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# How Loyalty Discounts Can Perversely Discourage Discounting: Comment

# Assaf Eilat, Jith Jayaratne, Janusz A. Ordover, & Greg Shaffer<sup>1</sup>

#### **I. INTRODUCTION**

The academic literature on loyalty discounts and exclusive dealing demonstrates that the welfare effects of these practices are ambiguous and that market details determine the direction of the effect.<sup>2</sup> However, in his recent paper entitled *How Loyalty Discounts Can Perversely Discourage Discounting*,<sup>3</sup> Professor Einer Elhauge argues that exclusive contracts with loyalty discounts offered by a single incumbent seller can create anticompetitive effects in a broad range of settings. Moreover, he claims, "anticompetitive effects are exacerbated if multiple sellers use loyalty discounts."<sup>4</sup>

To motivate his analysis, Professor Elhauge defines two types of customers of the incumbent seller, namely: "committed buyers," who signed an exclusive contract with the incumbent, and "uncommitted buyers," who did not.<sup>5</sup> The "uncommitted buyers" are free to purchase from the entrant, if there is entry, or from the incumbent. The contractual benefit from signing an exclusive contract with the incumbent is the promise that the committed buyer will always pay \$d less than the price that the incumbent offers to the uncommitted buyers. Put another way, \$d is the assured spread between the incumbent's prices offered to these two groups. From this it follows that if the incumbent chooses not to compete for the uncommitted buyers then the incumbent can, in effect, charge committed buyers the monopoly price.<sup>6</sup>

Professor Elhauge departs from key papers in the literature on exclusive dealing by defining his exclusive contracts to include a Most Favored Nation (MFN)-like feature, which actually does a great deal of work in his model. The MFN-like feature comes through the assumption that the price paid by committed buyers depends not only on the fact that they committed to an exclusive contract, but also on the price that the seller offers to uncommitted buyers (the "list" price). This link between the prices offered to committed and uncommitted buyers is not found in any of the key papers in the exclusive-dealing literature that Professor Elhauge cites.<sup>7</sup> This linkage is crucial because—as exposited by Professor

<sup>4</sup> Id. at 4.

<sup>&</sup>lt;sup>1</sup> Assaf Eilat and Jith Jayaratne: Compass Lexecon; Janusz A. Ordover: New York University and Compass Lexecon; Greg Shaffer: University of Rochester. Address for correspondence: aeilat@compasslexecon.com. Compass Lexecon and Janusz Ordover have been retained in several litigation matters involving contracts with loyalty discounts, and Professor Einer Elhauge was also involved in several of these matters. The views expressed in this paper are those of the authors.

<sup>&</sup>lt;sup>2</sup> See, for example, Bruce Kobayashi, *The Economics of Loyalty Discounts and Antitrust Law in the United States*, 1(1) COMPETITION POL'Y INT'L (autumn 2005).

<sup>&</sup>lt;sup>3</sup> Einer Elhauge, *How Loyalty Discounts Can Perversely Discourage Discounting*, 5(2) J. COMPETITION L. ECON. 189–231 (March 17, 2009).

<sup>&</sup>lt;sup>5</sup> The terms, "committed" and "uncommitted," are employed by Professor Elhauge.

<sup>&</sup>lt;sup>6</sup> In particular, if  $p_m$  is the monopoly price and  $p_f$  is the price offered to uncommitted buyers by the incumbent (these buyers are 'free' of loyalty conditions), then the incumbent can ensure that the price charged to committed buyers is equal to the monopoly price by setting  $p_f = p_m + d$ .

<sup>&</sup>lt;sup>7</sup> See Eric B. Rasmusen, J. Mark Ramseyer & John S. Wiley, *Naked Exclusion*, 81 AM. ECON. REV. 1137 (1991); Ilya R. Segal & Michael Whinston, *Naked Exclusion: Comment*, 90 AM. ECON. REV. 296 (2000); John Simpson & Abraham L. Wickelgren, *Naked Exclusion, Efficient Breach, and Downstream Competition*, 97 AM. ECON. REV. 1305 (2007).

Elhauge—it greatly increases the incumbent's cost of competing with the entrant for sales to the uncommitted buyers. In fact, in Professor Elhauge's model, the incumbent seller sets its list price so high that no uncommitted buyer will buy from it in equilibrium, which means that along the equilibrium path, committed buyers never actually receive the loyalty discount d they are promised; or, stated more precisely, they receive their "discount" d off of a phantom price which nobody pays!<sup>8</sup> As we show below, the qualitative results in his model are unchanged even if there are no loyalty discounts and buyers do not commit to buy exclusively from the incumbent. Thus, it is the MFN-like feature of the contracts, not the loyalty discounts, that drives his results—and the potential impact of MFN provisions on competition has already been extensively analyzed in other papers.<sup>9</sup>

Professor Elhauge fails to identify a single real-world example of exclusive contracts that contain the combination of the two key features of his model: (a) an explicit MFN-like provision combined with discounts over and above the price concessions implied by MFN provisions, and (b) the lack of a specific price to be paid by the committed buyer stipulated at the time the contract is signed. This is a remarkable omission given that he notes that in the existing models of exclusive dealing and loyalty discounts "...the seller offers a form of exclusionary agreement one does not often observe in the real world."<sup>10</sup> To our knowledge, the combination of the key features of Professor Elhauge's model is not present in any of the contracts that have been at the center of recent antitrust litigation.<sup>11</sup>

In addition to being quite irrelevant to explaining the impact of actual loyalty contracts, Professor Elhauge's results are fragile and depend on a number of additional highly restrictive assumptions. First, contrary to Professor Elhauge's claim, not only are the alleged anticompetitive effects not exacerbated if multiple incumbent sellers use loyalty discounts but, indeed, there are no anticompetitive effects in this case; competition among the incumbent sellers to sign up buyers to loyalty contracts ensures competitive pricing. Second, his results are not robust for more than one potential entrant competing for the uncommitted buyers. Third, his results depend on his assumption that contracts between the buyers and the incumbent seller cannot be renegotiated even though both parties would have an incentive to do so. Fourth, as noted above, his results have little, if anything, to do with loyalty discounts since the qualitative results are unchanged even when the loyalty discount d is equal to zero. Fifth, his results imply that when loyalty discounts are anticompetitive, all buyers sign exclusivity contracts and the entrant is foreclosed from the market. This outcome is at odds with the mechanism in the paper, which calls for the entrant to enter and sell to all uncommitted buyers. Sixth, he fails to identify a unique equilibrium in the but-for world in his sequential game, and therefore the interpretation of his results in this game, even without the above criticisms, is problematic. Relative to some equilibria in the but-for world, the equilibrium that arises in Professor Elhauge's model is pro-competitive, resulting in lower prices to consumers.

#### II. PROFESSOR ELHAUGE'S MODEL

Professor Elhauge explores a competitive environment in which an incumbent seller (hereafter "Incumbent") competes with a single potential entrant (hereafter "Entrant") for sales of a homogeneous

<sup>&</sup>lt;sup>8</sup> Or, to expand on the statement by the former Russian Prime Minister Viktor Chernomyrdin, "We hoped for the best, but it turned out like it always does"—and we are paying monopoly prices.

<sup>&</sup>lt;sup>9</sup> Among the papers that identify that, under certain conditions, MFN clauses might be anticompetitive are Thomas E. Cooper, *Most-Favored-Customer Pricing and Tacit Collusion*, RAND 17(3): 377-388 (1986); and Steven C. Salop, *Practices that (Credibly) Facilitate Oligopoly Co-ordination*, NEW DEVELOPMENTS IN THE ANALYSIS OF MARKET STRUCTURE (Stiglitz & Mathewson eds) (1986). Below, we discuss more extensively the similarity between Professor Elhauge's model and the MFN literature.

<sup>&</sup>lt;sup>10</sup> Elhauge, *supra* note 3 at 3.

<sup>&</sup>lt;sup>11</sup> For example, Kobayashi (*supra* note 2) reviews several recent cases that involved loyalty discounts, none of which had the form of loyalty discounts assumed by Professor Elhauge.

product to a population of identical customers. The Incumbent is assumed to have a first-mover advantage in that it can offer contracts with "loyalty discounts" to buyers in the first stage before the Entrant has a chance to enter the market. Buyers who sign the Incumbent's loyalty contract become "committed" and must subsequently buy from the Incumbent or not buy the product at all. In exchange, the Incumbent commits to offering these buyers a discount of \$d off the list price offered to buyers who do not sign its loyalty contract (i.e., the "uncommitted" or, as Professor Elhauge sometimes calls them, the "free" buyers). Thus, if the Incumbent offers a list price of  $p_f$  to the uncommitted buyers, then the Incumbent's price to each committed buyer must be  $p_f$ -d.

Professor Elhauge assumes that at the time that the Incumbent offers its loyalty contract, the Incumbent does not make any commitments regarding the actual price it will charge committed buyers, only that its price to committed buyers will be \$d less than the price it charges to uncommitted buyers. This implies that if the Incumbent does not wish to sell to uncommitted buyers, then it can effectively charge committed buyers any price and, in particular, it can charge them the monopoly price, which is denoted  $p_m$ . This is because if the Incumbent does not wish to sell to the uncommitted buyers, then the price to the uncommitted purchasers is really a "phantom" price which no discerning buyer would ever pay. Thus, the price paid by a committed buyer depends not only on the commitment to buy exclusively from the Incumbent but also on the list price offered to uncommitted buyers, whether or not any of them actually buys at the list price. In the second stage of the game, the outcome of the first stage becomes known to the Entrant. The Entrant then decides whether to enter the market and, if it does enter, the Incumbent and the Entrant compete for the uncommitted buyers with the Entrant moving first (that is, the Incumbent gets to choose its list price after observing the Entrant's chosen price).<sup>12</sup>

In this stylized model, Professor Elhauge argues that loyalty contracts will have anticompetitive effects. His argument is that loyalty contracts essentially allow the Incumbent to act as a monopolist over the committed buyers while ceding market share to the Entrant for the uncommitted buyers, whereas without loyalty contracts, competition would ensure competitive pricing. Competition allegedly breaks down in his world because the committed buyers cannot switch to the Entrant given they have signed loyalty contracts, and the Incumbent has made it too costly for itself to go after the uncommitted buyers (because it would have to give up monopoly profits on committed buyers). Thus the loyalty contracts offered by the Incumbent enable the Incumbent and the Entrant to divide the market between them and implement supra-competitive prices. For a given fraction  $\theta < 1$  of committed buyers, the Entrant always enters in equilibrium, but a "price war" never breaks out because of the way the loyalty contract is structured.

More formally, the essence of Professor Elhauge's argument is as follows: Without the possibility of offering loyalty contracts (the "but-for world"), the Incumbent and the Entrant engage in a Bertrand-like competition. Therefore, in one of Professor Elhauge's but-for worlds, each seller would charge p = c, where c denotes the sellers' marginal cost (as explained below, this is not the only equilibrium of the game if prices are set sequentially, but we will ignore this fact for now).

Now suppose that a fraction  $\theta$  of the buyers sign a loyalty contract with the Incumbent. Further suppose that the Entrant enters the market and offers to sell to the uncommitted buyers at a price of  $p < p_m$ . Under these suppositions, the Incumbent must decide between two possible strategies. One course of

<sup>&</sup>lt;sup>12</sup> Professor Elhauge considers several variants of the model. The main case he considers is the one in which the Entrant moves first in period 2, *supra* note 3 at 7. He also considers a scenario in which the Incumbent moves first and a scenario in which prices are set simultaneously. For ease of exposition we focus on Elhauge's main case, but our critique also applies to the other scenarios. In each of these scenarios, contracts with buyers are signed in stage 1 and prices are set in stage 2.

action is to concede all uncommitted buyers to the Entrant and only make sales to committed buyers, in which case the Incumbent can (and does) charge the monopoly price  $p_m$  while offering the list price  $p_f = p_m+d$ . Another strategy for the Incumbent is to undercut the Entrant and charge a price of  $p_r$ - $\varepsilon$ , attract all uncommitted buyers, and sell to committed buyers at the reduced price  $p_r-\varepsilon-d$ . The benefit of this latter strategy for the Incumbent is that it earns profit on the incremental sales (to uncommitted buyers), but the downside is that it is then contractually obligated to reduce below the monopoly price the price it charges committed buyers. Given this tradeoff, the Incumbent will choose to undercut the Entrant if and only if the Entrant's price is sufficiently high. Of course, the Entrant will rationally take the Incumbent's considerations into account when setting its price and thus will set the highest possible price that will not induce competition from the Incumbent, denoted  $p_r^*$ . Put another way, the Entrant engages in "judo economics" having been encouraged by the Incumbent's first-period decision to turn itself into a puppy dog.

Professor Elhauge shows that in any equilibrium the following relation holds for  $p_r^*: p_m \ge p_r^* > c$ . Moreover, he shows that the Incumbent does not compete against the Entrant for the uncommitted buyers and instead charges committed buyers the monopoly price  $p_m$ . The prices that can be expected to arise when loyalty contracts are offered by the Incumbent in this setting are therefore  $p_m$  and  $p_r^*$  for the committed buyers, respectively. Note that when both inequalities are strict, committed buyers end up being worse off from having signed the Incumbent's loyalty contract because they end up paying a strictly higher price compared to uncommitted buyers. Professor Elhauge shows in Lemma 3 of his paper that under certain (and hard to interpret) conditions, the Incumbent may nevertheless be able to convince some buyers to commit by offering them lump-sum side payments. In any case, in all the equilibria of his model, committed buyers never actually receive the loyalty discount d.

## **III. THREE CRITIQUES**

#### A. Multiple Incumbents.

Professor Elhauge is wrong in claiming that anticompetitive effects are exacerbated when multiple incumbent sellers offer loyalty discounts. In section IV of his paper, he assumes that (i) each seller offers the same loyalty discount d (this assumption supposedly is made "for simplicity"<sup>13</sup>), (ii) a fraction  $\theta_1$  of the buyers sign seller 1's loyalty contract, (iii) a fraction  $\theta_2$  of the buyers sign seller 2's loyalty contract, and (iv)  $\theta_1$  is identical to  $\theta$  (i.e., to the number of buyers signed by seller 1 when seller 1 is a monopolist). Given these assumptions, Professor Elhauge points out that the cumulative foreclosure share "exceeds the single seller foreclosure share because  $\theta_1 + \theta_2 > \theta_1$ ".<sup>14</sup> And based on this insight, he concludes that the alleged anticompetitive effects of loyalty contracts are exacerbated in the presence of incumbent competition: each additional incumbent seller does not affect the market share of any other incumbent seller (by assumption), and gains a strictly positive market share (by assumption), which implies that fewer uncommitted buyers are left for the Entrant.

The problem with Professor Elhauge's reasoning is that he assumes away the competition to sign committed buyers that would occur between incumbent sellers 1 and 2. Each buyer will correctly anticipate that if she signs an incumbent seller's loyalty contract, she will pay  $p_m$  for the product and, therefore, she will only do so if she receives some lump-sum compensation in the form of a side payment. But whose contract should she sign? That is where the competition battleground will occur. Suppose that incumbent seller 1 offers a side payment of f > 0 to induce buyers to sign its contract. Then incumbent seller 2's best response would be to offer a side payment of  $f + \varepsilon$ . But if incumbent seller 2 is offering a side

<sup>&</sup>lt;sup>13</sup> Elhauge, *supra* note 3 at 26.

<sup>&</sup>lt;sup>14</sup> Elhauge, supra note 3 at 27.

payment of  $f + \varepsilon$ , then incumbent seller 1's best response would be to offer a side payment of  $f + 2\varepsilon$ , and so forth. This iteration ends only when both sellers are effectively giving back to buyers in stage one all that they could hope to gain from buyers in stage two through the supra-competitive prices they would charge. In the end, consumer welfare will be far larger than it would have been with only one incumbent seller, contrary to Professor Elhauge's assertion that the welfare effects are exacerbated.

Moreover, there is no reason to restrict the form of competition to be in side payments. Either incumbent seller could, in addition, commit to offering discounts off the monopoly price. For example, incumbent seller 1 could announce to buyers that if they signed seller 1's loyalty contract, they would pay, at most,  $p_m - \varepsilon$  for their product. But then incumbent seller 2's best response would be to commit to a price of no more than  $p_m - 2\varepsilon$ , and so forth. Thus, we can expect competition between sellers to drive the price committed buyers pay all the way down to the incumbent sellers' marginal cost c, which Professor Elhauge asserts is what they would have paid absent any loyalty contracts.

Result 1: If the Elhauge model were extended to allow for multiple incumbents, competition among the incumbent sellers would be expected to lead to marginal-cost pricing whether or not exclusive contracts with loyalty discounts were prohibited.

Thus, contrary to Professor Elhauge's assertion, the anticompetitive effects that arise in his model are eliminated when there are multiple incumbent sellers.

## **B.** Multiple Entrants

The anticompetitive effects of loyalty contracts in the Elhauge model also disappear if there is more than one entrant competing for the uncommitted buyers. For example, suppose two sellers were to enter in the second stage, after loyalty contracts have been signed. Then, through the usual reasoning, Bertrand competition between the entrants would ensure that the prices that are offered to uncommitted buyers will equal marginal cost. Anticipating this, no buyer would be willing to sign the Incumbent's loyalty contract without a side payment that is large enough to make up for the expected loss of consumer surplus. Since all sellers are assumed to be equally efficient, it is easy to see that there is no side payment that would be strictly profitable for the Incumbent to offer and would induce a buyer to accept its loyalty contract. Stated differently, the Incumbent cannot profitably put buyers in a better position compared to the buyers' outside option of enjoying the fruits of perfect competition between the two entrants.

Result 2: If the Elhauge model were extended to allow for multiple potential entrants, competition among the potential entrants would be expected to lead to marginal cost pricing whether or not exclusive contracts with loyalty discounts are prohibited.

Thus, the alleged anticompetitive effects of loyalty contracts in Professor Elhauge's model are not robust to multiple potential entrants.

# C. Possibility of Renegotiation

It is easy to see that the very strong results reported in the paper depend on the assumption that the buyers and the Incumbent cannot renegotiate the loyalty discount contract, even though it is beneficial for both sides to renegotiate. Consider again the stylized world of one incumbent seller and one potential entrant. In the equilibrium proposed by Professor Elhauge, the Incumbent is indifferent between setting the monopoly price and only selling to committed buyers, and undercutting the Entrant's price by epsilon and selling to all consumers. However, this is an extremely fragile equilibrium. Suppose that after the Entrant sets its price, but before the Incumbent commits to its price, a single committed buyer approaches the Incumbent with the following proposal: The buyer says "I will unilaterally give up my right to receive my \$d discount off the price that you charge uncommitted buyers—provided that you undercut the Entrant's price and offer me the new price." The Incumbent would be better off accepting this offer and undercutting the Entrant with a new price equal to  $p_r^*$ - $\epsilon$ . This is because before the offer from the buyer, the Incumbent was just indifferent between undercutting the Entrant and not undercutting it. The buyer who proposed revising the contract also gains from the new outcome because she pays a lower price  $p_r^*$ - $\epsilon$  instead of  $p_m$ . Of course, all other committed buyers gain as well because they pay a lower price and receive a discount of \$d as a result of the deviation. Thus, the equilibrium proposed by Professor Elhauge would unravel in response to this renegotiation by a single buyer.

Result 3: The equilibrium in Elhauge's model unravels when the Incumbent and committed buyers are allowed to renegotiate their contracts.

## **IV. THREE DEFICIENCIES**

Professor Elhauge's analysis also suffers from several other deficiencies. In what follows, we will consider three such deficiencies: treating the loyalty discounts as exogenous; treating the number of buyers as exogenous; and not recognizing a multiplicity of equilibria in the but-for-world absent loyalty contracts.

#### A. Exogenous Loyalty Discounts

The loyalty discount offered to buyers (along with side payments) as an inducement to sign an exclusive contract with the Incumbent is assumed to be exogenous despite seemingly playing a central role in his paper. More importantly, all of the qualitative results in Professor Elhauge's paper are independent of the level of d, and in particular hold even if it is assumed that d = 0. This means that of the two components in Professor Elhauge's exclusive contracts that pertain to prices: (1) the MFN-like provision that ensures that any price reduction to uncommitted buyers is also given to committed buyers, and (2) the \$d discount given to all committed buyers compared to the price offered to uncommitted buyers, only the first component is necessary to achieve his results.

More precisely, when d = 0, and there is one incumbent seller, one potential entrant, and no possibility of renegotiation, the Entrant can still deter the Incumbent from competing for the uncommitted buyers (in fact, this is exactly the scenario discussed in the literature that analyzes the effects of MFN clauses). The reason is that the Entrant can always choose a price sufficiently low that the Incumbent will be unwilling to give up its opportunity to sell to committed buyers at the monopoly price. Therefore, the alleged effects identified by Professor Elhauge can arise even when no discount is offered. It follows that even if one accepts the stylized version of Professor Elhauge's model with all of its inherent limitations, it is not clear what, if any, anticompetitive effects can be attributed to loyalty discounts as opposed to the MFN-like feature of the Incumbent's contracts.<sup>15</sup>

<sup>&</sup>lt;sup>15</sup> Professor Elhauge argues that loyalty discounts as defined in his model are different from MFN clauses because "Unlike most-favored-nations clauses, loyalty discounts (1) include a seller commitment to maintain an affirmative price difference between agreeing and non-agreeing buyers and (2) often involve buyer commitments to buy all or a high share of purchases from the seller.", *supra* note 3 at 5. However, neither of these two assumptions differentiates between the rationales of MFN and Elhauge's loyalty discounts: (1) As we explain above, the affirmative price difference does not matter for the qualitative results. Even when the loyalty discount *d* equals zero the incumbent must bear a cost in order to compete for uncommitted buyers—this cost stems from the obligation that price reductions to uncommitted buyers would also be enjoyed by committed buyers. (2) Standard MFN clauses apply to the incumbent's existing customers. This implies that models that analyze MFN clauses *do* assume commitment on the part of buyers: buyers are rewarded with a MFN clause when they commit to buy from the incumbent at least one unit at a pre-specified price if no sales are made to uncommitted buyers. This commitment is crucial for the MFN mechanism because absent this commitment, the incumbent bears no cost for competing for uncommitted buyers, thereby restoring competition (in the MFN literature as well as in Professor Elhauge's model). Whether the commitment is to buy 100 percent, 1 percent, or one unit is irrelevant for the qualitative results—as long as the incumbent must bear any cost in order to

#### **B. Exogenous Number of Committed Buyers**

Another key variable assumed to be exogenous for much of the model is S, the number of buyers who sign the Incumbent's loyalty contracts. Professor Elhauge defines  $\theta \equiv S/N$  as the fraction of buyers who sign the Incumbent's loyalty contract, but then asserts in Proposition 1 of his paper that in equilibrium either all buyers will agree to the Incumbent's contract or none of the buyers will agree.<sup>16</sup> This is odd because if none of the buyers agree, so that  $\theta=0$ , then marginal-cost pricing obtains and there are no anticompetitive effects, whereas if all the buyers agree, so that  $\theta=1$ , then the Entrant is completely foreclosed from the market. But neither of these outcomes is consistent with the posited equilibrium of the model, which states that only some buyers become committed and the two sellers divide the market while charging supra-competitive prices. It is also notable that the scenario in which all buyers become committed is exactly the one considered in the exclusive dealing literature: there a monopolist signs buyers to exclusivity contracts for a lump-sum side payment, thereby foreclosing a potential entrant and charging the monopoly price. The outcome has nothing to do with loyalty discounts, which are meaningless when all buyers correctly anticipate that the Entrant will stay out.

#### C. Multiple Equilibria in the But-for World

Lastly, Professor Elhauge asserts that it does not matter for his results whether the Entrant chooses its price before, after, or at the same time as the Incumbent. He claims that in equilibrium they will both charge a price equal to marginal cost "because any price higher than c would be undercut by the other."<sup>17</sup> However, this is not the only equilibrium of the sequential game considered by Professor Elhauge. If the Entrant were to set its price first, the Incumbent's optimal strategy would be to undercut any price greater than c, thereby winning the patronage of all buyers. Given that this is what the Incumbent would do, the Entrant is then assured to earn a payoff of-at most-zero, no matter what price it sets. This implies that while there exists an equilibrium in which both sellers charge a price of c, there also exist other equilibria. One equilibrium involves the Entrant staying out of the market (or, equivalently, charging  $p_m + \varepsilon$ ) while the Incumbent charges p<sub>m</sub>. Although the Entrant earns a payoff of zero in this instance, it cannot do any better given the Incumbent's strategy of always undercutting the Entrant's price (in fact, if one assumes that the Entrant must incur a small sunk cost in order to enter, then the only equilibrium is one in which the Entrant stays out).<sup>18</sup> In particular, this but-for equilibrium involves higher prices compared to the alleged outcome that arises when loyalty contracts are signed. It follows, contrary to Professor Elhauge's assertions, that loyalty contracts may result in lower prices to buyers compared to the possible but-for prices: uncommitted buyers pay pr<sup>\*</sup> instead of paying pm, while committed buyers still pay pm but receive a lump-sum side payment from the Incumbent.

#### V. CONCLUSION

Professor Elhauge has put forth a model of exclusive dealing with loyalty discounts which allegedly shows that prices can be elevated by exclusive deals even absent scale economies. He also states that this is a

compete with the entrant, the latter is able to charge an above-cost price. In fact, Professor Elhauge himself shows in Section V that full commitment is not crucial for his results.

<sup>&</sup>lt;sup>16</sup> Elhauge, *supra* note 3 at 16.

<sup>&</sup>lt;sup>17</sup> Elhauge, *supra* note 3 at 8.

<sup>&</sup>lt;sup>18</sup> This result is well known in the economic literature: *See*, for example, P. Dasgupta & J.E. Stiglitz, *Potential competition, actual competition, and economic welfare*, 32(2-3) EUR. ECON. REV 569-577, at 571-2 (1988).

robust result and that he has a whole new angle on how these contracts work—something missed by the prior exclusive-dealing literature.

However, as we have shown, Professor Elhauge's definition of an exclusive-dealing contract with a loyalty discount includes an MFN-like provision that links the prices of committed and uncommitted buyers, and this provision/clause is central to his results. Prior literature on exclusive dealing (which he cites) does not contain this MFN-like provision, nor to our knowledge is this MFN-like provision contained in the exclusive-dealing contracts that have been litigated in prominent cases in recent years. It follows that the relevance of Professor Elhauge's model to real-life settings is questionable. In any case, the impact of MFN provisions has already been examined by others.

We have also shown that even within the confines of his model, the particular form of exclusive contracts examined by Professor Elhauge need not have anticompetitive effects. In particular, we show that the results of his model are not robust to small changes in the competitive environment. For example, they are not robust to the introduction of more than one incumbent seller, more than one potential entrant, or the possibility of renegotiation between the Incumbent and its committed buyers. Moreover, we have shown that Professor Elhauge's analysis suffers from several additional shortcomings, including but not limited to the lack of a unique equilibrium in his sequential game in the but-for world absent loyalty contracts.