



Third-degree price discrimination in two-sided markets

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CRESSE 2023

Rhodes, 1 July 2023



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Great paper

- Revisits an old issue: impact of (partial, explicit) discrimination

Classic answer

- Welfare decreases unless participation increases
- In case of linear demand, participation remains the same

- Accounts for indirect effects: two-sided platform

Two groups on one side, homogeneous users on other side

- Neat analysis delivers new, intuitive and relevant insights

Discrimination is good

... for both sides as well as for the platform

Insights

- Indirect network effects
 - For given buyer participation, discrimination (and linear demand) maintains total seller participation but increases revenue per buyer
 - Incentivizes platform to boost buyer participation (benefits buyers)
 - Benefits sellers / boosts their total participation (benefits buyers)
- Decoupling prices from participation / surplus
 - Discrimination may raise all seller prices
 - Discrimination may reduce all seller prices
 - Discrimination may increase some seller prices and reduce others

Comments: exposition

- Focus on case where both types of sellers initially served
... but strict Pareto improvement in other case as well.
- Role of network effects
 - Expressed in terms of thresholds on b
... but thresholds depend on θ_H & θ_L
 - Interplay between thresholds appearing in Propositions 2 and 3

Comments: variants and extensions

- Relation to traditional analysis
 - Would be good to allow network effects to vanish progressively
 - Buyer side: bN_S on top of intrinsic utility: allows for b going to 0
 - Seller side: $\theta N_B \rightarrow$ market disappears if θ goes to 0
- Competition
 - Common wisdom: Thisse-Vives
 - Nuances: Jullien, Reisinger & Rey (2022), Rhodes & Zhou (2023)
 - Two-sidedness: reverses the common wisdom or amplifies it?

Comments: modelling

- Participation

- From direct to indirect demand: not exactly equivalent
avoids multiplicity of users' responses ("chicken & eggs" pb)

- Alternative approach: sequential timing across sides

- pricing & participation decisions on sellers' side
- followed by pricing & participation decisions on buyers' side

- Heterogenous densities d_H & d_L for the two types of product:

- Would clarify the role of θ_H / θ_L vs. d_H & d_L
- Would also clarify the role of assumption $N_L > N_L$ used for intuition

Comments: motivation for assumptions

- *Not* primarily for tractability
- Participation fees vs. ad-valorem pricing
 - Ad-valorem commissions already involve some discrimination
 - Blurs the analysis
- Linear demand: good benchmark for common wisdom
 - Discrimination does not affect total participation
 - Discrimination reduces welfare