# Participation in Multiple Cartels Through Time and the Potentially Strategic Use of Leniency

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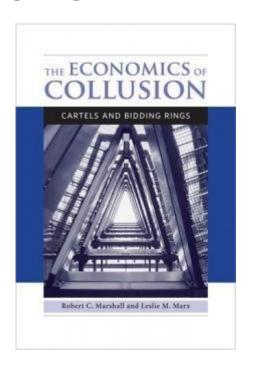
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#### Overview of Presentation

- Economics of Collusion: Cartels and Bidding Rings
- Economics of Collusion
- Self-enforcing agreement
- Chemical Industry
- AMC's
- Leniency



# All EC Decisions in Cartel Cases since 1966 where given firm has been named in 4 or more cartel decisions and awarded full leniency

Firm	Number of cartels	Leniency
Akzo Nobel	9	4
Fides/AC Treuhand	8	
BASF	7	
Solvay	7	
Shell	6	1
Degussa	6	2
Hoechst	6	
Arkema/ Atofina	6	
Bayer	5	2
Rhone Poulenc/Aventis	5	2
ICI	5	
Elf Aquitaine	5	
Atochem	4	3

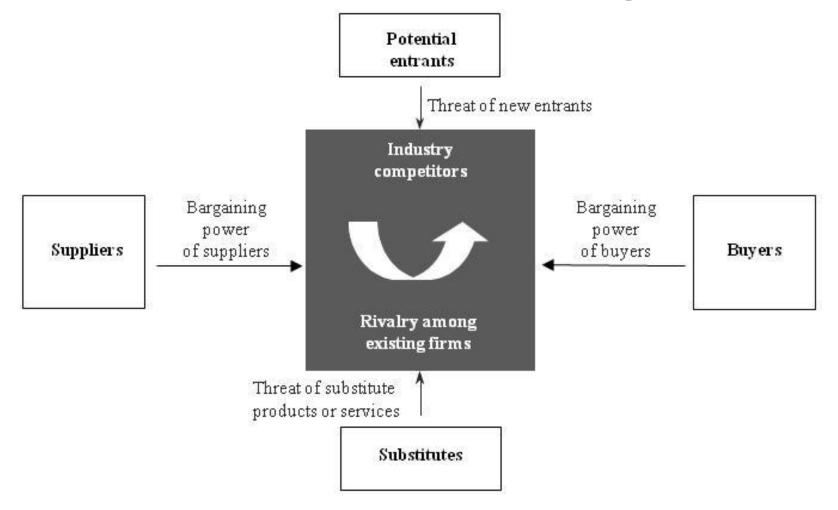
#### EC Decisions – Truncated Data

- As with any truncated data, the possible reasons for the truncation are noteworthy.
  - Perhaps these firms are participating in a vast number of cartels relative to other firms, and these are the very few that were detected by the EC.
  - Perhaps these firms are inept/incompetent at running cartels and thus they get caught frequently.
  - Perhaps the EC scrutinizes firms within the industries of the firms above, or the firms themselves, and thus the participation in cartels appears to be more frequent than other firms, or firms in other industries.
  - Perhaps these firms are choosing to have their collusive conduct detected in these cartels for strategic reasons.

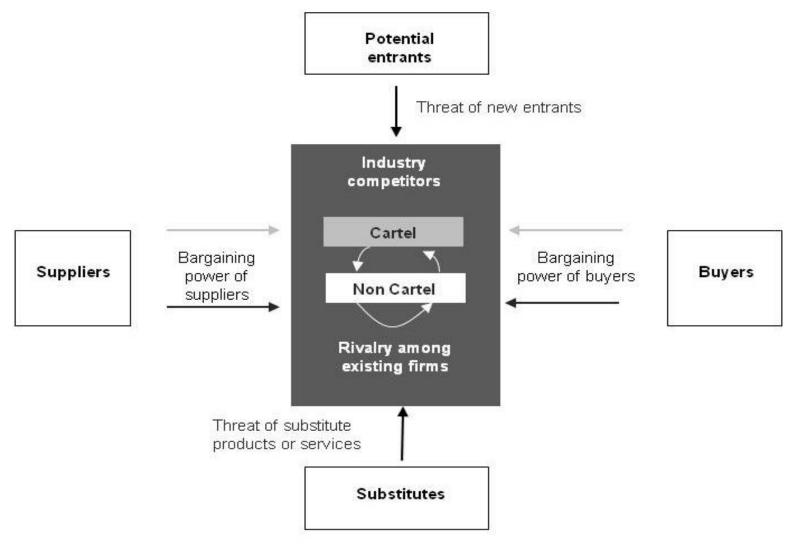
# Why are Large Multi-product Serial Colluders Applying for Leniency?

- Perhaps leniency is "working" as touted by antitrust authorities.
  - Like the discovery of the shotgun for hunting water fowl
- BUT, perhaps leniency is being used strategically by large multi-product firms.
- If leniency detects and deters inept/ineffective colluders, who were or would be causing little social harm, but is an incremental useful tool for large multi-product serial colluders in enforcing their anti-competitive agreements and, in addition, leads to the formation of cartels that otherwise would not have existed, then the benefits of leniency are unclear.

### Porter's Five Forces Diagram

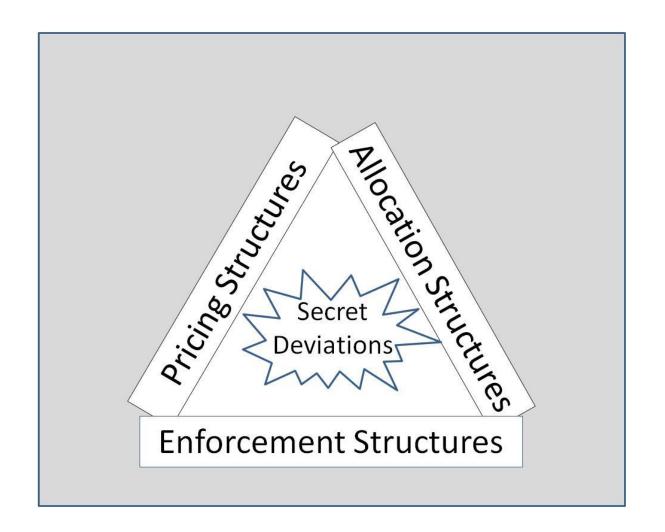


## Modified Five Forces Diagram



Source: Marshall and Marx (2012, Fig. 5.1) - Adapted from Porter (1980) and modified with the permission of Free Press, a Division of Simon & Schuster, Inc., Copyright © 1980, 1998 by the Free Press. All rights reserved.

#### Structures to support collusive profits



#### Functions of the collusive structures

#### Pricing Structures

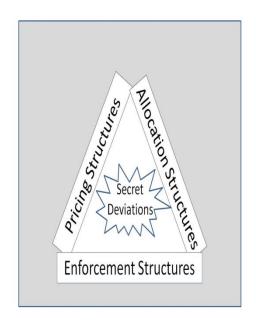
- Implement price increases and quantity reductions
- Modify within-firm incentives

#### Allocation Structures

- Implement the division of surplus
- Establish redistribution mechanisms

#### Enforcement Structures

- Implement monitoring mechanisms
- Establish threat of punishment



#### **Association Management Companies**

- What are they?
- Is Fides/AC Treuhand the only one involved with assisting cartels?
  - Initiation as well as implementation?
- Do antitrust authorities need to focus attention on AMC's?
  - Total fines imposed by EC on Fides/AC Treuhand have been 175k euros
- EC Decisions are notifying everyone that Fides/AC Treuhand provides cartel consulting and services.

#### The Value of Leniency to Sophisticated Cartels

- Leniency may be used to sacrifice smaller cartels to "protect" larger cartels.
- Leniency is a **PUBLIC** declaration by a multi-product firm that they are willing to enter a penalty period.
- Leniency is a definite commitment to punish across all firms. Renegotiation of penalties goes off the table with a leniency applicant.
- Leniency shortens the penalty period relative to the absence of leniency. (The financial penalty substitutes for time.)
- Is there collusion among the colluders regarding leniency applications? Are they taking turns?
  - Example: Akzo files for leniency in 2003, then Degussa in 2006, then Akzo in 2009 both were in all three cartels.
- Is leniency a precursor to merger, or, dominant firm activity, or, exit/entry?
  - In other words, is there anticompetitive strategic value to a commitment to end the collusion in a given product area?

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