Exclusive Dealing

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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 $\int_{c_I}^{c_E} D(p)dp > f$).
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 firm 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 $p^M_I$ given cost for incumbent $c_I$, if only firm I enters, where:
     $$ p^M_I \rightarrow \max_p (p - c_I)D(p) $$

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

- Incumbent
- Entrant
- B1
- B2
- B3

Upstream

Downstream
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).
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.
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
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 $t_1$. 

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 $t_1 = 0.01$. 

Solve this game by backward induction
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 then 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.