

IESE Business School – University of Navarra
Av. Pearson, 21 – 08034 Barcelona, Spain. Phone: (+34) 93 253 42 00 Fax: (+34) 93 253 43 43
Camino del Cerro del Águila, 3 (Ctra. de Castilla, km 5,180) – 28023 Madrid, Spain. Phone: (+34) 91 357 08 09 Fax: (+34) 91 357 29 13

The Public-Private Sector Research Center is a Research Center based at IESE Business School. Its mission is to develop research that analyses the relationships between the private and public sectors primarily in the following areas: regulation and competition, innovation, regional economy and industrial politics and health economics.

Research results are disseminated through publications, conferences and colloquia. These activities are aimed to foster cooperation between the private sector and public administrations, as well as the exchange of ideas and initiatives.

The sponsors of the SP-SP Center are the following:

- Accenture
- Ajuntament de Barcelona
- Caixa Manresa
- Cambra Oficial de Comerç, Indústria i Navegació de Barcelona
- Departament d' Economia i Coneixement de la Generalitat de Catalunya
- Departament d' Empresa i Ocupació de la Generalitat de Catalunya
- Diputació de Barcelona
- Endesa
- FOBSIC
- Fundació AGBAR
- Institut Català de les Indústries Culturals
- Mediapro
- Sanofi Aventis
- ATM, FGC y TMB

The contents of this publication reflect the conclusions and findings of the individual authors, and not the opinions of the Center's sponsors.

THE ANTITRUST TREATMENT OF LOYALTY DISCOUNTS IN EUROPE: TOWARDS A MORE ECONOMIC APPROACH

Giulio Federico[1]

Abstract

The European Commission's recent Guidance Paper on exclusionary abuse represents a first step towards the adoption of a more economic approach to the evaluation of loyalty discounts. The price-cost test suggested in the Guidance Paper is a coherent economic method of establishing whether a loyalty discount might be able to foreclose efficient rivals, but it raises some practical difficulties which need to be taken into account. Moreover, the theories of consumer harm applicable to loyalty rebates need to be explicitly articulated and verified against the characteristics of the market in question in order to fully embrace an economically sound approach to loyalty discounts. Whilst it is possible to apply non-predatory theories of harm to loyalty rebates, these require specific conditions to be present, and do not follow automatically from the application of retroactive discounts by a dominant firm.

Keywords: loyalty discounts, rebates, foreclosure, predation.

Note: Public-Private Sector Research Center (IESE Business School), Charles River Associates (CRA), and Barcelona Graduate School of Economics. I am grateful to Ugur Akgun, Geoff Edwards, Massimo Motta, and Bob Stillman for helpful comments on an earlier draft of this paper. I also acknowledge financial support from the Spanish Ministry of Science and Technology under ECO2008-05155/ECON. The views expressed in this paper represent those of the author only, and do not necessarily reflect the opinions of the institutions to which I am affiliated or of CRA's clients.

[1] Researcher, Public-Private Sector Research Center, IESE

THE ANTITRUST TREATMENT OF LOYALTY DISCOUNTS IN EUROPE: TOWARDS A MORE ECONOMIC APPROACH

Introduction

The antitrust treatment of loyalty discounts remains a highly topical debate in European competition policy. The European Commission has started to move towards a more economic approach to the evaluation of loyalty discounts (or rebates) with the publication of its Guidance Paper on exclusionary abuse in February 2009.[1] Part of the framework put forward in the Guidance Paper was then applied extensively in the decision on *Intel* in May of the same year.[2] Whilst these developments signal a shift away from the previous form-based treatment to rebates, the General Court's judgment in *Tomra* of September 2010 has reaffirmed elements of the traditional approach.[3] Moreover, the economic theory of anti-competitive leverage and consumer harm put forward by the Commission in its Guidance Paper and in *Intel* was not clearly articulated. As this paper argues, in order for the current shift towards a more economic approach on rebates to be more effective and complete, the theory or theories of consumer harm applicable to loyalty rebates need to be spelt out explicitly, and verified against the characteristics of the market in question on a case-by-case basis.

Contract Design and Foreclosure

The traditional analysis of the anti-competitive nature of loyalty discounts has been highly form-based.[4] This approach has focused on the contractual design of these discounts, which entails the payment by a dominant firm of a discount on all the purchases made by a buyer if a particular volume or market share target is met. The so-called retroactive (or retrospective) nature of loyalty rebates leads to the presence of very low (or even negative) prices on the some

[1] Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings, 2009/C 45/02, 24 February 2009.

[2] Case COMP/C-3/37.990 – Intel, Commission Decision of 13 May 2009.

[3] Tomra v Commission, T-155/06, Judgment of the General Court of 9 September 2010.

[4] Throughout this paper I use the term "loyalty discount" to refer to a discount scheme with a retroactive structure (as explained in the main text).

of the sales made by the dominant firm. In particular, effective incremental prices are very low on the purchases which trigger the payment of the rebate by the dominant firm, making it very attractive for the buyer to procure these sales from the incumbent firm.

A form-based approach to loyalty discounts interprets the presence of low incremental prices as a source of competition concern *per se*, due to their alleged loyalty-inducing nature. For example, in the *British Airways* case (which concerned commission rates paid to travel agents), the Commission computed that, due to the retrospective nature of the scheme, the dominant airline was paying on some tickets an incremental commission rate of over 17%, but an average commission of just above 7%.[5] It argued that this put smaller airlines at a competitive disadvantage. Both the Court of First Instance and the European Court of Justice subsequently confirmed that the high marginal commissions paid by British Airways led to fidelity-building effects, and were therefore judged to be anti-competitive.[6] Similarly (and more recently), in *Tomra*, the General Court found that the use of retroactive rebates by a dominant firm makes the "*competitor's average price structurally unattractive*" (paragraph 270), making it harder for a rival to compete.

The insight that the form of a given conduct can have a significant impact on its effects in the market place is correct. Economic contract theory suggests that discounts that are both individualized and retrospective can give rise to strong incentives for buyers to procure from a dominant seller. They can also make it cheaper for the dominant firm to obtain loyalty from buyers, by targeting the marginal purchasing decisions of each customer.

However, the form of a given contract structure is typically not sufficient to conclude that it is likely to lead to anti-competitive effects. A coherent economic evaluation of the likely effects of a loyalty discount scheme should contain two additional elements: i) economic evidence that efficient rivals to the dominant firm are not able to match the discounts offered to buyers, and ii) a coherent theory of how the exclusion of rivals can result in consumer harm (even if actual adverse effects on consumers might be difficult to identify or have not materialized yet).

As the next section of this article reviews, the Commission's Guidance Paper of 2009 represents a considerable step forward relative to past practice with respect to the first leg of the economic test for anti-competitive rebates suggested above. It is, however, still lacking on the second part (as the recent decision on *Intel* also illustrates).

The Test Proposed in the Commission's Guidance Paper

The Commission's Guidance Paper rejects the suggestion that the presence of very low prices on a small subset of volumes sold in the market may be enough to conclude that a loyalty discount structure is likely to lead to foreclosure and consumer harm. At paragraph 40, the Paper states that: "*The potential foreclosing effect of retroactive rebates is in principle* ***strongest on the last purchased unit of the product*** *before the threshold is exceeded. However, what is relevant for an assessment of the loyalty enhancing effect of a rebate is the* ***foreclosing effect of the rebate system on competitors***" (my emphasis).

---

[5] Case IV/D-2/34.780 – Virgin/British Airways, Commission Decision of 14 July 1999 (see paragraph 30 in particular).

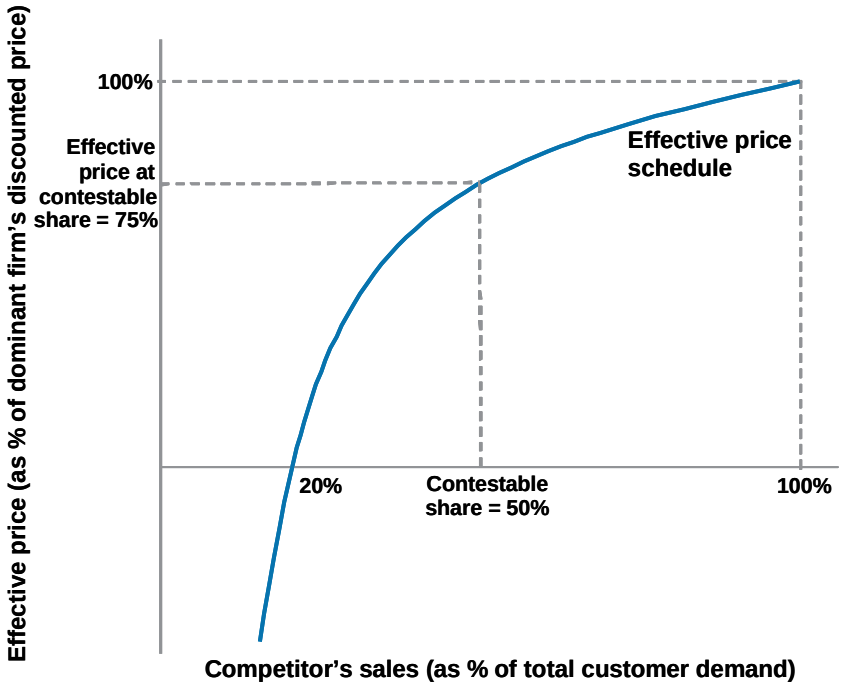
[6] British Airways v Commission, T-219/99, Judgment of the Court of First Instance of 17 December 2003 (see paragraphs 272-273 in particular); and British Airways v Commission, C-95/04 P, Judgment of the Court of Justice of 15 March 2007 (see paragraph 96-98 in particular).

The Commission is therefore indicating in its guidelines that the overall effect of a rebate structure needs to be assessed before reaching the conclusion that it may lead to anti-competitive foreclosure. To perform this assessment, the Commission develops a price-cost test. In the presence of an individualized rebate structure, the test assumes that the demand of a given customer will approximate the volume target contained in the rebate (see paragraph 45 of the Guidance Paper). For a given retroactive discount structure, it is then possible to compute the effective average price that a rival would need to offer to the buyer on its sales in order to compensate it for the loss of the rebate (which is triggered as soon as one unit of output is bought from the competitor, for a fixed level of demand). This effective price rises with the volumes sold by the rival firm, since the retroactive rebate lost by the customer is spread over a greater number of units. It is possible therefore to construct an effective price schedule, corresponding to different volumes of sales made by the competitor.

Figure 1 below plots this schedule, showing the level of sales made by the competitor (as a percentage of the customer's total demand), and the effective price corresponding to these sales that a rival needs to offer to match the economic conditions of the dominant firm. The latter is expressed as a percentage of the discounted price offered by the dominant firm if the buyer does not switch any of its purchases to the rival (i.e., this price equals the list price minus the percentage retroactive rebate).

Figure 1

The effective price schedule with retroactive rebates



Note: the example shown in the figure assumes a retroactive rebate of 20%.

The test suggested in the Guidance Paper uses, from the effective price schedule, the point corresponding to the volume of sales that the smaller rival is assumed to be able to compete for

(the so-called "contestable share").[7] In the example plotted in Figure 1, the contestable share equals half of the customer's requirements, and the retroactive rebate paid by the dominant firm is set at 20% of the list price. This means that the effective price that a rival needs to offer to be competitive equals three quarters (75%) of the dominant firm's average discounted price (which in this case is equivalent to a 40% discount off the list price). The rival firm therefore needs to offer a larger average rebate relative to the dominant incumbent (i.e., 40% rather than 20%), in order to compensate for its smaller size.

More generally, denoting the dominant's list price as p^L, the percentage retroactive rebate off the list price as R, and the contestable share as X, then the effective price (p^E) is given by the following expression:

$$p^E = p^L\left(1-\frac{R}{X}\right)$$

As the above formula illustrates, the effective price equals 0 (i.e., making it impossible for a rival to make sales profitably) if the contestable share X equals the percentage retroactive rebate R. In this case, the effective price is given by the point where the schedule crosses the horizontal axis in Figure 1. For values of X greater than R, the effective price is positive. If the rival can compete equally with the incumbent firm for 100% of the requirements of a customer (i.e., $X = 1$, implying that the incumbent does not benefit from any "must-have" sales), then the price that the rival needs to offer to be competitive is the same as the discounted price offered by the dominant undertaking. In this latter case, loyalty rebates do not distort competition, relative to alternative pricing structures (e.g., incremental discounts).

According to the Guidance Paper, if the effective price corresponding to the contestable share is above a measure of the dominant firm's costs (either Average Avoidable Cost (AAC) or Long-Run Average Incremental Cost (LRAIC)) then the rebate is not capable of having an exclusionary effect (see paragraphs 43-44). Otherwise it may lead to anti-competitive foreclosure. The logic of using the dominant firm's own cost (rather than the rival's) is that the test aims to protect only competitors that are as cost-efficient as the dominant undertaking, in order to maintain productive efficiency.

The approach embodied by the price-cost test contained in the Guidance Paper is consistent with an effects-based treatment of rebates in the sense that it does not simply assume that a rebate scheme would prevent a smaller rival from competing for a customer by virtue of the presence of a retroactive structure. Instead, it tests whether a given rebate structure is capable of having a foreclosure effect, on the basis of parameters which can be assessed empirically (in particular, the size of the retroactive discount, the cost of the dominant firm, and the contestable share available to a competitor).

Whilst the test described in the Guidance Paper is sensible, care should be taken when using the test in practice, for the reasons described in the next section of this article. Moreover, it should only be seen as a first screen for a finding of abuse, but not as a sufficient condition, for the considerations developed in Section 5.

[7] The contestable share is typically assumed to be below 100% if the rival is capacity-constrained or the dominant firm benefits from some "must-stock" sales.

Applying the Price-Cost Test in Practice

Employing the test put forward in the Guidance Paper in practice raises a number of issues (some of which were evident in *Intel*, where the Commission used the test for the first time). We consider three practical difficulties:

1. Risk of False Positives and False Negatives

One difficulty raised by the suggested test is that the level of contestable share to be assigned to a rival is not always an easily observable variable. This, coupled with the fact that the effective price computed under the test is highly sensitive to the assumed level of contestable share, creates a significant risk of mistaken conclusions in the application of the test (both false positive and false negatives).

The contestable share is a particularly critical variable in the application of the test because, for low values of this parameter (which is typically the empirically more relevant case in dominance abuse cases), the effective price schedule can be very steep. Algebraically, the effective price schedule shown in Figure 1 (where the effective price is expressed as a percentage of the discounted price offered by the dominant firm) is steep (i.e., its slope is more than 1) if the following condition holds:

$$X < \sqrt{\frac{R}{1-R}}$$

For example, if the rebate R equals 20%, then the effective price schedule is steep for a contestable share X less than 50%.

This means that a small reduction in the contestable share requires a much larger reduction in costs (for a given percentage discount) in order to "pass the test". For example, if the rebate offered by the dominant firm is 20%, then a reduction of the contestable share from ⅓ to ¼ of total demand (i.e., a relative reduction of 25%), leads to a corresponding fall in the effective price from ½ of the discounted price offered by the dominant firm to ¼ (i.e., a proportional fall of 50%). This means that, whilst a cost level equal to 50% of the discounted price offered by the dominant firm would be sufficiently low to "pass" the test at a contestable share of ⅓, costs would need to be significantly lower at the lower contestable share of ¼ in order not to fail the test.

The sensitivity of the test to a variable that is not always easy to measure suggests that the price-cost test needs to be used cautiously in dominance abuse investigations, and should not be the main or sole piece of empirical evidence used to make a finding of infringement. Alternative forms of evidence to be considered could include proof of actual foreclosure effects on rival firms or evidence that efficient rivals sought to match the discounts offered by the dominant firm but were unable to do so profitably.

2. KEY Buyers and the Correct Assessment of the Relevant Time Horizon

Another issue that concerns the measurement of the contestable share relates to the time horizon over which one should assume that a buyer is able to switch some of its purchases away from the dominant firm and towards a smaller rival. In general, the longer this time horizon, the higher the assumed contestable share.

The determination of the appropriate time horizon is related to the nature of the buyers targeted by the discounts. A discount scheme is more problematic if it has a high degree of coverage (so that it deprives a rival of sufficient scale to be competitive) and/or if it targets particularly strategic buyers whose purchases could "legitimize" an entrant in the overall market (thereby leading to follow-on sales with other buyers). If the latter is the case, then a small rival would presumably face incentives to compete aggressively for strategic buyers. In the context of the Guidance Paper's price-cost test, this means that it would be appropriate to use a longer time horizon in the computation of the contestable share. This would recognize the fact that the rival has an incentive to wait longer before recovering the investment made in capturing a strategic buyer from the dominant firm. In other words, failure to pass the test in short-run (e.g., in the first year of contracting) would not mean that anti-competitive effects will necessarily follow, given that the rival may be able to recoup any losses in the relatively near future and/or across other buyers through a "market legitimization" effect.

The relationship between the type of buyers targeted with the rebates and the appropriate time horizon for the application of the test is not explicitly recognized in the Guidance Paper, and nor was it taken into account by the Commission in *Intel*. In *Intel*, the Commission argued at the same time that the retailers targeted by Intel were strategic and could have legitimized its rival AMD (see paragraphs 1584-1592 of the decision), and that a short time horizon of a year or less was appropriate in the computation of contestable share (see paragraphs 1012-1014 of the decision).

3. The Treatment of Demand Not Included Within the Discount Target

The third difficulty associated with the price-cost is the treatment of sales whose effective price is not affected by the retroactive structure of the rebate, either because the rival firm has access to non-contestable sales which are not included in the scheme, or because the sales target set in the scheme is below the total demand of a customer.[8] The Guidance Paper proposes dealing with non-contestable volumes available to a rival firm through the choice of the appropriate cost benchmark to be used in the test (as explained below). The same approach can be extended to levels of demand that lie above the sales target contained in a loyalty discount scheme.[9]

The Guidance Paper considers that an effective price below AAC is a *sufficient* condition for the possibility of anti-competitive foreclosure. If the effective price is above AAC, but below LRAIC (which requires fixed-cost recovery as well) then the Commission recommends looking also at other volumes potentially available to a rival, including those that are not covered by the scheme (see in particular paragraph 44).[10]

Care should be taken when adopting this approach in order not to reach counter-intuitive conclusions. For example, consider two potential rebate structures that a dominant firm may offer: one under which a retroactive rebate is payable if a 90% share of demand is achieved (and no discount is offered on the residual 10% of demand), and an alternative one where a rebate is offered on 100% loyalty. The second structure would typically be seen as more exclusionary since

---

[8] Competition for demand that lies above the volume target is not affected by the retroactive structure of the rebate, since the customer would not lose the retroactive lump-sum rebate offered by the dominant firm if it were to switch these volumes to a rival firm.

[9] The treatment of loyalty discounts in cases where customer demand lies above the discount targets was an issue in Tomra (see, e.g., the General Court judgment at paragraphs 85, and G. Federico, "When are rebates exclusionary?" European Competition Law Review, 26(9), 2005).

[10] In Intel, however, the Commission only relied on the AAC version of the test.

it rewards *de facto* exclusivity. If the same total contestable share is attributed to a rival (say, 20% of demand), then one possible interpretation of the test is that it should be assumed that the rival's incremental volumes covered by the rebate scheme under the first structure are *lower* than those under the second structure.[11] This is because, under the first structure, of the total volumes that the rival can contest only half (10% of total demand) would fall under the rebate scheme, with the other 10% of demand not affected by the rebate. With the second scheme, the rival would be in a situation where all of its contestable volumes (20% of demand) are covered by the rebate scheme. This difference in the levels of contestable sales under each rebate structure will lead to the computation of a *lower* effective price under the first scheme, and therefore a greater likelihood that it will fall below AAC. However, the rival is likely to earn greater profits under the first structure than under the second, and, as a result, the actual risk of foreclosure (e.g., through failure to recover the fixed costs of operation and/or entry) would be lower.

To see this possibility more concretely, consider the following numerical example. Assume that the dominant firm offers a 10% retroactive rebate off a list price of €100 in return for 90% loyalty (with no discount offered on the remaining 10% of demand), or for 100% loyalty. Assume also that total customer demand is 100 units. If the contestable volumes attributed to an entrant are equal to 20% of demand (i.e., 20 units), then under the first case (90% loyalty) a rival can only sell 10 incremental units under rebate structure (with the other 10 not subject to the rebate). The effective price at the contestable share is therefore €10 (i.e., the list price of €100 minus the rebate (€10*90=€900) spread over 10 units). Under the second structure, the incremental volume is 20 units, and the effective price is equal to €50 (i.e., the list price of €100 minus the rebate (€10*100=€1,000) spread over 20 units). If AAC is equal to €20, then the first structure would fail the test, but the second one would not. However, the rival actually makes more profit under the first scheme, either by just selling 10 units at the list price (in which case its profit is equal to €800), or by competing for all its contestable volumes in spite of the presence of the rebate (in which case it makes a profit of €700). Under the second structure, the rival can at most make profits of €600. The recovery of fixed and/or entry costs is therefore harder under the second than the first structure, and overall foreclosure is, in turn, more likely.

This example shows that it is important to apply the price-cost test carefully, in particular by checking whether a smaller rival may be able to recover its LRAIC on volumes not affected by the retroactive structure of the rebate, even if it might be prevented from profitably selling incremental volumes due to the discount scheme. If this is the case, foreclosure is unlikely to be a significant competition concern.

Which Theory of Consumer Harm: Predation versus Leverage?

Failure to pass the price-cost test proposed in the Commission's Guidance Paper does not automatically mean that consumers will be harmed as a result. A coherent theory of consumer harm is required before reaching such a conclusion. Such a theory should be based on sound economic principles and corroborating evidence from the market. In particular, the theory

[11] A situation of this type was relevant in Intel, for the case of the rebates paid to HP (see paragraph 1349 of the Intel decision). Intel offered rebates to HP if it sourced 95% of its requirements from it, leaving 5% of its demand unaffected by the retroactive discount structure. When applying the test, the Commission appears to have subtracted the 5% share from the contestable share attributed to Intel's rival (AMD), thus effectively applying a more stringent test than the one applicable in cases with 100% loyalty discounts.

should be consistent with some of the salient characteristics of the market, and it should be supported by evidence on the actual effects of the conduct (e.g., foreclosure of rivals) if such evidence is available.

There are two leading candidates for the theory of consumer harm that can be applied to anti-competitive loyalty rebates: a dynamic predatory theory, and a static theory (or set of theories) based on "leverage" by the dominant firm:

1. Loyalty Discounts as Predation "In Disguise"

Predation is, in many ways, a natural candidate theory of harm for loyalty discounts. A predatory theory of harm posits that a dominant firm prices below cost in the short-run in order to induce the exit or marginalization of a rival competitor. According to this theory, the resulting harm to competitors allows the dominant firm to raise prices in the future, thus also injuring consumers (assuming the presence of barriers to re-entry or to expansion by rival firms once prices go up). This theory of harm is dynamic, in the sense that consumers are better off and the dominant firm is worse off (i.e., it incurs a profit sacrifice) in the short-run, but in the medium-run the converse is the case. The conditions identified in the economic literature for a predatory theory to hold are explicitly identified in the Commission's Guidance Paper (in its specific discussion of predation at Section IV.C, in particular at paragraph 68). These conditions include the presence of uncertainty of the dominant firm's costs (which can induce a firm to signal the existence of low costs through low prices), the possibility of the predator establishing a reputation for aggressive behavior (which may benefit a dominant operator across multiple markets), and financing constraints on the prey.

A retroactive rebate can be interpreted as the application of predatory pricing "in disguise". That is, the retroactive structure hides the existence of very low prices on contestable volumes by the application of the discount on all of the volumes sold by the dominant firm (including non-contestable or infra-marginal volumes). In reality however, if the dominant firm truly has some non-contestable sales, it faces no incentives to discount these volumes below the monopoly price. The loyalty rebate can therefore be correctly reinterpreted as a two-part pricing structure: a monopoly price on non-contestable sales; and a potentially much lower effective price on the contestable sales. The latter is computed by applying the entire retroactive discount only on the contestable units. It is therefore exactly the same as the effective price that is computed in the test suggested in the Guidance Paper. If this effective price is below cost, then it can be seen as predatory and it may result in consumer harm in the future (through the mechanism and under the conditions outlined above).

2. Rebates as Anti-Competitive Leverage

Whilst a predatory theory of harm can be easily applied to loyalty discounts, the Guidance Paper does not actually interpret rebates as a form of predatory pricing. The non-predatory interpretation of rebates has been reinforced both by the decision in *Intel* and by the General Court's judgment in *Tomra*. For example, the Guidance Paper states that, unlike predation, rebates can foreclose without "*necessarily entailing a sacrifice for the dominant undertaking*" (paragraph 37). This statement is endorsed by the General Court in *Tomra*, which states: "*the exclusionary mechanism represented by retroactive rebates does not require the dominant undertaking to sacrifice profits, since the cost of the rebate is spread across a large number of units. If retroactive rebates are given, the average price obtained by the dominant undertaking may well be far above cost and ensure a high average profit margin*" (paragraph 267).

The corollary of the rejection of a predatory theory of rebates is the argument adopted by both the Commission in *Intel* and by the Court in *Tomra* that rebates can harm consumers in the short-run (and not only in the future, as under a standard predatory mechanism). For example, in *Intel* the Commission argued that "[...] *the fact that a "rebate" can be leveraged by the dominant company from its non-contestable share into the contestable share may allow that company to foreclose* [...] *rivals, even if its overall average price is higher than that of its rivals. This is therefore* ***to the detriment of consumers and competition both in the short and in the long term***" (paragraph 1612, my emphasis). Similarly, in *Tomra* the Court held that "*customers on the foreclosed part of the market should have the opportunity to benefit from whatever degree of competition is possible on the market*" (paragraph 241), effectively arguing that these customers were being harmed in the short-run by virtue of accepting the rebates offered by the dominant undertaking.

The Commission and the Court are relying on an alleged "leverage" of the non-contestable volumes available to the dominant firm into the contestable part of the market in order to argue that exclusion can take place (through low *incremental* prices), in concurrence with consumer harm and no-profit-sacrifice (through high *average* prices). However, without further assumptions on the structure of competition and the precise foreclosure mechanism at work, this alleged leverage effect does not arise. The application of a rebate by the dominant firm across both monopoly and contestable volumes does not imply that offering the discount is profit-increasing, and that consumers are harmed. As noted above, a retroactive rebate structure can be naturally (and correctly) de-composed as a monopoly price on the non-contestable volumes and a low price on the contestable volumes. If the latter is below cost (and thus capable of foreclosing a rival), this means that the dominant firm is sacrificing profits on these sales and that consumers are better off (relative to a situation without the rebate).[12]

Moreover, the profit sacrifice that the dominant firm needs to incur at the margin is exactly the same as the one that an equally-efficient rival (with the same constant variable cost) faces for competing for those same marginal units. The fact that the dominant firm can express a predatory discount at the margin as a (lower) discount on all of its units does not give it an advantage relative to a smaller rival that can sell fewer units, and it is not a source of economic leverage *per se*. A richer theory of foreclosure is required for this conclusion to hold.

Modern economic theory provides models of foreclosure whereby a dominant firm can profitably exclude a rival at the same time as harming consumers in the short-run. In order to adopt a coherent economic approach to rebates, these theories must be spelt out and verified empirically.

I briefly review three possible theories of static foreclosure which might support the position on rebates that was put forward by the Commission's Guidance Paper (and was then relied upon more explicitly in *Intel*).

- **Exclusive dealing with final consumers.** The first such theory interprets rebates as a form of obtaining de facto exclusive purchasing from a buyer.[13] Exclusive dealing can be anti-competitive in the presence of a clear incumbency advantage in favor of the

[12] The absence of an automatic leverage effect can be thought of as an application of the "one monopoly profit" critique: if a firm enjoys a monopoly profit on some non-contestable sales, it cannot automatically extend this monopoly power to other sales or markets, in the absence of specific conditions that enable a leverage effect.

[13] The Guidance Paper in fact treats conditional rebates as a form of exclusive dealing (in Section IV.A of the paper), but does not explicitly apply to rebates the conditions that are identified for anti-competitive exclusive purchasing at paragraphs 33-36.

dominant firm, implying that a rival is not able to respond to the contractual offers made by the incumbent (i.e., the assumption is that buyers need to accept or reject the offer of the dominant firm before the rival can make a counter-offer). A situation of this type can result in both foreclosure and consumer harm if buyers fail to coordinate, and sign the exclusive deals with the incumbent, thus depriving a rival of the scale required to enter successfully.[14] A loyalty discount can be interpreted as an exclusive deal if the implied discount at the margin prevents a rival from profitably inducing a buyer from successfully switching any of its purchases away from the dominant firm if entry were to occur (which is the condition verified by the test put forward in the Guidance Paper). However, in order for the exclusive dealing story to hold, one also needs the other elements of this theory to apply (most notably, a clear first-mover advantage for the dominant firm, sustained over time; high market coverage of the conduct; and the risk of coordination failures between buyers).

- **"Bribing" intermediaries.** The exclusive dealing theory summarized above changes if the recipients of the rebates are intermediaries (who then compete with each other), rather than final buyers. Intense competition between buyers may worsen exclusionary effects if it makes it easier for the upstream dominant firm to "bribe" buyers to accept an exclusive deal (since, in the absence of the deal, buyers are earning limited profits in any event).[15] On the other hand, sufficiently intense competition between buyers may also enable purchasers which procure from a more efficient entrant to expand their sales by undercutting their rivals.[16] This second effect can make exclusion harder, by allowing an entrant to recover its fixed cost of entry by serving only one large buyer.[17] The possibility that a rebate paid to intermediaries leads to foreclosure and can result in immediate consumer harm is also greater if the intermediaries do not set final prices and simply "pocket" the rebate. The latter situation can apply to a market such as the one considered in *British Airways* (where the retroactive payment was made to travel agents, who do not set fares but can instead influence the choices made by passengers[18]), but is not easily translated to a case such as *Intel*, where the buyers of Intel's input had the possibility and presumably also the incentive to pass on the discount to their consumers.

- **Exclusionary bundling.** A third possible leverage story explicitly interprets loyalty rebates as a bundled discount between a monopoly "product" (i.e., non-contestable sales) and a competitive "product" (i.e., contestable sales). That is, the dominant firm offers a discount on the monopoly product if the buyer also purchases from it a competitive

---

[14] These theories of exclusive dealing are summarized in chapter 4 of M. Whinston, Lectures on Antitrust Economics, 2006, MIT Press.

[15] An effect of this type is shown in J. Abito and J. Wright, "Exclusive dealing with imperfect downstream competition", International Journal of Industrial Organisation, 2008, 26.

[16] For this result see C. Fumagalli and M. Motta, "Exclusive dealing and entry, when buyers compete", American Economic Review, 2006, 96.

[17] A related effect was mentioned by the General Court in Tomra, where it stated that discounts paid to final consumers lead to stronger exclusionary effects by making it harder for a rival to bypass the buyers targeted by the rebates (see paragraph 222).

[18] In a case similar to British Airways, the South African Competition Tribunal has recognized that the retroactive commissions paid to travel agents can result in consumer harm through "directional selling" by agents, and that they are not best analyzed as price discounts because agents do not set prices (see South African Competition Tribunal, Nationwide/Comair vs. SAA, Case 80/CR/SEPT06, Decision of 17 February 2010, paragraphs 156, 189 and 230).

product. Under some conditions, it can be shown that a bundled discount may lead to exclusion of a rival from the competitive product without a profit loss for the dominant firm.[19] This result is due to the fact that the discount can eliminate some of the inefficiency associated with monopoly pricing (assuming that efficient pricing structures for the monopoly good cannot be adopted in the absence of the discount). Consumers are not necessarily harmed by this conduct, however; consumer harm only follows if the dominant firm can threaten to increase the stand-alone price of the non-contestable good above the monopoly level (i.e., to a level that would actually not be profitable for the seller *ex post*, if the buyer were to reject the bundle). This requires the dominant firm to be able to credibly commit to a high stand-alone price. It also assumes that this commitment mechanism cannot be implemented independently of the bundled offer.

As this brief review shows, modern economics can provide plausible non-predatory theories of foreclosure and consumer harm. However, these theories need to be fully articulated and verified empirically. It cannot simply be assumed that the use of loyalty rebates will result in anti-competitive leverage, even in those circumstances where a smaller entrant may not be able to successfully match the offers made by the incumbent.

Conclusion

With the publication of its Guidance Paper on Article 82 (now Article 102) in early 2009, the Commission made a significant step in the transition to a more economically sound treatment of exclusionary abuse in Europe, in particular in relation to loyalty discounts. The as-efficient competitor test contained in the Guidance Paper (and applied in detail in *Intel*) is a useful screen to distinguish between legitimate price competition and conduct which may lead to foreclosure of competitors and consumer harm. However, a coherent and fully articulated theory of consumer harm is also required before reaching the conclusion that a loyalty discount scheme is likely to lead to anti-competitive effects. A non-predatory theory of harm (whereby the conduct leads to immediate consumer harm, and the dominant firm does not incur a profit sacrifice) does not automatically follow from the application of loyalty discounts, contrary to the position adopted by the Commission in *Intel* in 2009, and by the General Court in *Tomra* in 2010. Modern economics can provide theories of non-predatory foreclosure which can be applied to rebates. However these theories need to be carefully articulated, and verified against the characteristics of the market where the conduct is taking place. The next stage in the journey towards a solid economic approach to exclusionary pricing should ideally include closer recognition of these issues.

[19] For an economic model of exclusionary bundling, see P. Greenlee, D. Reitman and D. Sibley, "An antitrust analysis of bundled loyalty discounts", International Journal of Industrial Organisation, 2008, 26.