ANTITRUST ENFORCEMENT: LEVERAGING SUPPLY CHAIN INCENTIVES

BY NITISH JAIN & SERGUEI NETESSINE[1]

1 Nitish Jain, London Business School; Serguei Netessine, The Wharton Business School.

CPI ANTITRUST CHRONICLE APRIL 2022

Visit www.competitionpolicyinternational.com for access to these articles and more!

ANTITRUST ENFORCEMENT: LEVERAGING SUPPLY CHAIN INCENTIVES

By Nitish Jain & Serguei Netessine

Antitrust regulations are meant to promote fair competition in the market, but balancing administrative and legal costs with enforcement can be difficult when multi-layered supply chains are involved. The canonical example of this challenge is the landmark *Illinois Brick* ruling, which limits antitrust damages to only the direct purchasers of a product; for instance, consumers can file antitrust claims against colluding retailers but not against colluding manufacturers – only retailers can file claims against manufacturers. This controversial ruling was meant to reduce legal costs, but it can clearly lead to missed enforcement opportunities. In this paper we demonstrate how the Illinois Brick ruling interacts with contracts adopted in the supply chain and we show that otherwise equivalent supply chain arrangements can have markedly different effects. In particular, we find that wholesale price, minimum order quantity, revenue-sharing and quantity discount contracts lead retailers to take legal action against manufacturers in the event of collusive behavior. However, the wholesale price plus fixed fee contract structure (a.k.a. a two-part tariff or slotting fee contract) facilitates collusion among the manufacturers with retailers compensated by the fixed fee and not filing the antitrust litigation. We further demonstrate that collusion is more likely under high demand uncertainty and high competition at the retail level but is less likely under high competition at the manufacturer level. Our paper helps public enforcers identify market conditions conducive to antitrust violations.

I. INTRODUCTION

Supply chain structures are integral to firms' decisions, often enabling or deterring anticompetitive actions, and therefore they often attract attention of antitrust regulators. While many supply chain arrangements came under the scrutiny of lawmakers, perhaps one of most impactful and contentious antitrust regulation concerns the case of *Illinois Brick* (to be detailed shortly). In this short essay we show how policymakers can leverage nuanced understanding of supply chain decision making, which is primarily driven by self-interests of the trading firms, to strengthen enforcement of enacted regulations as it relates to *Illinois Brick*.

Consider the following recent antitrust suit: On February 14, 2020, KPH Healthcare Services, Inc. filed an antitrust case against Pfizer Inc, Mylan Pharmaceuticals and other related parties alleging anticompetitive actions by these parties to monopolize the epinephrine autoinjector market.[2] Specifically, KPH — an indirect buyer as a pharmacy retailer[3] — alleged that direct buyers of Mylan are leveraging a discounted EpiPen program to exclusively stock the autoinjector and, thus, dampening competitors' products. On July 26, 2021 U.S. District Judge Crabtree, in the District Court of Kansas, dismissed the antitrust suit citing a 1977 Supreme Court ruling *(Illinois Brick Co. v. Illinois)* that held that only direct purchasers, and not subsequent indirect purchasers, have antitrust standing to sue and recover damages.[4]

The case involving Pfizer-Mylan and KPH raises several questions. To begin with, is there a flip side of the Supreme Court ruling that debars indirect buyers to file an antitrust suit and recover damages? Put differently, though the ruling was passed with the good intent of reducing administrative and judicial cost, can this ruling in some instances encourage collusive action instead of deterring it? Another natural query is whether we can learn something from the nature of agreements between trading firms that can guide antitrust agencies' investigative efforts in identifying collusion, considering the *Illinois Brick* ruling? Along a similar line, can we identify products and market structures that are more (or less) prone to collusive action under this ruling? With the help of a supply-chain perspective one can start answering the above queries.

II. *ILLINOIS BRICK CO. v. ILLINOIS*: A RECAP

In 1977, the State of Illinois and 700 local governmental entities sued the brick manufacturers of concrete block for alleged antitrust violations.[5] The plaintiffs hired contractors for construction work. These contractors, in turn, engaged with the subcontractors, who purchased the concrete blocks from defendants – the manufacturers. In this transaction, thus, the plaintiffs were not direct purchasers of the defendants' product but were three levels down in the supply chain tiers. The U.S. Supreme Court made a landmark judgment in *Illinois Brick Co. v. Illinois* ("*IB*").[6]

The *IB* decision barred an indirect purchaser from suing and recovering antitrust damages based on a "pass-on" claim (i.e. on claims of supracompetitive prices, charged by the upstream firms, being passed on to them by the intermediary firms). The judgment noted that "whole new dimensions of complexity would be added to treble damages suits, undermining their effectiveness, if the use of pass-on theories were allowed."[7] The indirect purchaser suits could transform "into massive multiparty litigations involving many distribution levels and including large classes of ultimate consumers remote from the defendant,"[8] resulting in an astronomical increase in administrative and legal costs. Hence, the judgment barred purchasers from suing unless they directly suffered the antitrust injury.

2 https://www.govinfo.gov/content/pkg/USCOURTS-ksd-2_20-cv-02065/pdf/USCOURTS-ksd-2_20-cv-02065-0.pdf.

3 KPH operates both brick-and-mortar and online pharmacies.

4 Case No: 20-2065-DDC-TJJ.

5 *Ibid.* at 726-7

6 431 U.S. 720 (1977).

7 *Ibid.* p. 2.

8 *Ibid.*

Since its inception, the *IB* ruling has attracted considerable debate among scholars and practitioners alike. Strong arguments were advanced not only by the ruling's supporters (Litwin et al. 2010,[9] Price 2013[10]), but also by its opponents (Karon 2003[11]) — including a recent call from the Trump administration for its repeal.[12] Over the last 41 years, 28 U.S. states have introduced varying forms of IB repealers (see Figure 1). The other 22 states continue to support the IB ruling, recognizing its importance in limiting administrative burdens. 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 percent (2.42 percentage points) higher than the cost for direct purchaser suits (5.63 percent versus 3.21 percent).[13]

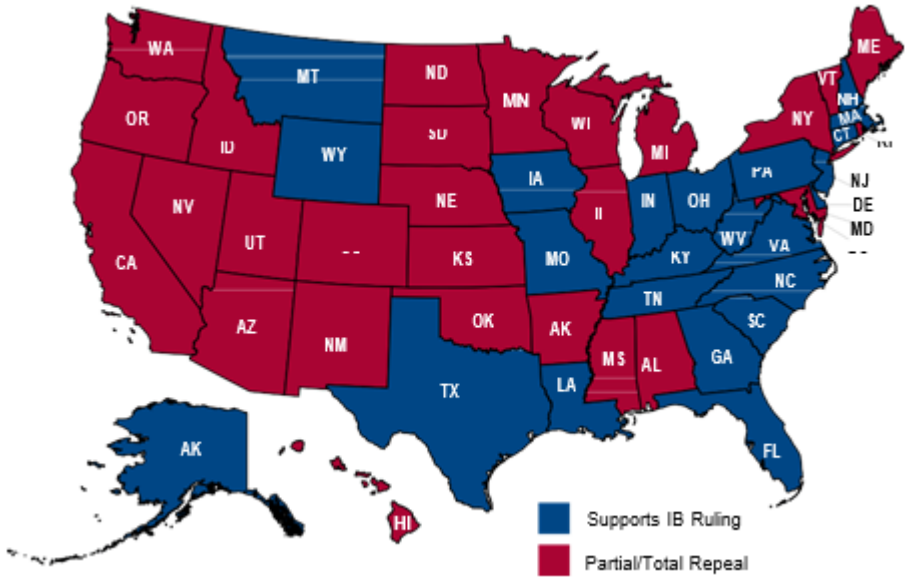

Figure 1. ***Illinois Brick*** **Ruling: States' Repealer Status as in 2020.**

III. THE CHINK IN THE ARMOR: THE THREAT TO THE BALANCE BEWEEN PRIVATE AND PUBLIC ENFORCERS.

Although the *IB* ruling reduces legal costs, at the same time it can enable firms to collude by attenuating incentives of its direct purchasers from filing antitrust suits (Schinkel et al. 2008).[14] In other words, the ruling weakens the role of private enforcers (i.e. firms) in curbing, via lawsuits, the anticompetitive behavior of other firms. As a result, public enforcers (i.e. government entities) must, via monitoring, step up their efforts. This raises a conundrum: how can the IB related benefits of lower legal costs be retained without a significant increase in public enforcement costs?

The challenge in balancing the role of public and private antitrust enforcers is not specific to the *IB* ruling. In the 2001 remarks of Mario Monti, European Commissioner for Competition Policy,[15] creating such a balance is a central tenet for framing antitrust reforms; such reform "should enable us to make the most of the complementary functions of the public and private enforcement of the competition rules." On the one hand, antitrust regulation that favors greater participation by private enforcers burdens the judicial system and thus, increases legal costs. On the

9 Litwin, *Time to Rebuild The Illinois Brick Wall*, Bloomberg Law Reports, Vol. 3, No. 19. Accessed December 18, 2020, https://bit.ly/2KAvcXC.

10 Price, G., *One Short Of a Load: Why an Illinois Brick Repealer Will Increase Private Antitrust Enforcement in Montana*, Montana Law Rev. 74(2).

11 Karon D.R., *Your Honor, Tear Down that Illinois Brick Wall— The National Movement Toward Indirect Purchaser Antitrust Standing and Consumer Justice*, Wm. Mitchell L. Rev. 30:1351 (2003).

12 Strimel & Ilter, *Trump DOJ's Next Target: The IB Indirect Purchaser Rule?*, The National Law Review, February 2, 2018.

13 Davis & Lande 2013, table 11, *Toward an empirical and theoretical assessment of private antitrust enforcement*, Seattle Univ. Law Rev. 36(3):1269.

14 Schinkel M, Tuinstra PJ, Rüggeberg J, *Illinois walls: How barring indirect purchaser suits facilitates collusion*, RAND J. Econom. 39(3):683–698.

15 See Monti, *Effective Private Enforcement of EC Antitrust Law*, Sixth EU Competition Law and Policy Workshop, June 2001 at https://ec.europa.eu/commission/presscorner/detail/en/SPEECH_01_258 (accessed April 20, 2018).

other hand, if the role of private enforcers is restricted, then policy makers may either need to increase the level of regulatory monitoring (and hence, bear higher administrative costs) or suffer the adverse consequences of anticompetitive behavior in the market.

IV. MITIGATING THE *IB* CONUNDRUM WITH SUPPLY CHAIN INSIGHTS

The solution to the *IB* 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, one can examine whether supply chain interactions can be used to improve public enforcement. Specifically, we recommend that the regulators focus on the procurement contracts between direct trading firms, for example, 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. Building on this line of inquiry, in Jain et al. (2021) we compare the extent to which five common contractual structures — wholesale price (WP), minimum order quantity ("MOQ"), wholesale price plus fixed fee ("WPFF"), revenue sharing ("RS"), and quantity discount ("QD") — facilitate anticompetitive (collusive) decision making among firms.[16,17] 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.

In Jain et al. (2021) 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 we study the propensity of manufacturers to collude. Jain et al. (2021) finds 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 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 I*B* ruling, manufacturers are no longer indifferent towards the five contractual structures: there is a clear preference for WPFF in light of the IB ruling. Under collusion, manufacturers set a higher wholesale price than under competition. In terms of social welfare, both consumer surplus and total surplus are lower as compared to a competitive scenario.

The feature that any WPFF contract must have 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 do not suffer as a result of it.

V. *IB* FACILITATED COLLUSION: THE ROLE OF PRODUCT CATEGORY AND MARKET STRUCTURE:

In Jain et al., we found that the manufacturers incentive to collude varies by the product category and market structure. Specifically, they found that the manufacturers' likelihood to collude is sensitive to a product's demand uncertainty (i.e. the ability of a firm or industry to accurately predict consumer demand for its products or services). Manufacturers are more likely to collude in product categories for which demand uncertainty is high. For instance, based on publicly available data, we identify food products like cereal, butter and margarine to have high demand uncertainty. Likewise, we identify non-food category products like stationery and school supplies.

With respect to the market structure, the incentive for manufacturers to collude 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. In contrast, given the challenges involved in coordinating anticompetitive behavior among larger numbers of firms, the incentive for manufacturers to collude decreases as the number of (and competition among) manufacturers increases.

16 Cachon GP, K˙ok AG, *Competing manufacturers in a retail supply chain: On contractual form and coordination.* Management Sci. 56(3):571–589, 2010.

17 Chen Y, Ozer O, *Supply chain contracts that prevent information leakage.* Management Sci. 65(12):5619–5650, 2019.

VI. ANTITRUST AND SUPPLY CHAINS: A FEW MORE EXAMPLES

A few more studies have illustrated the role of supply chain and operations management lens in encouraging or deterring firms' anticompetitive actions. For instance, Krishnan et al. (2010) show an example of business model innovation that can invoke anticompetitive actions from other members of the supply chain.[18] Specifically, the authors show that in response to a retailer's reduced sales efforts because of the supply chain innovation of "quick response" ("QR") fulfilment, the manufacturers might partake in anticompetitive actions — for instance, engaging in exclusivity terms when offering QR service. Likewise, Cho (2013)[19] and Yang et al. (2017)[20] demonstrate that the effect of mergers and multichannel distribution strategies on antitrust activities depends on the structure of a supply chain and the ensuing strategic decisions of its members.

VII. IN SUMMARY

Policymakers can enable more effective framing and enactment of antitrust framework if they understand the interplay between supply chain interactions and regulations. For example, the findings of Jain et al. (2021) illustrate that public enforcers can sharpen their case selection of business conduct, for monitoring of antitrust violations using the example of profiling the most likely offenders under the *IB* ruling.

18 Krishnan, H., Kapuscinski, R. & Butz, D.A., *Quick Response and Retailer Effort*, Management Sci. 56(6):962–977.

19 Cho, S.H., *Horizontal Mergers in Multitier Decentralized Supply Chains*. Management Sci. 60(2):356–379.

20 Yang Z., Hu, X., Gurnani H., & Guan H., *Multichannel Distribution Strategy: Selling to a Competing Buyer With Limited Supplier Capacity*, Management Sci. 64(5):2199–2218.

CPI COMPETITION POLICY™ INTERNATIONAL

CPI Subscriptions

CPI reaches more than 35,000 readers in over 150 countries every day. Our online library houses over 23,000 papers, articles and interviews.

Visit competitionpolicyinternational.com today to see our available plans and join CPI's global community of antitrust experts.