



# CLOSENESS OF COMPETITION AND THE ROLE OF BIDDING DATA

Global Competition Law Centre, 79th Lunch Talk

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Disclaimer: the views expressed are those of the presenter and cannot be regarded as stating an official position of the European Commission.

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# Introduction

- Bidding data:
  - Competition for the market
  - Even if a firm is not the winner of the auction, it can still be an important competitive constraint during the tender procedure
- Economic framework:
  - Open auctions vs sealed bid auctions
- Empirical analyses used in practice



# SOME ECONOMIC PRINCIPLES



# Some basics

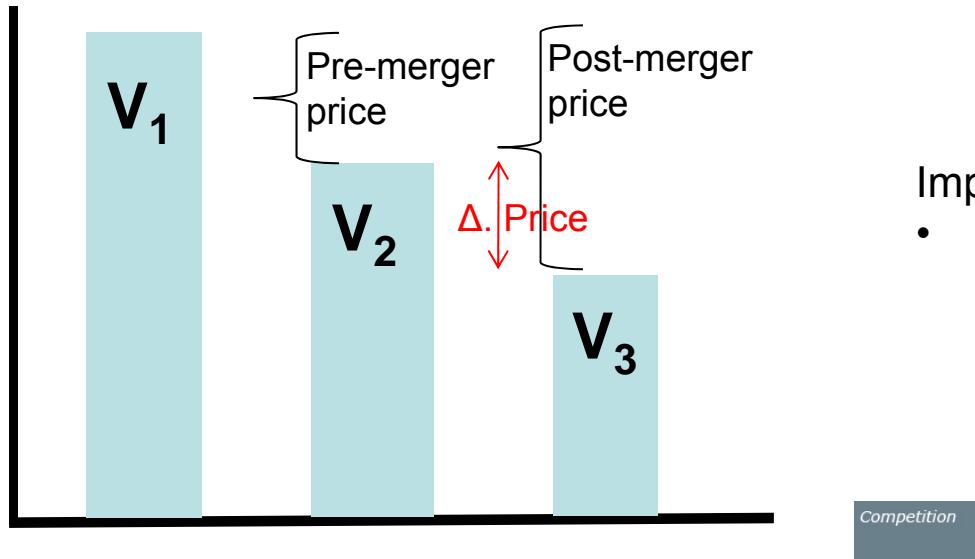
- **Klemperer survey (2005)**
  - The existence of a "bidding market" does **not** mean that competition concerns from a merger should be less severe
- **Targeted customers and market definition**
  - If pricing is highly individualised, in principle each tender may represent a well-defined market
  - In practice, it makes sense to focus the analysis on the subset of customers/tenders with broadly similar competitive conditions

# The argument of "2 bidders for a competitive outcome"

- Argument:
  - only those tenders where the merging parties are the winner and runner-up would be affected by the merger
  - Price effects limited for those tenders if there is a strong number 3

Illustration of an open auction  
 (also called second-price auction) (no cost)

**Price**



Strict conditions:

- Bidders have or receive **very good ("perfect") information** on characteristics of competing offers, including their cost and their value to customer

Implication:

- All bidders other than the winner **offer their product at cost** (making zero expected margin)



## Bidding with imperfect information (sealed bid auction, first-price auction)

- Features of FPA: private offers to customers, uncertainty on competing offers (cost, quality)
- The optimal bid is based on familiar price-volume trade-off (as in standard differentiated products)

$$E(\text{Profit (bid)}) = \begin{matrix} \text{Profit margin if bid} \\ \text{successful} \end{matrix} \times \begin{matrix} \text{Probability of bid} \\ \text{being successful} \end{matrix}$$

- Pre-merger:
  - A higher bid by **Firm 1** increases the probability of the bid of **Firm 2** being successful
  - The closer is Firm 2 to Firm 1, the higher is the increase in the probability of Firm 2 to win (**probability diversion**) => This constrains the bidding behaviour of Firm 1
- Post-merger (**Firm 1** and **Firm 2** merge): this competitive constraint is lost
  - All bids where the merging parties would have met are potentially affected by the loss of competitive pressure
- **Divisions** of sales from **Firm 1** to **Firm 2** needs to be interpreted as "**probability diversions**"
- Assessment of closeness (e.g. diversions) and of margins informs the evaluation of unilateral effects (as in standard differentiated products)



# EMPIRICAL ANALYSES



## Empirical tools for unilateral effects in bidding markets (see for example Annex in GE/Alstom, 150+ pages)

Analysis	Questions that can be addressed
Participation	<ul style="list-style-type: none"><li>○ Is (firm) participation indicative of product fit and of closeness?</li><li>○ How often do the parties meet?</li><li>○ How concentrated are tenders where the parties meet?</li></ul>
Win / loss	<ul style="list-style-type: none"><li>○ How often do the Parties lose to each other?</li></ul>
Switching analysis	<ul style="list-style-type: none"><li>○ How often one merging party won a customer from the other merging party (not done in GE/Alstom)</li></ul>
Runner-up	<ul style="list-style-type: none"><li>○ How often are the Parties runner-up to each other?</li></ul>
Probit	<ul style="list-style-type: none"><li>○ Does participation by one party affect the probability of the other winning (controlling for other factors)?</li></ul>
Margins	<ul style="list-style-type: none"><li>○ What is the level of gross margins?</li><li>○ Are margins affected by participation by the other party (controlling for other factors)?</li><li>○ Is the evolution of margin at different stages of the bidding process affected by the presence of the other merging firm?</li></ul>



# Participation analysis

- Tender participation is costly, selective, and indicative of product fit
- Evidence on participation is informative on closeness across bidders
- How often are the merging parties participating against each other in tenders?
- Siemens/Dresser-Rand (see press release): the activities of Dresser-Rand and Siemens are largely complementary as:
  - Focus on different oil and gas applications
  - They are only rarely bidding against each other in tenders procedures
- See also GE/Instrumentarium: the merging parties often participated in the same tenders (FR, DE, SP)



# Loss analysis

- When one firm participate in tenders, how often does it lose to the other merging party?
- See for example Baxter/Gambro (2013)
  - Market for haemodialysis
  - Most tenders lost by Gambro were won by Fresenius, and Baxter won only very few tenders lost by Gambro



# Probit analysis

- Does participation by one party affect the probability of the other winning (controlling for other factors that may also affect the probability of winning)?
- Data requirements:
  - Participants, cost to provide the product to the customers as a control for scope/quality, other tender characteristics
- See GE/Alstom (2015)



# Margin analysis

- Does participation by one party affect the (expected) margin of the other merging party (controlling for other factors that may also affect the expected margins)?
- Data requirements:
  - Participants, cost to provide the service to the customers as a control for scope/quality, other tender characteristics
- See GE/Alstom (2015)
- See also GE/Instrumentarium (2003)
  - Regression analysis run for France
  - Average discount offered when Instrumentarium is participating= [35-45]%
  - Average discount when Instrumentarium is not participating: [25-35]%
  - Regression analysis: [5-10]% effect on discount when Instrumentarium is present



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