Best Price Clauses Set by Intermediation Platforms: Disentangling the Effects

KAI-UWE KÜHN
UNIVERSITY OF MICHIGAN, DICE, AND CEPR

Introduction

- Internet Platforms providing Intermediation services between service providers and end consumers
  - Example Hotel bookings
    - Search and comparison: Online Hotel Booking platforms, Price comparison sites
    - Booking services: Online Hotel Booking platforms, Hotels, Pure booking intermediaries
  - Price structure differences between types of intermediaries:
    - Pure search and comparison: click through advertising of booking sites
    - Booking platforms: percentage payments of price for successful booking, but no price on search and comparison (like classic travel agencies)
    - Consumer payment: only to the service provider, not to the intermediary
    - Typical two sided (multi-sided) market structure
  - Recent developments: integration of booking platforms and comparison sites

The Hotel booking cases

- The German initiative against HRS
  - Triggered when HRS extended its best price clauses from competing hotel booking platforms to hotels themselves
  - Extension to availability as well
- Hotel organizations: "
  - The booking sides squeeze themselves between the customer and the hotel"
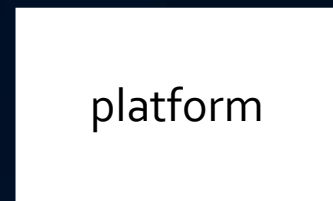 - Vision: customers should search on booking sites and book with the hotels

Hotel Booking Cases: The Allegations

- Reduced Competition between hotel booking platforms

  - Best Price clause induces uniform price. This means a price increase in the platform will be passed through less to the final goods price. Hence, more market power for the hotel platforms

- Reduced Competition between hotels

- Entry Barrier

- Efficiencies: Increasing the incentives to invest in search because of greater conversion ratio (only search that leads to booking is rewarded)

  - BKartA: We don't believe it. There is no free rider problem. Investments not firm specific

  - France/Sweden/Italy: Efficiency argument relevant for relationship with hotels, but not between platforms
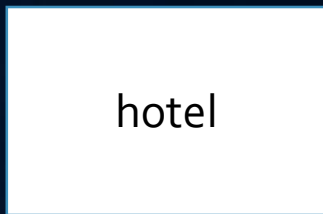
The issues that have not been addressed

- Is there really a systematic price effect?

- How should we think about substitution in retail markets?
  - Substitution: replacement vs. subadditivity
  - Can market power be controlled when there is contracting with many markets
  - What offerings are in the same market

- What is the role of price comparison sites in assessing the degree of competition?

- Why would there be an impact on competition between hotels

- Is there really an entry barrier?

- What is the record of entry in this industry?
  - The changing entry paths in the internet economy and the assessment of entry barriers

A Simple Model to Fix ideas

platform

commission $\square$

hotel

consumers

Hotel price p
(possible discrimination
by who the customer books with)

Demand: $D(p;n) = (1 - (1 - \quad)(1 - \theta(p))$

s – costs of going from website to hotel booking

F(s) distribution of those costs on [o, $\square$), *F(o) = o*
s*=p-$\hat{p}^e$, where $\hat{p}$ *price at hotel and p at booking site*

Profit for the hotel:

$$(\hat{p}\text{-}b_h - c)D(\hat{p};n)F(s*)$$
$$+(p(1 - \quad) - c)D(p;n)(1 - F(s*))$$

Does abolishment of Best Price Clauses generally reduce consumer prices?

- The Problem with a best price clause:
  - All booking through the booking platform
  - First order condition:
  - $(p(1 - \quad) - b_b - k)D_p(p; n) + D = 0$
- The problem without a best price clause
  - $(\hat{p}\text{-}b_h - c)D_p(\hat{p}; n) + D = 0,$
  - *Which is independent of p!*
  - For FOC with respect to p there is an extra term:
  - $f(s*)[(\hat{p}\text{-}b_h - c)D(\hat{p}; n) - (p(1 - \quad) - c)D(p; n)] > 0$

The "vertical foreclosure" effect

- $f(s^*)[(\hat{p}\text{-}b_h - c)D(\hat{p}; n) - (p(1 - \quad) - c)D(p; n)] > 0$

- The hotel has an incentive to move buyers from the platform if the royalty $\square$p exceeds the own booking costs b_h. But this means that the platform can earn no more than $b_h - b_b$ for its search and comparison services if it does not want to lose business

- So the hotel has an incentive to save on the royalty and the implied reward for search and comparison by raising the hotel price – inducing more buyers to shift.

- As long as a sufficient number of end customers continue to book on the website, the main effect of this incentive is to raise average price

- It is a typical vertical foreclosure incentive

What the anticompetitive effects claims are based on

- The platforms problem:
  - Maximize $\Box pD(p,n)(1 - F(p - \hat{p}^e))$

  - pD(p,n)(1-F(p-$\hat{p}^e$)+$[\Box pD_p(p,n) - \Box pD(p,n)$f(s*)$]\frac{dp}{d\Box}$

  - Note, that it is not clear at all, which effect would win out. The reason is the double marginalization effect!

Demand of the platform gets more elastic when there is no Best Price Clause!

How to think about substitution: Switching vs. Subadditivity

- Up to now: no alternative sources of customers for the Hotels

- But: other sources including traditional ones (phone call, contracts with institutions, repeat customers).

- The greater a probability to fill the capacity, the lower the marginal value of extra potential customers (because the marginal increase in the probability of filling the bed eventually decreases

- I retailing it is not just a question of substituting between different input providers. You normally would want to use them all. Nevertheless more providers decrease the market power of each, because the incremental contribution of the input declines!

- Subadditivity (see Universal/EMI and US hospital cases)

Subadditivity and Market Definition

- The marginal cost of dropping

declines in the number of customers

Already reached

- Platform faces heterogeneous hotels

- When you raise the fee, some hotels

will not keep their listing. This will

Create extra elasticity of demand even

With a best price clause.

- Technically: subadditivity leads

To all distribution channels being in the same market

$\square(n_1)$

n1   n2
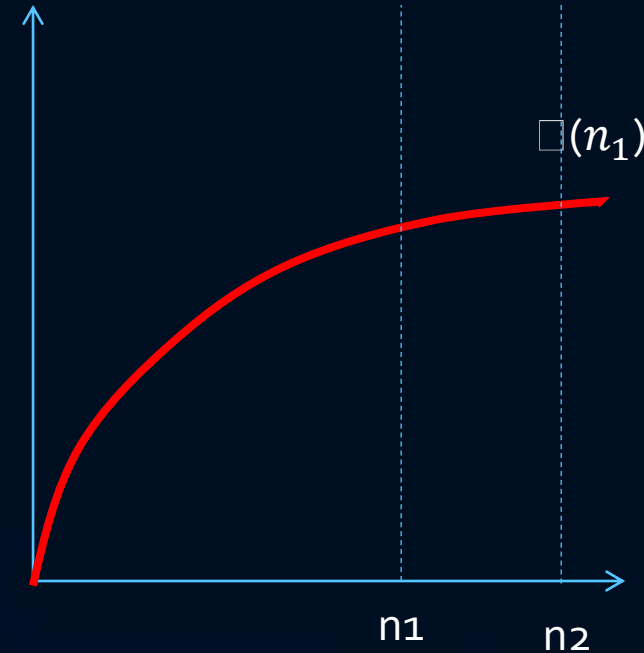
The Claimed Efficiency effects

- The conversion ratio: $D(p)(1-F(s^*))$ lower (you would need the price to drop very strongly to get a different result)

- The margin of the platform is reduced

- It follows: return from activities that enhance match quality and consumer presence are reduced

  - Increasing the probability of match ($\square$)

  - Advertising to enhance the customer pool (n) (but externalities)

  - Ranking by conversion rates

  - Getting payment for transfer for booking (price comparison sites)

Competing booking platforms not that different

- Still the question is whether the hotel raises the price to move customers to its minimum fee protal.

- Same effects

- The "competition effects" remain the unilateral effect of reducing the demand elasticity.

  - Note that more competitors make the elasticity effect worse (because each has smaller proportion of demand

  - But at the same time the "dropping effect" (i.e. subadditivity) leads to more willingness to drop firms. Competition only resolves double marginalization here if you acknowledge the subadditivity effect

The role of Price comparison sites

- A benchmark: everyone goes to the price comparison website

- A hotel only needs to offer one booking opportunity on the website (since it can drop contracts)

- Only keeps the contract with the site that offers the cheapest booking service

- (Remark on the court)

- What the extreme case illustrates: comparison websites increase competition on fees and you cannot analyze the market without taking them into account

Entry

- The deterred entry evidence in the German case
  - One firm: only mobile booking site
  - Other firm: you had to register before you could use the site
- Is de novo entry the right way to think about entry barriers
  - Network effects as entry barriers (e.g. customer pools)
  - But many ways to build large customer pools
  - Very different firms are becoming potential competitors for each other
- Entry is very vibrant in this market
  - Tripadvisor
  - Intermediation solutions are springing up every where
  - The integration of booking sites and price comparison sites

Conclusions

- The roll back of effects based antitrust is starting with complex new cases

- Disruptive of the search for more effective business models

- Lack of understanding of both competitive interaction and dynamics of these industries

- The "effects based" analysis of the Bundeskartellamt