Finding and Punishing Cartels:
The Role of Public and Private Antitrust Enforcement

Joe Harrington (U. of Pennsylvania - Wharton)

Apoyo Consultoria

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Market power is the inevitable result of a well-functioning market economy.

Innovation creates market dominance $\Rightarrow$ market power $\Rightarrow$ anti-competitive conduct.

Examples: Apple, Google, Microsoft have a history of innovation and antitrust suits.

Economies of scale results in high concentration $\Rightarrow$ market power $\Rightarrow$ anti-competitive conduct.

Examples: airlines, chicken processing, vitamins have had cartels
Introduction

Role for government intervention

- When market power is abused or enhanced in ways that reduces efficiency.
- Challenge is reducing market power without harming the efficiency-enhancing process that creates market power.
- Two forms of intervention: antitrust, regulation
Introduction

**Price regulation** creates inefficiencies that tend to be *permanent*.

- Inefficient prices - regulators lack information about cost and demand.
- Reduced innovation - stifles incentives to innovate because firms are less able to appropriate the gains.
- Regulatory capture - regulators come to value stable prices and profits rather than "disruptive" entry and innovation.
**Antitrust** (or competition policy) has inefficiencies but they tend to be *temporary*.

- Antitrust does not immediately detect or deter all collusion.
  - But cartels do not last forever. They internally collapse and are discovered and prosecuted.
- Antitrust often does not eliminate unilateral market power that causes price to exceed cost.
  - But entry and innovation can lower prices and improve consumer welfare.
Introduction

- Price regulation is rarely the answer to highly concentrated markets.
- Antitrust must be aggressive.
- Some approaches to a more aggressive competition policy in fighting cartels:
  - **Screening** market data can aid in actively searching for cartels.
  - **Private enforcement** has a prominent role to play in the discovery, prosecution, and penalization of cartels.
Cartel Screening
What is screening?

Screening is the analysis of market data for the purpose of detecting collusion.

- **Structural screening**
  - Identifying industries with a market structure conducive to collusion.
  - Conducive traits: high concentration, homogeneous products, excess capacity, etc.
  - Examples: cement, chemicals, construction

- **Behavioral screening**
  - Identifying collusive patterns in prices, bids, quantities, market shares, and other market data.
  - Examples: shrimp (The Netherlands - NMa), LIBOR (global - *Wall Street Journal*), generic drugs (Mexico - Cofece)
Cartel Screening

Requirements for behavioral screening

1. Data to examine for evidence of collusion
2. Knowing what to look for in the data
   - Structural break - change in the data-generating process which could be due to cartel birth, death, disruption
   - Collusive markers - patterns more consistent with collusion than with competition
Collusive markers are regularities that distinguish collusion from competition and include:

- High prices (compared to some competitive benchmark)
- V-shaped pattern to prices
- Low price variability
- Correlated bids at a procurement auction
- Stable market shares
- and others
Cartel Screening

What to look for in the data: Collusive markers

Collusive marker

- High prices compared to some competitive benchmark

Gasoline (Italy)
Cartel Screening
What to look for in the data: Collusive markers

Collusive marker

- V-shaped pattern to prices
  - Cartel formation is often preceded by price decline
  - Transition phase in which price gradually rises.

Citric Acid (global)

Graphite Electrodes (global)
Cartel Screening

What to look for in the data: Collusive markers

Collusive marker

- Low price variability
- Unresponsiveness to cost shocks

Fig. 1. Frozen perch prices and costs: 1/6/87–9/26/89.

Frozen Perch (U.S.)

Urethane (U.S.)
Cartel Screening

What to look for in the data: Structural break

*Structural break* is a change in the data-generating process that could be due to cartel birth, death, or disruption

- Cartels can be detected at birth
  - Collusion must mean a change in the price-generating process which, in principle, can be identified.
- Cartels can be detected when disrupted by non-cartel members or death
  - Disruptions are not easily "managed" by colluding firms which often means sharply lower and more volatile prices.
Cartel Screening

What to look for in the data: Structural break

Pattern consistent with collusion: Entry has very large price response

Under competition:
- modest decline in price

Under collusion:
- switch to competition $\Rightarrow$ large decline in price

Generic drugs (Mexico)
- Price levels went down
- Price variability went up
Cartel Screening

Who should engage in screening?

**Competition authorities**

- Screening can be the basis for an investigation.
- Screening is more effective in the presence of a leniency program.
  - If a competition authority discovers a suspected cartel, an investigation might induce a firm to apply for leniency.

**Economic consulting firms and plaintiff law firms**

- Screening can be the basis for litigation to claim customer damages.
Cartel Screening
Who should engage in screening?

Companies

- Screening to determine if any suppliers are colluding.
  - Deutsche Bahn has a cartel detection team.

- Screening to determine if any employees are colluding.
  - Upon an employee’s departure from Kühne, an internal audit revealed evidence of price-fixing in the EU industrial bulk vinegar market.

- Screening as part of a due diligence process before a merger or acquisition.
  - Only after acquiring Hoechst’s chemicals business did Clariant discover Hoechst was involved in the MCAA cartel.
### Some Retail Markets with Cartels in Recent Years

<table>
<thead>
<tr>
<th>Auto insurance</th>
<th>Bank interest rates</th>
<th>Beer</th>
<th>Bread</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buses</td>
<td><strong>Chicken</strong></td>
<td>Cooking oil</td>
<td>Detergent</td>
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<tr>
<td>Generic drugs</td>
<td>Maize</td>
<td>Milk</td>
<td>Newspapers</td>
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<tr>
<td>Pharmacies</td>
<td><strong>Propane</strong></td>
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<tr>
<td><strong>Toilet paper</strong></td>
<td>Tortillas</td>
<td>Toys</td>
<td><strong>Wheat flour</strong></td>
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Note: Peruvian cases in **bold**
Cartel Screening
Screening retail markets

Data
- Price data is public (not proprietary) though may not always be easily available.
- Benchmark price series for other markets may be available.

Patterns
- Are prices high relative to a benchmark?
- Are prices excessively stable? Are they unresponsive to input prices?
- Was there a significant change in the price series? in the responsiveness of price to cost?
Private Enforcement

Overview

1. Government fines are too low and are insufficient to deter collusion.
   - Critical role for private litigation to increase penalties through customer damages

2. Competition authorities do not prosecute all suspected cases because of resource constraints and case selection.
   - Critical role for private litigation to supplement public enforcement

"These private suits provide a significant supplement to the limited resources to the Department of Justice." U.S. Supreme Court (Reiter v. Sonotone Corp., 1979)
Private Enforcement

Government fines are too low

- Deterrence requires that the penalty is a significant multiple of excess profit in order to make collusion unprofitable \textit{in expectation}.
- In practice, collusion is profitable \textit{even after having been penalized}!
- Peru performed relatively well only because cartel duration was short.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{graph1.png}
\caption{Comparison of penalty-excess profits ratios, \%}
\end{figure}

Ivaldi, Jenny, and Khimich (2016)
Private Enforcement

Government fines are too low

Toilet Paper Cartel (Peru, 2005-2014)

- Market sales = 790 million nuevo sol/year
- Retail price = 67 céntimos/roll, Quantity = 1.2 billion rolls/year
- Cartel: Market share = 88%, Quantity = 1 billion rolls/year
- Overcharge = 10-20% or 10 céntimos/roll
- Excess profit = $1 billion nuevo sol

"The fines ... could exceed US$1 million [3.3 million nuevo sol] for each company."

Data source: Peru Reports December 15, 2015
Private Enforcement

Government fines are too low

- Fining guidelines ("severe" infraction)
  - Maximum fine of 1000 Tax Units or 12% of annual sales, whichever is lower.
  - Maximum fine is approximately 4-5 million nuevo sol.

- Problems with fining formula is that it is
  - not tied to excess profit
  - not tied to duration
  - too low.

- Creates an essential role for customer damages to
  - link them more closely to the excess profit from collusion.
  - increase the magnitude of penalties
Private enforcement means higher penalties and **more prosecutions** due to

- resource constraints faced by the competition authority.
- case selection by the competition authority.

Even though the Antitrust Division of the U.S. Dept of Justice (DOJ) is aggressive, private enforcement initiates many cases not pursued by the government.

- Of 60 recent large private antitrust suits, 40% of them were initiated by the plaintiffs (Lande and Davis, *Georgia Law Review*, 2013).
- Private litigants are more willing to take on "less explicit" collusion.
Private Enforcement

Limits of public enforcement

- Claim: Competition authority is more concerned with winning cases than with penalizing firms and deterring cartels.
  - May not be inclined to invest scarce resources into difficult or risky cases which can weaken deterrence.
  - May be inclined to focus on cases with a leniency applicant.

- Evidence from the U.S.
  - "The DOJ appears much more willing to tolerate a false negative (a failure to prosecute a violation of the antitrust laws) than a false positive (litigating a case when in fact there was no violation)."
  - More than 75% of cases involve the leniency program which suggests a focus on explicit collusion.
Private Enforcement

- Private litigants and plaintiff lawyers are more concerned with *expected profit* than the probability of winning.
  - Willing to take on risky cases if the damages are large.
- Combined public and private enforcement covers more legal ground because
  - Public enforcers are more willing to take on small cases with high probability of success.
  - Private enforcers are more willing to take on large cases with low probability of success.
Concluding Remarks

- Aggressive antitrust, rather than price regulation, is the proper response to highly concentrated industries.
- Aggressive antitrust means actively looking for cartels.
  - Screening market data for collusive markers and for radical changes associated with cartel birth, death, and disruption.
  - Without a tradition of convicting and harshly punishing cartels, Peru is likely to have many cartels.
Concluding Remarks

- Private enforcement has a crucial role to play in conjunction with public enforcement.
  - Indecopi has limited resources and cannot pursue all cases.
  - Indecopi may not want to use scarce resources on difficult cases but, if the damages are high enough, private litigants will pursue them.
  - Government fines are insufficient to deter and need to be augmented with customer damages.

- Private litigation should be encouraged with
  - hospital legal environment: class action, joint and several liability, flexible evidentiary standards
  - support from the competition authority - assistance in follow-up suits, sharing leniency documents.