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Hub-and-spoke arrangements – Note by the United States

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United States

1. Overview

1. In United States antitrust law, a "hub and spoke conspiracy" is a term of art used to describe horizontal conspiracies that include participants who are in a vertical relationship with one or more of the competitor conspirators. The conspiracy is organized so that one level of a supply chain—a buyer or supplier—acts like the "hub" of a wheel. Vertical relationships up or down the supply chain act as the "spokes" and, most importantly, a horizontal agreement among the spokes acts as the "rim" of the wheel. The distinguishing feature of a hub and spoke conspiracy is the participation of the vertically aligned conspirator in the horizontal agreement. Hub and spoke conspiracies existed before they gained a name.[1]

2. A hub and spoke conspiracy is correctly characterized as an agreement to eliminate competition among the spokes. It is per se illegal under United States law for horizontal competitors to collude, whether on their own or through an intermediary, to set prices, divide markets, or rig bids. When the objective of the conspiracy is such a per se illegal restraint of trade, all participants in the conspiracy are held liable.[2]

3. There are many legitimate vertical arrangements, and firms often use similar restraints in their relationships with multiple upstream or downstream partners. Geographic restraints, exclusivity clauses, resale price maintenance (RPM), most favored nation clauses, loyalty discounts, and similar types of restraints can all be used for legitimate business purposes independent of forming a cartel or engaging in a conspiracy.[3]

4. But vertical agreements with these types of restraints may also be used for the organization of a cartel. From the participants' perspective, hub and spoke agreements can reduce the cost of coordination and monitoring by centralizing some of the cartel functions at the hub. The hub creates collusive efficiency by reducing the need for horizontal coordination—the vertical relationships established with the spokes facilitate or coordinate the main aspects of the collusion. In addition, vertical agreements entered to effectuate the horizontal agreement may be harder for authorities to detect. The vertical positions are usually clear and visible, and participants/conspirators rely on the actions of a single company – the hub – to enforce the vertical agreements by punishing spokes that do not comply with the cartel's policies and restrictions.[4] Because the hub has a legitimate

[1] The first antitrust case against a hub and spoke conspiracy never used the term hub and spoke, *see* Interstate Circuit v. U.S., 306 U.S. 208 (1939). A later loan fraud conspiracy case used the metaphor of a hub and spoke of a wheel, while finding that there was no actual "rim" or horizontal agreement. Kotteakos v. United States, 328 U.S. 750, 756 (1946) (finding that without horizontal agreements among the rim parties, there may be multiple conspiracies, but not one unifying conspiracy).

[2] United States v. Apple, 791 F.3d 290, 322 (2d Cir. 2015).

[3] Margaret C. Levenstein & Valerie Y. Suslow, *How Do Cartels Use Vertical Restraints*? *Reflections on Bork's* The Antitrust Paradox, 57 J.L. & ECON. S33, S42–44 (2014).

[4] Barak Orbach, *Hub-and-Spoke Conspiracies,* 15 ANTITRUST SOURCE no. 3, Apr. 2016 at 2, https://www.americanbar.org/content/dam/aba/publishing/antitrust_source/apr16_orbach_4_11f.authcheckdam.pdf.

business relationship with each spoke, communications between the hub and a spoke may not attract antitrust scrutiny. However, if the hub functions as a go-between for communications between or among the spokes that lead to an illegal horizontal agreement, those relationships will not preclude a finding that there is an illegal hub and spoke conspiracy.

5. From a United States enforcer's perspective, hub and spoke arrangements raise the prospect of either civil or criminal enforcement. The determination of whether a hub and spoke agreement will give rise to criminal liability depends on whether the objective of the agreement is to effectuate a naked restraint of trade (i.e. to fix prices or rig bids, to lower output, or to allocate customers or markets). If it is, the conspirators may be subject to criminal charges. If not, the Antitrust Division of the U.S. Department of Justice will not prosecute the conspiracy criminally under its discretionary policy to prosecute only per se illegal restraints. Standards of pleading and proof differ between civil and criminal contexts. The following sections focus on civil enforcement actions.

2. Proving a Hub and Spoke Agreement

6. A set of vertical relationships and resulting parallel conduct cannot alone establish a hub and spoke conspiracy. Instead, the competitors must agree amongst themselves to the restraint of trade, regardless of whether the competitors or the vertically related hub are the source of the idea.[5] The horizontal agreement among the spokes is the central element of the offense.

7. Liability for a hub and spoke arrangement rests not on whether there is "simply a vertical agreement between supplier and customer, but [also on] a horizontal agreement among competitors."[6] Calling it a hub and spoke agreement is therefore somewhat inaccurate. To prove a hub and spoke conspiracy, the horizontal agreement of the rim must also be proven. There must be "direct or circumstantial evidence that reasonably tends to prove" an agreement.[7]

8. "Rimless" wheels do not give rise to a hub and spoke conspiracy as that term is used in antitrust law. For example, in *In re Insurance Brokerage Antitrust Litigation,* the Third Circuit Court of Appeals upheld a lower court decision refusing to find a per se hub and spoke conspiracy when the plaintiff failed to prove any agreement between the insurers it alleged were a part of a broker conspiracy.[8] Merely pointing to similar contingent commission agreements that the insurers entered into with the broker was not enough to plausibly establish that there was a horizontal agreement among the issuers. Similarly, the Fourth Circuit has held that a "rimless wheel conspiracy" is not one single conspiracy, but

[5] Theatre Enters., Inc. v. Paramount Film Distrib. Corp., 346 U.S. 537, 541 (1954).

[6] NYNEX Corp. v. Discon Inc., 525 U.S. 128, 136 (1998) (citing Bus. Elects. Corp. v. Sharp Elecs. Corp., 485 U.S. 171, 734) (1988) (internal citations omitted).

[7] Monsanto Co. v. Spray-Rite Serv. Corp., 465 U.S. 752, 768 (1984).

[8] 618 F.3d 300, 327 (3d Cir. 2010).

a collection of vertical agreements with a common defendant.[9] As one court stated, "what is a wheel without a rim?"[10]

9. Absent direct evidence of horizontal agreement, it can be difficult to find evidence to show a connecting agreement between the horizontal competitors to form the rim. Courts generally look for circumstantial evidence—or "plus factors"—that may allow them to infer horizontal agreement. These are similar to the plus factors that are used more broadly in civil antitrust law to determine whether a plaintiff has sufficiently pleaded, or raised a genuine issue of material fact concerning the existence of, an antitrust conspiracy.[11] The absence of one or some of the factors, however, does not preclude bringing a case as a hub and spoke conspiracy. These factors include: the spokes acting against self-interest;[12] spokes knowing about agreements with other spokes and expecting reciprocity;[13] abrupt changes to business practices;[14] bid rigging among spokes;[15] communication among spokes;[16] or communications from hubs to spokes regarding other spokes' intentions.[17]

10. These plus factors are only used when there is insufficient direct evidence of a horizontal agreement among the spokes. As previously stated, the vertical agreement is often the most visible; however, if there is direct evidence of an agreement between spokes/horizontal competitors, with the hub acting as a conduit for that agreement, then the facts would be looked at as in any other cartel or conspiracy case. Without that direct evidence, courts must turn to plus factors to reasonably infer that there is a horizontal agreement forming a rim among the spokes. The following cases illustrate what courts have looked to when inferring a horizontal agreement.

3. Case History

11. The initial antitrust hub and spoke case was *Interstate Circuit v. United States* in 1939.[18] A dominant movie theater operator sent demand letters to eight first run movie

[9] Dickson v. Microsoft Corp., 309 F.3d 193 (4th Cir. 2002).

[10] Guitar Center, 798 F. 3d 1186, 1192 n.3 (9th Cir. 2015).

[11] Bell Atl. Corp. v. Twombly, 550 U.S. 544, 557 (2007) (requiring that when allegations of parallel conduct are set out to make a conspiracy claim, plaintiffs must plead enough nonconclusory facts to place that parallel conduct "in a context that raises a suggestion of a preceding agreement"); Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 588 (1986)(To survive a motion for summary judgment or for a directed verdict, a plaintiff seeking damages for a violation of § 1 must present evidence "that tends to exclude the possibility" that the alleged conspirators acted independently).

[12] Toys "R" Us, Inc v. FTC, 221 F. 3d 928 (7th Cir. 2000).

[13] United States v. Apple, 791 F.3d 290 (2d Cir. 2015).

[14] Interstate Circuit v. United States, 306 U.S. 208 (1939).

[15] *In re* Insurance Brokerage Antitrust Litigation, 618 F.3d 300, 336 (3d Cir. 2010).

[16] United States v. General Motors Corp., 384 U.S. 127 (1966).

[17] Toys "R" Us, Inc v. FTC, 221 F. 3d 928 (7th Cir. 2000).

[18] 306 U.S. 208 (1939).

distributors setting a minimum price for first run movies and a prohibition on evening double features. The purpose of this agreement was to protect the operator from competition with second-run theatres.

12. Though there was no direct evidence of communication between the distributors, all eight were copied on the demand letter. The Supreme Court found that the fact that all distributors were copied on the demand letter, combined with the substantial unanimity of the distributors adopting the restrictions demanded, was enough to support the "inference that the distributors acted in concert and in common agreement."[19] Each distributor was aware that any competitor that did not adopt the restrictions stood to lose business and that all distributors stood to gain substantial profits if each complied. The Court found it would "tax[] credulity" to believe that the distributors would all take a radical departure from their previous business practices and create a drastic increase in prices without some understanding that all were going to join in the conspiracy.[20]

13. Though the Court never used the term "hub and spoke" in *Interstate*, it is the landmark decision for such conspiracies. Today, courts interpret *Interstate* to say that a conspiracy may be inferred where: (1) two or more competitors enter into vertical agreements with a single upstream or downstream firm; and (2) absent express or implied agreement amongst the competitors all to enter parallel vertical agreements with the firm, it would be economically irrational for an individual competitor to agree to the vertical restraint.[21] The Supreme Court has not overruled *Interstate*, but courts have disregarded some of the broader language of the opinion. In particular, the language that "an unlawful conspiracy may be formed without . . . agreement on part of the conspirators"[22] is "intriguing, but potentially misleading."[23] Instead, the decision is interpreted more narrowly.

14. After *Interstate*, the Supreme Court examined a series of other hub and spoke conspiracies, including *United States v. General Motors Corporation*.[24] At the request of dealers, GM facilitated a horizontal conspiracy among rival dealers not to do business with discounters. Dealers coordinated a letter writing campaign to GM and met to discuss the ongoing problem of discounters. GM secured vertical agreements with the dealers including a manufacturer RPM and helped in enforcing the RPM against price cutters. The Court rejected the defendants' claims that the arrangement was merely a set of vertical agreements, pointing to the coordination between the dealers to enlist GM's assistance. The Court emphasized that GM did not "confine its activities to the contractual boundaries of its relationships with the individual dealers."[25] Instead, GM advised dealers that they planned on discussing the issue with other dealers and met with the dealers that refused to comply. The GM regional manager told dealers "I can tell them to stop something. If they

[19] *Id.* at 225.

[20] *Id.* at 223.

[21] United States v. Apple, 791 F.3d 290, 319–20 (2d Cir. 2015).

[22] Interstate Circuit v. United States, 306 U.S. 208, 277 (1939).

[23] *See* VI PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶1426 (3d ed. 2010).

[24] 384 U.S. 127 (1966).

[25] *Id.* at 143.

don't do it . . . I can knock their teeth down their throats."[26] Some dealers waited to see that other dealers were complying before they agreed to enter into the vertical agreement. The actions of the dealers led to a clear inference of a rim around the vertical relationships.

15. The Court also rejected the asserted justification for the conspiracy. The conspiracy allegedly addressed the issue of free riders—franchise dealers were required to service new cars, regardless of where they were purchased, and discounters did not offer those services. The case emphasized that even if there were potentially procompetitive effects of the vertical agreement used to enforce the horizontal agreement, the per se illegality of the horizontal agreement rendered them irrelevant.[27]

16. *United States v. All Star Industries*, a criminal bid rigging case, also involved a hub and spoke conspiracy between a specialty pipe distributor and several manufacturers.[28] Here, the distributor, Texas Pipe Bending Company ("TPB"), was the hub of the conspiracy. With a director acting as the "quarterback" of the deal, TPB would reach out to six different pipe suppliers when awarding a fabrication job on a cost-plus basis and direct the suppliers to rig the bids, dictating the prices it expected to receive. TPB would then pass the artificially high winning bids along to end users with the agreed upon mark up. Though the suppliers emphasized the vertical component of the conspiracy, the court found that they conspired to rig their bids with TPB acting as the conduit to pass on the rigged bids and upheld the convictions. The court found that even though the hub conceptualized the conspiracy, orchestrated it by bringing the distributors together, and collected most of the money, the suppliers were still liable for conspiring with each other. They were informed by TPB that other suppliers were cooperating and took efforts to cover up their bid rigging by making their bids look competitive. This was enough evidence to infer a horizontal agreement among the suppliers.

17. Not every attempt to use plus factors to allege or prove a rim between spokes has been successful. In *In re Musical Instruments and Equipment Antitrust Litigation (Guitar Center)*, the Ninth Circuit upheld a lower court decision that the plaintiffs had failed to plausibly state a claim under *Twombly* pleading standards showing a horizontal agreement.[29] The plaintiffs did not have any direct evidence of communication among the guitar manufacturer spokes, and the court did not find it plausible that the parallel conduct along with plus factors amounted to a conspiracy. Guitar Center, the largest seller of musical instruments in the United States, pressured the five leading guitar manufacturers to set the lowest prices at which any retailer could advertise its products (a minimum-advertised-price or MAP). The policy was supported by the musical instrument manufacturers trade association, which had negotiated and then abandoned an industry wide MAP following a consent decree with the FTC.[30] Guitar Center created its MAP policy shortly thereafter.

[26] *Id.* at 136.

[27] *Id.* at 148.

[28] 962 F.2d 465 (5th Cir. 1992). See also Henderson v. United States, 568 U.S. 266, 279 (2013).

[29] 798 F.3d 1186 (9th Cir 2015).

[30] *In re* Nat'l Ass'n of Music Merchants, Inc., No. 1-0203, 2009 WL 641814 (FTC Mar. 4, 2009).

18. While not disregarding the possibility of hub and spoke conspiracies, the court maintained that plaintiffs did not plausibly show a horizontal conspiracy.[31] Instead, the court found the complaint actually showed "ample independent business reasons" for each of the manufacturers to adopt MAP policies that were profitable for Guitar Center. If there were reasonable reasons to enter into the MAP policy without assurance that each other manufacturer would enter into similar agreements, then there was no evidence of collusion.

19. *Dickson v. Microsoft Corporation* also shows the need to prove the rim connecting the spokes of the conspiracy to prove a hub and spoke.[32] A district court found that a "rimless wheel antitrust conspiracy theory" was not actionable; the ruling was upheld by the Fourth Circuit. The plaintiff argued that the distribution agreements between Microsoft and three original equipment manufacturers (OEMs) were a conspiracy because of similar licensing agreements. The court did not see any proof of an agreement among the OEMs, and the Fourth Circuit repeated that there cannot be rimless wheel conspiracies in antitrust law.

4. Agency Enforcement

20. The DOJ recently won a hub and spoke conspiracy case against Apple and five of the six major book publishers (the Big Six).[33] Following the introduction of Amazon's Kindle, a portable electronic device that allows for purchase, download, and reading of ebooks, in 2007, the market for ebooks expanded rapidly. By 2009, Amazon was responsible for 90% of all ebook sales. To the chagrin of the Big Six, Amazon departed from the publishers' traditional business model for new releases and *New York Times* bestsellers—rather than a more expensive version on initial release, Amazon set the price at $9.99. This was viewed as a threat to the publishers' business model, and executives from the Big Six communicated the need to act together, meeting roughly once a quarter to discuss strategies to raise Amazon's wholesale pricing.

21. In 2009, Apple saw the opportunity to enter into the ebook market, creating an ebook marketplace (iBookstore) for the iPad. After meeting with industry leaders and realizing the Big Six's willingness to raise Amazon's pricing, Apple approached and enlisted five of the six to enter into agency distribution agreements with a most favored nation (MFN) clause. The arrangement allowed the publishers to set prices within committed caps of $14.99, $12.99, and $9.99, where the MFN clause required the publishers to change their relationship with other retailers—this would effectively eliminate retail price competition with Amazon. Apple then used its close relationship with the Big Six publishers to have each enlist the others to participate in the scheme. Apple kept each of the publishers, who were in close communication with each other,[34] up to date about who was "on board."[35] After the deal, price of ebooks increased 23.9%. The DOJ filed civil antitrust actions against both Apple and the five publishers who participated in

[31] Guitar Center, 798 F.3d at 1192.

[32] 309 F.3d 193 (4th Cir. 2002).

[33] United States v. Apple, 791 F.3d 290 (2d Cir. 2015).

[34] The district court found that in three days while making the decision, the CEOs of the Big Six called each other 34 times. *Id.* at 325 n.7.

[35] *Id*. at 325.

the arrangement, alleging that the price caps were in fact horizontally agreed upon prices that had been facilitated by Apple's vertical agreements with the publishers.

22. The Second Circuit upheld the district court's finding of a hub and spoke conspiracy to set prices. The court rejected Apple's argument that the evidence was ambiguous and therefore insufficient to support the inference of a conspiracy. Instead, the court found that the evidence and the relationship between the publishers unambiguously demonstrated that Apple consciously orchestrated a conspiracy among the publishers to set prices.[36] The court found both that the publishers colluded among themselves and that Apple helped to organize that collusion. Both the agreements and the intention of the publishers and Apple to use those agreements to raise ebook prices were "useful evidence" to prove a horizontal cartel.[37]

23. Though the Second Circuit found it was appropriate to infer a horizontal conspiracy from vertical coordination in this case, it was split on the applicability of per se rules to hub and spoke conspiracies. The two-judge majority analyzed the issue as a per se violation and found, under that standard, Apple was liable.[38] Additionally, writing only for herself, Judge Livingston analyzed the case under the rule of reason in the alternative and found Apple also liable under that standard. Judge Lohier's concurrence joined for the per se analysis, but rejected any rule of reason analysis.[39] In Judge Jacobs' dissent, he stated that the vertical agreements between Apple and the publishers should be analyzed under a rule of reason analysis and that Apple would not be liable for any antitrust violations if that were the case.[40]

24. The FTC concluded that Toys "R" Us (TRU) acted as the coordinator of a horizontal agreement among a number of toy manufacturers to restrict sales to TRU's competitors, like Costco and other discount club stores.[41] TRU was the largest toy retailer in the United States at the time. In response to the rise of competition from low-price discount clubs, TRU demanded that its toy manufacturers stop supplying the clubs. The Commission found (1) that TRU facilitated a per se illegal horizontal boycott; (2) the boycott was also illegal under a full rule of reason analysis; (3) the vertical agreements between TRU and the manufacturers were per se violations of Section 1 of the Sherman Act.[42] Though TRU held considerable market power, the key toy manufacturers were unwilling to refuse to sell, or otherwise discriminate, against the clubs without assurances that the other manufacturers would follow suit.

25. TRU argued that the series of separate, parallel vertical agreements did not facilitate a horizontal conspiracy. The Seventh Circuit disagreed, and upheld the Commission's

[36] *Id.* at 328.

[37] *Id*. at 324 ("When used for such a purpose, the vertical agreement may be 'useful evidence . . . to prove the existence of a horizontal cartel.'") (quoting Leegin Creative Leather Prods. v. PSKS, Inc., 551 U.S. 877 (2007)).

[38] *Id.* at 333.

[39] *Id.* at 340 (J. Lohier, concurring).

[40] *Id.* at 352 (J. Jacobs, dissenting).

[41] Toys "R" Us, Inc v. FTC, 221 F. 3d 928 (7th Cir. 2000).

[42] *Id.* at 934 (quoting the FTC opinion).

findings.[43] Calling the case a modern-day equivalent to the old *Interstate Circuit* decision, the court affirmed the conspiracy was per se illegal. The court found that there was enough evidence to infer a horizontal agreement among the manufacturers. Not only was the boycott an abrupt shift from past practice, but there was evidence that the manufacturers wanted to reduce their reliance on TRU. It was suspicious that these manufactures were depriving themselves of a profitable sales outlet, especially as the manufacturers were unwilling to enter into agreements without the assurance that other manufacturers were joining. TRU executives communicated the message "I'll stop if they stop" from one manufacturer to another, facilitating the formation of the conspiracy.

5. Conclusion

26. Hub and spoke conspiracies have been recognized in American antitrust jurisprudence for eighty years. The basics of the conspiracy are well established. The conspiracy requires a central hub participating in or orchestrating a horizontal agreement among the spokes (the rim), often by coordinating vertical restraints to up-or-downstream spokes. To enforce the antitrust laws against a hub and spoke conspiracy, the horizontal agreement must be proven. This can be done through direct or circumstantial evidence of agreement, such as inferences from the vertical arrangements and the circumstances under which those arrangements were entered.

[43] *Id.*