



Insight

Primer: Pricing Algorithms and Antitrust

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Executive Summary

- On March 1, 2024, the Federal Trade Commission (FTC) published a blog warning competing firms that the use of a common algorithm to determine price may violate federal antitrust laws, regardless of business or industry.
- The blog cited a Statement of Interest jointly filed with the Department of Justice that claimed pricing algorithms could facilitate collusion among competitors that enables them to charge supracompetitive prices.
- While courts have not yet ruled on the theory, several ongoing court cases involving alleged algorithmic price-fixing schemes could shape future antitrust enforcement and serve as a catalyst for newly proposed federal legislation.

Introduction

On March 1, 2024, the Federal Trade Commission (FTC) [published a blog](#) warning competing firms that using a common algorithm to determine price may violate federal antitrust laws, regardless of business or industry.

The post referred to a [Statement of Interest](#) (SOI) jointly filed with the Department of Justice (DOJ) in *Duffy v. Yardi Systems, Inc.* The case's plaintiffs allege that competitors used a common algorithm to fix multifamily rental prices. Such practices, according to the agencies, may violate Section 1 of the Sherman Act, which prohibits any contracts, combination, or conspiracy in restraint of trade or commerce.

Courts have not yet ruled on the theory, but several ongoing court cases involving the alleged use of an algorithm to fix prices could shape future antitrust enforcement policy and usher in proposals for new federal legislation.

The FTC Blog Post

The FTC's blog post warned competing businesses that outsourcing pricing decisions to a common algorithm could run afoul of antitrust laws. Under Section 1 of the Sherman Act, it is per se illegal for competitors to collude to fix prices.

The blog post referred to an SOI jointly filed with the DOJ in *Duffy v. Yardi Systems, Inc.* The plaintiffs claimed that competing landlords used firm Yardi's pricing algorithm to "artificially inflate" multifamily rental prices. In other words, the case alleged competitors engaged in a price fixing scheme. The SOI was submitted to notify the court of an earlier SOI filed by the DOJ *In Re: RealPage, Rental Software Antitrust Litigation* which, according to the DOJ, "discusses the key legal principles applicable to claims of algorithmic price fixing." The DOJ explained that it is per se unlawful "for competitors to join together their independent decision-making power to

raise, depress, fix, peg, or stabilize prices” under Section 1 of the Sherman Act. While firms can use public data to maximize their individual profits, sharing non-public, competitively sensitive information with competitors could allow participating firms to maximize industry-wide profit above a competitive level.

The brief stressed two theories of antitrust law: (1) firms cannot “use an algorithm to evade the law banning price-fixing agreements,” and (2) “an agreement to use shared pricing recommendations, lists, calculations, or algorithms can still be unlawful even where co-conspirators retain some pricing discretion or cheat on the agreement.”

Algorithmic Price-Fixing Theory

The DOJ’s Memorandum of Law in Support of the SOI explained the mechanics of the alleged price-fixing scheme, relying on the two principles outlined in the blog post.

Principle 1: You can’t use an algorithm to evade the law banning price-fixing agreements.

Generally speaking, plaintiffs must show that firms knowingly agreed to a conspiracy to fix prices: Tacit collusion alone does not violate the law. This may make it difficult to successfully bring a case against firms that use pricing algorithms to help identify market trends and develop a profit-maximizing price. The DOJ asserts, however, that using a common pricing algorithm trained using competitively sensitive information provided by competing firms could sufficiently satisfy this knowingly agreed element.

Citing the *RealPage* complaint, the DOJ claimed that landlords shared real-time, non-public, and competitively sensitive data including “actual rents paid, occupancy rates, and records of lease transactions” with RealPage, and did so with the “knowledge and expectation that other competitors will do the same.” RealPage then took these data and fed them into a “common algorithm,” which generated “forward-looking, unit specific pricing and supply recommendations for all participating landlords.” According to one of the complaints against RealPage, landlords adopted the algorithm’s pricing recommendations 80–90 percent of the time.

The DOJ asserted that competitors using RealPage’s algorithm represented a concerted action to remove independent pricing decisions from the market and that centralizing this decision enabled competing landlords to “raise rents in concert.” The court will have to determine whether the actions of the competitors constituted an unlawful “agreement” under the Sherman Act.

Moreover, the DOJ added that “RealPage was clear about the purpose of its common pricing scheme: to increase prices above competitive levels through collaboration.” In other words, rather than using the information to maximize profit at the firm level, the algorithm allegedly enhanced the ability to boost industry-wide profit.

Principle 2: An agreement to use shared pricing recommendations, lists, calculations, or algorithms can still be unlawful even where co-conspirators retain some pricing discretion or cheat on the agreement.

The FTC’s blog post explained that even though the algorithm “recommends rather than determines price,” its use could be illegal and added that deviating from the algorithmically developed price is not a viable defense. The DOJ’s memo examines case law that argues even conspiring to fix the “starting point of pricing” is per se unlawful. Therefore, even if a firm only uses the suggested price 80-90 percent of the time, the DOJ argues it could still violate the law.

Using an Algorithm Is No Different

The DOJ’s theory largely rests on the collation of competitively sensitive information from competing landlords to develop its price recommendation. This isn’t the first time such practices have drawn scrutiny from the DOJ.

In February 2023, the [DOJ withdrew several decades-old policy statements](#) outlining information exchange antitrust safety zones – circumstances under which the agency will not challenge certain activity. The agency contended that the antitrust safety zones were “overly permissive” and likely to run afoul of antitrust laws.

Moreover, in September 2023, the DOJ sued Agri Stats, a meat-processing industry information exchange. The agency alleged the firm disseminated competitively sensitive information that enabled competing meat processors to raise prices and reduce supply.

The DOJ’s SOI explained that sharing information through an algorithm is no different than sharing information through “email, fax, machine, or face-to-face conversation.” The FTC put it simply: “[Y]our algorithm can’t do anything that would be illegal if done by a real person.”

Proposed Legislation

With the case law making tacit collusion arguments difficult under current law, [congressional action may be coming soon](#). Senators Ron Wyden (D-OR) and Amy Klobuchar (D-MN), perhaps eager to get ahead of any potential court decision, have each proposed new legislation targeting pricing algorithms.

Senator Wyden’s bill ([S.3692](#)), *Preventing the Algorithmic Facilitation of Rental Housing Cartels Act of 2024*, would prohibit the use of algorithms to “artificially inflate the price or reduce the supply of leased or rented residential dwelling units in the United States.” The bill would ban rental property owners from contracting with a coordinator, a person that collects prices, supply levels, or lease or rental information, or recommends prices, lease terms, or occupancy levels.

Senator Klobuchar’s bill ([S.3686](#)), *Preventing Algorithmic Collusion Act of 2024*, would prohibit the use of pricing algorithms that can facilitate collusion using nonpublic competitor data.

Both bills would deem a violation to be per se illegal under the Sherman Act.

Conclusion

The FTC’s blog post and the SOIs should serve as a sufficient warning to competing businesses that the use of common pricing algorithms trained using competitively sensitive data could run afoul of antitrust law.

Members of Congress, too, are concerned that pricing algorithms could be used to reduce competition. Some members have responded with legislative proposals intended to block competitors from sharing competitively

sensitive information through a pricing algorithm.

The current cases and potential legislation involving the use of pricing algorithms could be a window into the next frontier of antitrust enforcement.