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Identifying Cartels that Use the Illinois Brick Ruling as a Shield

Summary
“Identifying Cartels that Use the Illinois Brick Ruling as a Shield” looks at a landmark Supreme Court ruling, known as the Illinois Brick (IB) decision, which bars “indirect purchasers” from bringing antitrust suits against upstream product manufacturers. The research suggests the IB ruling not only reduced the costs associated with antitrust enforcement but has the potential to enable firms upstream in the supply chain to engage in collusion through the use of the wholesale price plus fixed fee structure (WPFF). WPFF allows manufacturers to pay a fixed fee to retailers, compensating them for stocking fewer, higher cost items than they would under perfect competition. The fee acts as a disincentive for retailers to level antitrust suits against manufacturers. And consumers, whose welfare is reduced by the collusion, are forbidden from bringing antitrust action by the IB ruling. The incentive to collude is greater when demand uncertainty for a product is higher, the number of retailers in the market is higher, and the number of manufacturers is lower. Public enforcers of antitrust law can use this knowledge to focus their monitoring efforts on firms embedded in the type of supply chain structures described here while using WPFF contracts.

Keywords
wholesale; price; plus; fixed; fee; antitrust; illinois brick; illinois; anti-competitive market; Samsung; Philips; Panasonic; Toshiba; Hitachi; Chunghwa; Supreme Court

Disciplines
Economic Policy | Other Economics | Public Policy

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Identifying Cartels that Use the Illinois Brick Ruling as a Shield

Nitish Jain, PhD; Sameer Hasija, PhD; and Serguei Netessine, PhD

In 2007, a civil suit was filed against a group of cathode ray tube (CRT) manufacturers—including Samsung Electronics Co. Ltd., Philips Electronics NA, Panasonic Corp., LG Electronics Inc., and Toshiba Corp.—for fixing prices over the 12-year period from March 1, 1995 to November 25, 2007.¹

After a tedious damage discovery process spanning several years, a group of plaintiffs (the so-called indirect purchaser plaintiffs) who had bought the overpriced CRTs through intermediaries reached settlements amounting to $576 million.² Although the California Northern District Court finally approved the settlements in 2016, it limited the monetary compensation to those states that had enacted “repealer” statutes in response to the U.S. Supreme Court judgment in a landmark case: Illinois Brick Co. v. Illinois (431 U.S. 720, 1977). The CRT case was just one of thousands of legal cases—involving products as diverse as credit cards, pharmaceutical drugs, and airline flights—affected by this Supreme Court ruling.

The Illinois Brick (IB) decision bars an indirect purchaser (e.g., consumer) from suing and recovering antitrust damages based on a “pass-on” claim charged by an upstream firm (e.g., manufacturer) that gets passed-on to them by an intermediary firm (e.g., retailer). The legal intuition behind the judgment is that indirect purchaser suits could transform “into massive multiparty litigations involving many distribution levels and including large classes of ultimate

SUMMARY

- The landmark Supreme Court ruling in Illinois Brick Co. v. Illinois (IB), which bars “indirect purchasers” from bringing antitrust suits against upstream product manufacturers, has greatly reduced the legal costs associated with antitrust enforcement.
- The ruling also might have another, lesser-known result: it has the potential to enable firms upstream in the supply chain to engage in collusion through the use of a particular contract structure—the wholesale price plus fixed fee structure (WPFF).
- The key component of the WPFF structure is a slotting fee, by which manufacturers agree to pay a fixed fee to retailers, compensating them for stocking fewer, higher cost items than they would under perfect competition. The fee acts as a disincentive for retailers to level antitrust suits against manufacturers. And consumers, whose welfare is reduced by the collusion, are forbidden from bringing antitrust action by the IB ruling.
- The research suggests that the incentive to collude is greater when demand uncertainty for a product is higher, the number of retailers in the market is higher, and the number of manufacturers is lower.
- Public enforcers of antitrust law can use this knowledge to focus their monitoring efforts on firms embedded in the type of supply chain structures described here while using WPFF contracts.
consumers remote from the defendant,” ultimately undermining the effectiveness of the suits, and resulting in an astronomical increase in administrative and legal costs. Hence the judgment prevents purchasers from suing unless they directly suffered the antitrust injury. Practically speaking, only retailers—and not consumers—can file antitrust claims against product manufacturers.

Since its inception, the IB ruling has attracted considerable debate among scholars and practitioners alike. Notably, the Department of Justice under President Trump has recently taken public positions both against and, later, in support of this law, signaling a desire to overturn and, shortly afterwards, uphold the practice at the federal level of prohibiting indirect purchaser suits. Over the last four decades, in fact, 26 U.S. states and Washington, D.C. have introduced varying forms of IB “repealers.” The other 24 states continue to support the IB ruling, recognizing its role in limiting administrative burdens (see Figure 1)—a role that is not insignificant. On average, the cost of administering a settlement fund (as a percentage of the settlement amount) associated with indirect purchaser suits is more than 75% higher (2.42 percentage points) than the cost for direct purchaser suits (5.63% vs. 3.21%).

Although the IB ruling reduced legal costs by precluding indirect purchaser suits, it has also enabled upstream firms to collude, simply through the use of pre-specified fixed payments to their intermediaries, as will be discussed below. These payments attenuate the incentives of their direct purchasers to file antitrust suits. In other words, the ruling weakens the role of private enforcers (i.e., firms, in their roles as direct purchasers) in curbing, via lawsuits, the anti-competitive behavior of other firms. As a result, public enforcers (i.e., government entities) must, via regulatory monitoring, step up their efforts. This raises a conundrum: how can the IB-related benefits of lower legal costs be retained without either significantly increasing public enforcement costs or suffering the adverse consequences of anti-competitive behavior in the market?

NOTES

2. The settlements comprised agreements with Samsung for $225 million, Philips for $175 million, Panasonic for $70 million, Toshiba for $30 million, Hitachi for $28 million, LG for $25 million, Chunghwa for $10 million, and a joint agreement with Thomson and TDA for $13.75 million.
5. Michael A. Lindsay, “Overview of State RPM,” American Bar Association, April 2017 (accessed 20 April 2018). Among these 26 states, four authorize their respective attorneys general (as parens patriae) to secure monetary relief for indirect damages, two allow the state (or any of its political subdivisions) to bring an action for indirect damages, and one state allows its courts to make additional orders or judgments as may be necessary to recover indirect damages.
8. In a recent report to the U.S. Congress, the Office of Management and Budget estimated the administrative cost of...
The solution to this conundrum may lie in improving the ability of public enforcers to identify the firms that are most likely to commit IB-enabled antitrust violations. Since the IB ruling weakens the incentives of private enforcers to act, we examine whether supply chain interactions can be used to improve public enforcement. We focus specifically on the procurement contracts between a manufacturer and its direct purchasers. A choice of contractual agreement between two supply chain members not only determines the supply chain's overall efficiency, but it is also instrumental in determining how the resulting profits are allocated. Market conditions may lead to a preferential ranking (by supply chain members) among contractual agreements that might otherwise seem to be equivalent.

Motivated by these observations, we compare the extent to which five common contractual structures facilitate anti-competitive (collusive) decision-making among firms. If these contract types do differ on that score, then public enforcers can enact simple rules that will improve their ability to select appropriate cases for investigation of antitrust violations and thereby reinforce the IB framework.

**DIGGING INTO THE DIFFERENT CONTRACTS**

We model a three-tier supply chain that consists of manufacturers, retailers (direct purchasers), and consumers (indirect purchasers) in the context of the IB ruling. For each of five different contractual structures—wholesale price, minimum order quantity, wholesale price plus fixed fee, revenue-sharing, and quantity discounts—we study the propensity of manufacturers to collude. We find that the five types of contracts are quite distinctive in their ability to facilitate collusion. Specifically, no collusion is feasible under the wholesale price, minimum order quantity, revenue-sharing, and quantity discount contracts. Although manufacturers could earn more profit by colluding under these four contract types, those structures would reduce retailer profits in comparison with a competitive decision-making scenario. Retailers would take legal action against any collusive behavior by manufacturers under such contracts and, as a result, manufacturers would not be able to sustain a cartel.

In contrast, the wholesale price plus fixed fee (WPFF) structure facilitates collusion via a side payment from manufacturers to retailers—sometimes referred to as a slotting fee—and it enables manufacturers not only to form but also to sustain a cartel. In the presence of the IB ruling, manufacturers are no longer indifferent towards the five contractual structures: there is a clear preference for WPFF in light of the IB ruling. The feature that any WPFF contract must have in order for collusion to be feasible is the use of slotting fees. Under a WPFF contract, manufacturers agree to pay a fixed fee to retailers (similar to the slotting fees observed in practice), compensating them for stocking fewer, higher cost items than they would under perfect competition. Slotting fees, in short, make retailers indifferent to manufacturer collusion because they make the retailers financially whole. (Absent the IB ruling, manufacturers set this fixed-fee term to zero.) Slotting fees have been a fixture since the mid-1980s. Many reasons have been advanced to explain their prevalence: demand signaling and screening, cost and risk sharing, product assortment coordination, the exercise of market power by retailers, and as a tool for manufacturers to gain competitive foreclosure. But we highlight an additional factor that encourages a

**NOTES**

3. We used the A.C. Nielsen Homescan panel data set (Albuquerque and Bronnenberg 2009, Hwang and Park 2015), which records both the food and non-food purchases of registered panelists.
supply chain's use of slotting fees, namely that firms may use them solely to enact collusive actions under the IB ruling. That said, manufacturers can cite the aforementioned reasons—however misleadingly—to justify the collusion-enabling fixed payments made to retailers.

Under collusion, manufacturers set a higher wholesale price than under competition. In terms of social welfare, we find that in the presence of the IB ruling, under the WPFF contract structure, both consumer surplus and total surplus are lower than under competition. In sum, we find that the IB ruling induces a preferential ranking, from the standpoint of manufacturers, among contract structures to which they would be indifferent in the absence of that ruling. Public enforcers of antitrust regulations can exploit this finding to improve case selection by focusing on supply chains that employ WPFF contracts with slotting fees.

**USING MARKET DEMAND TO TARGET ANTITRUST ENFORCEMENT**

The WPFF contract structure facilitates manufacturer collusion under all demand scenarios. In practice, however, manufacturers' incentives to collude will depend on the monetary gain that can be achieved through collusion. A higher gain implies that, under collusion, manufacturers not only have a higher potential to increase their individual profits, but also have a greater flexibility in using fixed payments to mitigate retailers' incentive towards filing an antitrust lawsuit. Thus, a better understanding of the factors that influence gains under collusion would enable antitrust public enforcers to effectively select product categories for monitoring anti-competitive actions.

To that end, we compiled data on all purchases made by a random sample of 10,000 customers over the five-year period 2004–2009. We found that the supply chain profit difference between the competition and collusion scenarios increases with respect to one variable in particular: demand uncertainty (i.e., the ability of a firm or industry to accurately predict consumer demand for its products or services). For high-demand uncertainty products, the profit difference ranges from 13.8% to 23.5%, while the profit difference for medium-demand uncertainty products ranges from 13.6% to 17.5% and that for low-demand uncertainty products ranges from 12.1% to 12.3%. Since manufacturers are more likely to collude in product categories for which demand uncertainty is higher, it follows that public enforcers can make the most efficient use of their limited resources by prioritizing cases of product categories characterized by high demand uncertainty over categories within which product demand is more certain. Some examples of each category are in Table 1.

The incentive for manufacturers to collude also increases with the number of retailers. Robust retailer competition leads to lower prices, lower supply chain profit, and lower profits for individual retailers. But by colluding, manufacturers are effectively able to control retailers’ supply to the market and, thus, drive the supply chain profits upwards. Hence the presence of a greater number of retailers makes it more likely that manufacturers will form a cartel using WPFF contracts. Finally, given the challenges involved in coordinating anticompetitive

**TABLE 1: DEMAND UNCERTAINTY—REPRESENTATIVE PRODUCTS**

<table>
<thead>
<tr>
<th>PRODUCT-TYPE</th>
<th>DEMAND UNCERTAINTY</th>
</tr>
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<tbody>
<tr>
<td><strong>Food and Beverages</strong></td>
<td>Low: Canning and Freezing Supplies, Ice, Fruit-Dried</td>
</tr>
<tr>
<td></td>
<td>Medium: Baby Food, Baked Goods, Frozen, Beer, Baking Mixes, Breakfast</td>
</tr>
<tr>
<td></td>
<td>High: Cereal, Butter and Margarine, Cheese, Carbonated Drinks, Fresh Produce, Ice Cream, Pet Food, Snacks, Yogurt</td>
</tr>
<tr>
<td><strong>Non-Food</strong></td>
<td>Low: Automotive, Photographic Supplies, Cosmetics, Charcoal and Logs, Disposable Diapers, Electronics-Records-Tapes, Men’s Toiletries</td>
</tr>
<tr>
<td></td>
<td>Medium: Batteries and Flashlights, Haircare, Oral Hygiene, Glassware, Hardware and Tools, Cold and Cough Remedies</td>
</tr>
<tr>
<td></td>
<td>High: Stationery and School Supplies, Paper Products</td>
</tr>
</tbody>
</table>

13 We found the supply chain profit difference between the competition and collusion scenarios increases with respect to one variable in particular: demand uncertainty (i.e., the ability of a firm or industry to accurately predict consumer demand for its products or services). For high-demand uncertainty products, the profit difference ranges from 13.8% to 23.5%, while the profit difference for medium-demand uncertainty products ranges from 13.6% to 17.5% and that for low-demand uncertainty products ranges from 12.1% to 12.3%.
behavior among larger numbers of firms, the incentive for manufacturers to collude decreases as the number of (and competition among) manufacturers increases.

**THE BIG TAKEAWAY FOR POLICYMAKERS**

The *Illinois Brick* ruling encourages anti-competitive actions among upstream firms. It can act as a legal shield for colluding firms if they can eliminate the threat of a lawsuit arising from their direct purchasers.

We can now profile the most likely offenders, however. Public enforcers of antitrust law can focus their monitoring efforts on firms embedded in supply chain structures that meet these criteria. Specifically, collusive manufacturer behavior, shielded by the IB ruling, is most likely to occur in cases where manufacturers use (1) wholesale price plus fixed fee contracts (supported by the use of slotting fees), in product categories marked by (2) high demand uncertainty, (3) high retailer competition, and (4) low manufacturer competition. This knowledge can lead to significant administrative cost savings for public enforcers given that WPFF contracts are widely prevalent in practice. Targeted regulatory monitoring, furthermore, could provide support for the *Illinois Brick* framework—namely its legal and administrative cost reduction benefits—going forward.
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