

Exclusive Dealing

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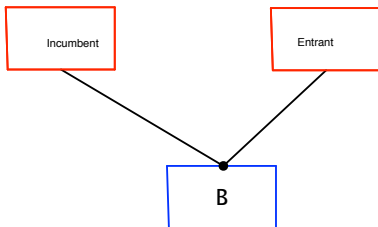
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Dealers

- ▶ Distinction between exclusive dealers (cars), versus non-exclusive dealers (grocery stores).
- ▶ Do we think that exclusion:
 - ▶ Can happen?
 - ▶ Is it anticompetitive?
- ▶ Examples
 - ▶ Intel having exclusives with Dell, excluding AMD.
 - ▶ Beer distributors are restricted on which beer they can distribute.
 - ▶ Apple had an exclusive agreement with ATT for several years, when the iPhone was launched.
 - ▶ The newspaper Lorain Journal refused to print advertisements by those who patronized its rival.
- ▶ Policy history of exclusion is quite varied: sometimes banned outright, now something that is more lightly regulated.

Exclusion: Chicago School

- ▶ Two suppliers: Incumbent (I), Entrant (E).
- ▶ One buyer (B), with demand $D(p)$ for the input.
- ▶ Cost of Entry by Entrant is f .
- ▶ Marginal cost advantage for entrant: $c_E < c_I$.
- ▶ It will be socially efficient for this entrant to come in.
(this means that $\int_{c_I}^{c_E} D(p) dp > f$).



Upstream

Downstream

Exclusive Contract

- ▶ Suppose that the incumbent offers a contract to the buyer:
Buy exclusively from me, and I will pay you t \$.
- ▶ Three period model:
 1. Seller I offers or not an exclusive contract to buyer (B) at price t .
 2. Firm E can enter at cost f .
 3. Firms I and E compete simultaneously in prices p that they sell to B, or Firm I is the only firms in the market.
- ▶ Solve this by backward induction.

Exclusive Contract: Solution

3) Firms Compete in prices:

- ▶ Bertrand like solution $p = c_I$, and the entrant sells everything, if both firms enter.
- ▶ Otherwise, monopoly price p_I^M given cost for incumbent c_I , if only firm I enters, where:

$$p_I^M \rightarrow \max_p (p - c_I) D(p)$$

2) Entry:

The entrant will come in if a) no exclusive contract, and b) if it is profitable:

$$(c_I - c_E) D(c_I) > f$$

1) Accept or reject exclusive contract.

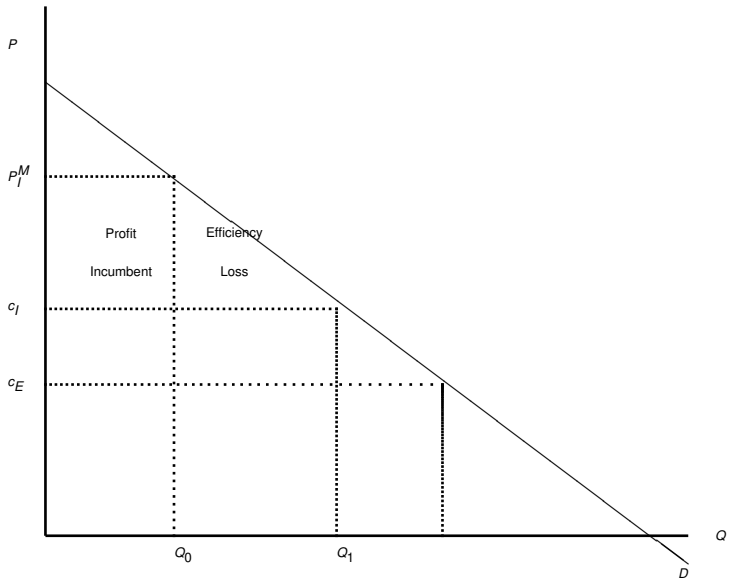
Notice that buyer B will accept if:

$$\int_{c_I}^{p^m} D(p) dp < t$$

Can I offer more than t ? No!

Remember that the profits of I are:

$$(p_I^M - c_I)D(p_I^M) < \int_{c_I}^{p_I^M} D(p) dp$$



“Naked” Exclusion: Externalities between Firms

- ▶ So far we don't get any reason for exclusion, and no reason to think that it is anticompetitive.

Antitrust law bans exclusionary agreements: contracts that say, "You agree not to purchase from anyone besides me." No one, however, has explained convincingly how such contracts could be both profitable and pernicious.

- ▶ Now let's change the model a little bit to get a motive for exclusion.
- ▶ There are three buyers now. They have the same demand curve $D(p)$, and are in separate markets, i.e. they don't compete with each other.
- ▶ As well, the entrant needs at least two buyers to break even:

$$2(c_I - c_E)D(c_I) > f > (c_I - c_E)D(c_I)$$

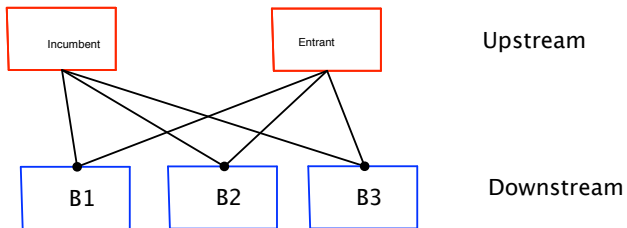
- ▶ Notice that there are externalities here: if a firm signs an exclusive, it lowers the probability that the entrant will serve the other firms.

More specifics

- ▶ Suppose that the monopolist's surplus is $\pi^M = 9$ (I get to buy only from incumbent), and if $x^* = 12$ (I get to buy from entrant). So deadweight loss of monopoly (versus bertrand) is 3.
- ▶ This is called “naked exclusion” (like the work naked short in finance).

We focus on exclusionary conduct that is "naked": conduct unabashedly meant to exclude rivals, for which no one offers any efficiency justification.

Naked Exclusion Model



Timing

1. Incumbent I offers firm 1 an exclusive for t_1 .
2. Incumbent I offers firm 2 an exclusive for t_2 .
3. Incumbent I offers firm 3 an exclusive for t_3 .
4. Entrant E makes entry decision.
5. Either entrant E and incumbent I, or just incumbent I, compete a la Bertrand in prices with each firm 1, 2, 3 (i.e. they can price discriminate between each firm).

Solve this game by backward induction

- 5) Last stage: usual prices p_i^M or c_i depending on whether the entrant has entered.
- 4) Entrant will enter as long as two of the three firms have not signed exclusive contracts.
- 3) What will firm 3 accept in terms of t_3 , exclusion payment. It depends on whether firms 1 and 2 have already signed exclusives, since this determines E's entry decision.
 - ▶ Neither firm 1 or firm 2 has signed an exclusive.
 - ▶ Both firm 1 and firm 2 have signed an exclusive.
 - ▶ Only one of firms 1 and 2 have signed an exclusive agreement.
- 2) What payment will firm 2 accept t_2 .
- 1) What payment will firm 1 accept t_1 .
- 0) What payments t_1 , t_2 , t_3 will be offered by firm B.

Solve this game by backward induction

3) What will firm 3 accept in terms of t_3 , exclusion payment.

- ▶ Both firm 1 and firm 2 have signed an exclusive.
In this case, E won't enter. So firm 3 will accept anything above 0, $t_3 = 0.01$ say.
- ▶ Neither firm 1 or firm 2 has signed an exclusive.
In this case, E will enter for sure. So firm 3 will accept anything above $t_3 > 12$, whereas E's profits in one market from monopoly are 9. Notice that this is the case we studied before, where I will not find it profitable to offer an exclusive agreement at this price.
- ▶ Only one of firms 1 and 2 have signed an exclusive agreement.
This case gets more complicated. Firm 3 will be pivotal about firm E's entry decision. As such, it will accept if $t_3 > 12$. This is a little different from the previously studied case, since firm I will have a larger incentive to get firm 3 to accept: it ensures that it has monopoly in all three markets (comparing $t_3 = 12$ to profits $9 \times 3 = 27$).

2) What payment will firm 2 accept t_2 .

1) What payment will firm 1 accept t_1 .

Solve this game by backward induction

- 3) What will firm 3 accept in terms of t_3 , exclusion payment.
- 2) What payment will firm 2 accept t_2 .

Now this depends on firm 1's agreements:

- ▶ Firm 1 has signed an exclusive.
If firm 1 has signed an agreement, then firm 2 knows that if it disagrees, then firm 3 will sign an exclusive at $t_3 = 12$. So firm 2 knows that either way, E won't enter. Thus firm 2 will accept anything above a penny. Thus, $t_2 = 0.01$ and firm 2 agrees to an exclusive.
- ▶ Firm 1 has not signed an exclusive.
In this case, firm 2 knows that it is pivotal: if it signs, firm 3 will sign, and the entrant won't come in. It will accept as long as $t_2 \geq 12$.

Now firm 1 has to decide what to do. They will compare $t_2 + t_3 = 12 + 12 = 24$ to the profits from monopoly, $3 \times 9 = 27$. So this is a case where they will want to monopolize the market by exclusive agreements.

- 1) What payment will firm 1 accept t_1 .

Solve this game by backward induction

- 3) What will firm 3 accept in terms of t_3 , exclusion payment.
- 2) What payment will firm 2 accept t_2 .
- 1) What payment will firm 1 accept t_1 .

Firm 1's decision is clear: no matter what it does, firm 2 and 3 will sign exclusive agreements, and the entrant won't come in. Thus, firm 1 will accept $t_1 = 0.01$.

Naked Exclusion: Intuition

- ▶ What is going on here?
- ▶ What is happening is that firms 1, 2 and 3 have an incentive to band together to get the entrant to come in.
- ▶ This means that when firm 1, say, signs an exclusive agreement with B, it imposes an externality on firms 2 and 3.
- ▶ Seller I is exploiting the lack of coordination: there is a free rider problem that allows it to inefficiently lock up the market.

Exclusion: Other models

- ▶ Maybe one seller is really efficient: I tie them up to raise my rivals marginal cost.
- ▶ Net Neutrality debate has some flavor of the debate on exclusion: discriminating between different firms.
- ▶ We don't know much empirically about the effects of these policies.