

Anti-Trust/Competition Policy

- When and how should the government intervene?
- **Main anti-trust laws in the US: the *Sherman Act* (1890) and the *Clayton Act* (1914), *Hart-Scott-Rodino Act* (1976, 2000)**
- Section 1 of the Sherman Act deals with conspiracy to restrain trade (i.e., price fixing, bid rigging, market division etc.)
- Section 2 of the Sherman Act deals with monopolization (more on this)
- Clayton Act deals with Mergers, HSR deals with merger notification

Agenda

- Sherman Act Section 1
- Sherman Act Section 2

Sherman Act Sec 1

Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is declared to be illegal. Every person who shall make any contract or engage in any combination or conspiracy hereby declared to be illegal shall be deemed guilty of a felony, and, on conviction thereof, shall be punished by fine not exceeding \$100,000,000 if a corporation, or, if any other person, \$1,000,000, or by imprisonment not exceeding 10 years, or by both said punishments, in the discretion of the court.

E.g. Price Fixing, Bid Rigging, Market Division

Price Fixing Case

I.

DESCRIPTION OF THE OFFENSE

23
24
25 1. WALTER SCOTT CAMERON (“defendant”) is hereby made defendant on the
26 charge contained in this Information.

27 2. Beginning as early as 2011 and continuing until in or about 2013, the exact
28 dates being unknown to the United States, in the Northern District of California and
elsewhere, the defendant and his coconspirators knowingly entered into and engaged in a

INFORMATION

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1 combination and conspiracy to fix, raise, and maintain the prices of packaged seafood sold in
2 the United States. The combination and conspiracy engaged in by the defendant and
3 coconspirators was an unreasonable restraint of interstate commerce in violation of Section 1
4 of the Sherman Antitrust Act (15 U.S.C. § 1).

U.S. V. WALTER SCOTT CAMERON (2016)

Price Fixing Case

1 representatives while they were actively engaged in the management, direction, control, or
2 transaction of its business or affairs.

3 III.

4 MEANS AND METHODS OF THE CONSPIRACY

5 10. For the purpose of forming and carrying out the charged combination and
6 conspiracy, the defendant and his coconspirators did those things that they combined and
7 conspired to do, including, among other things:

8 a. engaged in conversations and discussions and attended meetings with
9 representatives of other major packaged-seafood-producing firms;

10 b. agreed and reached mutual understandings during these conversations,
11 discussions, and meetings, to fix, raise, and maintain the prices of packaged seafood sold in the
12 United States; and

13 c. negotiated prices and issued price announcements for packaged seafood in
14 accordance with the agreements and mutual understandings reached.

Bid Rigging Case

2 trustee was appointed to oversee the public auctions. These public auctions usually took place at
3 or near the courthouse of the county in which the properties were located. The auctioneer, acting
4 on behalf of the trustee, sold the property to the bidder offering the highest purchase price.
5 Proceeds from the sale were then used to pay the mortgage holders, other holders of debt secured
6 by the property, and, in some cases, the defaulting homeowner (collectively, “beneficiaries”).

7 COUNT ONE: 15 U.S.C. § 1 – Bid Rigging (San Mateo County)

8 THE COMBINATION AND CONSPIRACY

9 2. Beginning as early as September 2010 and continuing until in or about January
10 2011, the defendant MATTHEW WORTHING and co-conspirators entered into and engaged in
11 a combination and conspiracy to suppress and restrain competition by rigging bids to obtain
12 selected properties offered at public auctions in San Mateo County in the Northern District of
13 California, in unreasonable restraint of interstate trade and commerce, in violation of the
14 Sherman Act, Title 15, United States Code, Section 1.

15 3. The charged combination and conspiracy consisted of a continuing agreement,
16 understanding, and concert of action among the defendant and co-conspirators to suppress
17 competition by agreeing to refrain from or stop bidding against each other to purchase selected
18 properties at public auctions in San Mateo County at non-competitive prices.

What Kind of Data Patterns are Suggestive of Collusion

- DOJ: “Red Flags of Collusion”

<https://www.justice.gov/atr/red-flags-collusion>



- Over a series of awards, competing vendors rotate as the award winner.
- Over a series of awards, routine competing vendors win the same or similar amounts of work.
- Over a series of awards, one vendor always wins, regardless of competition.
- The vendor that wins the award subcontracts work to losing vendors or to vendors that withdrew their proposals or refused to submit proposals.
- As compared with prior awards, a smaller number of vendors submit proposals for the current award.

Patterns that are Suggestive of Collusion

- Canadian Competition Bureau: “Detecting bid-rigging”

<https://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/03152.html>

Detecting bid-rigging

While bid-rigging schemes are limited only by the imagination of those involved, there are four common types of agreements that result in a pre-selected supplier winning the contract:

- **Cover bidding** gives the impression of competitive bidding, but, in reality, suppliers agree to submit token bids that are usually too high.
- **Bid suppression or withdrawal** is an agreement among suppliers either to abstain from bidding or to withdraw bids.
- • **Bid rotation** is a process whereby the pre-selected supplier submits the lowest bid on a systematic or rotating basis.
- • **Market division** is an agreement among suppliers not to compete in designated geographic regions or for specific customers.

Allocation Patterns Suggestive of Collusion

- OECD: “Checklist for Detecting Bid Rigging in Public Procurement”

<https://www.oecd.org/daf/competition/RecommendationOnFightingBidRigging2012.pdf>

- The same supplier is often the lowest bidder.
- ● There is a geographic allocation of winning tenders. Some firms submit tenders that win in only certain geographic areas.
- Regular suppliers fail to bid on a tender they would normally be expected to bid for, but have continued to bid for other tenders.
- Some suppliers unexpectedly withdraw from bidding.
- Certain companies always submit bids but never win.
- ● Each company seems to take a turn being the winning bidder.
- Two or more businesses submit a joint bid even though at least one of them could have bid on its own.

OECD Report



In some cases, bidders may attempt to split the extra profit that is earned through bid rigging. This is especially true if one large contract is involved. Sometimes the winning firm may pay the other bidders directly; however, the 'profit split' can also be passed on through lucrative sub-contracts to do some of the work or to supply inputs to the project. Joint bids can also be used as a way to split profits.

5. Look for suspicious bidding patterns.

Bidders may have devised a scheme that reveals itself as a pattern over the course of many bids. For example, there may be a pattern to the winner (A,B,C,A,B,C), or it may be that the same bidder always wins bids of a certain type or size, or that some bidders only bid in particular geographic areas. Perhaps a bidder never wins but keeps bidding; or a bidder wins whenever it bids, even if it bids rarely. A bidder may show a pattern of submitting relatively high bids for some tender offers and relatively low bids for other, similar tender offers.

Pricing may be unusual. All bids may be unexpectedly high, or discounts or rebates may be unexpectedly small. Bids may also be different from previous, similar procurements, but the differences are unrelated to any change in the underlying economic conditions. Bid levels may change when a new bidder (i.e. one who has not bid in the past) submits a bid. Pricing may not make sense when you consider transportation costs to different locations.



DETECTING BID RIGGING IN PUBLIC PROCUREMENT

Helping governments to obtain best value for money

Porter (1995), Detecting Collusion

- There is a tendency to view bid rotation or incumbency advantages as evidence of presence of collusion. Under a rotating bid arrangement, firms take turns submitting “serious” bids for the ring. However, these patterns can be consistent with non-cooperative bidding. For example, bid rotation is a natural outcome in auctions of highway construction contracts where bidders’ cost functions exhibit decreasing returns to scale. Firms with idle capacity are more likely to win a contract, but having won the contract, are less likely to win another until some existing contracts are completed.
- Similarly, patterns reflecting incumbent advantage can reflect unobserved asymmetries among firms. Those who won contracts or customers in the past may have done so because of location or other advantages that persist through time. Incumbents may have the advantage of lower costs due to experience, or an advantage with buyers who are reluctant to switch suppliers. An empirical challenge is to develop tests that can discriminate between collusive and non-cooperative explanations for rotation or incumbency patterns.

Use close winners and close losers to identify collusion

- Propose an empirical test that can distinguish collusion from competition
- Consider bid rotation first.

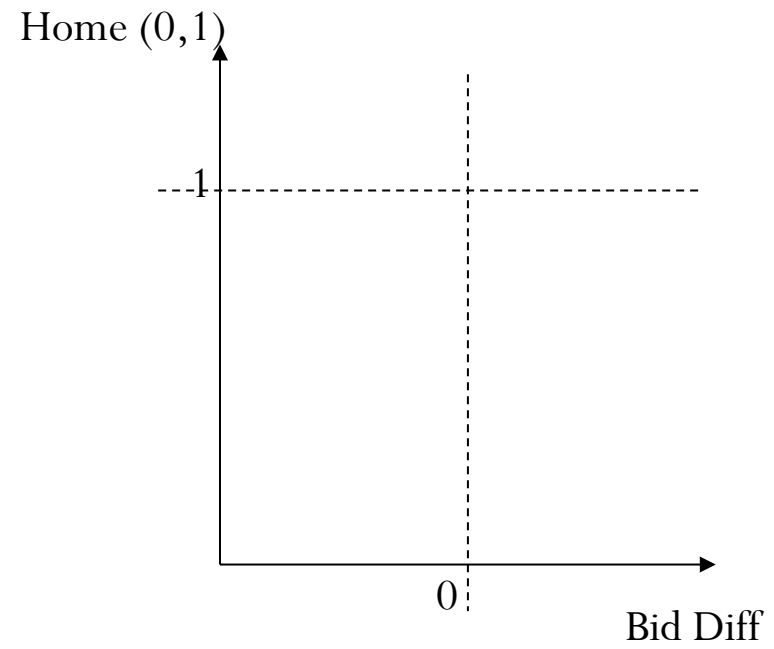
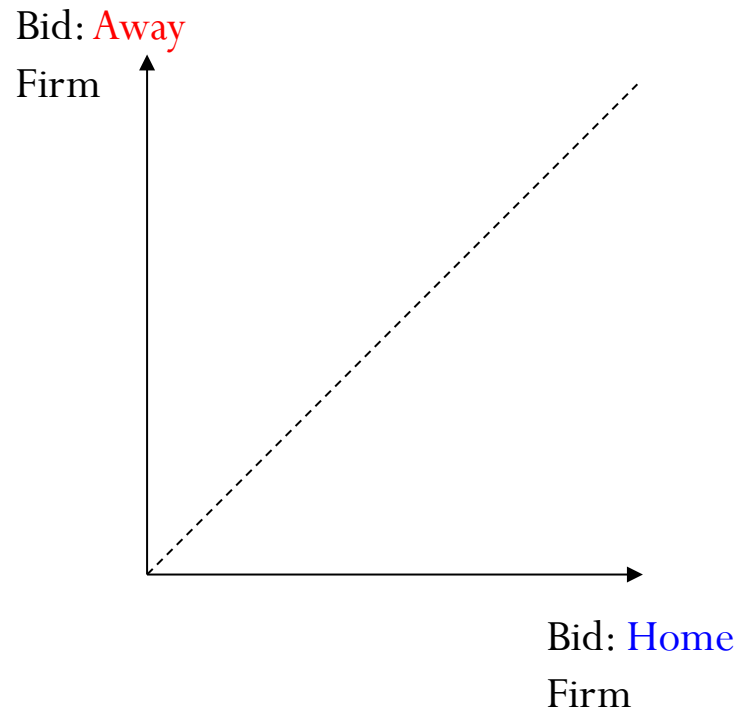
$$[\text{Winner's recent backlog}] \geq [\text{Losers' recent backlog}]$$

...conditional on winner and loser bid almost the same

- Probability of winning or losing conditional on close bids $\approx \frac{1}{2}$ *regardless of bidder characteristics.*
 - Size of backlog, incumbency status etc.
 - They should be the same for marginal winner and marginal loser
- Sports analogy: detect match fixing
 - Knicks win against Nets all the time
 - Match fixing? Maybe, but perhaps Knicks is just a better team
 - Some games are decided by a single point, and in all of them Knicks win against Nets.
 - If game decided by 1 point, it should have been anyone's game. Suspicious if Knicks win all of these games.

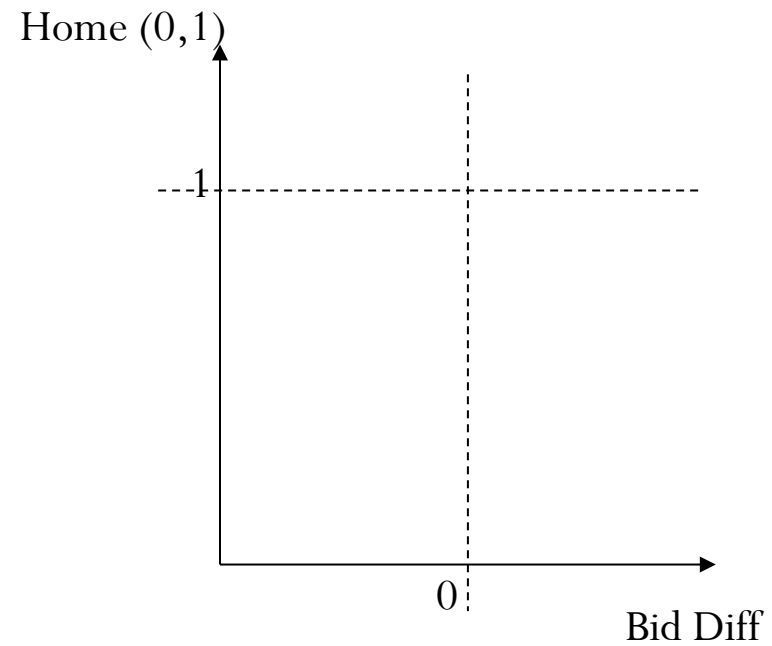
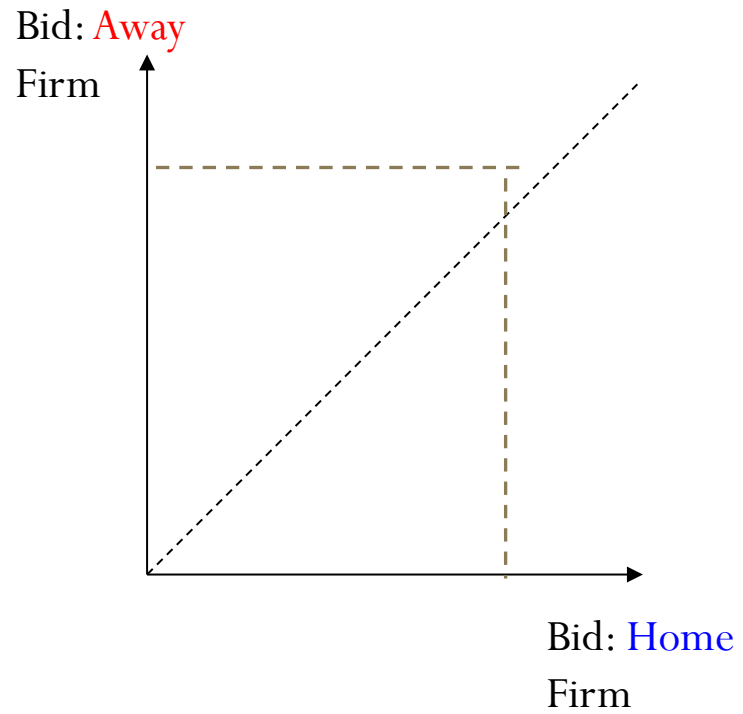
Intuition

Competition: Incumbency affects costs



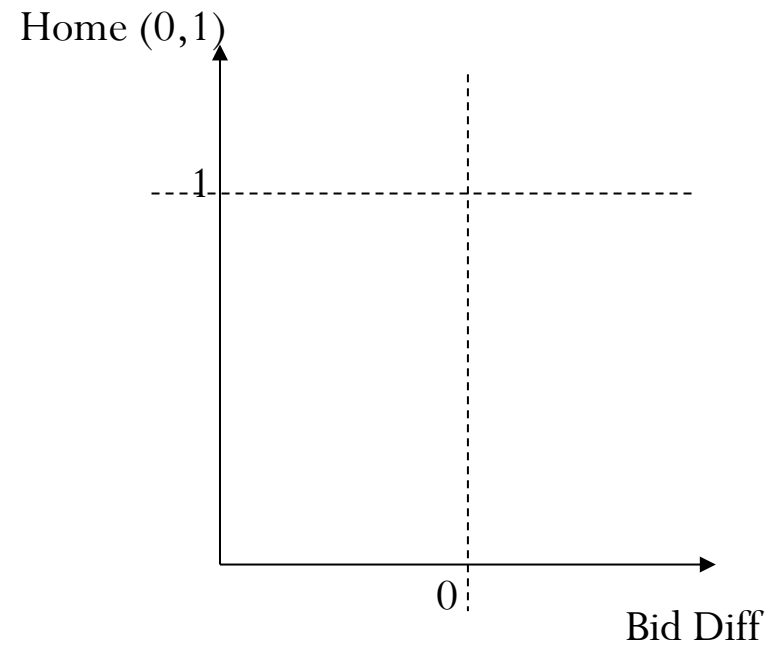
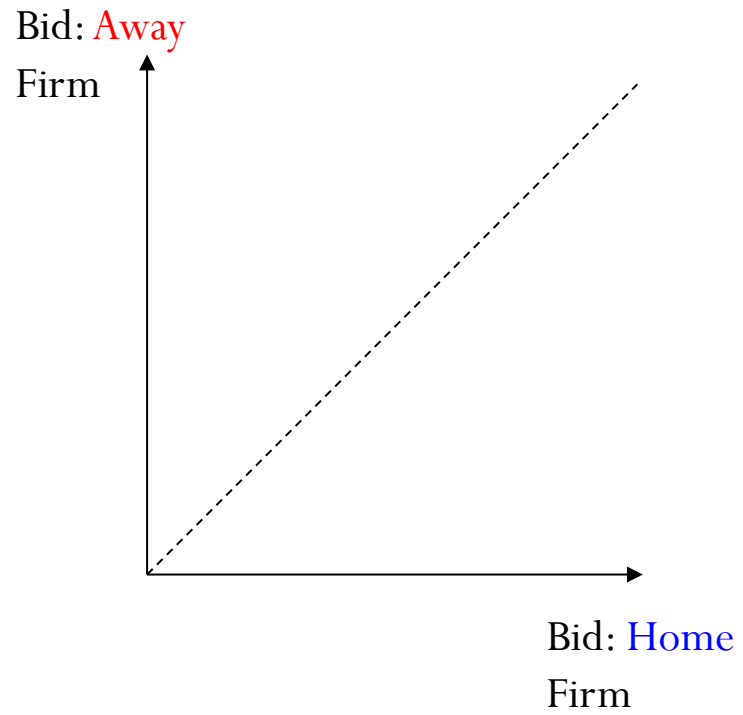
Intuition

Competition: Incumbency affects costs



Intuition

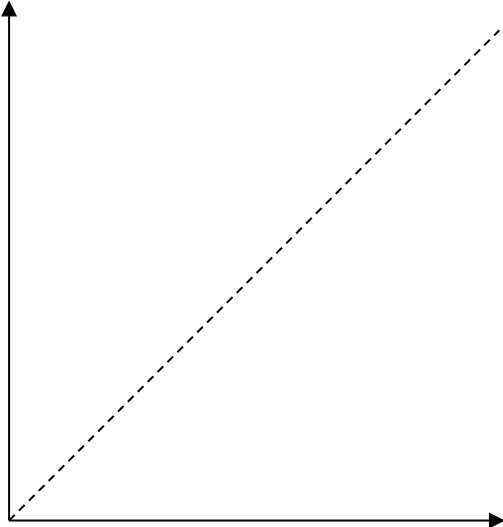
Collusive bidding: market division



Intuition

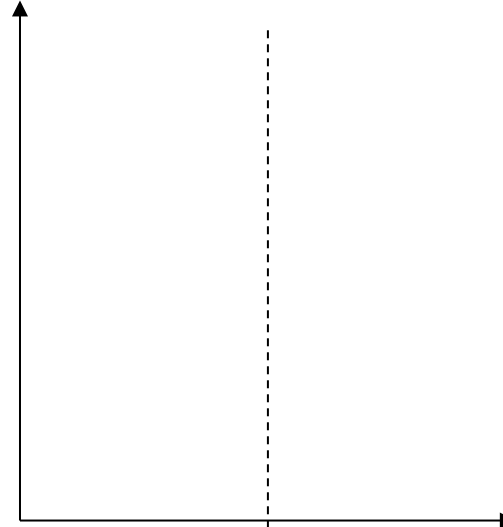
Competitive bidding: capacity affects costs

Bid: **High**
Backlog Firm



Bid: **Low**
Backlog Firm

Backlog



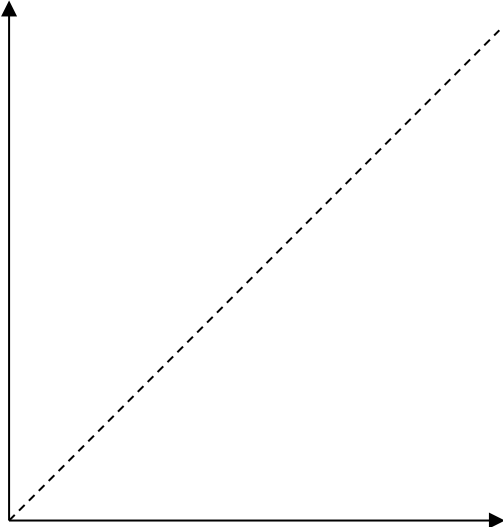
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Bid Diff

Intuition

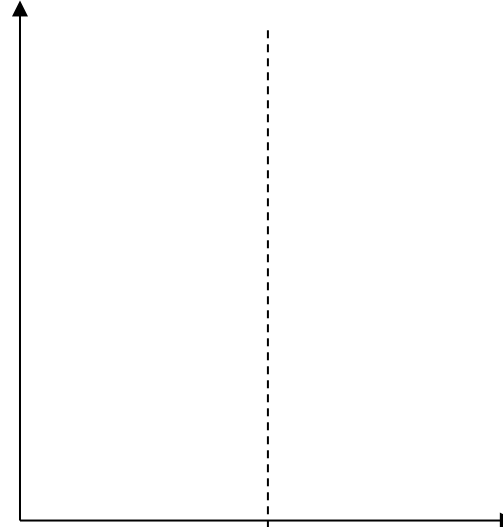
Collusive bidding: bid rotation

Bid: **High**
Backlog Firm



Bid: **Low**
Backlog Firm

Backlog



0

Bid Diff

Application to Known Collusion Case: Ohio School Milk Auctions

- Setting: School milk auctions
 - In particular, auctions for 1yr contract to supply milk for the school district
 - Bid: price/pint of milk
 - Auction format: First-price sealed bid.
 - Auction takes place in the summer before school yr.
 - Unbalanced panel of 300-400 school districts, 1980-1990 (11yrs)
- Data:
 - Bids
 - Identity of bidders.

Collusion in Ohio School Milk Auctions

- Collusion in school milk auctions:
 - 3 bidders from the Cincinnati region confessed to bid-rigging
 - Allocation of contract through incumbency
 - Incumbent submits low bid, non-incumbents submit cover bids.
 - According to testimony, cartel active during sample period, but broke down in yrs 1983 and 1989, 1990.

Summary Statistics

	(1)	(2)		(3)	
	All	Non-Competitive		Control	
	All Years	All Years	Excl 83,89	All Years	Excl 83,89
# Bidders	1.866 (0.909)	1.983 (0.891)	2.058 (0.882)	1.763 (0.838)	1.770 (0.846)
Winning Bid	0.131 (0.013)	0.136 (0.015)	0.138 (0.015)	0.131 (0.013)	0.131 (0.013)
2nd-Low Bid	0.135 (0.013)	0.142 (0.015)	0.144 (0.014)	0.135 (0.012)	0.135 (0.013)
3rd-Low Bid	0.138 (0.013)	0.147 (0.016)	0.149 (0.014)	0.138 (0.012)	0.137 (0.012)
Obs.	3,754	235	189	3,267	2,658

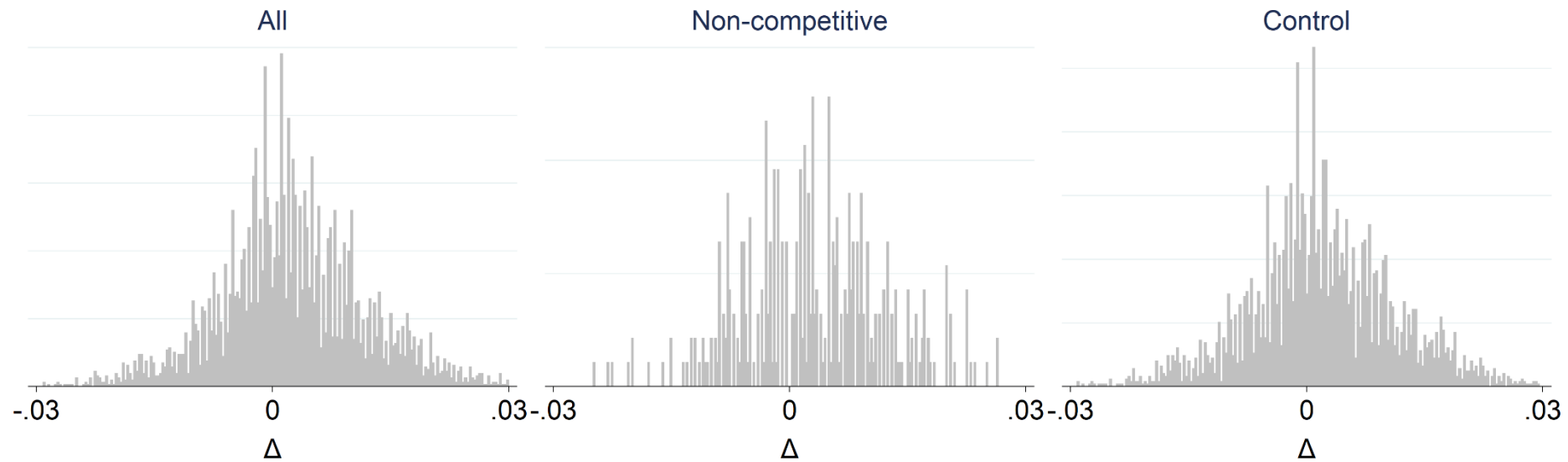
Incumbency

	(1)			(2)			(3)		
	Win/Inc	All Ratio	Total	Win/Inc	Non-Competitive Ratio	Total	Win/Inc	Control Ratio	Total
1980	.	.	249	0.	.	4	.	.	230
1981	136/185	0.74	273	6/7	0.86	12	123/162	0.76	235
1982	148/188	0.79	287	9/10	0.90	13	131/161	0.81	252
1983	162/214	0.76	318	7/10	0.70	16	150/187	0.80	274
1984	199/249	0.80	339	18/20	0.90	24	174/215	0.81	293
1985	205/260	0.79	357	18/18	1.00	22	177/226	0.78	314
1986	242/293	0.83	378	16/19	0.84	25	216/255	0.85	332
1987	236/287	0.82	411	18/20	0.90	27	211/255	0.83	358
1988	253/304	0.83	419	18/20	0.90	28	227/263	0.86	359
1989	257/332	0.77	392	13/19	0.68	30	236/289	0.82	335
1990	185/247	0.75	331	17/29	0.59	34	165/211	0.78	285
Obs.		3,754			235			3,267	

Running variable

- Define Δ_{it} as the diff between bidder i 's bid and lowest bid among its rivals in auction t :

$$\Delta_{it} = b_{it} - \wedge \mathbf{b}_{-it}$$



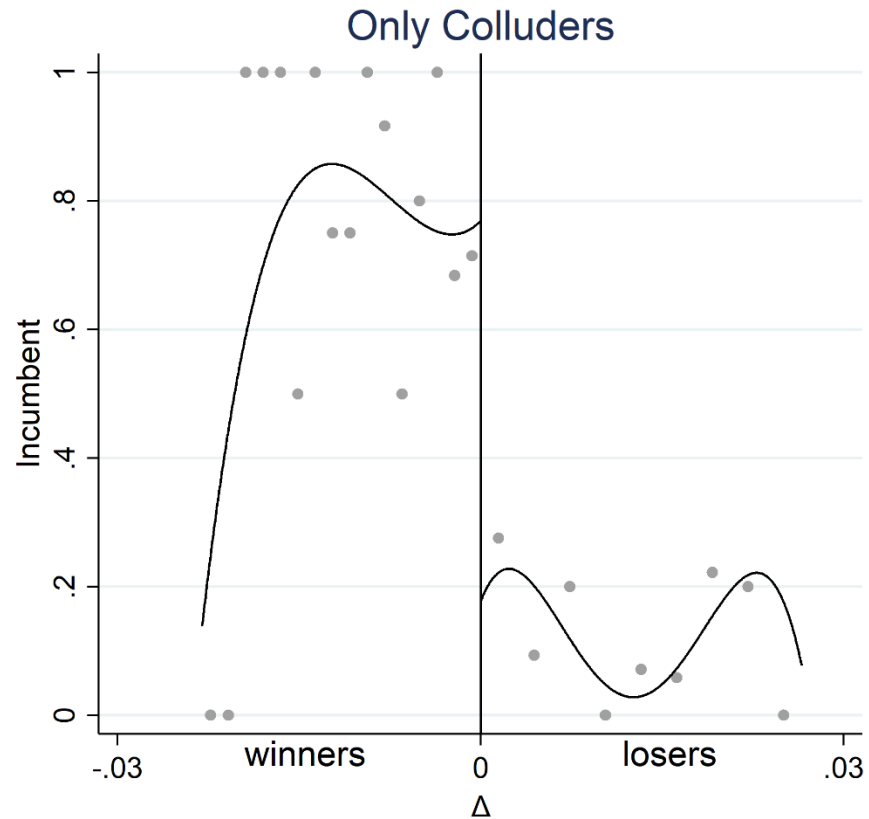
Outcome Variable y_{it}

- Incumbency status $y_{it} \in \{0,1\}$
 - define incumbency y_{it} for firm i in auction t as whether or not firm i won the contract of the school district last year.

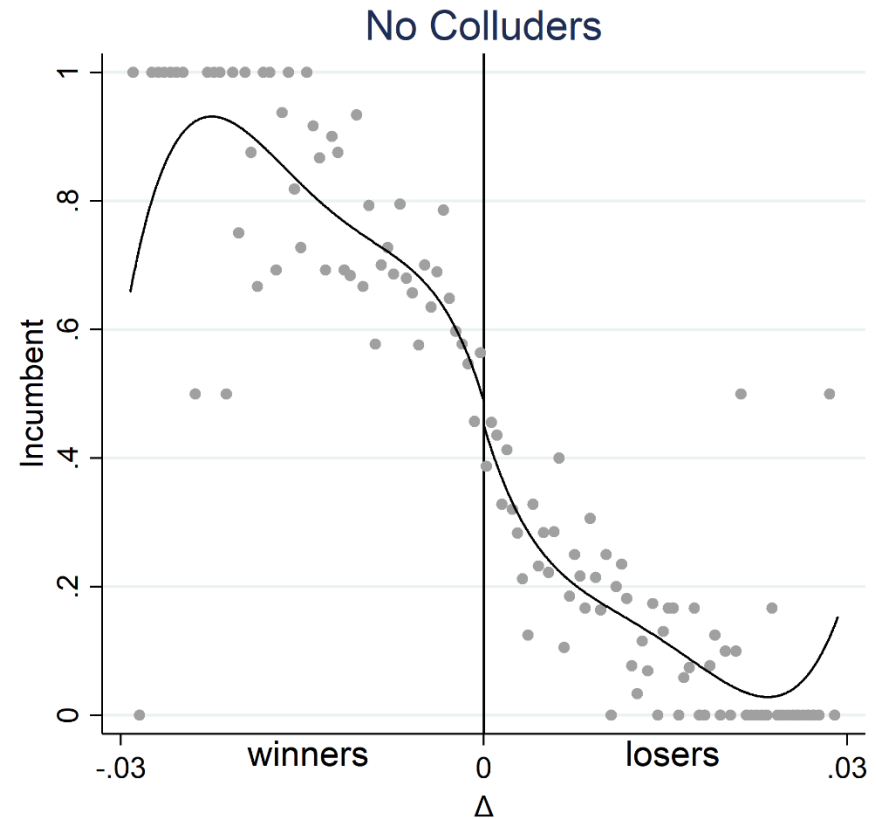
- RDD

$$\underbrace{\lim_{\Delta_{it} \rightarrow +0} \mathbf{E}[y_{it} | \Delta_{it}]}_{\text{avg. inc. status of marginal losers}} - \underbrace{\lim_{\Delta_{it} \rightarrow -0} \mathbf{E}[y_{it} | \Delta_{it}]}_{\text{avg. inc. status of marginal winners}}$$

RDD Scatter Plot



Collusion Sample: Excl. 1983, 1989



Competitive Sample, All yrs

Application to Japanese Municipal Procurement Auctions

- About 11,000 municipal auctions from the North East region of Japan (16 municipalities). C.f. Munis with missing bids.
 - 2004-2018 (depending on muni)
 - Civil engineering, road paving, electrical (elevators, air conditioning etc.), ...
- FPSB with a reserve price
- Reserve is public in 7 and secret in 8 (both used in 1)
- No bidder has been formally charged w/ collusion
 - Reasons to suspect some collusion

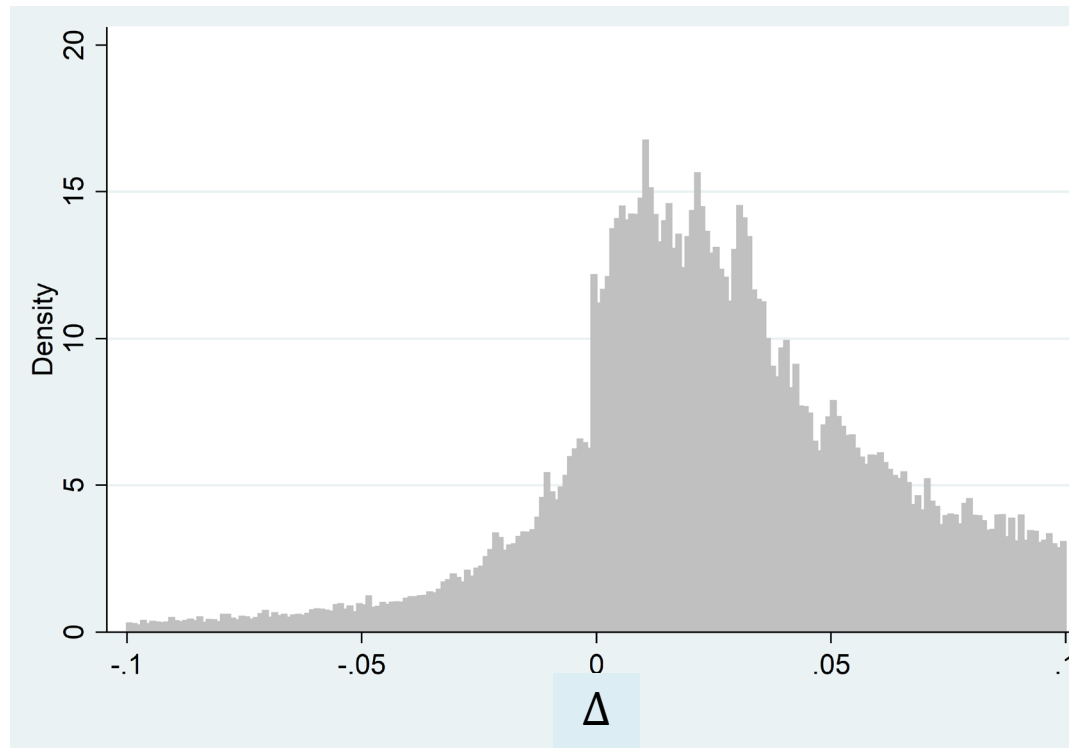
Outcome Variables

- Backlog:
 - Backlog: Cumulative sum of projects awarded (90 days, 180 days)
- Incumbent
 - define two auctions as “same” if have exact same project name
 - Ex. laying artificial grass in Matsushima-playground
 - define incumbent as previous winner

Running variable

- Running variable Δ defined as the (normalized) difference between bidder i 's bid and its most competitive rival in each auction t :

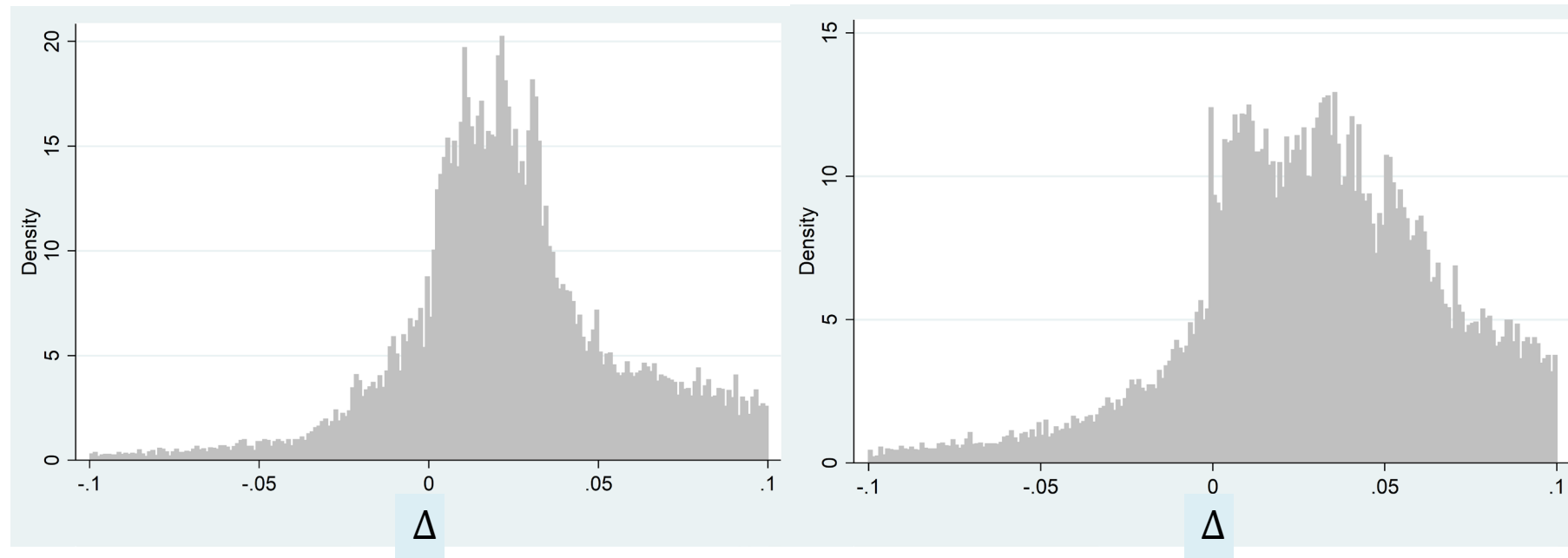
$$\Delta_{it} = b_{it} - \wedge b_{-it}$$



Running variable

● Above Median

● Below Median



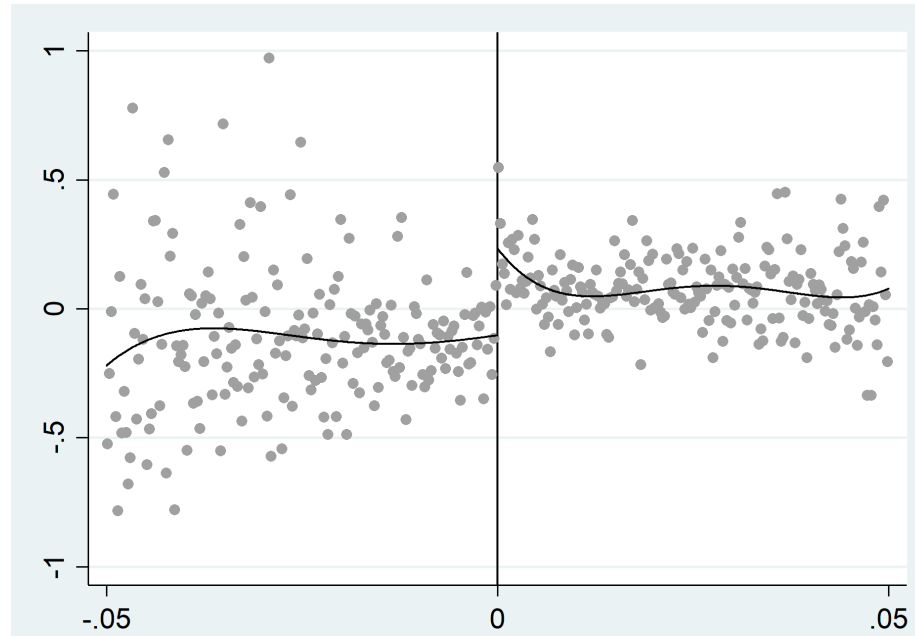
RDD

- For each outcome variable y_{it} , want to compute

$$\lim_{\Delta_{it} \rightarrow +0} \mathbf{E}[y_{it} | \Delta_{it}] - \lim_{\Delta_{it} \rightarrow -0} \mathbf{E}[y_{it} | \Delta_{it}]$$

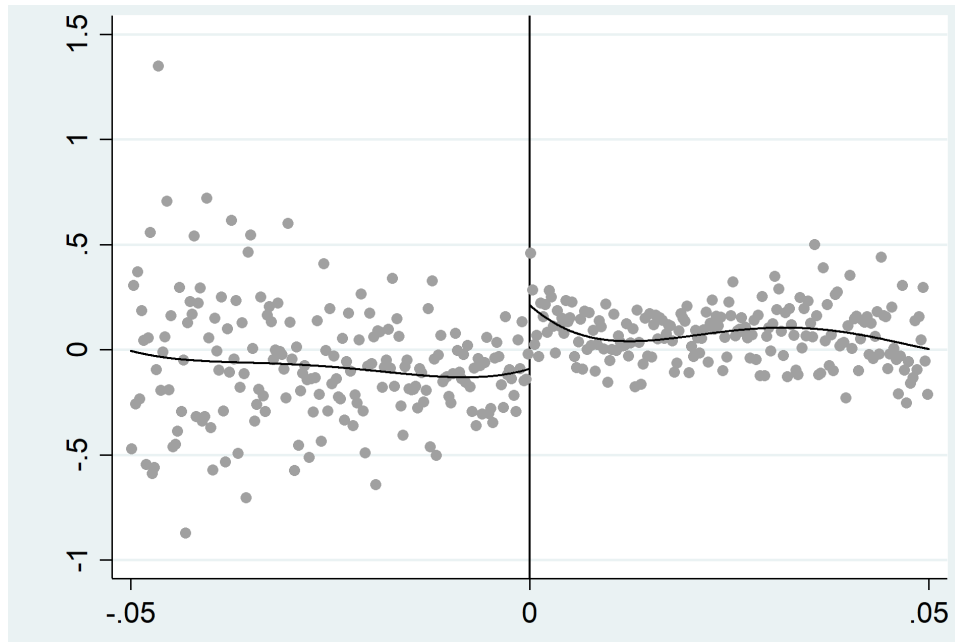
- Separate results for auctions with above median winning bid, and below median winning bid.

Above Median: 90-Day Backlog

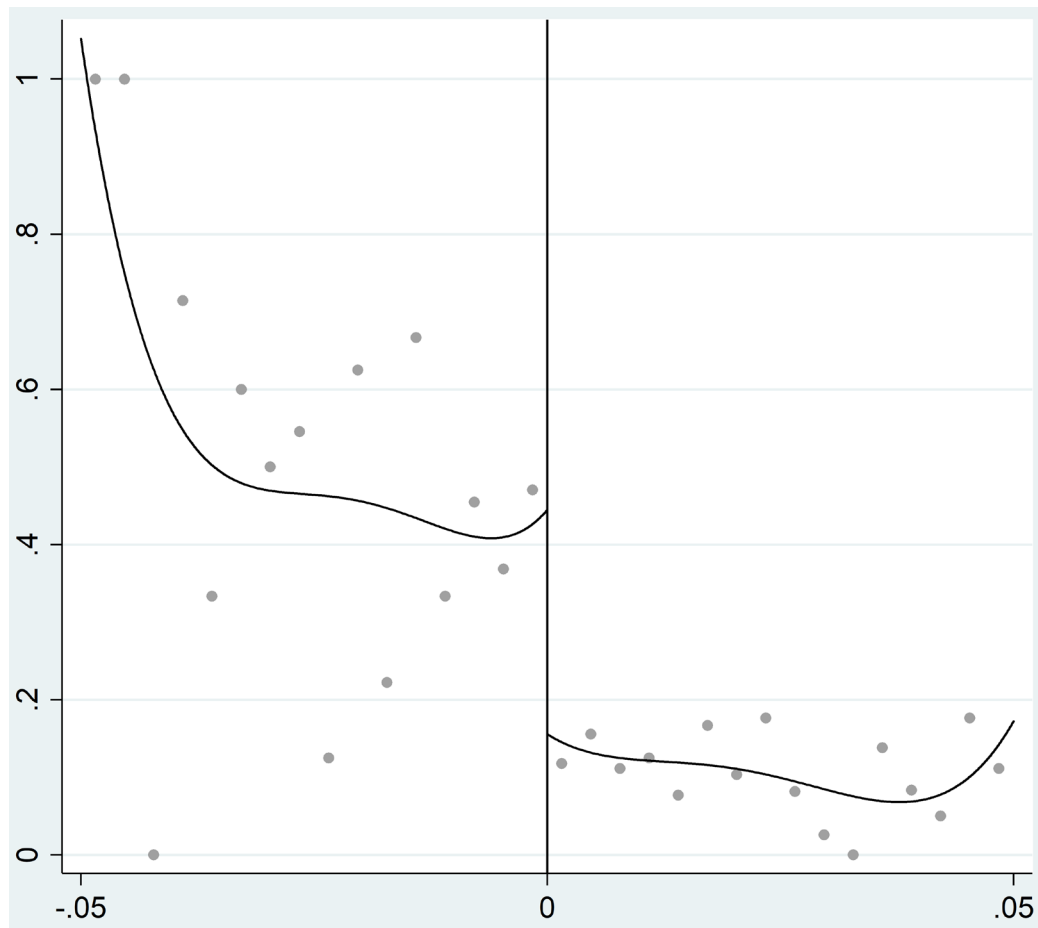


(Bin plot width corresponds to $\frac{1}{2}$ of bandwidth used for estimation)

Above Median: 180-Day Backlog



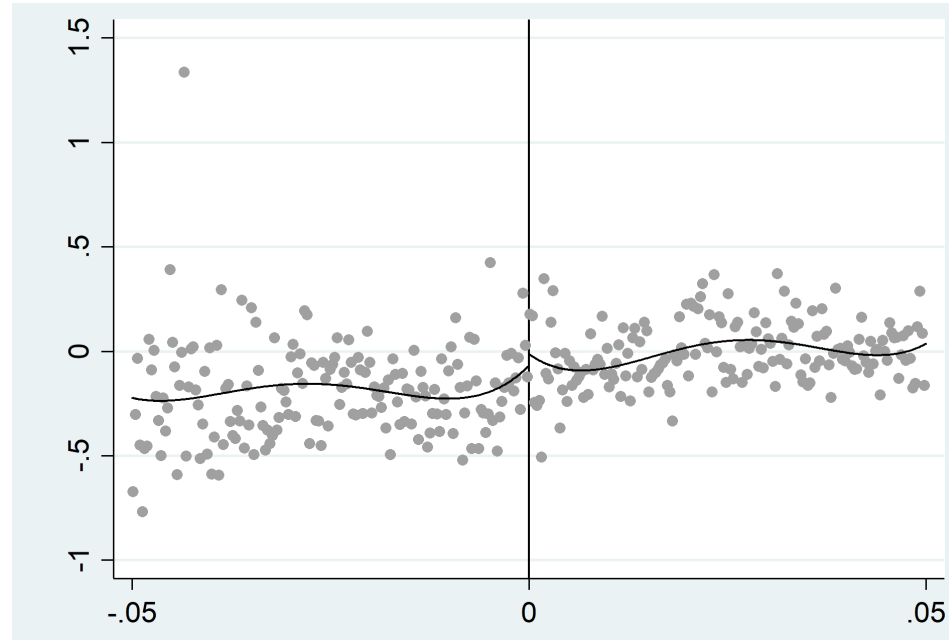
Above Median: Incumbency



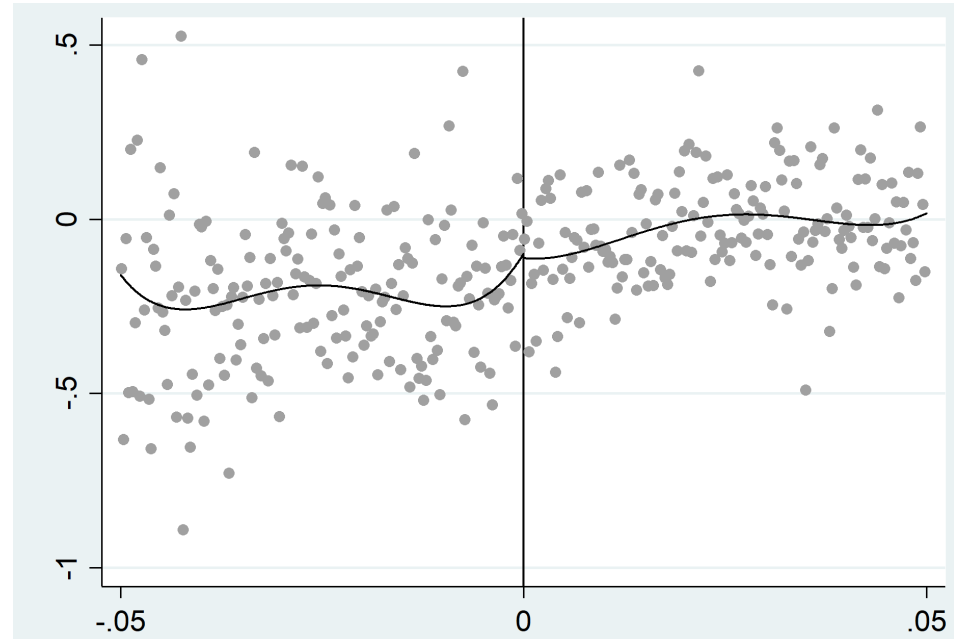
Results: running variable : Δ

	(1)	(2)	(3)	(4)	(5)
	90-Day Backlog		180-Day Backlog		Incumbent
	Raw	Standardized	Raw	Standardized	
Panel (A) :					
Above Median					
$\hat{\beta}$	7.155** (3.239)	0.249*** (0.048)	13.205*** (4.708)	0.221*** (0.046)	-0.277** (0.110)
h	0.014	0.019	0.013	0.025	0.031
Obs.	30,666	28,650	30,666	28,665	1,058
Panel (B) :					
Below Median					
$\hat{\beta}$	-0.290 (1.983)	-0.058 (0.065)	-1.278 (2.957)	-0.022 (0.064)	-0.268* (0.143)
h	0.027	0.021	0.024	0.021	0.027
Obs.	33,100	30,739	33,100	30,770	1,032

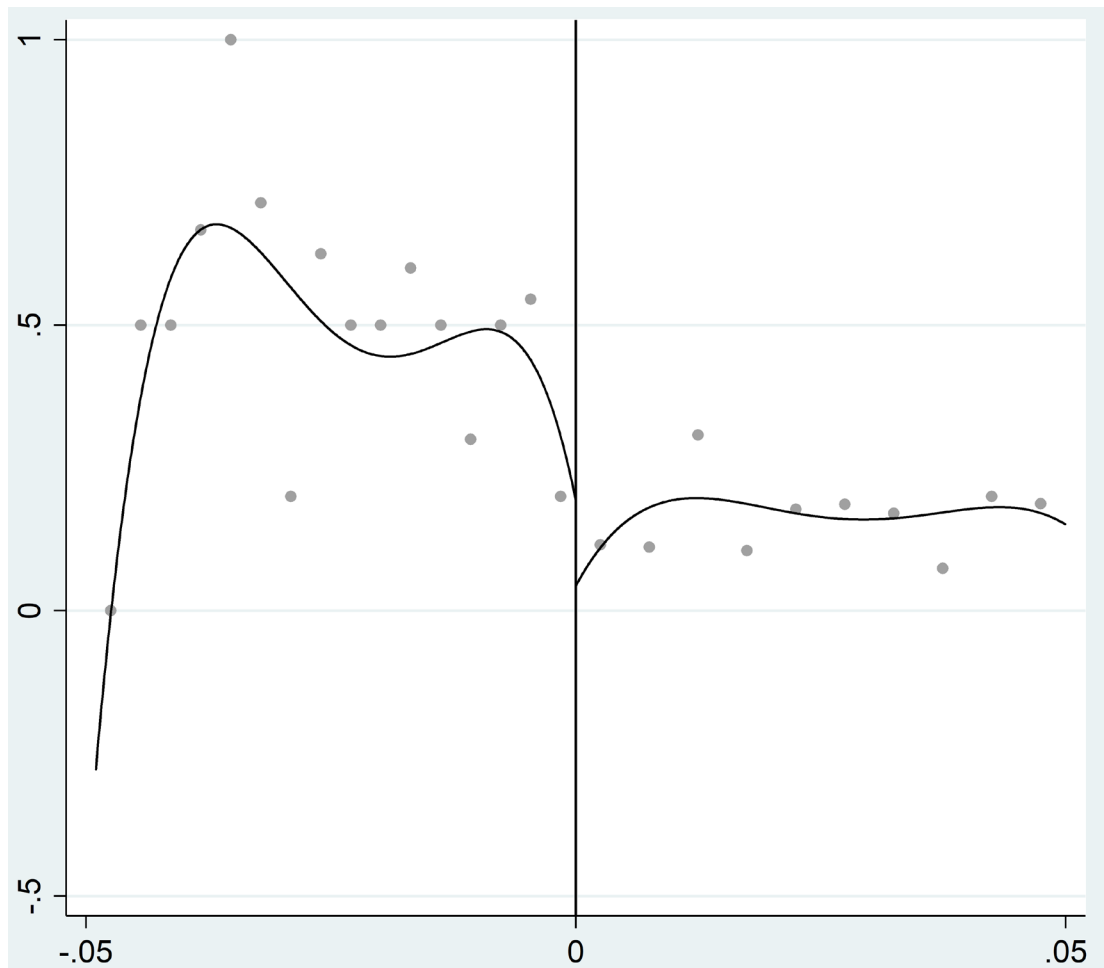
Below Median: 90-Day Backlog



Below Median: 180-Day Backlog



Below Median: Incumbency



Results: running variable : Δ

	(1)	(2)	(3)	(4)	(5)
	90-Day Backlog		180-Day Backlog		Incumbent
	Raw	Standardized	Raw	Standardized	
Panel (A) :					
Above Median					
$\hat{\beta}$	7.155** (3.239)	0.249*** (0.048)	13.205*** (4.708)	0.221*** (0.046)	-0.277** (0.110)
h	0.014	0.019	0.013	0.025	0.031
Obs.	30,666	28,650	30,666	28,665	1,058
Panel (B) :					
Below Median					
$\hat{\beta}$	-0.290 (1.983)	-0.058 (0.065)	-1.278 (2.957)	-0.022 (0.064)	-0.268* (0.143)
h	0.027	0.021	0.024	0.021	0.027
Obs.	33,100	30,739	33,100	30,770	1,032

Results: running variable : Δ^2

	(1)	(2)	(3)	(4)	(5)
	90-Day Backlog		180-Day Backlog		Incumbent
	Raw	Standardized	Raw	Standardized	
Panel (A) :					
Above Median					
$\hat{\beta}$	-1.425 (1.696)	-0.077 (0.052)	-3.129 (2.704)	-0.055 (0.049)	0.094* (0.058)
h	0.018	0.010	0.015	0.012	0.016
Obs.	25,469	23,568	25,469	23,578	854
Panel (B) :					
Below Median					
$\hat{\beta}$	0.540 (1.226)	0.051 (0.050)	1.236 (1.693)	0.066 (0.046)	-0.057 (0.107)
h	0.018	0.020	0.018	0.023	0.024
Obs.	30,143	27,712	30,143	27,747	927

Sherman Act Sec. 2

Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a felony, and, on conviction thereof, shall be punished by fine not exceeding \$100,000,000 if a corporation, or, if any other person, \$1,000,000, or by imprisonment not exceeding 10 years, or by both said punishments, in the discretion of the court.

Monopolization or Exclusionary Practices

- Monopolization?
 - Creating monopoly or maintaining monopoly power through exclusionary practices
- Section 2 prohibits monopolization and attempted monopolization
- Exclusionary practices: practices carried out by an incumbent with the intention to deter entry or force the exit of rivals
 - Predatory pricing: set a “too low” price to force a rival out of the market or pre-empt a potential entrant
 - Refusal to deal
 - Tying and bundling

Predatory Pricing

A. INTRODUCTION

The present action arises from competition between American Airlines and several smaller low cost carriers on various airline routes centered on Dallas - Fort Worth Airport (DFW) from 1995 to 1997. During this period, these low cost carriers created a new market dynamic, charging markedly lower fares on certain routes. For a certain period (of differing length in each market) consumers of air travel on these routes enjoyed lower prices. The number of passengers also substantially increased. American responded to the low cost carriers by reducing some of its own fares, and increasing the number of flights serving the routes. In each instance, the low fare carrier failed to establish itself as a durable market presence, and eventually moved its operations, or ceased its separate existence entirely. After the low fare carrier ceased operations, American generally resumed its prior marketing strategy, and in certain markets reduced the number of flights and raised its prices, roughly to levels comparable to those prior to the period of low fare competition.

Predatory Pricing

In the present action the plaintiff United States alleges that the defendants AMR Corporation, American Airlines, Inc., and AMR Eagle Holding Company, (all hereafter "American"), participated in a scheme of predatory pricing against the low cost carriers in violation of Section 2 of the Sherman Act. The government alleges that American's pricing and capacity decisions on the routes in question resulted in pricing its product below cost, and that it intended to subsequently recoup these costs by supra-competitive pricing by monopolizing or attempting to monopolize these routes. It further alleges that, in addition to these routes, American has violated Section 2 in a large number of additional airline routes, contending that American has monopolized or attempted to monopolize by means of the "reputation for predation" it allegedly gained in its successful competition against low fare carriers in the core markets.

Refusal to Deal/Tying

- Summary

After respondent independent service organizations (ISO's) began servicing copying and micrographic equipment manufactured by petitioner Eastman Kodak Co., Kodak adopted policies to limit the availability to ISO's of replacement parts for its equipment and to make it more difficult for ISO's to compete with it in servicing such equipment. Respondents then filed this action, alleging, *inter alia*, that Kodak had unlawfully tied the sale of service for its machines to the sale of parts, in violation of § 1 of the Sherman Act, and had unlawfully monopolized and attempted to monopolize the sale of service and parts for such machines, in violation of § 2 of that Act. The District Court granted summary judgment for Kodak, but the Court of Appeals reversed. Among other things, the appellate court found that respondents had presented sufficient evidence to raise a genuine issue concerning Kodak's market power in the service and parts markets, and rejected Kodak's contention that lack of market power in service and parts must be assumed when such power is absent in the equipment market.

Tying

I. NATURE OF THIS ACTION

1. This is an action under Sections 1 and 2 of the Sherman Act to restrain anticompetitive conduct by defendant Microsoft Corporation (“Microsoft”), the world’s largest supplier of computer software for personal computers (“PCs”), and to remedy the effects of its past unlawful conduct.

2. Microsoft possesses (and for several years has possessed) monopoly power in the market for personal computer operating systems. Microsoft’s “Windows” operating systems are used on over 80% of Intel-based PCs, the dominant type of PC in the United States. More than 90% of new Intel-based PCs are shipped with a version of Windows pre-installed. PC manufacturers (often referred to as Original Equipment Manufacturers, or “OEMs”) have no commercially reasonable alternative to Microsoft operating systems for the PCs that they distribute.

Tying

10. To respond to the competitive threat posed by Netscape's browser, Microsoft embarked on an extensive campaign to market and distribute Microsoft's own Internet browser, which it named "Internet Explorer" or "IE." Microsoft executives have described this campaign as a "jihad" to win the "browser war."

12. Microsoft, however, has not been willing simply to compete on the merits. For example, as Microsoft's Christian Wildfeuer wrote in February 1997, Microsoft concluded that it would "be very hard to increase browser share on the merits of IE 4 alone. It will be more important to leverage the OS asset to make people use IE instead of Navigator." (MS7 004346). Thus, Microsoft began, and continues today, a pattern of anticompetitive practices designed to thwart browser competition on the merits, to deprive customers of a choice between alternative browsers, and to exclude Microsoft's Internet browser competitors.

Tying

18. Second, Microsoft unlawfully required PC manufacturers, as a condition of obtaining licenses for the Windows 95 operating system, to agree to license, preinstall, and distribute Internet Explorer on every Windows PC such manufacturers shipped. By virtue of the monopoly position Windows enjoys, it was a commercial necessity for OEMs to preinstall Windows 95 -- and, as a result of Microsoft's illegal tie-in, Internet Explorer -- on virtually all of the PCs they sold. Microsoft thereby unlawfully tied its Internet Explorer software to the Windows 95 version of its monopoly operating system and unlawfully leveraged its operating system monopoly to require PC manufacturers to license and distribute Internet Explorer on every PC those OEMs shipped with Windows.

Tying

19. Third, Microsoft intends now unlawfully to tie its Internet browser software to its new Windows 98 operating system, the successor to Windows 95. Microsoft has made clear that, unless restrained, it will continue to misuse its operating system monopoly to artificially exclude browser competition and deprive customers of a free choice between browsers.

20. Microsoft designed Windows 98 so that removal of Internet Explorer by OEMs or end users is operationally more difficult than it was in Windows 95. Although it is nevertheless technically feasible and practicable to remove Microsoft's Internet browser software from Windows 98 and to substitute other Internet browser software, OEMs are prevented from doing so by Microsoft's contractual tie-in.

Google: Monopolization

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European Commission - Press release

Antitrust: Commission fines Google €2.42 billion for abusing dominance as search engine by giving illegal advantage to own comparison shopping service

Documents

[Infographic Google_en.pdf](#)

Statement by the EU Commission

In 2004 Google entered the separate market of comparison shopping in Europe, with a product that was initially called "Froogle", re-named "Google Product Search" in 2008 and since 2013 has been called "Google Shopping". It allows consumers to compare products and prices online and find deals from online retailers of all types, including online shops of manufacturers, platforms (such as Amazon and eBay), and other re-sellers.

When Google entered comparison shopping markets with Froogle, there were already a number of established players. Contemporary evidence from Google shows that the company was aware that Froogle's market performance was relatively poor (one internal document from 2006 stated "*Froogle simply doesn't work*").

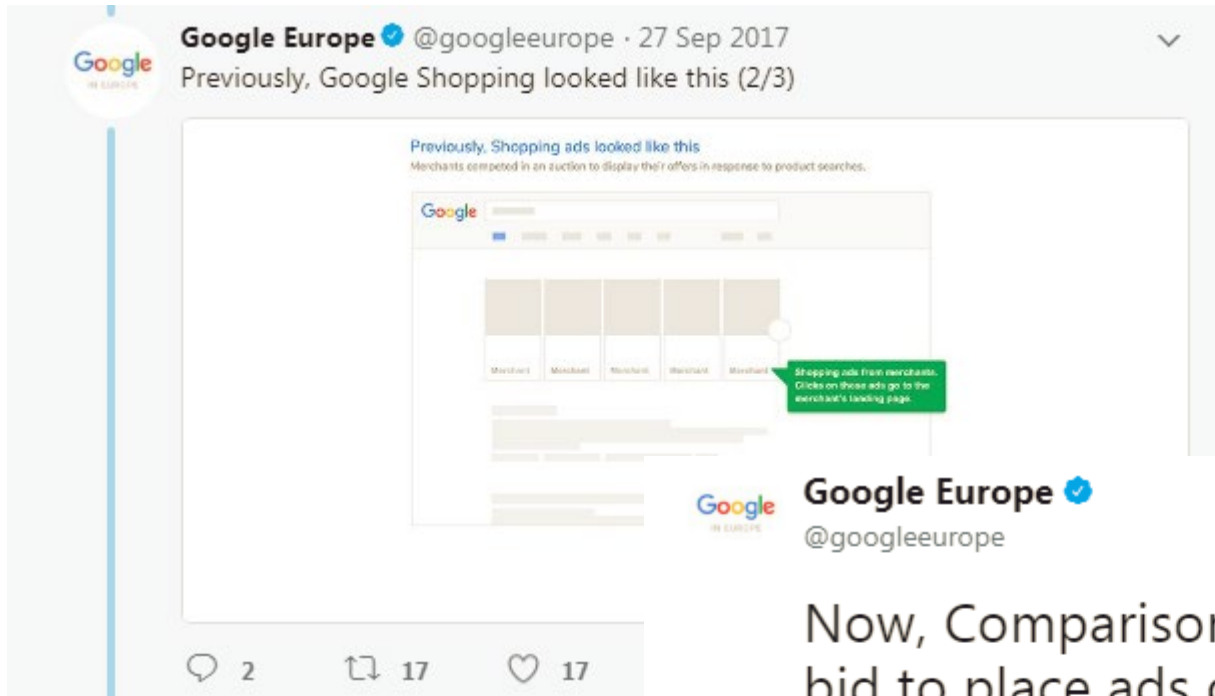
Comparison shopping services rely to a large extent on traffic to be competitive. More traffic leads to more clicks and generates revenue. Furthermore, more traffic also attracts more retailers that want to list their products with a comparison shopping service. Given Google's dominance in general internet search, its search engine is an important source of traffic for comparison shopping services.

Statement by the EU Commission

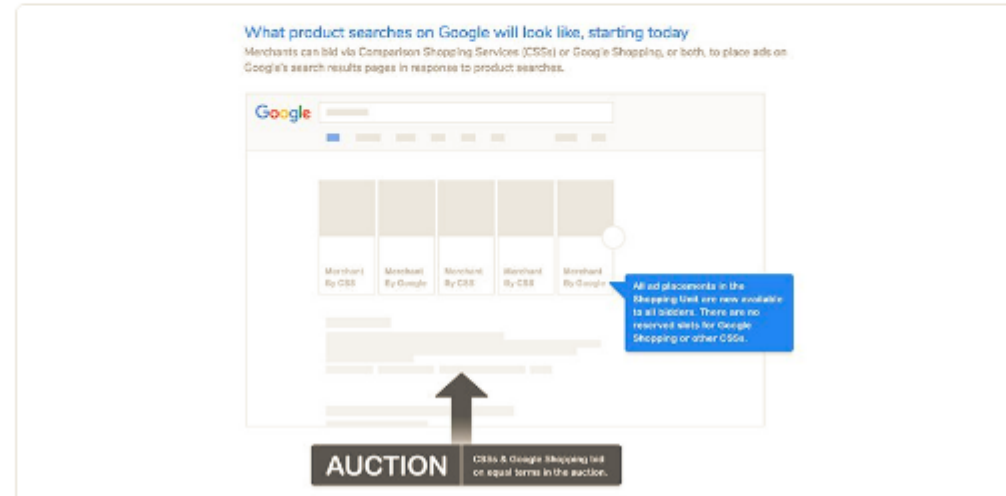
From 2008, Google began to implement in European markets a fundamental change in strategy to push its comparison shopping service. This strategy relied on Google's dominance in general internet search, instead of competition on the merits in comparison shopping markets:

- **Google has systematically given prominent placement to its own comparison shopping service:** when a consumer enters a query into the Google search engine in relation to which Google's comparison shopping service wants to show results, these are displayed at or near the top of the search results.
- **Google has demoted rival comparison shopping services in its search results:** rival comparison shopping services appear in Google's search results on the basis of Google's generic search algorithms. Google has included a number of criteria in these algorithms, as a result of which rival comparison shopping services are demoted. Evidence shows that even the most highly ranked rival service appears on average only on page four of Google's search results, and others appear even further down. Google's own comparison shopping service is not subject to Google's generic search algorithms, including such demotions.

As a result, Google's comparison shopping service is much more visible to consumers in Google's search results, whilst rival comparison shopping services are much less visible.



Now, Comparison Shopping Services can bid to place ads on equal terms with Google Shopping (3/3)



Summary

- Understand the law environment in your business
- Market power can result in inefficiency, and in practice it is often measured by market concentration indexes (e.g., HHI)
- Most countries have laws that enforce competition and reduce market power:
 - Most of *collusive behaviors* such as price fixing is per se illegal
 - *Mergers* between large companies are subject to review
 - *Exclusionary practices* are also under scrutiny
- When hard to introduce competition (e.g., natural monopoly), regulation is often needed
- US and European agencies claim jurisdiction even for companies headquartered elsewhere