



VOLUME 1 | NUMBER 2 | AUTUMN 2005

Competition Policy International

Loyalty Rebates: An Assessment of Competition Concerns and a Proposed Structured Rule of Reason

David Spector

Loyalty Rebates: An Assessment of Competition Concerns and a Proposed Structured Rule of Reason

David Spector

Like most pricing practices, loyalty rebates may benefit or harm consumers according to the circumstances. This paper reviews the pro-competitive and anticompetitive motives for loyalty rebates. Several conclusions emerge. First, every particular type of loyalty rebates can be pro-competitive in some circumstances. There is, therefore, little basis for a per se prohibition, even restricted to a particular category of suspicious-looking schemes. Second, dominant firms willing to engage in an exclusionary strategy may find that cleverly fine-tuned pricing schemes involving loyalty rebates possess several advantages over simple predatory pricing strategies: they can achieve exclusion at a lower cost, be more credible, and erect a permanent barrier to entry without any need for a recoupment period. Loyalty rebates thus deserve the scrutiny with which they have been gratified lately. This paper concludes by proposing a structured rule of reason for the antitrust handling of loyalty rebates cases.

| The author is an economist at Paris Sciences Economiques (joint research center, CNRS-EHESS-ENPC-ENS).

I. Introduction

Two recent decisions on both sides of the Atlantic have aroused renewed interest in the antitrust treatment of loyalty rebates. On September 30, 2003, the Court of First Instance of the European Communities (CFI) upheld a decision by the European Commission to impose a fine of almost EUR 20 million on the tire company Michelin because of its pricing practices in France.¹ The Commission had focused on the scheme of conditional rebates—mostly, but not only, simple quantity discounts—granted by Michelin to its non-exclusive retailers. It claimed that these rebates, because of their “loyalty-inducing” effects, amounted to an abuse of the dominant position held by Michelin in the relevant markets in France. The Court’s concurring ruling stated a very simple criterion as to the abusive character of quantity discounts granted by dominant firms in that they are to be considered abusive unless they reflect the firm’s cost structure.² The decision and subsequent ruling have been broadly construed as marking a shift toward an increasingly repressive handling of loyalty rebates—the decision and the Court’s claims to the contrary notwithstanding.³ In the United States, the recent *LePage’s* judgment, which found 3M guilty of exclusionary practices based on the structure of loyalty rebates granted to several large retailers, has often been interpreted in the same way.⁴ But, the two cases are different in many respects, in particular because the issue of loyalty rebates in *LePage’s* conflates with that of bundling.⁵

Critics of the *Michelin* ruling stressed that it too readily presumed the anticompetitive effects of loyalty rebates and failed to consider their possible pro-competitive ones.⁶ Regarding the possible adverse effects of the disputed practices, neither the decision nor the ruling even purported to prove harm to competitors,

1 Commission Decision 2002/405/EC, *Michelin*, 2002 O.J. (L 143) and Case T-203/01, *Manufacture française des pneumatiques Michelin v. Commission* (Sep. 30, 2003, not yet reported). Throughout this paper, the expressions “*Michelin* decision” and *Michelin* refer to this case, and not to the earlier (and oft-quoted) Commission decisions in other cases involving Michelin.

2 *Id.* at § 58.

3 D. Waelbroeck, *Michelin II: A per se rule against rebates by dominant companies?*, 1 J. COMP. L. & ECON. 149–71 (2005) and J. Kallaugher & B. Sher, *Rebates revisited: Anti-Competitive Effects and Exclusionary Abuse Under Article 82, 25(5) EUR. COMPETITION L. REV.* 263–85 (2004). The European Commission’s view is laid out in L. Gyselen, *Rebates: Competition on the Merits or Exclusionary Practice?*, in *EUROPEAN COMPETITION LAW ANNUAL* (2003). For a general discussion, see J. Temple Lang & R. O’Donoghue, *Defining legitimate competition: how to clarify pricing abuses under Article 82 EC*, 26 *FORDHAM INT’L L.J.* 86–162, 115 (2002).

4 *LePage’s v. 3M*, 324 F.3d 141 (3rd Cir. 2003) [hereinafter *LePage’s*].

5 For a discussion, see D. Rubinfeld, *3M’s Bundled Rebates: An Economic Perspective*, 72 U. CHI. L. REV. 243 (2005).

6 See, e.g., Waelbroeck, *supra* note 3.

let alone to consumers, or acknowledged the possibility that loyalty rebates might be pro-competitive absent economies of scale.

Among the reproaches leveled at Michelin was the claim that loyalty rebates “made access to the market more difficult for competitors.” The expression “more difficult access” was apparently used synonymously for lost sales, since neither the decision nor the ruling considered any impact of the disputed schemes beyond the possible diversion of some sales away from rivals.⁷ But since this would also have been true of a price cut or a quality enhancement, the notion of “making access more difficult” cannot, as such, form the basis of a sound handling of loyalty rebates.

The current state of the case law, especially in the European Community, leaves open the question of how loyalty rebates should be handled under a more economics-based approach. The goal of this paper is to shed some light on this question by looking at the possible causes and consequences of loyalty rebates and considering both exclusionary and pro-competitive motives.⁸ Of course, “the principal result of [industrial organization] theory is to show that nearly anything can happen,”⁹ and loyalty rebates are no exception. Despite this slightly distressing truth, economic analysis may help clarify a few questions:

- 1) In what types of markets should the courts and competition authorities be concerned about loyalty rebates?
- 2) Do some types of rebates deserve more scrutiny than others?

Of particular importance, in my view, is a comparison of different types of exclusionary practices in order to know, for example, whether loyalty rebates should be analyzed through the lens of predatory pricing or whether a specific treatment is warranted. This requires a comparison of the likelihood and the conditions of the possible different types of exclusionary behavior.

This paper is organized as follows. First, in Section II, I briefly review the well-known pro-competitive explanations for loyalty rebates. The main conclusion is that all types of loyalty rebates may be pro-competitive in some circumstances. Then, in Section III, I show that in markets in which rivals’ exclusion is possible and may increase the excluding firm’s market power, loyalty rebates may be used as a very efficient and cheap tool for entry deterrence or eviction. In particular, the corresponding exclusionary strategies may be far more effective, and

7 *Michelin*, *supra* note 1, at § 110.

8 As explained in Section II, loyalty rebates may also belong to a so-called “grey zone” in that they reduce social welfare without any eviction or strengthening of market power. The same holds true of bundling and tying practices.

9 F. Fisher, *Organizing Industrial Organization*, in *BROOKINGS PAPERS ON ECONOMIC ACTIVITY, MICROECONOMICS* (M. Baily & C. Winston eds., 1991), at 201–225.

more credible, than predatory pricing. I conclude by outlining a possible structured rule of reason to handle loyalty rebates cases in Section IV.

II. The Pro-competitive Explanations for Loyalty Rebates

A. LOYALTY REBATES ARE PERVASIVE AND FACILITATE THE PROVISION OF INCENTIVES TO RETAILERS

Loyalty rebates are pervasive in many sectors, including those in which there is no dominant firm and no firm can realistically hope to exclude rivals so as to increase market power. For example, nobody would claim that the coffee shop on the street corner offering a free espresso for every ten euro of sales is doing so with sinister exclusionary motives. Loyalty rebates may take many different forms. For example, market share discounts, discounts based on the year-to-year change in sales, and discounts granted conditional on reaching thresholds defined differently for different customers (three types of discounts specifically targeted by the Commission in *Michelin*), exist in many sectors and are often part of price schemes set by firms lacking substantial market power.

Nonlinear pricing (of which loyalty rebates are a subset) may be used for several reasons.¹⁰ One of them is a firm's attempt to discriminate across consumers. For example, a two-part tariff (comprising a fixed fee and a variable, per-unit part) may help a firm exploit the heterogeneity in its customers' willingness to pay for its product. Nonlinear pricing based on such motives may either increase or decrease aggregate and consumer welfare. (There is no general result, but some evidence points to specific cases in which it vastly increases welfare.¹¹)

There also exists another, more universal (in the sense that it applies even without any customer heterogeneity) explanation for nonlinear pricing. Customers' decisions (whether they are final consumers or retailers) depend chiefly on the prices they pay at the margin, and in general, efficient decisions

LOYALTY REBATES ARE PERVASIVE IN MANY SECTORS, INCLUDING THOSE IN WHICH THERE IS NO DOMINANT FIRM AND NO FIRM CAN REALISTICALLY HOPE TO EXCLUDE RIVALS SO AS TO INCREASE MARKET POWER. FOR EXAMPLE, NOBODY WOULD CLAIM THAT THE COFFEE SHOP ON THE STREET CORNER OFFERING A FREE ESPRESSO FOR EVERY TEN EURO OF SALES IS DOING SO WITH SINISTER EXCLUSIONARY MOTIVES.

¹⁰ For an all-encompassing treatment of the subject, see R. WILSON, *NONLINEAR PRICING* (1992).

¹¹ E. MIRAVETE & L.-H. RÖLLER, *COMPETITIVE NONLINEAR PRICING IN DUOPOLY EQUILIBRIUM: THE EARLY CELLULAR TELEPHONE INDUSTRY* (CEPR Discussion Paper No. 4069, 2003).

are induced when the price faced by customers on their marginal purchases is equal to their supplier's marginal cost. Therefore, in the simplest circumstances, efficiency requires this marginal price to be equal to marginal cost. However, profit maximization requires average price to be above average cost—and thus, above marginal cost in the many cases in which marginal cost is constant. Unless average and marginal price are allowed to differ, there is a tension between the supplier's legitimate goal of profit maximization and the goal to induce efficient decisions.¹²

Since most of the case law relates to wholesale markets, this point can be illustrated by considering how a retailer's decisions depend on the wholesaler's price scheme. A retailer makes several decisions that affect the sales of a given product. It sets the retail price, decides how much effort it will devote to learning about the product and promoting it, and decides to what extent it wants to provide its customers with goods or services complementing the product (e.g. at what price, etc). Since these decisions only affect the volume of sales at the margin, their impact on the retailer's profit only depend on the price paid on marginal units. Therefore, the lower this price, the more the retailer is induced to set low retail prices, to promote the product, and to supply complementary goods and services at a low price.

The wholesaler, meanwhile, would like to encourage such behavior as much as it can without decreasing its average price too much. The obvious solution is to set a low price for marginal units and a higher price for the other units (called infra-marginal units). For example, if the wholesaler knows that, regardless of which price and non-price actions it takes, a given retailer will sell between 1,000 and 1,500 units of its good, then it may rationally decide to set a high price for the first 1,000 units and a lower per-unit price for all units above 1,000. But prohibiting loyalty rebates would make it more costly for wholesalers to cut the price of marginal units. Thus, they would set higher marginal prices, which would raise retail prices and decrease retailers' incentives to learn about products, promote them, and provide affordable complementary goods and services.

B. MANY TYPES OF LOYALTY REBATES MAY BE PRO-COMPETITIVE

1. Discriminatory Rebate Schemes

In the real world, retailers differ in size. Which unit is marginal thus depends on the retailer considered. For example, when facing a small retailer expected to sell approximately 100 units per year, a wholesaler would like to set a low price for all units above the 90th unit. But doing the same for a retailer expected to sell approximately 100,000 units per year would be tantamount to offering that

12 For the sake of simplicity, the presentation of the argument ignores the question of competition among retailers. When retailers compete against each other, the argument becomes more complex because suppliers may want to have marginal prices above marginal costs in order to induce retail prices to be close to the price that a vertically integrated monopoly would set.

retailer a linear price schedule and earning a very small margin on the sales to that retailer, which would be economically unsound. Thus, the only way to account for the heterogeneity of retailers is to allow the pricing scheme to be heterogeneous as well.¹³

2. Market Share Discounts

The pro-competitive properties of market share discounts may be less clear than those of discounts based on absolute levels. This is because encouraging a retailer to increase Firm A's market share is equivalent to encouraging it to decrease rival suppliers'. Faced with such incentives, a retailer's rational response is to cut the price of Firm A's product and raise the price of rival products. The overall effect on retail prices is ambiguous. However, this reasoning misses the possibility that market share discounts could simply be used by all suppliers to induce a low marginal price when aggregate demand is uncertain. For example, assume that suppliers A and B do not know whether a retailer's total sales will be around 1,000 or around 10,000 (which depends on an unpredictable demand shock), but they know that regardless of the choices the retailer makes, consumer preferences imply that each firm will have at least a 40 percent market share. Then, a very simple way for each supplier to provide good incentives to the retailer is to set a high per-unit price for all units below 40 percent of total sales, and a low per-unit price for units above this threshold. The retailer then faces a low marginal price for both products and the ensuing retail prices are likely to be low. In this example, market share discounts do not aim to induce retailers to make efforts to reach a threshold above which discounts take effect. They simply ensure that the price of marginal units is lower than that of infra-marginal ones.

3. Negative Marginal Prices, Quantity Forcing, and Exclusivity

Some rebate schemes may induce strong incentives for retailers to achieve a minimum level of sales or a given market share, or even encourage quasi- or full exclusivity. This is the case in particular when they include rollback rebates (i.e. rebates that apply to the entirety of a customer's purchases conditional on reaching a given target, expressed in absolute or in market share terms). Setting a very high unit price together with a large rollback discount granted conditional on reaching a given target is, in fact, tantamount to quantity forcing in that a retailer signing such a contract can do so profitably only upon reaching the target. At the limit, such contracts may amount to requiring exclusivity. Exclusivity or quasi-exclusivity requirements have aroused a lot of suspicion (not altogether undeservedly, as explained in Section III). But it should be noted that they can also be pro-competitive tools that increase suppliers' incentives to provide knowledge or other types of services to their retailers. The reason is that an

¹³ An additional argument in favor of allowing discriminatory discounts is developed in D. O'Brien & G. Shaffer, *The Welfare Effects of Forbidding Discriminatory Discounts: a Secondary Line Analysis of Robinson-Patman*, 10(2) J.L. ECON. & ORG. 296–318 (1994).

upstream firm may be reluctant to train retailers in order to make them more efficient at promoting goods or offering complementary services if there is a risk that retailers will use their resulting skills to the benefit of competing suppliers—in effect expropriating the upstream firm of its investment in training. Absent any commitment mechanism, this reluctance results in a socially suboptimal level of

LOYALTY REBATES MAY ACHIEVE PROFITABLE EXCLUSION OF RIVALS IN SITUATIONS IN WHICH PREDATORY PRICING WOULD BE COMPLETELY INEFFECTIVE. THIS RAISES THE QUESTION OF WHETHER THE COURTS AND COMPETITION AUTHORITIES SHOULD ANALYZE THEM THROUGH THE LENS OF PREDATORY PRICING, OR WHETHER DIFFERENT RULES SHOULD APPLY TO DIFFERENT TYPES OF PRACTICES.

training. An extreme way to overcome this problem is to sign exclusive contracts with retailers.¹⁴ A less extreme possibility is to provide retailers with strong financial incentives to devote a large share of their efforts to promoting the products of the upstream firm providing the training, rather than competitors' products.

Finally, marginal prices below marginal costs can also be rational for a firm absent any exclusionary strategy in situations in which additional sales provide side-benefits, such as increasing product awareness, allowing learning-by-doing, testing market demand, or increasing the demand for complementary products (e.g. in two-sided markets).

III. Exclusionary Loyalty Rebates

When rival firms face significant fixed costs, reducing the demand they face may deprive them of the minimum viable scale and trigger exit or deter entry, thus removing a competitive constraint. This is the general logic of predatory pricing and anticompetitive exclusionary practices. This section reviews the main ways in which loyalty rebates may be used for exclusionary purposes. The main finding of the economics literature is that loyalty rebates, in some circumstances, may constitute less costly and more efficient exclusionary tools than predatory pricing. Furthermore, loyalty rebates may achieve profitable exclusion of rivals in situations in which predatory pricing would be completely ineffective. This raises the question of whether the courts and competition authorities should analyze them through the lens of predatory pricing, or whether different rules should apply to different types of practices.

14 This classical pro-competitive explanation for exclusive contracts has been formulated in, e.g., H. Marvel, *Exclusive Dealing*, 25 J. L. & Econ. 1–25 (1982).

A. LOYALTY REBATES AS CHEAPER PREDATION

1. An Example

In some circumstances, loyalty rebates may be equivalent to a cheaper, and thus more efficient, form of predatory pricing. This idea can be illustrated through an example. Let us assume the following:

- 1) Two firms, Firm A and Firm B, compete in the market for widgets in which 10 retailers purchase 100 units each, as long as prices are not too high. Total demand is therefore 1,000 units. For simplicity, Firm A's variable costs are assumed to be zero.
- 2) Consumer preferences are asymmetric. 90 percent of consumers will never purchase product B, regardless of its price, because the characteristics of that product do not fit their needs. This means that the real battle is over the remaining 10 percent of the market. More precisely, we assume that absent Firm B, all retailers are ready to pay up to EUR 10 for Firm A's product. This means that, even with Firm B in the market, each retailer is ready to pay up to EUR 10 for the 90 units of Firm A's product which are not subject to competition from Firm B.
- 3) The setting is one in which predatory pricing at the expense of Firm B could a priori be a rational strategy for Firm A in that Firm B is a cash-constrained firm (lacking good access to credit markets), facing significant fixed costs and prohibitive re-entry costs should it exit. This means that if Firm B does not manage to earn sufficient revenues, then it will be forced out of the market forever. Let us assume that this happens as soon as the wholesale price of Firm A's product falls below EUR 1.

Whether Firm A will choose to engage into predatory pricing depends on whether the discounted future profits arising from increased market power following Firm B's eviction outweigh the short-term loss. Under linear pricing, evicting Firm B requires Firm A to charge a uniform price of EUR 1, earning total revenues between EUR 900 and EUR 1,000, while it could earn at least EUR 9,000 by charging a price of EUR 10 (since Firm A necessarily serves at least 90 percent of aggregate demand equal to 1,000 units). Therefore, simple predatory pricing would involve a loss of at least EUR 8,000.

This is where nonlinear pricing may help. Consider the loyalty rebate program in which Firm A sets a price of EUR 10 and grants an overall rebate varying from 1 to 10 percent as a retailer's volume of purchases varies from 91 to 100 units. For example, a retailer purchasing 93 units from Firm A will get an overall rebate of 3 percent, applicable to all 93 units. For a retailer purchasing at least 90 units, an additional unit purchased from Firm A costs EUR 10, but raises the overall discount by 1 percent, and applies to purchases worth at least EUR 900 (90 units multiplied by EUR 10). The overall balance is such that the true marginal price is less than EUR 1, because the EUR 10 unit price is partly offset by an addition-

al discount worth more than EUR 9. Such a scheme allows Firm A to bring the price of its product in the battleground below EUR 1—that is, below the threshold triggering Firm B's eviction.

This scheme is also far less costly than simple predatory pricing. Under this scheme, the overall discount is at most 10 percent, so that the average price is at least EUR 9, applying to at least 900 units. Firm A's overall revenues are thus above EUR 8,100. While in the case of simple predatory pricing, evicting Firm B requires Firm A's revenues to fall below EUR 1,000, a cleverly fine-tuned loyalty rebates scheme achieves the same result at a far lower cost to Firm A.¹⁵ As a result, nonlinear pricing may tilt the balance of short-term losses and long-term gains in a way that makes eviction more likely to be profitable.

What are the consequences for antitrust treatment? In the absence of any qualitative difference with simple predatory pricing, such a strategy should probably be dealt with using the same tools and criteria—taking into account the fact that the relevant prices are not the average prices, but the marginal ones, which may differ from the explicit post-discount prices. For instance, in the above example, while the apparent price is always above EUR 9 (EUR 10 less a discount between 1 and 10 percent), the economically relevant price is that of a marginal unit, after subtracting the entirety of the gains induced by the purchase of that unit through the discount system. As shown in the previous example, that price is in fact below EUR 1.

To sum up, cases involving claims of nonlinear predatory pricing should probably be handled like ordinary predatory pricing claims. The only difference is that, to the extent that a price-cost test is used, the relevant price is not an easily defined, and readily observed price, but rather the true marginal price, which may be very far from the average post-discount price. Therefore, the suggestion to treat these cases like predatory pricing cases leaves open the question of how to adapt price-cost tests. Two suggestions are made in Section IV of this paper. Notice, however, that price-cost tests are becoming less central than they previously were in the handling of predatory pricing claims, which should facilitate a unified treatment of simple and nonlinear predatory pricing.¹⁶

15 The mechanism is akin to that of targeted price cuts, rather than uniform price cuts following a rival's entry—departing from uniform pricing decreases the cost of predation.

16 In the United States, price-cost tests lost their primacy after the *Brooke Group* judgment (*Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209 (1993)). See P. Bolton, J. Brodley, & M. Riordan, *Predatory Pricing: Strategic Theory and Legal Policy*, 88 *GEORGETOWN L.J.* 2239 (2001). In the European Community, while the interpretation of the existing case law often stresses the centrality of these tests, recent evolutions point toward bridging the transatlantic divide. For instance, a recent decision by the Conseil de la concurrence (the French competition authority) mentioned price-cost comparisons as one of many criteria for the assessment of predatory pricing claims and stated that proof of predation requires, among other elements, proof that initial losses can be recouped later thanks to the existence of barriers to entry. See Decision No. 04-D-17 of May 11, 2004 "relative à la saisine et à la demande de mesures conservatoires présentées par les sociétés AOL France SNC et AOL Europe SA," at § 66, available at <http://www.conseil-concurrence.fr/pdf/avis/04d17.pdf>.

B. LOYALTY REBATES AS A TOOL FOR COSTLESS ENTRY DETERRENCE

1. The Theory of Nonlinear Predatory Pricing Is at Odds with the Facts of the *Michelin* Case

Just like predatory pricing theories in general, the above example is essentially dynamic. In the example, nonlinear pricing is used for a limited period of time to deter or evict an entrant by lowering the price of the marginal units of the predator's product. Then, once the entrant's threat has subsided, the price of these marginal units can be raised again. This ulterior reversal of the disputed price scheme is indeed the only rationale of predatory strategies.

However, this dynamic story fails to fit the facts of some of the most important loyalty rebates cases. For example, in the *Michelin* case, neither the Commission nor the CFI claimed that the disputed pricing schemes were temporarily enacted in order to deal with a specific threat, only to be modified later. These pricing schemes were long-lasting, with occasional amendments described in the Commission's decision more like refinements than like reversals intended to recoup initial losses. Such cases clearly cannot be analyzed in terms of a predatory strategy that comprises a predatory period followed by a recoupment period.

This observation raises the following questions: Can loyalty rebates be the instrument of a profitable anticompetitive strategy lacking the dynamic nature of predatory strategies? Can a long-lasting, little-changing loyalty rebates scheme be consistent with a profitable exclusionary strategy? The answer is "yes", as explained in the next section. The following scenarios of anticompetitive behavior draw mostly from the theoretical literature on exclusive dealing. There is indeed a continuum between loyalty rebates conditional on absolute purchases, those conditional on market share targets, and exclusive dealing. If a retailer's total demand is equal to 10, then setting a very large price with a very large discount conditional on purchasing 10 units is equivalent to requiring exclusivity.¹⁷

CAN LOYALTY REBATES BE THE INSTRUMENT OF A PROFITABLE ANTICOMPETITIVE STRATEGY LACKING THE DYNAMIC NATURE OF PREDATORY STRATEGIES? CAN A LONG-LASTING, LITTLE-CHANGING LOYALTY REBATES SCHEME BE CONSISTENT WITH A PROFITABLE EXCLUSIONARY STRATEGY? THE ANSWER IS "YES."

¹⁷ Case law on both sides of the Atlantic recognizes this continuum. For a discussion of case law in the European Community, see Waelbroeck, *supra* note 3, and for the United States, see W. Tom, D. Balton, & N. Averitt, *Anticompetitive aspects of market-share discounts and other incentives to exclusive dealing*, 67 ANTITRUST L.J. 615 (2000).

2. Nonlinear Pricing as a Costless Entry Deterrent: Exploiting the Lack of Coordination across Buyers

Consider the following example.¹⁸ Firm A is a monopolist facing possible entry by Firm B and serving many customers (retailers or final consumers), each of whom has an aggregate demand of 5 units. Assume that, as long as it faces no competition, it can charge a monopoly price equal to EUR 10. Assume also that, because of the need to cover fixed costs, Firm B's entry cannot be profitable unless it can sell its product to at least one half of its potential customers.

Firm A can deter entry very simply by offering its customers the option to sign an exclusive contract (i.e. to commit to procure 100 percent of their needs from it) against a per-unit price of EUR 9.99, or equivalently, by offering a contract setting a very high per-unit price together with a discount granted upon purchase of 5 units, applicable to all units, and leading to an average post-discount per-unit price of EUR 9.99. This contract could deter entry for the following reason. First, if all customers sign it, then there is no room left for Firm B and it will not enter. Second, if buyers fail to coordinate, then they may end up all signing the contract because it is in a single buyer's interest to do so if it expects others to sign the contract as well even though it is not in the buyers' collective interest. Indeed, if a buyer expects all others to sign this contract, then it believes that Firm B's entry is precluded anyway (because Firm B will not want to enter if it can sell only to a single customer). Thus, signing the contract will not have any impact on Firm B's decision, but it will afford the buyer a small price cut of EUR 0.01. In this setting, the lack of coordination across buyers allows the excluding firm to deter entry and entrench its market power at no cost.

3. Nonlinear Pricing as a Not-Too-Costly Entry Deterrent: Discriminating across Buyers

The above scenario relies on the lack of coordination across buyers and may lack relevance if a few large buyers are able to coordinate and collectively defeat Firm A's exclusionary attempts. However, a variant of this strategy could still allow Firm A to profitably deter Firm B's entry, albeit at a higher cost. In the above example, Firm A only needs one half of its customers to enter into exclusive agreements (or equivalent quantity-forcing contracts) in order to deter entry. Of course, these potential customers may try to coordinate. To defuse this threat, Firm A should ensure that the contract offered to them is generous enough (in terms of price) to make the customers better off signing it (at the price of deterring Firm B's entry) than they would be should Firm B enter and intensify competition. Then, even if the customers offered such contracts could coordinate to defeat Firm A's exclusionary strategy, they would have no collective interest to

18 The following example is adapted from two contributions to the recent theoretical literature on exclusive dealing: E. Rasmusen, J. Wiley, & M. Ramseyer, *Naked Exclusion*, 81 AM. ECON. REV. 1137–44 (1991) and I. Segal & M. Whinston, *Naked Exclusion: Comment*, 90 AM. ECON. REV. 296–309 (2000). See also J. Farrell, *Deconstructing Chicago on Exclusive Dealing*, ANITRUST BULL. (forthcoming).

do so. Offering such contracts is costly for Firm A because they involve price cuts. But this cost is proportional to the number of buyers that sign the contract (i.e. half the entire set of customers). As a consequence of this profit sacrifice, Firm A should be able to deter entry and exploit its monopoly power at the expense of all consumers—not just those who were granted a price cut and, in some sense, bribed to cooperate in deterring Firm B from entering.

This type of strategy falls outside the reach of the standard Chicago critique which stresses that inefficient entry deterrence cannot take place because the compensation to be paid to buyers for willingly submitting to Firm A's increased market power is greater than the excluding firm's extra profit. The reason the Chicago critique fails is that the need for Firm B to reach a minimum viable scale creates externalities across buyers. When one of them agrees not to purchase from Firm B, it decreases the likelihood that Firm B will enter at all, thereby harming all other buyers. As a consequence, the excluding firm does not need to compensate all buyers for the loss they may suffer from Firm B's eviction, but only half of them. If the per-customer harm is less than twice the per-customer gain to the excluding firm, exclusion may occur even though it is socially harmful.¹⁹

4. Loyalty Rebates May Deter Entry in Settings in which Predatory Pricing Is of No Use

Beyond deterring entry at little or no cost, loyalty rebates may be effective in settings in which threats to react to entry using predatory pricing are not only costly (if realized), but also ineffective. Consider the case in which Firm A wants to deter Firm B from entering because Firm B's presence in the market decreases the demand for Firm A's product, forcing it to cut price, and in which the demand for Firm B's product is independent of Firm A's prices. In that case, threats of predatory pricing are toothless. But Firm A may still deter entry if enough of its customers sign contracts containing strong incentives to procure at least a given fraction of their needs from Firm A, denying Firm B the minimum viable scale.

C. LOYALTY REBATES AS AN EVICTION TOOL

1. Accounting for the Alleged Victims' Presence in the Market

The above theories of costless entry deterrence consider situations in which the excluded firms are unable to counter the exclusionary strategy targeting them by offering contracts of their own, in order to deter customers from signing the disputed contracts. These theories may be justified in some cases, but this limitation is at odds with the facts of several recent antitrust cases involving loyalty rebates. For example, in *Michelin* and *LePage's*, the alleged victims were already present in

¹⁹ The example in which Firm A deters entry by offering some customers a contract with quantity discounts (or an equivalent exclusivity discount) could give the impression that this strategy requires explicit discrimination. This need not be the case. If retailers differ in size, then a uniform scheme may result in very different average prices for different retailers—the essence of this type of strategy.

the market and able to offer contracts of their own. This was also the case in the landmark U.S. cases involving exclusive dealing, such as *Lorain Journal* and *Tampa Electric*.²⁰ Therefore, assessing whether the courts' and competition authorities' hostility to loyalty rebates is well-grounded requires one to determine whether these pricing practices may facilitate eviction, rather than entry deterrence.

The fact that the alleged victims were already active when the disputed contracts were offered by the defendant and taken up by its customers has two important consequences which could warrant some skepticism when addressing claims that a given loyalty rebates scheme was aimed at evicting rivals. First, these firms may already have sunk their fixed costs so that no exclusionary strategy will succeed in evicting them and removing the competitive pressure emanating from them—even if they lose market share. Second, the alleged victims could have reacted to the disputed contracts by offering contracts of their own.

Each of these two arguments contains some truth and implies that evicting already active rivals by offering loyalty rebates is more difficult than deterring entry. But neither of them is strong enough to imply that such strategies can never be observed. The first argument is, indeed, theoretically correct, but it relies on assumptions which often do not fit the facts. The second argument, regarding the alleged victims' possible reactions, starts from a factually correct basis (that, in general, the alleged victim already active in the market may offer the same type of contract as the allegedly excluding firm), but it reaches an incorrect conclusion (that such reactions are sufficient to prevent socially inefficient eviction).

2. Exclusionary Strategies Make Sense if the Victims Face Decisions about Future Fixed Costs

The first argument is theoretically correct, but its factual premises are often at odds with the facts. Clearly, if the alleged victims have already incurred all of their fixed costs in the past, then there is no point to even discussing the possibility of exclusionary strategies. However, in most markets, firms must continuously re-invest in research and development, new production facilities, and advertising. At the very least, they have to decide whether to continue to incur the recurrent fixed costs (e.g. administrative costs) induced by the presence in a given market. In such markets, a strategy allowing a firm to credibly commit to reduce its rivals' future revenues below a certain threshold may induce them to rationally decide to reduce the magnitude of their future investments, or to leave the market altogether, thereby reducing the competitive pressure they exert.

20 These cases are discussed in D. Carlton, *A General Analysis of Exclusionary Conduct and Refusal to Deal - Why Aspen and Kodak are Misguided*, 68 ANTITRUST L.J. 659–83 (2001).

3. The Targeted Firms' Ability to Offer Contracts Early On May Not Suffice to Counter Exclusionary Strategies

Everything else being equal, a firm attempting to evict a rival using loyalty rebates will find it more difficult to reach its goal if the targeted firm is able to respond by offering contracts of its own—possibly with loyalty rebates. This is, indeed, the logic of the Coase theorem which states that if eviction is socially harmful and if all the affected parties (the excluding and excluded firms as well as their actual and potential customers) can enter into contractual arrangements at an early enough stage, then an inefficient outcome cannot occur because all of the parties could agree to improve on any hypothetical inefficient outcome by shifting to an efficient one (as long as transaction costs are low).

This panglossian conclusion appears to imply that, if the firms targeted by the allegedly exclusionary scheme are present in the market when the disputed contracts are offered, then they should be able to offer counter-contracts so as to defeat the exclusionary attempt. There are, however, several circumstances in which this view is wrong and eviction through nonlinear pricing is possible, even when taking into account the evicted firms' reactions.

First, even if the firms targeted by the disputed contracts are present and able to make counteroffers when these contracts are offered, this may not be true of all of the adversely affected parties. For example, future consumers, who risk falling prey to the defendant's market power, may be absent from the market—and thus unable to react—at the time when the exclusionary contracts are offered. Therefore, if there are intertemporal economies of scale (e.g. if a given investment in, say, research and development, capacity, marketing, or administrative costs, raises demand, cuts variable costs, or raises quality over the current period and the future as well), then it may be the case that part of the welfare loss caused by eviction is borne by future consumers. These future customers, whose identity is likely unknown when the disputed pricing schemes are in effect, cannot participate in the kind of grand bargaining that is necessary for the Coase theorem to hold. When this is the case, the premise behind the Coase theorem breaks down. Indeed, countering the excluding firms' contracts would require some agents to be subsidized by those future consumers who cannot take part in the contracting game (and who may not even know that they will be consumers in this market).²¹

A second possible rebuttal of the skeptical view of the risk of eviction through nonlinear pricing hinges on the fact that the types of counterstrategies which would allow the targeted firms to counter the exclusionary scheme may be very complex—to the point of being unrealistic. For example, assume that, even absent any exclusionary strategy targeting it, Firm B would earn very low prof-

²¹ A similar argument has been formulated in the context of tying in D. Carlton & M. Waldman, *The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries*, 33 RAND J. ECON. 194–220 (2002).

its—just enough to justify staying in the market. Assume, however, that Firm B’s presence vastly raises overall welfare and consumer welfare (in the sense that consumers gain a lot from Firm B’s presence in the market, and that their gains vastly outweigh the loss to Firm A from increased competition). If Firm A attempts to evict Firm B using one of the abovementioned strategies (namely by having one half of its customers—the “lucky half”—sign a nonlinear contract that effectively denies Firm B the minimum viable scale, in exchange for a substantial discount off Firm A’s price), then the only way for Firm B to counter this strategy is to offer these customers a very low price so as to deter them from accepting Firm A’s offer.

The problem with this reaction is that if Firm B’s profit is very low even in the absence of any exclusionary strategy, then such a counterstrategy would not be profitable. The reason is that Firm B would have little room to cut prices below their equilibrium levels. In this example, the only agents who could, in principle,

THE VICTIMS’ ABILITY TO OFFER CONTRACTS OF THEIR OWN IN ORDER TO COUNTER AN EXCLUSIONARY STRATEGY INVOLVING LOYALTY REBATES RAISES THE COSTS OF EXCLUSION FOR THE EXCLUDING FIRM, BUT MAY NOT BE SUFFICIENT TO MAKE THE EXCLUSIONARY STRATEGY UNPROFITABLE.

pay in order to avoid Firm B’s eviction would be its customers, or, more precisely, the customers who were not offered low prices by Firm A but would be the primary victims of Firm B’s eviction and Firm A’s ensuing market power—the “unlucky half.” Therefore, avoiding eviction would require Firm B to organize monetary transfers from the unlucky half to the lucky half, who were offered a generous exclusive contract by Firm A, so as to induce them to not accept these contracts. While theoretically possible, such transfers would involve very complex contracts. They could also face informational difficulties, since Firm B would have to

convince the unlucky half that it is indeed in their interest to agree to pay high prices in order to allow Firm B to offer low prices to the lucky half and induce them not to cooperate in Firm A’s exclusionary scheme. Therefore, the grand bargaining, which could in theory prevent inefficient eviction, may be unrealistic in practice.²²

To summarize, the victims’ ability to offer contracts of their own in order to counter an exclusionary strategy involving loyalty rebates raises the costs of exclusion for the excluding firm, but may not be sufficient to make the exclusionary strategy unprofitable.

22 For a formal presentation of this argument, see D. Spector, Demand foreclosure through exclusive contracts (2005) (unpublished manuscript, on file with the author). This paper shows that, as long as too complex contracts are ruled out, socially inefficient eviction may occur even if all adversely affected parties may enter into contracts. See also Z. Neeman, *The Freedom to Contract and the Free-Rider Problem*, 15 J.L. ECON & ORG. 685–703 (1999).

The idea that the alleged victim's ability to offer contracts at the same time as the excluding firm limits the feasibility of exclusion is true, however, in the following limited sense. The use of loyalty rebates for exclusionary purposes cannot occur if the excluding firm and its alleged victim are equally efficient (i.e. they have an identical cost structure) and, say, the demand function is symmetric in both products. The reason is simply that any strategy allegedly used by the excluding firm in order to drive its victim out of the market, and thus earn large profits, could be matched by the victim. The victim, by offering a small discount relative to the excluding firm's contracts, could avoid exclusion, reverse the situation, and earn large profits itself. This remark should not be construed to mean that when eviction takes place, the evicted firm is necessarily less efficient than the excluding firm, and thus, deserves its fate. In differentiated product markets, comparing the efficiency level of different firms makes little sense, and a firm's exclusion may be detrimental to welfare even when its products are less demanded, or its costs are greater than the excluding firm's.²³ In other words, in cases in which the plaintiff and the defendant were on an equal contractual footing when contracts were offered, eviction through the strategic use of loyalty rebates requires some fundamental asymmetry in terms of consumer preferences or costs.²⁴ But this asymmetry cannot be considered an excuse for eviction.

4. Differences with Predation

The different types of strategies considered above (no-cost entry deterrence, loyalty rebates as an eviction tool) share a common property in that their profitability does not require that the firm implementing them change its pricing policy after the goal (entry deterrence or eviction) has been reached, nor does it require that the evicted firms face significant barriers to entry. In this sense, the exclusionary contracts essentially pay for themselves. This implies that when checking whether market structure is consistent with claims that the disputed pricing schemes are exclusionary, it would be wrong to conclude from the absence of barriers to entry that exclusionary strategies are implausible—as is often the case in the United States when handling predatory pricing claims.²⁵

23 This remark implies that defining anticompetitive practices by resorting to the "as efficient competitor test" may not be satisfactory in differentiated product markets. This test is discussed in a Speech by J. Vickers, *Abuse of market power*, European Association for Research in Industrial Economics, Berlin, Sep. 3, 2004, available at <http://www.ibanet.org/images/downloads/John%20Vickers%20-%20Paper1.pdf>.

24 A similar result had been established under the assumption that nonlinear pricing is precluded but exclusive dealing is allowed. See F. Mathewson & R. Winter, *The Competitive Effects of Vertical Agreements: Comment*, 77 AM. ECON. REV. 1057–62 (1987).

25 Notice, however, that not all theories of predation require barriers to re-entry. For example, in the models of reputational predation, the predator's aggressive response to entry deters future entrants even if they do not face any barriers to entry. As Bolton, Brodley, & Riordan, *supra* note 15, explain, it is the predatory strategy itself which creates a reputational barrier to entry, and U.S. courts' insistence that predation is not possible absent barriers to entry could cause them to treat predatory pricing in an overly lenient way.

D. HOW CREDIBLE ARE EXCLUSIONARY STRATEGIES INVOLVING LOYALTY REBATE?

1. Exclusionary Strategies Relying on the Use of Loyalty Rebates May Lack Credibility

All of the above scenarios about the possible exclusionary use of loyalty rebates, whether about entry deterrence or eviction, assume that the targeted firm (Firm B) knows that, should it enter the market (or stay in the market, or make additional investments), it will face a low demand because most or all of its potential customers are bound by contracts with the excluding firm (Firm A). If Firm A's strategy were expected to change after Firm B decides to, in fact, enter the market (or stay in the market, or make additional investments), then the exclusionary strategy would lose all its bite.

This may seriously hamper the efficiency of exclusionary strategies based on loyalty rebates. Consider, for example, the scenario of costless entry deterrence. In this scenario, all buyers sign a contract containing a quantity-forcing clause and setting a price equal to the monopoly price less a small discount, and the forced quantity purchased from Firm A is so large that the residual contestable demand is too little to make Firm B's entry economically rational. However, if Firm B nevertheless decides to enter the market, then there is no reason for Firm A to insist that its customers abide by the quantity-forcing clause. Rather, it could choose to increase its profits by selling its customers the right to purchase from Firm B (i.e. by allowing them to breach their contract in exchange for a fee). But Firm B could anticipate this and enter the market irrespective of whether buyers are locked up in contracts containing loyalty rebates clauses. Of course, buyers should also anticipate such behavior by Firm B and take it into account when considering contracts offered by Firm A. If buyers expect Firm B to enter anyway and Firm A to ask for a payment in exchange for granting them the right to breach the quantity-forcing contracts, then they will not sign such contracts in the first place, or in any case, not on the same price terms.²⁶

Loyalty rebates, since they are only contractual terms, cannot offer the same commitment value as technical choices like tying. However, the recent theories of predatory pricing have identified factors making contractual commitments at least partly credible. As discussed in the following section, the corresponding analyses are at least as persuasive in the case of exclusionary loyalty rebates as in the case of predatory pricing. Even when the credibility problem is recognized, loyalty rebates may still constitute an effective exclusionary tool.

26 In game-theoretic terms, this argument implies that the strategy underpinning costless entry deterrence is not a renegotiation proof. On the strategic use of breach penalties to extract rents from entrants, see P. Aghion & P. Bolton, *Contracts as a Barrier to Entry*, 77 AM. ECON. REV. 388-401 (1987). They show that exclusivity provisions may be used by incumbents in order to force entrants to cut prices upon entry, because incumbents may then appropriate part of the entrant's rent through breach penalties paid by their customers. In this theory, exclusive contracts together with breach penalty clauses do not aim at exclusion, but induce it as a side-effect with positive probability.

2. Reputational Concerns as a Commitment Device: Application to Loyalty Rebates

In settings in which potential entrants may repeatedly appear, incumbents may solve the credibility issue by building a reputation for making life hard for entrants. For example, in the reputational theory of predatory pricing, price cuts following entry do not aim to evict the firm which actually entered, but rather to deter future entrants. In the situations considered in such theories, the predator would have a short-term interest to accommodate the entrant and not to cut price too much, but it refrains from doing so in order to sustain its reputation for toughness and dissuade other potential entrants²⁷. The likelihood of a successful exclusionary strategy thus depends on how the tradeoff between credibility and reputation is solved.

This argument carries over to any exclusionary strategy. In fact, it applies more forcefully to exclusionary strategies based on loyalty rebates than to traditional predatory pricing, because the former are less costly than the latter. Consider again the case in which the excluding firm signs exclusive (or quantity-forcing) contracts against a very small discount relative to the monopoly price. The credibility problem comes from the fact that, should entry take place despite the price scheme meant to deter it, the excluding firm could increase its profits by releasing its buyers from their commitment to purchase exclusively from it.

While the tension between long-term reputational concerns and short-term profit maximization exists both in the case of entry deterrence through predatory pricing and in the case of entry deterrence through exclusive contracts, the balance between these two effects is not the same in the two cases. For a firm engaging in predatory pricing, the urge to depart from the exclusionary strategy is likely to be strong because sticking to very low prices in order to sustain a reputation generates large losses in the short run and may worry shareholders. In contrast, for a firm implementing a strategy relying on customers signing exclusive contracts in exchange for a small discount off monopoly prices, sticking to these contracts yields monopoly profits (less a small discount)—which is far less worrying. True, the firm implementing the disputed scheme could, after entry unexpectedly took place, further increase its profits above monopoly levels. But the urge to do so is certainly easier to resist than the urge to stop the large losses generated by very low prices. This means that exclusionary strategies based on the use of loyalty rebates are likely to be more credible than those based on predatory pricing.

27 See D. Kreps & R. Wilson, *Reputation and Imperfect Information*, 27 J. ECON. THEORY 253–79 (1982).

This argument is all the more relevant if the disputed contracts are long-term. As long as customers are bound by an exclusive contract with a small discount relative to the monopoly price (for example), the excluding firm will earn almost its monopoly profit even after entry. This limits its incentives to accommodate the entrant. However, once these contracts expire, continuing to bleed the entrant becomes more costly. While long-term exclusive contracts do not remove the credibility problem, they do help to mitigate it.

3. The Multiplicity of Possible Motivations for Loyalty Rebates May Increase the Credibility of Exclusionary Strategies

Among the various theories of predatory pricing are some that rely on the idea that predation may be credible because the targeted firms may not know for sure whether the predator's low prices result from a predatory strategy (in which case they would lack credibility should the entrant resist the predator's bluff) or from fundamentals such as the predator's low costs. If there is uncertainty about the predator's costs, then the targeted firms may (wrongly) interpret the predator's low prices as evidence of its low costs, implying that future prices will be low and that the prospects in this market are dim. This possible interpretation may trigger exit. As a consequence, a predator with not-so-low costs could cut prices so as to mislead the targeted firm about its true prospects if it stays in the market, and to induce its exit.

This type of argument is even more forceful in the case of loyalty rebates. In many markets, firms are able to gauge their rivals' costs with enough accuracy and may see predatory prices for what they are if prices are too far below a normal competitive level. A firm that sees a rival engaged in predatory pricing could rationally anticipate that, should it stay in the market and sink its fixed costs (eliminating the possibility of eviction), the predator will rationally raise price. This type of reasoning is likely to reduce the effectiveness of predatory pricing.

In the case of loyalty rebates, identifying an exclusionary strategy is much more difficult. For example, consider a firm contemplating a costly entry into a market and observing that the incumbent monopolist offers its customers a very large discount in exchange for an exclusivity commitment. Assume that the potential entrant considers that, should the monopolist continue to offer such contracts, it will not manage to earn enough to cover its entry costs. The entrant should then try to answer the following question: Are these contracts intended to deter entry into the market? If the answer is "yes", then it should enter, because once it has entered there is no rationale any more for the monopolist to offer such contracts (it is assumed for simplicity that entry entails a large, irreversible, once-and-for-all fixed cost and that there are no reputational concerns). But if the answer is "no" (i.e. if it can be expected that it will be in the monopolist's interest to offer such contracts even after entry), then the potential entrant should back away.

The difference between predatory pricing and entry deterrence strategies based on loyalty rebates is that in the latter case, it may be very difficult to know whether the entry-detering properties of loyalty rebates are the rationale for these contractual clauses, or merely a side-effect. This is because there are many reasons why a firm might want to offer contracts including loyalty rebates, based either on absolute amounts or on market shares, even when it is impossible to have an impact on other firms' entry or exit. These reasons are related to the belief of the firm offering loyalty rebates as to the shape of each customer's demand function and customer heterogeneity. Ascertaining this belief and the underlying reality is a far more complex task than discerning prices below costs. The targeted firms cannot, in general, tell whether a given scheme of loyalty rebates is there for exclusionary purposes (in which case they should not be impressed) or for other reasons (in which case they might be better off leaving the market, because the disputed scheme will not change).

This analysis points to the existence of an inherent degree of uncertainty. The exclusionary use of loyalty rebates (or predatory pricing) is facilitated by the uncertainty regarding the rationale for such contractual clauses. Thus, loyalty rebates are likely to be used for exclusionary purposes precisely in situations in which they could also plausibly be used for other reasons. This apparent paradox should be kept in mind when trying to devise an efficient rule for competition authorities and courts to handle antitrust claims regarding loyalty rebates. It implies that it would be wise to design rules which limit the need to delve into the detailed motivations for the disputed contractual practices.

THE DIFFERENCE BETWEEN PREDATORY PRICING AND ENTRY DETERRENCE STRATEGIES BASED ON LOYALTY REBATES IS THAT IN THE LATTER CASE, IT MAY BE VERY DIFFICULT TO KNOW WHETHER THE ENTRY-DETERRING PROPERTIES OF LOYALTY REBATES ARE THE RATIONALE FOR THESE CONTRACTUAL CLAUSES, OR MERELY A SIDE-EFFECT.

IV. Which Structured Rule of Reason for Loyalty Rebates?

A. THE NEED FOR SAFE HARBORS

Like most pricing practices, loyalty rebates may be used for pro-competitive as well as exclusionary purposes. In particular, they may in some settings constitute a more effective and cheaper exclusionary tool than predatory pricing. This precludes any general per se rule which would apply to all types of rebates. Nevertheless, the above analyses lend support for some type of safe harbor clause, under which some types of rebates would be per se legal. In the simplest possible settings, a firm has every reason to set price as close as possible as marginal cost for each customer's marginal units, regardless of any exclusionary strategy, and

this is, in general, pro-competitive. On the other hand, most of the exclusionary strategies, as depicted in Section III, involve far more extreme behavior, such as

LOYALTY REBATES ARE LIKELY TO BE USED FOR EXCLUSIONARY PURPOSES PRECISELY IN SITUATIONS IN WHICH THEY COULD ALSO PLAUSIBLY BE USED FOR OTHER REASONS. THIS APPARENT PARADOX SHOULD BE KEPT IN MIND WHEN TRYING TO DEVISE AN EFFICIENT RULE FOR COMPETITION AUTHORITIES AND COURTS TO HANDLE ANTITRUST CLAIMS REGARDING LOYALTY REBATES. IT IMPLIES THAT IT WOULD BE WISE TO DESIGN RULES WHICH LIMIT THE NEED TO DELVE INTO THE DETAILED MOTIVATIONS FOR THE DISPUTED CONTRACTUAL PRACTICES.

quantity-forcing or exclusivity requirements, which are equivalent to price schemes involving negative marginal prices for some units. Therefore, it appears reasonable to have the antitrust treatment of loyalty rebates contain a safe harbor clause stating that price schemes including marginal prices above some measure of cost should be considered per se legal. Several remarks must be made:

- Such a rule would make sense only with reference to the true, economically relevant, marginal prices, taking into account how the scheme of rebates works. These prices may be far below average post-discount prices.
- A price scheme inducing a discount applicable to all purchases conditional on total purchases reaching a certain threshold would never benefit from the proposed safe harbor clause, because such a scheme induces a negative marginal price at every threshold.
- An additional reason to have such a safe harbor would be the need to ensure consistency between the treatment of loyalty rebates

and the treatment of predatory pricing. This goal could help competition authorities to define the applicable cost measure. One could a priori think of three possibilities: (i) marginal cost; (ii) average total cost of serving an additional customer (i.e. including customer-specific fixed costs only); and, (iii) average total cost.

- The proposed safe harbor should not imply that marginal prices below marginal costs are illegal, only that they deserve further scrutiny. Indeed, there are many settings in which prices below marginal costs are the outcome of a normal competitive process (e.g. in the presence of two-sided markets, complementary goods, learning-by-doing effects, promotional efforts, or if exclusive dealing is necessary to induce a supplier to provide customer-specific investments).
- It must be recognized that, just like the “Areeda-Turner” rule for predatory pricing, the proposed safe harbor would not be fully grounded in economic theory: the possibility of above-cost predatory pricing is well-known.²⁸ This is why economic theory cannot authoritatively prescribe a specific cost threshold.

28 See A. Edlin, *Stopping above-cost predatory pricing*, 111 YALE L.J. 941 (2002).

B. THE PLAUSIBILITY OF AN ANTICOMPETITIVE IMPACT SHOULD BE A FIRST FILTER

A basic question for handling complaints regarding loyalty rebates not covered by the proposed safe harbor is whether the first filter should address the possible pro-competitive explanations (in the absence of which the disputed rebates would be deemed illegal) or the possible anticompetitive impact (in the absence of which they would be deemed legal). I argue that the latter solution is better.

First, assessing the plausibility of the pro-competitive explanations for such practices is likely to be much more difficult than assessing the plausibility of an exclusionary strategy. This is simply because the pro-competitive motives for nonlinear pricing depend chiefly on the demand side. This gives rise to several questions:

- How will a retailer change its retail prices as a consequence of changes in the marginal wholesale prices?
- How will it change the amount of promotional effort it chooses to devote to a given product as the marginal wholesale price changes?
- How will the provision of non-contractible complementary services be affected?

The practical difficulty of answering these questions cannot be overestimated. It is precisely because a wholesaler and a retailer cannot mention all aspects of the retailer's actions in a contract that the wholesaler needs to provide pricing incentives or to require exclusivity. If the actions which the wholesaler seeks to promote through loyalty rebates are difficult to promote using contracts, it may be because they are also difficult to monitor or even to describe in words. But then, a court or a competition authority would face the same difficulties and thus might not be able to grasp the magnitude or the nature of the incentive problem—and it might thus overlook and wrongly dismiss relevant pro-competitive explanations for the disputed practices. Besides the pro-competitive explanations based on the provision of incentives, it should be stressed that checking even the simplest justifications for nonlinear pricing (i.e. those based on the heterogeneity of buyers' willingness to pay or the shape of each buyer's demand function), would require very detailed information about demand.

On the contrary, in spite of the diversity of the abovementioned anticompetitive scenarios, they all share some common properties. In order to be exclusionary, the disputed schemes should deny the targeted firms a sufficient scale to enter, or stay in, the market or to make additional investments. This allows for a relatively simple checklist:

- What is the plaintiff's cost structure²⁹?
- What fraction of the plaintiff's addressable market is foreclosed because of the disputed practices, and is it large enough to induce a rational firm to exit or give up some cost-reducing or demand-enhancing investment?
- Could the plaintiff have countered the disputed scheme (e.g. by cutting price or by offering similar rebates)?
- Would the plaintiff's exclusion remove a significant competitive pressure from the defendant and allow it to exert market power?³⁰

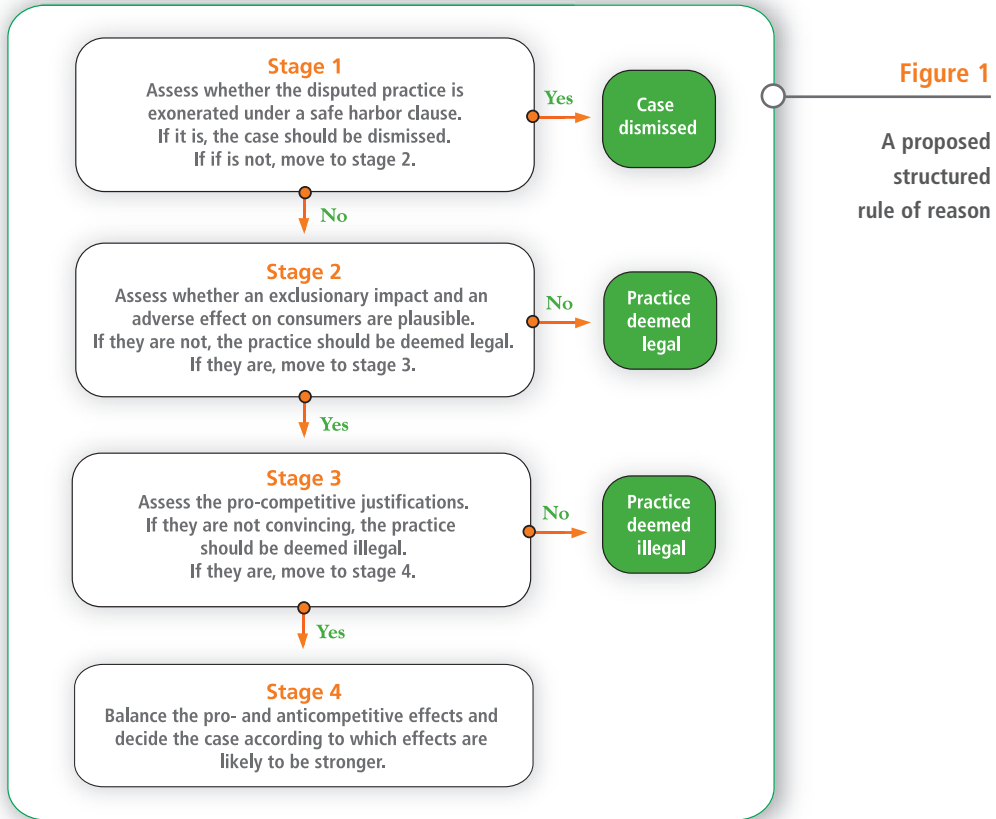
In short, because the pro-competitive explanations for loyalty rebates depend a lot on demand factors, while the anticompetitive ones rely a lot (though not only) on supply factors which are often more tangible (the plaintiff's cost structure, in particular), a structured rule of reason should probably assess the plausibility of an anticompetitive effect first, in order to minimize the number of cases in which the difficult assessment of the possible pro-competitive explanations is carried out. The idea of the proposed rule is that this assessment should take place only if the exclusion of rivals has been found to be possible and likely to harm consumers.

Under the proposed rule, pricing schemes which decrease consumer welfare without excluding rivals would not be challenged. Assessing the welfare effects of complex pricing schemes absent any exclusionary strategy would be very difficult indeed in practice because it would require one to have very precise information about the shape of each consumer's demand function. Since there are good reasons to consider that, absent any exclusionary strategy, nonlinear pricing increases welfare more often than not (see Section II), the best policy is probably to focus the antitrust handling of nonlinear pricing on the risk of it being used as an exclusionary tool.

29 Direct or indirect network effects may play the same role as fixed costs in the exclusionary strategy scenarios discussed above. Network effects are essentially the demand-side equivalent of scale economies on the supply-side since they induce positive externalities across customers.

30 This and the above condition are equivalent to the criteria known as "impact on competitors" and "impact on consumers." The approach to allegedly exclusionary strategies in recent U.S. case law is close to these principles. In several rulings, U.S. courts declined to consider exclusive distribution contracts as anticompetitive because there existed alternative means of distribution or because there was no evidence that the disputed practice had had any adverse effects on prices or output (see, e.g., *Omega Environmental, Inc. v. Gilbarco, Inc.*, 127 F.3d 1157 (9th Cir. 1997), at 1162 and *CDCTech. v. IDEXX Labs.*, 186 F.3d 74 (2d Cir. 1999)). It cannot be stressed enough that lost sales, or even a market share driven to zero because of the disputed practice, would not constitute sufficient evidence. For example, a practice in a given country may cause the alleged victims to sell nothing in that country. But, if they are able to continue offering the same products at the same price thanks to their Foreign branches, then they continue to exert the same competitive pressure on the allegedly excluding firm in the country where the disputed practice took place. Thus, the question is whether the loss of sales caused the alleged targets to make decisions that resulted in a decreased ability to offer the same price-quality combinations in that country.

To summarize, we advocate a structured rule of reason of the following sort:



C. SOME TYPES OF MARKETS AND REBATES DESERVE PARTICULAR SCRUTINY

For any scheme of loyalty rebates, there are corresponding theories that explain why it could be pro-competitive or anticompetitive, depending on the setting. However, some types of settings and some types of rebates are more prone to anticompetitive effects than others. In particular:

- Loyalty rebates are less likely to be pro-competitive in markets characterized by a low elasticity of aggregate demand. The reason is that they simply encourage retailers to change the market shares of the various suppliers, but not to increase aggregate sales (which is, by assumption, very difficult). Thus, there is no clear reason that rebates should cause aggregate retail prices to fall.
- Rebate schemes inducing locally negative marginal prices are prevalent in all theories of exclusionary strategies based on loyalty rebates. Even though such schemes also may have pro-competitive explana-

tions, the standard of proof regarding their pro-competitive effects should be quite demanding.

- Contracts committing buyers for a very long period of time may facilitate exclusionary strategies because they help to solve the credibility problem that often impedes them.³¹ However, long periods of reference may also have pro-competitive explanations (e.g. in cases in which specific training or knowledge is expected to be useful for a long period of time, they may encourage the transfer of such knowledge to retailers by decreasing the risk that it will be used to the benefit of rivals). Thus, this factor alone should not be sufficient to make a practice illegal.

Many other factors do not lend themselves to a one-sided interpretation. For example, in the *Michelin* case, the Commission and the CFI considered that the lack of clarity of the overall scheme and the difficulty for retailers to know whether they qualified for a given rebate were aggravating circumstances because they increased the loyalty-inducing properties of the overall scheme. Whether this was true or not, it was above all irrelevant absent an appraisal of the overall impact on competition because an increased loyalty-inducing effect alone could be pro- or anticompetitive, depending on market structure and firms' costs.

Also, it should be noted that the anticompetitive strategies outlined above may apply both when buyers are final consumers and when they are retailers competing against each other in a downstream market.³²

V. Conclusion

Loyalty rebates have the potential to be pro-competitive inasmuch as they induce favorable incentives in retail markets, but they may also achieve anti-competitive exclusion more effectively and cheaply than alternative strategies such as predatory pricing. Since almost any type of scheme could be pro- or anti-competitive depending on the circumstances, treating them under a formalistic, per se rule would induce many wrong decisions as it would fail to address one of the most important questions: Does the market structure permit exclusion in

31 See Section III, *supra*. The European Commission followed this kind of reasoning in several cases reviewed in J. Temple Lang & R. O'Donoghue, *supra* note 3.

32 Recent theoretical research found contrasting results about the relationship between the intensity of downstream competition and the feasibility of exclusion through nonlinear contracts. See C. Fumagalli & M. Motta, *Exclusive Dealing and Entry, When Buyers Compete*, AM. ECON. REV. (forthcoming), available at http://www.iue.it/Personal/Motta/Papers/AERMresub-proposta_latex.pdf; C. Stefanadis, *Selective Contracts, Foreclosure, and the Chicago School View*, 41 J.L & ECON. 429–50 (1998); and J. SIMPSON & A. WICKELGREEN, *THE USE OF EXCLUSIVE CONTRACTS TO DETER ENTRY*, (Federal Trade Commission, Working Paper No. 24, Jul. 2001) available at <http://www.ftc.gov/be/workpapers/wp241.pdf>

order to increase or protect market power? However, a pure rule of reason would be impractical because it would require courts and competition authorities to delve into the often inextricable complexities of price discrimination and to assess incentive problems which may be as intangible as they are economically important. This paper's proposed structured rule of reason, which would include a safe harbor clause, is an attempt to avoid the drawbacks of these two extreme solutions. ▼