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ALGORITHMIC PRICING AND THE COMPETITION ACT: THE HUB-AND-SPOKE PROBLEM

(Nandni Kamal)

Two sellers sharing the same shopping platform, two airlines between the same cities, two cab drivers between the same city. No one has ever talked to the other. But they both go up and down; week after week they are close together in price. This would have seemed a cartel waiting to be found a decade ago. Today it could just be two pieces of software operating as they were designed to function. The hub-and-spoke problem is at the distance between collusive conduct and conduct the law can actually reach.

THE HUB, THE SPOKES, AND THE MISSING RIM

Competition law in India is based on the concept of "agreement". Section 3(1) of the Competition Act 2002 prevents agreements that have an appreciable adverse effect on competition,[1] and Section 3(3) treats horizontal agreements[2] between competitors, price fixing[3] among them, as presumptively harmful. The statutory definition of an agreement is purposely general. It includes any agreement, understanding or action in concert, regardless whether it has been put in writing or is legally binding.[4]

This tidy picture is disturbed by a hub-and-spoke configuration. Think of a wheel, the players are the spokes, and do not play directly with each other. Each of these, on the other hand, deals with a common third party, the hub, usually a supplier, a distributor or a platform. The hub passes commercially sensitive information between them, or steers them in the same direction without them knowing. The connection between the spokes is the rim according to lawyers.[5] If there were no such rim and no mutual understanding

[1] The Competition Act, 2002, No. 12, Acts of Parliament, 2003, § 3(1) (India).
[2] The Competition Act, 2002, No. 12, Acts of Parliament, 2003, § 3(3). (India).
[3] The Competition Act, 2002, No. 12, Acts of Parliament, 2003, § 3(3) (a).(India).
[4] he Competition Act, 2002, No. 12, Acts of Parliament, 2003, § 2(b). (India).
[5] Michal S. Gal, *Algorithms as Illegal Agreements*, 34 BERKELEY TECH. L.J. 67 (2019), https://btlj.org/data/articles2019/34_1/02_Gal_Web.pdf.

between the participants themselves, then what is generated would be a bundle of vertical relationships, not a cartel.

WHERE THE CAB AGGREGATOR CASE FALTERED

That's just where the lawsuit against cab aggregators fell apart. In *Samir Agrawal v CCI*, the informant wanted to state that Ola and Uber were hubs that had set prices for thousands of independent drivers, the spokes.[6] The Supreme Court, which held the same view as the Competition Commission of India and the appellate tribunal, disagreed. The drivers had been unable to reach any agreement with each other.[7] They used the app each on their own terms, both were free to shoot down a competitor, and the algorithm was setting fares based on the demand, time of day and traffic and not on any defined plan. If you did not have a rim, you wouldn't have a cartel.

WHEN THE HUB IS AN ALGORITHM

Samir Agrawal was settled, but a harsher one remained. What if the hub wasn't a person, but code? Algorithms make hub-and-spoke coordination both easier to achieve and harder to prove. Easier, since competitors that feed their prices through the same third party pricing tool can end up with the same result without having to pick up the phone at all. More difficult, as there may be no email, no meeting or no guide to point to, just one program responding to another.

This is something that other jurisdictions have already faced. In the case of *United States v. Apple*, the United States courts discovered a textbook hub-and-spoke scheme, in which Apple was at the middle of a plan among publishers to increase e-book prices.[8] In Eturas, the Court of Justice of the European Union reached a more far-reaching decision, stating that the travel agents were deemed to have entered into a concerted practice when the online travel agency (OTA) they used informed them of the cap on their discounts and they took no steps to withdraw from it.[9] But the concern for India goes deeper. Each algorithm can independently self-learn to place inflated prices without any human telling them to collude.[10] The conduct, if there is any, may slip outside of Section 3, if the law requires an agreement, and there is no agreement per se.[11]

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[6] Samir Agrawal v. CCI, (2021) 3 SCC 136 (India).
[7] *Id.*; *see also Samir Agrawal v. ANI Techs. Pvt. Ltd.*, 2020 SCC OnLine NCLAT 81 (India).
[8] United States v. Apple, Inc., 791 F.3d 290 (2d Cir. 2015).
[9] Case C-74/14, *Eturas UAB v. Lietuvos Respublikos konkurencijos taryba*, ECLI:EU:C:2016:42 (Jan. 21, 2016).
[10] Emilio Calvano et al., *Artificial Intelligence, Algorithmic Pricing, and Collusion*, 110 AM. ECON. REV. 3267 (2020), https://www.aeaweb.org/articles?id=10.1257/aer.20190623.
[11] Salil K. Mehra, *Antitrust and the Robo-Seller: Competition in the Time of Algorithms*, 100 MINN. L. REV. 1323 (2016), https://scholarship.law.umn.edu/cgi/viewcontent.cgi?article=1203&context=mlr.

WHAT THE 2023 AMENDMENT FIXED, AND WHAT IT LEFT UNTOUCHED

Parliament has sought to fill some of this void. This proviso was inserted into Section 3(3) of the Competition (Amendment) Act, 2023, and now explicitly provides a statutory footing for hub-and-spoke cartels.[12] An enterprise which does not engage in business activities of a similar or identical nature with the enterprises involved in the horizontal agreement, a facilitator, platform, intermediary or agent, can now be considered to be a party to the horizontal agreement if it participates or wishes to participate in furthering the agreement. The hub can be trapped even if it does not sell any of the goods sold by the spokes. That's a promising development. A price-coordinating platform sitting at the centre of commerce, much earlier, attributed itself to being a mere intermediary. Its facilitation has been moved into the cartel provision, and the presumption of harm that goes with Section 3(3) goes with it.

But what the amendment does NOT do? It expands the scope of those that can enter into an agreement. It does not waive the need for an agreement. The rim issue remains. There may be nothing left for the proviso to tie on if the spokes don't reach an agreement, or if their prices are in line only because the same algorithms are reading the same data. The amendment arrives at the “knowing facilitator”. It doesn't obviously get to the autonomous machine.

THE ROAD AHEAD

Where does this leave the regulator? It is the Commission's job to become acquainted with economic and technical evidence, rather than waiting for documents that never would be produced. The creation of the rim in a digital market could involve demonstrating that companies (or their agents) knew that a common tool would synchronise prices, or that they chose to use it precisely for this reason.[13] Most difficult of all, however, will be those few instances where pricing software learns to work with no one telling it so, and a law based on the word agreement will have to be able to keep pace with markets increasingly working without one. At this time, the "hub-and-spoke" issue is not so much a loophole as a warning. The platform has been caught up with the law. It hasn't yet updated to the algorithm.

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[12] The Competition (Amendment) Act, 2023, No. 9 of 2023, § 3 (India).

[13] Ariel Ezrachi & Maurice E. Stucke, *Virtual Competition: The Promise and Perils of the Algorithm-Driven Economy*, (Harvard Univ. Press 2016), https://www.researchgate.net/publication/362293102_Virtual_Competition_The_Promise_and_Perils_of_the_Algorithm-Driven_Economy.