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Lecture 20

Dealing & territorial control

Industrial Economics

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Previously in IE…

* Vertical relations cause ***double marginalization***
  * R ***overprices*** relative to the FB
  * R ***underinvests*** in the provision of a ***pre-sale service***
* This is referred to as a ***vertical externality***
  R ***does't care*** for the effect of her choices on the Mf's profit
* Can be solved with a ***2PT***
  if the Mf has the ***bargaining power***
* A reputable retailer may offer ***quality certification*** by the mere fact that carries the product
* ***RPM*** to prevent ***intra-brand*** competition

Mathewson and Winter (1984)

* So far we had a Mf and a ***single*** R
* A more realistic situation involves ***N retailers*** differentiated by location
  still some ***market power*** for the R
* R can increase ***demand*** by costly ***advertisement***
  which is a form of ***service***
* ***Two types*** of consumers: informed and uninformed
* Advertisement affects the ***ratio*** of informed consumers
* Advertisement can ***spillover***
  a consumer can get the ***signal*** from R_i and ***shop*** from R_j

Horizontal externality and free-riding

* Now in addition to the ***two vertical externalities***, there exists a ***horizontal externality*** among retailers
  * Advertising retailers ***increase*** the demand but non-advertised retailers ***also benefit*** from the spillover
  * However, advertised retailers must be ***more expensive*** – thus, they cannot be ***competitive*** with non-advertised ones
  * This is a ***free-riding problem***
* ***Consumers*** also free-ride
  obtain info from ***one retailer***, then shop from ***another***
* This leads to a ***further decrease*** of the level services
  horizontal externality effect ***on top*** of that of vertical externality

Resolving the vertical externality

* We can attain the first best if we ***internalize the externalities***
* The ***vertical externality*** can be resolved by the ***franchise fee***
  same idea as in the previous model
* This assumes that the ***bargaining power*** is on the side of the Mf

Resolving the horizontal externality

- A usual method to deal with free-riding is to ***impose RPM***

  encourages consumers to buy where the services are provided since they cannot find a better price elsewhere

- RPM will ***increase*** the level of ***services*** provided, but it will also ***increase prices***
  - This brings ***efficiency*** at the First Best
  - But the ***welfare implications*** are unclear
- RPM is essentially "legal price fixing"

  firms use the ***excuse*** of the horizontal externality to fix price

- We often observe RPM on products that involve ***pre-sale services***

The Levi Strauss case

- L-S was the ***inventor*** of jeans in 1853
- Till the end of 80s Levi's was ***synonymous*** with jeans

  was the ***industry leader*** with only Lee and Wrangler to follow

- Today, it is ***not any longer*** so
- In the 90s ***high-end designers*** entered the market

  DKNY, C-K, Armani, Hugo Boss, became active in the industry

- Also, several ***casual clothing*** companies focused in jeans

  Diesel, A & F, Guess, Replay, Staff

- The ***prices*** of Levi's started ***plummeting***
- It's ***market share*** today is lower than ever

What happened?

- L-S used ***RPM*** from very early
  - When jeans were a ***new product***, L-S used RPM to guarantee ***retailer margin*** and, in effect, ***buy shelf space***
  - High price worked as ***quality certification*** and Levi's was established
- Soon, RPM was ***no longer needed*** but L-S chose to keep prices high to ***ensure high profits*** for the network
- In 1976, the FTC sued L-S and soon L-S ***abandoned RPM***

  in an effort to keep prices high without RPM the company ***refused to supply*** discount stores

- L-S feared that this would be ***the end for the brand***

After the abolition

- An era of ***fierce competition*** indeed started
  - ***Intra-brand***: retailers started competing among them
  - ***Inter-brand***: new manufacturers entered the market
- Levi's ***prices dropped*** fast, nearly 40% from the RPM level
- However, Levis ***sales*** and ***profits increased*** significantly!
- In the first years, this was attributed to a ***demand lag***

  consumers run to buy a product which considered ***underpriced***

- However, this was ***not a temporary trend***

  demand proved to be ***more elastic*** than L-S had thought, so the RPM policy was in fact ***wrong pricing***

Aftermath

- In the mid 80s the new wave of ***designer's jeans*** started dominating the market
- Unknown if ***intentionally or accidentally***, Levi's became a ***middle range*** brand
- Many consider L-S a ***story of the fall***
- Although it may seem so, the ***opposite is true***

  RPM abolition ***increased sales***, which ***lowered distribution costs*** and yielded ***higher margins*** for L-S

- Today, Levi's is in a ***much better position*** with a diminished piece of a far larger pie

Credits

Additional research by ICEF IE students 2015-16:

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Exclusive dealing

- When the Mf requires from the Rs to ***not carry competitive products***
- Thus, the manufacturer develops a ***private distribution network*** for the product
  - this can be seen as a ***barrier of entry*** to the upstream market
- Potential entrants to the Mf's market must develop their ***own distribution*** network
  - this can be ***costly***, ***time consuming***, or ***impossible*** and thus sufficient to deter entry by new Mfs
- Of course, this results to ***welfare losses***

*Coke vs. Pepsi refrigerators

- Why Coke and Pepsi are always sold in ***different refrigerators***?
- The most important reason why those brands were able to be successful was their genius ***contractual agreements*** with dealers
- Coca Cola was the leader in ***implementing contracts*** of exclusive dealing with distributors
  - Straight up in countries where this was ***allowed***
  - Through offers in countries that ***it was not*** – In the US ED was deemed illegal by the Clayton Act in 1914
- This practice was quite ***effective*** till the end of the 60s

*Refrigerators

- In the 70s the ***antitrust authorities*** started looking into the ED agreements of soft drink companies
  - coke decided to ***stop offers*** for exclusive dealing
- Instead offered ***free refrigerators*** to stores that were meeting a specific ***quota*** of stocking CC soft drinks
  - the fridge was CC property so ***no competing brands*** should be stored inside
- The practice effectively ***led*** to ED mostly due to ***space***
  - small convenient stores and restaurants did not have ***enough space*** to store another fridge for other brands
- The fridge loophole allowed CC to ***circumvent*** the antitrust law for another 40 years

*Aftermath

- Pepsi ***followed*** the policy but it came second
- The fridge trick soon was followed by ***other industries***
  - ice-cream, beer, hard alcohol, frozen foods
- Later the technique was ***expanded*** to include store signs, elaborate stands, safes, and other merchandise
- In 2004, ***EU*** effectively ***grounded*** the practice
  - ***ruled*** that sponsored fridges could be used to store ***competitive brand products*** up to 20% of their capacity
- A ***fine*** to CC was not disclosed
- Similar cases were filed later in ***Mexico***

Exclusive territories

- The division of the downstream market into a set of ***territorial monopolies***, each assigned to one retailer
  - the exclusive territory is a monopoly ***property right*** preventing ***intra-brand competition***
- The usual instance of such market is the ***franchise***
- Fast food joints, automobile dealerships, electronics retailers, university franchises are ***based*** on ET deals
- Given that consumers ***can travel*** across territories, not all intra-brand competition will be eliminated

Rey & Stiglitz (1995)

- Two manufacturers, producing a ***differentiated*** product
  - Demand for good 1: $q_1 = 1 - p_1 + bp_2$
  - Demand for good 2: $q_2 = 1 - p_2 + bp_1$
  - we must impose that $b \in (0,1)$
- Production ***cost*** and retail cost is zero
- Each Mf grants monopoly rights to a ***single retailer***
- Intra-brand competition ***eliminated*** in any given territory
  - only inter-brand competition is possible
- Every retailer exploits monopolistically their ***market***
- Every Mf exploits monopolistically their ***retailer***

Second stage

- Profit for each retailer is
$$\Pi_i^R = (p_i - w_i)\cdot(1 - p_i + bp_j), \qquad i \neq j$$
where w denotes the transfer price set by the Mf at stage 1
- Maximizing wrt p_i
$$\frac{\partial \Pi_i^R}{\partial p_i} = 1 - 2p_i + bp_j + w_i = 0, \qquad \text{for } i = 1,2$$
- Solving the system of FOCs
$$p_i^R = \frac{b + 2 + 2w_i + bw_j}{4 - b^2} \quad \text{and} \quad q_i^R = \frac{b + 2 - 2w_i + b^2 w_i + bw_j}{4 - b^2}$$

First stage

- Mf i takes p_i^R, p_j^R as given and chooses w_i to maximize
$$\Pi_i^{Mf} = w_i q_i^R + (p_i^R - w_i)\cdot q_i^R = p_i^R \cdot q_i^R$$
Profit from sales to R_i | Franchise fee
- The solution of the system of FOCs yields
$$w_i = \frac{b^2}{4 - 2b - b^2} \qquad \text{for } i = 1,2$$
- And profit
$$\Pi_i^{Mf} = \frac{4 - 2b^2}{(4 - 2b - b^2)^2} \qquad \text{for } i = 1,2 \quad (1)$$

No ET benchmark

- No ET means that retail market ***becomes PC***
that is, $\Pi_i^R = 0$ thus, $p_i = w_i$ for $i = 1,2$
- Manufacturer's profits are
$$\Pi_i^{Mf} = w_i\cdot(1 - w_i + bw_j), \qquad i \neq j$$
- Maximizing w.r.t. w_i, $\frac{\partial \Pi_i^{Mf}}{\partial w_i} = 1 - 2w_i + bw_j = 0$
- Reaction function for Mf i: $w_i = \frac{1 + bw_j}{2}$
- Imposing symmetry: $w_i = \frac{1}{2 - b}$ for $i = 1,2$
- Then profit for i: $\Pi_i = \frac{1}{(2-b)^2}$ for $i = 1,2$ (2)
it is ***as if*** Mf serves directly the final market

Comparison

- From (1) and (2), ***profit*** for the Mf under ET is higher
for instance, when $b = 0.5$ profit under ET is around 4% higher
- ***Quantities sold*** in the market are lower under ET
ET restrict competition between Mfs and ***decrease the welfare*** further
- ***Extensions*** by Rey and Stiglitz:
  1. Retailer i might not be able to ***observe*** w_j
  2. Fixed ***fees*** cannot be used, say because of arbitrage
- In both cases the ***basic results carry over*** if b is high enough
i.e. if the products are close substitutes

Modern practices on ET

- Today dealers are allocated territories under various ***requirements***
  - To restrict the ***number of branches*** by the same dealer in each territory
  - To restrict the ***volume of sales*** by each dealer
  - To allow sales ***outside*** the dealer's territory but no ***advertisement*** or ***soliciting*** outside their territory
  - To not sell ***competing brands*** on the same sight
  - To follow specific ***price discriminating*** practices
  - To not ***advertise prices*** and offers
  - To not drop prices under ***MSRP***

Distribution systems

- Modern distribution systems pay significant ***attention*** on the ***vertical*** and ***horizontal*** externalities
- Often ***combine*** vertical restrains methods:
  - Exclusive dealing
  - Exclusive territories
- This is often referred to as an "***1 to 1***" relationship between the vertical partners
- In some cases, ***RPM*** is also imposed ***on top*** of those restrains

Policy towards vertical restraints

- Vertical restraints can have ***opposing*** welfare effects
  - Positive: resolve ***externality*** failures
  - Negative: interfere with free ***competition***
- ***Empirical evidence*** *is also* ***contradicting***
- Most ***competition laws*** acknowledge these ambiguities
  - Vertical restraints are ***not subject to an outright prohibition***, but are judged on a ***case by case basis***
  - Often the authorities are more ***concerned*** with competition between Mfs than between retailers
- ***In their survey*** Copper et al. (2005) concluded that restrains are mostly applied for the right reasons

Arguments on vertical restraints

- Against
  - Restrict ***intra-brand*** competition
  - Prevent efficient dealers from ***expanding***
  - Reduce ***inter-brand*** competition by preventing consumers from directly ***comparing*** competing makes
- Supporting
  - Encourage dealer ***investment*** and provision of ***services***
  - Often ***economies of scope*** from retailing different brands may be limited and its benefit is offset by ***specificity*** and possibly ***specialized services***
  - For some goods ***search costs*** are low relative to the cost of the good

Thank you!

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