

DEPARTMENT OF JUSTICE

"SOME THOUGHTS ON SLOTTING ALLOWANCES AND EXCLUSIVE DEALING"

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There has been increasing discussion of a variety of practices under the heading of "slotting allowances." Concerns have been expressed particularly when these practices seem to have a degree or flavor of exclusivity. Today, I plan to share with you a very preliminary exploration of the economics of some such practices. This is not meant as a full analysis: rather, it is an attempt to organize some thoughts and suggest some questions that a full analysis ought to address, and as such it is consciously skimpy on facts.

Although usage is not completely standardized, I will use the term "slotting allowance" for a payment from a manufacturers to a retailer in consideration of the retailer stocking the manufacturer's product. Sometimes these are paid on new products; in other cases, however, even established products carry slotting allowances, and that is sometimes said to be more worrying. For today's purposes, I will ignore the distinction between new and established products, and I will treat a "slotting allowance" as any "fixed" payment that's independent of quantity.

Why would manufacturers and retailers engage in such payments, rather than a comparable reduction in the per-unit wholesale price?² After all, some classical economic theory (discussed below) suggests that the latter could help achieve more profitable and efficient outcomes for the firms, and might perhaps more obviously be passed through to consumers.

¹I understand that some "slotting allowances" amount to rental of shelf space, while others are phrased in terms that might raise more exclusive-dealing concerns, such as guaranteeing a large fraction of category shelf space.

²The distinction between fixed allowances and per-unit discounts may not be as sharp as it appears: allowances keyed to sales in previous periods, for example, might be tantamount to per-unit discounts. While some smaller manufacturers are concerned about capital versus running costs, I will not pursue this here.

I will argue that such theory rests on uncertain assumptions about the structure of decision-making within the manufacturer-retailer relationship. When we take a slightly broader view, it seems easy to identify innocent theories of slotting allowances based on modern contract theory with no anticompetitive flavor. At the same time, it is also possible to identify anticompetitive exclusionary theories. This suggests that it may be productive to gather more information, as the FTC staff proposes to do;³ it also suggests certain questions that any enforcement action (or private litigation) should consider.

I find it helpful to organize the discussion into three sections. First, why might "slotting allowances" arise in a simple bilateral vertical relationship between one manufacturer and one retailer? Second, how does this change when there are two competing manufacturers, but still only one retailer, in the picture? And third, how does it change further when there is more than one retailer involved?⁴ A fourth section raises some issues that don't fit neatly into that structure.

1. Pricing in a single vertical relationship

Consider pricing when a single manufacturer, M, sells a single product to a single retailer, R. The vertical chain of M and R faces a given demand curve for the retail product. Although no other active players will feature in this section, this need not mean that M, or R, or the M-R chain, has a lot of market power, nor that they're the only manufacturer or retailer in the world. All it has to mean is that the contract choices made by M and R do not *shift* the residual demand curve

³As you know, the FTC recently released a Staff Report on slotting allowances. See http://www.ftc.gov/opa/2001/02/slotting.htm.

⁴In the text I discuss two retailers; "two" can probably stand broadly for "more than one."

that they jointly face (as distinct from moving *along* that demand curve).⁵ One might interpret this as meaning that there is no "competitive effect" from those choices. Even if one called movements along the curve "competitive effects," they wouldn't be exclusionary effects, as there is nobody in this model to exclude.

I will ask about the form of privately efficient contracts between M and R, and in particular whether such contracts will likely involve a fixed payment from M to R. Assuming that lump-sum payments are at least possible (not assuming that they are actually observed), asking about privately efficient contracts amounts to asking what contract(s) maximize joint profits.⁶ This is broadly what economists call "contract theory." One observation of contract theory is that some commonplace realities, such as the very existence of "prices," may themselves tell us something about the contracting environment.

If, unrealistically, there were no uncertainty (e.g. about demand) and if a contract could cheaply specify everything relevant, then M and R could achieve the optimum by specifying everything and there need only be a single settling-up payment from one side to the other. Since the consumer's money goes in the first instance to R, presumably that payment flows from R to M. There need be no separate identification of a per-unit wholesale price: R doesn't unilaterally choose quantities in such a detailed contract. And if for some reason the parties did write down a price structure, it would be rather arbitrary and not very meaningful, since almost all points on the structure would predictably never be chosen.

⁵Also, those choices don't shift M's and R's joint cost function.

⁶I will not examine here the role of risk and risk-sharing, although some have stressed that as relevant to slotting allowances especially for new products.

In short, a price structure, as distinct from a single payment, is only a useful contract device when there is uncertainty (for instance about demand) and/or (because detail is costly or because of superior information on one side) contracts leave parties discretion. "Only" of course includes almost all real-world contracts, but it's a useful analytical observation.

Indeed, I would expect that in a manufacturer-retailer chain, each party typically makes discretionary choices that are not explicitly agreed upon in the contract. A manufacturer M may unilaterally choose such things as product quality, inventory levels, packaging, some aspects of marketing, maintenance policies for delivery trucks, and product innovation. A retailer R may choose the retail price, store hours, parking provision, number of checkout stations, local advertising, checkout clerk training levels, etc. While firms do sometimes contract on at least some of these choices, I doubt that M and R will contract on *all* relevant choices; some will remain at the discretion of one party or the other. The contract nevertheless, importantly, affects these choices by affecting the incentives of the party that chooses, often through a price system.

What prices or contract terms give jointly profit-maximizing incentives for these discretionary choices? A core principle is that, for full profit maximization, the unilateral incentives of the party who is choosing would incorporate the effect of his choice on both parties.

In particular, consider the notion that the manufacturer's marginal wholesale price, w, be equal to its marginal cost, c. In the simplest classic vertical model, if R unilaterally chooses the retail price p, given the contract terms, R's incentive in making that choice tends to maximize joint profits if w = c, and generally fails to do so otherwise.⁷ The same applies if R is making

⁷Of course, unless the M-R chain lacks market power, R's choice of p will not tend to be economically efficient, but it will be efficient for M and R jointly, ignoring consumers' interests.

other choices such as the provision of parking for customers.8

A lump-sum payment from R to M would then serve a role in order to cover M's fixed costs and/or give M its equilibrium share of joint profits. Thus a very simple classical theory predicts that a particular kind of incomplete contract (one that does not specify R's retail price and/or other choices by R, but that is otherwise complete) will involve marginal-cost wholesale pricing (w = c) and a lump-sum payment from R to M. This is a wholesale "two-part tariff." Joint maximization means marginal-cost wholesale pricing when the only important contractual incompleteness is that R makes some unilateral choices such as retail price, taking as given the contractually specified wholesale price w.

However, we do not typically see wholesale gross margins equal to zero, including in contexts where few would see competitive concerns. Why not? Evidently a contractual choice of w has other consequences that do not counsel w = c. In particular, if M's incremental gross profit from extra sales is zero, M will not have a correct incentive to make *its* discretionary choices that affect sales. To maximize joint profits, M should face an incremental-profit function that coincides with the partnership's. But that is generally inconsistent with R's facing such a function: you can't normally give both partners 100% of the joint returns at the margin.

Moreover, when M and R bargain under asymmetric information, a wholesale markup (w > c) may be used to give M a larger total payoff in those cases where demand is high.

In short, there may be sensible reasons, having nothing to do with weakening competition, why M and R jointly might prefer a marginal wholesale price w that is well above c. The

⁸Strictly, the word "marginal" should be replaced with "incremental," the relevant increment depending on the context.

discussion suggests that this is most likely if important demand-shifting decisions are, for whatever reason, left up to M, and if few such decisions are left up to R.

The marginal wholesale price w is thus *trying to do more than one thing* in the contract. When a price does more than one thing, it typically won't do any of them perfectly. Thus wholesale price w typically won't equal M's marginal cost c; hence there may be a double-marginalization problem. It typically won't end up equal to retail price, or retail marginal revenue; hence M may have wrong incentives to maintain inventories, etc.

And these problems, or their sum that emerges from the contract's imperfect compromise, will typically be worse if the wholesale price also determines the distribution of inframarginal joint profits. Hence there may well be an incentive to have a lump-sum payment, which could quite plausibly go in either direction: from R to M if the other forces make it wise to set a low marginal wholesale price, but from M to R if the other forces make it wise to set a rather high marginal wholesale price. The latter will be natural if other considerations counsel (or it's inevitable) that M retain discretion over important choices such as national advertising, innovation, packaging, central inventories, warehousing, etc., and where fixed payments to give incentives for such choices are impractical.

Because these tradeoffs arise where prices must try to do more than one thing at a time, it will also often pay, where possible, to contract explicitly on some of the otherwise discretionary variables. Cooperative advertising is an example. Equally, contracting for shelf-space allocation directly, rather than leaving it to R's unilateral discretion given the incentives imperfectly set up by the few contract terms, may well enhance joint profits. It is also quite possible that a contract

⁹This is perhaps relative to their bargaining power with respect to each other.

might efficiently shift some of the discretionary choices from one party to the other, so as to minimize the uncomfortable compromises involved in trying to give each side correct incentives. This could be part of what is at issue in category management.

What I'd like you to take from this brief discussion of contract theory is that there's little challenge, at least at this level of theory, in understanding why M might pay R a lump sum. Moreover, these explanations don't necessarily link the lump sum at all closely to R's costs of maintaining an incremental SKU, or of backing a new product that might fail, or even to the opportunity cost of shelf space -- all of which could well be relevant to the more complex real-world problem. Nor did my discussion require that the M-R team have substantial market power: it assumed little or nothing about the shape of the retail demand curve that they jointly face. Finally, it assumed away any exclusionary effect (there's no-one here to exclude).

Although this discussion is certainly quite incomplete, I think it suggests that seeing lumpsum payments from M to R that are not closely linked to R's per-product costs, or that persist after a new product is proven, is not itself very good evidence of substantial market power, let alone of anything exclusionary.

This basic observation will persist when there are several manufacturers and/or several retailers. Other forces may arise, as I will discuss below, but the same principles of privately efficient design of incomplete contracts, taking as given the level of competition, will remain in the picture.

¹⁰The discussion suggests that elasticities of each party's discretionary choices with respect to the marginal wholesale price, in particular, will also matter. This is closely analogous to the fact that socially optimal prices are based on costs where there are enough instruments but that elasticities also matter (Ramsey pricing) when there are not.

Yet the contract theory discussion did not explicitly address the fact that some manufacturers report that they are excluded as a result of retailer demands for slotting allowances. An innocent possibility is that the manufacturer simply can't contribute enough incremental value to the retailer's offer to customers, given the other products the retailer can or does stock. Another possibility, perhaps less appetizing but not an antitrust violation, is that the retailer has mistakenly overestimated how much rent it can extract from the manufacturer. But it is appropriate here to ask whether there *might* be intentional anticompetitive exclusion.

Following what I think is the primary focus of those who have expressed competitive concern about slotting allowances, I will spend most of my time on the possibility of anticompetitive exclusion at the manufacturing level through a contract between a retailer and one of two manufacturers.

Rather than asking first whether a potentially excluded manufacturer can *get around* the restrictions, I will ask first whether there would be an *incentive* for anticompetitive exclusion. Obviously both questions matter; the economics may have more to contribute to the incentive issue. The incentives may also tell us something about whether it is likely that quasi-exclusive arrangements that do not *completely* exclude a manufacturer from the market, but make its competitive position weaker, may be anticompetitively motivated.

2. Two manufacturers, one retailer

I begin with the simplest framework in which to think about exclusion of a manufacturer

by a retailer-manufacturer contract: this is a framework with two manufacturers and one retailer. I ask whether there is likely to be an anticompetitive incentive for one manufacturer, say M1, and R to agree to exclude another manufacturer, M2.

Why isn't it obvious that a manufacturer would like to exclude its rival? That is not the right question here, since the retailer must be persuaded to cooperate in any exclusion done through agreement between M1 and R. Thus, even if M2 cannot influence their negotiations, the right question is whether it is jointly profitable for M1 and R to agree to exclude M2. Informally, can M1 pay R enough to agree to it? If M2 can also get involved, the question may become whether an exclusive deal increases profits for all three firms jointly.

Although I have not assumed that there is an antitrust monopoly, the framework is essentially that of the "one monopoly rent theorem." That "theorem," in my view, is seldom a final answer but often suggests some usefully challenging questions about vertical theories of competitive harm. Another way to express the same basic insight is that R, like consumers, by and large gains from improvements in upstream efficiency and competition, and loses when upstream (manufacturing) competition is reduced.¹¹

A key insight here is that in assessing *joint* profitability, payments made between R and participating manufacturers count equally on both sides of the ledger: they are payments from one pocket to another. So, in particular, the simple-sounding argument that M1 gains market power from exclusivity, and can thus charge R a higher wholesale price, logically cannot explain why

¹¹It is worth noting that a firm such as R gains from a reduction in its input costs *whether or not* it finds it profitable to pass through much of this reduction to consumers (provided, of course, that there is no shift in R's demand, as there might well be if R's competitors experienced the same change in input costs -- see below).

such a deal would enhance joint profits. An explanation must involve a reduction in costs *within* the relationship, and/or a reduction in payments to, or increase in revenues from, *non*-participants.

This does not mean that prices among participants are irrelevant. As discussed above, such prices can affect joint profits if they affect behavior. In particular, consider an exclusive contract between M1 and R that leaves R in sole charge of retail pricing, and that sets M1's wholesale price above the level that would prevail absent the exclusive. When wholesale prices increase (and were already at or above wholesale marginal cost), R's discretionary price to consumers increases and becomes *less* profitable, not more, for the firms jointly. This observation is the classic double marginalization effect. If, on the other hand, the retail price were set by the contract, this double marginalization effect would in principle disappear, leaving behind only the change in payments among the firms, which as we have noted is an accounting wash from the point of view of joint profits.¹²

Consequently, although M1 might well *unilaterally* like to eliminate M2 as a competitor so it can charge higher prices to R, the pricing effect is unlikely to make it *jointly* profitable to do so. Another way to say this is that it's hard to see how anticompetitive exclusion can be jointly profitable with a single retailer simply through raising retail prices: in most versions of this context, R will already choose to raise retail prices at least as high as is jointly profitable.

Jointly profitable exclusion depends on there being some aspect of behavior by the three

¹²Similar effects could be expected if the agreement does not specify M1's wholesale pricing. Recall from our discussion of the bilateral vertical relationship the classical fact that R's unilateral retail-pricing incentive is most privately efficient if R faces a marginal wholesale price that is equal to marginal wholesale cost. I hope it will be clear by now that I am talking about retail price somewhat metonymically: other discretionary choices by R would have similar effects.

firms that reduces *joint* profits, that *cannot* be resolved by contracts among them short of exclusion, and that *can* be resolved through exclusion. As we have seen, the possibility that, absent exclusion, M1 and M2 compete wholesale prices downward seems unlikely to constitute such behavior, because if anything it is apt to increase joint profits. A somewhat casual way to put this is that R already has all the market power over consumers that M1, M2, and R jointly have or can get, so if they agree to limit R's upstream options they only limit their own efficiency in exploiting this market power, great or small.

One can certainly think of ways in which this simple and robust-seeming argument -essentially the "one monopoly rent theorem" -- may go awry. Nevertheless, I think it warrants a
degree of healthy skepticism toward claims of intentional anticompetitive exclusion through
agreements by a retailer with manufacturers, *to the extent that* they can properly be analyzed in a
single-retailer context: that is, to the extent that the opportunities for *other retailers*, for excluded
manufacturers dealing with other retailers, and for customers through other retailers, are not
substantially affected by the behavior in question. At a minimum, I hope anyone making such a
claim will have an explicit response to the kinds of arguments sketched above. I therefore turn
next to discuss the possibility that such opportunities might be so affected.

3. Two manufacturers, two retailers

As I briefly discussed above, a single retailer R often internalizes, at least in part, the efficiency effects of upstream competition versus exclusivity. When there are multiple (actual or

¹³For instance, non-price competition in manufacturing might in principle dissipate profits in a way that is harder for R to undo. "Fixing" this private inefficiency (whether through contract or through exclusion) could hurt consumers if the firms jointly have market power. By the same token, however, fixing private inefficiencies might well benefit help consumers.

potential) retailers, this reassuring observation may become less reliable, for at least two related reasons.

One well recognized reason is that upstream competition may become an under-supplied *public good* from the perspective of retailers, in the following sense. Suppose that, because of scale effects, M2 must exit if *either* retailer agrees to exclusivity with M1. Then, even though each retailer prefers that upstream competition survive, M1 may be able to pay R1 enough to persuade it to sign an exclusive that will weaken or eliminate M2 -- especially if M1 can point out that R2 might be willing to sign if R1 does not. Note also that in this theory retailers collectively may well be harmed by the overall outcome, despite perhaps getting money for the exclusives. The concern is that M1 may be able to profit from a kind of coordination problem among the retailers. This concern does not depend on competition between the retailers, and indeed is analytically simplest if they do not compete (e.g., if the two supermarkets are far apart) so that one need not consider diversion of demand from one to the other.

The second reason, by contrast, depends on competition between the retailers: I call it *relativity*. When two firms compete hard enough, each may care more about relative input prices than about absolute. So, if R1 perceives that its actions may affect competition upstream *in a way that applies equally* to R2, it will not weigh this very heavily against any consideration offered by (say) M1 to exclude M2. Notice that in this case, in contrast to the previous (single retailer) section, one might very well expect exclusivity to increase total industry profits, so that "bidding to not be excluded" is apt to be a substantially weaker force than above.¹⁴ However, in contrast

¹⁴As a general matter, whether or not firms such as M2 can themselves bid and thus compete for exclusivity, or bid to dissuade R from agreeing to exclusivity, is not immediately dispositive. Anticompetitive practices can have elements of "competition" to them. It would not,

to the previous (multiple non-competing retailers) paragraph, if R1 and R2 compete hard and if exclusion is inefficient, then R1 and M1, if tempted to negotiate anticompetitive exclusivity, must recognize that M2 might not die for lack of scale but might distribute very effectively through R2, drawing many customers away from R1, reducing M1-R1 profits (and scale) and perhaps total (four-firm) profits.

Thus retail-level competition may cut both ways: it makes it at least mechanically harder to exclude one manufacturer inefficiently from the upstream market (more distribution channels must be closed off), but may make it more tempting to do so, both by increasing the anticompetitive returns available and also, perhaps surprisingly, by weakening the resolve of individual retailers not to let it happen.

4. Increased rent extraction from manufacturers

Although much discussion of competitive concerns in slotting allowances centers around intentional exclusion at the manufacturer level, there might potentially be other concerns. I certainly can't mention all of them, so will just mention two, both relating to increased rent extraction from manufacturers who are not excluded (though exclusion may be a key negotiating threat).

for instance, immunize a price-setting cartel if one cartel member were permitted to choose the joint price, and that member were to be selected by a secret triathlon, or by an internal bidding process, no matter how fierce the competition in that process.

Any additional contract instrument, such as slotting allowances, might enable a retailer with buying power to extract a greater fraction of a superior or innovative manufacturer's ex post rent. While such an effect may be competitively neutral or even beneficial ex post, it could in principle adversely affect investment incentives ex ante. One might expect that, ex ante, the powerful retailer would rather it didn't have such an effect; but commitment might be difficult. Moreover, if there are multiple non-competing powerful retailers (dominant grocery chains in different cities, perhaps), retaining investment incentives upstream could be a public good for retailers. While this could be a general concern, it is not clear how much incremental blame should attach to slotting allowances as distinct from the assumed buyer power.¹⁵

Another possibility is that exclusive or somewhat-exclusive dealing is neither about intentional anticompetitive exclusion nor about real efficiencies, but is about pecuniary efficiencies through procurement practices. If a buyer is willing to eschew benefits of product variety and promise to shift substantial market share to whatever seller offers the better price, it may be able to get a considerably better price than if it chose based on variety as well as price. Group buying schemes, of which retailers might in some ways be seen as an example, might do this by a procurement practice of limiting variety, somewhat as HMO formularies do. In this model, bidding for share, akin to bidding for the exclusive, is central.

¹⁵It is also unclear, in this interpretation, whether restrictions on contract form would on balance be helpful.

5. Conclusion

Slotting allowances, in the mere sense of fixed payments from manufacturers to retailers in consideration of being stocked, do not automatically raise antitrust concerns. If the contracts take on a substantially exclusive flavor, then in addition to investigating the degree of exclusivity, one should carefully evaluate whether the contracting parties have a joint economic *incentive* to engage in anticompetitive exclusion. Contrary to what one might fear, this is by no means always the case, although it certainly can be. The necessary economic analysis may be quite subtle.