

Enforcement of Anti-Cartel Laws: Successes and Challenges

Joe Harrington (U. of Pennsylvania - Wharton)

Joint Workshop - FNE, CRESSE AND ISCI

16 November 2016

Introduction

William Kovacic (OECD Conference, October 2013), former Chair of the U.S. Federal Trade Commission:

No modern development in antitrust law is more striking than the global acceptance of a norm that condemns cartels as the market's most dangerous competitive vice [but] is modern antitrust cartel enforcement attaining its deterrence goals?

- Are policies reducing the cartel rate?
- Challenges faced by a competition authority
 - if there has not been success in lowering the cartel rate.
 - if there has been success in lowering the cartel rate.

Are There Fewer Cartels?

Enforcement Trends

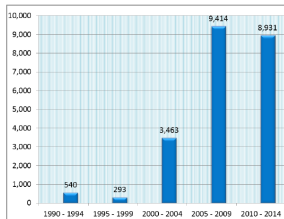
- Competition laws are more widespread.
- Many competition authorities are intensely engaged in enforcement.
- Widespread adoption of leniency programs.
- Increase in corporate penalties in some jurisdictions; for example, U.S. and EU (and now Chile)
- Expansion of criminalization.

Are There Fewer Cartels?

Enforcement Trends

- Higher penalties reflecting more convictions and higher penalty rates.

European Commission - Fines

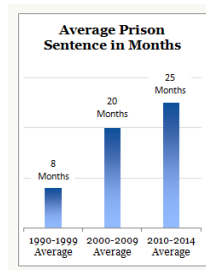
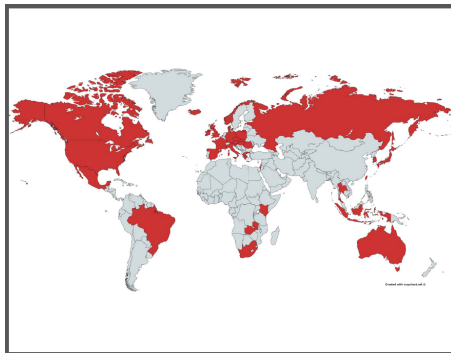


- But collusion is probably still profitable in almost all jurisdictions.
- But penalties are tied to revenue (e.g, up to 10% of turnover) in most jurisdictions \Rightarrow cartels with high profit/sales ratio may not be deterred.

Are There Fewer Cartels?

Enforcement Trends

- 35 countries have criminalized cartel participation.



United States

- But incarceration is only routinely used in the U.S.

Are There Fewer Cartels?

Enforcement Trends

- Leniency programs adopted in more than 50 countries and unions.
- Active in many jurisdictions including U.S., EU, Brazil, South Africa.
- Leniency program is picking up in Chile
 - 2009-14: 22% (3 out of 14 convictions) had a leniency awardee.
 - 2015-16: 75% (3 out of 4 cases brought by the FNE) have a leniency applicant or awardee.
- But not active everywhere. Rarely used in Estonia, Israel, Latvia, Lithuania, Poland, Turkey (OECD Policy Roundtable, 2013).

Are There Fewer Cartels?

- In some jurisdictions:

Are There Fewer Cartels?

- In some jurisdictions:
- Encouraging signs

Are There Fewer Cartels?

- In some jurisdictions:
- Encouraging signs
 - Many convictions

Are There Fewer Cartels?

- In some jurisdictions:
- Encouraging signs
 - Many convictions
 - Many leniency applications

Are There Fewer Cartels?

- In some jurisdictions:
- Encouraging signs
 - Many convictions
 - Many leniency applications
- Discouraging signs

Are There Fewer Cartels?

- In some jurisdictions:
 - Encouraging signs
 - Many convictions
 - Many leniency applications
 - Discouraging signs
 - Many convictions

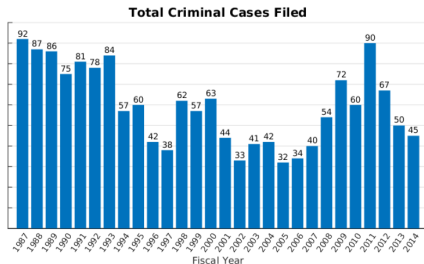
Are There Fewer Cartels?

- In some jurisdictions:
 - Encouraging signs
 - Many convictions
 - Many leniency applications
 - Discouraging signs
 - Many convictions
 - Many leniency applications

Are There Fewer Cartels?

- In some jurisdictions:
- Encouraging signs
 - Many convictions
 - Many leniency applications
- Discouraging signs
 - Many convictions
 - Many leniency applications

U.S. Department of Justice (1987-2014)



Are There Fewer Cartels?

Fact: Cartels continue to be discovered at a significant rate and include some of the largest in history (auto parts, foreign exchange, LIBOR).

- Cartels keep forming in the U.S. in spite of
 - aggressive enforcement
 - higher government fines
 - incarceration
 - vibrant private litigation with treble customer damages
- What does this portend for jurisdictions with
 - lower corporate fines
 - absence of private litigation or only single customer damages
 - no incarceration

Are There Fewer Cartels?

- There is no compelling evidence (yet) of significant deterrence of cartel formation.
- Contrary to an oft-stated claim, we do **not** know how many cartels go undiscovered.

Are There Fewer Cartels?

- OECD Secretariat - "Serial Offenders" (Oct 2015):

Cartel studies generally conclude that only about 10 to 30 percent of all such conspiracies are discovered and punished. (Quoting from Connor, 2010)

IN THE UNITED STATES COURT OF APPEALS
FOR THE SEVENTH CIRCUIT

MOTOROLA MOBILITY LLC,

Plaintiff and Appellant,

vs.

AU OPTRONICS CORPORATION, et al.,

Defendants and Appellees.

On Appeal from an Order of
the United States District Court
for the Northern District of Illinois
Case No. 09-cv-6610

AMICUS CURIAE BRIEF OF
ECONOMISTS AND PROFESSORS IN
SUPPORT OF APPELLANT'S
PETITION FOR REHEARING *EN BANC*

"A focus on deterring formation of international cartels is particularly important in view of estimates suggesting that more than two-thirds of conspiratorial activity goes undetected and unpunished."

These claims are incorrect and are based on a misinterpretation of estimates.

Are There Fewer Cartels?

- These statements are based on estimates of the "probability of discovery" using cartel duration data.
- What is actually estimated is the annual probability of discovery *for those cartels that are discovered*.
- At best, what can be estimated is the (annual) cartel death rate =
$$\text{discovery rate} + \text{collapse rate} - \text{discovery rate} \times \text{collapse rate}$$
- A given cartel death rate could be due to
 - high collapse rate and low discovery rate \Rightarrow many undiscovered cartels
 - low collapse rate and high discovery rate \Rightarrow few undiscovered cartels

Source: Harrington and Wei, "What Can the Duration of Discovered Cartels Tell Us About the Duration of All Cartels?," (*Economic Journal*, forthcoming)

Are There Fewer Cartels?

Takeaways

- There is no compelling evidence that there are fewer cartels.
- It is of first-order importance to address:
 - Is the cartel rate lower?
 - Are policies reducing the cartel rate?
- Enforcement should entail
 - Detection (of cartels)
 - Prosecution (and conviction of cartels)
 - Penalization (of convicted cartels)
 - **Evaluation (of enforcement policies)**

Disabling Cartels

- If there is uncertainty as to whether enforcement is deterring cartels then it is prudent to intensify efforts to shut down active cartels.
- Enhancing the detection of cartels
 - 1 Leniency programs
 - 2 Whistleblower rewards
 - 3 Screening

Disabling Cartels

Leniency Programs

- Leniency programs have proven instrumental in prosecuting cartels but are they
 - discovering active cartels?
 - lowering the cartel rate?
- Concerns that leniency programs
 - are largely used by dying cartels and thus their value lies more in increasing penalties than in shutting down active cartels.
 - are more effective against the least stable cartels.
 - could be enhancing the duration of the most stable cartels.

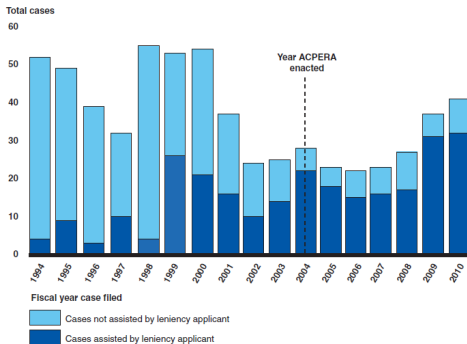
Disabling Cartels

Leniency Programs

Increased reliance on leniency program.

U.S. DOJ: Growth in Role of Leniency Applications

Figure 8: Number of Criminal Cartel Cases Filed Each Fiscal Year, Broken Out by Those Assisted and Not Assisted by a Leniency Applicant



Source: GAO analysis of Antitrust Division data.

Disabling Cartels

Leniency Programs

- *Too much reliance on the leniency program?*

U.S. Senator Bill Blumenthal speaking to Assistant Attorney General William Baer:

"My concern is that most of the cases that are brought today are ... generated exclusively from firms that decided to come forward and seek a leniency application I'm worried that the success of the leniency program combined with budget constraints that your Division faces will, in effect, give you incentives to pursue only the companies that come forward . . . [A]s I know from personal experience, some of the most egregious and harmful of the cartels may have nobody coming forward."

- U.S. Senate Hearing on "Cartel Prosecution: Stopping Price Fixers and Protecting Consumers" - November 14, 2013

Disabling Cartels

Leniency Programs

A leniency program may be disproportionately used by dying cartels.

- EC official Olivier Guersent expressed this concern at the 11th Annual EU Competition Law and Policy Workshop (June 2006)
- Only 13 out of 110 EC cases with a leniency awardee (over 1996-2012) involved applications before the death of the cartel.
- António Gomes, President of the Portuguese Competition Authority (2014):

Cartels which have already become unstable ... are more likely to lead to a leniency application. On the other hand, cartels whose members are successful in maintaining stable collusion rules for several years ... are more difficult to be detected through leniency programs.

Disabling Cartels

Leniency Programs

Harrington and Chang (*Journal of Law and Economics*, 2015)

Theoretical model of cartel birth, death, and discovery finds:

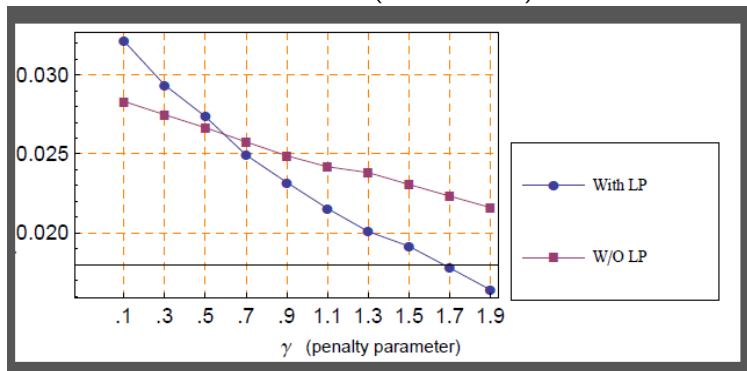
- Leniency program is extensively used by dying cartels.
- Competition authority that focuses on cartels with a leniency applicant is using scarce resources on prosecuting cartels that have already collapsed.
- More stable cartels could be less likely to be caught because non-leniency enforcement is weaker.

Disabling Cartels

Leniency Programs

It is possible for a leniency program to raise the cartel rate.

Cartel Rate (Simulations)



Disabling Cartels

Leniency Programs

Theoretical analysis shows:

- a leniency program can:
 - have many applications
 - reduce the expected duration of relatively unstable cartels (and deter some from forming)
 - *increase* the expected duration of relatively stable cartels
- a leniency program need not decrease the cartel rate when
 - leniency cases do not sufficiently save on resources
 - penalties are not sufficiently severe.

Disabling Cartels

Leniency Programs

The main takeaway is not that leniency programs are counter-productive but rather

- number of leniency applications is not a measure of success (though can be an encouraging sign).
- it is unclear that they are effective at shutting down *active* cartels.
- not to overly rely on leniency programs as a method of detection.

Disabling Cartels

Whistleblower Rewards

- Whistleblower programs provide rewards to those who are (typically) not involved in a cartel and report a suspected cartel to the government.
- Sales representatives (and other employees) of the colluding firms may become suspicious because, for example,
 - of a lack of concern of competitors' reactions
 - of instructions not to deviate from the price list even when business may be lost.
- Industrial buyers may become suspicious because, for example,
 - some suppliers are no longer willing to bid for their business
 - firms' price changes are much more coincident in time.

Disabling Cartels

Whistleblower Rewards

- Cement cartels reported by employees:
 - Argentina: “disgruntled employee revealed to a newspaper that the cement companies were exchanging information and dividing their market shares”.
 - Brazil: Former employee of Votorantim Cimentos reported cartel.
- Why wait for them to depart or be disgruntled? *Incentivize them with financial rewards.*

Disabling Cartels

Whistleblower Rewards

Some cases in which employees suspected something was awry but did not report:

- Carbonless paper: “A Sappi employee admits that he had very strong suspicions that two fellow employees had been to meetings with competitors. They would come back from trade association meetings with a very definite view on the price increases that were to be implemented and ... were relatively unconcerned by competitor reactions.” (EC Decision, 2001)
- Fine arts auction houses: “Some of [Sotheby’s] personnel commented that they had a ‘feeling’ that the introduction of the fixed vendor’s commission structure may have arisen out of some sort of understanding with Christie’s.” (EC Decision, 2002)

Why fail to have them share their suspicions? *Incentivize them with financial rewards.*

Disabling Cartels

Whistleblower Rewards

Only four countries have whistleblower rewards

- South Korea (2005) - Rewards of up to 1 billion Korean Won
- United Kingdom (2008) - Rewards of up to £100,000
- Hungary (2010) - at least 1% of government fine up to a maximum of 50 million forints
- Taiwan (2015) - 5-20% of govt fine up to 10 million New Taiwan Dollars

Disabling Cartels

Screening

- *Behavioral screening* identifies collusive patterns in firm conduct and outcomes (prices, sales, etc.)
- *Behavioral screening can work because ...*
 - ① ... collusion must mean a change in the price-generating process which, in principle, can be identified.
 - ② ... collusion is difficult and leaves an evidentiary trail.
 - Collusion imposes a unique set of challenges and constraints which manifests itself in terms of firm behavior.
 - Even if cartelists are strategic, they will be unable to beat some screens because it is costly for them to do so.
 - ③ ... *it has worked!*

Disabling Cartels

Screening

Screening has discovered cartels in

- Generic drugs (Mexico)
- **Road construction (Switzerland)**
- Retail gasoline (Brazil)
- Shrimp (The Netherlands)
- **Cement (South Africa)**
- LIBOR (global)
- **Ampoules (Chile)**
- Subway construction (Korea)
- Electronic stock exchange Nasdaq (United States)

Screening produced evidence ⇒ Dawn raid ⇒ Leniency application ⇒ Conviction

Response of Collusive Practices to Effective Enforcement

Suppose a competition authority has had success in deterring hard core cartels.

- *How might this impact future collusion?*
- *What can be done if collusion becomes less explicit?*

Response of Collusive Practices to Effective Enforcement

Case: Market for turbine generators

- 1960: General Electric, Westinghouse, and Allis-Chambers were indicted for an explicit price-fixing cartel and subsequently convicted.
- 1963: GE decides to pursue "less explicit" collusion with Westinghouse (with Allis-Chambers having exited the market).
- Practices
 - GE released a pricing book that allowed one to compute the book price of any GE generator.
 - GE announced a standard multiplier it would apply to the book price to calculate the final price.
 - GE announced it would not offer discounts off of that final price.
- Outcome
 - GE and Westinghouse had identical multipliers and book prices for the next 12 years.
 - They effected no generator price decreases.

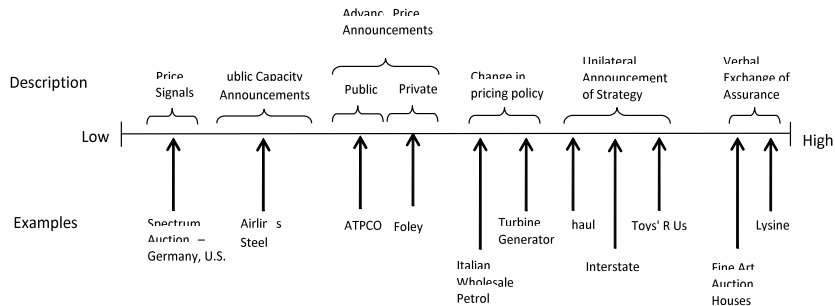
Response of Collusive Practices to Effective Enforcement

Is the turbine generator market a microcosm of what will occur in countries that have experienced success against explicit collusion?

- Prior to the introduction of competition laws, colluding firms will use the most effective methods to communicate and coordinate.
- With the introduction of competition laws, colluding firms are likely to pursue similar methods while making them clandestine.
- If a competition authority is effective in its enforcement, some colluding firms may turn to methods that are less susceptible to detection and prosecution.

Response of Collusive Practices to Effective Enforcement

Range of Coordinating Practices



Response of Collusive Practices to Effective Enforcement

- Challenge: More difficult to detect and prosecute because
 - some coordinating actions may be public and have legitimate rationales
 - direct contact is less frequent and extensive
 - leniency program is not as effective because there may be no "smoking gun" evidence.
- Responding to these challenges
 - ① Pursue cases that push the boundary of legal precedent regarding
 - liability - expand the definition of unlawful collusion
 - evidentiary standards - promote acceptance of economic evidence.
 - ② Develop a legal environment conducive to private litigation.

Response of Collusive Practices to Effective Enforcement

United States v. Foley (1979)

- At a dinner party with competing real estate agencies, one firm announced it was raising its commission rate from 6 to 7%.
- No evidence of communications regarding a formal agreement.
- 7% commission rate was adopted over the ensuing months by many of those in attendance.
- Combination of an announced intention (among firms, excluding customers) and subsequent behavior proved sufficient for the court.

Case exemplifies

- less explicit collusion
- expanded evidentiary standards

Response of Collusive Practices to Effective Enforcement

Price Signalling Using Advance Price Announcements

Advance price announcements as a facilitating practice

- A firm announces a future price increase through some public medium.
- If rivals respond with similar announcements then proposed price increases are implemented.
- If rivals do not respond in kind then the initial firm retracts the proposed price increase.
- Cases
 - Airlines (U.S., 1994)
 - Banking - interest rates (Australia, 2012)
 - Container liner shipping (European Commission, 2016)

Response of Collusive Practices to Effective Enforcement

Price Signalling Using Advance Price Announcements

Container liner shipping (European Commission, 2016)

- Since 2009, 15 container liner shipping companies regularly publicly announced their future General Rate Increase (GRI) of freight prices
- GRI announcements are made 3-5 weeks before their intended implementation date.
- Some or all of the other carriers typically responded by announcing similar intended rate increases.
- EC claimed "this practice may allow the companies to signal future price intentions to each other and may harm competition and customers by raising prices."
- Carriers agreed not to publish or communicate GRIs (i.e., price changes expressed solely as an amount or percentage of the change).

Response of Collusive Practices to Effective Enforcement

Price Signalling Using Advance Price Announcements

ACCC v. Informed Sources (Australia, 2014)

- Information exchange device
 - Petrol retailers subscribe to online service of Informed Sources.
 - Petrol retailers submit their prices to IS.
 - IS disseminates prices almost instantly to retailers.
- ACCC allegations
 - Service is a near real time communication device that promotes coordination.
 - Retailers can propose a price increase to their competitors, monitor the response to it, and quickly withdraw the price if necessary.
- Action: Coles Express agreed to terminate its subscription to Informed Sources and committed not to enter into similar information sharing agreements.

Response of Collusive Practices to Effective Enforcement

Public Announcements of a Collusive Plan: Coordinated Price Increase

"Invitation to collude" cases

- High-ranking company official publicly comments about the "excessive" intensity of competition.
- Proposes a plan that, if adopted, would reduce competition.
- Forum: trade meetings, investor press conferences

Response of Collusive Practices to Effective Enforcement

Public Announcements of a Collusive Plan: Coordinated Price Increase

Truck rental market (FTC, 2010) - Budget and U-Haul

- U-Haul's CEO instructed regional managers to raise prices above Budget's rates and to "let Budget know" about the higher rate with the object of Budget matching it.
- Used an earnings call to coordinate with Budget.
 - Emphasized that U-Haul was demonstrating "price leadership."
 - Complained that Budget's aggressive pricing strategy produced "turbulence that results in no economic gain for the group."
 - Conveyed that U-Haul managers had been instructed to "hold the line at a little higher [price]" in order for prices to "stabilize"
 - Suggested that he could tolerate a 3-5% price differential with Budget but that U-Haul would respond if its market share eroded.

Response of Collusive Practices to Effective Enforcement

Public Announcements of a Collusive Plan: "Capacity Discipline"

Capacity Discipline

- In public statements, executives convey a message of all firms curtailing supply and reducing capacity.
- Coordination is only on capacity, not prices.
- Constrained capacities results in higher prices.
- Cases (in progress)
 - Steel producers (U.S. private litigation)
 - Airlines (U.S., DOJ and private litigation)

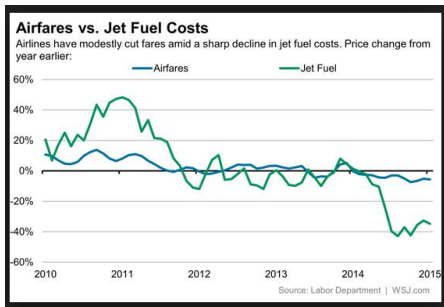
Response of Collusive Practices to Effective Enforcement

Public Announcements of a Collusive Plan: "Capacity Discipline"

Airlines (U.S., 2015)

- 2002-2014: Load factor on U.S. passenger planes to U.S. airports went from 72% to 83%.
- Fares have not fallen in spite of drastically declining jet fuel prices.

Why has capacity not increased?



Response of Collusive Practices to Effective Enforcement

Public Announcements of a Collusive Plan: "Capacity Discipline"

July 2015 - U.S. Dept of Justice opened an investigation into collusion among airlines because:

- airlines seem to have decided to limit their capacities at roughly the same time.
- airline executives have expressed in public statements their commitment to their new business model and the hope that other airlines will adopt it.
 - CEO of United Airlines: "We are very focused on capacity discipline, but we're not going to do it at the expense of United and to the benefit of others. The whole industry needs to have that level of discipline."

Response of Collusive Practices to Effective Enforcement

Develop a Legal Environment Conducive to Private Litigation

Importance of private litigation in the U.S.

- Enhances corporate financial penalties by following up on government convictions.
- Shuts down cartels by initiating cases not pursued by the government.
 - Lande and Davis (2013): Of 60 recent large private antitrust suits, 40% of them were initiated by the plaintiffs.
 - Private litigants are more willing to take on "less explicit" collusion.

Response of Collusive Practices to Effective Enforcement

Develop a Legal Environment Conducive to Private Litigation

Competition authority attaches more weight to winning cases than to large penalties.

- May not be inclined to take on risky cases that would push the legal boundaries.
- Lande and Davis (2011)
 - DOJ obtained convictions in 92% of 699 cases filed over 1992-2008.
 - "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)."

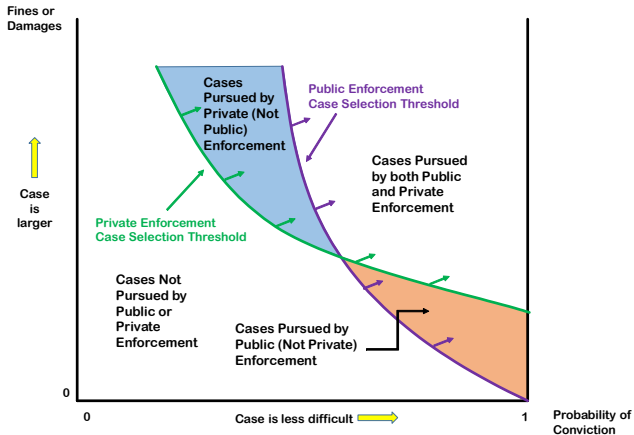
Response of Collusive Practices to Effective Enforcement

Develop a Legal Environment Conducive to Private Litigation

- Private litigants and plaintiff lawyers are more concerned with *expected profit* than the probability of winning.
 - Willing to take on cases with low probability of winning as long as the damages could be large.
- Combined public and private enforcement cover more legal ground because
 - public enforcers are more willing to take on low payoff-high probability of success cases.
 - private litigants are more willing to take on high payoff-low probability of success cases.

Response of Collusive Practices to Effective Enforcement

Develop a Legal Environment Conducive to Private Litigation



Concluding Remarks

- Enforcement has significantly intensified but we do not yet know whether it has lowered the presence of cartels in economies.
- If enforcement is not proving successful (in lowering the cartel rate), this calls for more effort to discover and shut down active cartels by
 - not excessively relying on leniency programs
 - adopting whistleblower programs
 - engaging in screening.
- If enforcement is proving successful then firms may choose to engage in less explicit forms of collusion and this will call for
 - a broader notion of unlawful collusion
 - greater use of economic evidence to prove liability
 - an environment that promotes private litigation.