



## Summary of the ABA Sections' Comments on "Algorithms: How they can Reduce Competition and Harm Consumers"

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On March 16, 2021, the Antitrust Law Section and the International Law Section of the American Bar Association ("the Sections") submitted their comments on the consultation paper "Algorithms: How they can reduce competition and harm consumers," published by the Competition and Markets Authority ("CMA") on January 19, 2021 ("the Paper").<sup>3</sup>

The Sections recognized the increasingly important role that algorithms play in commercial activities. The Sections also acknowledged the complexity of algorithmic systems and the importance of analyzing the implications of their use from a competition and consumer law perspective. As recognized by the CMA in the Paper, the Sections also noted that both inter-agency and international cooperation is essential for assessing such implications because platforms and internet businesses span the globe. The use of algorithms and their resulting consumer harm or benefit are not restricted to a single jurisdiction. The Sections appreciated the CMA's comprehensive overview and assessment of potential harms to competition and consumers from the use of algorithms and their continued commitment to coordinate further work on algorithms with its international enforcement colleagues.

This article summarizes the Sections' comments on exclusionary abuses and collusion risks.

### I. Exclusionary Abuses

The Sections commended the CMA "for comprehensively identifying potential theoretical harms that could stem from the unilateral development, adoption, or modification of algorithms."<sup>4</sup> These included exclusionary abuses that could theoretically foreclose competition, such as: (1) self-preferencing; (2) unintended exclusion from

manipulation of platform algorithms; and (3) predatory pricing.<sup>5</sup> Although "the Paper acknowledges the potential efficiencies or benefits associated with algorithms generally, the discussion of these benefits is limited in the context of the assessment of individual exclusionary harms."<sup>6</sup> The Sections therefore made two suggestions. First, the CMA should further develop evidence on "the extent of efficiencies and benefits created by particular algorithms" because pro-competitive benefits are "relevant to the application of the legal standard. . . ."<sup>7</sup> Second, the CMA should help avoid enforcement uncertainty and promote the legitimate and procompetitive development, implementation, and refinement of algorithms.<sup>8</sup> For this, the CMA should provide further guidance on which applicable legal standards—including how pro-competitive benefits and efficiencies may be weighed—will apply to potential identified theories of harm.<sup>9</sup>

#### a. Potential Efficiencies and/or Benefits of Algorithms

The Sections discussed efficiencies and benefits to consumers from algorithms that the Paper did not identify. "For example, refinement of a search algorithm could enhance relevance of results overall, to the benefit of consumers and other users."<sup>10</sup> Additionally, "potential benefits from algorithmic improvements [may] promote legitimate—and potentially procompetitive—modification of algorithms."<sup>11</sup> The Sections encouraged the CMA to "consider efficiency-enhancing discounts that promote competition and consumer benefits. . . ."<sup>12</sup>

"Further, when considering the real-world effects associated with use and modification of algorithms—including balancing the potential harms and benefits—the Sections strongly recommend[ed] that the CMA's future work program develop the Paper's theoretical discussion to develop and consider empirical evidence."<sup>13</sup> The Sections noted that the Paper rightly acknowledges that "[e]ven in relatively well-researched areas, such as algorithmic collusion, there is a dearth of empirical studies to understand real-world impacts."<sup>14</sup> Because the operation of machine learning and algorithms is a

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<sup>3</sup> ABA Section of Antitrust Law, *Joint Comments on Competition and Markets Authority Consultation Paper on "Algorithms: How They Can Reduce Competition and Harm Consumers,"* Mar. 16, 2021 [hereinafter *ABA Comments*], available at [https://www.americanbar.org/content/dam/aba/administrative/antitrust\\_law/comments/march-2021/comments-uk-31621.pdf](https://www.americanbar.org/content/dam/aba/administrative/antitrust_law/comments/march-2021/comments-uk-31621.pdf); Competition & Markets Authority, *Algorithms: How they can reduce competition and harm consumers*, Jan. 19, 2021 [hereinafter *Paper*], available at [https://www.gov.uk/government/publications/algorithms-how-they-can-](https://www.gov.uk/government/publications/algorithms-how-they-can-reduce-competition-and-harm-consumers/algorithms-how-they-can-reduce-competition-and-harm-consumers)

[reduce-competition-and-harm-consumers/algorithms-how-they-can-reduce-competition-and-harm-consumers](https://www.gov.uk/government/publications/algorithms-how-they-can-reduce-competition-and-harm-consumers/algorithms-how-they-can-reduce-competition-and-harm-consumers).

<sup>4</sup> *ABA Comments*, *supra* note 3, at 4.

<sup>5</sup> *Paper*, *supra* note 4, § 2.2.

<sup>6</sup> *ABA Comments*, *supra* note 3, at 4.

<sup>7</sup> *Id.*

<sup>8</sup> *Id.*

<sup>9</sup> *Id.*

<sup>10</sup> *Id.* at 5.

<sup>11</sup> *Id.*

<sup>12</sup> *Id.*

<sup>13</sup> *Id.*

<sup>14</sup> *Paper*, *supra* note 4, at 3.



highly complex area,<sup>15</sup> the Sections called for further evidence gathering. Given this context, the Sections respectfully recommended “that the future work in relation to the effects of algorithms be evidence based, taking due account of the complexity of the issues.”<sup>16</sup>

*b. Framework for Assessment*

The Sections called for further guidance and clarification of “legal standards relevant to assessing: when development, use, or modification of an algorithm could constitute an exclusionary abuse; the types of evidence that the CMA envisages would be relevant to this assessment; and how changes to algorithms that may create benefits for some users and negative implications for others should be assessed.”<sup>17</sup>

In particular, the Sections welcomed “guidance as to whether the CMA envisages its further work on exclusionary issues relating to algorithms proceeding under the proposed *ex ante* regime for the Digital Markets Unit, existing competition law, or both.”<sup>18</sup> If both, the Sections suggested that “further guidance regarding the relevant factors for determining which legal framework to apply would be helpful.”<sup>19</sup> For example, “[e]xisting competition law standards on issues such as ‘self-preferencing’ are currently in a state of development so that it is likely to be more difficult for businesses and advisers to ‘self-assess’ how potential uses of, and/or changes to, algorithms will be evaluated under applicable legal standards. Given the potential consequences for business (including exposure to sizeable penalties) and current lack of clarity in this area, the Sections encourage[d] the CMA to develop further guidance to assist businesses and their advisers in assessing when an algorithm is likely to result in one of the exclusionary harms identified in the Paper.”<sup>20</sup>

Finally, the Sections called for further guidance as to the legal standard for assessment of “unintended harms”<sup>21</sup> stemming from legitimate business decisions to make changes to algorithms. Because the potential effects of algorithmic changes may not always be clear in advance, the Sections particularly encouraged guidance as to the legal standard for assessment of “unintended harms” “to allow businesses to

proactively monitor and seek to mitigate the risk of such harms in advance.”<sup>22</sup>

**II. Collusion Risks**

The Sections appreciated CMA’s evaluation of the use of algorithms in the context of horizontal price-fixing agreements, hub and spoke conspiracies, and autonomous tacit collusion. The Sections described that algorithms present a “double-edged sword” to competitive markets. The use of algorithms could enhance competition by facilitating rapid response to changing competitive conditions and customer demand. However, the use of algorithms may facilitate collusion and make cartels more stable. Based on the current understanding of the use of algorithms, the Sections concluded that the use of algorithms “does not alter the core elements of a cartel case.”<sup>23</sup>

*a. Horizontal Price Fixing Agreements*

The Sections described that “[c]ases in which competitors use an algorithm to implement or monitor a price-fixing agreement are still, at their essence, just traditional price-fixing cases,” and an agreement among competitors remains a required element in proving collusion.<sup>24</sup> The Sections cited the online poster cases, *United States v. Topkins*<sup>25</sup> and *United States v. Aston*,<sup>26</sup> where the DOJ demonstrated how U.S. antitrust laws can be used to prosecute this type of classic collusive agreement to restrain trade.<sup>27</sup>

The Sections commented that existing law and economic analysis could adequately address potential horizontal price-fixing issues raised by algorithms, although acknowledging that computer-determined pricing may be susceptible to coordination, just as human-determined pricing.<sup>28</sup>

The Sections clarified that the mere fact of using algorithms to detect competing prices that are already transparent quickly does not convert lawful conscious parallelism into a cartel offense. They illustrated this point by giving the example of two petrol stations across the street from one another, and as one station posts its new price to the public, the other station could adjust its price as well. “Without an

<sup>15</sup> *Id.* § 1.

<sup>16</sup> *ABA Comments, supra* note 3, at 5.

<sup>17</sup> *Id.*

<sup>18</sup> *Id.* at 5-6.

<sup>19</sup> *Id.* at 6.

<sup>20</sup> *Id.*

<sup>21</sup> *Paper, supra* note 4, § 2.2.2.

<sup>22</sup> *ABA Comments, supra* note 3, at 6.

<sup>23</sup> *Id.*

<sup>24</sup> *Id.* at 7.

<sup>25</sup> Information, *United States v. Topkins*, No. 3:15-cr-0021 (N.D. Cal. Apr. 6, 2015), ECF No. 1, available at <https://www.justice.gov/atr/case-document/file/513586/download>.

<sup>26</sup> Indictment, *United States v. Aston*, No. 3:15-cr-00419 (N.D. Cal. Aug. 27, 2015), ECF No. 1, available at <https://www.justice.gov/atr/file/840016/download>.

<sup>27</sup> Press Release, U.S. Dep’t of Justice, Former E-Commerce Executive Charged with Price fixing in the Antitrust Division’s First Online Marketplace Prosecution (Apr. 6, 2015), available at <https://www.justice.gov/opa/pr/former-e-commerce-executive-charged-price-fixing-antitrust-divisions-first-online-marketplace>.

<sup>28</sup> *ABA Comments, supra* note 3, at 7.



agreement between the stations on any component of the price, there is no cartel violation.”<sup>29</sup>

*b. Hub and Spoke Conspiracies*

The Paper discussed the possibility that using algorithms by online platforms could create a “hub-and-spoke structure” or facilitate anticompetitive information exchange among such platforms and their supply-side users.<sup>30</sup> For a potential hub-and-spoke conspiracy, the Sections commented that “there should be evidence of an agreement among horizontal competitors to fix prices or allocate markets, or at least to use a particular algorithm to achieve those same ends.”<sup>31</sup>

The Sections respectfully recommended exercising caution before inferring a per se unlawful cartel offense merely from using a common algorithm by sellers on an online platform. The Sections described that the rule in both UK courts<sup>32</sup> and the United States<sup>33</sup> is that a series of vertical agreements between a “hub” and various “spokes” can be viewed as a horizontal agreement among the spokes only if they use the hub as a means to communicate an anticompetitive intent with each other.<sup>34</sup> Finally, the Sections commented that there could be procompetitive justifications on certain online platforms to use a common algorithm that should be considered in any analysis (e.g., using a common algorithm may result in competitive pricing to consumers).<sup>35</sup>

*c. Autonomous Tacit Collusion*

The Paper discussed the possibility of “autonomous tacit collusion,” as the third concern around algorithmic collusion, where algorithms could use complex techniques to learn to collude tacitly.<sup>36</sup> The Sections agreed with the Paper’s conclusion that the risk of such collusion in real-world markets is unclear due to the lack of sound empirical evidence.<sup>37</sup>

The Sections raised three issues. First, if future research supports algorithmic “autonomous tacit collusion” (i.e., collusion without explicit communication and human intentions), would antitrust enforcers need a new definition of agreement and treat algorithmic interactions similarly to human interactions? Second, although humans design algorithms – do they intentionally design such algorithms so they can self-learn to collude? Finally, would individuals or firms that benefit from the algorithmic collusion be liable for the algorithm’s autonomous decisions? Although the Sections did not rule out

that a different legislative approach to some of these issues might be required, they agreed that additional studies and research are necessary to assess whether autonomous tacit collusion can and does take place.<sup>38</sup>

*d. Other Issues*

The Sections also recommended that the CMA consider other issues related to collusion that were not mentioned in the Paper.

First, the Sections suggested CMA exercise caution concerning their recommendation of disclosing algorithms to the consumers.<sup>39</sup> The Sections described that information relating to a firm’s use of pricing algorithms should be considered highly confidential because sharing or even disclosing that a certain kind of algorithm is being used to set prices could facilitate collusion with competitors.<sup>40</sup>

Second, the Sections recommended CMA to consider discussing how algorithms might make markets more susceptible to collusive outcomes, if at all. For example, does the use of algorithms change any structural (demand and supply) characteristics, or does the availability of algorithms and data make it easier for firms to innovate and differentiate their production process leading to asymmetries in costs and hence harder to sustain “collusion.”<sup>41</sup>

Finally, the Sections suggested that the CMA consider topics related to multi-market contacts and multi-sided markets in greater detail.<sup>42</sup> “For example, how would the CMA assess ‘collusive’ activities potentially harming one side of the market, third-party sellers, but that return as indirect network effects to the other side of the market, consumers, as benefits?”<sup>43</sup>

<sup>29</sup> *Id.*

<sup>30</sup> *Paper, supra* note 4, §§ 2.80(b), 2.83.

<sup>31</sup> *ABA Comments, supra* note 3, at 8.

<sup>32</sup> Nicolas Sahuguet & Alexis Walckiers, *Hub-and-Spoke Conspiracies: the Vertical Expression of a Horizontal Desire?*, 5 J. EUR. COMPETITION L. & PRAC. 711, 712 (2014).

<sup>33</sup> *E.g., United States v. Apple, Inc.*, 791 F.3d 290 (2d Cir. 2015).

<sup>34</sup> *ABA Comments, supra* note 3, at 8.

<sup>35</sup> *Id.*

<sup>36</sup> *Paper, supra* note 4, §§ 2.80(c), 2.84–2.85.

<sup>37</sup> *ABA Comments, supra* note 3, at 8.

<sup>38</sup> *Id.* at 8-9.

<sup>39</sup> *Id.* at 9.

<sup>40</sup> *Id.*

<sup>41</sup> *Id.*

<sup>42</sup> *Id.*

<sup>43</sup> *Id.*