COMMENTS REGARDING HEARINGS ON HEALTH CARE AND COMPETITION LAW AND POLICY – STATEMENT FOR DOJ-FTC HEARING ON GPOs – Sept. 26, 3003

ANTITRUST ANALYSIS OF GPO EXCLUSIONARY AGREEMENTS

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Executive Summary.

Serious antitrust concerns remain about exclusionary agreements that charge higher prices to GPOs or hospitals that won't commit to limiting purchases from rivals of dominant manufacturers to a small (often 5-10%) percentage of their purchases. While I lack data on the general prevalence of such agreements, it is clear that such agreements have been used for multiple devices, and are not meaningfully constrained by the recent codes of conduct adopted by certain GPOs. Standard antitrust analysis indicates that these agreements have anticompetitive effects when they foreclose enough of the market to impair rival efficiency and thus increase the market power of a dominant firm. It further indicates that the procompetitive justifications offered by GPOs either are not furthered by the agreements or could be furthered in less restrictive ways. FTC-DOJ Health Care Enforcement Policy Statement 7 only covers horizontal agreements among hospitals to form a GPO, and thus provides no guidance for enforcement policy on any exclusionary agreements these GPOs might enter into with suppliers. The Statement should thus be supplemented to provide that guidance in line with standard antitrust analysis.

There are several common misconceptions that must be put aside for sound analysis in this area.

1. It is not true that a loyalty or bundled "discount" must reflect a "price cut." Anything we call a "discount" for agreeing to the loyalty or bundled condition could equally be called a "penalty" on those who refuse to conform to that condition. The higher price charged to those who violate the condition may be inflated artificially or by the increased market power that results from the exclusionary condition itself. Nor does history provide a good baseline for determining whether we have a discount or penalty. Instead, the proper baseline is the level to which prices would have gone without the exclusionary agreement.

[1] Einer Elhauge has been retained to state his opinions in this statement by the Medical Device Manufacturer's Association. The views expressed here are his own and should not be taken to reflect the views of Harvard University.

2. It is not true that GPO or hospital willingness to enter into exclusionary agreements indicates that they are efficient and good for hospitals or the market as a whole. That notion reflects a fallacy of composition and a misunderstanding of the nature of exclusionary agreements. The main reason exclusionary agreements work is that collective action problems mean that individual buyers have incentives to enter into them (to get the discount/avoid the penalty) even when the combined effect of all of them doing so is to create anticompetitive harm for the market. And if buyers enjoy enough market power to ameliorate their collective action problems, they alternatively can have incentives to collude with dominant sellers to enhance each others' market power and split the resulting supracompetitive profits earned from downstream purchasers.

3. The existence of GPOs is not the problem. To the contrary, GPOs are a highly efficient means of distributing medical devices. The problem arises when GPOs take part in exclusionary agreements whose aggregate effect is to impair rival competition.

4. The efficiencies produced by GPOs themselves do not justify the exclusionary agreements at issue. To the contrary, the greater efficiency of GPOs means that agreements that foreclose them to rivals are foreclosing the most efficient means of distribution, which impairs rival efficiency.

5. It is a mistake to believe that a short term to exclusionary agreements reduces antitrust concern. The same individual incentives that cause each buyer to enter into exclusionary agreements that collectively have an anticompetitive effect will also cause buyers to stay in those agreements even when their term ends. Indeed, the incentives to stay will be even higher. Thus, giving exclusionary agreements a short term does not reduce their anticompetitive effect. Further, no matter how long the nominal term of a contract, if it is unreasonable restraint of trade, it would not be enforceable under contract law anyway. Thus, every exclusionary agreement that unreasonably restraints trade is actually terminable at will. According, as binding Supreme Court authority has repeatedly held, exclusionary agreements with very short terms have anticompetitive effects when they produce substantial marketwide foreclosure.

6. In fact, a short contractual term or provision allowing for quick termination actually undermines any claim that these exclusionary agreements procompetitively enhance the seller's efficiency by giving it greater predictability or certainty, thus reducing its risk and transaction or sales costs, and/or allowing it to make sunk cost

or relationship-specific investments. All those efficiencies turn on the assumption that the agreement constrains the buyer in the future. If instead buyers could terminate the agreements on short notice, then the seller would not enjoy this predictability or certainty, would have to incur transaction and sales costs to keep buyers, and could have any sunk cost or relationship-specific investment appropriated by a buyer decision to terminate.

7. Nor do the relevant exclusionary conditions further any buyer efficiencies, like lowering administrative or transaction costs or achieving standardization benefits. If the exclusionary condition limiting purchases from rivals were actually desired by buyers for these reasons, there would be no need to couple it with a discount. Nor would a condition conferring benefits on the buyer constrain the buyer; instead it would constrain the seller by requiring it to supply the buyer if the buyer so desires.

8. It is a mistake to focus solely on agreements between device makers and GPOs. Even when device makers do not have an exclusionary agreement brokered through a GPO, they can enter into similar or even more onerous exclusionary agreements directly with hospitals, and it is the cumulative effect of all those exclusionary agreements that determines the marketwide foreclosure. Agreements directly with hospitals might be an especially attractive anticompetitive alternative to the extent that scrutiny of GPOs and their codes of conduct constrains brokering them through GPOs. In any investigation the FTC or DOJ does, it should make sure to inquire about the prevalence of exclusionary agreements with hospitals generally, and not just through GPOs.

The Serious Anticompetitive Concerns

If, without imposing conditions, a firm simply sells its product at a more attractive price or quality than rivals, then this will deprive rivals of sales, but that constitutes successful competition rather than an exclusionary agreement. Such competition is desirable because the firms that succeed will be those who offer the best combination of price and quality. This usefully channels each business' efforts into improving its own efficiency by lowering its costs and improving its products.

What creates anticompetitive effects is when a dominant firm attaches conditions on the sales of its products that foreclose enough of the market to impair rival efficiency. *See* Einer Elhauge, *Defining Better Monopolization Standards*, 56 STANFORD LAW REVIEW at III.B (forthcoming November 2003), *available at* http://www.law.harvard.edu/faculty/elhauge/. This is undesirable and harmful to efficiency and consumer welfare. It lowers the productive efficiency of whatever amount of output is produced by rivals. It also reduces the ability of rivals to constrain prices by the dominant producer, thus harming consumer welfare. Such tactics enhance a dominant firm's market share not by improving its own efficiency, but by worsening the efficiency of its rivals.

Such marketwide foreclosure can anticompetitively impair rival efficiency and harm consumers in various distinct ways.

(1) Foreclosure can bar rivals from the supplies or distribution needed to sustain a competitive number of rivals at their minimum efficient scale. In most industries, there are economies of scale at low output levels, so that firms can lower their costs by expanding until they reach the output level that minimizes their costs, which is called the minimum efficient scale. If foreclosure prevents rivals from maintaining this scale, or from expanding their operations to reach it, then it will impair rival efficiency. Foreclosure can similarly deprive rivals of economies of scope if, without the foreclosure, rival expansion would have enabled them to offer a variety of products that can be more efficiently produced or sold together than separately.

If rival efficiency is impaired in any of these ways, then rivals will have to cover their now-higher costs by charging higher prices than they otherwise would have. This will worsen the market options available to consumers, and mean that these rivals will impose less of a constraint on the dominant firm's market power than they otherwise would have. This can thus enhance or maintain market power even if it never drives rivals out of the market. Both economies of scale and scope clearly exist for medical devices, though the degree of each must be ascertained for each relevant device.

Further, this concern is not eliminated if the unforeclosed market can sustain merely one rival at the minimum efficient scale, or else firms would have a license to use foreclosure to convert otherwise competitive markets into duopolies, and if only one rival exists it would be less likely to undercut supracompetitive prices by the dominant firm since it knows it will make less profit in the long run if it did. Rather, to avoid this anticompetitive effect, the unforeclosed market must be large enough to sustain a competitive number of rivals at their minimum efficient scale – that is, whatever number of rivals is sufficient to prevent such coordination. *See* IX AREEDA, ANTITRUST LAW 29, 55-56 (1991) (relevant question is whether the foreclosing agreements "preempt so much patronage that not enough remains to support a competitive number of efficient rivals.") Just what the minimum number of firms is that assures competitive behavior rather than oligopolistic coordination depends on the particulars of each market and how conducive it is to such coordination. But, as reflected in prevailing merger guidelines that presumptively condemn mergers that create HHIs over 1800, the normal presumption is that it takes about six firms to make oligopolistic coordination unlikely absent special factors, which would have to be assessed for each particular device market.

To be sure, foreclosing buyers may not foreclose rivals if the buyers are dealers who merely resell the product to ultimate consumers, entry barriers to being a dealer are zero, and any entrant can immediately and costlessly expand sales to any extent necessary. In that case, foreclosure of dealers cannot effectively foreclose rivals because rivals could simply create a new dealer that could immediately access the entire consumer market. But foreclosure will limit rival sales under more realistic assumptions about buyer entry and expandability. In particular here, the barriers to entry and expansion by hospitals are formidable, not only for economic reasons but because of government regulation, such as requirements to get a certificate of need for the creation or major expansion of hospital facilities. A rival foreclosed from selling a medical device to existing hospitals cannot simply create its own new chain of hospitals in order to distribute its product. Likewise, the barriers to entry and expansion in the GPO market are significant, in part because hospitals have largely already signed up with existing GPOs who have can offer them the benefits of some share of their buyer market power. The anticompetitive concern here is thus far greater than for the sorts of exclusionary agreements normally considered by courts, which typically instead involve distributors or retailers who can enter or expand far more easily.

(2) Foreclosure can bar rivals from the most efficient means of distribution, which here is through GPOs, and in particular through the largest GPOs. Even if other means of distribution remain open (like selling directly to hospitals), foreclosing rivals from the means of distribution that are the most cost effective will increase rival costs and thus their prices, hampering their ability to compete. *See* HOVENKAMP, FEDERAL ANTITRUST POLICY 431 (2d ed. 1999) (noting that "foreclosure theories of exclusive dealing become more robust if" they are "raising rivals' costs by relegating them to inferior distribution channels"). Although such distributors are nominally buyers, one can conceptualize their foreclosure as effectively a foreclosure of the most efficient suppliers of a necessary input called distribution services. *See generally* Thomas G. Krattenmaker & Stephen C. Salop, *Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power Over Price*, 96 YALE L.J. 209, 234-45 (1986); Stephen C. Salop & David T. Scheffman, *Raising Rivals' Costs*, 73 AM. ECON. REV. 267 (1983) (Special Issue).

Note that this sort of foreclosure can have an anticompetitive effect even if rivals are able to achieve its minimum efficient scale of operation. Even though its production costs are unchanged, rivals' incremental costs of selling each product will be raised by their exclusion from the most efficient means of distribution. Rivals will have to substitute other, less efficient, means of distribution. This reduction in rival efficiency will in turn enhance the dominant firm's ability to raise prices.

Foreclosure of the most efficient means of distribution was the sort of anticompetitive foreclosure effect relied on in the recent *Microsoft* and *LePage* en banc decisions. *See* LePage's v. 3M, 324 F.3d 141, 159-60 & n.14 (3rd Cir. 2003) (en banc); Microsoft v. U.S., 253 F.3d 34, 60-61, 70-71 (D.C. Cir. 2001) (en banc). Indeed, both en banc courts demanded far less than proof of a substantial foreclosure of the most efficient means of distribution. *LePage's* found an anticompetitive effect sufficiently proven by evidence that loyalty rebates and bundled discounts were used to foreclose a rival seller of tape from selling to superstores like K-Mart and Wal-Mart because they provided "high volume sales with the concomitant substantially reduced distribution costs," even though no evidence was cited of the percentage of the market they covered. 324 F.3d at 60 n.14. Likewise, the en banc court in *Microsoft* found that agreements that required computer makers to carry the Microsoft browser had an anticompetitive effect because it made it too expensive for "many" (not all) computer makers to also install rival browsers and because computer maker installation was "*one* of the two most cost-effective methods by far of distributing browsing software." 253 F.3d at 60-61 (emphasis added). Separately, the en banc court in *Microsoft* also found that agreements that required AOL and other "leading" internet access providers not to "promote" rival browsers and to supply no more than 15% of their customers with a rival browser had an anticompetitive effect because internet access providers were the other most efficient means of distribution and these agreements assured that a "majority" (not all) of the subscribers would not be offered rival browsers as the "default" choice by their internet access provider. *Id.* at 68, 70-71 (rejecting argument that there is no anticompetitive effect because rivals can still use other, less efficient, means of distribution to reach all consumers). *A fortiori*, if an exclusionary agreement does foreclose a significant share of GPOs, or the largest and most efficient of them, then it produces an anticompetitive effect of concern.

(3) Many modern industries are also characterized by network effects, which means that one seller's product is more valuable to buyers the more that other buyers have purchased the same good from that seller. *See, e.g.*, David S. Evans & Richard Schmalensee, *A Guide to the Antitrust Economics of Networks*, ANTITRUST, Spring 1996, at 36; Michael L. Katz & Carl Shapiro, *Systems Competition and Network*

Effects, 8 J. ECON. PERSP. 93 (1994); S. J. Liebowitz & Steve Margolis, *Network Effects and Externalities*, THE NEW PALGRAVES DICTIONARY OF ECONOMICS AND THE LAW 671, 671 (MacMillan 1998). Where network effects exist for a medical device, foreclosure can impair rival efficiency by denying rivals access to the number of buyers they need to make their products more valuable to all buyers. Rather than raising rivals' costs, this strategy succeeds by lowering the value of rivals' products. This also worsens the market options available to consumers and lessens the ability of rivals to constrain a dominant firm's market power.

(4) In industries where innovation is important, like the medical device industry, foreclosure can bar rivals from the potential market sales they need in order to raise the capital necessary to make efficient levels of investment in the research and development of new products. Investment in research and development is costly and risky, and capital markets will not provide the funding unless the net returns are positive. If firms are foreclosed from any significant share of the market, then successful innovations will have a smaller payoff than they otherwise would have, which will discourage capital markets from making efficient investments in research and innovation. For example, suppose it would cost $1 million to invest in research with a firm that has a 50% chance of successfully innovating to create a product that would be sufficiently better than current market options that, if created, it would take all customers in a market with 2.1 million customers and earn the firm an additional $1/customer.[2] Without foreclosure, capital markets would provide the firm with funding because the expected returns are $1.05 million, which exceeds the $1 million cost, and this is socially efficient since the net benefits exceed the costs. But if even as little as 10% of the market were foreclosed, then capital markets would not provide the firm with funding for its research because the expected payoff would only be $945,000, which is less than the cost. Thus, in this example, 10% foreclosure could preclude rivals from obtaining the capital funding they need to make efficient, socially desirable investments in research and development. Because incentives for research investments are optimal if the entire market is open to a firm that succeeds with new innovation, agreements that foreclose a significant share of the market will discourage some funding necessary to make efficient investments in innovation. Note that this anticompetitive effect follows even if the unforeclosed market is large enough that rivals can achieve economies of scale or scope in operations and have sufficient access

[2] For simplicity, costs here include normal returns on capital and earnings reflect the present value of future earnings. Capital markets are also assumed to be risk neutral. Taking risk aversion into account would only exacerbate the anticompetitive effects of foreclosure by increasing the risks faced by new innovative companies.

to efficient means of distribution.

(5) Substantial market foreclosure can also impair rival efficiency by simply slowing down rival expansion even though it does not outright prevent that expansion. Firms expand their sales by persuading buyers to switch to them. This requires buyers willing to expend some information costs to decide whether a switch is merited and distributors able to overcome that information cost barrier. Foreclosure of the means of distribution most efficient at getting buyers to switch can thus slow down expansion. Further, in many industries, only a certain percentage of buyers may reasonably be open to expending the information costs of switching for any given period. If so, then foreclosure of a significant share of buyers can slow down expansion. For example, if a market has 1 million customers, 20% of which are reasonably open to switching a year, then foreclosure of 50% of the market would mean only 10% of the market is reasonably open to switching, which means that a firm could only expand by 100,000 sales per year rather than 200,000 sales per year.

Such a slow down in expansion can impair rival efficiency for at least two reasons. First, in many industries there is a learning curve, so that the more total output a firm has made in the past, the lower its current per unit costs. See, e.g., James E. Hodder & Yael A. Ilan, *Declining Prices and Optimality When Costs Follow an Experience Curve*, 7 MANAGERIAL & DECISION ECON. 229 (1986); A. Michael Spence, *The Learning Curve and Competition*, 12 BELL J. ECON. 49 (1981). This is related to but different from economies of scale because those turn on how high the current output is whereas learning curve economies turn on how high total past output has been because that is what provides the product experience that lowers costs. By delaying rival expansion where a learning curve exists, a firm can increase its rivals' costs in every year up until the year that the rival finally accumulates enough past experience to achieve all learning curve economies.

Second, small companies generally must rely mainly on retained earnings to grow rather than on capital markets. VISCUSI, VERNON & HARRINGTON, ECONOMICS OF REGULATION AND ANTITRUST 168 (1998). From 1970-79, for example, firms with less than $5 million in assets retained 80% of earnings and firms with $5-25 million in assets retained 75%. *Id.* This reliance on retained earnings may reflect the fact that small companies pose risks that deter capital markets or that there are agency and information costs to capital markets assessing small companies that are best solved by requiring those companies to rely on internal earnings once the initial capital stake has been raised. Given this reliance, delaying expansion will delay the accumulation of internal earnings necessary to finance cost-reducing building and research. An expansion delay will thus prevent firms from achieving economies of scale in production and research as soon as they otherwise would have.

Causing such an delay in rival expansion can be profitable for a firm with market power even if the rival ultimately will achieve economies of learning and scale because the longer those rival economies are put off, the longer the firm with market power will continue to earn supracompetitive profits.

(6) Foreclosure can deter or delay entry into a related market in which a firm enjoys market power. Often two product markets might be related. Entry into both product markets at the same time can be costly because it requires a larger investment in sunk costs and because it is hard to produce both products in sufficient scale. Dual entry can also be difficult because it is hard to overcome the information costs necessary to get buyers to deviate from brand loyalty. A entrant might, however, be able to enter into one of the markets more readily because that market is smaller and less costly to enter, or because the entrant has a superior product in that market that makes it easier to get customers or efficient distributors to switch to a new brand. Once an entrant becomes established in that market, it might then have the scale, expertise, distribution, or brand reputation to undertake a second entry into the related market more successfully and/or at lower cost. If so, a firm with market power in the related market has incentives to engage in defensive leveraging, foreclosing the other market in order to deter or delay the second entry into the related market that can undermine its market power. *See generally* D.W. Carlton & M. Waldman, *The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries*, 33 RAND J. ECON.194 (2002); Feldman, *Defensive Leveraging in Antitrust*, 87 GEO. L.J. 2079 (1999). M.D. Winston, *Tying, Foreclosure and Exclusion*, 80 AMER. ECON. REV. 837 (1990). This was again one of the principal theories relied on in *Microsoft.*

Defense leveraging has even stronger – and more immediate – anticompetitive effects if the two related product markets are partial substitutes for each other. Then the foreclosure in one market will immediately protect or enhance market power in the related market even if second entry is not rendered more likely in the future. Such suppression of competition from partial substitutes is one of the most anticompetitive effects of exclusionary agreements. *See* IX AREEDA, ANTITRUST LAW 70-72 (1991); X AREEDA, ELHAUGE & HOVENKAMP, ANTITRUST LAW 233 (1996).

Defensive leveraging also has even stronger – and more permanent -- anticompetitive effects if the technological trend is from the related market (where the firm has market power) to the other market (where the foreclosure is occurring). In such a case, a firm can use foreclosure not just to delay the erosion of its current market power over a waning technology but in order to shift to having market power over the technology of the future. This can have long lasting adverse effects by creating market power in the new technology that otherwise might not have existed or (even if market power in the new market were somehow inevitable) by preventing the most efficient firm from winning the new market.

(7) Finally, foreclosure can harm downstream buyers by precluding rival competition even if it does not impair rival efficiency. Suppose, for example, that a device maker pays ten hospitals in a regional market $1 million each to agree to give the device maker exclusive rights to sell its product to patients in those hospitals, thus foreclosing competition from a rival device maker. With a regional monopoly, the device maker will now be able to raise prices on the device to supracompetitive levels to consumers in that regional market. None of the regional hospitals need fear the higher device prices will cause them to lose market share to other regional hospitals because they all have the same agreement. In effect, the device maker's exclusionary agreements here allow it to serve as a regional cartel ringmaster, splitting the supracompetitive profits with the regional hospitals. *See generally* Krattenmaker & Salop, *supra*, at 238-40; Elizabeth Granitz & Benjamin Klein, *Monopolization by Raising Rivals' Costs: The Standard Oil Case*, 39 J.L. & ECON. 1 (1996); Hovenkamp, *Mergers & Buyers*, 77 VA. L. REV. 1369 (1991); IV AREEDA, HOVENKAMP & SOLOW, ANTITRUST LAW ¶943b, 204-06 & n.4 (1998). This anticompetitive effect does not require that the foreclosure impair rival efficiency in any of the other ways indicated above. It suffices that the foreclosure precludes competition that would otherwise have constrained market power in a downstream regional market.

Some Important Implications of the Relevant Antitrust Concerns

A few important general lessons can be drawn from the above analysis. ***First,*** the market in which one should measure the relevant foreclosure varies with the anticompetitive theory. If the theory is that rivals are deprived of their minimum efficient scale, the market access necessary to raise research capital, or progress along the learning curve, then the relevant market will be the full market to which rivals can turn to achieve that scale, sales access, or experience. If the theory is that rivals are deprived of the most efficient means of distribution, then the relevant foreclosure will be of those means of distribution, rather than of the entire product market. If the theory is defensive leveraging, then the relevant foreclosure will be of the other market rather than of the markets in combination. If the theory is downstream exploitation, then the relevant foreclosure will be of the downstream regional market, not of the entire upstream market in which the rival sells. The relevant markets and foreclosure shares to examine turns on economic function.

After all, market shares, including foreclosure shares, are merely a means of inferring anticompetitive effects. Thus, the relevant shares to examine turn on the anticompetitive effects one is interested in predicting. *See* XI HOVENKAMP, ANTITRUST LAW 157 (1998) ("the relevant market for exclusive dealing claims depends on the underlying theory explaining why the exclusive dealing or some other similar arrangement is anticompetitive."; IX AREEDA, ANTITRUST LAW 398 (1991) ("The key point is that the market boundaries chosen must be relevant to the particular dangers that foreclosure shares help predict.") The need to vary the market and necessary foreclosure sure for the anticompetitive theory at issue was recognized in the *Microsoft* en banc decision, which did not require 40% foreclosure of the entire computer market but found it sufficient: (1) under one theory that there was substantial foreclosure of the most efficient means of distribution; or (2) under the other theory that the foreclosure prevented Netscape from getting a sufficiently ubiquitous market share on all computers so that an ability to run applications on the Netscape browser could undermine Microsoft's monopoly in the operating system market.

Second, to achieve the relevant anticompetitive foreclosure, agreements need not absolutely prohibit buyers from dealing with the firm's rivals. If the agreements foreclose 90% of sales to 80% of the buyers, then they achieve 72% marketwide foreclosure. This is even more anticompetitive than an absolute foreclosure of 70% of buyers, and certainly enough foreclosure to raise the anticompetitive concerns noted above. This was again recognized in the *Microsoft* case, which condemned certain agreements that did not totally preclude Netscape from dealing with certain Internet Access Providers but did keep Netscape's share with those Internet Access Providers below 15-25%. *See also LePage's*, 324 F.2d at 155, 158.

Indeed, in the hospital context, foreclosing 80% or more of sales to each hospital is likely to have even stronger anticompetitive effects because of the importance of medical standardization. It is well-established that standardization within any given hospital reduces medical errors. Because of this, the hospital accreditation group, JCAHO, exerts pressure on hospitals to encourage each to standardize the devices it uses. This means that a commitment to buy 80% or more of a device from one seller can be tantamount to a commitment to buy 100%. This is not to say that standardization within hospitals is undesirable. The problem is that an 80% obligation can prevent standardization on the best or cheapest product. Nor is there any medical reason to force standardization *across* hospitals in the devices they buy since it is standardization *within* any given hospital that improves medical outcomes. In any event, the practical upshot is that, for devices used in hospitals, there is little difference between an 80% and 100% purchase obligation. Rival devices that offer especially large medical benefits may sometimes be able to overcome the benefits of standardization to occupy the 20% of hospital business left open to them. But even then the result is anticompetitive because the hospital loses the medical benefits of both standardizing on the rival device and using that better device for the other 80% of patients. Most rival devices, even if somewhat better and cheaper, will not be able to overcome the medical benefits of standardization given that the hospital must buy a high percentage of that product from another supplier.

Third, to achieve the relevant anticompetitive foreclosure, the agreements need not impose an absolute obligation to meet the foreclosure share. Conditioning the amount of discounts or rebates or sidepayments on achieving the foreclosure share can be fully sufficient. The anticompetitive effects flow from the foreclosure, not from the means used to gain the foreclosure. *See* XI HOVENKAMP, ANTITRUST LAW ¶1807b, at 116 (1998) ("antitrust policy should not differentiate between the manufacturer of widgets who explicitly imposes exclusive dealing on its dealers and the manufacturer who gives such dealers a discount or rebate for dealing exclusively in the manufacturer's widgets."); *FTC v. Brown Shoe*, 384 U.S. 316, 318-19 & n.2 (1966) (condemning discounts conditioned on exclusivity); *Standard Fashion v. Magrane-Houston,* 258 U.S. 346, 362-63 (1922) (same). Further, even a pure exclusive dealing agreement must depend on some implicit discount to induce agreement, so it makes no sense to treat more leniently those that make the discount explicit.

Nor does making discounts conditional on compliance lessen the penalty for noncompliance or produce lower compliance levels. After all, even an absolute contractual obligation to buy from only one supplier is at worst a promise to either do so or pay contractual damages. Using loyalty rebates simply sets a different penalty on noncompliance, and one that is far more enforceable to boot. With a loyalty rebate, the supplier can unilaterally impose a penalty for noncompliance by just withholding the quarterly or annual rebate without even going to court, and can easily prove in court the amount of past rebates that must be returned. With an absolute exclusive dealing contract, the supplier faced with a noncomplying buyer cannot impose any penalty without going to court and winning a litigation and appeal, and has damages that are much harder to prove and measure.

Moreover, because any exclusive dealing agreement that unreasonably restrains trade is not enforceable under contract law, an absolute contractual obligation would, if unreasonable, not even enjoy any contractual penalties for noncompliance. Thus, normally the only real penalty suppliers impose on buyers who do not comply with an absolute exclusive dealing contract is refusing to deal with that buyer in the future. This termination penalty is serious enough to make exclusive dealing agreements raise antitrust concerns. By adding additional penalties that are more enforceable, loyalty discounts probably increase rather than decrease the exclusionary effect. This is especially true when loyalty rebates are either on *past* purchases or are bundled with discounts on *other* goods that are contingent on the buyer meeting the loyalty threshold on each product in the bundle.

Fourth, the relevant anticompetitive effects do not depend on all the foreclosure being accomplished by one agreement, one type of agreement, or even by agreements with one dominant firm. They will be produced if a number of exclusionary agreements *cumulatively* cause enough marketwide foreclosure to create the predicted anticompetitive effects. If one firm uses two types of exclusionary agreements – say, both bundled discounts and loyalty rebates -- then the relevant foreclosure is what they produce in aggregate for the device market being examined. *See* IX AREEDA, ANTITRUST LAW 94, 104 (1991).

Likewise, if two manufacturers use exclusionary agreements with multiple buyers that, in aggregate, foreclose enough of the market to preclude rivals from achieving their minimum efficient scale, that can anticompetitively protect a duopoly even though neither firm's agreements alone result in sufficient foreclosure. Thus "the relevant foreclosure aggregates those of the defendant and of his rivals." *Id.* at 94, 103-04; XI HOVENKAMP, ANTITRUST LAW 160 (1998) ("When exclusive dealing is used to facilitate collusion . . . the relevant foreclosure becomes the *aggregate* foreclosure imposed by the upstream firms in the collusive group."). The economic relevance of this aggregate foreclosure does not depend on the two manufacturers conspiring with each other.

It similarly follows that, if every buyer had a dual source contract with the same two manufacturers, then all other rivals would be excluded from the market and the contracts would anticompetitively create a duopoly even though no single firm enjoys exclusive rights at any one buyer. It should, however, be noted that the sorts of medical device contracts with GPOs called dual source contracts often do not actually permit hospitals to be able to make an ongoing choice between the two device makers. Instead, such dual source contracts often just mean that the GPO is free to distribute either of the two sources, but that the relevant hospital contracts reflect an exclusionary agreement with one or the other of those sources.

To be sure, if a market had twenty firms, all of whom had exclusionary agreements, then we would have aggregate foreclosure of 100% but no anticompetitive effects since the agreements would not deprive the market of a competitive number of firms. But, as noted above, the question is whether cumulative foreclosure has deprived the market of a competitive number of efficient rivals by barring some firms from achieving efficiencies by expansion. If a market could sustain more than two firms at their minimum efficient scale, and only two firms benefit from the exclusionary agreements whose aggregate foreclosure deprives rivals of similar economies, then cumulative foreclosure is clearly the relevant measure of whether the exclusionary agreements have an anticompetitive effect. Such cumulative foreclosure creates an effective duopoly where consumers would have otherwise enjoyed a more competitive market with more firms. It can also impair the efficiency of a more innovative firm with a higher quality product.

Accordingly, Professor Areeda concludes that the test of whether foreclosure is "substantial" should be "that foreclosure be presumed unreasonable when it reaches 20 percent for an individual seller or a total of 50 percent for five or fewer sellers." *See* IX AREEDA, ANTITRUST LAW 375, 377, 387 (1991). *See also* XI HOVENKAMP, ANTITRUST LAW 152, 160 (1998) (single firm foreclosure of 20% and evidence that the selling market concentration has an HHI of at least 1800.) Professor Areeda explains:

> *Cumulative Foreclosure.* High cumulative foreclosure by a few firms seems dangerous. To illustrate, consider market-wide tying by six or seven firms, each foreclosing around 15 percent. The danger of supra-competitive pricing through tacit coordination seems high. That is the reason for examining cumulative as well as individual foreclosures. Although tying may not have caused the concentration, it impedes entry or expansion by other firms and makes that concentration impregnable and more dangerous.
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> High cumulative foreclosure without concentration is altogether different. A cumulative foreclosure of 100% by 50, or even 20, significant firms does not portend oligopoly, higher prices, or reduced output or entry . . .
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> *Cumulation revisited.* Let us now return to the case of three or six firms sharing, more or less equally, a cumulative foreclosure of 50 percent. If we assume them to be of efficient size, this market would support at least an equal number of similar firms, for a total of six or 12.

> At this point, the potential overkill represented by hypothetical further aggregation is less. I tentatively suggest, therefore, that a cumulative foreclosure of half the market by five or fewer firms be regarded as presumptively dangerous.

Id. at 388, 390-91.

Further, as Professor Areeda points out, cumulative foreclosure that prevents a competitive number of rivals from obtaining their minimum economies is anticompetitive even when economies of scale are such that the market could only support the smaller number of firms who benefit from those exclusionary agreements. *Id.* at 391. The reasons are twofold. First, such exclusionary agreements guarantee that the firms who use them will be the firms that make up the duopoly or oligopoly rather than other firms that might, if allowed to compete openly and achieve their own economies of scale, be more efficient. *Id.* Second, allowing such exclusionary agreements when they are judged consistent with economies of scale complicates litigation and makes it turn on matters antitrust courts are unlikely to be able to decide accurately. *Id.* He might have added that even if antitrust judges and juries were generally accurate, they will always be a less accurate judge of those economies than the market test that would be provided by allowing firms to compete without those exclusionary agreements. Further, as with all economies of scale arguments, technology, costs and demands can change in ways that make today's economies differ from tomorrow's, and antitrust litigation can offer only a long delayed retroactive assessment. *See infra.* It is thus better to allow undistorted market competition to determine how many and which firms the market will support rather than to allow those issues to be determined by a form of private self-regulation through exclusionary agreements, subject to imperfect review years later by antitrust judges and juries.

Consistent with the above analysis, many Supreme Court decisions hold that the foreclosure produced by exclusionary agreements must be aggregated among even more than two manufacturers. *See Standard Oil & Standard Stations v. United States*, 337 U.S. 293, 295, 309, 314 (1949) (assessing foreclosure by aggregating defendant's own exclusive contracts, which foreclosed a mere 6.7% of the market, with those of the seven leading oil producers, to produce an aggregate foreclosure of 65%); *FTC v. Motion Picture Advertising Service*, 344 U.S. 392, 395 (1953) (concluding that, under the Sherman Act and FTC Act, the relevant foreclosure was the aggregate 75% produced by adding the exclusive dealing arrangements of four firms); *Tampa Electric v. Nashville Coal*, 365 U.S. 320, 334 (1961) (describing and distinguishing *Standard Stations* as a case where there was an "industry-wide practice of relying upon exclusive contracts"); *United States v. Philadelphia Nat'l Bank,* 374 U.S. 321, 365-66 (1963) ("In [Standard Stations], this Court held violative of §3 of the Clayton Act exclusive contracts whereby the defendant company, which accounted for 23% of the sales in the relevant market and, together with six other firms, accounted for 65% of such sales, maintained control over outlets through which approximately 7% of the sales were made. In [Motion Picture] we held unlawful, under §1 of the Sherman Act and §5 of the Federal Trade Commission Act, rather than under §3 of the Clayton Act, exclusive arrangements whereby the four major firms in the industry had foreclosed 75% of the relevant market"); *Jefferson Parish v. Hyde*, 466 U.S. 2, 30 n.51 (1984) (favorably citing both *Standard Stations* and *Tampa Electric* on the appropriate foreclosure measure under exclusive dealing doctrine). In all the above cases, the Court reached that conclusion without any finding or evidence of a conspiracy between the firms whose foreclosure shares were aggregated. Indeed, in one case, the dissenting argument that such a horizontal conspiracy was required was explicitly rejected under the Sherman Act. *Motion Picture,* 344 U.S. at 393-95; *id.* at 399-400 (dissent).

This binding Supreme Court precedent must control over the contrary conclusion in *Paddock Publ'ns. v. Chicago Tribune*, 103 F.3d 42 (7th Cir. 1996), which was based on the erroneous premise that the *Motion Picture* decision rested on a distinction between the Sherman and FTC Act's requirements on concerted action. Further, *Paddock* also ignored all the other Supreme Court precedent noted above, and the obvious fact that vertical agreements can also satisfy the concerted action requirement. Nor did *Paddock* address the relevant economics, which, for the above reasons, shows that cumulative foreclosure is the relevant measure. Moreover, even if one wrongly accepted *Paddock*'s apparent conclusion that courts must not aggregate different manufacturers' exclusionary agreements unless they have engaged in a horizontal conspiracy, antitrust economics would still produce the same conclusion, just through a less direct means of analysis. The reason is that the existence of other factors foreclosing the rest of the market to rivals would remain highly relevant to determining the anticompetitive effect of any single firm's exclusionary agreements. For example, if one firm had an exclusionary agreement foreclosing 60% of the market, and the other 40% could be shown to be unavailable due to regulation, then that regulation must be taken into account by a proper economic analysis, and would indicate that the single exclusionary agreement had foreclosed all the market that would otherwise be available to rivals and thus would produce the various anticompetitive effects outlined above. The same follows if the other 40% is instead foreclosed by another firm's exclusionary agreements. This fact would still mean that the single firm's exclusionary agreement under consideration had foreclosed all of the market that would otherwise be left available to rivals, and thus would impair rival efficiency. In short, even if not simply aggregated, the anticompetitive effect of one firm's exclusionary agreements can depend on whether other firms have similar exclusionary agreements. This point of antitrust economics is also well-recognized by the law. *See United States v. General Dynamics*, 415 U.S. 486 (1974) (in assessing the competitive significance of a merger a court should exclude production that has already been committed by contract). Even the dissent to the Supreme Court's doctrine of aggregating foreclosure acknowledged that "the existence of the other exclusive contracts is, of course, not irrelevant in a market analysis." *Motion Picture*, 344 U.S. at 399-400 (dissent).[3]

Even more clearly in conflict with binding Supreme Court precedent is the odd decision in *Dickson v. Microsoft Corp.*, 309 F.3d 193, 212 (4th Cir. 2002), which apparently reasons that one cannot even aggregate a single seller's exclusionary agreements with different buyers, and that thus substantial foreclosure can only be proven if a single seller's exclusionary agreement with an *individual* buyer alone forecloses a substantial share of the market. Even the one Supreme Court case that did assess only a single manufacturer's exclusive dealing agreements measured foreclosure by including a series of exclusive contracts that this manufacturer had with 20,800 different merchants, which were aggregated to come to the foreclosure figure of 40%. *See Standard Fashion*, 258 U.S. at 357. Further, *Standard Stations* and *Motion Picture* likewise aggregated not only foreclosure by different sellers, but exclusionary agreements those sellers had with thousands of different buyers. 337 U.S. at 295 (aggregating defendant's own exclusive dealing contracts with 5,937 different retail buyers, as well as thousands more between other sellers and buyers); 344 U.S. at 398-99 (dissent) (pointing out that 1,250 equaled 10% of the relevant theaters in the nation, which means that the Court's 75% foreclosure figure aggregated exclusive dealing agreements with 9,375 different theaters). The holding in *Dickson* is also flatly in conflict with many Supreme Court cases on monopolization, which have found it illegal when a monopolist agrees to do business with many different firms – none of whom alone forecloses a significant share of the market -- on the

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[3] As Professor Areeda has noted, this can mean that the anticompetitive effect (and thus legality) of an exclusionary agreement changes over time as other firms adopt similar agreements. *See* IX AREEDA, ANTITRUST LAW 388 (1991) ("legality usually depends upon market circumstances as they exist from time to time; a reasonable restraint in today's environment can become unreasonable when market conditions change. Moreover, if cumulative foreclosure affects the competitive threat, we must weigh it when judging the legality of a restraint."). *See also* AREEDA & KAPLOW, ANTITRUST ANALYSIS 780 (5th ed. 1997) (offering similar analysis of cumulating the foreclosure of a series of exclusive dealing agreements).

condition that they not deal with the monopolist's rivals. *See Eastman Kodak Co. v. Image Technical Services, Inc*., 504 U.S. 451, 482-83 (1992); *Lorain Journal Co. v. United States*, 342 U.S. 143 (1951); *Griffith v. United States,* 334 U.S. 100 (1948); *United States v. United Shoe Machinery Corp.*, 110 F. Supp. 295 (D. Mass. 1953), *aff'd per curiam*, 347 U.S. 421 (1954). In all these cases, the Supreme Court aggregated the monopolist's agreements with different firms to ascertain their exclusionary effect on the monopolists' rivals.

The theory of *Dickson* is also entirely unsound as a matter of antitrust economics. None of the above-described possible adverse economic effects from marketwide foreclosure depend on there only being a single buyer. *Accord* XI HOVENKAMP, ANTITRUST LAW 72 (1998) (treating case of a dominant seller that creates 80% market foreclosure with 8 exclusive dealing agreements with 8 buyers as equivalent to the case of a dominant seller that has one exclusive dealing agreement with one buyer that has 80% of the market.) To the contrary, as discussed below, the existence of multiple buyers increases the collective action problems of buyers, and will make them more vulnerable to anticompetitive exclusionary agreements. The *Dickson* theory would also lead to ludicrous results. Assuming that 10% of the market does not constitute substantial enough foreclosure, a 100% monopolist who told each of ten buyers with 10% of the market that they could not get his product unless they agree not to buy from the monopolist's rival would, under this theory, not have produced any anticompetitive effect and thus its conduct would effectively be per se legal even though it foreclosed 100% of the market to rivals. Since few markets have buyers whose individual market shares are substantial, this theory would license monopolists in almost every market to use exclusionary agreements to lock up 100% of the market and prevent any rival from ever challenging the monopoly.

Why These Antitrust Concerns Remain Despite the Voluntary Codes of Conduct

I do not have data on the general prevalence of loyalty or bundled discount agreements with GPOs and hospitals today. Even if I did, the question is less whether they exist, than how often they are used by dominant device makers in a way that produces enough marketwide foreclosure to have the anticompetitive effects noted above. However, I am aware of several different sorts of devices for which they have been used. Moreover, it is clear that the practice of using these sorts of exclusionary arrangements has not been meaningfully constrained by the voluntary codes of conduct adopted by Premier and Novation. The reasons are several.

***First*,** the plain fact is that the Novation and Premier codes are voluntary. They are not contracts with anyone and contain no enforcement mechanism to make the

GPOs comply with them rather than follow their natural monetary incentives to profit by helping device makers reimpose the same old anticompetitive practices. Any limitations must be made enforceable to be meaningful, perhaps in the form of a consent decree.

Second, the Premier and Novation codes apply only to, respectively, "physician preference products," and "clinician preference products." These are conclusory terms and since the GPOs themselves determine what counts, they can evade any limitation by simply defining an excluded device as not a "preference" item, and I understand have done so in at least one case. Further, Novation reserves the right to still award a sole source contract if it decides the alternative does not offer incremental patient care or safety benefits. Since Novation has claimed precisely that in the past about allegedly excluded products despite contrary safety evidence, this offers little comfort. Thus, the definition of "preference" products must be made concrete its application in particular cases adjudicated by someone other than these GPOs for any limitation in the code to be meaningful. Again, a consent decree might be the best method.

Third, these voluntary codes of conduct still do nothing meaningful about percentage side-payments paid by dominant device makers to get GPOs and hospitals to restrict their rivals of to a small percentage of purchases. To be sure, Premier says it will not take more than 3% in administrative fees. But even 3% is distorting, and Premier allows other fees to be taken if they can be said to be for "additional services." Nor does Premier impose any limit on sidepayments paid directly to hospitals. Likewise, Novation says it will limit its private brand Novaplus program to "commodities," will not accept administrative or marketing fees paid before the contract is awarded or in the form of vendor equity, and will (on "clinical preference products" prospectively) reduce administrative fees to 3% and will not accept marketing fees. But Novation will still have the Novaplus program, and it is not clear what products Novation will deem "commodities." Further, this code does not restrict marketing fees paid *after* the contract, which would be equally effective at distorting its decisionmaking. While there is a 3% limit on administrative fees, even that is again distorting, and the code provides no limit on fees that are not called "administrative fees" or "marketing fees," nor any limit on what Novation can charge in fees for "additional services." Finally, Novation's code not only imposes no limit on sidepayments to hospitals, but Novation explicitly contemplates that increased "incentive" payments to hospitals will replace any decreased payments to Novation. To be meaningful, these codes must be modified to prohibit any device maker payments for restricting purchases from rivals, whether made to GPOs or hospitals, before or after the GPO contracts, and no matter what their nominal label. If GPOs are supposed to be acting as agents for hospitals rather than device makers, their fees could be covered by hospitals instead to eliminate the plain conflict of interest.

Fourth, even if side-payments were constrained, these voluntary codes would do nothing to prevent GPOs from entering into contracts that give one firm 90-95% of sales in exchange for discounts and rebates. To be sure, Premier and Novation say that they will not award "sole source" contracts on "preference" products in the future. But these GPOs have always insisted that the contracts that give large discounts and rebates to hospitals who buy 90-95% from a favored source are "multisource" contracts even though their effect is to produce practically the same foreclosure. Likewise, Premier and Novation also say that future GPO contracts on "preference" products will avoid GPO "commitment" levels and requirements. But given how they have interpreted such terms in the past, this probably means only that these GPOs will no longer require members to buy only through the GPO. Nothing in these codes says these GPOs will no longer broker contracts whereby hospitals commit to buying a high percentage from dominant device makers. Indeed, Novation clearly limits its own code to the imposition by Novation itself of a requirement that members buy from favored manufacturers. Novation's code thus does not bar it from brokering contracts that give payments to hospitals for a high share of their business, though it says it will have its clinical council review those contracts. If there is to be any actual change in practice, these terms must be made more concrete and limit the taking of loyalty or bundled discounts from dominant device makers.

Fifth, these voluntary codes do nothing effective to prevent future bundling of multiple products. Novation says it will eliminate only combinations of clinical preference and nonclinical preference items, or of unrelated clinical preference items. Although Premier says it won't "bundle" preference products across different vendors, it does not say that it will not bundle different products from the same vendor. In any event, Premier has always denied that giving a big sidepayment for meeting share requirements on multiple products is a "bundle," so this code will do nothing to stop that problem. If this limit is to be meaningful, it must clearly prohibit offering bundled discounts on products made by to dominant device makers.

Sixth, these voluntary codes do not apply to all GPOs or to any hospitals. Premier and Novation are far from the only GPOs that have participated in these sorts of exclusionary arrangements. Further, exclusionary agreements directly made with hospitals have all the same anticompetitive effects if they contribute to a sufficient marketwide foreclosure. This is especially important because the exclusionary agreements made with Premier and Novation were all implemented through exclusionary contracts made with their member hospitals. Even if Premier and Novation stopped engaging in such exclusionary schemes, the contracts made directly with hospitals would have continuing effects. Indeed, even when they terminate, the collective action problems noted above are likely to make individual hospitals renew those exclusionary contracts. A meaningful limit must thus include all GPOs or hospitals who contribute to an anticompetitive marketwide foreclosure.

Seventh these codes do not apply to all the exclusionary contracts already in place. The problem is not only that the codes thus do nothing about past harms, but that these contracts are often very long term, going on for periods like seven years. Thus, an existing manufacturer-GPO contract can persist in inflicting anticompetitive effects for a long time in the future. A meaningful limit must thus also void past exclusionary contracts that offer such limits.

Why Buyer Willingness (or Even Initiation) Does Not Mean Exclusionary Agreements Must be Procompetitive

An argument one repeatedly hears to defend GPO exclusionary agreements is that they could not possibly have anticompetitive effects because they were agreed to by hospital buyers (or by the GPOs who are claimed to perfectly represent them) and thus must be in their interests. This is a common misconception, and reflects a logical fallacy of composition. *See* Elhauge, *Defining Better Monopolization Standards*, *supra*, at II.C.2 & IV.D.

The easy way to see why this claim is unsound is to realize that in *every* exclusive dealing agreement it is true that the buyers must have agreed to the exclusive dealing condition. Indeed, it is that agreement that satisfies the conspiracy element. Further, in every exclusive dealing agreement it is true that the buyers who agreed must have viewed it as in their individual interests to agree – otherwise, they would not have agreed. Typically, as here, they agree because they get an explicit discount from the monopoly price for doing so. But even when the seller nominally refuses to sell its product at all to buyers unless they accept the exclusive dealing condition, the seller must implicitly be offering some discount from the monopoly price that would otherwise maximize its revenues because it is adding a burden.[4] Thus, we know from the very fact that buyers have agreed to an exclusive dealing

[4] *See generally* XI HOVENKAMP, ANTITRUST LAW ¶1807b, at 116 (1998) ("antitrust policy should not differentiate between the manufacturer of widgets who explicitly imposes exclusive dealing on its dealers and the manufacturer who gives such dealers a discount or rebate for dealing exclusively in the manufacturer's widgets.")

agreement that they must have determined that it was in their individual interests to take the explicit or implicit discount even though it imposed an exclusionary condition on the market.

According, the claim that buyer agreement proves the absence of anticompetitive effects must be rejected because, if true, it logically would follow that *no* exclusive dealing agreement can ever have an anticompetitive effect and that they thus are all effectively per se *legal* no matter how much of the market they foreclose. Further, this claim would imply the same for tying agreements and any other vertical agreement since they also – by definition – require buyer agreements. But that position would clearly be contrary to the antitrust economics literature, which does not conclude that exclusive dealing agreements should be per se legal, but rather concludes that they can have anticompetitive effects (despite buyers' agreement to them) and thus should be judged under the rule of reason. *See, e.g.,* TRIOLE, THE THEORY OF INDUSTRIAL ORGANIZATION 185-86 ("Theoretically, the only defensible position on vertical restraints seems to be the rule of reason.. . Legality or illegality *per se* thus seems unwarranted."); WALDMAN, INDUSTRIAL ORGANIZATION 553 (1998); CARLTON & PERLOFF, MODERN INDUSTRIAL ORGANIZATION 639 (2000). That position would also be flatly inconsistent with binding legal authority. In the *Standard Fashion* case, the exclusive dealing agreement was invalidated even though thousands or merchants found it in their interests to accept that exclusivity condition in exchange for a 50% discount. *See Standard Fashion*, 258 U.S. at 351-52. And that conclusion was approvingly cited in *Tampa Electric.* 365 U.S. at 334. Likewise, *Standard Stations* and *Motion Pictures* condemned exclusive dealing agreements even though each individual firm found it in its interests to accept the defendant's exclusive agreement. The same can be said for all cases finding it to constitute monopolization when many firms agree not to deal with a monopolist's rivals. *See Eastman Kodak; Lorain Journal; Griffith; United Shoe.* This claim is also inconsistent with the fact that, under *Tampa Electric* and authority in practically every circuit, exclusive dealing agreements are governed by a rule of reason, not a rule of per se legality. Indeed, this claim even conflicts with the text of Clayton Act §3 itself, which clearly indicates the Congressional view that offering discounts to induce buyers to agree to exclusionary conditions can be anticompetitive. *See* Clayton Act §3 ("It shall be unlawful for any person ...to ... make a sale ... or fix a price charged therefor, or discount from, or rebate upon, such price, on the condition ... that the ... purchaser thereof shall not use or deal in the goods ... of a competitor ... where the effect ... may be to substantially lessen competition ...")

The reason the claim is false is that it rests on a logical error well-known in economics – the "fallacy of composition." The fallacy of composition is the assertion that if something is true for individual members of a group, then it must be true for the group as a whole. 5 OXFORD ENGLISH DICTIONARY 693 (2d ed. 1989); RUSSELL HARDIN, COLLECTIVE ACTION 2 (1982); Caballero, *A Fallacy of Composition,* 82 AMER. ECON. REV. 1279, 1279 (1992) ("Fallacy of composition: A fallacy in which what is true of the part is, on that account alone, alleged to be also true on the whole." (quoting SAMUELSON, ECONOMICS (1995)). Here, the claim commits that fallacy by asserting that, if it is in the interests of individual GPOs or hospitals to accept an exclusionary condition in exchange for a discount, then it must be in the interests of buyers as a group (and thus for the market as a whole) for them to so agree. As is well known in the academic literature, this "fallacy of composition . . . has collapsed in the face of two major developments ...: Mancur Olson's logic of collective action and game theory's Prisoner's Dilemma. In the latter, there is a dilemma precisely because what it makes sense for an individual to do is not what it would make sense for the group to do ..." HARDIN, *supra*, at 2. Because of this, we cannot justifiably assume that what is in the interests of each individual GPO is in the interests of participating GPOs as a group, or that what is in the interests of each individual hospital is in the interests of participating hospitals as a group. Even less can we assume that, if something is in the interests of participating GPOs and/or hospitals, it is in the interests of the market as a whole given the effects on nonparticipating GPOs or hospitals or on those downstream who pay the anticompetitive costs.

The academic literature has offered several affirmative explanations for why individual buyers find it in their interest to agree to exclusionary agreements even when they impose anticompetitive effects on the market. The main problem is that multiple buyers have collective action problems that can make it individually rational for them to enter into agreements that harm buyers as a group. *See generally* MANCUR OLSON, THE LOGIC OF COLLECTIVE ACTION (2d ed. 1971). These collective action problems can drive individual buyers to each agree to exclusionary arrangements that collectively enhance seller market power in exchange for a small discount from current or expected supracompetitive prices. *See* Elhauge, *supra*, at II.C.2 & IV.D; XI HOVENKAMP, ANTITRUST LAW 94-95 (1998). If they think about the anticompetitive consequences at all, each individual buyer will individually reason that, if enough other buyers agree to the exclusionary policy, then the individual buyer will be better off agreeing because agreeing gets it a discount (and thus avoids a competitive disadvantage compared to other buyers) but does not cause it to suffer any harm since marketwide foreclosure (and the resulting anticompetitive effects) will result anyway given the agreement of other buyers. And, if enough other buyers do not agree to the exclusionary policy, then the individual buyer will find it in its interests to agree because agreeing gets it a discount (and a competitive advantage over other buyers) but does not cause it to suffer any harm since no marketwide foreclosure will result given the refusal by other buyers. Thus, no matter what it expects other buyers to do, each individual buyer has incentives to agree to the exclusionary policy in exchange for the discount because its individual decision has little influence on whether the adverse marketwide effects occur, but does definitely determine whether or not that buyer gets a discount. Since every buyer has those individual incentives, each will agree to the exclusionary policy for a small discount even though those agreements will collectively create or protect the anticompetitive market power that imposes a long term harm on them all. Indeed, if there are many buyers, their individual decisions will have so little effect on the marketwide outcome that they none will find it worthwhile to even incur the costs of thinking through the anticompetitive consequences – they will simply accept any discount offered.

The offered discount might be a real short-term discount from the current price that buyers would each have incentives to take even though they realize that, if most of them do so, then in the long run they will face a seller who has greater market power than it otherwise would have, which will result in higher long run prices for all buyers. *See* Louis Kaplow, *Extension of Monopoly Power Through Leverage*, 85 COLUM. L. REV. 515 (1985). But even then the discount can be trivially small given the lack of influence any individual buyer decision has over the marketwide foreclosure. *See* Elhauge, *supra*, at II.C.2. Further, the offered discount can also be from a future supracompetitive market price that will result because a sufficient number of the buyers can be expected to agree. *See id.*; Eric Rasmussen, Mark Ramseyer & John Wiley, *Naked Exclusion*, 81 AMER. ECON. REV. 1137 (1991). In either case, the individual buyer realizes that, if it did not agree to accept the discount, it would suffer an expected market disadvantage by paying higher prices than its rivals. And because each buyer has those individual incentives, each will agree to the exclusionary agreement and thus will collectively create or protect the anticompetitive market power that harms them all. The end result will be that no buyer has any market advantage over other buyers because they have all agreed to the exclusionary agreements that in aggregate give the seller enhanced market power to charge them higher prices than otherwise would have prevailed on the market.

These collective action problems mean that we cannot leap from the observation that buyers (such as hospitals) individually agree to join an exclusionary scheme to the conclusion that the scheme must benefit them or be efficient. They may voluntarily join the exclusionary scheme to reap a gain that depends on their individual decision to join, even though that gain is more than offset by the marketwide loss they suffer from the scheme because enough buyers join to harm buyers collectively. Inefficiency will result because the enhanced market power creates a deadweight loss, and hampers the productive efficiency of rivals. It is precisely because such collective action problems exist that a collective response in the form of a legal prohibition on exclusionary agreements that produce anticompetitive marketwide foreclosure is necessary to protect buyers and markets as a whole.

Cases where buyers have market power might be thought an exception to this, but are not unless the market consists of a single buyer who is the ultimate consumer of the product. There are two reasons for this. First, it only takes two actors to create a prisoner's dilemma problem. Thus, if there are a few buyers with some degree of market power but none is a monopolist, then they will still have collective action/prisoner's dilemma problems that can make it in their interests to agree to an exclusionary agreement in exchange for a discount. True, a buyer with substantial market power is less likely to conclude that its individual agreement has no significant influence on whether the marketwide anticompetitive effect will occur. But the same problem can result because their individual decision definitely determines whether they get a discount that inures 100% to their benefit, but both has lower odds of determining whether a marketwide harm is created and would only suffer the portion of that marketwide harm that reflects their buyer market share. Thus, even though the biggest GPOs like Premier and Novation likely have some degree of market power (with roughly 30% of the market each), they and the other eight major GPOs would still have collective action problems amongst themselves that would lead each individual GPO to agree to exclusionary agreements in exchange for discounts and side-payments because doing so is in their individual interests (and the interests of their member hospitals) even if the agreements collectively create a marketwide harm.

Second, if buyers with market power are (as with GPOs) intermediate buyers, then it is in their interests to agree to exclusionary agreements because they can share in the seller's monopoly profits and pass on much of the anticompetitive harm downstream. In particular, intermediate buyers have incentives to agree to preserve or enhance seller market power (by excluding the seller's rivals or raising their costs) in exchange for side-payments that split the seller's supracompetitive profits, or for special discounts that give the participating buyers market advantages over other buyers and thus enhance the participating buyers' downstream market power. *See* Elhauge, *supra*, at II.C.2; Krattenmaker & Salop, *supra* note , at 238-40; Granitz & Klein *supra*; Hovenkamp, *Mergers & Buyers*, 77 VA. L. REV. 1369 (1991); IV AREEDA, HOVENKAMP & SOLOW, ANTITRUST LAW ¶943b, at 204-06 & n.4 (1998).

This is true whether buyers have market power individually or collectively, as long as the intermediate buyers sell to others in a downstream market. Indeed, the ability of intermediate buyers to reach agreements with sellers that help sellers acquire market power in exchange for a share of the resulting supracompetitive profits (either directly or by increasing the buyers' downstream market power) is just one special application of the general Coase Theorem. *Id.*; XI HOVENKAMP, ANTITRUST LAW 95 & n.27, 100 & n.44 (1998).

Buyer strategies may begin as the latter but end up as the former. That is, buyers may agree to exclusionary agreements because they expect that the discounts they receive will give them an advantage over their rivals that enhances their downstream market power. But they may find that this induces other buyers to likewise agree, with the end result that no buyer enjoys a special discount or market advantage over others. Instead, each buyer will have received a discount from a price that has been inflated by the fact that the marketwide foreclosure has helped the seller enhance, maintain, or slow down the erosion of its market power. And collective action problems will cause them to continue to adhere to those exclusionary agreements to get the discounts. This may in part explain what happened here, with some GPOs initially soliciting exclusionary loyalty and bundled discounts to gain a competitive advantage, and with latter GPOs feeling compelled to do the same until all were receiving loyalty and bundled discounts that left none with a competitive advantage over the other.

In the side-payment scenario, buyers agree to an arrangement that enhances seller market power, even if that means each buyer must pay more for the seller's product, in exchange for the seller agreeing to share its supracompetitive profits through side-payments. Such payments are distinguishable from simple product discounts because they are not made on a per-unit basis for a single product to the purchaser. Sometimes they reflect lump sum payments; other times they reflect discounts on multiple products. In either case, the key is that, because they are not mere per unit discounts on a single product, such side-payments do not decrease the buyers' marginal cost for that product in a way that would cause them to pass on any savings from the sidepayments downstream to consumers. Instead, the increased prices for the monopolized good are passed on to the buyers' customers as part of increased marginal costs without an offset for the sidepayment. The buyers' losses thus result only from reduced sales, which can be more than offset by the side-payments, which are funded out of the sellers' monopoly overcharge. In short, such side-payments increase buyers' profits without reducing their marginal costs, and thus effectively constitute the payment of a share of the seller's supracompetitive profits in exchange for helping the seller enhance or maintain those profits.

Further, sidepayments can also be made in the form of per-unit rebates to intermediate firms (like GPOs) who broker or negotiate the terms of purchase but do not actually make those purchases. In such cases, the rebate payment does not reduce the marginal cost of purchasing and is thus not passed on to the downstream buyers. The intermediate firms thus have incentives to agree to exclusionary agreements even if they cause a price inflation whose amount exceeds the amount of the percentage payments because the intermediate firms do not pay the inflated price but do get the payments. Indeed, to the extent such payments compensate them based on a percentage of the purchase price, the intermediate firms not only have incentives to agree to enhance seller market power in exchange for additional payments, but generally benefit from anything that causes price inflation. The market arrangement in effect gives the intermediate firms a direct cut of the seller's supracompetitive profits.

In the special discount scenario, participating buyers agree to the arrangement in exchange for special per-unit discounts that are unavailable to nonparticipating buyers. These special discounts enhance the participating buyers' market power downstream by giving them a cost advantage over existing or potential rivals that effectively constitutes a barrier to rival expansion or entry. In these cases, the seller effectively agrees to enhance the participating buyers' downstream market power (through discounts unavailable to the buyers' rivals) in exchange for the participating buyers helping maintain and enhance the seller's market power upstream (by excluding the seller's rivals).

In some cases, the special discount to these participating buyers might just offset the supracompetitive price inflation that results from the enhanced seller market power. Sellers have incentives to agree to such special discounts because the agreements with the participating buyers that enhance seller market power enable the sellers to charge supracompetitive price levels to the *non*participating buyers. The participating buyers have incentives to agree because the agreement does not increase their costs, but does increase the costs of their rivals. This helps the participating buyers keep out new entrants, and oust or hobble their rivals. In such case, the exchange is a straightforward trade of enhanced seller market power (exercised against nonparticipating rival buyers) in exchange for enhanced buyer market power (exercised against downstream buyers).

In other cases, the special discounts might even exceed the supracompetitive price inflation attributable to whatever aid the participating buyers provide to seller market power. In these cases, the seller effectively shares the proceeds from its enhanced seller market power against nonparticipating buyers with the participating buyers, as well as enhancing the participating buyers' downstream market power. But the larger the share of purchases made by the participating buyers, the less advantageous such a scheme can be to the seller.

Perhaps more typically, the special discounts are smaller than the supracompetitive price inflation that results from the enhanced seller market power. That would result in prices to the participating buyers that are higher than they would be without the agreement. Even then, these buyers might be willing to agree to this price increase because their special discount means that the price increase raises their rivals' costs more than their own, and thus enhances participating buyers' market shares compared to rival buyers. In this case, the participating buyers would pay some premium (in input prices) in exchange for an increase in their downstream profits. Here, the participating buyers effectively give the sellers a share of the supracompetitive profits created by their enhanced buyer market power, as well as give the seller enhanced market power against nonparticipating buyers.

Indeed, this last scenario is what happened in the mother of all monopolization cases, the famous Standard Oil case. Back then, railroad transportation was necessary to get crude oil to refiners and then distribute refined oil. Standard Oil agreed to pay the railroads at least 15% *more* that it was previously paying in exchange for the railroads making sure that the price paid by Standard Oil was a significant discount from the price charged to other oil refiners. Granitz & Klein, *supra* note , at 9-10. Faced with transportation costs that were now significantly higher than Standard Oil's, the other refiners were either driven out of the market or, because they realized they could not compete at this cost disadvantage, sold their business to Standard Oil. *See* Standard Oil Co. v. United States, 221 U.S. 1, 32-33 (1911); Granitz & Klein, *supra* note , at 14.

Interestingly enough, a powerful buyer has incentives to agree to arrangements that create or enhance seller market power even though the seller does *not* guarantee the buyer any special discount in exchange. The reason is that, even without any formal seller commitment, a buyer with market power knows that it will have the leverage to negotiate for some discount from the supracompetitive price that a seller with market power will charge to buyers who have no significant market share. And that special discount will give the powerful buyer an additional advantage over its rivals in the downstream market. In contrast, if the seller market were perfectly competitive, then seller prices will all be at cost, and even a powerful buyer will not be able to negotiate any discount from a price set at cost because no seller wants to lose money. Thus, counter-intuitively, a powerful buyer will often *prefer* to create or maintain seller market power even though the buyer knows that such power will increase prices.

This last point explains the continued implementation of the scheme in *Standard Oil*. In that case, a corporate charter and contracts initially provided a formal commitment to special discounts, which caused all the major rival refiners in Cleveland to sell to Standard Oil, thus giving it buyer market power. Granitz & Klein, *supra* note , at 9-10, 14-16. But the formal commitment was withdrawn before it was ever implemented because it provoked crude oil suppliers to strike violently and the Pennsylvania legislature to revoke the corporate charter. *Id.* at 14-15. Why then did Standard Oil continue to assist railroads to enhance their market power over transportation? The answer is that Standard Oil's buyer market power sufficed to enable it to negotiate for special discounts without any formal commitment by the railroads.[5] And those special discounts in turn forced the rest of the refiners to sell to Standard Oil. *Id.* at 20-23. To get the benefit of those special discounts, Standard Oil was willing not only to pay more than the competitive rate for transportation, but to block a new transportation technology (pipelines) that would have lowered its transportation costs. *Id.* at 18-22, 31-37. Obviously, it is vital to make sure the same thing does not happen here if, as in *Standard Oil*, public scrutiny causes GPOs to abandon formal commitments to exclusionary arrangements.

Given the above problems, a GPO's decision to agree to anticompetitive exclusionary agreements will not be adequately constrained by their members' voting control. Even if (contrary to fact) each GPO were perfectly controlled by its member hospitals and passed on all the benefits of sidepayments and discounts to those member hospitals, then whenever collective action problems or Coasian bargains made it in the interests of GPOs to agree to an exclusionary agreement in exchange for sidepayments and discounts, it would likewise be in the interests of those member hospitals to have the GPO agree. When GPOs have collective action problems, each GPO's individual decision will determine whether its member hospitals get a discount but will not alone determine whether the anticompetitive harm on hospitals as a whole is inflicted by marketwide foreclosure. If the biggest GPOs have enough market

[5] *Id.* at 17-20. When railroads tried to extend those discounts to rival refiners, Standard Oil exercised its buyer market power aggressively to force railroads to keep the discounts special to Standard Oil. *Id.* at 27-31, 34-35.

power to strike Coasian bargains to enhance the market power of device makers, then their member hospitals would benefit from their proportionate share of the side-payments and/or from the market advantage the special discounts give them over hospitals that do not belong to that GPO. The net benefits can be positive for the member hospitals but not the market because the anticompetitive cost is largely externalized onto others like nonmember hospitals and downstream purchasers of health care.

Nor would the ability of individual hospitals to switch or leave GPOs be an adequate method of disciplining a GPO who acted contrary to the interests of its member hospitals by offering an exclusionary agreement that was harmful to member hospitals as whole. After all, other GPOs will likely be offering the same sorts of exclusionary agreements because collective action problems impel them too, especially if the GPO is too small to itself significantly influence whether anticompetitive foreclosure occurs. Further, in making the individual decisions about which GPO to join (or whether to leave them altogether), member hospitals have collective action problems that give them incentives to join GPOs that couple discounts with exclusionary agreements because an individual decision to join gives each hospital access to the discounts but by itself does not determine whether the anticompetitive foreclosure occurs. That is, the decision to agree to join a GPO that offers discounts for exclusionary agreements has precisely the same collective action problems as a decision whether to agree directly with a manufacturer who offers the same. Further, if a hospital did leave GPOs to negotiate contracts itself, the same collective action problems would give it the same incentives to agree to an exclusionary agreement with a device maker since its individual decision has little influence on whether the marketwide foreclosure occurs. A hospital aggrieved by an exclusionary agreement on one product may also find that worth bearing to get lower prices and distributional efficiencies on the range of other products offered by GPOs generally, or by its GPO in particular, especially if the relevant GPO is large enough to be exercising buyer market power.

For all the above reasons, it should also be irrelevant whether GPOs initiated an exclusionary arrangement with a dominant device maker. The same underlying collective action and seller-buyer collusion problems that make it individually profitable for a GPO to agree to an exclusionary agreement in exchange for a discount from the monopoly price even though it imposes adverse marketwide effects also make it profitable for the GPO to initiate such an agreement. Consistent with this, the Supreme Court has rejected the defense that the defendant did not demand a challenged exclusionary condition, noting that the anticompetitive effect was the same regardless of who initiated the idea. *Griffith*, 334 U.S. at 108. Likewise, in another famous monopolization case, Standard Oil as a buyer initiated the plan to give exclusive rights to the railroads selling oil transportation in return for the railroads giving Standard Oil special discounts. *See* Granitz & Klein, *supra*.

The Error With The View That Loyalty and Bundled Discounts Must be Desirable and Unforeclosing If the Discounted Price Is Above Cost

A related error is the claim that loyalty or bundled discounts must be good for buyers and consumer welfare because lower prices are always good unless they are predatorily below cost. A loyalty or bundled discount need not reflect lower prices at all. The only thing we know it means is that the price charged to buyers who refuse to limit their purchases from the dominant seller's rivals to a small percentage is higher than the price charged to buyers who conform to such a limit. Thus, anything called a "discount" for agreeing to the loyalty or bundling condition could equally be called a "penalty" on those who refuse to conform to that condition.

The higher price charged to those who violate the loyalty or bundling condition may be inflated artificially. If one accepted the proposition that no discount for agreeing to an exclusionary condition could ever be challenged unless the discounted price were below cost, "then any firm could immunize its exclusive-dealing agreements from antitrust scrutiny by the simple expedient of inflating the price and then offering a rebate conditioned on exclusivity." Einer Elhauge, *Why Above-Cost Price Cuts to Drive out Entrants Do Not Signal Predation or Even Market Power – and the Implications for Defining Costs,* 112 YALE LAW JOURNAL 681, 698 N.53 (2003). Thus, the mere existence of a discount proves nothing.

More frequently, the discount will be from the supracompetitive price that reflects the market power enhanced or maintained by the marketwide foreclosure created by the exclusionary condition itself. Indeed, as just shown in the last section, any anticompetitive exclusionary agreement or conduct generally succeeds by offering such a discount from a supracompetitive price. *See also* Elhauge, *Defining Better Monopolization Standards*, *supra*, at II.C.2. This does not mean the discount has "lowered" prices. Rather, the exclusionary condition has inflated the supracompetitive price from which the discount is taken, and can thus mean that even the discounted price is higher than market prices otherwise would have been.

Nor does history provide a good baseline for determining whether a loyalty or bundled discount has really lowered prices. Prices may be declining for unrelated reasons, including changes in costs and demand, but have that decline dampened by the marketwide foreclosure produced by exclusionary conditions. One cannot simplistically assume that, if prices decreased from historical levels, then an exclusionary agreement cannot have increased prices compared to the even lower level that otherwise would have resulted from other market trends. For example, if costs decreased over time from $1.00 to 50 cents (including capital costs), evidence that per unit prices went down from $1.00 to 80 cents would signal an *increase* (not decrease) in market power, for without increased market power one would have expected prices to decline to 50 cents along with costs.

Even without an unrelated change in costs or demand, historical prices are a bad baseline because most anticompetitive conduct is undertaken not to create market power, but rather to maintain and slow down the erosion of existing market power that has inflated prices. In fact, it is precisely when a firm sees its market power waning because of a new market threat or technology that it is most desperate to cling to that power, and thus most tempted to use anticompetitive conduct to slow down that erosion and maintain some degree of market power for as long as possible. Such conduct need not increase prices to be anticompetitive; it is enough that it prevents prices from dropping further and faster, or in slowing down a market shift to a higher quality product. This is why the Supreme Court's monopolization test correctly condemns not just the acquisition, but also the "maintenance" of monopoly power with exclusionary conduct,[6] which includes conduct that simply slows down the erosion of monopoly power.[7]

Accordingly, the correct baseline to determine whether exclusionary conduct causes an increase in market power is *not* how high prices, profits or market shares were in the *past.* Instead, the correct baseline compares the actual extent of market

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[6] Eastman Kodak Co. v. Image Technical Services, Inc., 504 U.S. 451, 481 (1992); Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 472 U.S. 585, 596 n.19 (1985); United States v. Grinnell Corp., 384 U.S. 563, 570-571(1966).

[7] *See* Otter Tail Power v. United States, 410 U.S. 366, 378, 381 (1973) (invalidating exclusionary conduct designed to prevent the defendant's rivals from "from eroding its monopolistic position" even though the tactics did not prevent the defendant from losing the retail business of some municipalities). Indeed, it is the illegitimate extension of such temporary monopolies that antitrust law should care about most. If the market were instead a natural monopoly, it would exist and persist regardless of exclusionary conduct or antitrust law as long as the underlying economic fundamentals persisted. All antitrust law could do is assure fair competition to try to assure the most efficient firm wins the natural monopoly. It is only if the monopoly is a temporary monopoly that we fear exclusionary conduct that might extend its temporary life, and thus saddle use with monopoly prices that otherwise would have been competitive.

power to the degree of power the defendant would have had without the exclusionary conduct. To illustrate, suppose a firm earns monopoly profits of $100 million, which would have decreased to $50 million without exclusionary agreements because rivals would have expanded and reaped efficiencies of scale. Suppose further that monopoly profits would instead decrease to $80 million if the firm uses exclusionary agreements with buyers that slow down rival expansion. If so, it would be in the monopolist's interest to pay $20 million in discounts or sidepayments to get buyers to agree to exclusionary agreements, even though those agreements produced no efficiencies whatsoever. The firm's monopoly profits would then show a decrease from $100 million to $60 million ($80 million minus $20 million in discounts or sidepayments), which might mislead some into concluding that the firm's exclusionary conduct failed to cause an increase in monopoly power. But in fact this exclusionary conduct would have increased monopoly power because giving the discounts or sidepayments to get the exclusionary agreements would still have increased its net monopoly profits by $10 million over what they otherwise would have been, and would have done so not by improving the monopolist's efficiency but by impairing the efficiency of its rivals and harming consumer welfare. Thus, a decline in monopoly prices or profits is perfectly consistent with a strategy of paying sidepayments or discounts in order to slow down a decrease in monopoly profits. Despite such a decline, this monopolist can still profitably pay up to $30 million in sidepayments or discounts out of the additional monopoly profits the exclusionary conduct will create.

In short, one must be careful to use the correct but-for baseline rather than the historical baseline to measure whether loyalty or bundled discounts have increased or decreased prices. But any inquiry into such "but-for" prices is effectively indistinguishable from an inquiry into whether the loyalty or bundled discounts have a net anticompetitive effect. It thus cannot obviate the need to inquire into whether the arrangement produces a marketwide foreclosure that has anticompetitive effects are not offset by any procompetitive effects.

Another argument sometimes made is that an exclusionary agreement made in exchange for an above-cost discount cannot really foreclose an equally efficient rival because they can always match the discount with a price cut of their own. As noted above, this argument is inconsistent with the rule of reason treatment given by antitrust caselaw and standard antitrust economics to exclusionary agreements conditioned on explicit or implicit discounts. It is also an argument that fails for four other reasons.

First, the claim that rivals can avoid foreclosure by just matching the exclusionary discount assumes away the very anticompetitive harm of interest. For one reason that equally efficient rivals cannot match the discount is that the marketwide foreclosure has impaired their efficiency. The anticompetitive effect is precisely that this marketwide foreclosure prevents rivals who are equally or more efficient (in the sense of having a long run cost curve that is as low or lower than the incumbent dominant seller) from achieving the economies of scale, scope, distribution, network effects, research or learning that it would have been able to obtain without the foreclosure. It would be bootstrapping to allow a dominant seller to use exclusionary agreements that impair the efficiency of its rivals and then cite the rivals' lower efficiency as proof that those agreements cannot have an anticompetitive effect.

Second, the relevant discounts are often bundled with discounts on other products, and thus a rival who makes any one product cannot win sales by just matching the discount on that product. *See LePage's*, 324 F.2d at 155 (pointing out the special danger raised by bundled discounts) (citing PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 794, at 83 (Supp.2002)). A single device maker often does so by offering bundled discounts on multiple products. In many cases, these are acknowledged to be in separate product categories. But in other cases, what nominally looks like a discount on one product is actually a discount on multiple products grouped under one "product category," for which a percentage of purchases must be met to get the discount on any of the products in that category. Further, multiple manufacturers often bundle discounts on their products together through GPOs, which is one of the most anticompetitive ways of using them. Sometimes this is done explicitly, as with the Novation Opportunity program, where hospitals who failed to buy 95% of 13 different product categories from the different manufacturers in that program had to return rebates they earned on any of those 13 product categories. But it is also done implicitly, such as when a GPO (like Premier) offers an array of products to its hospitals with discounted prices, and requires that hospitals meet the GPO's commitment threshold on all products to stay in the GPO. Such an arrangement effectively bundles the commitment discounts of every product and manufacturer the GPO offers. In either case, a GPO member hospital cannot switch to a rival without losing the GPO discount not only on that single product but on many other products as well.

As the above indicates, the implicit bundling of separate products through a single product "category" or by offering them through a single GPO means that the use of bundled discounts is far more prevalent than it might appear at first blush. And wherever such bundled discounts are used, their result is that a rival would have to offer discounts that were a substantial multiple of the discounts offered by dominant sellers who are part of a bundled discount program.

Third, where the seller is offering sidepayments that are not made on a per-unit basis, the rival cannot match them with a per-unit discount. Suppose, for example, the dominant seller gives each hospital $900,000 in exchange for the hospital agreeing to limit rivals to 10% of their 1,000 purchases of device X. This amounts to a per unit rebate of $1,000 per unit for 900 units the hospital must buy from the dominant seller. But the rival cannot just offer the a $1000 per unit discount to gain a sale of the 101st unit; for the hospital that exceeds the 10% limit would lose the entire $900,000 from the dominant seller. In effect, such side-payments bundle rebates on all the units of that product sold. And when the sidepayments are offered to GPOs the problem is even greater since the magnitude of units are greater. This would make it all the harder for a rival to persuade the GPO to give up the discounts on all units to switch marginal purchases to the rival, and also harder for the rival to immediately expand to entirely replace all the units being bought from the dominant seller.

Fourth, rivals cannot fund their discounts out of enhanced supracompetitive profits in the way a dominant seller can. A dominant seller can offer additional discounts for exclusionary agreements because their effect is to impair the efficiencies of its rivals and thus enhance, maintain, or slow down the decrease in Becton's supracompetitive profits. Thus, a dominant seller can fund those additional discounts with the additional supracompetitive profits it receives relative to what it would have received without the agreements. Rivals cannot offer the same additional discounts in exchange for exclusionary agreements because they don't reap the same increased supracompetitive profits given no one small rival could hope that its agreements will deprive other rivals of efficiencies, especially given that the dominant incumbent has presumably already acquired the relevant economies that come with large numbers of sales. This factor is particularly important where discounts are bundled across multiple products, or when the dominant seller is using side a case of defensive leveraging. In the latter case, the dominant seller has supracompetitive profits in a related market whose erosion it can prevent or slow by preventing rivals from expanding to the point where they achieve efficiencies in another market. Rivals in that other market could never offer as great a discount since for them it would not be an investment in preserving supracompetitive profits in another market.

Short Terms or Rapid Terminability Does Not Undermine the Anticompetitive Effects of Exclusionary Agreements With GPOs

The above explanation for why individual buyers willingly enter into exclusionary agreements that collectively cause them marketwide harm also make clear why it is irrelevant whether those exclusionary contracts have short terms or are terminable by buyers on short notice. That analysis shows that buyers agree to anticompetitive exclusionary agreements in exchange for discounts because it is in their interests to do so even though the agreements as a group will have an anticompetitive effect. The same factors that make it in buyers' interests to agree to an exclusionary agreement to get discounts will also make it in their interests not to terminate a exclusionary agreement that offers those discounts even though termination by all buyers would eliminate the anticompetitive effect.

When the exclusionary agreement results from collusion between sellers and intermediate buyers that benefits the latter at the expense of downstream buyers, then the intermediate buyers have no incentive to terminate or decline to renew the agreement. When collective action problems induced buyers to enter exclusionary agreements, those same collective action problems will also cause buyers not to terminate them because buyers will realize that their individual termination would lose them the discounts from the monopoly price but would not have much impact on whether the marketwide harm persists. Each buyer will thus have every incentive not to terminate in order to keep getting the discount, even though that discount is from a price that has been inflated by the seller market power that results because buyers collectively adhere to the scheme. Thus, the anticompetitive effects of such exclusionary agreements are not at all vitiated by the fact that buyers can terminate or decline to renew exclusionary agreements.

This shows the economic error in the conclusion by some scholars and courts that an ability to terminate (or not renew) an exclusionary agreements in less than one year indicates they presumptively or probably lack any substantial foreclosing effect.[8]

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[8] *See* Roland Mach. Co. v. Dresser Indus., Inc., 749 F.2d 380, 395 (7th Cir. 1984); Omega Envtl., Inc. v. Gilbarco, Inc., 127 F.3d 1157, 1163-64 (9th Cir.1997); Thompson Everett, Inc. v. National Cable Adver., 57 F.3d 1317, 1326 (4th Cir.1995); U.S. Healthcare, Inc. v. Healthsource, *Inc.,* 986 F.2d 589, 596 (1st Cir.1993); 11 HERBERT HOVENKAMP, ANTITRUST LAW 167-69 (1998). Professor Hovenkamp and the last case acknowledge that this point does not hold if buyers receive discounts that they would lose by termination. *Id.* at 88, 117. But acknowledging this exception swallows the presumption because any buyer must receive a discount from the monopoly price that otherwise could be charged to secure its consent to an exclusionary agreement. *See supra*; Elhauge, *Defining Better Monopolization Standards*, *supra* at II.C.2; Aaron Director & Edward H. Levi, *Law*

That conclusion also conflicts with many Supreme Court cases that have invalidated exclusionary agreements that were terminable on short notice. In *Standard Fashion*, the Supreme Court held that an exclusive dealing agreements covering 40% of the market was unlawfully anticompetitive even though it was terminable upon three months' notice. 258 U.S. at 352. Likewise, in *Standard Stations*, the Court held the same for exclusionary contracts that lasted only one year, and were terminable upon a mere 30 days notice. 337 U.S. at 296. Neither of these cases can be squared with the position that terminability in less than one year eliminates any anticompetitive effect. The courts and scholars concluding otherwise have relied on *Motion Picture,* but that case merely rejected a defendant argument that exclusive dealing agreements longer than one year should be permitted. 344 U.S. at 396. Nowhere did it suggest that any agreement shorter than one year could not be anticompetitive. *Accord LePage's,* 324 F.3d at 157 n.11. Indeed, the Supreme Court later sustained an FTC conclusion that certain exclusive dealing contracts were anticompetitive even though they were terminable at will. FTC v. Brown Shoe, 384 U.S. 316, 318-19 & n.2 (1966) (agreement condemned even though buyers could "voluntarily withdraw" at any time),*rev'g* Brown Shoe v. FTC, 339 F.2d 45, 53 (9th Cir. 1964) (sustaining agreement in part because "[r]etailers were free to abandon the arrangement at any time they saw it to their advantage so to do.").

There is also a logical legal flaw with the assertion that an agreement cannot be anticompetitive if it can be terminated in less than one year. The flaw is that *all* contracts that are unreasonable restraints of trade are unenforceable at common law, and were even before the Sherman Act was enacted, and thus have always been terminable at will. The assertion that no terminable agreement is anticompetitive would thus mean that no agreement could ever be deemed anticompetitive under antitrust law, thus making them all per se legal. This would effectively take Sherman Act § 1 and Clayton Act § 3 off the books, as well as any application of Sherman Act §2 to exclusionary conduct that requires buyer acquiescence. Terminability provides a limit on judicial enforcement of a contract, but such judicial enforcement is not necessary for an antitrust offense. Accordingly, the Supreme Court has had no trouble concluding that agreements unenforceable at contract law remain illegal under federal antitrust law.[9]

Indeed, if GPO exclusionary agreements have short terms or can be terminated

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and the Future: Trade Regulation, 51 NW. U. L. REV. 281, 290, 292-94 (1956).

[9] *See, e.g.*, Dr. Miles Medical Co. v. John D. Park & Sons Co, 220 U.S. 373, 404-08 (1911).

upon short notice, then the main implication would be to undermine the *pro*competitive justifications generally offered for those agreements. It is, for example, hard to see how such agreements can fulfill such asserted purposes as providing certainty and predictability when buyers can easily terminate the agreements whenever it suits their fancy. Such terminability also seems inconsistent with the claim that exclusive agreements are necessary to encourage relation-specific or other sunk-cost investments that increase firm's economies of scale or scope or otherwise make it interact more efficiently with buyers. After all, if the agreements are really terminable, then there would be nothing to prevent buyers from opportunistically exploiting any such investments by threatening to terminate the agreement unless they get a better deal that expropriates any additional efficiency created by the investment.

The Relevant Loyalty or Bundled Discounts With GPOs Cannot Generally Be Justified by Procompetitive Efficiencies

In defending their exclusionary arrangements, GPOs have generally stressed the efficiencies generated by GPO purchasing. But one must be careful to distinguish efficiencies allegedly produced by GPOs from efficiencies allegedly produced by the sorts of exclusionary agreements at issue. It is the latter that is of interest here since no claim has been made that GPOs themselves constitute an antitrust violation. For the same reason, it is irrelevant whether hospitals do better with GPOs than without them because that comparison provides no market test of whether GPO exclusionary agreements are efficient and procompetitive. Hospitals are entitled to the benefits of an unrestrained competitive market, where they could reap the benefits of GPOs without enduring the costs of these anticompetitive arrangements. That is, since the antitrust question is not whether GPOs are themselves walking antitrust violations, the answer cannot turn on whether or not hospitals on balance benefit from GPOs. The antitrust question is instead whether these exclusionary agreements cause a sufficient marketwide foreclosure to impair rival efficiency in a way that is not justified by offsetting procompetitive efficiencies.

To the contrary, antitrust concerns about these exclusionary agreements are affirmatively *exacerbated* by the fact that GPOs are the most efficient way of distributing goods, and that the factors that make them efficient generally mean they are more efficient the larger they are. The reasons are twofold. First, the greater efficiency of GPOs bolsters the point above that the advantages of GPOs on all products can be enough to induce hospitals to stick with them even if GPOs enter into otherwise disadvantageous agreements on a few products. Second, the greater efficiency of GPOs generally (and the largest GPOs in particular) means that foreclosing them forecloses the most efficient method of distributing medical supplies, which alone suffices to prove anticompetitive harm under one of the theories noted above.

GPOs have also offered some efficiency justifications for the exclusionary agreements themselves, claiming that they save marketing and administrative costs, enable efficient standardization, and provide a predictability and certainty that reduces risk and enables sunk cost or relationship-specific investments to gain economies of scale or scope. But these justifications are weak for at least ten reasons.

First, as I noted above, the asserted justifications for why these exclusionary agreements enhance *seller* efficiency are entirely inconsistent with the claim that the terms of these exclusionary agreements allow GPOs or hospitals to terminate these agreements on short notice. If GPOs or hospitals are free to terminate these exclusionary agreements whenever it suits them, then the agreements cannot (1) provide predictability and certainty or reduce risk for sellers; (2) reduce the need for marketing and sales efforts to make sure buyers do not switch to another provider; or (3) encourage sunk cost or relationship-specific investments because buyers could later end the agreement (or threaten to do so) before the seller has recouped its investments. All those efficiencies turn on the assumption that the agreement that constrains the buyer in the future. In contrast, collective action and seller-buyer collusion problems explain why it would remain in each buyer's interest to continue adhering to terminable exclusionary agreements even though they are anticompetitive for either those buyers as a whole or for downstream buyers.

Second, these exclusionary agreements are also inconsistent with the claims that the agreements offer greater efficiencies *to buyers*, like lowering their administrative costs, offering standardization benefits, or offering greater predictability and certainty to buyers. (A) If the exclusionary agreements really conferred efficiency benefits on buyers, then there would be no reason why sellers had to offer discounts to get buyers to agree to the exclusionary conditions. As Professor Hovenkamp has noted, "in explaining why a buyer agreed to exclusive dealing the discount policy may render less likely alternative efficiency explanations – for example, that the buyer wanted an ensured source of supply that exclusive dealing tended to provide. In that case the seller would not need to offer a discount to induce the buyer to accept exclusive dealing." XI HOVENKAMP, ANTITRUST LAW 116 (1998). Thus, "the fact that the inducement to agree to exclusive dealing was a price discount" undermines the claim that the exclusionary agreement offers efficiencies to buyers. *Id.* (B) If an exclusionary condition was designed to benefit buyers, there would be no need for it constrain the choices that buyers make. Instead, the requisite condition would mandate that the seller supply all the buyers' needs if the buyer so desires. A buyer's net efficiency cannot be enhanced by requiring it to limit its purchases from rivals when the buyer decides the benefit from doing so outweigh whatever arguable efficiencies result from using only one supplier to obtain administrative and standardization benefits.

In particular, although standardization has medical and efficiency benefits, these exclusionary agreements are unnecessary to achieve any benefits standardization might bring. Without any agreement restricting their choices, hospitals could choose to standardize on whichever product was the best or cheapest, or weigh any benefits of standardization against the costs of foregoing purchases of other better products. And these exclusionary agreements frequently require hospitals to use only one brand for multiple products or types of products even when that has no standardization benefit. Moreover, the posited standardization benefits come from standardization *within* any given hospital, and thus cannot justify the standardization across *different* hospitals produced by exclusionary agreements with GPOs. Rather than providing an efficiency justification, the reality of standardization benefits actually accentuates the anticompetitive effect of agreements requiring that hospitals buy 90-95% of their needs for a product from one manufacturer. For given those benefits, any nominal 90-95% commitment effectively requires a hospital to buy 100% from that manufacturer unless it wants to give up the benefits of standardization. *See supra.* To put it another way, a 90-95% commitment means that even in the supposedly unforeclosed 5-10% the agreement impairs rival efficiency because it means that a hospital choosing the rival product must add to its price the cost of losing standardization benefits.

***Third*,** if these asserted efficiencies were real, one would have expected them to be factored into the bid analysis of manufacturers, GPOs, and hospitals when exclusionary agreements were reached. But I have not seen any evidence that anyone making or accepting a bid that included a loyalty or bundled discount ever assessed these factors. If the asserted efficiencies played no role in actual decisionmaking by manufacturers, GPOs, or hospitals, then the hypothesized efficiency claims are mere post hoc rationalizations for agreements that were really made for other reasons. For example, a manufacturer could not have been motivated to bid lower for an exclusionary agreement because winning the bid would enable the manufacturer to make sunk cost investments when the manufacturer never determined whether it needed additional sunk cost investments to achieve further economies of scale at all, let alone calculated whether this expansion would lower its net costs enough to offset the lower price. The FTC or DOJ should thus require proof that the claimed efficiencies played an actual role in bid analysis before considering them.

Fourth, if the agreements were really designed to provide either volume-based efficiencies or predictability and certainty, they would offer discounts in exchange for a set *volume* of purchases rather than for excluding rivals from a *share* of purchases. Such share-based discounts turn on whether each hospital meets a certain percentage threshold regardless of the hospital size or demand for the device in question. A 90% threshold might mean 1,000 units for one hospital, and 10,000 units for another. Any given percentage applied to all hospitals is thus likely to be too high to be necessary to achieve any volume-based efficiencies for some hospitals, and perhaps too low to achieve them for others. This suggests that the rebates are designed to buy loyalty rather than achieve volume-related efficiencies. Nor do such share-based agreements eliminate the risk of a reduction in the *amount* of purchases by buyers; they protect only against an increase in the *share* purchased from rivals. Morever, these agreements typically do not restrict buyers from switching amongst various sizes and types of a seller's products within some broad category. They thus typically cannot provide the sort of predictability and certainty that would enable sunk cost investments in specialized plant and equipment, because such plants and equipment are normally tailored to making particular types and sizes, and buyers remain free to greatly vary the types and sizes they buy, as well as to buy much less in total in the future. Rather, the only predictability many of these agreements provide is that they predictably deny rivals access to market share and thus impair rival efficiency.

Fifth, the argument that GPO exclusionary agreements provide predictability and certainty by assuring sellers of any sort of sales (volume or share) is inconsistent with the claim also made by their defenders that GPO agreements are not foreclosing because they provide device makers with no assurance of getting hospital business. If there is no assurance of getting hospital business, then how can these GPO contracts provide predictability and certainty and induce sunk cost investments? And how can risk and marketing costs be reduced by GPO contracts when every hospital's business remains up for grabs at every moment? In fact, the reality is that these agreements do provide assurances that have foreclosing effects, but the claims that they do not are internally inconsistent with these efficiency claims.

Sixth, the argument that these agreements actually save administrative and marketing costs flies in the face of the reality that they actually require enormous administrative and sales efforts in order to monitor and achieve compliance with their 90-95% share obligations. It is much easier to sell a product, or broker transactions, when all one has to do is determine how much a given manufacturer has sold. It is much harder when one also has to determine how much buyers have bought from others in order to make sure that the share of the latter is sufficiently low. This claim is also inconsistent with the fact that device makers pay *higher* administrative fees for sole source contracts than for dual source contracts.

Seventh, bundled discounts across multiple product and even multiple manufacturers are especially hard to square with many of the justifications offered. Such bundling cannot be justified by the need to encourage sunk investments to gain economies of scale in any given product. Nor can bundling be justified by standardization benefits, which come from standardizing within one product not across multiple products or manufactures. And while economies of scope might exist for some multiple products produced by the same manufacturer, then cannot explain the bundling of products by different manufacturers.

Eighth, I have yet to see defenders of these exclusionary agreements provide concrete evidence that these asserted efficiencies actually existed and were improved by the challenged agreements. Nor have I seen them quantify those efficiencies, let alone prove, as required, that the likelihood and magnitude of any efficiencies offset the anticompetitive effect on market output and price, and were actually passed on to consumers in a way that enhanced consumer welfare by giving them lower prices than consumers would have paid without the anticompetitive conduct.[10] For example, I have seen no evidence that these exclusionary agreements actually reduced rather than increased administrative or marketing costs, or by how much. In any investigation, the FTC or DOJ should demand such evidence under standard antitrust rule of reason analysis, which provides that, whenever anticompetitive effects have been shown to be likely by either direct proof or the market share foreclosed, then the defendant has the burden of proving its asserted procompetitive justifications are really furthered by the restriction, are significant in magnitude, and outweigh the anticompetitive effects. *See, e.g.,* VII AREEDA, ANTITRUST LAW 429 (1986); XI HOVENKAMP, ANTITRUST LAW 176 (1998); *California Dental v. FTC*, 526 U.S. 756, 771 (1999); *Indiana Dentists,* 476 U.S. 447, 460-61 (1986).

Ninth, to the extent defenders are right that the asserted economies of scale and scope exist, the plain less restrictive alternative is vigorous above-cost price

[10] DOJ-FTC Merger Guideline §4 ("To make the requisite determination, the Agency considers whether cognizable efficiencies likely would be sufficient to reverse the merger's potential to harm consumers in the relevant market, e.g., by preventing price increases in that market. In conducting this analysis, the Agency will not simply compare the magnitude of the cognizable efficiencies with the magnitude of the likely harm to competition absent the efficiencies.")

competition and internal expansion to achieve them. "'The central message of the Sherman Act is that a business entity must find new customers and higher profits through internal expansion --that is, by competing successfully rather than by arranging treaties with its competitors." *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 600 (1985). The same preference for internal expansion would seem to apply vis-avis efforts to achieve profits through treaties with others to fence out competitors. If there are economies of scale or scope, a firm can keep expanding and lowering prices as it achieves those greater economies, until it has fully achieved its minimum efficient scale. This would provide a market test of whether economies of scale really justify a firm of that size. Further, a firm that has achieved economies of scale through such price competition remains vulnerable to competition by a rival who is more efficient and has an even lower cost curve, thus assuring the market gets the most efficient firm or firms. And through such price competition the market can also adjust for the fact that today's economies of scale can change tomorrow as technology and consumer demand changes, making a size that seems efficient today inefficient tomorrow.

Tenth, the problem with claims that economies of scale justify agreements that guarantee certain shares to one firm is that such agreements also impair rival efficiency by foreclosing rivals of access to that same share so that they can achieve economies of scale too. This may be good for the first firm, but there is no reason to think it is good for market efficiency. (A) Such exclusionary agreements can give a less efficient incumbent firm exclusive access to the benefits of economies of scale, preventing a rival that is more efficient (because it has a lower overall cost curve) from being able to compete because the agreements foreclose that rival from the access to buyers that it needs to achieve its own economies of scale. *Accord* IX AREEDA, ANTITRUST LAW 29, 391 (1991). (B) Assigning market share by such agreements rather than by open competition can also result in firms that become larger than economies of scale really justify, or in firms persisting at a size that later becomes unjustified when changes in technology and consumer demand change economies of scale. This latter problem could in theory be constrained if antitrust judges and juries were able to costlessly make perfectly accurate decisions about the correct size of economies of scale and scope and modify them from day to day. But in fact, doing so would be costly, and decisions by antitrust judges and juries will often be inaccurate. *Id.* Further, technology, costs and demands are constantly changing in ways that can make today's economies of scale or scope differ from tomorrow's, and antitrust litigation cannot offer constantly updated assessments of this issue, but only a long delayed retroactive judgment. Further, even if antitrust judges and juries were generally accurate at determining the size of economies of scale, they will always be less accurate at doing so than the market test that would be provided by allowing firms to compete without exclusionary agreements. Accordingly, market competition rather than firms seeking to self-regulate industries by private agreement should determine whether economies of scale require a firm of a given size and which firm that should be.

The argument that economies of scale justify exclusionary conduct that assures market share to one firm over its rivals is conceptually no different than the argument that exclusionary conduct to achieve a monopoly should be legal if the market is a natural monopoly. *See* Elhauge, *Defining Better Monopolization Standards, supra,* at III.B.2. That argument has been rejected by well-accepted antitrust economics, and for the same reasons. *See* III AREEDA & HOVENKAMP, ANTITRUST LAW 125-26 (2002). After all, "competition *for* a natural monopoly can be just as beneficial to consumers as competition within an ordinary market." *Id.* at 126. Banning such exclusionary conduct despite the seeming inevitability of monopoly helps "assure survival for the most efficient competitor and protect the processes of competition when the claimed inevitability [of monopoly] is less than sure." AREEDA & KAPLOW, ANTITRUST ANALYSIS 616 (4th ed. 1988). Further, it preserves an undistorted market that is able to adjust if today's natural monopoly becomes unnatural tomorrow. *See* Richard A. Posner, *Natural Monopoly and its Regulation*, 21 STAN. L. REV. 548 (1969) ("No natural monopoly can safely be assumed to last forever, impervious to changes in technology and consumer taste")

Indeed, whenever a dominant device maker has a market share of over 50%, any argument it makes about needing exclusionary agreements to achieve economies of scale necessarily amounts to a claim that the minimum efficient scale is greater than 50% and that thus the market is a natural monopoly. Accordingly, any claim by such a manufacturer that exclusionary agreements are justified by economies of scale amounts to a claim that it is entitled to engage in exclusionary conduct to achieve or maintain a monopoly because this is a natural monopoly. Such claims should be determined not by private agreement or antitrust juries, but by an undistorted market test, which can determine whether the market is really a natural monopoly, who the most efficient natural monopolist is, and can rapidly alter either conclusion as circumstances change. They are thus properly rejected under antitrust law. *See* Elhauge, *Defining Better Monopolization Standards, supra,* at III.B.2.

The Need to Supplement and Modify Enforcement Statement 7

DOJ-FTC Health Care Enforcement Policy Statement 7 covers horizontal agreements among hospitals to form a GPO. It does not purport to cover any other sort of agreement that might be entered into by GPOs, including the exclusionary agreements with dominant suppliers considered above. Since the validity of those exclusionary agreements has now become the dominant concern, it seems sensible to supplement Statement 7 to provide guidance about how the agencies will treat them. If the agencies do provide that guidance, it should conform to the antitrust analysis described above. That policy should make clear that: (1) dominant suppliers who charge more to buyers who do not conform to conditions that limit purchases from the supplier's rivals can have anticompetitive effects even though no offered price is below cost; (2) enforcement concerns would presumptively be raised if such agreements in aggregate foreclose enough of the market to impair the efficiency of rivals in one of the various ways described above; (3) redeeming efficiencies must be shown to be concrete, consistent with any terminability by buyers and any constraint on buyer choice during their term, not furthered by less restrictive alternatives, passed on to consumers, and not achieved by simply taking similar efficiencies away from rivals; and (4) buyer willingness to initiate or refrain from terminating such an exclusionary agreement proves neither a procompetitive effect nor the absence of an antitcompetitive one.

As for its provisions on the horizontal agreements creating GPOs, Statement 7 provides that:

> The Agencies will not challenge, absent extraordinary circumstances, any joint purchasing arrangement among health care providers where two conditions are present: (1) the purchases account for less than 35 percent of the total sales of the purchased product or service in the relevant market; and (2) the cost of the products and services purchased jointly accounts for less than 20 percent of the total revenues from all products or services sold by each competing participant in the joint purchasing arrangement.

Statement 7 explains that the first condition's "purpose is to determine whether the joint purchasing arrangement might be able to drive down the price of the product or service being purchased below competitive levels." Unfortunately, it turns out that the 35% buyer market share standard has not been an accurate proxy for determining whether GPOs have such buyer market power. The biggest GPOs, Novation and Premier, each have less than 35% of the market, but both claim to exercise buyer market power and appear to do so. The 35% market share standard should probably be replaced with a more direct standard inquiring into whether the GPO can exercise buyer market power.

"The second condition addresses any possibility that a joint purchasing arrangement might result in standardized costs, thus facilitating price fixing or otherwise having anticompetitive effects." Statement 7. Its rationale is that a GPO spanning competing hospitals "is not likely to facilitate collusion if the goods and services being purchased jointly account for a small fraction of the final price of the services provided by the participants." *Id.* Further because "[i]n the health care field, it may be difficult to determine the specific final service in which the jointly purchased products are used, as well as the price at which that final service is sold" the agencies will instead examine whether the cost of purchases through that GPO "accounts, in the aggregate, for less than 20 percent of the total revenues from all health care services of each competing participant." *Id.*

This rationale may well be correct if the only issue is whether the formation of the GPO facilitates downstream price-fixing by hospitals. But it is potentially misleading to the extent it were misinterpreted to suggest that supplier agreements with such GPOs cannot facilitate price-fixing when the GPOs account for less than 20% of hospital revenue. Even if the total GPO share of revenue is less than 20%, supplier-GPO agreements that exclude the supplier's rivals in a way that increases the price of an input for all hospitals in an area equally will increase the marginal cost of all the hospitals equally without causing any hospital to lose market share to another. GPOs and their hospitals thus have incentives to agree to such an arrangement that increases the prices of that input (in exchange for a share of the supplier's supracompetitive profits) because the costs of the price increase will largely be passed on to downstream consumers. Thus, this 20% standard should probably be supplemented with language making clear that it does not indicate that a supplier's agreement with a GPO cannot cause a downstream anticompetitive effect when the GPOs account for less than 20% of hospital revenue.