

**GOVERNING DATA MARKETS IN CHINA:  
FROM COMPETITION LITIGATION AND GOVERNMENT REGULATION TO LEGISLATIVE ORDERING**

*Celine Yan Wang\**

I. INTRODUCTION

*“The things which are naturally everybody’s are: air, flowing water, the sea, and the seashore. So nobody can be stopped from going on to the seashore. But he must keep away from houses, monuments, and buildings. Unlike the sea, right to those things are not determined by the law of all peoples.”*

— JUSTINIAN I, INSTITUTES<sup>1</sup>

In mid-2017, disagreements over the terms of access to each other’s propriety data led two private Chinese companies to a rare public spat that invited unusual intervention by the State’s regulatory agency that is supervising their market activities. The tit-for-tat escalations saw a clash of billionaire personalities, but, more importantly, thrust into the limelight the principal question facing China’s internet platform economy: who owns the big data of China’s US \$910 billion online retailing market?<sup>2</sup>

SF Express (顺丰), China’s largest private carrier by market value,<sup>3</sup> precipitated the standoff in late May against its largest e-commerce partner, Cainiao (菜鸟), who is the logistics arm of e-commerce giant Alibaba Group founded by Jack Ma.<sup>4</sup> The deadlock between the two originated from a decision by SF Express to decline a data-sharing request from Cainiao, which insisted upon unspecified access to propriety data on all packages handled by SF Express.<sup>5</sup> Within this data request, Cainiao had asked for details on SF Express’s non-Cainiao and non-Alibaba deliveries; many of which also involved the company’s deliveries for other online retailers.<sup>6</sup> Consequent to SF Express’s denial of data access, both companies disconnected from each other’s data interfaces on SF Express’s last-mile delivery solution, Hive Box.<sup>7</sup> Moreover, Alibaba retaliated by entirely blocking SF Express’s access to Cainiao through temporarily de-listing the company as a service provider option from all of its online shopping markets, including Taobao and T-mall, which account for three-quarters of total e-commerce market share in China.<sup>8</sup>

The rift threatened to break up one of the largest and most valuable partnerships in China’s booming e-commerce market.<sup>9</sup> It also attracted the attention of China’s State Post Bureau (国家邮政局), the government agency

---

\* Law Clerk, Chaffetz Lindsey LLP. J.D., 2021, New York University School of Law; M.A., 2016, Yale University; B.A., 2015, University of Notre Dame. I am deeply grateful to Professor Benedict Kingsbury for encouraging me to pursue this project and for his invaluable guidance and cheerleading throughout the development of this Article. Additional thanks to Professor Angelina Fisher for introducing me to the topic of data and law in her clinic course and to Professor Thomas Streinz for his teachings and scholarship on China’s role in global data governance. This project has also benefited from Professor Shitong Qiao’s presentation on data ownership at the 2019 NYU Guarini Global Data Law Conference. I would also like to thank the editors at the *George Mason International Law Journal*, particularly Sally Alghazali, Hope D’Amico, John Allaire, Rachael Griffin, Suzanne Schultz, Shannon Thielen, and Emily Bordelon, for publishing this Article and for all of their thoughtful suggestions throughout the editorial process. The views expressed in this Article, and any errors, are my own.

<sup>1</sup> See JUSTINIAN I, JUSTINIAN’S INSTITUTES 55, 55 (Peter Birks & Grant Mcleod Trans., 1987) (533).

<sup>2</sup> See, e.g., Lulu Yilun Chen & Dong Lyu, *Chinese Billionaires Clash Over Alibaba’s Parcel Deliveries*, BLOOMBERG (June 1, 2017), <https://www.bloomberg.com/news/articles/2017-06-02/chinese-billionaires-clash-over-alibaba-s-parcel-deliveries>; Josh Ye, *Cainiao, SF Express in Standoff Over Data, Causing Confusion Among Chinese Online Shoppers*, S. CHINA MORNING POST (June 2, 2017), <https://www.scmp.com/business/article/2096631/cainiao-sf-express-standoff-over-data-gumming-deliveries-chinas-online>.

<sup>3</sup> Amanda Wang & Philip Glamann, *China’s Biggest Courier Firm Could Soon Deliver Parcels by Drone*, BLOOMBERG (Mar. 28, 2018), <https://www.bloomberg.com/news/articles/2018-03-28/china-s-biggest-courier-firm-could-soon-deliver-parcels-by-drone>.

<sup>4</sup> See, e.g., Louise Lucas et al., *Alibaba Fights with Courier for Control of Customer Data*, FIN. TIMES (June 02, 2017), <https://www.ft.com/content/5eb8e094-475c-11e7-8519-9f94ee97d996>.

<sup>5</sup> Alyssa Abkowitz, *Crippling China Delivery Dispute is All About the Data*, WALL ST. J. (June 2, 2017), <https://www.wsj.com/articles/crippling-china-delivery-dispute-is-all-about-the-data-1496407108>.

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

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

<sup>8</sup> Willow Wang & Jiaxin Wang, *SF Express: Data Wars*, IVEY BUS. SCH. 1 (Sept. 24, 2018), <https://hbsp.harvard.edu/product/W18544-PDF-ENG>.

<sup>9</sup> See YOUZHENG JU WANGZHAN (邮政局网站) [Post Office Website], *Guojia Youzheng Ju Xietiao Jiejue Cainiao Shunfeng Shuju Hutong Wenti* (国家邮政局协调解决菜鸟顺丰数据互通问题) [*The State Post Bureau Coordinated to Solve the Data Interoperability Problem Between Cainiao and SF Express*], ZHONGHUA RENMIN GONGHEGUO ZHONGYANG RENMIN ZHENGFU (中华人民共和国中央人民政府) [STATE COUNCIL OF THE PEOPLE’S REPUBLIC OF CHINA] (June 3, 2017), [http://www.gov.cn/xinwen/2017-06/03/content\\_5199542.htm](http://www.gov.cn/xinwen/2017-06/03/content_5199542.htm).

regulating the postal service in China.<sup>10</sup> The clash between the two e-commerce titans caused a major disruption for the delivery of over a hundred million packages and triggered a 3.54 percent loss in SF Express's share price—or, US\$1.2 billion (CN¥ 7.74 billion)—from the Shenzhen Stock Exchange in under a day.<sup>11</sup> The State Post Bureau, in a rare occasion, intervened directly and urged both sides to “take the big picture into consideration” and to “preserve the market order and consumers' rights and benefits.”<sup>12</sup> After government-mediated negotiations, SF Express and Cainiao agreed to an armistice and ended a potentially costly data war, which could have impacted many more hundreds of millions of merchants and consumers in China.<sup>13</sup>

This incident reveals at least two important themes related to data commercialization. First, as big data analytics powered by artificial intelligence (AI) become central features of commerce across sectors and worldwide, data have shifted from by-products of industrial, commercial, and consumer activities to prized resources in their own right.<sup>14</sup> Second, as data becomes the “new oil,”<sup>15</sup> the legal concept of data ownership becomes a fundamental issue to be determined. For example, some of the world's largest corporations already treat data as a new type of property—an asset that is “created, manufactured, processed, stored, transferred, licensed, sold, and stolen.”<sup>16</sup>

Ownership is an important foundational concept upon which transactions in digital information proceed. Canadian scholar, Teresa Scassa, identifies a number of contexts in which issues of data ownership are fundamental.<sup>17</sup> Principally, the issue of data ownership decides which companies and organizations can extract perpetual commercial value from these data.<sup>18</sup> Secondarily, Scassa also recognizes the complicated relationship between data ownership and competition and antitrust law.<sup>19</sup> For instance, she points out that excessive concentrations of certain types of data controlled by big internet companies can lead to monopolies.<sup>20</sup> Tertiarily, data ownership weighs heavily in the debate on personal data privacy protection.<sup>21</sup> Finally, clarity of data ownership is necessary for particular public policy agendas, such as creating more competitive data-based industries.<sup>22</sup> For example, many governments, as part of the open data movement,<sup>23</sup> are making their data available for reuse under open licenses.<sup>24</sup>

Issues of data ownership are common across multiple jurisdictions and regions. In the United States, ongoing litigation between LinkedIn and companies that scrape LinkedIn's platform data raises a number of critical issues around ownership and control over publicly accessible platform data.<sup>25</sup> In the European Union, the evolving European model of data protection, *i.e.*, the General Data Protection Regulation, grants individuals a series of *sui generis* rights—a quasi-ownership rights regime in data that gives individuals increased control over “their” personal data,

---

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

<sup>11</sup> *Data Sharing Cut off as SF Express, Alibaba Spat Continues*, CHINA GLOBAL TELEVISION NETWORK (June 2, 2017), <https://news.cgtn.com/news/3d67444e7945444e/index.html>.

<sup>12</sup> See Post Office Website, *supra* note 9.

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

<sup>14</sup> See Teresa Scassa, *Data Ownership*, CIGI Papers No. 187 (Sept. 2018), [https://www.cigionline.org/static/documents/documents/Paper%20no.187\\_2.pdf](https://www.cigionline.org/static/documents/documents/Paper%20no.187_2.pdf).

<sup>15</sup> *The World's Most Valuable Resource is No Longer Oil, But Data*, THE ECONOMIST (May 6, 2017), <https://www.economist.com/leaders/2017/05/06/the-worlds-most-valuable-resource-is-no-longer-oil-but-data>.

<sup>16</sup> Jeffrey Ritter & Anna Mayer, *Regulating Data as Property: A New Construct for Moving Forward*, 16 DUKE LAW & TECH. REV. 220, 221 (2018).

<sup>17</sup> See Scassa, *supra* note 14, at 2.

<sup>18</sup> *Id.*

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

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

<sup>21</sup> See *id.*; see also Michelle Denney & Sagi Leizerov, *On Monetizing Personal Information: A Series*, THE INT'L ASS. OF PRIVACY ADVISORS (Sept. 26, 2017), <https://iapp.org/news/a/on-monetizing-personal-information-a-series/>; Michael Haupt, *Introducing Personal Data Exchanges & The Personal Data Economy*, PROJECT 2030 (Dec. 7, 2016), <https://medium.com/project-2030/what-is-a-personaldata-exchange-256bcd5bf447>.

<sup>22</sup> See Scassa, *supra* note 14, at 2.

<sup>23</sup> For a discussion on open data movement, see, e.g., Frederik Zuiderveen Borgesius, Jonathan Gray & Mireille van Eechoud, *Open Data, Privacy, and Fair Information Principles: Towards a Balancing Framework*, 30 BERKELEY TECH. L. J. 2073 (2015); Jonathan Gray, *Towards a Genealogy of Open Data* (General Conference of the European Consortium for Political Research in Glasgow, 2014), <https://ssrn.com/abstract=2605828>.

<sup>24</sup> For examples of open data movements and agreements in various jurisdictions, see, e.g., Directive 2019/1024, of the European Parliament and of the Council of 20 June 2019 on Open Data and the Re-Use of Public Sector Information, 2019 O.J. (L 172); FOIA Improvement Act of 2016, 114th Cong. (2016); Decreto No. 8.777, de 11 de Maio de 2016 [Decree No. 8.777, 11 May 2016], Diário Oficial da União [D.O.U.] de 12.05.2016 (Braz.) (establishing the Brazilian Federal Executive Branch's Open Data National Policy); Digital Trade Agreement, Japan-U.S. art. 20, Oct. 7, 2019, T.I.A.S. No. 20-101.1; Digital Economy Partnership Agreement, Chile-N.Z.-Sing., [2020] (signed 11 June 2020, entered into force 7 Jan. 2020), art. 9.5, (N.Z.).

<sup>25</sup> See, e.g., hiQ Labs, Inc. v. LinkedIn Corp., 938 F.3d 985, 990 (9th Cir. 2019).

including rights of erasure and data portability rights.<sup>26</sup> In Canada, the now-defunct Sidewalk Toronto Project triggered considerable discussion about who will own any data generated by this public-private partnership.<sup>27</sup> In China, ongoing legal battles among the big tech companies over consumer data again highlight this grey area of data ownership.<sup>28</sup> In each of these examples, the growing economic importance of data raises serious questions about who “owns” data and what data “ownership” entails (hereinafter, the “twin questions”).

This Article analyzes the question of who “owns” data in China. Despite the growing economic role of data, the current global legal regime lacks a comprehensive framework on data property rights. As Scassa illustrates, the extent to which law recognizes property rights in data is, at best, unsettled, and who owns or should own data is a question without a definitive answer.<sup>29</sup> Nevertheless, control over data can be asserted through a variety of means. On the one hand, technological means, e.g., control over data infrastructures, can be deployed to prevent data access by others.<sup>30</sup> On the other hand, the existing legal regimes, e.g., intellectual property (“IP”) rights (copyright and trade secrecy) and competition law, may help protect certain data assets when data ownership in general is not defined.<sup>31</sup> Nevertheless, these existing legal frameworks are increasingly proving insufficient to deal with the challenges of today’s big data-driven economy.<sup>32</sup>

Like many other jurisdictions, China has some law under existing legal regimes that protects basic data rights but lacks a comprehensive legal framework that answers the twin questions.<sup>33</sup> The uncertain legal milieu has led to heated disputes between companies and between the private and public sectors over access and control of big data.<sup>34</sup> However, despite the legal ambiguity, the digital economy has boomed in the country without specification of data ownership.<sup>35</sup> How has China managed the massive growth of its data markets and inter-company data disputes without any legal determinations as to who owns data? This Article examines the particular case of data ownership within the Chinese jurisdiction by reviewing the existing legal regimes in China, along with some of the strategies and means in which Chinese private companies and state agencies use to access data or to adjudicate its control. Thus far, China has established a data governance framework through private litigation applying the principle of unfair competition within the court system, with some high-profile cases addressed by direct government mediation or indirect policy regulation

<sup>26</sup> Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the Protection of Natural Persons with Regard to the Processing of Personal Data and on the Free Movement of Such Data and Repealing Directive 95/46/EC (General Data Protection Regulation), arts. 59, 73, 2016 O.J. (L 119) [hereinafter GDPR].

<sup>27</sup> The Sidewalk Toronto Project was a megaproject spearheaded by Waterfront Toronto and a Google-affiliated company pledging to make Toronto “one of the world’s first ‘smart’ cities.” Leyland Cecco, *Toronto Swaps Google-Backed, Not-So-Smart City Plans for People-Centered Vision*, THE GUARDIAN (Mar. 12, 2021), <https://www.theguardian.com/world/2021/mar/12/toronto-canada-quayside-urban-centre>; see also Teresa Scassa, *Who Owns All the Data Collected by ‘Smart Cities’?*, TORONTO STAR (Nov. 23, 2017), <https://www.thestar.com/opinion/contributors/2017/11/23/who-owns-all-the-data-collected-by-smart-cities.html>.

<sup>28</sup> See discussion *infra* Part II.

<sup>29</sup> See Scassa, *supra* note 14, at 1.

<sup>30</sup> As Katharina Pistor notes, data controllers often exploit this legal ambiguity to entrench their *de facto* control over data and protect against compelled disclosures of data through “self-help by way of technological barriers to accessing their databases.” Katharina Pistor, *Rule by Data: The End of Markets?*, 83 L. & CONTEM. PROBS. 101, 107 (2020); see also Angelina Fisher & Thomas Streinz, *Confronting Data Inequality* 35 (World Development Rep. Working Paper No. 2021/1, 2021), <https://www.iilj.org/publications/confronting-data-inequality/>.

<sup>31</sup> See, e.g., Scassa, *supra* note 14; Fisher & Streinz, *supra* note 30, at 5.

<sup>32</sup> See, e.g., Ritter & Mayer, *supra* note 16, at 222 (arguing that while copyright law framework has evolved to protect data in some contexts, this legal regime is ultimately inadequate for the task of addressing data ownership in a big data economy); Fisher & Streinz, *supra* note 30, at 37 (noting that because the processes of data generation consist of recording facts and most databases do not satisfy the threshold for creative works, these data and most databases cannot be protected under copyrights); Scassa, *supra* note 14, at 12 (arguing that laws of trade secrets or confidential information do not protect all data, because some data are necessarily broadly shared or are even publicly accessible and other data are difficult to keep confidentiality, as the law protects the confidentiality of the data and not the data itself).

<sup>33</sup> See, e.g., LI YOUXING (李有星) ET AL., SHUJU ZIYUAN QUANYI BAOHU FA LIFA YANJIU (数据资源权益保护立法研究) [RESEARCH ON LEGISLATION OF DATA RESOURCES PROPERTY RIGHTS PROTECTION LAW], 18–32 (2019) (e-book); Tong Bin (童彬), *Shuju Caichanquan de Lilun Fenxi He Falü Kuangjia* (数据财产权的理论分析和法律框架) [*The Theoretical Analysis and Legal Framework of Data Property Rights*] 31 J. CHONGQING UNIV. POSTS & TELECOMMS. 50, 50, 56 (2019); Wang Youqiang (王佑强), *Shuju de Falü Jieding Jiqi Baohu* (《数据的法律界定及其保护》) [*Legal Definition of Data and Its Protection*], ALLBRIGHT (July 26, 2020), <https://www.allbrightlaw.com/CN/10475/93b93cce4e93bddf.aspx>.

<sup>34</sup> See discussion *infra* Parts II–III.

<sup>35</sup> See, e.g., RESEARCH & MARKETS, COUNTDOWN TO THE CHINESE CENTURY: GLOBAL DIGITAL ECONOMY (July 2021) (e-book), [https://www.researchandmarkets.com/reports/5360338/countdown-to-the-chinese-century-global-digital?utm\\_source=Ci&utm\\_medium=PressRelease&utm\\_code=f9zxbg&utm\\_campaign=1590916+-+Countdown+to+the+Chinese+Digital+Century%3a+2021+Report&utm\\_exec=chdo54prd](https://www.researchandmarkets.com/reports/5360338/countdown-to-the-chinese-century-global-digital?utm_source=Ci&utm_medium=PressRelease&utm_code=f9zxbg&utm_campaign=1590916+-+Countdown+to+the+Chinese+Digital+Century%3a+2021+Report&utm_exec=chdo54prd) (estimating that China will become the world’s largest economy by 2025 with 55% of that economic output coming from the digital economy, at around US \$12 trillion); Jonathan Woetzel et al., *China’s Digital Economy: A Leading Global Force 1*, MCKINSEY & COMPANY (Aug. 2017), <https://www.mckinsey.com/~media/mckinsey/featured%20insights/China/Chinas%20digital%20economy%20A%20leading%20global%20force/MGI-Chinas-digital-economy-A-leading-global-force.ashx>.

under anti-monopoly law and other data-specific legislation.<sup>36</sup> Many unresolved issues remain under legislative and policy experimentation, such as specification of data property rights and establishment of a national data trading market.<sup>37</sup>

The Shenzhen legislative experiment is one of the most prominent Chinese government exercises to address the issue of “ownership” hitherto sidestepped to spur competition, innovation, and growth for future applications of AI and machine learning (ML).<sup>38</sup> However, there remains the risk within this experiment, and other legislative and policy-making efforts by Chinese authorities, that premature specification of data property rights may raise more challenges than it solves. The reason for that is because a status quo bias towards data controllers who have already controlled much of the Chinese consumer data, which have excluded others from accessing that data, may undermine efforts at addressing issues of competition, innovation, and the broader public interest. Therefore, this Article proposes that incremental development and experimentation, in the form of judicial rulings, regulatory guidance, and legislative initiatives, is a promising path forward. As Angelina Fisher and Thomas Streinz observe, “proactively establishing or recognizing legal property rights in data can further entrench infrastructural control with the authority of law by preventing redistributive measures because data holders would use property rights as an additional shield to exclude others from access.”<sup>39</sup>

Part II examines the role of the Chinese Anti-Unfair Competition Law in legal battles between various Chinese internet platforms over data ownership, and investigates the ways in which these companies resort to competition litigation to settle data disputes. Part III delves into governmental mediation in high-profile tech-industry conflicts and intervention through antitrust regulatory action. Part IV explores legislative and policy initiatives taken by the Chinese authorities to establish a new data ownership regime. Part V then provides legal analysis of the cases and legal framework presented and proposes that incremental development and prudent experimentation, in the form of judicial rulings, regulatory guidance, and legislative initiatives, is a promising path forward in establishing a comprehensive legal regime on data ownership in China. The final section concludes the Article.

## II. COMPETITION LITIGATION: ANTI-UNFAIR COMPETITION LAW

Litigation has increasingly become the preferred means for Chinese internet platforms to retain access and assert control over their collected consumer data.<sup>40</sup> While this conventional approach invokes legal protections under core IP law (copyrights and trade secrets) and contract law,<sup>41</sup> in Chinese judicial practice, inter-company disputes rely primarily upon competition law—which regulates business operators’ conduct and prohibits certain unfair acts that damage their competitors’ interests.<sup>42</sup>

On January 1, 2018, the newly amended Anti-Unfair Competition Law (“AUCL”) took effect, which was passed in November 2017 by China’s highest legislative body, known as the Standing Committee of the National People’s Congress.<sup>43</sup> The amended AUCL included new provisions under Article 12 that specifically address internet-related unfair competition.<sup>44</sup> Similar to Article 2 of the superseded AUCL, Article 12 of the amended AUCL required

<sup>36</sup> See discussion *infra* Parts II–III.

<sup>37</sup> See discussion *infra* Part IV.

<sup>38</sup> See discussion *infra* Part IV.A.

<sup>39</sup> Fisher & Streinz, *supra* note 30, at 36.

<sup>40</sup> See Ives Duran, *Tesla Chezhu Weiquan Shijian Beihou, Nanjie de Shuju Zhengduo Zhan* (特斯拉车主维权事件背后，难解的数据争夺战) [*Behind the Tesla Owner’s Rights Case, The Inexplicable Data Battle*], TENCENT (Apr. 23, 2021), <https://new.qq.com/omn/20210423/20210423A04P6T00.html>.

<sup>41</sup> See Sharon Liu & Zhangwei Wang, *Recent Privacy Case Law Update in China*, JD SUPRA (Feb. 24, 2020), <https://www.jdsupra.com/legalnews/recent-privacy-case-law-update-in-china-25291/>; Guanbin Xie & Bin Zhang, *Competition Law Could Give Better Protection to Big Data Than Copyright Law*, MANAGING IP (Mar. 22, 2019), <https://www.managingip.com/article/b1kblzh0qht8gh/competition-law-could-give-better-protection-to-big-data-than-copyright-law#:~:text=In%20the%20case%20of%20Taobao,Anhui%20Meijing%20for%20unfair%20competition.&text=The%20court%20held%20that%20unfair,Meijing%20unlawfully%20acquired%20Taobao's%20data.>

<sup>42</sup> Xie & Zhang, *supra* note 41.

<sup>43</sup> Fan Bu Zhengdang Jingzheng Fa (反不正当竞争法) (2017) [Anti-Unfair Competition Law (2017)] (promulgated by Standing Comm. Nat’l People’s Cong., Nov. 4, 2017, effective Jan. 1, 2018), [http://www.gov.cn/xinwen/2017-11/05/content\\_5237325.htm](http://www.gov.cn/xinwen/2017-11/05/content_5237325.htm) [hereinafter Anti-Unfair Competition Law (2017)], *translated at* <https://www.hongfanglaw.com/wp-content/uploads/2019/10/Anti-Unfair-Competition-Law-of-the-Peoples-Republic-of-China-2019-AmendmentEnglish.pdf>. In 2019, the NPC Standing Committee further amended the 2017 AUCL to enhance the protection of trade secrets. This Article only focuses on Article 12 of the 2017 AUCL for the discussion of the internet-related unfair competition.

<sup>44</sup> Anti-Unfair Competition Law (2017), *supra* note 43, at art. 12

companies to honor the general principles of fairness, honesty, and good faith, and widely recognized business ethics.<sup>45</sup> But, in contrast to Article 2’s catch-all clause, the specific language of Article 12 set prohibitions on certain types of conduct that are deemed to constitute internet-related unfair competition by obstructing legitimate competitor activities or restricting consumer choice.<sup>46</sup> Article 12 also codified existing judicial practice, which clarified the standards to determine whether an act violated the law.<sup>47</sup> Specifically, the courts would have to rule on whether there was competition between the litigants, whether the data holder’s lawful rights and interests were infringed, and whether the infringer’s illegal act harmed market order and caused, or might have caused, damage to the competitive interests of the data holder.<sup>48</sup>

The amended AUCL was influenced by several of the rulings discussed in the cases below, and in turn, has influenced the general direction of later rulings. One notable outcome in these court decisions is that data holders enjoy property-like claims to the data already collected and processed if the process was deemed to constitute a substantial investment.<sup>49</sup> These rulings reveal the current analytical framework—unfair competition—that Chinese courts use to assess data ownership and control.<sup>50</sup>

#### A. Sina Weibo v. Maimai (*Beijing Intellectual Property Court, 2016*)

*Sina Weibo v. Maimai* was the first big data case in China using the unfair competition law. This landmark case recognized the quasi-property rights of data held by platform companies under competition law.<sup>51</sup>

Founded in 2010, Sina is a social networking service (“SNS”) provider of the famous micro-blogging platform Weibo (新浪微博), the Chinese equivalent to Twitter.<sup>52</sup> Maimai (脉脉), founded three years later, offers a competing SNS service.<sup>53</sup> The two parties entered into a Developer Agreement (“Open API”) that enabled Sina Weibo’s login function on Maimai’s webpage and mobile application.<sup>54</sup> In return, Maimai received access to Sina Weibo’s user profiles subject to certain rules and restrictions with regards to collection and usage of Sina Weibo’s data.<sup>55</sup> According to a complaint filed by Sina Weibo in 2013 and 2014, Maimai violated the terms of the API by scraping a variety of public and non-public user information without consent from either Sina Weibo or its users.<sup>56</sup>

The key issue of this case was whether the alleged unauthorized collection and use of data constituted unfair competition under the AUCL.<sup>57</sup> In April 2016, Beijing Haidian District People’s Court (“Haidian People’s Court”) found that Maimai’s conduct constituted unfair competition.<sup>58</sup> Maimai scrapped public information on Sina Weibo platform without the consent of Sina Weibo or its users to promote its own SNS services.<sup>59</sup> Consequently, the Haidian People’s Court ordered Maimai to pay Sina Weibo US\$309,000 (CN¥ 2 million) in damages.<sup>60</sup>

Maimai later appealed the decision to the Beijing Intellectual Property Court (“Beijing IP Court”).<sup>61</sup> In December 2016, the intermediate court upheld the original ruling, holding that Maimai violated the AUCL for failing

<sup>45</sup> *Id.*; Fan Bu Zhengdang Jingzheng Fa (反不正当竞争法) (1993) [Anti-Unfair Competition Law (1993)] art. 2 (promulgated by Standing Comm. Nat’l People’s Cong., Sept. 2, 1993, effective Dec. 1, 1993), [https://www.jetro.go.jp/ext\\_images/world/asia/cn/ip/law/pdf/origin/2007032859393454.pdf](https://www.jetro.go.jp/ext_images/world/asia/cn/ip/law/pdf/origin/2007032859393454.pdf), translated at <https://www.cecc.gov/resources/legal-provisions/prc-unfair-competition-law-english-and-chinese-text>.

<sup>46</sup> Anti-Unfair Competition Law (2017), *supra* note 43, at art. 12

<sup>47</sup> *Id.*

<sup>48</sup> *Id.*

<sup>49</sup> See *infra* discussion Part II.A–E.

<sup>50</sup> *Id.*

<sup>51</sup> See generally Beijing Weimeng Chuangke Wangluo Jishu Youxian Gongsi Yu Beijing Taoyoutianxia Jishu Youxian Gongsi Deng Bu Zhengdang Jingzheng Jiufen (北京微梦创科网络技术有限公司与北京淘友天下技术有限公司等不正当竞争纠纷) [Beijing Micro Dream Network Technology Co. Ltd. v. Beijing Taoyou Technology Co. Ltd.], China Judgments Online (Beijing Haidian District People’s Ct. Apr. 26, 2016), <https://wenshu.court.gov.cn/website/wenshu/181107ANFZ0BXSK4/index.html?docId=197fc006635a46f7b8a1a84d00a81fb1> [hereinafter *Sina v. Maimai I*].

<sup>52</sup> *Id.* at 3.

<sup>53</sup> *Id.*

<sup>54</sup> *Id.* at 5–6.

<sup>55</sup> *Id.*

<sup>56</sup> *Id.*

<sup>57</sup> *Id.* at 31.

<sup>58</sup> *Id.* at 38.

<sup>59</sup> *Id.*

<sup>60</sup> *Id.* at 47.

<sup>61</sup> Beijing Taoyoutianxia Jishu Youxian Gongsi Yu Beijing Weimeng Chuangke Wangluo Jishu Youxian Gongsi Deng Bu Zhengdang Jingzheng Jiufen (北京淘友天下技术有限公司与北京微梦创科网络技术有限公司等不正当竞争纠纷) [Beijing Taoyou Technology Co. Ltd.

to obtain proper consent from either Sina Weibo or its users.<sup>62</sup> In reaching this decision, the Court indicated that because data had become a critical component of commercial advantage for business operators, the collection and utilization of data conferred a competitive advantage benefiting those who hold it.<sup>63</sup> The decision of the Beijing IP Court advanced the general principle of data as part of the competitive advantage within commercial operations, but demurred to discuss issues related to user data ownership or specify the rights SNS platforms had over user data legally collected.<sup>64</sup> The Court, however, did find that due to the large investment made by Sina Weibo to collect and maintain its user database, its user data could be regarded as an important “operating interest” and “competitive advantage” for Sina Weibo.<sup>65</sup>

The Beijing IP Court established a “triple authorization” principle (三重同意原则) to determine and offer additional protection for a platform’s legitimate interests over user data.<sup>66</sup> Under this principle, a third-party service provider can legally obtain data from the platform only when it obtains: (1) user authorization to the platform; (2) platform authorization to the third-party service provider; and (3) user authorization to the third-party service provider.<sup>67</sup> It appears that this “triple authorization” principle exhibits a pro-platform bias over data control.

### B. Dianping.com v. Baidu (*Shanghai Intellectual Property Court, 2016*)

Dianping.com (大众点评网), the Chinese internet platform similar to Yelp, Inc., provides consumer reviews and ratings of local services, including restaurants, hotels, and entertainment venues.<sup>68</sup> Baidu, Inc. (百度) is China’s leading search provider, which also provides other online services, including Baidu Map and Baidu Zhidao (or Baidu Q&A).<sup>69</sup> In 2014, Dianping.com sued Baidu under the AUCL for unfair competition alleging that Baidu Maps and Baidu Zhidao scraped customer reviews from Dianping.com to display on their own service platforms without consent.<sup>70</sup>

The court of the first instance, Shanghai Pudong People’s Court (“Pudong Court”), held that the unauthorized use of consumer reviews by Baidu violated Article 2 of the AUCL.<sup>71</sup> Specifically, the Court held that for a conduct to constitute an unfair action, the plaintiff needs to prove that: (1) the defendant in question is a competitor; (2) the plaintiff suffered a loss as a result of the conduct; and (3) the conduct was unlawful.<sup>72</sup>

Regarding the first requirement, the Court applied a broad definition of “competitive relationship,” finding that companies from different sectors may be considered competitors for the purposes of the AUCL.<sup>73</sup> Therefore, the Court found that since Dianping.com and Baidu both targeted the same group of consumers, they could be viewed as competitors regardless of the specific nature of services each provided.<sup>74</sup> Moreover, the Court found that the practice of Baidu Maps and Baidu Zhidao, in allowing Baidu users to access the consumer reviews without visiting Dianping.com, resulted in a loss of user visits and potential business opportunities for Dianping.com.<sup>75</sup> Finally, the Court considered multiple factors that were necessary to determine whether Baidu’s conduct was lawful.<sup>76</sup> These

---

v. Beijing Micro Dream Network Technology Co. Ltd.], China Judgments Online, at 2 (Beijing Intell. Prop. Ct. Dec. 30, 2016), <https://wenshu.court.gov.cn/website/wenshu/181107ANFZ0BXSK4/index.html?docId=49854fde619a47d7b772a71d000fcf00> [hereinafter *Sina v. Maimai II*].

<sup>62</sup> *Id.* at 69.

<sup>63</sup> *Id.* at 67.

<sup>64</sup> *Id.*; see also Susan Ning, *China’s Step Forward to Personal Data Protection*, KING & WOOD MALLESONS (Apr. 10, 2017), <https://www.kwm.com/en/cn/knowledge/insights/china-s-step-forward-to-personal-data-protection-20170410>.

<sup>65</sup> See *id.*; see also *Sina v. Maimai II*, at 67 (Beijing Intell. Prop. Ct. Dec. 30, 2016).

<sup>66</sup> *Id.* at 76.

<sup>67</sup> *Id.*

<sup>68</sup> See generally DAZHONG DIANPING WANG (大众点评网) [DIANPING.COM], <https://www.dianping.com/> (last visited Jan. 30, 2022).

<sup>69</sup> See generally BAI DU (百度) [BAIDU], <https://www.baidu.com/more/> (last visited Jan. 30, 2022).

<sup>70</sup> Shanghai Hantao Xinxu Xixun Youxian Gongsi Yu Beijing Baidu Wangxun Keji Youxian Gongsi, Shanghai Jietu Ruanjian Jishu Youxian Gongsi Bu Zhengdang Jingzheng Jiufen Yishen Minshi Panjueshu (上海汉涛信息咨询有限公司与北京百度网讯科技有限公司、上海杰图软件技术有限公司不正当竞争纠纷一审民事判决书) [Shanghai Hantao Information Consulting v. Beijing Baidu Netcom Science Technology, et al.], China Judgments Online, at 2 (Shanghai Pudong New Area People’s Ct. May 26, 2016), <https://wenshu.court.gov.cn/website/wenshu/181107ANFZ0BXSK4/index.html?docId=d563eead95949c9bb3fa7f90122dbae> [hereinafter *Dianping.com v. Baidu I*].

<sup>71</sup> *Id.* at 18; Anti-Unfair Competition Law (2017), *supra* note 43, at art. 2.

<sup>72</sup> *Dianping.com v. Baidu I*, at 15–17 (Shanghai Pudong New Area People’s Ct. May 26, 2016).

<sup>73</sup> *Id.*

<sup>74</sup> *Id.*

<sup>75</sup> *Id.*

<sup>76</sup> *Id.* at 17.

factors included: (1) whether the data at stake had commercial value; (2) whether that data conferred a competitive advantage to Dianping.com; (3) whether there were any reasonable means for Baidu to obtain the data; (4) whether Dianping.com violated the law, commercial ethics, or public interests in its original collection and use of the data; and (5) whether Baidu’s end-use of the data was lawful.<sup>77</sup> Here, the Court applied these factors and found that consumer reviews were valuable resources conferring a competitive edge to Dianping.com.<sup>78</sup>

The Court also recognized that Dianping.com invested a significant amount of time and effort to set up a functioning consumer review system to collect these reviews.<sup>79</sup> In addition, the Court held that Dianping.com’s original collection and use of the consumer data from its customers had neither violated the law nor business ethics.<sup>80</sup> The Court further found that by scraping customer reviews from Dianping.com, Baidu had “free-ridden” on Dianping.com’s investment, breaching business ethics and the principles of honesty and good faith.<sup>81</sup> The Court did note, however, that Baidu would not have violated the law if it displayed only a portion of consumer reviews from Dianping.com and included links to the original reviews.<sup>82</sup>

Baidu later appealed the decision before the Shanghai Intellectual Property Court (“Shanghai IP Court”).<sup>83</sup> In 2017, the intermediate court affirmed Pudong Court’s ruling, recognizing Dianping.com’s legitimate business interest in its customer review data.<sup>84</sup> The Court also noted that the data Baidu scraped from Dianping.com was beyond “proportional,”<sup>85</sup> and that such conduct discourages further investments by companies in data collection and new market entrants and disrupts market order.<sup>86</sup> Therefore, consumers’ interests are harmed in the long run.<sup>87</sup>

The *Dianping.com v. Baidu* rulings reflect important court decisions on data property rights. These rulings held that user-generated data on Dianping.com nevertheless were essential to the company’s business and should be counted as among its key assets;<sup>88</sup> and they expanded the scope of data scraping cases that could be brought under the AUCL.<sup>89</sup> A key factor in the courts’ reasoning was that Dianping.com had made significant upfront investments in building up the consumer review system.<sup>90</sup> This system allowed for the collection of consumer reviews, and even though the reviews were written by individual contributors, Dianping.com’s investment granted the platform certain rights over these comments.<sup>91</sup> It is worth noting that the Shanghai courts’ positions were largely consistent with the 2016 issuance of Trial Guidelines on Network Related Intellectual Property Right Cases by the Beijing High People’s Court.<sup>92</sup> According to these guidelines, the Beijing courts may hold that the unauthorized use of information constitutes unfair competition under the AUCL if: (1) the scraped information advantages the competitive and commercial opportunities of the data holder; and (2) the scraped information is used to provide users with an effective alternative service to the data source.<sup>93</sup> That is, the guidelines seem to apply irrespective of whether the data in question is generated by the data holder.<sup>94</sup>

<sup>77</sup> *Id.*; see also Andy Huang, *Hantao V. Baidu— ‘Scraping’ Third-Party Information as Unfair Competition*, GLOBAL MEDIA & COMM’N WATCH (June 30, 2016), <https://www.hlmediacomms.com/2016/06/30/hantao-v-baidu-scraping-third-party-information-as-unfair-competition/>.

<sup>78</sup> *Dianping.com v. Baidu I*, at 17 (Shanghai Pudong New Area People’s Ct. May 26, 2016).

<sup>79</sup> *Id.* at 18.

<sup>80</sup> *Id.*

<sup>81</sup> *Id.*

<sup>82</sup> *Id.* at 19.

<sup>83</sup> Beijing Baidu Wangxun Keji Youxian Gongsi Yu Shanghai Hantao Xinxun Zixun Youxian Gongsi Qita Bu Zhengdang Jingzheng Jiufen Er Shen Minshi Panjueshu (北京百度网讯科技有限公司与上海汉涛信息咨询有限公司其他不正当竞争纠纷二审民事判决书) [Beijing Baidu Netcom Science Technology v. Shanghai Hantao Information Consulting], China Judgments Online, at 1 (Shanghai Intell. Prop. Ct. Aug. 30, 2017), <https://wenshu.court.gov.cn/website/wenshu/181107ANFZ0BXSK4/index.html?docId=41dbc2267514473886a6a7f90124a13c> [hereinafter *Dianping.com v. Baidu II*].

<sup>84</sup> *Id.* at 22.

<sup>85</sup> *Id.* at 24.

<sup>86</sup> *Id.* at 23.

<sup>87</sup> *Id.* at 25.

<sup>88</sup> *Id.* at 22.

<sup>89</sup> Huang, *supra* note 77.

<sup>90</sup> *Dianping.com v. Baidu I*, at 17–18 (Shanghai Pudong New Area People’s Ct. May 26, 2016); *Dianping.com v. Baidu II*, at 22 (Shanghai Intell. Prop. Ct. Aug. 30, 2017).

<sup>91</sup> *Dianping.com v. Baidu II*, at 22 (Shanghai Intell. Prop. Ct. Aug. 30, 2017).

<sup>92</sup> See *Trial Guidelines on Network Related Intellectual Property Right Cases*, CHINA INTELLECTUAL PROPERTY LAWYERS NETWORK (Apr. 4, 2016), <https://www.ccpit-patent.com.cn/zh-hans/node/3542>; see also Paul Ranjard & Jiang Nan, *New Anti-Unfair Competition Guidance for Internet Players from Beijing Court*, LEXOLOGY (May 12, 2016), <https://www.lexology.com/library/detail.aspx?g=f11a2a1d-eaef-4b64-aa88-0e33dc3a8a3b>.

<sup>93</sup> Ranjard, *supra* note 92.

<sup>94</sup> See *id.*

C. Taobao v. Meijing (*Hangzhou Intermediate People's Court, 2018*)

Alibaba's Taobao (淘宝网), the operator of one of the world's largest e-commerce platforms,<sup>95</sup> developed a market analytics software service to provide Taobao merchants with up-to-date information on their business performances.<sup>96</sup> Meijing operated a competing analytics service to Taobao and purchased from Taobao merchants the analytics data they originally obtained from Taobao, which Meijing then used to sell a cheaper competing service.<sup>97</sup> In 2017, Taobao sued Meijing for unfair competition by scraping that proprietary data from Taobao.<sup>98</sup> In its defense, Meijing argued that the data in question was personal data belonging to Taobao's users and not to the Taobao platform.<sup>99</sup>

The court of the first instance, Hangzhou Railway Transportation Court ("Railway Court"), ruled that Meijing violated the AUCL.<sup>100</sup> Within its ruling, the Court made a key distinction between the individualized user personal data and the "big data" that Taobao had accumulated and analyzed using its investment in algorithmic aggregators.<sup>101</sup> Accordingly, the Court determined that Taobao held a "senior property claim"<sup>102</sup> (竞争性财产权益) to this aggregated and processed data.<sup>103</sup> As such, the platform had an exclusive interest in the commercial value of the data.<sup>104</sup> Meijing did not pay the platform for access to this data; therefore, it unlawfully acquired Taobao's data against business ethics.<sup>105</sup>

A year later, Meijing appealed to the Hangzhou Intermediate People's Court claiming that Taobao's collection of personal data did not comply with privacy laws.<sup>106</sup> In 2018, the Hangzhou People's Court upheld the lower court's ruling, holding that the user information that Taobao collected was not personal data because it "cannot be used to identify the personal identity of individuals, alone or in combination with other data."<sup>107</sup>

D. Gumi v. Yuanguang (*Shenzhen Intermediate People's Court, 2017*)

In the case of *Gumi v. Yuanguang*, the Shenzhen Intermediate People's Court sided with other courts' rulings that a data holder's act of collecting, analyzing, editing, and integrating big data resources with commercial value is protected by the AUCL.<sup>108</sup> As such, an unauthorized use of web crawler technology to misappropriate these big data resources for usage in running similar applications constitutes unfair competition.<sup>109</sup>

<sup>95</sup> See John Koetsier, *44% of Global eCommerce is Owned by 4 Chinese Companies*, FORBES (Oct. 21, 2020), <https://www.forbes.com/sites/johnkoetsier/2020/10/21/44-of-global-ecommerce-is-owned-by-4-chinese-companies/?sh=3c359ac11645> (noting that Taobao, which owns 15% of the global e-commerce market, remains among the largest digital commerce companies in the world).

<sup>96</sup> Tao Bao (Zhongguo) Ruanjian Youxian Gongsi Su Anhui Meijing Xinxi Keji Youxian Gongsi Bu Zhengdang Jingzheng Jiufen An (淘宝(中国)软件有限公司诉安徽美景信息科技有限公司不正当竞争纠纷案) [Taobao (China) Software Co., Ltd. v. Anhui Meijing Information Technology Co., Ltd.], China Judgments Online, at 2 (Hangzhou Railway Transp. Ct. Aug. 16, 2018), <https://wenshu.court.gov.cn/website/wenshu/181107ANFZ0BXSK4/index.html?docId=52bffab9fe774da69d5aab0200a272f0> [hereinafter *Taobao v. Meijing I*].

<sup>97</sup> *Id.* at 2.

<sup>98</sup> *See id.* at 2.

<sup>99</sup> *Id.* at 3.

<sup>100</sup> *Id.* at 2.

<sup>101</sup> *Id.* at 17.

<sup>102</sup> In its opinion, the Railway Court used "竞争性财产权益" ("senior property claim") to describe the types of rights that Taobao held for the data product. The Court stressed that these "property rights" were not absolute: Taobao's rights to the data product was more "senior" or "competitive" than those of its data-scraping competitors. Since there does not seem to exist an equivalent concept to "竞争性财产权益" outside of the Chinese legal context, I describe these rights as "senior" or "competitive" property rights. *Id.*

<sup>103</sup> *Taobao v. Meijing I*, at 17 (Hangzhou Railway Transp. Ct. Aug. 16, 2018).

<sup>104</sup> *Id.*

<sup>105</sup> *Id.* at 19.

<sup>106</sup> Anhui Meijing Xinxi Keji Youxian Gongsi Su Tao Bao (Zhongguo) Ruanjian Youxian Gongsi Bu Zhengdang Jingzheng Jiufen An (安徽美景信息科技有限公司诉淘宝(中国)软件有限公司不正当竞争纠纷案) [Anhui Meijing Information Technology Co., Ltd. v. Taobao (China) Software Co., Ltd.], China Judgments Online, at 1–2 (Hangzhou Intermediate People's Ct. Dec. 18, 2018), <https://wenshu.court.gov.cn/website/wenshu/181107ANFZ0BXSK4/index.html?docId=42144396b7e84876aa3bac0500aca27c>.

<sup>107</sup> *Id.* at 20.

<sup>108</sup> Shenzhen Shi Gumi Keji Youxian Gongsi Yu Wuhan Yuanguang Keji Youxian Gongsi Deng Bu Zhengdang Jingzheng Jiufen (深圳市谷米科技有限公司与武汉元光科技有限公司、陈昂、邵凌霜、刘江红、刘坤朋、张翔不正当竞争纠纷) [Gumi Technology Co. Ltd., v. Yuanguang Technology Co. Ltd.], China Judgments Online, at 13–14 (Shenzhen Intermediate People's Ct. May 23, 2018), <https://wenshu.court.gov.cn/website/wenshu/181107ANFZ0BXSK4/index.html?docId=48ccfedb41e48a18055ab03009f13e6>.

<sup>109</sup> *Id.* at 14.



Gumi (谷米) and Yuanguang (元光) operated competing real-time transit information apps, “Kumike” and “Chelaile,” respectively.<sup>110</sup> To improve geospatial data accuracy, Gumi partnered with a bus operator, Eastern Bus Company, in Shenzhen and installed location devices on the operator’s buses, which then fed data to Gumi’s users via the Gumi app.<sup>111</sup> By using a web crawler software, Yuanguang crawled a large amount of Gumi’s real-time data and then incorporated that data into its own app.<sup>112</sup>

The Shenzhen Intermediate People’s Court found that although Gumi’s real-time bus information was made available to individual users for free, Gumi expended considerable effort to collect and analyze this data, and as a result, gained a competitive advantage from it.<sup>113</sup> Due to its investment, Gumi had “intangible property-like interests” (无形财产权益属性) in this data, so that Yuanguang’s conduct in accessing the data without Gumi’s consent violated Gumi’s interests.<sup>114</sup> The Court also found that Yuanguang’s conduct breached the principles of good faith under the AUCL and caused a disruption to the market order.<sup>115</sup>

#### E. ByteDance v. Tencent (*Beijing Intellectual Property Court, 2021*)

After the promulgation of the amended AUCL, the question of who owns user data returned to the spotlight after two Chinese social media giants, ByteDance (字节跳动) and Tencent (腾讯), became embroiled in a legal fight over alleged monopolistic practice in a pending high-profile case.<sup>116</sup>

Since 2019, ByteDance, the Beijing-based tech giant which owns TikTok and its Chinese version Douyin (抖音), has been fighting Tencent, a company that owns the social network and messaging app WeChat, after WeChat blocked links to Douyin.<sup>117</sup> The lawsuit alleged that Tencent violated the amended AUCL by restricting access to content from Douyin and asked for US\$14 million (CN¥ 90 million) in damages.<sup>118</sup> ByteDance argued that users are the owners of the data they generated, and as such, have “absolute rights” to their own data overriding Tencent’s rights to them.<sup>119</sup> In its defense, Tencent insisted that users’ personal data were Tencent’s “commercial resources,” and therefore required the company’s consent for commercial use.<sup>120</sup> In response, Tencent claimed that ByteDance’s products, including Douyin, obtained WeChat users’ data through unfair competition and cited a 2019 court case suggesting Tencent ownership over those data.<sup>121</sup> In that case, Tianjin Binhai New District People’s Court ruled that while Tencent authorized Douyin to let users sign up for an account via WeChat, the company did not seek permission from Tencent before passing on user data to Duoshan, another ByteDance app.<sup>122</sup> Therefore, the Court ruled that Duoshan was banned from using WeChat user information obtained from Douyin.<sup>123</sup> In particular, the Court

<sup>110</sup> *Id.* at 8.

<sup>111</sup> *Id.* at 9.

<sup>112</sup> *Id.* at 9–10.

<sup>113</sup> *Id.* at 14.

<sup>114</sup> *Gumi Technology Co. Ltd., v. Yuanguang Technology Co. Ltd.*, at 14 (Shenzhen Intermediate People’s Ct. May 23, 2018).

<sup>115</sup> *Id.* at 15.

<sup>116</sup> Beijing Weiboshijie Keji Youxian Gongsi, Beijing Zijietiaodong Keji Youxian Gongsi Su Shenzhen Shi Tengxun Jisuanji Xitong Youxian Gongsi, Tengxun Keji (Shenzhen) Youxian Gongsi, Tengxun Keji (Beijing) Youxian Gongsi, Beijing Litian Wuxian Wangluo Jishu Youxian Gongsi Lanyong Shichang Zhipei Diwei Jiufen An (北京微播视界科技有限公司、北京字节跳动科技有限公司诉深圳市腾讯计算机系统有限公司、腾讯科技(深圳)有限公司、腾讯科技(北京)有限公司、北京力天无限网络技术有限公司滥用市场支配地位纠纷案) [ByteDance Technology Co. Ltd. v. Tencent Holdings Ltd.], (Beijing Intel. Prop. Ct. 2021), [https://www.thepaper.cn/newsDetail\\_forward\\_11258634](https://www.thepaper.cn/newsDetail_forward_11258634).

<sup>117</sup> *Id.*

<sup>118</sup> *Id.*; see also Rebecca Davis, *ByteDance Files \$14 Million Suit Against Tencent for Monopolistic Behavior*, VARIETY (Feb. 2, 2021), <https://variety.com/2021/digital/news/bytedance-douyin-tencent-lawsuit-monopoly-1234898734/>.

<sup>119</sup> *Guanyu Douyin Qisu Tengxun Longduan de Shengming* (关于抖音起诉腾讯垄断的声明) [Statement on Douyin Suing Tencent for Monopolistic Practice], SOHU (Feb. 2, 2021), [https://www.sohu.com/a/448343319\\_327908](https://www.sohu.com/a/448343319_327908).

<sup>120</sup> *Id.*

<sup>121</sup> *Id.*

<sup>122</sup> See Shenzhen Shi Tengxun Jisuanji Xitong Youxian Gongsi, Tengxun Keji (Shenzhen) Youxian Gongsi Shangye Huilu Bu Zhengdang Jingzheng Jiufen Yishen Minshi Caidingshu (深圳市腾讯计算机系统有限公司、腾讯科技(深圳)有限公司商业贿赂不正当竞争纠纷一案民事裁定书) [Tencent Holdings Ltd. v. ByteDance Technology Co. Ltd.], China Judgments Online, at 21–22 (Tianjin Binhai New District People’s Ct. Mar. 18, 2019), <https://wenshu.court.gov.cn/website/wenshu/181107ANFZ0BXSK4/index.html?docId=1bc6e2edab3248b09030aa470163d9e7> [hereinafter *Tencent v. ByteDance*]; see also Sun Ruliang (孙汝亮), “*Tou Teng*” *Shuju Yinsi Xin Zhanyi: Fayuan Caiding Douyin, Duoshan Tingyong Weixin* (“头腾”数据隐私新战役：法院裁定抖音，多闪停用微信) [New Battle for Data Privacy Between Douyin and Tencent: Court Ruled Douyin and Duoshan Stopped Using WeChat], SHIDAI ZAIXIAN (时代在线) [TIME-WEEKLY] (Mar. 21, 2019), <http://www.time-weekly.com/post/257312>.

<sup>123</sup> *Tencent v. ByteDance*, at 22 (Tianjin Binhai New District People’s Ct. Mar. 18, 2019).

recognized that WeChat has accumulated a large number of user information from its platform, which can be used as core business resources to bring Tencent a competitive advantage.<sup>124</sup>

*ByteDance v. Tencent* is another landmark case given both companies' market share within China's large and booming digital economy.<sup>125</sup> WeChat's monthly active users passed 1.2 billion total users worldwide as of September 2020, although the vast majority of those are in China.<sup>126</sup> Douyin attracted 600 million daily active users by August 2020, compared with the country's overall short video user base of 873 million by the end of 2020.<sup>127</sup> Although China operates under a civil law system where courts are not usually bound by judicial precedents, the Chinese central government is making reform efforts to allow or encourage judges to refer to precedents,<sup>128</sup> which could mean that the outcome of the ByteDance-Tencent litigation may set a benchmark.

### III. GOVERNMENT MEDIATION AND REGULATION: A CRACKDOWN ON BIG TECH

#### A. Government Mediation

##### i. Cainiao and SF Express Dispute (2017)

In rare cases, the Chinese government intervenes to settle disputes not yet litigated in a court between private commercial entities on the issue of data ownership.<sup>129</sup> One recent illustration is the conflict between SF Express and Cainiao, mentioned in this Article's Introduction, which brought the issue of data ownership to the fore of the Chinese public consciousness.<sup>130</sup>

In 2015, SF Express, along with four other courier companies, established Hive Box as a last-mile, smart locker package delivery solution, similar to Amazon Locker, for sending and receiving deliveries to local neighborhoods.<sup>131</sup> In May 2016, Cainiao began collaborating with Hive Box and formed an alliance of logistics firms and self-pickup service providers, which included both SF Express and Hive Box.<sup>132</sup> Under this collaboration, Cainiao would integrate the delivery information provided by its logistics partners with these smart lockers to avoid the customer confusion that resulted when these information systems were independent.<sup>133</sup> This data stream centralization of courier and locker interfaces made it so that package statuses could be tracked only on Cainiao and Alibaba's platforms and, thus, made SF Express and Hive Box increasingly dependent on Alibaba-related systems.<sup>134</sup>

In March 2017, the relationship between SF Express/Hive Box and Cainiao reached a new low when Cainiao proposed new data-sharing terms during negotiations with SF Express.<sup>135</sup> The terms requested data on shipments originating from non-Alibaba's e-commerce marketplaces.<sup>136</sup> SF Express refused the terms and cited breach of consumer privacy and exposure of SF Express's trade secrets as reasons for non-compliance.<sup>137</sup> However, Cainiao insisted upon accessing this data for security verification of self-service pick-up lockers and for prevention of

<sup>124</sup> See *id.* at 25.

<sup>125</sup> See, e.g., *Mobile Reach in 2021: Tencent, Alibaba, Baidu, ByteDance, Kuaishou*, CHINA INTERNET WATCH (Apr. 7, 2021), <https://www.chinainternetwatch.com/30684/batt/>; Lulu Yilun Chen, Coco Liu & Zheping Huang, *ByteDance Valued at \$250 Billion in Private Trades*, BLOOMBERG (Mar. 29, 2021), <https://www.bloomberg.com/news/articles/2021-03-30/bytedance-is-said-valued-at-250-billion-in-private-trades>.

<sup>126</sup> Chen Yin (陈银), "WeChat Economy" Development Report: The Number of Users Reached 1.2 Billion, Driving 29.63 Million Jobs ("微信经济"发展报告: 用户规模达 12 亿, 带动就业 2963 万个), HUAJING QINGBAO WANG (华经情报网) [HUAON.COM] (June 8, 2020), <https://m.huaon.com/detail/620184.html>.

<sup>127</sup> *Statistical Report on Internet Development in China*, CHINA INTERNET NETWORK INFO. CTR. 42 (Feb. 2021), <https://www.cnnic.com.cn/IDR/ReportDownloads/202104/P020210420557302172744.pdf>.

<sup>128</sup> Guanyu Tongyi Falü Shiyong Jiaqiang Lei'an Jiansuo de Zhidao Yijian (Shixing) (关于统一法律适用加强类案检索的指导意见(试行)) [Guiding Opinions on Unifying the Application of Laws and on Strengthening Searches for Similar Cases (Trial Implementation)] (promulgated by the Sup. People's Ct., July 27, 2020, effective July 31, 2020), <http://www.court.gov.cn/zixun-xiangqing-243981.html>.

<sup>129</sup> See discussion *infra* Part III.A.1 & 2.

<sup>130</sup> See generally Wang & Wang, *supra* note 8.

<sup>131</sup> *Id.* at 7.

<sup>132</sup> *Id.*

<sup>133</sup> *Id.*

<sup>134</sup> *Id.*

<sup>135</sup> *Id.*

<sup>136</sup> *Id.*

<sup>137</sup> *Id.*

unauthorized third-party access to its customer data, as SF Express already had access to the Cainiao database.<sup>138</sup> Cainiao claimed that some alliance partners had already shared their data, including non-Alibaba shipments on Cainiao’s platform,<sup>139</sup> and further proposed a list of solutions for Hive Box to comply with its data security requirements.<sup>140</sup> This included Hive Box to switch its cloud computing service provider from Tencent Cloud to Alibaba Cloud.<sup>141</sup> As the public standoff devolved into acrimony, Alibaba temporarily barred SF Express from accepting deliveries from its e-commerce vendors and nudged merchants to select alternative couriers.<sup>142</sup>

While both parties cited “information security” as justifications, the issue of data ownership was the central reason behind the confrontation, as both SF Express and Cainiao vied for monopolistic control over consumer information throughout the entire value chain.<sup>143</sup> On one side, Cainiao commanded valuable upstream supplier and merchant information—such as consumption patterns and delivery courier preferences—and actively sought to expand its access to downstream consumer data—such as time and location of delivery/pickup—held firmly within SF Express’s control.<sup>144</sup> On the reverse side, SF Express aimed to maintain tight control over its part of the value chain while also seeking to advance its understanding of upstream operations management for the purposes of increasing its service quality and efficiency.<sup>145</sup>

The State Post Bureau intervened before the two companies could resort to legal means and summoned the CEOs of SF Express and Cainiao to Beijing as the dispute intensified.<sup>146</sup> Aware of the potential consequences of escalating customer frustration in a year of senior Chinese leadership transition,<sup>147</sup> the Bureau issued a notice urging both parties to find the largest possible common ground and to abide by market order and consumer rights.<sup>148</sup> The notice also cautioned both parties against exerting severe and negative social influence because of company feuding.<sup>149</sup> As a controversial move, the Bureau’s market intervention foreshadows further government involvement in inter-company disputes if the issue of data ownership remains unresolved and if the impact of data on the economy increases.<sup>150</sup>

## ii. Tencent and Huawei Dispute (2017)

Another dispute over user data that led to Chinese government intervention was the spat between Chinese internet giant Tencent (腾讯) and telecommunications equipment maker Huawei (华为). Huawei, one of the world’s biggest smartphone makers,<sup>151</sup> had begun collecting user-activity data to build up the AI capabilities of its smartphones.<sup>152</sup> In particular, on its advanced smartphone, the Honor Magic, the company accessed sensitive WeChat message histories of users for the purposes of providing user-specific advertisement recommendations.<sup>153</sup> In response, Tencent, the owner of the WeChat app, accused Huawei of stealing Tencent’s data, and thereby violating the privacy of its users.<sup>154</sup> Huawei, however, denied violating user privacy, contending that users authorized the data capture

<sup>138</sup> *Id.*

<sup>139</sup> *Id.*

<sup>140</sup> *Id.* at 7–8.

<sup>141</sup> *Id.* at 8.

<sup>142</sup> *Id.*

<sup>143</sup> He Xinrong (何欣荣), *Cainiao Shunfeng “Shuju Duanjiao”: Xinxi An’quan Weihe Cheng Zhengzhi Chufa Dian?* (菜鸟顺丰 “数据断交”: 信息安全为何成争执触发点?) [*Cainiao SF Express “Data Severance:” Why is Information Security A Trigger Point for Disputes?*], XINHUA WANG (新华网) [XINHUANET] (June 2, 2017), [http://news.xinhuanet.com/fortune/2017-06/02/c\\_1121078704.htm](http://news.xinhuanet.com/fortune/2017-06/02/c_1121078704.htm).

<sup>144</sup> Wang & Wang, *supra* note 8, at 8.

<sup>145</sup> *Id.*

<sup>146</sup> See Post Office Website, *supra* note 9.

<sup>147</sup> Ye, *supra* note 2.

<sup>148</sup> See Post Office Website, *supra* note 9.

<sup>149</sup> *Id.*

<sup>150</sup> Li Hanwen (李翰文), *Shunfeng Gen Cainiao Jiufen: Zhongguo Youzheng Chumian Jiejue* (顺丰跟菜鸟纠纷: 中国邮政出面解决) [*Dispute Between SF Express and Cainiao: China Post Came Forward to Resolve*], BBC ZHONG WEN (BBC 中文) [BBC NEWS CHINESE] (June 3, 2017), <https://www.bbc.com/zhongwen/simp/chinese-news-40142199>.

<sup>151</sup> See *Global Smartphone Market Share: By Quarter*, COUNTERPOINT (Aug. 5, 2021), <https://www.counterpointresearch.com/global-smartphone-share/>; Arjun Kharpal, *Huawei Overtakes Samsung to Be No. 1 Smartphone Player in the World Thanks to China as Overseas Sales Drop*, CNBC (July 29, 2020), <https://www.cnbc.com/2020/07/30/huawei-overtakes-samsung-to-be-no-1-smartphone-maker-thanks-to-china.html>.

<sup>152</sup> Yang Jie et al., *Two China Tech Titans Wrestle Over User Data*, WALL ST. J. (Aug. 3, 2017), <https://www.wsj.com/articles/two-china-tech-titans-wrestle-over-user-data-1501757738>.

<sup>153</sup> *Id.*

<sup>154</sup> *Id.*

through the phone's settings.<sup>155</sup> As Huawei emphasized, “[a]ll user data belongs to the user [. . .] it doesn't belong to WeChat or Honor Magic . . . User data is processed on the Honor Magic device after user authorization.”<sup>156</sup>

In resolving this dispute, the two sides elected for China's Ministry of Industry and Information Technology (“MIIT”) (中华人民共和国工业和信息化部) to intervene and adjudicate between them, instead of resorting to legal proceedings through the courts.<sup>157</sup> Commenting on the dispute, the regulator responded:

“Regarding the dispute between Tencent and Huawei, with respect to the newly introduced mobile functions, in order to protect user personal information, the MIIT will abide by the Provisions on Telecommunications and Protection of Internet User Personal Information and other laws and regulations so as to urge enterprises to strengthen internal management, self-regulate in the collection and use of user personal information, and protect the legitimate rights and interests of users in accordance with the law. As for disagreements and disputes between information and communications enterprises, the MIIT will proactively coordinate and guide industrial self-regulation so as to create sound market order for mass entrepreneurship and innovation.”<sup>158</sup>

Following regulator-facilitated reconciliation and private negotiations, Huawei and Tencent reached a settlement.<sup>159</sup> In spite of this reached settlement, the underlying question of data ownership remains unresolved.

### B. State Regulation

Around the world, governments are wrestling to manage tech platforms and limit their vast power that comes from these companies' extensive collection and control of an enormous cache of user data. China's regulators, who have long wanted to seize control of the data held by internet platforms as strategic assets, have initiated widening regulatory crackdowns on industry practices, including anticompetitive behaviors.<sup>160</sup> The newly announced data-specific laws and regulations send a strong and a clear message that clarification on data ownership and control becomes a top priority for Chinese authorities along with the development of the country's vast digital economy.<sup>161</sup>

#### i. Anti-Monopoly Law & Antitrust Guidelines for the Platform Economy

Over 80 percent of Chinese internet user data is held by the government and large tech corporations, which restricts the scope of the data usage aimed to increase productivity and profit.<sup>162</sup> As Chinese tech giants grow in market influence, the antitrust regulators in China have turned more attention towards ensuring fair competition in the digital economy, and are moving swiftly to address what they view as anticompetitive conduct by the country's tech platform companies.<sup>163</sup> Since November 2020, Beijing began an antitrust enforcement campaign to crack down on monopolistic practices within the Chinese big tech industry as concerns mount over these private institutions' growing control over the country's voluminous data.<sup>164</sup> To maintain competitive markets, the government focused on a stated policy goal to address the concentration of data within these established platforms, particularly to limit platforms' control over

<sup>155</sup> *Id.*

<sup>156</sup> *Id.*

<sup>157</sup> *Id.*; see also Xinjie Yang, *Gongxin Bu Huiying Huawei Tengxun Shuju Zhizheng: Zheng Zuzhi Diaocha, Duncu Qiye Guifan Souji* (工信部回应华为腾讯数据之争: 正组织调查, 敦促企业规范搜集) [*The Ministry of Industry and Information Technology Responds to Data Dispute Between Huawei and Tencent: Investigation Undergoing While Collection of Data by Relevant Enterprises Urged to Abide by Laws and Regulations*], PENG PAI (澎湃) [THE PAPER] (Aug. 8, 2017), [https://www.thepaper.cn/newsDetail\\_forward\\_1756038](https://www.thepaper.cn/newsDetail_forward_1756038) (reporting that China's Ministry of Industry and Information Technology was investigating into the dispute between Huawei and Tencent).

<sup>158</sup> Yang, *supra* note 157.

<sup>159</sup> *Tencent Games Reinstated on Huawei App Store*, REUTERS (Jan. 1, 2021), <https://www.reuters.com/article/china-games-huawei-tencent-holdings-idUKKBN29626R>.

<sup>160</sup> See discussion *infra* Part III.B.1 & 2.

<sup>161</sup> *Id.*

<sup>162</sup> Xiang-Yang Li, Jianwei Qian & Xiaoyang Wang, *Can China Lead the Development of Data Trading and Sharing Markets?*, 61 COMM'NS OF THE ACM 50, 50 (Nov. 2018).

<sup>163</sup> See, e.g., *Giants Tencent, ByteDance Among Companies Reined in By China*, BBC (Apr. 30, 2021), <https://www.bbc.com/news/business-56938864>.

<sup>164</sup> *Id.*

user data.<sup>165</sup> Chinese tech titans, Alibaba and Tencent, and large tech startups, ByteDance and Meituan, have all attracted increased government scrutiny for their data collection via social-media apps.<sup>166</sup>

The two main tools that Chinese authorities have deployed are the Anti-Monopoly Law (2007) and the Antitrust Guidelines for the Platform Economy (2021).<sup>167</sup> Together, they provide a set of rules for increasing scrutiny of internet platforms and preventing their market dominance. The Anti-Monopoly Law, promulgated in August 2007 and went to effect a year later, codified the then-existing body of competition-related laws and regulations into the first comprehensive anti-monopoly legislation in China.<sup>168</sup> The Anti-Monopoly Law has been viewed as an “economic constitution” and a “milestone” in promoting fair competition and cracking down on monopolistic activities,<sup>169</sup> as it prohibits anticompetitive agreements and abuse of a dominant market position and is able to preempt mergers that eliminate or restrict competition.<sup>170</sup>

In addition to implementing this legal device, Chinese regulators have also issued new policy guidance to assist the application and interpretation of the Anti-Monopoly Law. The Anti-Monopoly Guidelines on Platform Economy Industries issued by the Anti-Monopoly Committee of the State Council (“Guidelines”) (国务院反垄断委员会关于平台经济领域的反垄断指南), which were promulgated by China’s State Administration for Market Regulation (“SAMR”) (国家市场监督管理总局) and went into immediate effect on February 7, 2021,<sup>171</sup> was the first specific piece of antitrust regulation systematically addressing the market dominance of Chinese internet platforms.<sup>172</sup> The final Guidelines do not differ substantially from its initial draft, which was unveiled only two months prior.<sup>173</sup> The quick action by the regulatory agency indicated the heightened concerns by Chinese authorities over China’s rapidly growing digital economy and their urgency to regulate the country’s internet giants to prevent those monopolistic practices from disrupting fair market competition.<sup>174</sup>

The Guidelines consist of twenty-four articles divided into six chapters.<sup>175</sup> Among its new rules include revision of the factors for determining market dominance and prohibition of certain illegal monopolistic practices.<sup>176</sup> In particular, the Guidelines target practices specific to internet platforms, including determinations of whether a transaction discriminates between customers and whether platform algorithms abuse access to big data on consumer purchasing power, consumption preferences, and usage habits to manipulate the market towards a company’s own advantage.<sup>177</sup>

<sup>165</sup> See *id.*

<sup>166</sup> Anusuya Lahiri, *China’s Key Data Sharing Mandate Wreaks Double Whammy for Tech Industry Amidst Increased Antitrust Probe*: Bloomberg, YAHOO (Mar. 5, 2021), <https://autos.yahoo.com/chinas-key-data-sharing-mandate-150731332.html>.

<sup>167</sup> See discussion *infra* Part III.B.1.

<sup>168</sup> Bruce M. Owen, Su Sun & Wentong Zheng, *China’s Competition Policy Reforms: The Anti-Monopoly Law and Beyond*, 75 ANTITRUST L.J. 231, 232 (2008).

<sup>169</sup> See Yijun Tian, *The Impacts of The Chinese Antimonopoly Law on IP Commercialization in China & General Strategies for Technology-Driven Companies and Future Regulators*, 9 DUKE L. & TECH. REV. 1, 4 (2010).

<sup>170</sup> Fan Longduan Fa (反垄断法) (2007) [Anti-Monopoly Law of the People’s Republic of China (2007)] (promulgated by the Standing Comm. Nat’l People’s Cong., Aug. 30, 2017, effective Aug. 1, 2018), [http://www.gov.cn/flfg/2007-08/30/content\\_732591.htm](http://www.gov.cn/flfg/2007-08/30/content_732591.htm) [hereinafter AML (2007)], translated at <http://www.lawinfochina.com/display.aspx?id=6351&lib=law>.

<sup>171</sup> Sofia Baruzzi, *China Enforces Antitrust Guidelines on its Online Economy*, CHINA BRIEFING (Feb. 19, 2021), <https://www.china-briefing.com/news/china-antitrust-guidelines-enforcement-online-economy/>.

<sup>172</sup> Yang Dong (杨东), *Pingtai Jingji Lingyu Fan Longduan Zhinan Jiedu* (《平台经济领域反垄断指南》解读) [Interpretation of the Antitrust Guidelines for the Platform Economy], THINK.CHINA.COM.CN (Feb. 22, 2021), [http://www.china.com.cn/opinion/think/2021-02/22/content\\_77235509.htm](http://www.china.com.cn/opinion/think/2021-02/22/content_77235509.htm).

<sup>173</sup> Baruzzi, *supra* note 171; see also Guanyu Pingtai Jingji Lingyu de Fan Longduan Zhinan (Zhengqiu Yijian Gao) (《关于平台经济领域的反垄断指南（征求意见稿）》) [The Anti-Monopoly Guidelines on Platform Economy Industries (Draft for Comments) (2020)], GUOJIA SHICHANG JIANGUAN JU (国家市场监督管理总局) [STATE ADMIN. FOR MARKET REG.] (Nov. 10, 2021), [http://www.samr.gov.cn/hd/zjdc/202011/t20201109\\_323234.html](http://www.samr.gov.cn/hd/zjdc/202011/t20201109_323234.html), translated at [https://www.concurrences.com/IMG/pdf/samr\\_antitrust\\_guidelines\\_for\\_the\\_platform\\_economy\\_industry\\_draft\\_for\\_comment\\_kwdm\\_13433849v4\\_.pdf?64652/99f359084eb23ee0a04931f64cff951ac9818e01](https://www.concurrences.com/IMG/pdf/samr_antitrust_guidelines_for_the_platform_economy_industry_draft_for_comment_kwdm_13433849v4_.pdf?64652/99f359084eb23ee0a04931f64cff951ac9818e01).

<sup>174</sup> See Guowuyuan Fan Longduan Weiyuanhui Guanyu Pingtai Jingji Lingyu de Fan Longduan Zhinan (国务院反垄断委员会关于平台经济领域的反垄断指南) [The Anti-Monopoly Guidelines on Platform Economy Industries issued by the Anti-Monopoly Committee of the State Council], GUOJIA SHICHANG JIANGUAN JU (国家市场监督管理总局) [STATE ADMIN. FOR MARKET REG.] (2021), [http://gkml.samr.gov.cn/nsj/fljd/202102/t20210207\\_325967.html](http://gkml.samr.gov.cn/nsj/fljd/202102/t20210207_325967.html) [hereinafter Anti-Monopoly Guidelines on the Platform Economy (2021)], translated at <http://www.anjielaw.com/en/uploads/soft/210224/1-210224112247.pdf>; see also Baruzzi, *supra* note 171.

<sup>175</sup> See generally Anti-Monopoly Guidelines on the Platform Economy (2021), *supra* note 174.

<sup>176</sup> See *id.*

<sup>177</sup> *Id.*

SAMR, notably, used its updated arsenal of regulatory weapons to immediate effect by enforcing several high-profile cases shortly thereafter. On April 10, 2021, SAMR fined Alibaba Group a record of US\$2.8 billion (CN¥ 18.228 billion) in accordance to the Anti-Monopoly Law.<sup>178</sup> After a four-month investigation into Alibaba, SAMR concluded that the company engaged in monopolistic practices restricting vendors from selling on other e-commerce platforms and for abusing its data and algorithm monopolies.<sup>179</sup> The fine, the equivalent of about four percent of the company's 2019 domestic revenue, was the largest ever imposed by Chinese antitrust regulators.<sup>180</sup> Subsequently, Chinese regulators warned Ant Group—an Alibaba financial affiliate whose planned US\$37 billion initial public offering (“IPO”) was suspended on November 3 of 2020—that the government would closely scrutinize the company's lucrative online lending business and ordered the company to refashion itself into a financial holding company subject to the Chinese central bank's supervision.<sup>181</sup>

The Alibaba fine and the Ant Group reorganization heralded further antitrust actions. Later in April 2021, SAMR ordered thirty-four of the country's largest tech companies, including ByteDance, JD.com, Meituan, and Kuaishou, to each conduct comprehensive self-inspection identifying and addressing potentially anticompetitive practices and pledging publicly to comply with the country's Anti-Monopoly Law.<sup>182</sup> SAMR urged that these platforms learn from the Alibaba case and warned specifically against the practice of forced exclusivity, abuse of market dominance, anticompetitive acquisitions, and predatory pricing.<sup>183</sup> After a follow-up meeting in May 2021 to inspect and evaluate these platforms' compliance,<sup>184</sup> SAMR assessed a US\$ 77,000 (CN¥ 500,000) fine on each of the twenty-two internet companies, including Didi Chuxing, Tencent, Suning, and Meituan, for actions in violation of the regulatory guidance, such as attempting to improperly increase market power through acquisitions without seeking prior regulatory approval.<sup>185</sup>

## ii. Didi Chuxing Case & Cybersecurity Review Measures

When Chinese regulators initiated a cybersecurity review of Didi Chuxing (滴滴出行)—China's ride-hailing giant that has over 493 million annual active users and possesses significant amounts of users' personal data<sup>186</sup>—just days after its huge IPO at the New York Stock Exchange, it marked another move in a widening crackdown on the

<sup>178</sup> AML (2007), *supra* note 170, at arts. 17, 47, 49.

<sup>179</sup> *Shichang Jianguan Zongju Yifa Dui A Li Ba Ba Jituan Konggu Youxian Gongsì Zai Zhongguo Jingnei Wangluo Lingshou Pingtai Fuwu Shichang Shishi “Er Xuan Yi” Longduan Xingwei Zuochu Xingzheng Chufa* (市场监管总局依法对阿里巴巴集团控股有限公司在中国境内网络零售平台服务市场实施“二选一”垄断行为作出行政处罚) [*The State Administration for Market Regulation Imposes Administrative Penalties on Alibaba Group in Accordance with the Law for Implementing the “Two-Choose-One” Monopolistic Practice on Online Retail Platform Services within China's Domestic Market*], GUOJIA SHICHANG JIANGUAN JU (国家市场监督管理总局) [STATE ADMIN. FOR MARKET REG.] (Apr. 10, 2021), [https://www.samr.gov.cn/xw/zj/202104/t20210410\\_327702.html](https://www.samr.gov.cn/xw/zj/202104/t20210410_327702.html).

<sup>180</sup> *Id.*; see also *A Li Ba Ba Jie Zhongguo Fan Longduan Shi Shang Zuida Fadan, Chuandi Chu Shenme Xinhao?* (阿里巴巴接中国反垄断史上最大罚单，传递出什么信号?) [*What Signal Does Alibaba Send After Receiving the Largest Penalty in China's Antitrust History?*], DABAI CAIJING GUANCHA (大白财经观察) [DA BAI FIN.] (Apr. 10, 2021), <https://posts.careerengine.us/p/60713519b691a12299454e28?from=latest-posts-panel&type=title>.

<sup>181</sup> Lingling Wei, *Ant IPO-Approval Process Under Investigation by Beijing*, WALL ST. J. (Apr. 27, 2021), <https://www.wsj.com/articles/ant-ipo-approval-process-under-investigation-by-beijing-11619532022>.

<sup>182</sup> *Shichang Jianguan Zongju, Zhongyang Wangxin Ban, Shuiwu Zongju Lianhe Zhaokai Hulianwang Pingtai Qiye Xingzheng Zhidao Hui* (市场监管总局、中央网信办、税务总局联合召开互联网平台企业行政指导会) [*The State Administration for Market Regulation, the Cyberspace Administration of China, and the State Administration of Taxation Jointly Convened an Administrative Guidance Meeting for Internet Platform Companies*], XINHUA WANG (新华网) [XINHUANET] (Apr. 13, 2021), [http://www.xinhuanet.com/politics/2021-04/13/c\\_1127324619.htm](http://www.xinhuanet.com/politics/2021-04/13/c_1127324619.htm); see also Zheping Huang, *China Warns 34 Tech Firms to Curb Excess in Antitrust Review*, BLOOMBERG (Apr. 13, 2021), <https://www.bloomberg.com/news/articles/2021-04-13/china-orders-34-tech-firms-to-curb-excesses-in-antitrust-review>.

<sup>183</sup> *Id.*

<sup>184</sup> *Shichang Jianguan Zongju Zhaokai Hulianwang Pingtai Qiye Zhenggai Ducha Zhuanti Hui* (市场监管总局召开互联网平台企业整改督查专题会) [*The State Administration for Market Regulation Held a Special Meeting on the Supervision and Inspection of Internet Platform Companies*], GUOJIA SHICHANG JIANGUAN JU (国家市场监督管理总局) [STATE ADMIN. FOR MARKET REG.] (May 7, 2021), [http://www.samr.gov.cn/xw/zj/202105/t20210507\\_329242.html](http://www.samr.gov.cn/xw/zj/202105/t20210507_329242.html).

<sup>185</sup> *Shichang Jianguan Zongju Yifa Dui Hulianwang Lingyu Er Shi Er Qi Weifa Shishi Jingyingzhe Jizhong An Zuochu Xingzheng Chufa Jueding* (市场监管总局依法对互联网领域二十二起违法实施经营者集中案作出行政处罚决定) [*The State Administration for Market Regulation Has Made Administrative Punishment Decisions on 22 Cases of Illegal Implementation of Operator Concentration in the Internet Sector in Accordance with Law*], GUO JIA SHI CHANG JIAN GUAN JU (国家市场监督管理总局) [STATE ADMIN. FOR MARKET REG.] (July 7, 2021), [http://www.samr.gov.cn/xw/zj/202107/t20210707\\_332396.html](http://www.samr.gov.cn/xw/zj/202107/t20210707_332396.html).

<sup>186</sup> See, e.g., Raymond Zhong & Li Yuan, *The Rise and Fall of the World's Ride-Hailing Giant*, N.Y. TIMES (Aug. 27, 2021), <https://www.nytimes.com/2021/08/27/technology/china-didi-crackdown.html>.

country’s once-freewheeling technology sector.<sup>187</sup> In July 2021, China’s top cyberspace regulator, Cyberspace Administration of China (“CAC”) (国家互联网信息办公室), launched a cybersecurity investigation into Didi for alleged illegal collection and use of user data after the company failed to take CAC’s suggestions to conduct a data security assessment and forced its way to a U.S. IPO.<sup>188</sup> Right after the CAC ordered Chinese app stores to remove twenty-five Didi-related apps<sup>189</sup> and required the company to suspend new user registration,<sup>190</sup> the CAC issued draft Cybersecurity Review Measures (Draft Revision for Comment) (网络安全审查办法 (修订草案征求意见稿)) for public comment.<sup>191</sup> The Measures purport to protect data and national security by making mandatory cybersecurity reviews for certain companies in particular circumstances.<sup>192</sup> Notably, Article 6 of the Measures sharpens scrutiny of overseas listings by requiring that any data operator/processor, that is in possession of the personal information of more than one million users and that seeks overseas listings, will be subject to a mandatory cybersecurity review.<sup>193</sup> Article 14 of the Measures further extends the period of the review procedure from the original forty-five working days to three months, and even longer under complicated cases.<sup>194</sup>

China’s sweeping regulatory action against internet giants is part of a broader national crackdown that targets internet companies’ handling of voluminous data following years of a laissez-faire approach.<sup>195</sup> This move will not only ease Beijing’s growing concerns that a foreign listing might force Chinese data-rich companies to hand over their data to foreign entities undermining national security, but will also help Chinese authorities significantly tighten their control over data gathered by internet giants.<sup>196</sup>

#### IV. LEGISLATIVE ORDERING: PRC EXPERIMENTS ON DATA PROPERTY RIGHTS

Court rulings and administrative actions are only part of China’s foray into addressing the issue of data ownership and property rights; legislative experiments are also ongoing. Current discussions and legal reforms underway highlight the necessity of some property rights specification to promote innovation in a data-driven economy, since the importance of data as a new “production factor” was highlighted in an April 2020 State Council opinion listing them alongside land, labor, capital, and technological knowledge.<sup>197</sup>

<sup>187</sup> Didi Global Inc., Registration Statement (Form F-1/A) (June 28, 2021), <https://sec.report/Document/0001047469-21-001221/a2243298zf-1a.htm>.

<sup>188</sup> See *Wangluo An'quan Shencha Bangongshi Dui "Didi Chu Xing" Qidong Wangluo An'quan Shencha de Gonggao* (网络安全审查办公室关于对“滴滴出行”启动网络安全审查的公告) [*Announcement of the Cybersecurity Review Office on Launching a Cybersecurity Review of Didi Chuxing*], GUOJIA HULIANWANG XINXI BANGONGSHI (国家互联网信息办公室) [CYBERSPACE ADMIN. OF CHINA] (July 2, 2021), [http://www.cac.gov.cn/2021-07/02/c\\_1626811521011934.htm](http://www.cac.gov.cn/2021-07/02/c_1626811521011934.htm); *Guojia Hulianwang Xinxi Bangongshi Deng Qi Bumen Jinzhu Didi Chuxing Keji Youxian Gongsi Kaizhan Wangluo An'quan Shencha* (国家互联网信息办公室等七部门进驻滴滴出行科技有限公司开展网络安全审查) [*Seven Departments Including the Cyberspace Administration of China Launch an On-Site Investigation at Didi Chuxing*], GUOJIA HULIANWANG XINXI BANGONGSHI (国家互联网信息办公室) [CYBERSPACE ADMIN. OF CHINA] (July 16, 2021), [http://www.cac.gov.cn/2021-07/16/c\\_1628023601191804.htm](http://www.cac.gov.cn/2021-07/16/c_1628023601191804.htm); see also Xinmei Shen, *China Issues Tighter Data Security Rules for Ride-Hailing Firms Amid Didi Probe, But More Clarity Still Needed*, S. CHINA MORNING POST (Aug. 23, 2021), <https://www.scmp.com/tech/policy/article/3146051/china-issues-tighter-data-security-rules-ride-hailing-firms-amid-didi>.

<sup>189</sup> See *Guanyu Xiajia "Didi Qiye Ban" Deng 25 Kuan APP de Tongbao* (关于下架“滴滴企业版”等25款App的通报) [*Announcement on the Removal of 25 Apps Including Didi Enterprise Solution*], GUOJIA HULIANWANG XINXI BANGONGSHI (国家互联网信息办公室) [CYBERSPACE ADMIN. OF CHINA] (July 9, 2021), [http://www.cac.gov.cn/2021-07/09/c\\_1627415870012872.htm](http://www.cac.gov.cn/2021-07/09/c_1627415870012872.htm).

<sup>190</sup> See *Wangluo An'quan Shencha Bangongshi Guanyu Dui "Didi Chuxing" Qidong Wangluo An'quan Shencha de Gonggao* (网络安全审查办公室关于对“滴滴出行”启动网络安全审查的公告) [*Announcement of the Cybersecurity Review Office on Launching a Cybersecurity Review of Didi Chuxing*], GUOJIA HULIANWANG XINXI BANGONGSHI (国家互联网信息办公室) [CYBERSPACE ADMIN. OF CHINA] (July 2, 2021), [http://www.cac.gov.cn/2021-07/02/c\\_1626811521011934.htm](http://www.cac.gov.cn/2021-07/02/c_1626811521011934.htm).

<sup>191</sup> See generally *Guojia Hulianwang Xinxi Bangongshi Guanyu 《Wangluo An'quan Shencha Banfa (Xiuding Cao'an Zhengqiu Yijian Gao)》 Gongkai Zhengqiu Yijian de Tongzhi* (国家互联网信息办公室关于《网络安全审查办法(修订草案征求意见稿)》公开征求意见的通知) [*A Notice on Seeking Public Comments on the Cybersecurity Review Measures (Draft Revision for Comment)*], GUOJIA HULIANWANG XINXI BANGONGSHI (国家互联网信息办公室) [CYBERSPACE ADMIN. OF CHINA] (July 10, 2021), [http://www.cac.gov.cn/2021-07/10/c\\_1627503724456684.htm](http://www.cac.gov.cn/2021-07/10/c_1627503724456684.htm).

<sup>192</sup> *Id.*

<sup>193</sup> *Id.* at art. 6.

<sup>194</sup> *Id.* at art. 14.

<sup>195</sup> See, e.g., Liu Jiang (刘江), *Pingtai Jingji Gaobie Yeman Shengzhang* (平台经济告别野蛮生长) [*Platform Economy Bid Farewell to Brutal Growth*], ZHONGGUO JINGJI WANG (中国经济网) [CHINA ECONOMY] (Sept. 13, 2021), [http://www.ce.cn/xwxz/gnsz/gdxw/202109/13/t20210913\\_36905995.shtml](http://www.ce.cn/xwxz/gnsz/gdxw/202109/13/t20210913_36905995.shtml).

<sup>196</sup> *Id.*

<sup>197</sup> See *Zhonggong Zhongyang, Guowuyuan Guanyu Goujian Gengjia Wanshan De Yaosu Shichanghua Peizhi Tizhi Jizhi de Yijian* (中共中央, 国务院关于构建更加完善的要素市场化配置体制机制的意见) [*Opinions on Building a More Complete System and Mechanism for the*

As early as 2016, the Chinese government began to weigh in on the issue of data ownership and property rights.<sup>198</sup> The addendum to the State Council's Thirteenth Five-Year National Informatization Plan ( “十三五” 国家信息化规划) first revealed the Chinese political authorities' concern for data ownership by including language establishing, as a priority, policies and standards regarding the protection of “data ownership rights” (数据产权).<sup>199</sup> Since then, many other guidelines and legislative materials have been issued by the State Council and various provincial governments have referred to the importance of establishing and improving protection mechanisms for data ownership rights.<sup>200</sup> Recently, at the ninth meeting of the Central Committee for Financial and Economic Affairs, Chinese President, Xi Jinping, emphasized the need to improve laws and regulations around internet platforms to “fill in the gaps and loopholes in rules.”<sup>201</sup> President Xi also advanced, as one of the priorities, the setting up of regulatory frameworks on data ownership (加强数据产权制度建设),<sup>202</sup> and urged internet platforms to increase their data security responsibilities.<sup>203</sup>

This section examines China's major legislative developments in data ownership, data property rights, and control over data. Such developments have been adopted amid a broader regulatory tightening on tech industry from Chinese regulators that enforces antitrust measures to address the concentration of data within internet platforms.

#### A. Data Regulations of Shenzhen Special Economic Zone (2021)

In addition to high-profile calls for national level reforms, significant local legislative developments are taking place in China. The Shenzhen legislative experiment in data ownership and data property rights is a pioneering effort.<sup>204</sup> In October 2020, the General Office of the Central Committee of the Chinese Communist Party, jointly with the State Council, released the Implementation Plan for the Pilot Comprehensive Reform of Building a Pilot Demonstration Zone of Socialism with Chinese Characteristics in Shenzhen (2020–2025) (深圳建设中国特色社会主义先行示范区综合改革试点实施方案 (2020–2025 年)).<sup>205</sup> The plan authorized Shenzhen to take the lead in a number of initiatives, including “establishing the data property rights system,” “exploring new mechanisms for data property rights protection,” and so on.<sup>206</sup> Known as China's Silicon Valley and for its leading role in the country's early economic reforms, the municipality of Shenzhen is often entrusted with the task of spearheading new reforms and landmark regulations.<sup>207</sup> On July 15, 2020, the Shenzhen municipal government published an initial draft of the Data Regulations of Shenzhen Special Economic Zone (Draft for Comments) (“Shenzhen Data Regulations”) (深圳

---

*Market-oriented Allocation of Factors*], ZHONGGUO GONGCHANDANG ZHONGYANG WEIYUANHUI GUOWUYUAN BANGONGTING (中国共产党中央委员会国务院办公厅) [GENERAL OFF. OF THE CENT. COMMITTEE OF THE COMMUNIST PARTY OF CHINA AND THE GENERAL OFF. OF THE STATE COUNCIL] (2020), [http://www.gov.cn/zhengce/2020-04/09/content\\_5500622.htm](http://www.gov.cn/zhengce/2020-04/09/content_5500622.htm).

<sup>198</sup> See *Guowuyuan Guanyu Yinfā “Shisanwu” Guojia Xinxin Hua Guihua de Tongzhi* (国务院关于印发 “十三五” 国家信息化规划的通知) [*State Council on Printing and Distributing Notice of the 13th Five-Year National Informatization Plan*], ZHONGHUA RENMIN GONGHEGUO ZHONGYANG RENMIN ZHENGFU (中华人民共和国中央人民政府) [THE STATE COUNCIL OF THE PEOPLE'S REPUBLIC OF CHINA] (Dec. 27, 2016), [http://www.gov.cn/zhengce/content/2016-12/27/content\\_5153411.htm](http://www.gov.cn/zhengce/content/2016-12/27/content_5153411.htm).

<sup>199</sup> *Id.*

<sup>200</sup> See discussion *infra* Part IV.A–F; see also *China- Data Protection Overview*, DATA GUIDANCE (Nov. 2021), <https://www.dataguidance.com/notes/china-data-protection-overview>.

<sup>201</sup> See *Xij Jinping Zhuchi Zhaokai Zhongyang Caijing Weiyuanhui Di Jiu Ci Huiyi Qiangdiao Tuidong Pingtai Jingji Guifan Jiankang Chixu Fazhan Ba Tan Dafeng Tan Zhonghe Naru Shengtai Wenming Jianshe Zhengti Bujū* (习近平主持召开中央财经委员会第九次会议强调推动平台经济规范健康持续发展 把碳达峰碳中和纳入生态文明建设整体布局) [*Xi Focus: Xi Stresses Healthy Growth of Platform Economy, Efforts for Peak Emission and Carbon Neutrality*], XINHUA WANG (新华网) [XINHUANET] (Mar. 15, 2021), [http://www.xinhuanet.com/politics/leaders/2021-03/15/c\\_1127214324.htm](http://www.xinhuanet.com/politics/leaders/2021-03/15/c_1127214324.htm).

<sup>202</sup> See *id.*

<sup>203</sup> *Id.*

<sup>204</sup> See Xinhua She (新华社) [Xinhua News Agency], *Zhonggong Zhongyang Bangong Ting, Guowuyuan Bangong Ting Yinfā “Shenzhen Jianshe Zhongguo Tese Shehui Zhuyi Xianxing Shifan Qu Zonghe Gaige Shidian Shishi Fang'an (2020–2025 Nian)”* (中共中央办公厅, 国务院办公厅印发《深圳建设中国特色社会主义先行示范区综合改革试点实施方案 (2020–2025 年)》) [*The General Office of the Central Committee of the Communist Party of China and the General Office of the State Council Issued the Implementation Plan for the Pilot Comprehensive Reform of Building a Pilot Demonstration Zone of Socialism with Chinese Characteristics in Shenzhen (2020–2025)*], ZHONGHUA RENMIN GONGHEGUO ZHONGYANG RENMIN ZHENGFU (中华人民共和国中央人民政府) [THE STATE COUNCIL OF THE PEOPLE'S REPUBLIC OF CHINA] (Oct. 11, 2020), [http://www.gov.cn/zhengce/2020-10/11/content\\_5550408.htm](http://www.gov.cn/zhengce/2020-10/11/content_5550408.htm).

<sup>205</sup> *Id.*

<sup>206</sup> *Id.*

<sup>207</sup> See, e.g., FU JUN (傅军), BEN XIAOKANG GUSHI: ZHONGGUO JINGJI ZENGZHANG DE LUOJI YU BIANZHENG (奔小康故事: 中国经济增长的逻辑与辩证) [THE STORY OF XIAOKANG: THE LOGIC AND DIALECTICS OF CHINA'S ECONOMIC GROWTH] 152–222 (2021).



经济特区数据条例 (征求意见稿)),<sup>208</sup> which was the first far-reaching legislative bill on data.<sup>209</sup> The Standing Committee of People’s Congress in Shenzhen released a second draft on May 31, 2021.<sup>210</sup> On June 29, 2021, the Standing Committee of People’s Congress in Shenzhen formally promulgated the Shenzhen Data Regulations into law, which came into force on January 1, 2022.<sup>211</sup> The Shenzhen Data Regulations was hailed not only as the first local effort to legalize the processing of data and personal information,<sup>212</sup> but by many as China’s first “foundational, comprehensive legislation in the data sphere.”<sup>213</sup>

The Shenzhen Data Regulations consist of 100 articles under seven chapters.<sup>214</sup> Importantly, the Regulations recognize for the first time the concept of “data ownership” and/or “data property rights and interests.”<sup>215</sup> Specifically, the Regulations state that “natural persons, legal persons, and unincorporated organizations are entitled to property rights and interests (财产权益) to the data products and services they created through lawful data handling and processing in accordance with provisions of laws, administrative regulations, and these Regulations.”<sup>216</sup> Moreover, the Shenzhen Data Regulations provide that “individuals are entitled to personality rights and interests (人格权益) over their personal data, including the rights to informed consent, supplementation and correction, erasure, inspection and reproduction, etc.”<sup>217</sup>

The new legislation, along with two earlier draft versions, are not without its limitations. In the Commentaries (解读) appended to the Regulations, the Regulators admitted the difficulty in establishing a comprehensive system of data property rights through local legislation in the absence of a common understanding of data ownership.<sup>218</sup> The Regulators also acknowledged that the new legislation only intended to codify the existing consensus that ““personal data has the attribute of personality rights,”” and that ““companies enjoy property rights over data products and services as a result of their investment.””<sup>219</sup>

Many of these concerns echo similar challenges present within earlier draft versions of the Regulations. The earlier drafts, for instance, created a new type of state-owned asset,<sup>220</sup> but were sparse in detail on how to demarcate the data rights between individuals, corporations, and the state, or how data usage rights could be allocated once ownership was determined.<sup>221</sup> As an example, the earlier draft versions created a dichotomous concept of ownership by ascribing

<sup>208</sup> *Shenzhen Shi Sifa Ju Guanyu Gongkai Zhengqiu “Shenzhen Jingji Tequ Shuju Tiaoli (Zhengqiu Yijian Gao)” Yijian de Tonggao* (深圳市司法局关于公开征求《深圳经济特区数据条例 (征求意见稿)》意见的通告) [*The Data Regulations of Shenzhen Special Economic Zone (First Draft for Comments)*], SHENZHEN SHI SIFA JU (深圳市司法局) [JUSTICE BUREAU OF SHENZHEN MUN.] (July 15, 2020), [http://sf.sz.gov.cn/xxgk/xxgkml/gsgg/content/post\\_7892072.html](http://sf.sz.gov.cn/xxgk/xxgkml/gsgg/content/post_7892072.html) [hereinafter Shenzhen Data Regulations First Draft (2020)].

<sup>209</sup> *Shenzhen Unveils China’s First “Comprehensive” Data Legislation, Requires Express Consent for Gathering of Personal Data*, CHINA BANKING NEWS (Dec. 31, 2020), <https://www.chinabankingnews.com/2020/12/31/shenzhen-unveils-chinas-first-comprehensive-data-legislation-requires-express-consent-for-gathering-of-personal-data/> [hereinafter *Shenzhen Unveils China’s First “Comprehensive” Data Legislation*].

<sup>210</sup> *Guanyu “Shenzhen Jingji Tequ Shuju Tiaoli (Zhengqiu Yijian Gao)” Gongkai Zhengqiu Yijian de Gonggao* (关于《深圳经济特区数据条例 (征求意见稿)》公开征求意见的公告) [*The Data Regulations of Shenzhen Special Economic Zone (Second Draft for Comments)*], SHENZHEN SHI RENDA CHANGWEI HUI (深圳市人大常委会) [SHENZHEN MUN. PEOPLE’S CONG.] (May 31, 2021), [http://www.szrd.gov.cn/rdyw/fgcayjzj/content/post\\_691275.html](http://www.szrd.gov.cn/rdyw/fgcayjzj/content/post_691275.html) [hereinafter Shenzhen Data Regulations Second Draft (2021)].

<sup>211</sup> *Shenzhen Jingji Tequ Shuju Tiaoli* (深圳经济特区数据条例) [*The Data Regulations of Shenzhen Special Economic Zone*] (promulgated by the Standing Comm. of Shenzhen Mun. People’s Cong., June 29, 2021, effective Jan. 1, 2022), [http://www.szrd.gov.cn/szrd\\_zlda/szrd\\_zlda\\_flfg/flfg\\_szfg/content/post\\_706636.html](http://www.szrd.gov.cn/szrd_zlda/szrd_zlda_flfg/flfg_szfg/content/post_706636.html) [hereinafter Shenzhen Data Regulations (2021)].

<sup>212</sup> See Galaad Delval, *China: Draft Data Regulations of the Shenzhen Special Economic Zone*, DATA GUIDANCE (Feb. 2021), <https://www.dataguidance.com/opinion/china-draft-data-regulations-shenzhen-special>.

<sup>213</sup> See *Shenzhen Unveils China’s First “Comprehensive” Data Legislation*, *supra* note 209; see also Lin Hanyao (林汉垚), *Zhong Bang! Shoubu Shuju Lingyu Zonghe Xing Lifa Jijiang Chutai Zai Shuju Baohu Jichu Shang Wajue Jingji Jiazhi* (重磅! 首部数据领域综合性立法即将出台 在数据保护基础上挖掘经济价值) [*The First Comprehensive Legislation in the Field of Data is about to be Introduced, Mining Economic Value on the Basis of Data Protection*], TENGXUN (腾讯) [TENCENT] (Dec. 29, 2020), <https://new.qq.com/omn/20201229/20201229A0IHS200.html>.

<sup>214</sup> Shenzhen Data Regulations (2021), *supra* note 211.

<sup>215</sup> *Id.* at art. 4.

<sup>216</sup> *Id.*

<sup>217</sup> *Id.* at art. 3.

<sup>218</sup> *Id.* at Commentaries 2(1).

<sup>219</sup> *Id.*

<sup>220</sup> Shenzhen Data Regulations First Draft (2020), *supra* note 208, at arts. 11, 21.

<sup>221</sup> See *id.*; see also Xuanfeng Ning et al., *Ganwei Tianxia Xian— Tequ Peiyu Shuju Yaosu Shichang de Qiji Yu Hegui Yaodian* (敢为天下先—特区培育数据要素市场的契机与合规要点) [*Opportunities for the Special Economic Zone to Cultivate the Data Element Market*], JING DU (金杜) [KING & WOOD MALLESONS] (Oct. 23, 2020), <https://www.chinalawinsight.com/2020/10/articles/intellectual-property/%e6%95%a2%e4%b8%ba%e5%a4%a9%e4%b8%8b%e5%85%88-%e7%89%b9%e5%8c%ba%e5%9f%b9%e8%82%b2%e6%95%b0%e6%8d%ae%e8%a6%81%e7%b4%a0%e5%b8%82%e5%9c%ba%e7%9a%84%e5%a5%91%e6%9c%ba%e4%b8%8e%e5%90%88/#more-29132>.

personal data to individuals and public data to the state.<sup>222</sup> Nevertheless, these drafts did not provide any specific guidance in determining which specific types of real-world data should be owned nor by which category of actor, *i.e.*, individuals, corporations, or the state.<sup>223</sup> Therefore, these drafts did not offer the concrete means to determine the subject (or the owner) of certain data, nor how to use these data rights once ownership was determined.<sup>224</sup> This inadequacy would inevitably present the challenge of demarking data rights and engender conflicts amongst these multiple parties claiming rights to the same data.

Another limitation present in earlier drafts was finding the appropriate balance between maintaining market stability and promoting innovation. The vague concept of data ownership within earlier drafts set up the Shenzhen municipal government as a key beneficiary.<sup>225</sup> In particular, the earlier draft legislation designated the Shenzhen government as a state executor able to exercise public data rights and delegate to lesser authorities the task of formulating public data asset management measures and organizing their implementation.<sup>226</sup> The Shenzhen authorities wielded these and other powers to adopt a status quo approach to data ownership by creating a framework protecting large internet platforms without sufficiently addressing user rights.<sup>227</sup> For example, when the Standing Committee of the Shenzhen People's Congress reviewed the first draft of the Regulations on December 28, 2020, the body made modifications by removing reference to provisions on "personal enjoyment of data rights."<sup>228</sup> In addition, the newly promulgated Regulations provided legal loopholes to the requirement that individual users must consent to any collection and processing of their personal data, which were stipulated under Article 27 as grounds to acquire data without user's consent, such as public service, legal obligations, and contract fulfilment.<sup>229</sup>

Given the historical role of Shenzhen as a hotbed for successful technological development and innovation, it is unsurprising that the draft legislation attempts to preserve the interests and enhance the local capabilities of Shenzhen-based tech companies by strengthening platforms' access to and control over consumer data.<sup>230</sup> In this sense, the status quo bias within the structure of the early draft versions of the Regulations also reveals a pro-business bias.<sup>231</sup> For instance, within the full text of the first draft of the Regulations, only nine of the 103 articles relate to provisions for personal information protection.<sup>232</sup> The core articles consider issues relating to the administration of public data, the regulation of data security on an open data infrastructure, and the acceleration of high quality development within the digital economy.<sup>233</sup>

For these reasons, the early draft versions of the Regulations triggered controversy in the Chinese legal community. Some scholars find controversy in the fact that the concept of data ownership/usage rights in the draft Regulations are not clear, and that ownership and usage rights should be treated as separate concepts—so that the subject of the data would own them, while the collectors of the data would use the data without infringing upon the subject's ownership rights.<sup>234</sup> Other scholars have taken issue with the status quo bias in Article 52 of the draft Regulations.<sup>235</sup> Specifically, they take issue with the language that "no organization or individual shall infringe on these rights [to these data]," as some scholars believe this restriction may impede the flow of data from the few large

<sup>222</sup> Shenzhen Data Regulations First Draft (2020), *supra* note 208, at arts. 11, 21.

<sup>223</sup> *Id.*

<sup>224</sup> See Ning et al., *supra* note 221.

<sup>225</sup> See Shenzhen Data Regulations First Draft (2020), *supra* note 208, at art. 21.

<sup>226</sup> *Id.*

<sup>227</sup> *Shenzhen Jiang Chutai Guonei Shuju Lingyu Shoubu Zonghexing Lifa* (深圳将出台国内数据领域首部综合性立法) [*Shenzhen Will Introduce the Country's First Comprehensive Legislation in the Data Field*], GUANGDONGSHENG ZHENGFU FUWU SHUJU GUANLIJU (广东省政府服务数据管理局) [SERVICE DATA ADMIN. OF GUANGDONG PROVINCIAL GOVT.] (Dec. 29, 2020), [http://zfsq.gd.gov.cn/xxfb/dsdt/content/post\\_3161961.html](http://zfsq.gd.gov.cn/xxfb/dsdt/content/post_3161961.html).

<sup>228</sup> See *id.*; Lin, *supra* note 213; Fan Wang, *Shenzhen Jiang Chutai Guonei Shoubu Shuju Lingyu Zonghexing Lifa, Shouji Chuli Geren Yinsi Shuju Xu Dedao Mingshi Tongyi* (深圳将出台国内首部数据领域综合性立法, 收集处理个人隐私数据须得到明示同意) [*Shenzhen Will Introduce the Country's First Comprehensive Legislation in the Field of Data, and the Collection and Processing of Personal Data Requires Express Consent*], 21 SHIJI JINGJI BAODAO (21 世纪经济报道) [21ST CENTURY BUS. HERALD] (Dec. 30, 2020), <https://m.21jingji.com/article/20201230/4b7c4634f8fb8ed73cf2a72640ac38b3.html>.

<sup>229</sup> Shenzhen Data Regulations (2021), *supra* note 211, at art. 27.

<sup>230</sup> Delval, *supra* note 212.

<sup>231</sup> See *infra* text accompanying notes 231–32.

<sup>232</sup> Delval, *supra* note 212.

<sup>233</sup> *Id.*; Shenzhen Data Regulations First Draft (2020), *supra* note 208, at arts. 11–19.

<sup>234</sup> See *Shenzhen Jingji Tequ Shuju Tiaoli (Zhengqiu Yijian Gao) Yantaohui Zai Huace Shuke Zhaokai* (《深圳经济特区数据条例(征求意见稿)》研讨会于华策数科召开) [*Seminar on the Data Regulations of Shenzhen Special Economic Zone (Draft for Comments) Was Held in Smart Decision*], WANG YI (网易) [163.COM] (Aug. 24, 2020), <https://www.163.com/dy/article/FKQCGVGS05385KVG.html>.

<sup>235</sup> See Shenzhen Data Regulations First Draft (2020), *supra* note 208, at art. 52 (providing that the subjects of data elements have data rights to the data they legally collect and generate, and no organization or individual shall infringe on these rights).

platforms where data has been “legally collected” to smaller companies where innovation occurs.<sup>236</sup> While the Shenzhen Data Regulations are limited in scope to the Shenzhen Special Economic Zone, the Regulations are widely regarded as a trial for the creation of other similar rules nationwide, as the city has a reputation for pioneering national reform.<sup>237</sup> However, this has not prevented a third group of scholars from challenging the legislative authority of Shenzhen in determining whether the issue of data rights is a basic civil right.<sup>238</sup> Many of them believe that the Shenzhen Data Regulations will likely to come into conflict with personal information protection and data security laws formulated at the national level, and do not wish that these laws be formulated prematurely by local governments.<sup>239</sup> Finally, a fourth group has expressed concerns about potential conflicts arising between individual and collective data ownership and their implications on public interests.<sup>240</sup>

In sum, the Shenzhen legislative experiments in data ownership remain a subject of legal controversy as the challenge of demarking data rights and the conflicts amongst data claimants remain yet unresolved.

### B. Action Plan for Building a High-Standard Market System (2021)

Data ownership also requires establishing standards and mechanisms for its determination. The State Council recognized this need when it released the Action Plan for Building a High-Standard Market System (建设高标准市场体系行动方案) on January 31, 2021, which provided guidance for building a high-standard market system, covering fifty-one specific measures to be implemented with the Fourteenth Five-Year Plan.<sup>241</sup>

The Action Plan confirms the Chinese leadership’s focus on emerging technologies and the digital economy, and echoes the Fourteenth Five-Year Plan Recommendations’ emphasis on achieving technological self-reliance as a key underpinning of the national strategy.<sup>242</sup> Its enumerated development goals include strengthening property rights, reducing local protectionism, improving competition, and increasing efficiency of resource allocation.<sup>243</sup>

Importantly, the Action Plan reiterates the Chinese central government’s emphasis on clarifying issues of data ownership rights by directing relevant authorities to “establish[ ] a basic system and standards regarding data resource property rights (数据资源产权)” for the purposes of establishing a high-standard market system to drive high-quality economic development.<sup>244</sup> The Action Plan conveys the seriousness with which Chinese authorities treat enforcement of competition laws, as it aims to reduce the asymmetric advantages that large platforms have accumulated, and to open up access to the digital market for new entrants.<sup>245</sup>

### C. The Anti-Monopoly Law (Draft Amendment) (2021)

The challenges posed by new digital monopolies possessing big data require that existing antitrust legislation be updated. On January 2, 2020, SAMR, in its efforts to strengthen existing antitrust legislation, published a

<sup>236</sup> See *Difang Wuquan Dui “Shuju Quan” Lifa? Shenzhen Shuju Tiaoli Yijian Gao Yin Zhuanjia Reyi* (地方无权对“数据权”立法? 深圳数据条例意见稿引专家热议) [*Local Governments Have No Right to Legislate On “Data Ownership”? Shenzhen Data Regulations Led to Hot Debate Among Experts*], NANFANG DUSHI BAO (南方都市报) [S. METROPOLIS DAILY] (July 20, 2020), [https://www.sohu.com/a/408645953\\_161795](https://www.sohu.com/a/408645953_161795).

<sup>237</sup> Arendse Huld, *Shenzhen’s New Data Regulations Explained*, CHINA BRIEFING (Aug. 2, 2021), <https://www.china-briefing.com/news/shenzhen-new-data-regulations-explained-impact-china-personal-data-protection/>.

<sup>238</sup> See *Local Governments Have No Right to Legislate On “Data Ownership”? Shenzhen Data Regulations Led to Hot Debate Among Experts*, *supra* note 236.

<sup>239</sup> *Id.*

<sup>240</sup> *Id.*

<sup>241</sup> *Jianshe Gao Biao Zhun Shichang Tixi Xingdong Fang’an* (《建设高标准市场体系行动方案》) [*The General Office of the Central Committee of the Communist Party of China and the General Office of the State Council Issued the Action Plan for Building a High-Standard Market System*], ZHONGGUO GONGCHANDANG ZHONGYANG WEIYUANHUI GUOWUYUAN BANGONGTING (中国共产党中央委员会国务院办公厅) [GENERAL OFF. OF THE CENT. COMMITTEE OF THE COMMUNIST PARTY OF CHINA AND THE GENERAL OFF. OF THE STATE COUNCIL] (Jan. 31, 2021), [http://www.gov.cn/zhengce/2021-01/31/content\\_5583936.htm](http://www.gov.cn/zhengce/2021-01/31/content_5583936.htm) [hereinafter Action Plan].

<sup>242</sup> Timothy Brightbill, Alan Price & Adam Teslik, *China Action Plan Targets Enhancement of Digital Economy*, JD SUPRA (Feb. 4, 2021), <https://www.jdsupra.com/legalnews/china-action-plan-targets-enhancement-5706249/>.

<sup>243</sup> See Action Plan, *supra* note 241, at ¶¶ 1–4, 8–13, 38.

<sup>244</sup> See *id.* at ¶ 22.

<sup>245</sup> See *id.* at ¶ 9.

preliminary draft of an amended 2007 Anti-Monopoly Law for public comment.<sup>246</sup> On October 19, 2021, the thirty-first session of the Standing Committee of the National People's Congress reviewed the State Council's submitted proposal for the draft amendment to the Anti-Monopoly Law, indicating the heightened emphasis on accelerating such regulatory efforts, and shortly after that review, the formal version of the Anti-Monopoly Law (Draft Amendment) ("Draft AML Amendment") (中华人民共和国反垄断法(修正草案)) was released.<sup>247</sup> Since the law's initial promulgation in 2008, this draft legislation marked the first time that Chinese authorities had proposed major changes to the types and severity of fines and legal liabilities, including criminal, for violators of antitrust law.<sup>248</sup>

The Draft AML Amendment proposes many substantive changes to the regulation of anticompetitive conduct. Article 18, for example, included new provisions that expand the scope of antitrust enforcement to include indirect conspirators.<sup>249</sup> In particular, the proposed article prohibits any business operator from facilitating or abetting other business operators in concluding anticompetitive agreements.<sup>250</sup> Importantly, this new legal language extends regulation of behaviors beyond those present within the 2007 AML,<sup>251</sup> making it illegal for third parties as well as the cartelists themselves, to help orchestrate a cartel and/or to aid in the conclusion of similar agreements.<sup>252</sup> Furthermore, the text of the Draft AML Amendment specifically targets enforcement within the digital economy, explicating that undertakings shall not exclude or restrict competition by abusing the advantages in data and algorithms, technology, and capital and platform rules,<sup>253</sup> and that one express objective of the Draft AML Amendment is to "encourage innovation."<sup>254</sup>

#### D. Personal Information Protection Law (2021)

The Personal Information Protection Law (中华人民共和国个人信息保护法), China's first comprehensive data protection regulation, is another measure taken by the Chinese authorities to clarify data property rights and access to data.<sup>255</sup> It increasingly reins in the power of the country's internet giants and pushes back against their exploitative practices and control over personal data.<sup>256</sup> Existing laws covering cybersecurity and data security exercise lax controls over the collection, storage, and use of individual data, and therefore, do not specifically address personal data protection.<sup>257</sup> Amid growing public concerns over user privacy and cybersecurity, on August 20, 2021,

<sup>246</sup> *Shichang Jianguan Zongju Jiu Fan Longduan Fa Xiuding Cao'an (Gongkai Zhengqiu Yijian Gao) Gongkai Zhengqiu Yijian de Gonggao* (市场监管总局就《〈反垄断法〉修订草案（公开征求意见稿）》公开征求意见的公告) [Announcement of the State Administration for Market Regulation on Public Comment on the Draft Revision of the Anti-Monopoly Law (Draft for Public Comment)], GUOJIA SHICHANG JIANGUAN JU (国家市场监督管理总局) [STATE ADMIN. FOR MARKET REG.] (Jan. 2, 2020), [http://www.samr.gov.cn/hd/zjdc/202001/t20200102\\_310120.html](http://www.samr.gov.cn/hd/zjdc/202001/t20200102_310120.html).

<sup>247</sup> *Shisan Jie Quanguo Renda Changweihui Di Sanshiyi Ci Huiyi Zai Jing Juxing, Shenyi Jiating Jiaoyu Cujing Fa Cao'an, Fan Dianxing Wangluo Zhapian Fa Cao'an Deng, Li Zhanshu Zhuchi* (十三届全国人大常委会第三十一次会议在京举行 审议家庭教育促进法草案、反电信网络诈骗法草案等 栗战书主持) [The Thirty-First Session of the Standing Committee of the Thirteenth National People's Congress Held in Beijing; Reviewed the Draft Law on the Promotion of Family Education, the Draft Law on Anti-Telecom and Network Fraud, etc.; Hosted by Li Zhanshu], REN DA (人大) [NAT'L PEOPLE'S CONG. OF THE PEOPLE'S REPUBLIC OF CHINA] (Oct. 19, 2021), <http://www.npc.gov.cn/npc/kgfb/202110/2788b5f506e54979a54058f67b5ecef.shtml>; *Zhonghua Renmin Gongheguo Fan Longduan Fa (Xiuzheng Cao'an)* (中华人民共和国反垄断法(修正草案)) [Draft Amendment to the Anti-Monopoly Law], REN DA (人大) [NAT'L PEOPLE'S CONG. OF THE PEOPLE'S REPUBLIC OF CHINA] (Oct. 23, 2021), <http://www.npc.gov.cn/flcaw/flca/fi8081817ca258e9017ca5fa67290806/attachment.pdf> [hereinafter Draft AML Amendment].

<sup>248</sup> Draft AML Amendment, arts. 53–56.

<sup>249</sup> *Id.* at art. 18.

<sup>250</sup> *Id.*

<sup>251</sup> Sébastien Evrard & Kelly Austin, *China Publishes Draft Amendment to the Anti-Monopoly Law*, GIBSON, DUNN & CRUTCHER LLP (Oct. 27, 2021), <https://www.gibsondunn.com/china-publishes-draft-amendment-to-the-anti-monopoly-law/>.

<sup>252</sup> *Id.*; Draft AML Amendment, *supra* note 247.

<sup>253</sup> Draft AML Amendment, *supra* note 247, at arts. 10, 22.

<sup>254</sup> *Id.* at art. 1.

<sup>255</sup> *Zhuanjia Jiedu: Quanmian Baohu Geren Xinxi Quanyi de Zhongyao Falü* (专家解读 | 全面保护个人信息权益的重要法律) [Expert Opinion: Important Law for the Comprehensive Protection of Personal Information Rights], GUOJIA HULLIANWANG XINXI BANGONGSHI (国家互联网信息办公室) [CYBERSPACE ADMIN. OF CHINA] (Aug. 25, 2021), [http://www.cac.gov.cn/2021-08/25/c\\_1631491543035763.htm](http://www.cac.gov.cn/2021-08/25/c_1631491543035763.htm).

<sup>256</sup> See Arjun Kharpal, *In A Quest to Rein in Its Tech Giants, China Turns to Data Protection*, CNBC (Apr. 11, 2021), <https://www.cnbc.com/2021/04/12/china-data-protection-laws-aim-to-help-rein-in-countrys-tech-giants.html>.

<sup>257</sup> See, e.g., *Geren Xinxi Baohu Fa de Shenyuan Yiyi: Zhongguo Yu Shijie* (个人信息保护法的深远意义: 中国与世界) [The Far-reaching Significance of Personal Information Protection Law: China and the World], REN DA (人大) [NAT'L PEOPLE'S CONG. OF THE PEOPLE'S REPUBLIC OF CHINA] (Aug. 24, 2021), <http://www.npc.gov.cn/npc/c30834/202108/1fee8d19bae14f9f9766c50ab1e53c0f.shtml>; Zhiyi Chen, Jinxia Sun & Zhongxiao Wang, *Jujiao Shuzi Jingji Jianguan: Ruhe Baohu Geren Xinxi?* (聚焦数字经济监管: 如何保护个人信息?) [Focus on Digital Economy Supervision: How to Protect Personal Information?], DONGFANG ZHENGQUAN (东方证券) [ORIENT SECURITIES] (Jan. 4, 2021), [https://pdf.dfcfw.com/pdf/H3\\_AP202101051447426133\\_1.pdf?1609866465000.pdf](https://pdf.dfcfw.com/pdf/H3_AP202101051447426133_1.pdf?1609866465000.pdf).

after two rounds of draft versions,<sup>258</sup> the Standing Committee of the National People’s Congress finally passed the long-awaited privacy law, the Personal Information Protection Law (“PIPL”), which went into effect on November 1, 2021.<sup>259</sup>

This legislation, seen as China’s version of the European Union’s General Data Protection Regulation (“GDPR”),<sup>260</sup> marks the country’s first attempt to establish a comprehensive legal framework for the regulation of personal data collection, process, usage, storage, transfer, and protection that will curb data abuses by internet platforms.<sup>261</sup> Similar to the GDPR, the PIPL is designed to give citizens more control over their personal data.<sup>262</sup> Specifically, the new law grants data subjects with various rights to their personal information, including the rights to access, inspect, copy, correct, supplement, and delete their personal information.<sup>263</sup> In addition, the PIPL grants data subjects the right to withdraw their consent, the right to restrict or refuse the processing of their personal information, and the right to refuse automated decision-making.<sup>264</sup> Simultaneously, the PIPL emphasizes that personal information gathered by a company must be limited to the minimum amount necessary to achieve the goals of handling data to prohibit abuses of such information.<sup>265</sup> The legislation also stipulates that companies processing data cannot refuse to provide services to users who do not consent to sharing data, unless that data is necessary for the provision of that product or service.<sup>266</sup>

Notably, the PIPL imposes additional requirements for internet platforms that have a large number of users.<sup>267</sup> Article 58 requires these internet platforms to set up systems and independent oversight bodies to ensure compliance.<sup>268</sup> Moreover, it demands these companies to formulate standards for intra-platform product or service providers’ handling of personal information.<sup>269</sup> The legislation further prevents the internet platforms from providing services to product or service providers that seriously violate laws or administrative regulations in handling personal information.<sup>270</sup> It also asks the companies to regularly release social responsibility reports on their information privacy practices to allow for public scrutiny.<sup>271</sup>

The PIPL significantly increases penalties for companies in violation of the new legislation, proposing fines of up to US\$7.6 million (CN¥ 50 million), or five percent of the company’s annual revenue.<sup>272</sup> The violators could also be forced to suspend or cease their business operations for rectification.<sup>273</sup> Nevertheless, given the huge size of the Chinese big data market that will be worth US\$22.49 billion (CN¥ 91.52 billion) by 2023,<sup>274</sup> some believe that the penalties under the new law are too light.<sup>275</sup>

For many legal experts, China’s new data privacy law could see the beginning of the end of the country’s “wild era” of internet development, where in the past two decades, big tech platforms have been free to collect and

<sup>258</sup> See generally *Geren Xinxi Baohu Fa Cao'an* (个人信息保护法(草案)) [*Personal Information Protection Law (First Draft)*], REN DA (人大) [NAT’L PEOPLE’S CONG. OF THE PEOPLE’S REPUBLIC OF CHINA] (Oct. 21, 2020), [https://www.dataguidance.com/sites/default/files/china\\_draft\\_personal\\_data\\_law.pdf](https://www.dataguidance.com/sites/default/files/china_draft_personal_data_law.pdf) [hereinafter PIPL First Draft (2020)]; *Geren Xinxi Baohu Fa Cao'an (Er'ci Shenyi Gao)* (个人信息保护法(草案)(二次审议稿)) [*Personal Information Protection Law (Second Deliberation Draft)*], REN DA (人大) [NAT’L PEOPLE’S CONG. OF THE PEOPLE’S REPUBLIC OF CHINA] (Apr. 29, 2021), <https://www.civillaw.com.cn/gg/t/?id=37701>.

<sup>259</sup> *Geren Xinxi Baohu Fa* (个人信息保护法) [*Personal Information Protection Law (2021)*] (promulgated by the Standing Comm. Nat’l People’s Cong., Aug. 20, 2021, effective, Nov. 1, 2021), <http://www.npc.gov.cn/npc/c30834/202108/a8c4e3672c74491a80b53a172bb753fe.shtml> [hereinafter PIPL (2021)].

<sup>260</sup> Todd Liao et al., *Personal Information Protection Law: China’s GDPR is Coming*, MORGAN LEWIS (Aug. 24, 2021), <https://www.morganlewis.com/pubs/2021/08/personal-information-protection-law-chinas-gdpr-is-coming>.

<sup>261</sup> *Id.*

<sup>262</sup> Arjun Kharpal, *In A Quest to Rein in Its Tech Giants, China Turns to Data Protection*, CNBC (Apr. 11, 2021), <https://www.cnbc.com/2021/04/12/china-data-protection-laws-aim-to-help-rein-in-countrys-tech-giants.html>.

<sup>263</sup> See PIPL (2021), *supra* note 259, at arts. 44–48.

<sup>264</sup> *Id.* at arts. 13–15.

<sup>265</sup> *Id.* at art. 6.

<sup>266</sup> *Id.* at art. 16.

<sup>267</sup> *Id.* at art. 58.

<sup>268</sup> *Id.*

<sup>269</sup> *Id.*

<sup>270</sup> *Id.*

<sup>271</sup> *Id.*

<sup>272</sup> See PIPL First Draft (2020), *supra* note 257, at art. 62.

<sup>273</sup> *Id.*

<sup>274</sup> Celia Chen, *China’s ‘Wild Era’ of Internet May Be Ending as New Personal Data Protection Law Seeks to Curb Big Tech’s Control Over User Data*, THE STAR (Nov. 26, 2020), <https://www.thestar.com.my/tech/tech-news/2020/11/26/chinas-wild-era-of-internet-may-be-ending-as-new-personal-data-protection-law-seeks-to-curb-big-techs-control-over-user-data>.

<sup>275</sup> *Id.* (“Compared with what the tech giants benefit from in mining users’ personal data, I don’t see the punishment as that significant.”).

use citizens' personal information with few rules to regulate their behaviors.<sup>276</sup> However, the PIPL falls short on details of what companies must do to be compliant, placing the burden on companies to be extra cautious when handling user data. Future governmental regulations and guidance are expected to clear up some of the law's ambiguities.

#### E. *Data Security Law (2021)*

In addition to the PIPL, the Chinese regulators have adopted another measure that tightens their control of data by restricting cross-border data flows. On June 10, 2021, the National People's Congress promulgated the Data Security Law ("DSL") (中华人民共和国数据安全法), effective since September 1, 2021, after three rounds of deliberations.<sup>277</sup> Notably, the new legislation contains sweeping requirements for the protection of data and severe penalties for violations.<sup>278</sup> The DSL further strengthens the Chinese government's control over data by restricting data transfers from both foreign and domestic companies operating in China to foreign governments.<sup>279</sup> It sets a framework for companies to classify data based on its economic value and relevance to China's national security.<sup>280</sup> Based on this classification, the DSL requires companies that process "critical data" and "national core data"—data that are pertinent to national security, national economy, public interests, or legal rights and legitimate interests of Chinese citizens and organizations—to conduct risk assessments to gain regulators' approval before sending any of that data overseas.<sup>281</sup> The DSL explicitly prohibits data processors within China from providing any data stored within China to any foreign judicial departments or law enforcement bodies without prior approval from the Chinese authorities.<sup>282</sup> Failure to obtain such prior authorization may subject data processors to severe penalties, *i.e.*, a fine of up to US\$ 154,800 (CN¥ 1 million) or US\$ 774,000 (CN¥ 5 million), as well as suspension or revocation of their business licenses in cases their actions cause "serious consequences" (such as a large-scale data leak).<sup>283</sup>

#### F. *National Markets for Data Trading (2020)*

China is estimated to be the single most prolific producer of big data in the world by 2025, overtaking the United States.<sup>284</sup> With the huge potential the commercialization of data offers, the Chinese authorities not only aim to take over supervision of the country's vast data assets through regulation and legislation, but also to commoditize them by creating a state-supervised nationwide marketplace for data trading.<sup>285</sup> Such ambitions are supported by the State Council's Implementation Plan for the Pilot Comprehensive Reform of Building a Pilot Demonstration Zone of Socialism with Chinese Characteristics in Shenzhen (2020–2025) (深圳建设中国特色社会主义先行示范区综合改革试点实施方案 (2020–2025 年)).<sup>286</sup>

According to the Plan, Shenzhen will lay the groundwork for establishing a national data trading market and lead efforts to explore new mechanisms for protecting and utilizing data property rights (数据产权制度).<sup>287</sup> Under the Plan, regulators will also draw up a list of responsibilities to strengthen the sharing and exchanging of data among

<sup>276</sup> *Id.*

<sup>277</sup> Colin Zick, *China Adopts New Data Security Law*, JD SUPRA (Aug. 4, 2021), <https://www.jdsupra.com/legalnews/china-adopts-new-data-security-law-7739585/>; Shuju An'quan Fa (数据安全法) [Data Security Law (2021)] (promulgated by the Standing Comm. Nat'l People's Cong., June 10, 2021, effective Sept. 1, 2021), <http://www.npc.gov.cn/npc/c30834/202106/7c9af12f51334a73b56d7938f99a788a.shtml> [hereinafter Data Security law (2021)], translated at <https://www.chinalawtranslate.com/en/datasecuritylaw/>.

<sup>278</sup> Zick, *supra* note 277.

<sup>279</sup> See, e.g., Data Security law (2021), *supra* note 277, at arts. 21, 30, 36, 48.

<sup>280</sup> *Id.* at art. 21.

<sup>281</sup> *Id.* at arts. 21, 30.

<sup>282</sup> *Id.* at art. 36.

<sup>283</sup> *Id.* at art. 48; see also Zick, *supra* note 277.

<sup>284</sup> Saheli Roy Choudhury, *As Information Increasingly Drives Economies, China is Set to Overtake the US in Race for Data*, CNBC (Feb. 13, 2019), <https://www.cnbc.com/2019/02/14/china-will-create-more-data-than-the-us-by-2025-idc-report.html>.

<sup>285</sup> See Cate Cadell, *Analysis: Beyond Security Crackdown, Beijing Charts State-Controlled Data Market*, REUTERS (July 20, 2021), <https://www.reuters.com/technology/beyond-security-crackdown-beijing-charts-state-controlled-data-market-2021-07-20/>.

<sup>286</sup> See Zhonggong Zhongyang Bangongting, *Guowuyuan Bangongting Yinfa Shenzhen Jianshe Zhongguo Tese Shehui Zhuyi Xianxing Shifanqu Zonghe Gaige Shidian Shishi Fang'an (2020–2025 Nian)* (《中共中央办公厅, 国务院办公厅印发《深圳建设中国特色社会主义先行示范区综合改革试点实施方案 (2020–2025 年)》》) [The General Office of the Central Committee of the Communist Party of China and the General Office of the State Council Issued the Implementation Plan for the Pilot Comprehensive Reform of Building a Pilot Demonstration Zone of Socialism with Chinese Characteristics in Shenzhen (2020–2025)], ZHONGHUA RENMIN GONGHEGUO GUOWUYUAN (中华人民共和国国务院) [STATE COUNCIL OF THE PEOPLE'S REPUBLIC OF CHINA] (Oct. 11, 2020), [http://www.gov.cn/zhengce/2020-10/11/content\\_5550408.htm](http://www.gov.cn/zhengce/2020-10/11/content_5550408.htm).

<sup>287</sup> *Id.* at art. 2.

regions and government departments.<sup>288</sup> While the Plan does not specify who owns the data, what kind of data can be traded, or what the trading mechanism will be like, the answers to these questions are fundamental to the long-term success of this proposed nationwide market for data.<sup>289</sup>

As a result of the Plan, Shenzhen’s new regulation—Data Regulations of Shenzhen Special Economic Zone—makes efforts to address some of these issues. Among others, the establishment of a data trading system is one of the highlights of the new legislation.<sup>290</sup> The Regulations expressly clarify that data products and services that have been created through the legal processing of data can be traded on the market.<sup>291</sup> The Regulations also outline new mechanisms for data trading in efforts to create a fairer playing field for the highly under-regulated data trading market.<sup>292</sup> For instance, to facilitate data trading, the Shenzhen Data Regulations urge the expansion of data trading channels to allow market players to freely trade data through legal and regulated platforms.<sup>293</sup> Specifically, the Regulations provide that companies may not use illegal means to obtain data from another company or use data collected illegally from another company to provide alternative products or services.<sup>294</sup> The Regulations also prohibit companies from using big data analytics to engage in price discrimination.<sup>295</sup>

To date, twenty data markets, including those in Beijing, Shanghai, and Guiyang, have been established by various local government authorities and private enterprises in China,<sup>296</sup> which allow for the trade of whole datasets, analytical results, and application programming interfaces, among other data commodities.<sup>297</sup>

## V. LEGAL ANALYSIS

### A. Common Patterns of Competition Litigation Cases

In many jurisdictions around the world, private sector actors increasingly rely on the legal regime of competition law to resolve and adjudicate disputes over data resources. Large platform companies, where large datasets are already concentrated, utilize competition law as the legal grounds both to consolidate control over their existing data resources and to pry additional data resources from their rivals’ grasps.<sup>298</sup> Smaller start-up companies also rely upon competition law to justify their aggressive acquisition of established data resources from their larger digital market brethren.<sup>299</sup> They argue that, as nimble actors, the new or improved products and services that they provide benefit from greater access to the data resources of these large digital platforms and, in some cases, offsets the means by which they close the disparity between their capabilities to gather and use data vis-à-vis their larger competitors.<sup>300</sup> Thus, they claim that competition law helps correct some of the market imbalances that arise from the larger platform companies’ lack of motivation to grant their potential competitors access to previously produced or collected data.<sup>301</sup>

<sup>288</sup> *Id.* at art. 8.

<sup>289</sup> See Iris Deng & Che Pan, *Beijing Wants A Market for Data Trading: The Question is How?*, S. CHINA MORNING POST (Feb. 2, 2021), <https://www.scmp.com/tech/policy/article/3120091/beijing-wants-market-data-trading-question-how>.

<sup>290</sup> Shenzhen Data Regulations (2021), *supra* note 211, at art. 56.

<sup>291</sup> *Id.* at art. 58.

<sup>292</sup> *Id.* at arts. 68–70.

<sup>293</sup> *Id.*

<sup>294</sup> *Id.* at art. 68.

<sup>295</sup> *Id.* at art. 69.

<sup>296</sup> See, e.g., *Beijing Guoji Da Shuju Jiaoyi Suo Chengli* (北京国际大数据交易所成立) [*Beijing International Big Data Exchange Market Was Established*], BEIJING LOCAL FIN. SUPERVISION & ADMIN. (Apr. 1, 2021), [http://jrj.beijing.gov.cn/jrgzdt/202104/t20210401\\_2342064.html](http://jrj.beijing.gov.cn/jrgzdt/202104/t20210401_2342064.html); SHANGHAI SHUJU JIAOYI SUO (上海数据交易所) [SHANGHAI DATA EXCHANGE CORP.], <https://www.chinadep.com/> (last visited Mar. 2, 2022); Luo Man & Tian Mu (罗曼) & (田牧), *Lixiang Hen Fengman, Xianshi Hen Gudan, Guiyang Da Shuju Jiaoyi Suo Zhe Liunian* (理想很丰满, 现实很骨感, 贵阳大数据交易所这六年) [*The Ideal is Beautiful, The Reality is Ugly: The Six Years of Guiyang Global Big Data Exchange Market*], ZHENGQUAN SHIBAO (证券时报) [SEC. TIMES] (July 12, 2021), [https://news.stcn.com/sd/202107/t20210712\\_3426762.html](https://news.stcn.com/sd/202107/t20210712_3426762.html) (discussing the establishment and the recent development of Guiyang Global Big Data Exchange Market).

<sup>297</sup> Li et al., *supra* note 162, at 50.

<sup>298</sup> See, e.g., *hiQ Labs, Inc. v. LinkedIn Corp.*, 938 F.3d 985, 995 (9th Cir. 2019).

<sup>299</sup> *Id.* (hiQ arguing that LinkedIn’s conduct in banning potential competitors from accessing and using otherwise public data constituted unfair competition under California’s Unfair Competition Law); see also Josef Drexler et al., *Data Ownership and Access to Data—Position Statement of the Max Planck Institute for Innovation and Competition of 16 August 2016 on the Current European Debate 9* (Max Planck Inst. for Innovation & Competition Res., Paper No. 16-10, 2018), available at <https://ssrn.com/abstract=2833165>.

<sup>300</sup> See, e.g., *hiO Labs Inc.*, 938 F.3d at 955.

<sup>301</sup> *Id.*

Similarly, within the Chinese jurisdiction, competition law is the primary legal weapon of choice that homegrown internet platforms use to fight for legal control of big data. The most common thread linking the various cases on inter-company disputes over data resources is that most of them had been filed under the Anti-Unfair Competition Law for unfair competition. Previously, for similar types of cases, the conventional approach adopted by Chinese companies was to invoke protection under trade secrets law and contract law.<sup>302</sup> However, the ambiguity in ownership of user-generated content, for example in *Dianping.com v. Baidu*, made it difficult to rely on the conventional approach. Indeed, the issue of data ownership in these emerging cases has revealed the inadequacy of earlier approaches to deciding where to draw the line between fair and unfair competition involving data collection and use.

Currently, Chinese courts have relied heavily upon Article 2 of the AUCL in deciding many of these new cases involving disputes over data ownership among large platform companies.<sup>303</sup> One reason for courts' reliance on this legal tool can be explained by "the catch-all nature" of Article 2, which makes it potentially applicable to all kinds of data practices. Using this approach, Chinese courts usually assess the overall impact of their decisions on market competition through a balancing test before issuing a final ruling on a case.<sup>304</sup>

Importantly, Chinese courts have refrained from issuing decisive rulings in cases that require them to opine on business models that rely on novel technology and data analytics.<sup>305</sup> As most of the cases discussed in this Article were decided before the AUCL was amended in 2017, and because post-amendment cases have been limited, it remains to be seen whether and how Chinese courts will apply Article 12 of the amended AUCL, which is intended to address internet-related unfair competition. In light of the pivotal function of data resources in the new digital economy, it may not be too long before a case is brought forward to test how data-related competition would be analyzed under Article 12—including establishing the standards by which to evaluate whether competition exists between litigants, whether the lawful rights and interests of the data holder were infringed, and whether the infringer's illegal act harmed market order and caused, or might have caused, damage to the competitive interests of the data holder.<sup>306</sup>

Finally, one critical and unresolved question remains: what is the appropriate balance between market stability and digital innovation? Notably, the use of internet robots to crawl and scrap the data of other companies poses challenging situations for the new digital economy. The issue arises as to the extent this behavior should be allowed for the sake of encouraging innovation and to the extent it should be prohibited for the sake of ensuring fair competition. The line in-between is becoming increasingly blurred, and the complexity of the issue may also suggest that Chinese courts will likely take a cautious approach: avoiding premature rulings that may further entrench the monopoly control of data resources by large internet platforms and those that may discourage market competition and the growth of new market participants.

### B. State Regulation: Anti-Monopoly and Antitrust Enforcement

Private litigation is only one part of the enforcement of competition law across many jurisdictions. In the public sector across regions and jurisdictions, antitrust authorities have increased regulatory scrutiny of big tech firms in terms of their control over customer data.<sup>307</sup> For instance, in recent years, antitrust regulators in the European Union and the United States have routinely considered the role of big data in reviewing potential mergers and acquisitions.<sup>308</sup> In these cases, due consideration is given to mergers between an upstream market player with large datasets and a

<sup>302</sup> See Mei Xiaying (梅夏英), *Qiyè Shùjù Quányì Yuanlùn: Cóng Cǎichǎn Dào Kòngzhì* (企业数据权益原则：从财产到控制) [*The Original Theory of Corporation's Data Property Rights: From Property to Control*], 33 PEKING U. L. J. 1188, 1189–1193, 1204 (2021), <http://journal.pkulaw.cn/PDFFiles/%E4%BC%81%E4%B8%9A%E6%95%B0%E6%8D%AE%E6%9D%83%E7%9B%8A%E5%8E%9F%E8%AE%BA%EF%BC%9A%E4%BB%8E%E8%B4%A2%E4%BA%A7%E5%88%B0%E6%8E%A7%E5%88%B6.pdf>.

<sup>303</sup> See discussion *supra* Part II.A–E.

<sup>304</sup> *Id.*

<sup>305</sup> *Id.*; see also Calvin Chiu et al., *Recent Privacy Case Law Update in China*, DENTONS (Feb. 24, 2020), <https://www.dentons.com/en/insights/articles/2020/february/24/recent-privacy-case-law-update-in-china>.

<sup>306</sup> Anti-Unfair Competition Law (2017), *supra* note 43, at art. 12.

<sup>307</sup> See John D. McKinnon & Deepa Seetharaman, *FTC Expands Antitrust Investigation into Big Tech*, WALL ST. J. (Feb. 11, 2020), <https://www.wsj.com/articles/ftc-plans-to-examine-past-acquisitions-by-big-tech-companies-11581440270>; Graham Hyman, *Antitrust M&A Snapshot | Q2 2021*, NAT'L L. REV. (Aug. 5, 2021), <https://www.natlawreview.com/article/antitrust-ma-snapshot-q2-2021>; Jennifer Huddleston, *Mergers and Acquisitions Amid Calls for Increasing Antitrust Enforcement*, AM. ACTION F. (May 27, 2021), <https://www.americanactionforum.org/insight/mergers-and-acquisitions-amidst-calls-for-increasing-antitrust-enforcement/>.

<sup>308</sup> Ben Gris & Sara Ashall, *European Union and United States: Antitrust and Data*, GLOB. DATA REV. (Dec. 2020), <https://www.lexology.com/library/detail.aspx?g=4f0d3e3e-18e6-4be0-a59d-7f0772f8340d>.



downstream user of related data, which could result in foreclosure of other downstream players who require access to this data to compete.<sup>309</sup> Regulatory authorities in these jurisdictions have also initiated a number of high-profile investigations. For example, there are investigations into Google/Fitbit,<sup>310</sup> Facebook/Instagram/WhatsApp,<sup>311</sup> Microsoft/LinkedIn,<sup>312</sup> and among others.<sup>313</sup> Regulatory authorities have not only required powerful internet firms to share data, but also have imposed penalties on companies that violate competition law. For example, the European Union, under Article 102 of the Treaty on the Functioning of the European Union, has levied fines of up to 10 percent of the global turnover of these big tech platforms,<sup>314</sup> and the United States has also sanctioned these monopolies under Section 2 of the Sherman Act.<sup>315</sup>

In China, while the overall data regulatory landscape remains in a state of flux, regulatory authorities have resorted to anti-monopoly and antitrust laws to regulate data and turn their attention to the country’s large internet platforms after many years of allowing their laissez-faire development. These laws offer the Chinese regulatory authorities the legal mechanisms to prevent data monopoly, and thus, encourage market competition within the digital realm. These rules also seem to have teeth—several leading Chinese internet companies, including Tencent, Alibaba, Didi Chuxing, were each fined per violations of anti-monopoly laws.<sup>316</sup> China has thus stepped up its crackdown campaign against monopolistic behaviors that threaten to stifle market vitality.

It appears that the Chinese authorities are much more ambitious than their American and European counterparts in how they centralize and restructure China’s cybersecurity policymaking.<sup>317</sup> Accordingly, the internet regulatory agency, CAC, has taken a more active role in enforcing antitrust and anti-monopoly regulations and has accumulated more power.<sup>318</sup> It is interesting to note that compared to China, neither the European Union nor the United States “has a single regulatory department that can be compared to the CAC in terms of authority,” and that “such power is more scattered” within these two major jurisdictions.<sup>319</sup> Given the growing importance of data, these rules will very likely continue to be enforced well into the future.

### C. The PRC Legislative Experimentation

As the discussion above shows, in addition to regulatory actions, the Chinese authorities have conducted legislative and policy experiments to clarify data property rights. Policy and legislative experimentation are not a unique feature in the area of data ownership; it has always been the standard operating procedure of China.<sup>320</sup> Since Reform and Opening in the late 1970s, the Chinese government has managed complex, rapid, and intersecting reforms across many policy areas.<sup>321</sup> The speed of development, and the complexity and interconnectedness of reforms have led to the emergence of the “Chinese model” of development.<sup>322</sup> Consequently, experimental policy making and

<sup>309</sup> *Id.*

<sup>310</sup> See Initiation of Proceedings (Case M.9660 – Google/Fitbit), 2020 O.J. (C 268/3) 3, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C:2020:268:FULL&from=EN>.

<sup>311</sup> See Fed. Trade Comm’n v. Facebook, No. CV 20-3590 (JEB), 2021 U.S. Dist. LEXIS 119540 (D.D.C. June 28, 2021); Commission Regulation 139/2004, 2014 O.J. (C 417/02) 4, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C:2014:417:FULL&from=EN>.

<sup>312</sup> See Natalia Drozdziak, *EU Sent Questionnaires about Microsoft-LinkedIn Deal to Rivals*, WALL ST. J. (Oct. 22, 2016), <https://www.wsj.com/articles/eu-sent-questionnaires-about-microsoft-linkedin-deal-to-rivals-1477144129>; Mark Scott & Nick Wingfield, *Salesforce is Said to Question Microsoft-LinkedIn Deal in Europe*, N.Y. TIMES (Sept. 29, 2016), <https://www.nytimes.com/2016/09/30/technology/salesforce-is-said-to-question-microsoft-linkedin-deal-in-europe.html>.

<sup>313</sup> See, e.g., Complaint, United States v. Visa Inc., (N.D. Cal. Nov. 5, 2020) (No. 3:20-cv-07810), <https://www.justice.gov/opa/press-release/file/1334726/download> (attempting to block Visa’s proposed acquisition of Plaid).

<sup>314</sup> See Consolidated Version of the Treaty on the Functioning of the European Union art. 102, May 9, 2008, 2008 O.J. (C 115) 47; Henry Mostyn, *The Dominance and Monopolies Review: European Union*, THE LAW REVIEWS. (June 21, 2021), <https://thelawreviews.co.uk/title/the-dominance-and-monopolies-review/european-union>.

<sup>315</sup> Sherman Antitrust Act of 1890, 15 U.S.C. § 2.

<sup>316</sup> Che Pan, *China’s Antitrust Watchdog Punishes Alibaba, Tencent and Didi for Merger Irregularities After Digging into Old Deals*, S. CHINA MORNING POST (July 7, 2021), <https://www.scmp.com/tech/policy/article/3140224/chinas-antitrust-watchdog-punishes-alibaba-tencent-and-didi-merger>.

<sup>317</sup> See Jane Li, *How China’s Top Internet Regulator Became Chinese Tech Giants’ Worst Enemy*, QUARTZ (Aug. 23, 2021), <https://qz.com/2039292/how-did-chinas-top-internet-regulator-become-so-powerful/>.

<sup>318</sup> *Id.*

<sup>319</sup> *Id.*

<sup>320</sup> See, e.g., YONGNIAN ZHENG, DE FACTO FEDERALISM IN CHINA: REFORMS AND DYNAMICS OF CENTRAL-LOCAL RELATIONS (2007); Sebastian Heilmann, *From Local Experiments to National Policy: The Origins of China’s Distinctive Policy Process*, 59 THE CHINA J. 1 (2008); Sebastian Heilmann, *Policy Experimentation in China’s Economic Rise*, 43 STUD. COMPARATIVE INT’L DEV. 1 (2008).

<sup>321</sup> Sebastian Heilmann, *From Local Experiments to National Policy: The Origins of China’s Distinctive Policy Process*, 59 CHINA J. 1 (2008).

<sup>322</sup> *Id.*

innovation have become part of the Chinese government's policy toolbox.<sup>323</sup> There is increasing understanding of the importance of policy and legislative experimentation and innovation in many of China's reforms.<sup>324</sup> As with reforms and legislation in other policy areas, so far clarification of data property rights has been through a process of trial and error (*i.e.*, Shenzhen experiment). This process of incremental development and prudent experimentation is a promising path forward in establishing a comprehensive legal regime on data ownership in China, as any premature legislation deepening monopolistic control of data resources by internet companies risks stifling innovation and competition.

As Fisher and Streinz have noted, assertions of property claim over data are often invoked by internet companies, and became contentious in response to demands for transparency and calls to share data with broader constituencies.<sup>325</sup> Thus, while new ownership rights over data for data controllers can facilitate contracting over data and can incentivize data generation, prematurely establishing or recognizing legal property rights in data can further entrench the large internet platforms' control with the authority of law by preventing redistributive measures.<sup>326</sup> This is because existing data holders would use property rights as a shield to exclude others from access.<sup>327</sup> In other words, it will reward those who have already accumulated data and treated data essentially as a *res nullius*, "things that belong to no one but can be claimed by whoever catches them first."<sup>328</sup>

Due to the risks of entrenchment, a more cautious "wait-and-see" approach, in the form of judicial rulings, state regulatory guidance, and legislative and policy experiments, is preferable to immature legislation on data property rights. As much of the Chinese consumer data is already controlled by large internet platforms, any new legislation or proposed reforms on data ownership that upholds the status quo could run the risk of stifling innovation and competition.

This more cautious approach does not mean that nothing can or should be done. As noted earlier, there is room for the legislature, the executive agencies, and the courts to provide more structure and guidance on the issue as to how the existing rules of competition law, along with other legal regimes, should apply to data. Attention should also be paid to ensuring that any monopoly rights on data access and control should be carefully limited to ensure fair rights of access and reuse in the public interest.

## VI. CONCLUSION

For many years, powerful internet platforms have taken economic advantage of the "new resource" of data, and society has muddled through without raising serious questions about who "owns" the data and what data "ownership" entails. To date, there is yet a comprehensive, global legal framework on data property rights. Therefore, data holders are often left to rely upon a thin patchwork of laws, including IP law and competition law, to defend their rights. However, in recent years, as today's economy becomes increasingly big data driven, these existing legal frameworks are proving increasingly insufficient.

In China, as in many other jurisdictions, the issue of data ownership remains unsettled and has provoked heated disputes by private entities over access and control of consumer data. Thus far, the digital economy in China has boomed without clear specification of data ownership. However, the issue of "ownership" can no longer be sidestepped as new and more efficient markets require new rules promoting competition, innovation, and growth for applications of AI and ML. While basic rules have been developed through litigation between private companies under the precepts of anti-unfair competition law, through government mediation and regulation in high-profile disputes, and through legislative and policy experiments, much work remains to be done before China's ambitions of a nationwide data market are to be realized.

In the Shenzhen legislative experiment, a pioneering attempt at addressing issues of data ownership, early efforts towards ownership recognition raise more questions than solutions. Therefore, it is advisable for the government to take on a cautious "wait-and-see" approach before premature legislation upholding the status quo risks stifling both innovation and competition. The current pattern of allowing judicial rulings by the courts, regulatory guidance by state agencies, and evidence from legislative and policy experiments to accumulate before codification is

---

<sup>323</sup> *Id.*

<sup>324</sup> *Id.*

<sup>325</sup> Fisher & Streinz, *supra* note 30, at 36.

<sup>326</sup> *Id.*

<sup>327</sup> *Id.*

<sup>328</sup> *Id.*

a promising strategy to allay these concerns without becoming too conservative. The Chinese cases presented herein highlight the present absence of effective and unified legal regimes on data ownership and suggest that the lacuna would benefit from careful study of existing rules as well as prudent experimentation.