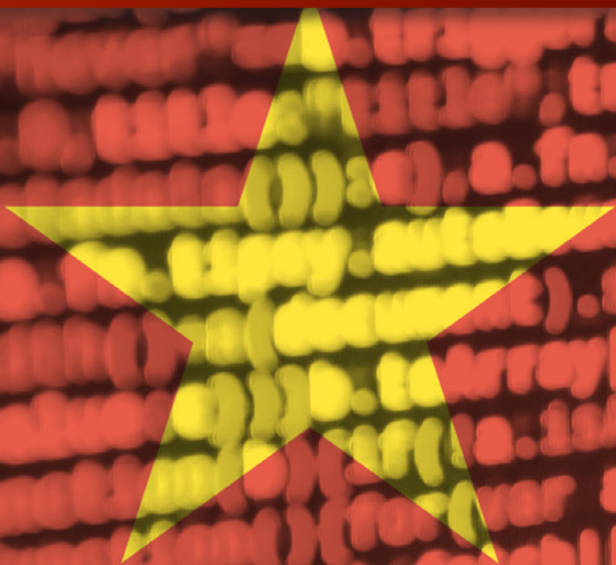


# BIG DATA AND COMPETITION IN CHINA: ANTITRUST REGULATION AND BEYOND



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## Big Data and Competition in China: Antitrust Regulation and Beyond

By Jet Deng & Ken Dai

Today, companies have had no doubt that they compete in terms of data. Data feeds companies to improve the quality of their products, to develop new products, to know their customers, and to personalize products. Big data is a novel source of market power, and has enabled companies to engage in monopoly behaviors through algorithms. China's antitrust authority has begun to seriously consider this issue in recent antitrust legislation (particularly, the draft *Antitrust Guidelines on the Field of Platform Economy*). This article provides an overview of how big data-related competition issues are dealt with in China, as well as the complex triangular relationship between antitrust, unfair competition and personal data protection in certain scenarios.

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The digitization process in the last two decades has dramatically changed the way people live as well as the way companies compete. Today companies have had no doubt that they are in a digital era of competition of the big data, by the big data, and for the big data. Big data helps companies to improve the quality of their products, develop new products, know their customers, and personalize the products. Provided that a high volume and variety of data is essential for the operation of certain types of business, access to that big data may enable a company to foster a competitive advantage over its rivals and even result in a dominant market position. Also, the algorithms developed and trained based on big data might lead to tacit collusion and abuse of dominance.

Having realized potential antitrust issues with big data, China's antitrust watchdog began to consider in recent antitrust legislation scenarios where big data plays a role in anti-competitive behaviors prohibited by the Anti-Monopoly Law ("AML"). Particularly, in November 2020, China's State Administration for Market Regulation ("SAMR") issued a draft of *Antitrust Guidelines on the Field of Platform Economy* ("Draft Platform Guidelines") soliciting public opinions, which factors in big data and/or algorithm in its chapters on monopoly agreements, abuse of dominance, and merger control. In addition, some other policies have warned government agencies or local governments not to commit administrative monopoly in terms of sharing big data controlled by the government.

This article will provide an overview of current antitrust regulation in China related to big data in some typical scenarios. At the same time, the complex triangular relationship among antitrust issues, anti-unfair competition, and personal data protection will be touched upon in the scenario of data scraping.

## I. SCENARIO 1: DATA SCRAPING

### A. Gathering Data from Your Rivals

Many companies have developed methods to gather data from apps or web pages provided by their actual or potential rivals with automated bots. This kind of data accessing approach, which is known as data scraping or data crawling, and its legitimacy, have been a bone of contention among internet companies in recent years.

Companies in control of data may be able to find many legitimate reasons to prohibit data scraping, including intellectual property, unfair competition, personal data protection, unauthorized computer entry and so on. But the scrapers do not always play a defensive role in the battle, as they can employ the antitrust law as a weapon, claiming that restrictions on data accessing by dominant internet companies may harm competition. This issue has been highlighted by the *hiQ v. LinkedIn*<sup>2</sup> case.

In this case, the plaintiff hiQ is a data analysis company that relies on LinkedIn's public profile data. LinkedIn sent a cease-and-desist letter to hiQ asking it to stop data scraping and adopted technology to block its access after staying silent to hiQ's operating practices for several years. hiQ, in turn, filed suit against LinkedIn to seek relief, alleging that it has not violated any laws by "scraping" public data. On the contrary, hiQ asserts, LinkedIn has acquired and maintained monopoly power with unlawful means, including denial of "essential facility."<sup>3</sup>

Although refusal to data scraping is viewed as a rather novel threat to competition, the discussion on the "essential facility" doctrine can date back to a hundred years ago.<sup>4</sup> This doctrine, which mainly holds that a monopolist is liable for denying access to a resource that is essential to downstream competition,<sup>5</sup> has been condemned long, for its widely acknowledged that market participants enjoy the freedom of trading, signifying they also enjoy the freedom of choosing whom to trade with or not to, and even a dominant company should not, in principle, be obliged to promote its competitor's business. The U.S. Supreme Court has never endorsed the essential facilities doctrine after all these years, whereas some of their judicial practice did lend support to this theory.

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<sup>2</sup> 938 F.3d 985 (9th Cir. 2019).

<sup>3</sup> *hiQ Labs v. LinkedIn*, Case No. 17-cv-03301-EMC (N.D. Cal., 2020) (Order granting in part and denying in part defendant's motion to dismiss).

<sup>4</sup> The essential facilities doctrine can be traced back to *U.S. v. Territorial Railroad Association of St. Louis* rendered by the US supreme court in 1912.

<sup>5</sup> 2 Antitrust Laws and Trade Regulation § 25.04 (LexisNexis 2d ed 2019).

In September 2019, the U.S. Court of Appeals for the Ninth Circuit affirmed the lower court's order granting a preliminary injunction barring LinkedIn from blocking hiQ from accessing and scraping publicly available LinkedIn member profiles to create competing business analytic products, as the court found credible that hiQ's entire business depended on being able to access public LinkedIn member profiles and the survival of its business was threatened absent a preliminary injunction. Despite the absence of direct reference to the essential facility, the ruling of the court undoubtedly has bearings on this doctrine.

## **B. Big Data as Essential Facility**

The Draft Platform Guidelines provides that the refusal of undertakings that control the essential facilities in the platform economy sector to deal with its counterparties under reasonable terms can translate into the abuse of dominance. Further, the guidelines list several factors in determining whether relevant data can constitute an essential facility, including the indispensability of the data for participating in market competition, other ways to access the data, the technical feasibility of data opening, and the impacts of data opening on the companies who possess the data.

So far, there is no public or private enforcement in China alleging certain big data as the essential facility. However, there have been several disputes involving the restriction on data accessing which have the potential to be regulated by the Draft Platform Guidelines, for instance, the dispute between Cainiao and SF express.

Cainiao is an express delivery platform founded by Alibaba, which collects logistics data from major express companies, including SF Express, and allows consumers to know where their parcels are and when they expect to receive them. In 2017, Cainiao disconnected SF Express in the name of cyber security, causing the latter to be kept out of the logistics platform, resulting in information chaos for online sellers and consumers. This event sparked controversy over the dominant power of a digital platform, as it was reported that in 2016, China's major express companies adopted Cainiao's big data services in 70 percent of their logistics business.<sup>6</sup> This dispute was solved by the State Post Bureau soon via mediation, urging the two parties to reach an agreement of fully resuming the business cooperation and data exchange. Thus, the potential antitrust issues have not been brought into legal proceedings.

## **C. Other Legal Recourses**

So far, most of the data scraping cases in China are resolved under the *Anti-unfair Competition Law*. One of the most representative cases is *Sina Weibo v. Maimai (2016)*.

Maimai is a LinkedIn-simulated platform providing career and social networking services in China. In order to expand its user population, Maimai scraped a large amount of user's educational and occupational information from Sina Weibo, a leading social networking platform, without the latter's authorization. The Beijing Intellectual Property Court ruled in December 2016 that Maimai's behavior harms the legitimate interests of Sina Weibo and constitutes unfair competition. Furthermore, the court established a fundamental principle for third parties to scrap data from companies in control of personal data, which is known as the "triple-authorization principle." According to the judgement, when a third party tries to obtain users' data from a data controller, it is required to ensure that there are "triple authorizations," that is, one authorization from the user to the data controller, one from the user to the third party, and one from the data controller to the third party. This principle has been recognized in several subsequent cases against data scraping in China. For example, in a dispute involving Tencent and ByteDance in 2019, a court in Tianjin decided that the "triple-authorization principle" has "become a business ethics that network operators in the field of open platforms should abide by."<sup>7</sup>

The triple-authorization principle shows the court's intention to find a point of balance among each stakeholder. The battle regarding data scraping and sharing between internet companies actually involves a tripartite relationship, as the collection and use of data may relate to invasion of privacy. In October 2020, China's *Personal Information Protection Law (Draft)* ("Draft PIPL") was unveiled, which establishes a rule that separate consent shall be obtained from the personal information subject before data controllers share it with third parties. The rule regarding "separate consent," which is the equivalent to the explicit consent under Article 9 of EU's GDPR, would apparently frustrate companies employing the data scraping method.

<sup>6</sup> See 21CBH, Logistics support express, Cainiao links new working population, <https://m.21jingji.com/article/20170103/herald/5ed995d0f718ef724935e31cfb21daad.html>, accessed 1/20/2021.

<sup>7</sup> Shenzhen Tencent Computer System Co., Ltd. and Tencent Technology (Shenzhen) Co., Ltd. Commercial Bribery and Unfair Competition Dispute(2019)Jin 0116 Min Chu No. 209.

In view of the above, although antitrust regulation may intervene in cases of refusal to access big data, it needs to take into account anti-unfair competition and personal data protection issues. To draw a legitimate boundary among this triangle relationship would be a challenge, and it remains to be tested in the future.

## II. SCENARIO 2: ALGORITHMS AND COLLUSION

Price-fixing cartels can be more easily implemented with the development of information technology. The idea is known as algorithmic collusion: instead of sitting in a smoke-filled room to negotiate a horizontal agreement, people now only need to hide behind the screens and use algorithms to execute their collusion.

Algorithms contribute to the implementation of cartels by affecting certain market characteristics that make collusion more viable. They increase market transparency as they automate the process of monitoring and collecting price information from other market competitors. They also enable the conspiring firms to exchange information in a more clandestine and frequent manner, making it much harder for the regulator to discover such collusion. With the help of algorithms, the firms can retaliate immediately against any deviation from collusion, which might have been hard to detect in the past in a traditional cartel. Besides, algorithms also lower the cost and complexity of collusion, making it possible in a wider range of markets, including those with so many competitors where cartels were traditionally deemed impossible to implement.

Cases of this kind are not uncommon worldwide. In 2015, the U.S. Department of Justice charged David Topkins, the employee of a company that sells posters, for violating the Sherman Act. Topkins wrote computer code that instructed the company's algorithm-based software to set prices of certain posters in accordance with a previously determined agreement. He also exchanged price and sales information with other conspiring firms in order to monitor the effectiveness of the pricing algorithms and adhere to the agreement. This is the first case in which using algorithms to collude became the target of law enforcement.

The regulator in China must have been aware of the negative impact algorithms can have on market competition, as the newly issued Draft Platform Guidelines specifically address the issue. Chapter 2 of the guidelines highlights several horizontal monopoly practices that need to be regulated, among them are the ones related to algorithms. Article 6 of the guidelines, for example, mentions "using platforms to collect or exchange price, sales or other sensitive information" as well as "using data and algorithms to achieve concerted practices." Article 8, which concerns the hub-and-spoke conspiracy, also states that "whether undertakings with competitive relationships use methods such as technological means, platform rules, data and algorithms" should be taken into account in the relevant analysis.

Though there have been cases involving algorithmic collusion in other countries, no such case exists in China. However, a specific mention of algorithms in the guidelines may serve as a signal that declares the advent of stricter law enforcement in this regard.

## III. SCENARIO 3: PERSONALIZED PRICING

For a long time, companies can only offer products to their customers at a uniform price. It creates what is known as consumer surplus, a concept that refers to the difference between the price that consumers pay and the price that they are willing to pay. However, algorithms are helping companies to encroach on consumer surplus so as to maximize their profits.

This is done through offering each consumer a personalized price, which is calculated in accordance with the personal data that companies have collected during their operation. In a very typical scenario, a platform may charge a higher price to an old customer than to a new customer, since it has learned the consumption habit of that old one from her purchase history on that platform and reached the conclusion that she is willing to pay more. Also known as first-degree price discrimination, this practice is especially common in online shopping, online car hailing services, online food delivery industries, and online travel agencies in China.

Issues related to first-degree price discrimination lies in the intersection between many legal sectors. Data protection law is applicable, as personalized pricing inevitably involves collecting and using users' personal data. In the Draft PIPL, there are also provisions regulating the automated processing of user information. From the perspective of consumers' interest protection, e-commerce Law may apply. Competition law also has a stake if such pricing strategy is carried out by an undertaking with a dominant market position.

The newly issued Draft Platform Guidelines reflect such a position. In Article 17, under the title of “differential treatment,” the guidelines prohibit undertakings from “adopting differential pricing or other transaction conditions based on the paying capacity, consumer preferences, usage habits, and other factors, as revealed by big data and algorithms,” as well as “adopting differential pricing or other transaction conditions between new and old users, as revealed by big data and algorithms.” The guidelines also specify that having different privacy, transaction history, individual preferences, and consumption habits does not mean the transaction conditions of trading parties is different, thus cannot justify differential treatments.

With the complexity of modern business activities in mind, the guidelines include some exceptions with regards to the above-mentioned prohibition. For example, if the undertaking presents a special offer to new users in a reasonable period for the first-time transaction, it will not be caught by the prohibition. If the differential treatment is adopted in accordance with the actual need of the trading party and is in conformity with the trade usage and industry practices, it will also be exempted. The guidelines also contain a catch-all provision that allows undertakings to raise other justifiable reasons not listed in Article 17, leaving some degree of flexibility in future law enforcement.

There are only anecdotal reports on big companies’ price discrimination practices, and none of them have entered legal procedure, whether in China or abroad. However, given the brewing public dissatisfaction in this regard, one might test the water through public or private antitrust enforcement proceedings based on the Draft Platform Guidelines when finalized in the future.

## IV. SCENARIO 4: MERGER CONTROL

The trend towards increased scrutiny of big data-related transactions has been observed in many jurisdictions around the world, especially for transactions that occurred in the past and are considered to have raised competitive concerns in the present. As only part of the entities would be able to gather first-party data directly from data subjects and they may not be willing to share them with their rivals, a practical corporate strategy may be to acquire other companies owning large datasets.

The Draft Platform Guidelines contains several articles to cover the data-related merger control issues. In particular, the guidelines have counted data as a crucial factor in evaluating the competitive impacts of the concentration of undertakings in the platform sector. The guidelines provide that considerations for the undertaking’s control over the market involve the undertaking’s ability to collect and process data and to control the data interface. Furthermore, the difficulty for undertakings to obtain necessary resources and necessary facilities, including data, may result in market entry barriers.

When it comes to remedies, the guidelines provide the divestiture of data as an available restrictive condition. Although opening up API has not been listed as a type of behavioral conditions, it may still be resorted in future cases. As in the case of Google’s acquisition of Fitbit, the European Commission found that a number of players in the relevant market currently access data provided by Fitbit through a Web API to provide services, and following the transaction, Google might restrict competitors’ access to the Fitbit Web API. Based on this consideration, the Commission cleared the acquisition after Google offering the maintenance of access to users’ data through the Fitbit Web API without charging as a commitment.<sup>8</sup>

By far, there has been no data-related representative merger control case in China. However, with the Draft Platform Guidelines, the on-going investigation of *Didi/Uber China* might end up with conditions of opening up certain data to competitors. In August 2016, Didi acquired all assets of Uber China business and thus acquired a market share of as much as 93.1 percent in the ride-hailing market in China.<sup>9</sup>

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<sup>8</sup> European Commission, Mergers: Commission clears acquisition of Fitbit by Google, subject to conditions, [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_20\\_2484](https://ec.europa.eu/commission/presscorner/detail/en/IP_20_2484), accessed 1/22/2021.

<sup>9</sup> Does Didi’s Acquisition of Uber China Constitute an Industry Monopoly?, China Youth Daily (Aug. 5, 2016), [http://zqb.cyol.com/html/2016-08/05/nw.D110000zgq-nb\\_20160805\\_6-01.htm](http://zqb.cyol.com/html/2016-08/05/nw.D110000zgq-nb_20160805_6-01.htm), accessed 1/21/2021.

## V. SCENARIO 5: ADMINISTRATIVE MONOPOLY

Administrative agencies have produced and collected a broad range of different types of data in order to perform their functions, which has simultaneously made them one of the biggest controllers of public data. With the increasing emphasis of data's strategic position, Open Government Data ("OGD"), as provided by OECD, has been acknowledged as "an important source of economic growth, new forms of entrepreneurship and social innovation." OGD-related policies and portals have proliferated all over the world since the mid-2000s.<sup>10</sup>

In response to the public outcry, China made public the *Action Plan for Promoting the Development of Big Data* in 2015, raising aspirations such as to accelerate the construction of a national government data opening and sharing platform, and to promote the opening of public data resources. Subsequently in 2020, China issued *Opinions on Building a More Improved System and Mechanism for Market-oriented Allocation of Elements* ("Opinions on Elements Allocation"), requiring the acceleration of the cultivation of the data element market via enhancing the opening and sharing of government data. However, these OGD initiatives may exert impacts on market competition if the government itself is involved in monopolistic behaviors.

Administrative monopoly, which refers to the abusive use of administrative power by government agencies to engage in monopolistic activities, is a unique part of the antitrust system in China. According to the AML, administrative agencies shall not abuse their administrative power to restrict competition in ways including designating trading partners, impeding the free flow of products between regions, or discriminating against non-local undertakings.

In the implementation of OGD policies, the government may face dilemmas due to the shortage of specific data processing and analysis technologies, which makes it inevitable to cooperate with private enterprises. Nevertheless, if the government authorizes an entity with exclusive rights in public data accessing or provision of services based on public data without going through legal procedures like a tender process, the market competition might be seriously impaired. To overcome this, the *Opinions on Elements Allocation* dictates that government agencies should break local protectionism and strengthen the enforcement of the AML to improve the regulation of element trading. Similar statements can also be observed in regulations formulated by local authorities. For instance, Guizhou, a testing ground for big data and the OGD policy in south-west China, has issued a regulation requiring local government agencies to select companies for public data processing services in a fair and merit-based manner.

Despite the lack of attention, administrative monopolistic practices related to big data and digital platforms have actually emerged in practice. With the respite of the COVID-19 pandemic, many local governments tried to promote economic recovery by issuing consumer vouchers. But the good intention went awry when some of them designated a single digital platform as the channel for issuance. When it comes to OGD, we have witnessed that some enterprises have exclusively provided services based on the public data of a local government, but the procedure of authorization remains ambiguous. Given that OGD has just entered a booming phase, governments in China may continue to refine their practice, ensuring public data to better serve market competition.

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10 Ubaldi, B. (2013), "Open Government Data: Towards Empirical Analysis of Open Government Data Initiatives," OECD Working Papers on Public Governance, No. 22, OECD Publishing, Paris, <https://doi.org/10.1787/5k46bj4f03s7-en>.



## VI. CONCLUSION

The Chinese government has realized the potential antitrust issues with big data, and thus issued the Draft Platform Guidelines to try to cover every typical scenario. However, since enforcement in this area is still rare, it remains to be seen how challenging issues will be solved in specific cases. First, big data has enabled the emergence of all sorts of new business-models, complicating matters in the already obscure application of the antitrust law in practice. Second, most disputes over big data involve at least three stakeholders, namely the data subject, the data controller, and a third-party company, and therefore can hardly be resolved unless a way to balance the legal interest is worked out. Furthermore, as the parties may claim their legitimate rights (such as anti-unfair competition and personal data protection) under different laws, the manner of managing their overlaps would also be a major challenge.

In November 2020, the CPC Central Committee released its forthcoming five-year plan, which puts breaking up industry monopolies and local protectionism on the schedule. This move is recognized as an indication that the top leaders of China have started to pay unprecedented attention to the role that the AML can play for economic development and other government purposes. China's digital market has passed through a decade characterized by lax oversight and unencumbered growth where virtually none of M&A deals in this sector had been reviewed by the antitrust regulators, nor had any internet companies received an antitrust penalty decision until the end of 2020. On December 14, SAMR imposed its first VIE gun-jumping fines on internet companies following the introduction of the Draft Platform Guidelines, which has demonstrated its determination in enhancing scrutiny against internet giants. Therefore, although challenging, antitrust regulation over big data issues will play an important role in the digital era to complete the goals of economic structural transformation and the development of a higher-level market economy as set by the Chinese government.





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