

Vertical Information Restraints: The Pro- and Anti-Competitive Impacts of Minimum Advertised Price Restrictions

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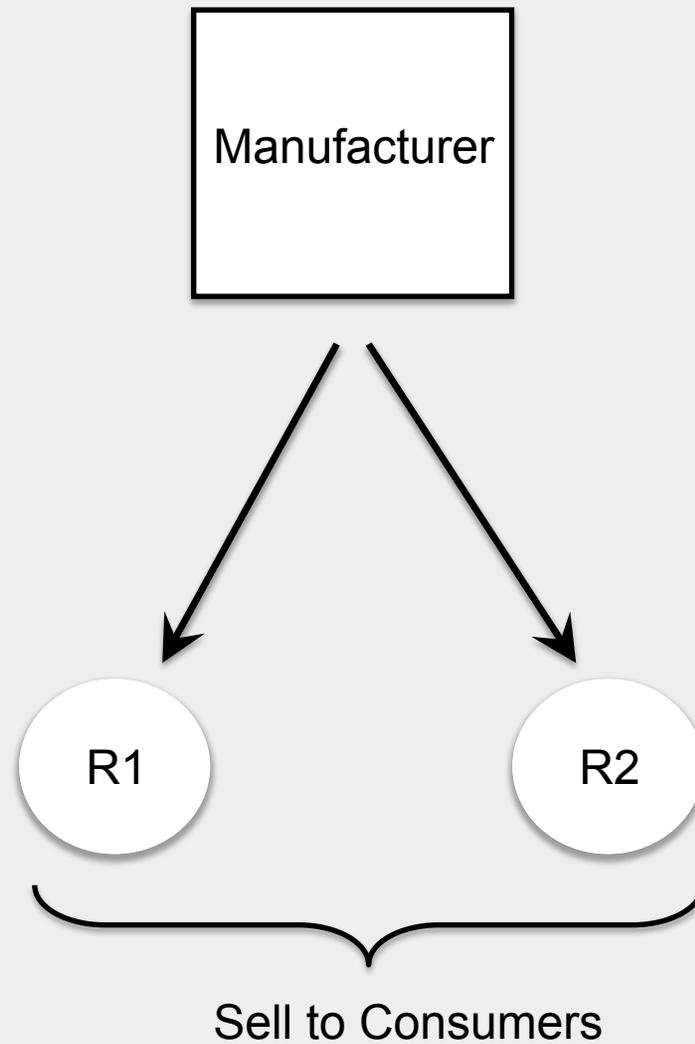
1. Introduction
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion

Nov 4th, 2016

9th Annual FTC Micro Conference

MAP?

- Minimum advertised price restrictions:



1. Introduction
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion

Research question

- Research Question:

'How should we think about MAP policies from an antitrust perspective?'
- Why is this interesting?
 1. MAP Policies appear to be very common
 2. Pervasive form of online and offline commerce
 3. Significant attention on related vertical restraints in policy, but little to date on MAP
 4. Merging vertical theory with search

1. Introduction
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion

Punchline:

- Instructive to compare MAP and RPM:
 - If RPM is like price fixing, MAP is like market division
- MAP particularly helpful in settings where dealing with heterogeneity requires giving flexibility to retailers.
- Three settings show that MAP can:
 1. Enable industry level consumer price discrimination
 2. Encourage service provision from heterogeneous retailers
 3. Facilitate upstream collusion in the presence of private local retailer information
- This can be pro- or anti- competitive relative to no restrictions or RPM

1. Introduction
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion

MAP: a closer
look

Enerpac MAP
policy effective
May 2014

Minimum Advertised Price ("MAP") Policy

Enerpac is a recognized global leader in industrial high-pressure tools and equipment. It maintains a significant investment in a consistent brand image emphasizing quality, safety and productivity. In keeping with that image, Enerpac believes that Enerpac branded products ("Enerpac Products") should be advertised at prices that reflect and protect the value of its brand.

For this reason, Enerpac has unilaterally established this Minimum Advertised Price ("MAP") Policy for all Enerpac Products.

Enerpac will provide distributors and retailers with suggested resale (list) prices for Enerpac Products which are applicable in the United States and Canada ("Price Lists"). Distributors and retailers may not advertise Enerpac Products at prices that are more than **15%** below the current Enerpac resale (list).

This MAP Policy applies to all forms of and mediums for advertising, including without limitation, print, television, radio, internet, flyers, posters, catalogs, mailers, and magazines.

This MAP Policy applies only to advertised prices. Distributors and retailers are free to sell Enerpac Products at whatever prices they choose. Enerpac does not seek, nor will it discuss or accept, any agreement or assurance from any distributor or retailer concerning the prices at which the distributor or retailer decides to sell Enerpac Products.

Pricing listed on an internet site is considered an "advertised price" and must adhere to this MAP Policy. Once the pricing is associated with an actual purchase (an internet order), the price becomes the selling price and is not bound by this MAP Policy.

Examples of advertisements that comply with this MAP Program:

* "price too low to print" * "lowest prices in town on Enerpac – call for quote" * "we will match any price" * "call for price"

Examples of advertisements that do not comply with this MAP Policy:

* "Bundling" or the inclusion of free or discounted products (whether made by Enerpac or another manufacturer) with an Enerpac Product if it has the effect of discounting the advertised price of the Enerpac product below the MAP Pricing.

* Offering a cash rebate on the purchase of an Enerpac Product, if the net price falls outside the MAP Pricing for such Enerpac Product.

1. Introduction
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion

MAP: a closer look

Energac MAP policy effective May 2014

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1. Introduction
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion

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Example

* Bundled Product

* Offered Enerpac

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1. Introduction
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion

MAP: a closer look

Industry coverage as at April 13 2016 – first 50 on a google search for “MAP Policy”

1. [Introduction](#)
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion

Product

Adjustable office and industrial chairs
American work boots
Antennas
Aquariums and filtration systems
Baby and toddler pillows
Batteries, flashlights, solar energy equipment
Cameras, security cameras
Chainstays, gripping bar tape
Chairs
Clutches, flywheels, accessories
Data storage electronics
Designer faucets, showers, and bath accessories
Digital display mounting
Enzymes
Exhaust systems and mufflers
Games
Health bars, drinks, and powders
High-pressure hydraulic tools
Holster clips

Company

Neutral Posture
Thorogood Shoes
Winegard Company
Lifeguard Aquatics
Smuggwugg
NOCO
Sony
Lizard Skins
allseating
Midway Industries
Seagate
Sonoma Forge
Ergotron
Enzyme Science
Flowmaster
Cool Mini or Not
powercrunch
Enerpac
Utiliclip

Model:

- Informational/search frictions exist and are meaningful
 - Need MAP to do something

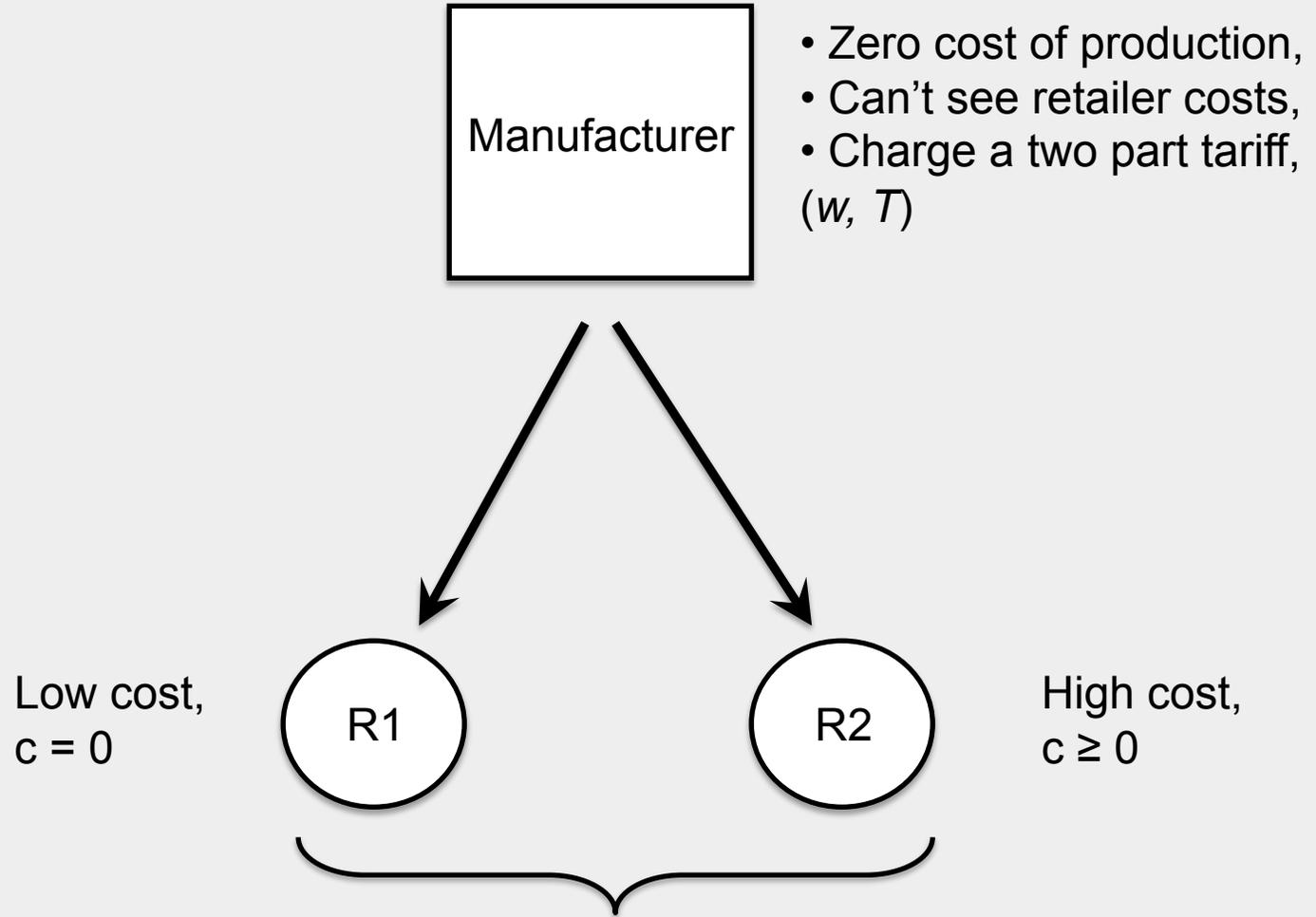
General ingredients

- Price Dispersion
 - Mixed equilibrium (a la Varian, Stahl et al)
 - Heterogeneity on consumer or retailer side, or both
 - Maybe some private information
- Vertical relations in search markets very recent line of inquiry
 - Lubensky (2014)
 - Janssen and Shelegia (2015)

1. Introduction
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion

MAP and Price Discrimination

Set-up



1. Introduction
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion

- Sell to Consumers
- Some see all prices
 - Others only advertised prices

MAP and Price Discrimination

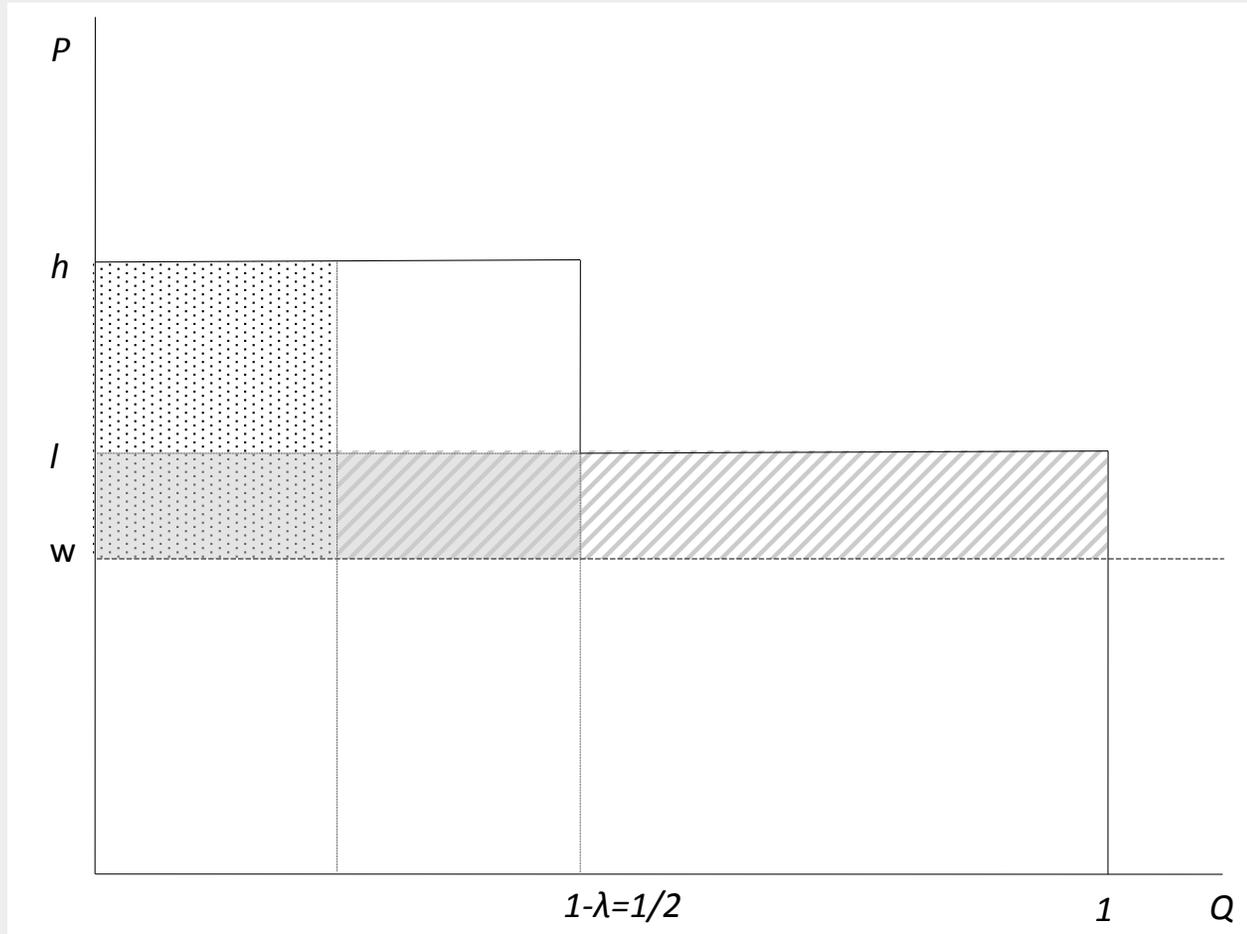
Results

- One retailer charges high price and sells to half of the high value non-searchers
- Other retailer charges low price and sells to all searchers and half non-searchers
- Judicious use of w ensures neither retailer has incentive to deviate, and Manufacturer extracts rents through T
- This cannot be achieved through RPM

1. Introduction
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion

MAP and Price Discrimination:

MAP



1. Introduction
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion

MAP and service

How does service work absent consumer heterogeneity (i.e. not leveraging price discrimination)?

1. Introduction
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion

MAP and service

- Usual RPM story: soften price competition and give bigger margin that incentivizes service (and extract retailer profits through T)
- But with heterogeneous retailers giving high-cost retailer sufficient margin might entail too high price for low-cost retailer (above monopoly price)
- MAP provides flexibility to allow high-cost retailer sufficient margin and low-cost retailer to charge lower (monopoly) price

1. Introduction
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion

MAP

MAP and
service

(Very Heuristic)

2 retailers, in
bertrand

1. Introduction
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion



MAP and collusion

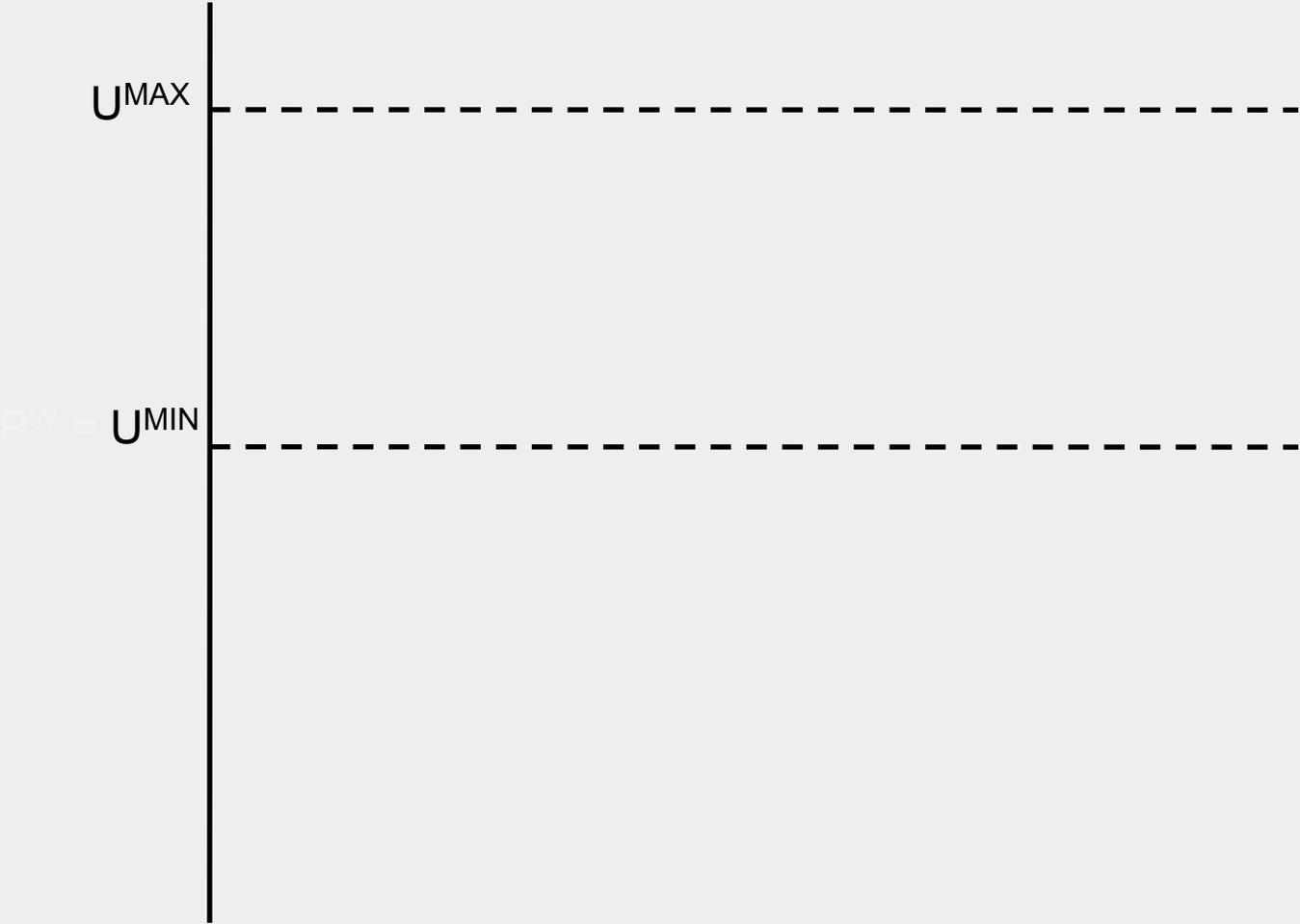
Model details

- Adaption of Julien and Rey (2007) to a setting with informational frictions
- Manufacturers (M_1 and M_2) compete in contracts to dedicated retailers (i.e. R_1 and R_2 , where R_i sells goods of M_i only)
- Retailer has private knowledge of local cost/demand conditions
 - Neither manufacturer observes realization of local shocks
- With no vertical restraints might be hard to sustain collusion;
 - low prices might reflect
 - a. retailer responding to local conditions;
 - b. or manufacturer “cheating” through low wholesale price
- RPM makes mutual monitoring easier at the cost of muted response to local conditions

1. Introduction
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion

MAP and collusion

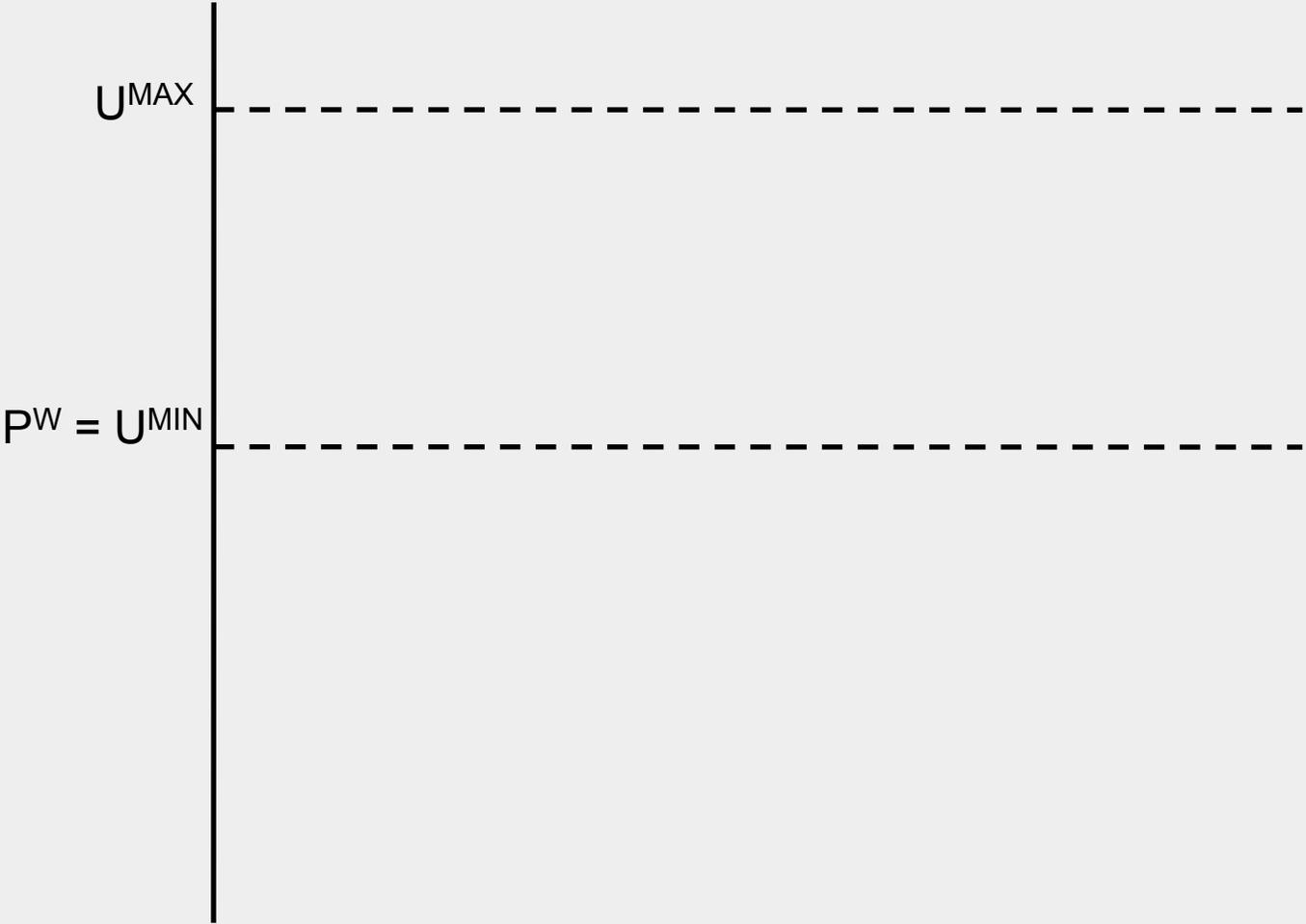
Model details



- 1. Introduction
- 2. Model
- 3. Price Discrimination
- 4. Service
- 5. Collusion
- 6. Conclusion

MAP and collusion

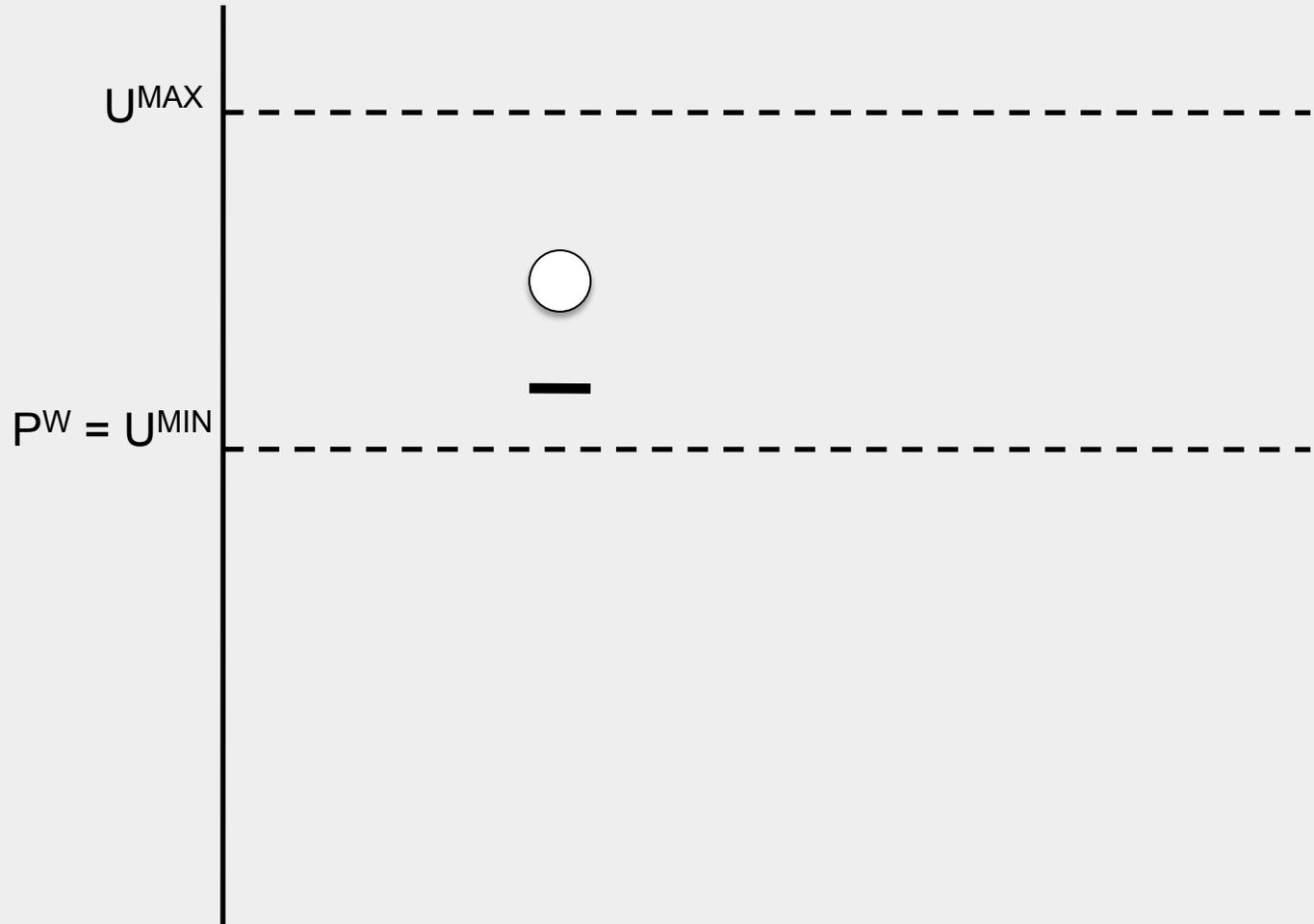
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- 1. Introduction
- 2. Model
- 3. Price Discrimination
- 4. Service
- 5. Collusion
- 6. Conclusion

MAP and collusion

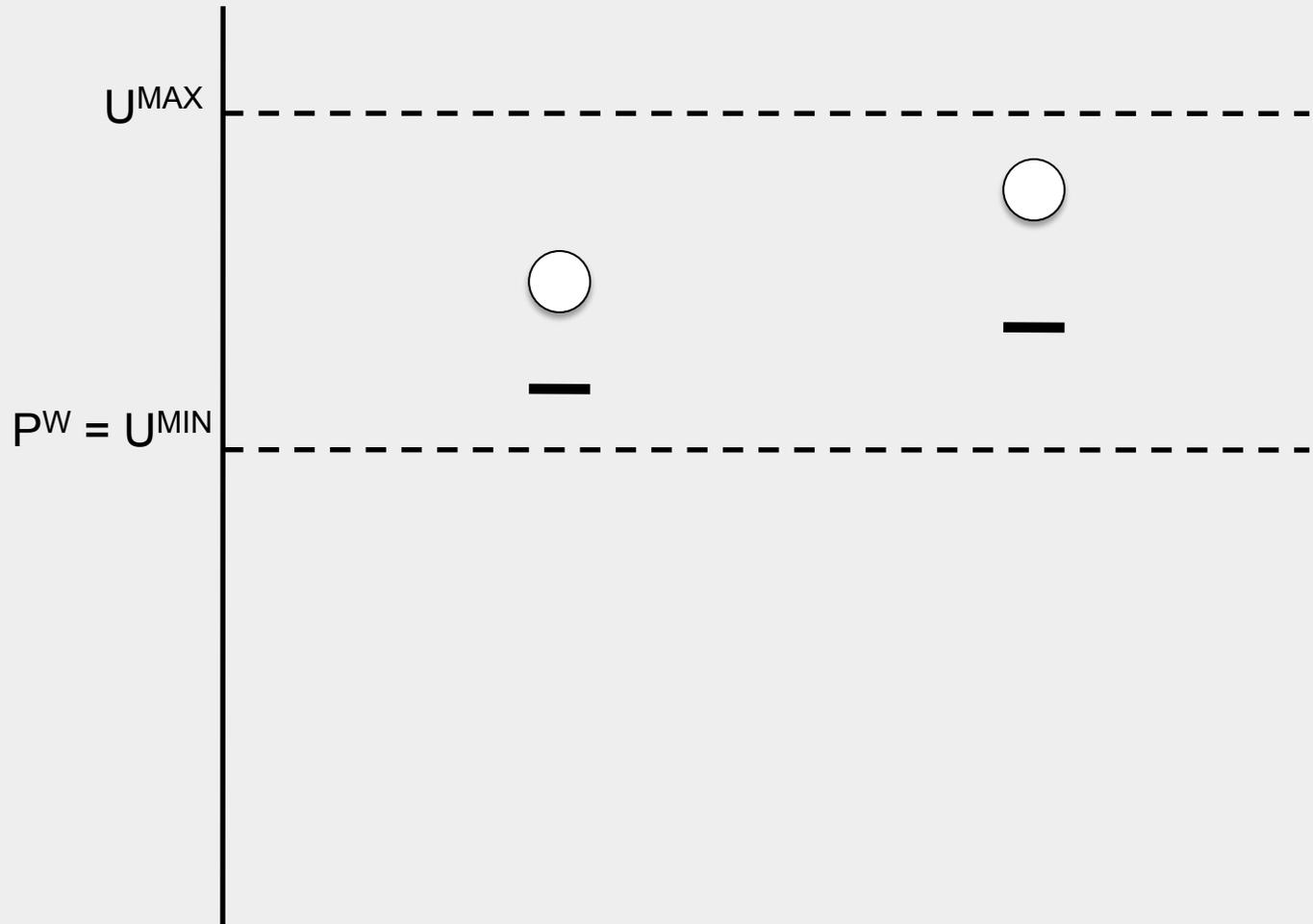
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1. Introduction
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion

MAP and collusion

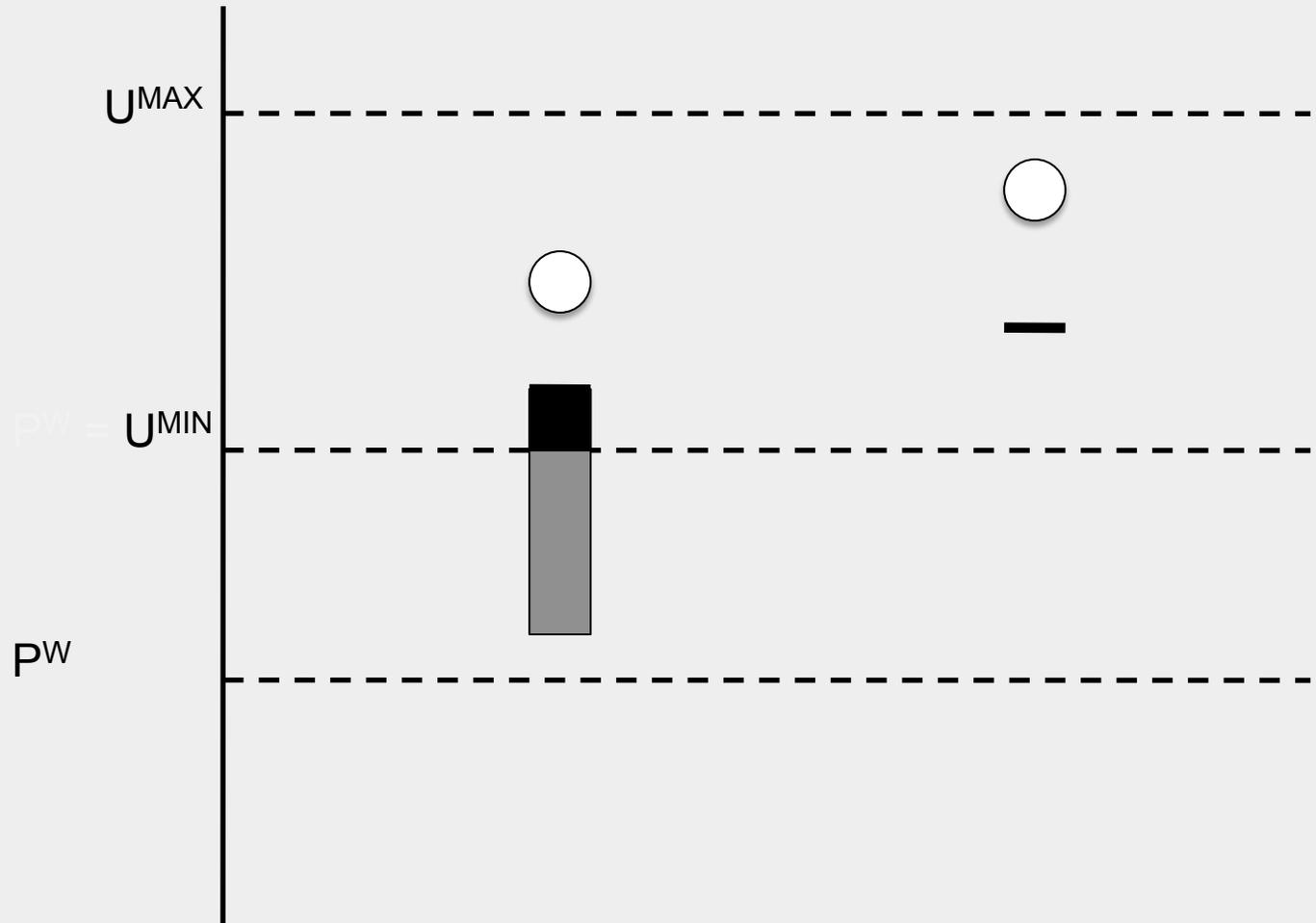
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1. Introduction
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion

MAP and collusion

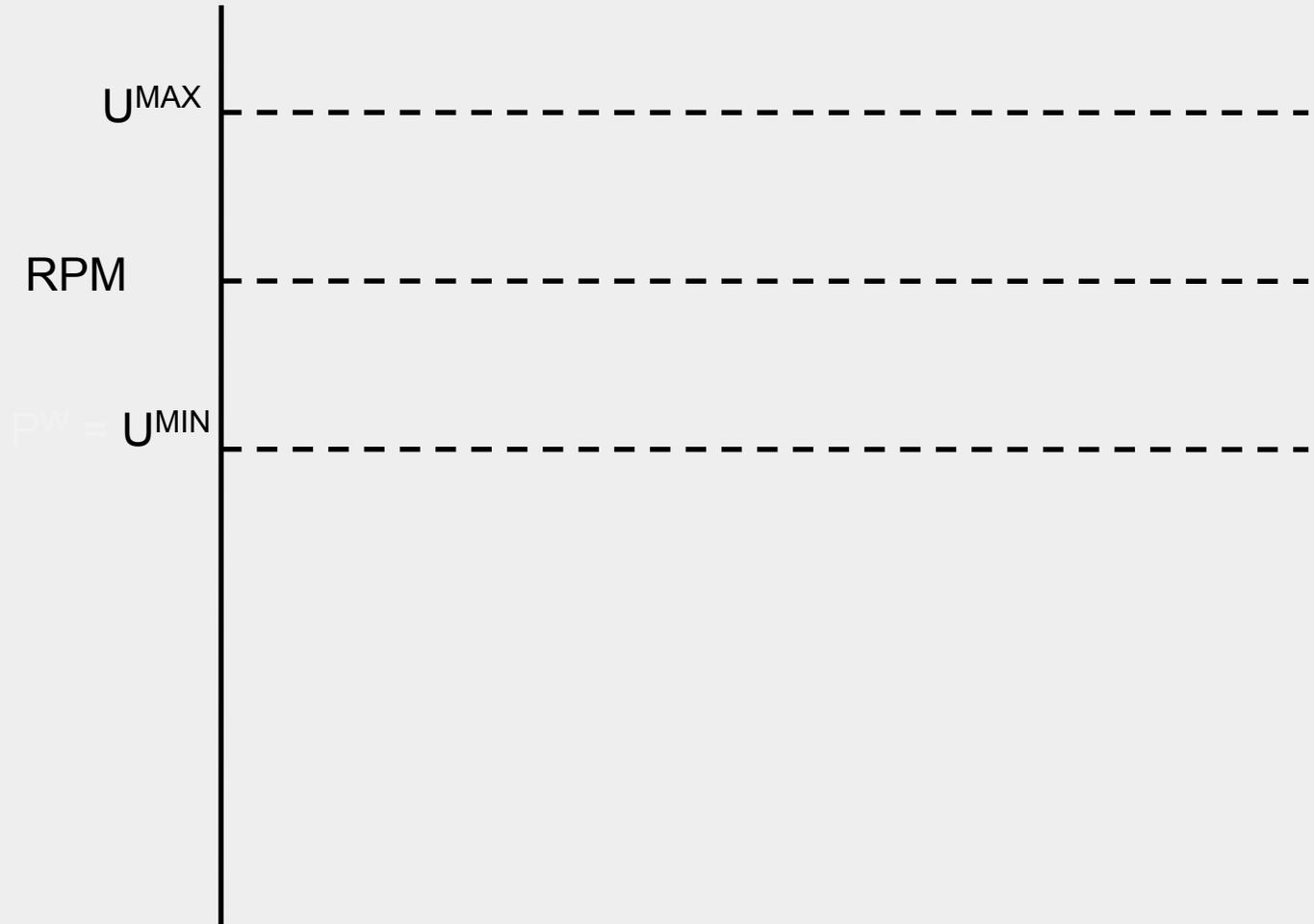
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1. Introduction
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion

MAP and collusion

Model details



1. Introduction
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion

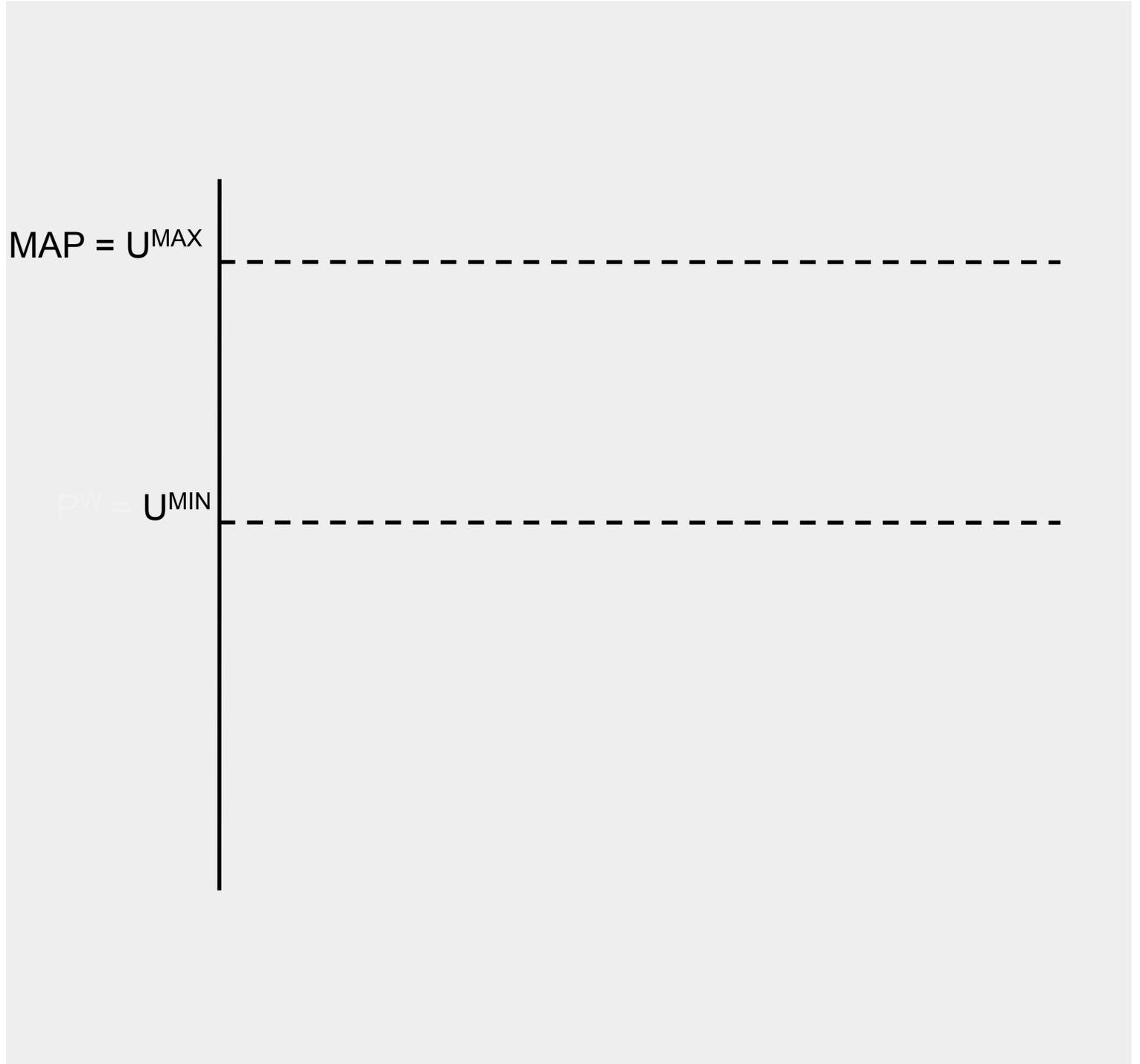
MAP and collusion

Model details

$$\text{MAP} = U^{\text{MAX}}$$

$$\text{PW} = U^{\text{MIN}}$$

1. Introduction
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion



MAP and collusion

- With MAP
 - Mutual monitoring easier AND
 - Retailers can (partially) respond to local variation
 - Dampen retailer competition
- Again, Key that some customers cannot search (in paper, for ease say no one can search)

1. Introduction
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion

Conclusion

- Instructive to compare MAP and RPM:
 - If RPM is like price fixing, MAP is like market division
- MAP particularly helpful in settings where consumer or retailer heterogeneity is first order.
- MAP can allow a manufacturer more profits than RPM can allow through
 - Price discrimination at level of industry
 - Encouraging service provision when retailers have heterogeneous costs
 - Facilitating manufacturer collusion in the presence of retailer private information
- In each of these cases MAP benefit relies on search frictions and heterogeneity either at the level of consumers or retailers
- Can be pro/anti-competitive relative to no restriction and relative to RPM

1. Introduction
2. Model
3. Price Discrimination
4. Service
5. Collusion
6. Conclusion