

Balancing Blockchain's Rewards With Its Antitrust Risks

By **Henry Hauser, Kim Ng and Shari Brandt** (January 31, 2023)

The emergence of blockchain technology has heralded significant advances across an array of industries, from financial services to consumer goods. But there are two sides to every bitcoin.

While providing an important vehicle for entry and disruption, blockchain also creates antitrust risks arising from new opportunities for firms to collude, signal competitively sensitive information, trade ahead, or engage in exclusionary tactics to block actual or potential rivals.

This article analyzes both the potential antitrust pitfalls and competitive opportunities associated with blockchain.

Chained Together

Blockchain has the potential to reduce the barriers to forming and maintaining anticompetitive cartels in violation of Section 1 of the Sherman Act. To understand why, it is important to consider that cartels must solve three operational challenges.

First, they must form a consensus around the terms of their agreement. This could be to charge a fixed price, rig which companies will win which bidding opportunities, or allocate customers or markets.

Second, they must monitor compliance. A cartel will not be effective unless members follow the consensus. Because a cartel is comprised of competitors, its members are naturally suspicious of each other.

For this reason, members must monitor each other to ensure that all are following the terms of their agreement. In practice, this is difficult because it requires exchanging competitively sensitive information on an ongoing and covert basis.

Third, there must be a mechanism to punish companies that cheat.

For example, if one company seeks to increase sales by undercutting its co-conspirators, the other parties to the agreement must have some way to discipline the company that deviates from the consensus. Unless these challenges can be overcome, the cartel is not likely to last.

With regard to monitoring compliance, distributed ledger technology enables companies to observe sales, purchases, and transaction metadata recorded on the blockchain.

This makes it easier to determine whether a company is violating the cartel agreement by selling below the fixed price, or by producing above its allocated quota. In addition, companies need not meet or even communicate directly to demonstrate that they are complying with the agreement.

They need only monitor transactions on the blockchain. This means that smoke-filled rooms



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are no longer necessary for co-conspirators to keep their agreement afloat.

Punishing cheaters can also be facilitated through blockchain technology and smart contracts, which are computerized protocols that automatically execute the terms of a contract if certain conditions are met. Of course, smart contracts also serve several procompetitive purposes, such as reducing transaction costs and decreasing lag time between satisfaction and performance of the contract.

For example, a smart contract could ensure that the title to a property automatically and instantly transfers to the buyer when funds are deposited in the seller's account.

In the cartel context, however, smart contracts could theoretically be weaponized to ensure that if one company sells below the fixed price, or exceeds its production quota under the cartel agreement, then all co-conspirators automatically punish that company.

Discretion is removed from the hands of cartel members and delegated to the smart contract, ensuring that the cheater is immediately punished. In turn, the risk of incurring the wrath of co-conspirators when cheating is higher in the blockchain context, which furthers adherence to the consensus and durability of the cartel.

Telephone Chain

An additional competitive concern is that blockchain technology could be used to facilitate the exchange of competitively sensitive information or price signaling.

As the U.S. Supreme Court recognized in the 1980 *Catalano Inc. v. Target Sales Inc.* decision, there is a "plain distinction between the lawful right to publish prices and terms of sale ... and an agreement among competitors limiting action with respect to the published prices," it said in the 1980 *Catalano Inc. v. Target Sales Inc.* decision.[1]

This distinction is largely driven by the fact that "the dissemination of information is normally an aid to commerce," as noted in the 1936 Supreme Court case *Sugar Institute v. U.S.*[2]

Also, exchanging pricing data "can in certain circumstances increase economic efficiency and render markets more, rather than less, competitive," which was discussed in the high court's 1978 *U.S. v. U.S. Gypsum* case.[3]

Further, publicly announcing pricing decisions is a common business practice.[4]

On the other hand, some courts, including the U.S. Court of Appeals for the Ninth Circuit in the 1990 *Petroleum Products* ruling, have inferred anti-competitive agreements where information sharing was intended to, and did in fact, render price increases "more effective by ensuring that competitors could quickly learn of, and respond to" rivals' price increase.[5]

Although inferring a conspiracy from the dissemination of competitive information is rare, Federal Trade Commission Chair Lina M. Khan recently remarked that "[i]nstances in which companies may be signaling to each other that they're looking to engage in coordinated price hikes ... has deep antitrust ramifications and is something that's on our radar." [6]

Blockchain platforms could enable companies to signal pricing and production information to

competitors, which in turn may enable them to reach agreements to increase prices or reduce output. This concern is exacerbated where private — permissioned — blockchains are involved, or where a blockchain consortia include competitors in concentrated industries.

Proof in the Pudding

On the other hand, blockchain technology could be a boon to antitrust enforcers and plaintiffs. Because transactions are recorded and logged on a distributed ledger, plaintiffs may be able to use distributed ledgers to show that an unlawful agreement was in fact reached.

Indeed, providing proof of a conspiracy is often one of the most difficult barriers that plaintiffs face in Section 1 cases. Under the Supreme Court's 2007 *Bell Atlantic v. Twombly* decision, the "crucial question is whether the challenged anticompetitive conduct stem[s] from independent decision or from an agreement, tacit or express." [7]

Notably, as the Supreme Court explained in the 1986 *Matsushita Electric Industrial Co. v. Zenith Radio Corp.* decision, "conduct as consistent with permissible competition as with illegal conspiracy does not, standing alone, support an inference of antitrust conspiracy." [8]

Per the high court's 1984 *Monsanto Co. v. Spray-Rite Service Corp.* decision, "there must be evidence that tends to exclude the possibility that ... [defendants] were acting independently." [9]

In that same case, the Supreme Court also indicated that "direct or circumstantial evidence" must show that defendants "had a conscious commitment to a common scheme designed to achieve an unlawful objective." [10]

To prevail, a plaintiff "must show that the inference of conspiracy is reasonable in light of the competing inferences of independent action or collusive action," which the court discussed in the *Matsuhisa* decision noted above. [11]

The information contained on a ledger can help plaintiffs demonstrate "plus factors" to satisfy this requirement. For example, a distributed ledger could contain data regarding parallel pricing or lockstep production cuts. Similarly, a distributed ledger could reflect the implementation of a cartel, or smart contracts designed to punish companies that "cheat" on their anti-competitive agreement.

Chain-Link Fence

In addition to cartel concerns, blockchain technology could be used to exclude rivals. As Thibault Schrepel, associate professor of law at VU Amsterdam University, writes in "Blockchain + Antitrust," "the possibility to refuse access is an essential characteristic of private blockchains." [12]

Similarly, in the *Georgia Law Review* article "Blockchain Neutrality," professor Samuel Weinstein of Yeshiva University's Benjamin N. Cardozo School of Law warns that "anticompetitive access denial to permissioned ledgers" represents an "antitrust harm that might arise from blockchain use." [13]

Such claims could be brought under a group boycott or refusal-to-deal theory of harm, depending on how critical access to the ledger is to a company's competitive viability.

Technology platforms can also act as gatekeepers. As Schrepel explained at an American Bar Association Federal Civil Enforcement Committee^[14] panel on Jan. 11, "Blockchain does not exist in a vacuum and neither does Web 3.0. Blockchain functions on top of the internet, and gatekeepers may impact blockchain and Web 3.0 based on infrastructure."^[15]

Competitive Opportunities

On the other hand, technological innovation often enables and empowers startups and small business growth by eroding barriers to entry. Distributed ledger technology has the potential to power this disruption.

Discussing the financial sector, Weinstein highlighted that "there are now ways to raise money without going to venture capital firms, like initial coin offerings and initial exchange offerings. We can see potential methods for raising startup capital that are untraditional and reaching new populations.

There is potential for raising money that circumvents big bank capital-raising mechanisms."^[16] This potential democratization of financial services is an important contribution of distributed ledger technology.

With regard to the unsecured credit market, Carla Reyes, assistant professor at Southern Methodist University's Dedman School of Law, pointed out that "blockchain could provide actual notice and could reduce barriers of entry in maintaining priority."^[17]

However, this outcome is not automatic. "People can design architecture that challenges gatekeepers, but alternatively, they can create the exact same structures in traditional finance and Web. And despite the possibility and potential of reducing barriers to entry, the law encourages recreation of new crypto gatekeepers."^[18] Bringing the point home, Reyes stated that "the social context and what you build with it matters."^[19]

Avoiding the Ball and Blockchain

Companies that leverage blockchain technology can reduce their antitrust exposure by taking appropriate precautions.

Employees that interact with distributed ledger technology should be trained never to use blockchain as a means to discuss, signal, or exchange information about company bids, sales opportunities, customers, costs, employee compensation, hiring, prices or other competitively sensitive information with competitors.

In the context of consortia blockchain involving concentrated industries, companies should consider more proactive antitrust guardrails.

Individuals that control access to permissioned blockchains must also recognize that agreements among competitors to boycott or exclude rivals from the ledger may be per se unlawful. Illegal group boycotts include blacklisting a firm from the ledger or agreeing with others to refuse to deal with a particular company.

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[1] *Catalano, Inc. v. Target Sales, Inc.*, 446 U.S. 643, 649-50 (1980); see also *Morton Salt Co. v. United States*, 235 F.2d 573, 576 (10th Cir. 1956).

[2] *Sugar Inst. v. United States*, 297 U.S. 553, 598 (1936).

[3] *United States v. United States Gypsum*, 438 U.S. 422, 441 n.16 (1978).

[4] *Holiday Wholesale*, 231 F. Supp. 2d at 1276 ("The public announcement of a pricing decision cannot be twisted into an invitation or signal to conspire; it is instead an economic reality to which all other competitors must react.").

[5] *In re Coordinated Pretrial Proc. in Petroleum Prod. Antitrust Litig.*, 906 F.2d 432, 446 (9th Cir. 1990).

[6] Leah Nylen, *FTC Keeping Close Watch on Corporate Price Signaling*, Khan Says, *Bloomberg Law* (June 8, 2022).

[7] *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 553 (2007) (quoting *Theatre Enter., Inc. v. Paramount Film Distrib. Corp.*, 346 U.S. 537, 540 (1954)) (internal quotes omitted).

[8] *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 588 (1986) (citing *Monsanto Co. v. Spray-Rite Serv. Corp.*, 465 U.S. 752 (1984)).

[9] *Monsanto*, 465 U.S. at 764.

[10] *Id.* at 768.

[11] *Matsushita*, 475 U.S. at 575.

[12] Thibault Schrepel, *Blockchain + Antitrust*, Edward Elgar Publishing (1st ed 2021).

[13] Samuel N. Weinstein, *Blockchain Neutrality*, 500 *Ga. L. Rev.* 499, 539 (2021).

[14] American Bar Association, *Federal Civil Enforcement Committee*, https://www.americanbar.org/groups/antitrust_law/about/committees/federal-civil-enforcement/.

[15] *The ABCs of Antitrust and Blockchain*, Federal Civil Enforcement Committee, Panel for the American Bar Association (Jan. 11, 2023) (moderated by co-author Henry Hauser).

[16] *Id.*

[17] *Id.*

[18] *Id.*

[19] Id.