# uc3m Universidad Carlos III de Madrid

# Information Exchange between car manufacturers in Spain

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## Roadmap

- 1. Would collusion have been possible without communication?
- 2. How could communication have facilitated collusion?
  - Types of information exchanged
  - Credibility of the information exchanged
- 3. [Efficiency defence]
- 4. Main Challenges

# Would collusion have been possible without communication?

- Coordination not straightforward in this market
  - Differentiated products
  - Demand schocks
- Difficult monitoring:
  - Opaque market (no public data sources)
  - Idyosincratic schocks (brand specific)
  - Volatile demand
- Strong <u>incentives to deviate</u>
  - Small losses from cheating (economic downturn)

# How could communication have facilitated collusion?

- Information exchange could have facilitated collusion by improving:
  - Coordination
  - Monitoring
  - Punishment

# How could communication have facilitated collusion?

- Scope to facilitate collusion depends on whether information exchange is...
  - About prices and sales, demand, costs
  - Past, current, future
  - Non-public
  - Accurate and disaggregated
  - Frequent

The information exchanged in this case seems to fall under all these categories

# Could cheap talk have helped firms monitor each other?

- Even with communication, monitoring relied on self-reported non-verifiable data (or verifiable but only with some lag):
  - incentives to under-report sales
  - particularly so, after a deviation

Why would firms rely on each-others' reports?

How would this help collusion?

### Recent research

- Sales and price data not publicly available
- Firms' own sales: noisy signals of rivals' actions
  - Absent communication, monitoring is imperfect
  - Sales reports are non-verifiable
- 1. Harrington and Skrzypacz (2011), <u>Private Monitoring</u> and Communication in Cartels: Explaining Recent Collusive Practices, American Economic Review
- Rahman (2016), <u>The Power of Communication</u>, AER
- Awaya and Krishna (2016), <u>On Communication and</u> <u>Collusion</u>, AER

### Rahman (2016)

#### The Power of Communication

"Firms can collude if allowed to communicate freely, without the need for any monetary transfers. All they need to do is build a nonbinding information management institution, or mediator, to coordinate firms."

# Awaya and Krishna (2016) On Communication and Collusion

"There are <u>equilibria</u> with "cheap talk" that <u>result in near-perfect collusion</u>, whereas all equilibria without such communication are bounded away from this outcome... <u>communication improves monitoring and leads</u> to higher prices and profits"

# Awaya and Krishna (2016)

#### Main idea:

- correlation across firms' sales are price sensitive
- differing sales reports lead to noncooperation

### Collusive strategy:

- 1. Charge collusive prices and report thruthfully
- Mantain collusive prices if sales reports are similar,
   OR trigger a <u>price war if reports differ</u>
- If deviant undercuts, sales less correlated; it becomes difficult to predict rivals' sales in order to misreport
- Deviation reduces probability of similar reports and increases the probability of retaliation

# Main challenge

- Prohibition by object but...
- More compelling case if we could infer from market data whether collusion took place de facto:
  - Analysis of firms' strategies
  - Analysis of the effects: consumers' harm

# Firms' strategies

### Harrington and Skrzypacz (2011):

 "Authorities should first look for firms exchanging sales reports. Second, interfirm sales or other forms of compensation, as the use of asymmetric punishments is essential to effective collusion. Third, periodic price wars, as it is the possible threat of a price war that induces firms to truthfully report their sales. Thus, information exchange, interfirm transfers, and periodic price wars all add up to potential indicators of collusion."

### Consumers' harm

### Spanish Competition Commission claims that:

 "[Effects were] passed on to consumers in the form of <u>less discounts</u>, <u>less aggressive commercial policies</u> <u>by the brands</u>, and <u>reduced effort in distinguishing</u> <u>themselves from other companies with higher quality</u> <u>services</u>." (CNMC, 2015)

## Final Remarks

- Disaggregated <u>information exchange</u> on various dimensions; non-public information and reciprocity
- Cheap talk communication facilitates collusion
- In this market, the <u>marginal impact of communication</u> on collusion seems high
- No compelling reasons: (i) information exchange for reasons others than collusion; (ii) efficiency motives
- Analysis of the <u>empirical evidence</u> (firms' strategies; effects) would have strengthened the case

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## Thank You!

questions? comments?

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