
CARTELS IN THE ALGORITHMIC AGE: INDIA'S LEGAL FRAMEWORK FOR HUB-AND-SPOKE COLLUSION

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ABSTRACT

Hub-and-spoke cartels represent a complex form of anti-competitive conduct where coordination occurs between competitors through a common intermediary. These arrangements often blur the line between horizontal and vertical agreements, making detection and enforcement difficult. Indian competition law does not expressly recognise hub-and-spoke cartels, but the Competition Commission of India has examined such conduct under the broader framework of Section 3 of the Competition Act, 2002. This article explores how the Commission and appellate bodies have approached these cases, especially in markets where pricing is influenced by platforms or algorithms. It also considers whether current legal standards are equipped to address tacit coordination in digital contexts. Decisions from the United States, European Union, and United Kingdom are discussed to highlight possible approaches that Indian enforcement authorities could adopt. The article argues that a more structured framework is needed to assess indirect collusion, particularly when direct evidence is unavailable. It concludes that doctrinal clarity, supported by regulatory guidance and technical expertise, will help ensure that competition law remains effective in addressing evolving forms of market coordination.

Introduction

As markets evolve and business models grow more complex, the structure of anti-competitive arrangements has become increasingly layered. Traditional cartel arrangements, where direct competitors enter into explicit agreements, are no longer the only concern. In recent years, regulatory authorities have observed a shift towards more sophisticated arrangements, particularly those involving indirect coordination through intermediaries. One such structure is the hub-and-spoke cartel, which enables competitors to coordinate their actions through a common platform or distributor, without engaging in direct communication. This arrangement poses a unique challenge to enforcement agencies, both in terms of detection and legal classification.¹

Under Indian law, Section 3 of the Competition Act, 2002 (**the “Act”**) prohibits anti-competitive agreements.² However, it does not expressly address the issue of indirect coordination. Indian courts and the Competition Commission of India (**“CCI”**) have attempted to fill this interpretive gap by applying existing legal provisions to emerging forms of collusion. The CCI’s investigations into the tyre and cement industries, as well as more recent scrutiny of digital platforms such as Ola and Uber, reflect this development.³ While these efforts are commendable, they highlight the difficulties involved in proving concerted conduct in cases where evidence of direct communication is absent.⁴

In international practice, jurisdictions such as the United States and the European Union have adopted different approaches to address similar concerns. Their enforcement strategies rely on a combination of circumstantial evidence, structural market analysis, and economic reasoning.⁵ These comparative experiences offer useful insights for Indian enforcement, particularly in sectors where digital platforms and algorithmic pricing are dominant. As the Indian market continues to integrate with global technological and commercial trends, there is an increasing need to clarify the legal treatment of hub-and-spoke arrangements. This article examines the nature of such collusion, evaluates the Indian legal framework in light of recent case law, and

¹ Richard Whish & David Bailey, *Competition Law* 538–42 (10th ed. 2021).

² The Competition Act, No. 12 of 2003, § 3, India Code (2003).

³ In re Alleged Cartelisation in the Tyre Industry, Case No. 29 of 2011, Competition Commission of India (Feb. 1, 2022); In re Cab Aggregator Platforms, Case No. 06 of 2017, Competition Commission of India (Nov. 6, 2018).

⁴ Avantika Tewari, The Challenges of Proving Tacit Collusion in India’s Platform Economy, 63(1) *Indian Journal of Law & Technology* 77, 82 (2022).

⁵ OECD, *Algorithms and Collusion: Competition Policy in the Digital Age* 6–9 (2017), <https://www.oecd.org/competition/algorithms-collusion-competition-policy-in-the-digital-age.htm>.

suggests reforms that can equip Indian authorities to address this evolving challenge more effectively.

Understanding Hub-and-Spoke Collusion

Anti-competitive agreements typically involve direct communication among competitors who agree to fix prices, allocate markets, or limit production. These horizontal agreements are explicitly covered under the Act.⁶ However, in many modern markets, especially where manufacturers or sellers operate through shared intermediaries or platforms, coordination does not necessarily occur through direct contact. Instead, it may take place indirectly through a central entity that facilitates alignment across otherwise competing firms. This form of coordination is commonly referred to as hub-and-spoke collusion.⁷

In a typical hub-and-spoke arrangement, the “hub” refers to a central player such as a distributor, supplier, or platform that interacts with multiple competitors, the “spokes,” who are themselves horizontally related. The hub facilitates the transmission of sensitive information between the spokes, either explicitly or implicitly, and helps maintain anti-competitive parity across the market. What distinguishes this structure from legitimate vertical agreements is the element of concerted action across the horizontal level, often established through the hub’s role in aligning commercial conduct.⁸

The challenge in proving hub-and-spoke collusion lies in establishing a “rim,” which refers to evidence that the spokes were aware of each other’s participation and intended to act in concert.⁹ This distinguishes a cartel from a series of independent vertical arrangements. Courts in various jurisdictions have held that the existence of a hub is not sufficient on its own. What is required is proof that the horizontal players knew that the information being shared was part of a broader effort to align market behaviour, and that they acted in a manner consistent with such knowledge.¹⁰

Such arrangements have been recognised and penalised in several jurisdictions. For instance, the U.S. Court of Appeals held that Apple had facilitated a horizontal price-fixing agreement

⁶ The Competition Act, No. 12 of 2003, § 3(3), India Code (2003).

⁷ Alison Jones, Hub-and-Spoke Conspiracies, in *Research Handbook on Cartels* 99, 101 (Peter Whelan ed., 2021).

⁸ Organisation for Economic Co-operation and Development (OECD), *Hub-and-Spoke Arrangements* 4–6 (2019), <https://www.oecd.org/competition/hub-and-spoke-arrangements.htm>.

⁹ Richard Whish & David Bailey, *Competition Law* 588–89 (10th ed. 2021).

¹⁰ Jonathan Faull et al., *The EU Law of Competition* 872–75 (3d ed. 2014).

among e-book publishers through a series of vertical contracts.¹¹ Similarly, in the UK, tobacco manufacturers and retailers were penalised for engaging in hub-and-spoke collusion through pricing communication channels.¹² These cases underscore the importance of evaluating both the structure and effect of the arrangement to determine its anti-competitive nature.

In India, while the Competition Act does not specifically refer to hub-and-spoke cartels, the CCI has interpreted Section 3 broadly enough to encompass such arrangements.¹³ However, the absence of explicit statutory recognition and the difficulties in proving the requisite intent and knowledge make enforcement in this area a complex task. These challenges become even more pronounced in digital markets, where communication is often mediated by algorithms and pricing engines rather than human decision-makers.

Indian Legal Framework

The Indian legal system does not explicitly define hub-and-spoke cartels. However, the structure and interpretation of Section 3 of the Act allow for their inclusion within the broader category of anti-competitive agreements.¹⁴ Section 3(3) prohibits agreements between enterprises engaged in identical or similar trade that directly or indirectly determine purchase or sale prices, limit supply, or share markets. Section 3(4) addresses vertical agreements, including tie-in arrangements, exclusive supply, and resale price maintenance. While the statutory text distinguishes between horizontal and vertical agreements, the Act does not address hybrid arrangements that combine both forms.

The CCI has adopted a purposive interpretation of these provisions in several enforcement actions. In cases involving trade associations or platform intermediaries, the Commission has analysed whether horizontal competitors indirectly coordinated their commercial conduct through a central actor.¹⁵ In *In re Alleged Cartelisation in the Tyre Industry*, the CCI held that five tyre manufacturers had shared sensitive pricing information through the Automotive Tyre Manufacturers' Association. Although no direct horizontal agreement was proven, the

¹¹ *United States v. Apple Inc.*, 791 F.3d 290, 314–15 (2d Cir. 2015).

¹² *Competition & Markets Authority, Decision in the Tobacco Retail Pricing Case* ¶ 52 (2010), <https://assets.publishing.service.gov.uk/media/555de2d2ed915d7ae200003d/tobacco-decision.pdf>.

¹³ *In re Alleged Cartelisation in the Tyre Industry*, Case No. 29 of 2011, Competition Commission of India (Feb. 1, 2022).

¹⁴ The Competition Act, No. 12 of 2003, §§ 3(3)–3(4), India Code (2003).

¹⁵ Vinod Dhall, *Competition Law Today: Concepts, Issues and the Law in Practice* 253–56 (2d ed. 2020).

Commission inferred coordination through the common platform, noting that prices were adjusted in a parallel manner following association meetings.¹⁶

In similar fashion, in the cement cartel case, the Commission examined data exchanged through industry associations and found that the conduct exhibited uniformity in pricing behaviour without direct evidence of agreement.¹⁷ These cases suggest that the CCI is willing to examine circumstantial evidence and patterns of behaviour in lieu of explicit communication. Nonetheless, the absence of a defined legal test for hub-and-spoke arrangements means that the threshold for proving coordination remains uncertain.

The challenge becomes more pronounced in digital markets, where platform operators may act as hubs between multiple service providers. In *Samir Agrawal v. CCI*, a case involving Ola and Uber, the informant argued that pricing algorithms operated by the platforms facilitated indirect collusion among drivers.¹⁸ The CCI rejected the claim, observing that independent action by drivers, even when subject to common pricing rules, did not amount to concerted practice. The National Company Law Appellate Tribunal (“NCLAT”) upheld this decision, noting that a platform’s use of a pricing algorithm cannot by itself establish the presence of a cartel.¹⁹

This decision reflects the judiciary’s cautious approach in cases involving digital coordination. It also highlights the evidentiary difficulty in distinguishing between unilateral conduct by a digital intermediary and collusive behaviour facilitated by such an intermediary. While the Commission has broad powers to investigate both horizontal and vertical agreements, the application of these powers to mixed arrangements remains dependent on a case-by-case assessment of facts and market structure.

Judicial Treatment of Hub-and-Spoke Collusion in India

The treatment of hub-and-spoke cartels under Indian competition law remains largely shaped by decisions of the Competition Commission of India. Although the statute does not mention

¹⁶ In re Alleged Cartelisation in the Tyre Industry, Case No. 29 of 2011, Competition Commission of India (Feb. 1, 2022).

¹⁷ In re Builders Association of India, Case Nos. 29, 30 & 31 of 2010, Competition Commission of India (June 20, 2012).

¹⁸ *Samir Agrawal v. Competition Comm’n of India*, Case No. 07 of 2018, Competition Commission of India (Nov. 6, 2018).

¹⁹ *Samir Agrawal v. Competition Comm’n of India*, Competition Appeal (AT) No. 11 of 2019, National Company Law Appellate Tribunal (Dec. 17, 2019).

such cartels expressly, the CCI has adopted an expansive interpretation of Section 3 to examine conduct that indirectly facilitates coordination among horizontal competitors. These decisions highlight the Commission's willingness to infer collusion through circumstantial evidence, market behaviour, and structural dependencies.

In *Alleged Cartelisation in the Tyre Industry*, the CCI investigated five major tyre manufacturers and the Automotive Tyre Manufacturers' Association ("ATMA").²⁰ The Commission found that the companies shared pricing, production, and inventory data through ATMA, and that this information exchange facilitated parallel pricing behaviour. Although there was no explicit agreement among the tyre companies to fix prices, the CCI inferred a concerted practice based on the uniformity in price increases and the timing of decisions. The platform, acting as a central hub, enabled a flow of sensitive information, which the Commission viewed as sufficient to establish coordination under Section 3(3)(a).²¹

A similar approach was taken in the *Builders Association of India* case, which involved cement manufacturers accused of cartelisation.²² The Commission observed that companies had used trade associations to exchange market information, resulting in synchronised production cuts and price hikes. The case was significant because the Commission drew an inference of collusion based on economic evidence, including capacity utilisation and pricing trends. The reliance on indirect indicators in both these cases demonstrates the CCI's evolving approach to identifying coordinated conduct in the absence of direct communication.

However, this interpretive flexibility has not always found favour with the judiciary, particularly in digital platform cases. In *Samir Agrawal v. CCI*, the informant alleged that cab aggregators Ola and Uber operated a pricing algorithm that facilitated indirect coordination among independent drivers.²³ The CCI dismissed the complaint, stating that the drivers had no inter se agreement, and that the pricing algorithm merely reflected the aggregator's unilateral business model. The Commission further noted that algorithmic pricing, even when applied

²⁰ In re *Alleged Cartelisation in the Tyre Industry*, Case No. 29 of 2011, Competition Commission of India (Feb. 1, 2022).

²¹ *Id.* ¶¶ 114–19.

²² *Builders Association of India v. Cement Manufacturers Association*, Case Nos. 29, 30 and 31 of 2010 (Competition Commission of India June 20, 2012).

²³ *Samir Agrawal v. Competition Commission of India*, Case No. 07 of 2018 (Competition Commission of India Nov. 6, 2018).

uniformly, cannot be equated with collusion unless it reflects a shared intention among competitors.²⁴

The NCLAT upheld the Commission's findings, holding that the platform's role as an intermediary did not give rise to a horizontal agreement among drivers.²⁵ The tribunal emphasised that concerted practice requires more than parallel conduct; it must be supported by some form of communication or conscious coordination. The case illustrates the challenge of applying traditional legal standards to platform-mediated markets, where the distinction between independent conduct and indirect collusion is increasingly difficult to draw.

These decisions reveal a tension between economic reality and legal thresholds. While the CCI has shown a readiness to infer collusion through circumstantial factors, appellate bodies continue to demand a higher standard of proof, especially where there is no direct evidence of agreement. In the absence of statutory clarification or specific guidelines, this divergence may lead to uncertainty in enforcement outcomes, particularly in digital markets where coordination is technologically enabled but not contractually evident.

Role of Technology and Algorithms

The rise of algorithmic pricing and digital platforms has made the task of identifying and regulating collusive behaviour more complex. In traditional markets, collusion typically required human interaction, whether through meetings, phone calls, or intermediaries. In contrast, in digital markets, the use of algorithms can lead to price alignment or output restriction without any direct contact among competitors. This creates a scenario where the outcome resembles collusion, but the process lacks the communication necessary to establish a traditional agreement.

There is growing recognition among scholars and regulators that algorithms may facilitate tacit collusion or parallel conduct that is difficult to distinguish from coordinated behaviour.²⁶ Algorithms can learn from market outcomes and adjust prices in a way that maintains supra-competitive levels, even in the absence of an explicit instruction to collude. This phenomenon,

²⁴ *Id.* ¶ 20.

²⁵ Samir Agrawal v. Competition Commission of India, Competition Appeal (AT) No. 11 of 2019 (National Company Law Appellate Tribunal Dec. 17, 2019).

²⁶ Ariel Ezrachi & Maurice E. Stucke, *Virtual Competition: The Promise and Perils of the Algorithm-Driven Economy* 40–43 (2016).

often referred to as algorithmic collusion, has prompted debates on whether existing competition law frameworks are equipped to address such conduct.²⁷

In India, the regulatory framework has not yet developed a formal doctrine for algorithmic collusion. Although the CCI has acknowledged the role of digital intermediaries in influencing market outcomes, it has so far stopped short of treating algorithm-driven alignment as evidence of a concerted practice. In *Samir Agrawal v. Competition Commission of India*, the Commission declined to investigate pricing algorithms used by ride-hailing platforms, stating that algorithmic uniformity does not by itself establish collusion.²⁸ The National Company Law Appellate Tribunal affirmed this view, holding that the absence of direct communication or intention among competitors precluded a finding of an agreement.²⁹

This approach is consistent with the evidentiary standards established in traditional cartel cases, but it may underestimate the risks posed by algorithmic interaction. Scholars have argued that self-learning algorithms, particularly those employing reinforcement learning techniques, may arrive at collusive outcomes even without human programming or coordination.³⁰ In such cases, the legal framework must confront the foundational question of whether competition law should concern itself with outcomes alone, or whether the presence of intent and communication remains indispensable.³¹

Other jurisdictions have begun addressing this concern. The European Commission and the German Federal Cartel Office have studied the role of pricing software in facilitating collusion and have recommended more robust oversight of algorithmic pricing tools.³² Similarly, the OECD has proposed that competition authorities develop new analytical tools to identify algorithm-driven anti-competitive outcomes.³³ These approaches recognise that enforcement

²⁷ OECD, *Algorithms and Collusion: Competition Policy in the Digital Age* 10–14 (2017), <https://www.oecd.org/competition/algorithms-collusion-competition-policy-in-the-digital-age.htm>.

²⁸ *Samir Agrawal v. Competition Commission of India*, Case No. 07 of 2018 (Competition Commission of India Nov. 6, 2018).

²⁹ *Samir Agrawal v. Competition Commission of India*, Competition Appeal (AT) No. 11 of 2019 (National Company Law Appellate Tribunal Dec. 17, 2019).

³⁰ Michal S. Gal & Niva Elkin-Koren, Algorithmic Consumers, 30(2) *Harvard Journal of Law & Technology* 309, 324–25 (2017).

³¹ Maurice E. Stucke, Should We Be Concerned About Data-Opolies?, 2(2) *Georgetown Law Technology Review* 275, 278 (2018).

³² European Commission & Bundeskartellamt, *Competition Law and Algorithms* 5–8 (2021), https://ec.europa.eu/competition/information/digitisation_2021_en.pdf.

³³ Organisation for Economic Co-operation and Development, *Algorithms and Collusion: Competition Policy in the Digital Age* 15–18 (2017), <https://www.oecd.org/competition/algorithms-collusion-competition-policy-in-the-digital-age.htm>.

strategies must evolve to keep pace with the technological changes shaping modern markets.

For India, the challenge lies in balancing innovation and regulatory oversight. Overregulation may suppress legitimate efficiency gains enabled by automation. At the same time, underregulation may allow structurally collusive outcomes to persist unchecked. As algorithmic pricing becomes more prevalent across sectors such as e-commerce, mobility, and fintech, the CCI will need to develop a coherent framework for analysing algorithm-facilitated coordination. This includes investing in technical capacity, engaging with data scientists, and refining legal standards to accommodate new forms of evidence.

Comparative Legal Approaches

Legal systems across jurisdictions have developed distinct approaches to addressing hub-and-spoke collusion. While the underlying concern of preventing horizontal coordination through vertical relationships is common, the evidentiary thresholds and analytical tools employed by regulators differ significantly. Comparative analysis of jurisdictions such as the US, the EU, and the UK provides valuable insight into possible pathways for reform in India.

In the United States, hub-and-spoke arrangements have been recognised and penalised under Section 1 of the Sherman Act.³⁴ The United States Court of Appeals for the Second Circuit affirmed that Apple had orchestrated a horizontal price-fixing agreement among e-book publishers through a series of vertical contracts.³⁵ The court held that Apple's conduct facilitated alignment among publishers, and that this amounted to a horizontal conspiracy notwithstanding the absence of direct communication among the publishers. The judgment clarified that a vertical actor may be held liable as a hub if the surrounding spokes are aware of one another and act in concert through the hub.³⁶

The European Union also acknowledges the existence of hub-and-spoke cartels. Under Article 101 of the Treaty on the Functioning of the European Union, any concerted practice that restricts competition is prohibited.³⁷ The European Commission has investigated several cases where retailers coordinated pricing through common suppliers or platforms. In its decisions,

³⁴ Sherman Antitrust Act § 1, 15 U.S.C. § 1 (2018).

³⁵ *United States v. Apple Inc.*, 791 F.3d 290, 314–15 (2d Cir. 2015).

³⁶ *Id.*

³⁷ Consolidated Version of the Treaty on the Functioning of the European Union art. 101, Oct. 26, 2012, 2012 O.J. (C 326) 47.

the Commission has focused on whether the suppliers acted as conduits for sharing commercially sensitive information, and whether the retailers were aware of the overall scheme.³⁸ The Court of Justice of the European Union has affirmed that the exchange of information through a common vertical player can establish a concerted practice among horizontal competitors, provided that the parties were aware of the intended coordination.³⁹

In the United Kingdom, the Competition and Markets Authority has also taken enforcement action against hub-and-spoke collusion. In the *Tobacco Retail Pricing* case, the Authority penalised both manufacturers and retailers for engaging in price coordination through bilateral agreements that effectively linked horizontal competitors.⁴⁰ The Authority relied on internal communications, price instructions, and retail data to demonstrate that pricing recommendations given by manufacturers resulted in uniform retail pricing, thereby eliminating effective competition. The approach adopted in this case illustrates a willingness to examine structural relationships and information flows rather than rely solely on direct agreements.

These comparative experiences offer instructive lessons for Indian enforcement. First, they demonstrate that regulators can infer a horizontal agreement from vertical conduct if there is a clear pattern of coordination and knowledge among the parties. Second, they show that circumstantial evidence, including pricing patterns and information exchange, may suffice to establish collusion in the absence of a formal agreement. Finally, they highlight the need for contextual analysis, taking into account the structure of the market, the incentives of the parties, and the nature of the platform or intermediary involved.

For India, adopting similar standards would not require statutory amendment but rather a more consistent application of existing principles. Indian authorities already have the discretion to interpret Section 3 in a purposive manner. Drawing upon international practice could help clarify the evidentiary standards applicable in cases involving indirect coordination, especially where the market structure and behaviour strongly indicate a departure from competitive

³⁸ European Commission, *Antitrust: Commission Fines Consumer Electronics Manufacturers for Fixing Online Resale Prices* (2018), https://ec.europa.eu/commission/presscorner/detail/en/IP_18_4601.

³⁹ *T-Mobile Netherlands BV v. Raad van bestuur van de Nederlandse Mededingingsautoriteit*, Case C-8/08, Judgment of the Court (Fourth Chamber), 2009 E.C.R. I-04529.

⁴⁰ Competition and Markets Authority, *Decision in the Tobacco Retail Pricing Case* (2010), <https://assets.publishing.service.gov.uk/media/555de2d2ed915d7ae200003d/tobacco-decision.pdf>.

norms.

Recommendations and Conclusion

The emergence of hub-and-spoke collusion in India reflects both the structural evolution of markets and the adaptive strategies of firms operating within them. While the CCI has demonstrated a willingness to examine indirect coordination, the existing legal framework provides limited guidance on how such cases should be evaluated. Given the increased complexity of modern supply chains and digital platforms, the current doctrinal approach may prove insufficient unless accompanied by more precise analytical tools and evidentiary standards.⁴¹

One key reform would be the development of formal guidelines on identifying and prosecuting hub-and-spoke arrangements. These guidelines could clarify the evidentiary threshold for proving a concerted practice, particularly in cases lacking direct communication among horizontal players. Drawing upon international jurisprudence, such guidelines should specify when vertical conduct may be deemed to facilitate horizontal collusion, and how the existence of a common facilitator, or hub, factors into this assessment.⁴²

Another recommendation involves the refinement of evidentiary presumptions. In traditional cartel cases, the Commission relies on economic evidence such as price parallelism and output restriction. In hub-and-spoke cases, especially those involving digital platforms, such indicators should be evaluated in light of platform design, algorithmic features, and control over pricing variables. This would require the CCI to strengthen its institutional capacity through interdisciplinary expertise, including data science and behavioural economics.⁴³

In addition, there is a need to address the growing role of self-learning algorithms in sustaining collusive outcomes. Current legal doctrine is oriented around human intention and communication. However, as pricing coordination becomes increasingly automated, the emphasis must shift toward outcome-based assessment. This includes recognising the role of

⁴¹ Organisation for Economic Co-operation and Development, *Hub-and-Spoke Arrangements* 9–12 (2019), <https://www.oecd.org/competition/hub-and-spoke-arrangements.htm>.

⁴² Vinod Dhall, *Competition Law Today: Concepts, Issues and the Law in Practice* 251–57 (2d ed. 2020).

⁴³ Michal S. Gal, Algorithmic-Facilitated Coordination: A Critique of Current Enforcement Strategies, 18(3) *World Competition Law and Economics Review* 393, 397 (2022).

platforms in creating market conditions that foster collusion, even where no explicit instructions or agreements exist.⁴⁴

Finally, the appellate bodies must adopt a more consistent approach to evaluating indirect collusion. Decisions such as *Samir Agrawal* reflect a conservative stance on what constitutes a concerted practice. While a cautious approach is understandable, a rigid insistence on direct evidence may defeat the purpose of competition law in technology-driven markets. Courts should acknowledge the changing nature of market interaction and permit the use of circumstantial and structural evidence to support enforcement actions.

In conclusion, hub-and-spoke cartels represent a new frontier in Indian competition law. Their hybrid nature makes them difficult to detect and even harder to prosecute. Yet, as market conduct becomes increasingly mediated through digital intermediaries, such arrangements are likely to become more prevalent. To meet this challenge, Indian competition authorities must interpret existing provisions purposively, supplement them with sector-specific guidance, and modernise investigative approaches. Doing so will ensure that the law remains responsive to contemporary market realities while preserving the fundamental goals of economic efficiency and consumer welfare.

⁴⁴ Maurice E. Stucke & Ariel Ezrachi, Artificial Intelligence and Collusion: When Computers Inhibit Competition, 2017 *University of Illinois Law Review* 1775, 1801 (2017).