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Roger D. Blair

Thomas Knight

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Bundled Discounts, Loyalty Discounts and Antitrust Policy

Roger D. Blair*
Thomas Knight**

I. Introduction

In most circumstances, discounts are procompetitive and lead to enhanced consumer welfare. When a manufacturer extends a discount to a downstream firm, the downstream firm's marginal cost of goods sold declines and at least some of that cost saving is usually passed on to consumers in the form of lower prices. If there is no reduction in quality, consumers are made better off by these lower prices. Thus, it would appear that discounts should be applauded. But discounts have aroused antitrust suspicion in some circumstances. In particular, bundled discounts and loyalty discounts, which are often grouped together with other conditional pricing arrangements, have come under antitrust scrutiny.¹

In this paper, we focus our attention on bundled and loyalty discounts, because they raise some unsettled issues for antitrust enforcers and the business community. When a manufacturer offers a discount on Product A that is conditional on a customer's purchases of both Product A and Product B, it is offering a bundled discount. As an example, suppose that a purchaser of products A and B will receive a five percent discount on all purchases provided that her purchases of A and her purchases of B both meet or exceed some threshold. If she fails to meet either threshold, the discount on both A and B reduced or even eliminated. Since the discount on purchases of A depends on the purchases of B and vice versa, the discounts are said to be bundled. Such discounts may well be exclusionary. For example, they can enable a monopolist in one market to expand

* Professor of Economics, University of Florida.

** Department Chair and Senior Lecturer, Economics Department, University of Florida.

¹ See, e.g., PHILLIP E. AREEDA & HERBERT HOVENKAMP, *FUNDAMENTALS OF ANTITRUST LAW* (Aspen Publishing, 4th ed. 2013).

sales in another initially competitive market. Whinston (1990); Nalebuff (2004); and Greenlee, Reitman, and Sibley (2008) point out monopolist may employ bundling to leverage monopoly power in one market to foreclose competition in another market.² More recently, Zhou (2017) demonstrated that bundling may also lead to higher prices in an oligopoly setting.³

Loyalty discounts provide another example of conditional pricing. A purchaser will enjoy reduced prices if it buys a specified fraction of its requirements of a single product from the seller. As an example, suppose a manufacturer offers a five percent discount on all purchases of Product A if a customer buys all its requirements of that product from the seller, a four percent discount if the customer buys 90 to 99% of its requirements from the seller, and no discount otherwise. This loyalty discount reduces a customer's input costs if it sources a certain fraction of its needs from a single upstream producer. Greenlee and Reitman (2005) and Klein and Lerner (2016) observe that these discounts may be used to expand sales to repeat customers, in which case they could be procompetitive.⁴ Alternatively, they may be employed by a dominant firm to pursue anticompetitive exclusion.

Both bundled discounts and loyalty discounts provide advantageous prices to customers that meet certain purchase requirements from the discounting supplier. In spite of some common characteristics and their seeming similarity, bundled discounts and loyalty discounts are sufficiently different to warrant separate discussion. To the extent that these discount programs foreclose entrants or exclude rivals, they arouse competitive concerns. The Department of Justice,

² Michael Whinston, *Tying, Foreclosure, and Exclusion*, 80 AMER. ECON. REV. 837 (1990); Barry Nalebuff, *Bundling as an Entry Barrier*, 119 Q.J. ECON. 159 (2004); Patrick Greenlee, David Reitman & David S. Sibley, *An antitrust analysis of bundled loyalty discounts*, 26 INT'L J. INDUS. ORG. 1132 (2008).

³ Jidong Zhou, *Competitive Bundling*, 85 ECONOMETRICA 145 (2017).

⁴ Patrick Greenlee & David S. Reitman, *Competing with Loyalty Discounts*, Econ. Analysis Grp., Discussion Paper No. 04-2, 200 (2005); Benjamin Klein & Andres V. Lerner, *Price-Cost Tests in Antitrust Analysis of Single Product Loyalty Contracts*, 80 ANTITRUST L.J. 631 (2016) [hereinafter Klein & Lerner, *Price-Cost Test*].

the Federal Trade Commission, and numerous antitrust scholars have expressed interest in these discounting practices. We share their interest.

In this paper, we explore the competitive significance of both bundled and loyalty discounts. The paper proceeds as follows. In Section II, we examine the antitrust treatment of both bundled discounts and loyalty discounts in the United States. In Section III, we examine bundled discounts and discuss their competitive significance. In Section IV, we examine loyalty discounts as well as their competitive significance. In Section V, we suggest that the courts evaluate bundled discounts and loyalty discounts under the Rule of Reason. In Section VI, we close with some concluding remarks and policy recommendations.

II. The Antitrust Landscape

Bundled discounts and loyalty discounts are designed to increase the volume of sales by lowering the average net price paid by repeat customers. If the seller faces competition, these increased sales come at least in part at the expense of its rivals. Faced with declining sales or an inability to penetrate the market, the seller's rivals may file an antitrust suit alleging unlawful monopolization or attempted monopolization, which are forbidden in the United States by §2 of the Sherman Act:

§2. Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a felony....⁵

This general language has gained meaning through judicial decisions over the last 125 years. The standards for unlawful monopolization were set out in the Supreme Court's *Grinnell* decision:

The offense of monopoly under §2 of the Sherman Act has two elements: (1) the possession of monopoly power in the relevant market and (2) the willful acquisition or maintenance of that power as distinguished from growth or

⁵ 15 U.S.C. § 2 (2004).

development as a consequence of a superior product, business acumen, or historic accident.⁶

Attempted monopolization is different only because actual monopoly has not yet been achieved.

In *Spectrum Sports*, the Supreme Court observed that

...it is generally required that to demonstrate attempted monopolization a plaintiff must prove (1) that the defendant has engaged in predatory or otherwise anticompetitive conduct with (2) a specific intent to monopolize and (3) a dangerous probability of achieving monopoly power.⁷

In most instances, the “dangerous probability” requirement is satisfied if the defendant’s market share exceeds 50 percent. Bundled discounts and loyalty discounts may be seen as “willful” efforts to protect a monopoly position or to achieve such status. Aggressive competition, however, is not unlawful unless it is predatory or otherwise unreasonably exclusionary. Competition on the merits—no matter how hard-nosed—does not violate §2 of the Sherman Act.⁸ Consequently, a plaintiff must show that a conditional pricing scheme is unreasonably exclusionary in order to prove a §2 violation. Against this backdrop, the lower courts in the United States have considered the legality of bundled discounts and loyalty discounts.

Bundled Discounts

Bundled discounts are earned by purchasing certain amounts and/or a fixed proportion of two or more products from a multi-product firm. As with any conditional pricing arrangement, bundled discounts appear to benefit purchasers through lower per-unit prices, but they may also induce firms to purchase all of its needs from the multi-product firm when a subset of the bundle is offered by an equally or more efficient rival.

⁶ United States v. Grinnell, 384 U.S. 563, 570–71 (1966).

⁷ *Spectrum Sports v. McQuillan*, 506 U.S. 447, 456 (1993).

⁸ *E.g.*, Frank H. Easterbrook, *On Identifying Exclusionary Conduct*, 61 NOTRE DAME L. REV. 972 (1986) (pointing out that it is often difficult to distinguish aggressive competition from exclusionary conduct).

Bundled discounts can take a variety of forms, with varying economic consequences. For example, some bundles include many component products, while others only involve two. Some bundles are based on fixed quantity requirements; others are specified as proportions of total requirements. This diverse set of bundled discount types, of course, makes generalized treatment quite difficult. One common observation, however, is that the judiciary is concerned about single product firms being unable to match prices with multiproduct firms that employ a bundled discount program.⁹

The antitrust problem of bundled discounts was the subject of *LePage's, Inc. vs. 3M Company* in the Third Circuit and *Cascade Health Solutions vs. PeaceHealth* in the Ninth Circuit.¹⁰ In the first case, LePage's had entered the transparent tape market in competition with 3M's Scotch brand transparent tape. LePage's strategy was to sell private label tape under contracts with large retailers (e.g., Office Depot and Walmart).¹¹ At the same time, 3M offered a bundled rebate program to multi-product purchasers.¹² The program spanned six distinct product groups, reflecting 3M's conglomerate structure. The diverse product groups were as follows: health care products, home care products, home improvement products, stationery products (including transparent tape), retail auto products, and leisure time products.¹³ It is obvious that this set is very diverse. LePage's argued that it could not compete with the breadth of 3M's offerings, and thus

⁹ See, e.g., Bruce H. Kobayashi, *Does economics provide a reliable guide to regulating commodity bundling by firms? A survey of the economic literature*, 1 J. COMPETITION L. & ECON. 707 (2005); Daniel A. Crane, *Mixed Bundling, Profit Sacrifice, and Consumer Welfare*, 55 EMORY L.J. 423 (2006); Greenlee et al., *supra* note 2; Erik Hovenkamp & Herbert J. Hovenkamp, *Exclusionary Bundled Discounts and the Antitrust Modernization Commission*, 53 ANTITRUST BULL. 517 (2008); Einer Elhauge, *Tying, Bundled Discounts, and the Death of the Single Monopoly Profit Theory*, 123 HARV. L. REV. 397 (2009) (all showing that a multiproduct firm may accept an incremental loss in a market in which it faces no competitor to foreclose another market (or markets) from potential rivals).

¹⁰ *LePage's, Inc. v. 3M*, 324 F.3d 141 (2003); *Cascade Health Solutions v. PeaceHealth*, 502 F.3d 895 (2007).

¹¹ *LePage's, Inc.*, 324 F.3d at 141.

¹² *Id.* at 154–55.

¹³ *Id.* at 154, 170.

could not compete against the bundled rebate program.¹⁴ The *en banc* ruling by the Third Circuit in *LePage's*, which was left to stand by the U.S. Supreme Court, stating that a bundled discount is exclusionary if a rival cannot match the rebate, simply because the rival does not offer an equal breadth of products.¹⁵ The Third Circuit's opinion makes it fairly clear that it was concerned about monopoly leveraging.

In its decision, the Third Circuit held that a multiproduct seller with monopoly power in one or more of the products in the bundle engages in unlawful monopolization or monopoly maintenance when the seller uses a bundled rebate program that (a) has the effect of expanding the monopolist's share in one or more of the competitive product markets, and (b) lacks a clearly legitimate business justification.¹⁶

The Third Circuit recognized the plight of single-product firms as it also concluded that bundled discounts could be used to maintain monopoly power. The *LePage's* decision concludes:

There was ample evidence that 3M used its market power over transparent tape, backed by its considerable catalog of products, to entrench its monopoly to the detriment of *LePage's*, its only serious competitor, in violation of §2 of the Sherman Act.¹⁷

The *LePage's* ruling establishes a non-price standard for reviewing bundled discounts. The Third Circuit ruled that 3M's bundled discount was exclusionary, because *LePage's* could not match the discounts simply due to the breadth of products offered by 3M.¹⁸

The Ninth Circuit's 2007 *PeaceHealth* decision takes a different approach from *LePage's* by adopting a price-based test and examining bundled discounts under a predatory pricing standard.¹⁹ *PeaceHealth*, one of two hospital operators in Lane County, Oregon, provided primary, secondary, and tertiary medical care services, and it offered a bundled discount to payors that

¹⁴ *Id.* at 144, 174.

¹⁵ *See id.* at 141; *PeaceHealth*, 502 F.3d 905.

¹⁶ Jeffrey A. Jaeckel, *LePage's, Cascade Health Solutions, and a Bundle of Confusion: What Is a Discounter To Do?*, 24 ANTITRUST 46, 47–48 (2010).

¹⁷ *LePage's, Inc.*, 324 F.3d at 169.

¹⁸ *Id.*

¹⁹ *PeaceHealth*, 502 F.3d 905.

agreed to make PeaceHealth their sole preferred provider.²⁰ Its rival, McKenzie-Willamette Hospital, only offered primary and secondary care.²¹ McKenzie-Willamette, like LePage's, argued that it could not compete with the breadth of its competitor's product offerings, and thus could not compete with the discount.²² The Ninth Circuit was unwilling to adopt the Third Circuit's *LePage's* standard due to "the endemic nature of bundled discounts in many spheres of normal economic activity."²³ The Court found that bundled discounts were anticompetitive if they resulted in below-cost pricing, effectively adopting a predatory pricing approach, consistent with *Brooke Group*, for scrutinizing bundled discounts.²⁴ The court ruled that "a plaintiff who challenges a package discount as anticompetitive must prove that, when the full amount of the discounts given by the defendant is allocated to the competitive product or products, the resulting price of the competitive product or products is below the defendant's incremental cost to produce them."²⁵

The standards proposed in *LePage's* and *PeaceHealth* are misdirected. In *LePage's*, the Third Circuit attributed the competitive harm to 3M's greater product array. The real economic problem, however, stemmed from LePage's inability to match the bundled discounts offered by 3M. LePage's did not lose business because it offered fewer products. Instead, it lost business due to 3M's bundling of its discounts on multiple products.

²⁰ *Id.* at 902–03.

²¹ *Id.* at 902.

²² *Id.* at 907 ("The principal anticompetitive danger of the bundled discounts offered by PeaceHealth is that the discounts could freeze McKenzie out of the market for primary and secondary services because McKenzie, like seller B in Judge Kaplan's example, does not provide the same array of services as PeaceHealth and therefore could possibly not be able to match the discount PeaceHealth offers insurers").

²³ *Id.* at 913.

²⁴ *Id.* at 919; *Brooke Group v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209 (1993). Under *Brooke Group*, predatory pricing has two elements. First, prices must be below some (unspecified) measure of cost. Second, there must be a reasonable prospect of recouping the losses incurred due to the below cost pricing. *Id.* at 226.

²⁵ *PeaceHealth*, 502 F.3d at 919.

The discount attribution test introduced by the Ninth Circuit in *PeaceHealth* was employed to identify predatory pricing.²⁶ But charges of predation conjure up images of Standard Oil and American Tobacco crushing small rivals and thereby monopolizing local markets. This is not, however, what bundled discounts accomplish. Multi-product firms may use bundled discounts to deter entry by firms that cannot compete for entire books of business. Total sales in each market are profitable at all times. As a result, deeming prices to be “predatory” is misleading.

The discount attribution test establishes a useful framework for evaluating when a bundled discount scheme is likely to result in competitive harm. It should, however, be viewed as identifying exclusion, rather than predation.

Loyalty Discounts

A loyalty discount program offers discounted prices to purchasers that buy a pre-specified amount or fraction of their needs from the discounting firm. These loyalty programs are often structured so a customer will receive increasing discounts on all of its purchases as the share of its total requirements accounted for by the seller’s product rises. The loyalty programs are said to be retroactive. In such cases, the loyalty discounts reward the seller’s loyal (*i.e.* repeat) customers. The seller’s loyalty programs are obviously intended to induce customers to buy larger quantities from the discounting firm. They do this by effectively lowering the average price paid as larger quantities are purchased, and thereby benefiting loyal customers. It is hard to see how these lower prices can be anticompetitive as long as they are not below cost. After all, as standalone loyalty programs do not involve multiple products, an equally efficient rival should not be excluded, provided that rival can compete for the entire book of business.

²⁶ *Id.* at 920.

Loyalty discounts raise two competitive concerns. First, a loyalty discount program may involve below-cost pricing. If a plaintiff satisfied the court's *Brooke Group* standard, the program would violate §2 of the Sherman Act.²⁷ In other words, to find a §2 violation, prices must be below-cost, and the seller must have a reasonable prospect of recouping any losses incurred as a result of the below-cost pricing. Second, a loyalty discount program may *de facto* require exclusivity, which implies that it could prevent entry or induce exit. Suppose, for example, that a buyer is offered a 10 percent discount on all purchases if it buys 100 percent of its requirements from the discounting seller, but no discount at all if it were to buy even token amounts from rivals. This loyalty program produces economic effects that are similar to those of a requirements contract. Thus, the program should be evaluated under precedents for exclusive dealing or requirements contracts.²⁸ For loyalty programs to be predatory or exclusionary, there are three primary considerations to make when determining whether a loyalty discount program violates §2:

1. Do the discounts result in below-cost pricing?
2. Can equally efficient rivals match the discounts?
3. Are the discounts so attractive that they induce the customer to deal exclusively with the dominant firm?

Answering these three questions determines whether an antitrust analysis should be based on a below-cost pricing standard or an exclusive dealing standard.

²⁷ *Brooke Group*, 509 U.S. at 226; 15 U.S.C. § 2 (2004).

²⁸ For an overview of the law and economics of exclusive dealing, see Chapter 18 of Areeda & Hovenkamp, *supra* note 2; Chapter 20 of ROGER D. BLAIR & DAVID L. KASERMAN, *ANTITRUST ECONOMICS* (2nd ed. 2008); B. Douglas Bernheim & Randal Heeb, *A Framework for the Economic Analysis of Exclusionary Conduct*, in *THE OXFORD HANDBOOK ON INTERNATIONAL ANTITRUST ECONOMICS: VOL. 2* (Roger D. Blair & D. Daniel Sokol, eds., 2015). See also Howard Marvel, *Exclusive Dealing*, in *THE OXFORD HANDBOOK ON INTERNATIONAL ANTITRUST ECONOMICS: VOL. 2* (Roger D. Blair & D. Daniel Sokol, eds., 2015); Jonathan M. Jacobson, *Exclusive Dealing, 'Foreclosure,' and Consumer Harm*, 70 *ANTITRUST L.J.* 311 (2002); Giacomo Calzolari & Vincenzo Denicolò, *Competition with Exclusive Contracts and Market-Share Discounts*, 103 *AMER. ECON. REV.* 2384 (2013).

In *Concord Boat*, the Eighth Circuit analyzed a loyalty discount program offered by Brunswick, which sold stern-drive engines in competition with several rivals to boat builders. Although Brunswick was the dominant seller, it was interested in expanding its sales.²⁹ To further this goal, it offered a combination of loyalty and volume discounts. The loyalty discount plan involved a three-year agreement. Boat builders and dealers could obtain a three percent discount if their purchases from Brunswick amounted to at least 80 percent of their needs. The discount for 70 to 80 percent of their needs was two percent and one percent from 60 to 70 percent.³⁰ Brunswick's quantity discount plan allowed boat builders to earn a five percent discount if its purchases of Brunswick engines met certain quantity thresholds.³¹ Concord Boat complained that Brunswick's discount plan allowed it to monopolize the stern-drive engine market, which then resulted in monopoly prices that exceeded the prices that would have been charged in a more competitive market.

The court observed, in *Concord Boat*, that boat builders and dealers routinely switched to other stern-drive engines when they offered more attractive discounts.³² Consequently, there was evidence that rivals could match Brunswick's offer and thereby compete.³³ The court also observed that the discount plan was not a *de facto* exclusive dealing arrangement.³⁴ Moreover, the boat builders were not obligated to buy from Brunswick for any specified period of time.³⁵ Finally, Brunswick's net prices were well above its costs so that equally efficient rivals could compete with Brunswick.³⁶

²⁹ *Concord Boat Corporation v. Brunswick Corporation*, 207 F. 3d 1039, 1444 (2000).

³⁰ *Id.* The terms changed a bit over time, but the essence of the plan was unchanged.

³¹ *Id.*

³² *Id.* at 1063.

³³ *Id.*

³⁴ *Id.* at 1058–60.

³⁵ *Id.* at 1062–63.

³⁶ *Id.* at 1059.

In *Eaton*, the Third Circuit took a noticeably different approach.³⁷ Most importantly, it demonstrated a reluctance to rely exclusively on the *Brooke Group* predatory pricing standard to loyalty discounts.³⁸ The Court “declined to adopt [the defendant’s] unduly narrow characterization of this case as a ‘pricing practices’ case,” arguing that Eaton’s loyalty program included exclusionary non-price features.³⁹ Eaton had monopoly power in the market for heavy-duty truck transmissions, and it attempted to expand or retain that monopoly power by offering the four direct purchasers of these transmissions –collectively known as Original Equipment Manufacturers (OEMs) – loyalty contracts.⁴⁰ These contracts were of unprecedented length (by industry standards) and included a variety of potentially exclusionary provisions including:

1. OEMs must list Eaton’s transmissions as the standard in their catalogues.
2. OEMs must preferentially price Eaton’s transmissions, compared to those of its competitors.
3. OEMs must remove Eaton’s competitor’s transmissions from their catalogues.
4. OEMs must provide Eaton the opportunity to match the price and quality of competitor’s transmissions.⁴¹

If an OEM met the provisions outlined in its particular contract with Eaton and purchased a pre-specified fraction of its transmissions needs from Eaton, it would receive a loyalty discount.⁴² ZF Meritor LLC and Meritor Transmissions Corporation alleged that these loyalty contracts were

³⁷ ZF Meritor, LLC v. Eaton Corp., 696 F.3d 254 (3d Cir. 2012).

³⁸ *Id.* at 272–73.

³⁹ *Id.* at 269.

⁴⁰ *Id.* at 264–66.

⁴¹ *Id.* These additional requirements complicate the inferences that can be drawn regarding loyalty discounts. See Klein & Lerner, *Price-Cost Test*, *supra* note 4 (exploring these complications in some detail).

⁴² *Eaton*, 696 F.3d at 328. The minimum requirements threshold for loyalty discounts was different for each OEM but ranged between 65% and 95%. *Id.* at 307–08.

exclusionary.⁴³ Eaton countered by arguing that its loyalty contracts were *per se* permissible, because it never priced below-cost.⁴⁴ The Third Circuit agreed that Eaton's prices were not predatory, but nonetheless, the total contract was illegally exclusionary. The court ruled that the non-price features of Eaton's contracts violated § 1 and § 2 of the Sherman Act and § 3 of the Clayton Act.⁴⁵

Neither *Concord Boat* nor *Eaton* provides a useful standard for evaluating the likely competitive effects of loyalty discount programs. In *Concord Boat*, the Eighth Circuit fails to establish an explicit standard that the plaintiffs' case fails to meet – or rather, a safe harbor into which Brunswick's discount program falls.⁴⁶ In *Eaton*, by focusing on non-price terms, the Third Circuit fails to establish an antitrust standard with clear boundaries that can be applied in other cases.

Summary

The legal status of bundled discounts and loyalty discounts is continuing to evolve. At this point, bundled discounts may be vulnerable to charges of predation under the discount attribution test. Loyalty discounts appear to be similarly vulnerable, but may also be likened to exclusive dealing. More extensive generalizations are difficult due to the variety of bundled and/or loyalty discount programs. Until the Supreme Court weighs in on the issue, an element of uncertainty will persist. When the Court finally does consider conditional pricing programs, there are some wrinkles and competitive ambiguities that it should consider. We examine some of these in the next two sections.

⁴³ *Id.* at 269–70.

⁴⁴ *Id.* at 263.

⁴⁵ *Id.* at 324–48.

⁴⁶ See *Concord Boat Corporation v. Brunswick Corporation*, 207 F. 3d 1039 (2000).

III. Bundled Discounts: Some Complications

Crafting an antitrust standard for evaluating bundled discounts presents a number of considerable challenges.⁴⁷ A generalized treatment of bundled discounts is extremely difficult for at least two reasons. First, the discount structure can take many different forms that may result in very different competitive consequences. If different discount structures are not economically equivalent in their competitive effect, standardized treatment may not be reasonable or desirable. Second, the impact of any specific discount program could vary across characteristics of the discounting firm and its rival sellers.⁴⁸ Consequently, a particular bundled discount program may be exclusionary against one set of rivals, but not against another. As such, a reasonable antitrust treatment of bundled discounts must be adaptable to firms' characteristics. In this section, we explore some of these complications and highlight some of the challenges with applying a discount attribution test.

Below, we present two basic numerical examples of bundled discounting schemes. These simple examples reveal some apparent anomalies flowing from the discount attribution test. A few of the concerns explored below include: 1) a profitable firm can be found to be engaged in exclusionary discounting in all markets in which it is active, 2) even very small discounts can be found to be exclusionary, 3) expanding the breadth of product offerings can lead a previously permissible discount program to be suddenly deemed exclusionary, and 4) the same discounting program can be deemed permissible or exclusionary, based solely on rivals' characteristics (*e.g.*, the product array a rival offers).

⁴⁷ See Herbert Hovenkamp & Erik Hovenkamp, *Complex Bundled Discounts and Antitrust Policy*, 57 BUFFALO L. REV. 1227 (2009).

⁴⁸ See *id.*

Example 1

Here, we present an example of bundled discounts, where the component products being bundled are homogenous services in numerous geographic markets.⁴⁹ Suppose that Firm A sells a service in all 50 states, and that each state is a separate geographic market.⁵⁰ Firm B is a customer of Firm A and operates in all 50 geographic markets. Firm A offers the following discount schedule for its service.

<u>Share of Requirements</u>	<u>Discount</u>
100%	5%
90-99%	4%
80-89%	3%
70-79%	2%
60-69%	1%
0-59%	0%

This discount schedule is not incremental. If, for example, a customer increases its purchases from 99 percent of its requirements to 100 percent of its requirements from Firm A, that customer receives a 5 percent discount on all purchases.

In each of the 50 geographic markets, Firm B purchases services worth \$1.0 million at list price. Since this amounts to 100 percent of its requirements, it qualifies for a 5.0 percent discount, and the resulting discounted cost to Firm B is \$47.5 million. Assuming that the average cost of providing \$1.0 million worth of services is \$600,000, Firm A incurs costs of \$30.0 million and, therefore, earns a profit of \$17.5 million on sales to Firm B.

⁴⁹ The examples presented in this section provide extensions of the setting described in Nalebuff, *supra* note 2. These examples may not apply to instances in which a large buyer (*e.g.*, Office Depot or Publix Supermarkets) is able, to some extent, to dictate the terms of trade.

⁵⁰ Since a service is being sold, we need not worry about arbitrage which would make the analysis more complicated without improving our understanding.

A small equally efficient competitor of Firm A, Firm M, sells services of identical quality as those sold by Firm A, but it only operates in a single geographic market, Missouri. If Firm M approaches Firm B with an offer to provide Firm B's service needs in Missouri, it faces a tough competitive problem, because Firm B will receive reduced discounts on its purchases in the other 49 geographic markets. If Firm B awards its business in Missouri to Firm M, it will receive a 4 percent discount from Firm A on business worth \$49 million at list price. The net price on that portion of Firm B's needs will be \$47.04 million. For Firm M to leave Firm B no worse off, it must provide the service in Missouri for no more than \$460,000, which is in stark contrast to the \$950,000 that A had been receiving for providing those services. Moreover, since the cost of providing those services is \$600,000 in each geographic market, Firm M simply cannot compete even if it is equally efficient in producing those services in Missouri. Its product array lacks sufficient breadth to compete against the discount scheme.

Firm M's ability to compete by expanding into only two markets is an artifact of the assumed profit margin. Suppose that both A and M incurred costs of \$800,000 in producing services worth \$1 million at list prices. M would have to offer services in a minimum of four states to profitably match A's bundled discounts.

If the discounts were not bundled (*i.e.*, if the same discount schedule were offered, but individually for each state), Firm M could compete for the business in Missouri. With bundled discounts, the net price of the services in Missouri would be \$950,000. Since the cost is only \$600,000, competition between Firm A and Firm M would depress price below \$950,000. Depending on the assumed model of competition, price could fall to \$600,000. Consequently, bundling the discounts is anticompetitive, because it prevents an equally efficient rival from competing to drive down price. This argument holds *a fortiori* if Firm M is somewhat more

efficient with costs of, say, \$500,000. If the discounts were unbundled, Firm M would win the business at a price just below \$600,000, which (a) would be more efficient and (b) would reduce Firm B's costs and thereby benefit Firm B and its customers.

Bundled discounts also prevent less efficient rivals from forcing prices down. Suppose that Firm A's costs of supplying the business in Missouri continue to be \$600,000, while Firm M's costs are \$650,000. If the discounts were unbundled, Firm A would retain the business in Missouri, but the net price would be driven below \$950,000, potentially by \$300,000, which would reduce Firm B's costs and thereby benefit its customers.

The above example illustrates that bundled discounts can be used to exclude equally efficient rivals whose product offerings are not as wide as the bundling firm. The smaller competitor in the numerical example above could only compete with the bundled pricing program if it were able to supply services to the downstream firm, Firm B, in at least two of the geographic markets. In that event, Firm B would earn a 4.0 percent discount on \$48.0 million worth of services at list price. Thus, it would incur a net cost of \$46.08 million. Firm M could charge as much as \$1.42 million for the services in the remaining two states and earn a slight profit. Since we have established that exclusion takes place in this example, we turn our attention to the antitrust treatment of this discount program.

According to the attribution test adopted in *PeaceHealth*, Firm A is guilty of anticompetitive exclusionary pricing. The business in Missouri costs Firm A \$600,000 to produce. Obtaining (or retaining) that business increases the discount on the entire book of business from 4 percent to 5 percent, and, therefore, the incremental revenue on sales in Missouri to Firm A is \$460,000, which is well below its incremental cost of \$600,000. While this is facially predatory, the actual antitrust concern is that an equally efficient firm could not compete against this

multiproduct discounting scheme.⁵¹ This prevents an equally efficient rival from exerting competitive pressure that would depress prices.

Even very small discounts can be deemed exclusionary. Suppose, for example, that Firm A offers a 1.0% discount to purchasers that buy 100% of their product needs from it, and no discount otherwise. Under the assumed conditions, even a 1.0 percent bundled discount would be deemed exclusionary. If Firm B gives all of its business to Firm A, it pays a total of \$49.5 million. If it awards the business in a single geographic product market to an equally efficient rival of Firm A, it will pay \$49.0 million plus whatever the rival charges. But the rival's charge cannot exceed \$500,000, because the sum cannot exceed \$49.5 million. Since \$500,000 is below its cost of \$600,000, the rival cannot profitably compete against even a 1.0% bundled discount.

Those examples illustrate the anticompetitive potential of bundled discounts. They can exclude equally efficient rivals and thereby reduce both consumer welfare and social welfare. It may seem anomalous that Firm A could earn substantial profit in each market while being guilty of exclusionary bundling in each market under the discount attribution test. But this illustrates another anticompetitive feature of bundled discounts. In our example, Firm A can exclude would be entrants in every market while enjoying an economic profit of \$350,000 in each market. If the discounts were unbundled, equally efficient rivals could not be foreclosed. Presumably, prices would be lower and both consumer welfare and social welfare would be greater.

The problem with this test, however, is that it finds Firm A's pricing strategy to be exclusionary in all fifty geographic markets. There is nothing special about Missouri—at least not in this example. Thus, Firm A is guilty of exclusionary bundling in every state because the

⁵¹ *E.g.*, Barry Nalebuff, *Exclusionary Bundling*, 50 ANTITRUST BULL. 321 (2005).

incremental revenue of \$460,000 is below its incremental cost of \$600,000 in each state.⁵² At the same time, however, Firm A is actually earning \$47.5 million in total revenue while incurring total costs of only \$30.0 million. The discount attribution test misdirects our attention toward the notion that the bundled discounts may be predatory. The test should, instead, be viewed as identifying as relationship between bundled discounts and the propensity for anticompetitive exclusion.⁵³

There is another peculiar feature of the bundled discount plan in our example. Consider a second buyer who operates in all 50 states, but buys \$10 million at list prices in each state. If it buys all of its requirements from firm A in 25 states, it will receive no discount at all. Thus, even though it buys five times as much as firm B, it must pay the full list prices while firm B enjoys a 5.0 percent discount. This raises a question of why there is such disparate treatment.

If we modify this example a bit, we encounter additional peculiarities. Suppose that Firm A operates in only 40 states, but still offers a 1.0% bundled discount to any customer that purchases all of its requirements from Firm A. If Firm B buys everything from Firm A, it pays \$39.6 million. If Firm B awards the business in one of the geographic product markets to Firm A's rival, it will pay Firm A \$39.0 million for its purchases in 39 states and A's rival can charge \$600,000 for the business in the remaining state. Since this is not below cost, the discount schedule is not predatory or exclusionary according to the discount attribution test. If A expands into a 41st state, its discount program will suddenly be deemed predatory, because a single-state rival can no longer profitably match the discount.⁵⁴ Expanding into previously unserved markets can lead a discount scheme that

⁵² For firm A, the incremental business appears to impose a loss of \$140,000 in each state and therefore would appear to be unprofitable. But foreclosing entry protects Firm A's overall profitability.

⁵³ Benjamin Klein & Andres V. Lerner, *The Law and Economics of Bundled Pricing: LePage's, PeaceHealth and the Evolving Antitrust Standard*, 53 ANTITRUST BULL. 555 (2008) [hereinafter Klein & Lerner, *Law and Economics of Bundled Pricing*].

⁵⁴ A 1.0 percent discount on \$41 million amounts to \$410,000. A single-state rival could charge no more than \$590,000 for the business in one market, but this is below its cost of \$600,000.

was previously permissible to fail the attribution test. This is an odd consequence of the discount attribution test.⁵⁵

This simple numerical example highlights three important features of the *PeaceHealth* discount attribution test. First, even a very small discount (*e.g.*, one percent) may be identified as exclusionary. Second, the test reveals that a profitable firm can use bundled discounts to exclude equally efficient rivals. Third, it is possible for a firm to be engaged in permissible discounting, only until expanding into a product market in which it faces no rival.⁵⁶

Example 2

The example that we presented above highlights some issues with evaluating bundled discounts by applying an attribution test. Another consideration deals with the relevance of rivals' characteristics in identifying exclusion. If a multi-product firm offers bundled discounts, it can be guilty of exclusion with respect to one rival while not being guilty with respect to another. Consider, for example, that a seller offers three products — Product A, Product B, and Product C — and a 2.0 percent discount if a buyer purchases 100 percent of its needs of all products. If the buyer substitutes a rival's product in any of the three markets, it receives no discount. At list prices, the buyer's purchase requirements are as follows:

Product A: \$1.0 million

Product B: \$1.0 million

Product C: \$50.0 million

If the buyer purchases everything from the bundling seller, it will receive a total discount of \$1,040,000. It is obvious that no rival selling either Product A or Product B can compete for the buyer's business, as any positive price would fall short of compensating the buyer for the lost

⁵⁵ See Klein & Lerner, *Law and Economics of Bundled Pricing*, *supra* note 53.

⁵⁶ *Cascade Health Solutions v. PeaceHealth*, 502 F.3d 895 (2007).

discount. Consequently, the seller would be guilty of exclusionary discounting with respect to rival sellers of Product A or Product B. But this is not necessarily true for a rival that sells Product C.

If a rival seller of Product C wants to take away \$10 million of this buyer's purchases, it must offer a discount of at least \$1,040,000, which is 10.4 percent. This would not be exclusionary if the rival's costs are less than \$8,960,000. Thus, the same discount schedule is predatory with respect to rivals that offer Product A and/or Product B, but not necessarily with respect to rivals selling Product C. Once again, if the discounts were unbundled, no equally efficient rival would be excluded.

In addition to demonstrating potential shortcomings of the attribution test, we have shown that bundled discounts can be exclusionary and profitable at the same time. For this reason, the question of whether a discounting scheme is incrementally profitable is irrelevant.

IV. Loyalty Discounts and Their Complications

Loyalty discounts are somewhat different from bundled discounts, but may be exclusionary under certain circumstances. Unlike bundled discounts, loyalty discounts apply to only one product in one geographic market. This makes their analysis less complicated. The discount rate, and thus the final price, depends on the percentage of the buyer's requirements that the supplier fills.⁵⁷ The schedule looks similar to the bundled discount schedule, but there is only one market.

Suppose that there is a single buyer and a seller offering the following discount program.

<u>Share of Requirements</u>	<u>Discount</u>
100%	10%
90-99%	9%
80-89%	8%

⁵⁷ The discount may depend on quantities rather than percentages, but if the seller knows the buyer's (approximate) requirements, the schedule may yield the same results.

70-79%	7%
60-69%	6%
0-59%	0

This loyalty discounts plan applies to a fixed period of time. These programs can be applied as rebate or discounts on future purchases. For buyers with ongoing purchases, the discount may appear as a credit on future purchases. That structure does not influence the competitive effects of the discount plan. There are, however, two factors that are critical in determining competitive impact. First, whether the incremental discounts are retroactive or apply only on incremental sales. Second, whether the customer's entire book of business is contestable.

Impact of Retroactivity

If the loyalty discount program is retroactive, higher discount rates apply to the entire book of business. In other words, if a buyer's purchases fall in the 90-99 percent range, it receives a 9.0 percent discount on all purchases. If the buyer increases its purchases to 100 percent of its requirements, it will then receive a 10 percent discount on all purchases. Retroactivity does not always lead to exclusion, but it increases the likelihood that a discount program would exclude an equally efficient rival.

Suppose that the buyer's requirements for a year amount to \$100 million (at list prices). If it purchases all of its requirements from the seller offering the loyalty discount, the buyer's net expenditure on this good will be \$90 million. For purposes of the following illustration, assume that the seller's profit margin at list prices is 15.0 percent. Consider a situation in which the buyer has already bought \$80 million worth of the good (at list prices), and it considers purchasing the remainder from one of the seller's rivals. For simplicity, we assume that their rival's product is a perfect substitute for the output of the discounting seller. We also assume that both firms are

equally efficient. If the buyer purchases the remaining 20 percent from a rival supplier, its cost on the first 80 percent will now be \$73.6 million, because it only qualifies for the 8 percent discount tier. To make the buyer whole, the rival supplier can charge no more than \$16.4 million for the remaining 20 percent of the business. This requires a discount of \$3.6 million, which amounts to an 18.0 percent discount. Since the profit margin at list price is only 15.0 percent, the rival supplier will be unable to make the sale without incurring a loss. The loyalty discounting scheme, in that case, would be exclusionary.⁵⁸ If the loyalty program were not retroactive, *i.e.*, the higher discounts only applied to incremental sales, this plan would not exclude an equally efficient rival. The rival could meet or beat the incremental rates of 9.0 and 10.0 percent without incurring a loss.

The example above demonstrates that an equally efficient rival can be foreclosed from a market by a simple loyalty discounting program. The discounting seller never offered an 18.0 percent discount, but a rival would be forced to offer such a discount if it wished to secure 20 percent of the buyer's book of business. The discounting scheme, however, would not, *as a whole*, yield below-cost pricing.

Loyalty schemes can exclude equally efficient rivals. It is worth noting, however, that this example only demonstrates exclusion when the second seller cannot compete for the purchaser's entire book of business. Excluding an equally efficient rival is only possible if that rival is capacity constrained, or cannot supply 100% of the purchaser's requirements for some other reason. This feature of loyalty programs should be considered in evaluating potential anticompetitive effects.

Contestability of Market

In the previous example, the loyalty discount program was exclusionary because the discounting firm had already made 80.0 percent of the sales and the schedule was retroactive. At

⁵⁸ Note, however, that this would not be the case if the profit margin at list prices were, say, 20 percent rather than 15 percent.

the start of the next year, however, that plan could not exclude an equally efficient rival who can meet or beat the plan.

A would-be rival cannot always compete for a purchaser's whole book of business. In our example, we assumed that the seller's output and that of the would-be rival were perfect substitutes. In many instances, however, this will not be true. In *Concord Boat*, for example, the Brunswick engines and those of its rivals were not fungible.⁵⁹ Similarly, Intel's microprocessors and those produced by AMD are not perfect substitutes.⁶⁰ In cases like these, consumer demand may require that a downstream manufacturer (*e.g.*, a boat builder or computer manufacturer) produce a substantial fraction of its output with a specific brand of input. Dell, for example, may find that it must produce 75 percent of its total output with "Intel Inside". As a result, only 25 percent of its microprocessor needs is open for competition. In that event, a retroactive loyalty discount program may well be exclusionary. This situation raises an interesting antitrust policy question: Is the market segmented such that 25 percent of the manufacturer demand is monopolizable?

In this example, the loyalty discount schedule is retroactive, *i.e.*, the increased discounts are not incremental. As break points are passed, the higher discounts apply to the entire book of business. Removing retroactivity could have a similar effect on loyalty discounts as unbundling has on bundled discount programs. It would separate the "monopolized" sales from the competitive sales. Essentially, this would separate contestable and non-contestable sales.

There is an additional anomaly that arises with loyalty discounts that are retroactive, or discounts that apply to non-contestable sales. If a seller offers the same discount program to large

⁵⁹ *Concord Boat Corporation v. Brunswick Corporation*, 207 F. 3d 1039, 1045–46 (2000).

⁶⁰ See Patrick DeGraba & John Simpson, *Loyalty Discounts and Theories of Harm in the Intel Investigations*, 2 J. ANTITRUST ENF'T 170 (2014).

and small buyers alike, it cannot be accused of price discrimination in violation of the Robinson-Patman Act.⁶¹ But doing so results in an anomalous outcome. A small buyer with a \$10 million book of business may qualify for the maximum discount when purchasing all of its requirements from the discounting supplier, while a larger buyer with, say, a \$50 million book of business would not qualify for any discount if it purchased \$10 million worth of output from the discounting seller. There appears to be no procompetitive rationale for this difference. This absence supports the inference of exclusionary impact.

V. An Antitrust Policy Proposal

Both bundled discounts and loyalty discounts can exclude equally efficient rivals. Since exclusion is rarely – if ever – welfare enhancing, these discount programs warrant antitrust scrutiny. Until experience has shown that bundled discounts and loyalty discounts are always or nearly always anticompetitive, challenges in specific cases should be conducted under the Rule of Reason.

Ultimately, the inquiry must determine whether the discount plan in question is unreasonably exclusionary. If so, it will be unlawful; if not, it will be lawful. Although the evidentiary details will vary, the central issue for both bundled and loyalty discounts will prove to be the same: are they exclusionary? While price-cost tests, which we accept as an important component of this antitrust analysis, aim to identify below-cost pricing, the central issue here is not whether prices are predatory. With predatory prices, the fear is that the firm could raise prices after securing monopoly power. No such concern exists with profitable bundled and loyalty discounts. Since these pricing strategies deter entry, the incumbent already charges noncompetitive prices.

⁶¹ 15 U.S.C. § 13 (1936).

At first glance, bundled and loyalty discounts appear quite different. Bundled discounts involve multiple products and competing against a bundled discounting scheme could require that the rival offer a similar product array. In contrast, loyalty discounts involve only a single product. The distinction, however, becomes less pronounced when loyalty discounts are applied in the presence of non-contestable sales, or “retroactively.” Both *Eaton* and Intel illustrate that single-product loyalty programs may cover both contestable and non-contestable sales. This, in effect, replicates the multi-product environment. Consequently, we agree with Carlton et. al. (2008), Federico (2011), and Klein and Lerner (2016) that similar treatment for these two forms of conditional pricing is most appropriate.⁶²

Rule of Reason Analysis

In a Rule of Reason analysis of a challenged practice, there are three stages. First, the plaintiff – public or private – must make a *prima facie* case that the conduct at issue is anticompetitive in an antitrust sense. That is, the practice is facially anticompetitive as it will raise price and reduce quantity or quality. If this effort is unsuccessful, the case ends here. If it is successful, the burden shifts to the defendant. In the second stage, the defendant may respond in one of two ways. The defendant may simply refute the plaintiff’s claims as being factually incorrect, or the defendant may acknowledge the conduct, but offer a procompetitive business justification for the conduct. In the third stage, the burden shifts back to the plaintiff to refute the defendant’s claim or offer one or more less restrictive alternative means of realizing any procompetitive gains offered by the defendant. If the plaintiff’s argument is persuasive, the defendant may be obligated to substitute a less restrictive alternative.

⁶² See Dennis W. Carlton, Patrick Greenlee & Michael Waldman, *Assessing the Anticompetitive Effects of Multiproduct Pricing*, 53 ANTITRUST BULL. 587 (2008); Giulio Federico, *The Antitrust Treatment of Loyalty Discounts in Europe: Towards a More Economic Approach*, 2 J. EUR. COMPETITION L. & PRAC. 277 (2011); Klein & Lerner, *Price-Cost Test*, *supra* note 4.

In the end, if the plaintiff establishes the existence of anticompetitive harm and the defendant offers evidence of procompetitive benefits, the court will have to weigh the harms and benefits to determine whether the discount program has a net positive or a negative effect on consumer welfare or social welfare.

Application to Bundled and Loyalty Discounts

In cases involving bundled discounts or loyalty discounts, plaintiffs will be alleging §2 Sherman Act violations. The *Grinnell* test for unlawful monopolization and the *Spectrum Sports* test for unlawful attempts to monopolize provide some guidance for a plaintiff in making a *prima facie* case. The *Grinnell* test for unlawful monopolization requires (1) proof of actual monopoly that (2) resulted from predatory or exclusionary conduct. For attempted monopolization, *Spectrum Sports* similarly requires proof of such conduct plus proof that actual monopolization will be achieved if the unreasonably exclusionary conduct goes unchecked.⁶³ The Rule of Reason framework seeks to determine whether the evidence is sufficient to conclude that the conduct being analyzed impairs competition.

In the case of a discounting scheme, the plaintiff will typically allege that the discount program is exclusionary (*i.e.*, that the plaintiff is unable to compete). Since the antitrust laws are intended to protect competition, rather than competitors, the plaintiff must make the case that the discount program results in harm to the market. For bundled discounts, this may be shown by demonstrating that unbundling would lead to lower prices due to competition from an equally or more efficient rival. In the case of loyalty discounts, one may show this by demonstrating that lower prices would result by eliminating retroactivity. For both types of discounting, one way to make a *prima facie* case is to show that the discount program fails the discount attribution test.

⁶³ *Supra* notes 6–7.

Failure provides evidence that the plan will exclude equally efficient rivals and would thereby be anticompetitive.⁶⁴

Once a plaintiff has made its *prima facie* case that a specific bundled discount or loyalty discount plan is unreasonably exclusionary, the burden shifts to the defendant in stage two. In this stage, the defendant can attempt to rebut the plaintiff's *prima facie* case in one of two ways. The defendant can challenge the plaintiff's allegations as being without merit. That is, the defendant may disprove the alleged facts offered in support of the plaintiff's claim that the discount plan is exclusionary. Alternatively, the defendant may offer a procompetitive or competitively neutral business rationale for the discount program. The defendant would be expected to put forth evidence that there is some offsetting benefit, and critically, that the benefit is unattainable without the discount program. This is where the defendant could argue that it realizes efficiency gains, but it would have to demonstrate that those gains are restraint-specific. Moreover, the defendant would also have to show that the efficiencies are sufficient to fully offset the welfare losses that accompany the restraint.

If the defendant offers a plausible procompetitive business justification for its discount program, the burden shifts back to the plaintiff. In stage three, the plaintiff may respond by arguing that the alleged benefit is fanciful or can be realized in a less restrictive way. If this argument is persuasive, the defendant may be obligated to substitute the less restrictive alternative.

VI. Concluding Remarks

Both bundled discounts and loyalty discounts reduce net prices below the list prices. They appear, therefore, to be procompetitive. But appearances may be deceiving as both types of

⁶⁴ We hesitate to make failure of the discount attribution test a necessary condition in stage one of a Rule of Reason inquiry. It is, however, difficult to see how a discount plan that does not result in below-cost pricing on incremental sales could exclude equally efficient rivals.

discounts can be exclusionary. The judicial treatment of bundled discounts and loyalty discounts continues to evolve (ever so slowly). We have suggested that this evolution proceed under the Rule of Reason. The central focus should be on whether a particular discount program excludes would-be rivals and thereby causes prices to be higher than they would be if the discounts were unbundled or retroactivity were removed. In either event, the program should be impermissible in the absence of efficiencies that cannot be realized without the discount program. But the mere existence of restraint-specific efficiencies is not enough. In order to justify an exclusionary discount program, the efficiency gains must be large enough to offset the welfare losses due to exclusion.