Development of the Sharing Economy in China: Challenges and Lessons

Yide Ma and Haoran Zhang

Abstract

With the growing Internet technology, mobile payment, logistics infrastructure, and huge demographic dividends, China's sharing economy has been leaping forward in recent years, reshaping China's economic pattern and becoming one of the priorities in China's economic development in the future. However, with the expansion of the sharing economy and the continuous emergence of various business models, a series of legal risks and challenges are restricting the development of China's sharing economy. This chapter starts with an analysis of the concepts, features, operating principles, and conditions of the sharing economy. In the second part, we introduce the development process of the internet economy, and the germination and status of the sharing economy in China. We then identify the main challenges that the sharing economy in China is now facing, and propose solutions before we end with a conclusion.

Keywords

Sharing economy · Intellectual property · Platform regulation · Platform liability · Platform monopoly

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Y. Ma (✉)

IP Research Center of Zhongnan University of Economics and Law,
Wuhan, Hubei, People's Republic of China

H. Zhang

Renmin University of China Law School, Beijing, China
e-mail: hr.zhang@ruc.edu.cn

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1 Introduction

The sharing economy is mainly reflected in the new economic modes that utilize information network technology to optimize the allocation and utilization of idle social resources. The rapid development of the sharing economy globally has profoundly changed the way of production and life, the consumption concept, and employment modes. Governmental support for the development of the sharing economy is commonplace. For example, a number of state governments in the United States have amended relevant laws and regulations to clarify the legality in the short-term lodging and for-hire transport sectors; the European Commission has published the European Agenda for the sharing economy¹ to eliminate unnecessary barriers and promote long-term development of the sharing economy in the EU; the UK has announced its plan to build a global center for the sharing economy and to provide policy support.² With the growing Internet technology, mobile payment, logistics infrastructure, and huge demographic dividends, China's sharing economy has been leaping forward in recent years, reshaping China's economic patterns.

In 2018, the Central Government Annual Work Report emphasizes the importance of "developing the platform economy and sharing economy, forming an innovation and entrepreneurship pattern, which combines the online and offline worlds, synergizes the industry with academic, research and application, and integrates small, medium and big enterprises."³ To develop the sharing economy has become one of the priorities in China's economic development. This chapter first explores the concepts, features, operating principles, and conditions for the sharing economy. It then introduces the status and developmental process of the sharing economy in China. The third section focuses on the following prominent problems of the sharing economy in China and proposes suggestions to tackle them: repeated investment and vicious competition, conflicts between the sharing economy and old regulatory patterns and its coordination, transaction costs related to the supervision of opportunistic behavior, the problems of platforms, rights protection of laborers, protection of users' information, and tax issues. The last section is the conclusion.

¹European Commission, A European agenda for the collaborative economy, available at <http://ec.europa.eu/DocsRoom/documents/16881/attachments/2/translations>, p3.

²Department for Business, Innovation & Skills and The Rt Hon Matt Hancock MP, Move to make UK global center for sharing economy, available at <https://www.gov.uk/government/news/move-to-make-uk-global-centre-for-sharing-economy>

³Premier Li Keqiang, 2018 Report on the Work of the Central Government (in Chinese) March 5, 2018 at the first session of the Thirteenth National People's Congress, available at http://www.gov.cn/premier/2018-03/22/content_5276608.htm

2 The Sharing Economy

2.1 The Concept and Characteristics

There is a wide-ranging debate over the exact meaning of the term “sharing economy.” Some commentators argue that the word “sharing” is a misnomer employed to mask the essentially commercial nature of the activity on these platforms.⁴ They feel the term misleadingly “frames technology-enabled transactions as if they were altruistic or community endeavors.”⁵ Others consider the term “sharing economy” vague, with a range of meanings.⁶ There are various other phrases used to refer to these platform-enabled activities, including “collaborative consumption,” “collaborative economy,” “gig economy,” “on-demand economy,” and the “peer-to-peer economy.”⁷

As defined by EC,⁸ this chapter uses the term “sharing economy” to refer to all business models facilitated by collaborative platforms that create an open marketplace for the temporary usage of goods or services often provided by private individuals. The sharing economy involves three categories of actors: (i) service providers who share assets, resources, time, and skills — these can be private individuals offering services on an occasional basis (“peers”) or professional service providers; (ii) users of these services; (iii) platforms that connect providers with users and facilitate transactions between them, and ensure the quality of these transactions, e.g., through after-sale services (handling complaints), insurance services, etc. Platforms can also provide services and goods themselves to serve customers, e.g., the OFO and Mobike, the two dominant bicycle-sharing platforms in China.

Sharing transactions often do not involve a change of ownership and can be undertaken in a profitable or nonprofitable way. The essence of the phenomenon is twofold: Firstly, the internet platform reforms the mode of production, i.e., the resources and production factors (information, laborers, financial means, and materials) that used to belong to traditional organizations are traded directly and matched accurately in accordance with information in a larger range, thereby producing index-level incremental value and increasing productivity. Secondly, as a result of increasing efficiency and transparency, suppliers are enabled to rent or

⁴See Abbey Stemler, *The Myth of Sharing Economy and Its Application for Regulating Innovation*, 67 *Emory Law Journal*. 199 (2017); Sarah O’Connor, *The Gig Economy is Neither ‘Sharing’ nor ‘Collaborative’*, *FIN. TIMES* (June 14, 2016).

⁵Natasha Singer, *Twisting Words to Make ‘Sharing’ Apps Seem Selfless*, *N.Y. TIMES* (August 8, 2015).

⁶See Rachel Botsman, *The Sharing Economy Lacks A Shared Definition*, available at <http://www.collaborativeconsumption.com/2013/11/22/the-sharing-economy-lacks-a-shared-definition/>

⁷See Gideon Lichfield, *All the Names for the New Digital Economy, and Why None of Them Fits*, available at <http://qz.com/548137/all-the-names-for-the-new-digital-economy-and-why-none-of-them-fits/>; also see EC, *A European agenda for the collaborative economy*, available at http://europa.eu/rapid/press-release_IP-16-2001_en.htm, p3.

⁸EC, *A European agenda for the collaborative economy*, available at <http://ec.europa.eu/DocsRoom/documents/16881/attachments/2/translations>, p3.

employ their assets, such as cars or apartments, for use by others, thereby improving utilization of those assets. In this sense, the sharing economy transcends traditional production organizations and relies on the redistribution of existing resources.⁹

To sum up, the sharing economy has the following characteristics¹⁰:

It is a new economic form that emerged when the information revolution reached a certain stage. The rapid development of modern information technology and its innovative applications, such as the Internet (especially mobile Internet), broadband, cloud computing, big data, Internet of things, mobile payment, and location-based service (LBS), allow the sharing economy to become possible.

It is a way of optimal resource allocation by effectively linking supply and demand. The sharing economy can quickly integrate all kinds of scattered and idle resources, accurately locate diverse needs, achieve rapid matching between supply and demand, and greatly reduce transaction costs.

It embodies the collective reflection of the new concept of consumption and view of development, and adapts to the development of the information society. As opposed to the industrial society which emphasizes the maximization of production and income and advocates the possession of resources and wealth, the information society exemplified by the sharing economy emphasizes a people-oriented conception and sustainable development, and advocates the best experiences and use.

2.2 The Operating Principles

Alvin Roth proposed that a well-functioning market should meet three conditions: marketplaces have to provide “thickness,” i.e., they need to attract a large enough proportion of the potential participants in the market; they have to overcome the “congestion” that thickness can bring, by making it possible to consider enough alternative transactions to arrive at good ones; and they need to make it “safe” and sufficiently simple to participate in the market, as opposed to transacting outside of the market, or having to engage in costly and risky strategic behavior.¹¹ For the sharing economy, its development also requires guaranteeing the establishment of a market with sufficient supply and demand, an effective mechanism for search and matching, and a trust mechanism to ensure the security of the transaction.¹²

⁹See Hu Ling: On Legal Regulation of the “Sharing Economy” (in Chinese), 4 Beijing Cultural Review 112–115 (2015).

¹⁰Information Research Department of the National Information Center, Sharing Economy Work Committee of China Internet Association, China’s Report on Collaborative Economy Development 2016 (in Chinese), pp. 6–7.

¹¹Alvin E. Roth, What Have We Learned from Market Design? 118 Economic Journal, 285–310 (2008).

¹²USFTC, The “Sharing” Economy: Issues Facing Platforms, Participants & Regulators, available at <https://www.ftc.gov/news-events/events-calendar/2015/06/collaborative-economy-issues-facing-platforms-participants-regulators>, pp. 19–23.

2.2.1 Creating Sufficient Supply and Demand

A successful platform for the sharing economy requires that both sides of the market have sufficient market players. There are a large number of buyers and sellers on the platform, so each participant is able to correspond to a number of potential matches, thus increasing the chances of a successful match. In addition, increasing the number of buyers or sellers can prompt more counterparties to join the platform and participate in the transaction.

This leads to the common problem of a two-sided network effect (or indirect network effect) on the two sides of the platform market. According to a USFTC report,¹³ the platform not only needs a large number of buyers to attract the participation of sellers, but also requires a large number of sellers to attract buyers' participation. In order to promote users' participation at both ends of the platform, the platform must have information about the price paid by the participants on each side of the platform, and often needs to subsidize the users. Taking the car-hailing services for example, the platform company may reduce the fare sharply to attract passengers every time they enter a new city, and pay drivers the full fare and even a certain reward by relinquishing profit for the platform itself. When there are enough users on both sides of the platform, the platform company will return to the normal pricing behavior.

2.2.2 Creating an Effective Mechanism for Search and Matching

An active market enables the presence of enough potential customers on both sides of the sharing economy platform to ensure market liquidity. However, a large number of potential users alone cannot guarantee the success of the transaction, and the platforms must be able to search for potential counterparties, find matches, and complete the transaction. According to the above-mentioned USFTC report, the "friction" of search and matching will increase the transaction cost, and whether the transacting party is willing to bear the search cost depends on the value that the transaction will produce. Effective search and matching requires proper definition or standardization of products and services that are to be bought and sold on the platform. But consumers' diverse demands for products and services make the platform face a certain degree of challenge when classifying products or services.¹⁴

The mechanism for platforms to define products, search, price, and match is dependent on the characteristics of the industry and the market, and the different needs of participants. For example, the platform for car-hailing services usually defines the service as "rapid transportation service from one location to another." The platform for car-hailing services receives passengers' requests, matches them with nearby drivers, and then establishes contacts between the two parties. Passengers have little chance to choose the drivers by themselves, and prices are usually determined according to the algorithm of the platform, which requires no further participation from either party. In contrast, the short-term apartment rental platform will show in detail the characteristics of accommodation services provided

¹³ Ibid.

¹⁴ Ibid.

by landlords. Customers can browse through lists, contact potential landlords, and negotiate further with regard to other transaction conditions. Compared to the low value and timeliness of the car-hailing services, and considering that the selection of a suitable residence can produce higher expected value, customers usually spend more time and participate more in searching and selecting a potential residence.

2.2.3 Creating the Trust Mechanism

If the platform does not establish mutual trust between the two parties, the participants will remain afraid that the other party may not perform properly. Such worries will undoubtedly discourage both parties from being involved in the transaction. Therefore, the platform must take measures to establish confidence of both parties. For example, the platform must check participants before allowing them to join, or set up a participant credit evaluation system based on previous transaction records, or provide security or insurance against bad results, or set up a prepayment mechanism, etc. Unlike traditional business models, the credit evaluation system and other trust mechanisms (such as insurance, guarantee, and prior review of participants) of the sharing platforms can effectively reduce concerns caused by information asymmetry on the two-sided market, thus reducing the demand for government regulation.¹⁵

3 The Development and Experiences of the Sharing Economy in China

In China, with the gradual popularization of smart mobile terminals, the Internet and mobile payment technology, and the social network ecology, the sharing economy is booming and has undergone a process from blind expansion to rationality. Many sharing websites have emerged rapidly. The sharing business models have penetrated various industries, from consumption to production, and account for a rapidly increasing share of the national economy.

3.1 Development of the Internet Economy and Third-Party Payment Platforms

In the late 1990s, with advancement in the construction of China's telecommunication infrastructure, the Internet economy flourished. The early Internet economy originated from traditional cultural industries like news, books, music, and movies. It attracted a large number of users through free use in exchange for their attention and patronage, resulting in a business model of "free basic service plus fee-based value-added service/advertising." After a decade or so of the Web 1.0 era, China's internet development entered the Web 2.0 era. The service architecture of the Internet transitioned from a one-way communication portal to an interactive

¹⁵ Ibid.

communication service. Ordinary users could now become producers of information, and share their experiences and works with unspecified people. The formation of network effects has led to the rise of various platforms. Internet corporations have attracted users through partially free markets, and at the same time recovered costs and gained profit in the toll market, forming an ecosystem of various services. A large number of third-party service providers joined the platforms, shared the infrastructure, and conducted direct transactions with users.

In the early days of Web 2.0, the Internet provided fragmented information and services to consumers and was forced to abandon charges due to the lack of flexible and convenient payment methods, which also led to the limitation of knowledge sharing and expansion to other sharing areas. At that time, the construction of electronic banking by state-owned commercial banks had just commenced and was unable to accommodate many Internet companies. Big internet companies in China had to develop virtual currency by themselves that could be purchased by fiat currency to trade and exchange on platforms.¹⁶ It was only when Alibaba's Alipay laid the foundation for online payment that the Chinese online payment system started to grow. The third-party payment platform not only solves the problem of payment inconvenience, but also that of trust among strangers in online transactions.¹⁷ With a combination of other credit evaluation systems and real-name systems, third-party payment platforms provide a basic guarantee for online economic activities, which again gives rise to new practices surrounding sharing of physical assets.¹⁸

3.2 The Current Status of the Sharing Economy

In 2015, the size of the main sectors¹⁹ of China's sharing market amounted to about RMB1,697.8 billion; in 2016, transactions amounted to RMB 3452 billion, an increase of 103% and accounting for GDP 4.6%. In 2016, over 600 million people participated in sharing economy activities in China. The number of participants in the service sector was approximately 60 million, with approximately 5.85 million

¹⁶One typical online payment tool at that time was the Q Coin, developed as a kind of virtual currency by Tencent. Q Coins can be purchased by telephone or credit card. Users can use the Q Coins to obtain related services or commodities on Tencent's website, e.g., membership services, electronic game props, and virtual commodities. However, these virtual currencies can only be exchanged on limited websites or platforms

¹⁷The basic model of Alipay is that the user pays first to the third-party payment platform, and the service provider delivers the goods. After the user confirms the receipt of goods, the third-party payment platform completes the payment to the service provider. The third-party payment platform functions as a transaction guarantor.

¹⁸See Hu Ling: On Legal Regulation of the "Sharing Economy" (in Chinese), 4 Beijing Cultural Review 112–115 (2015).

¹⁹The main sectors include sharing of knowledge, apartments, transportation, daily services, health care, and finance.

employees serving on the platforms. According to the State Information Center,²⁰ the sharing economy is expected to account for 10% of GDP by 2020, and 20% by 2025.

At present, the sharing economy has expanded to and penetrated all spheres of social life, with the following major industries and business models: (i) *Sharing of transportation*. This model mainly includes sharing of cars (such as DiDi²¹), driving, bicycles, and parking spaces, etc. Such transportation sharing is the most popular and influential sharing economy model, and one of the most controversial areas in the world for the sharing economy. (ii) *Sharing of apartments*. There are three main modes: the C2C open platform (such as [Mayi.com](http://www.mayi.com)²²), the B2C open platform, and the “property-sharing + swap-sharing” two-dimensional sharing model. (iii) *Sharing of catering*. There are three modes: private kitchen & distribution, home kitchen & eat-in, and recipes in community. (iv) *Sharing of logistics* (the realization of optimal allocation of the logistics system by sharing logistical resources, such as Joybuy Yuncang²³). (v) *Sharing of Finance*. There are crowd-funding networks, P2P loans networks (such as Hongling Capital²⁴), and so on; (vi) *Sharing of knowledge* (knowledge and skills dispersed among individuals or institutions are shared between specific individuals or institutions), such as online Q&A (questions and answers), webcast, education, and services crowd-sourcing.²⁵ (vii) *Sharing of health care*, including online medical consultation (such as Chunyu Doctor²⁶), and sharing of medical facilities.

²⁰ State Information Center, The sharing economy is expected to account for 10% of GDP in 2020, available at <http://finance.sina.com.cn/roll/2017-04-18/doc-ifyeimzx6886194.shtml>

²¹ DiDi is the biggest sharing car platform in China. It provides vehicle rental information, user ride information, and driver service information between the car owners, users, and drivers to facilitate the transaction and profit from it.

²² [Mayi.com](http://www.mayi.com) is a short-term lodging platform like Airbnb. The business model is that landlords with idle apartments publish lodging information on the platform; users can search for and rent those apartments and reach a lodging contract with the landlords on the platform.

²³ Joybuy Yuncang (<http://jdyuncang.cn>) is the logistics system, in which Joybuy puts other logistics companies' warehouses into its logistics system and shares them with third parties. As consideration, Joybuy provides access to its online platform, data analysis, and delivery service to third parties.

²⁴ Hongling Capital (<https://www.my089.com>) is one of the earliest P2P loan platforms in China. Users announce their need for a loan on the platform, third parties with funds bid for the opportunity to provide the loan, and parties reach loan contracts after review by the platform.

²⁵ The basic model of these crowdsourcing platforms is that users post rewards for custom services on the platform, which usually includes LOGO design, Flash design, website construction, programming, translation, etc., and third-party companies and individuals provide online creative work services.

²⁶ Chunyu Doctor (<https://www.chunyuuyisheng.com>) is an online medical consultation platform where the users can consult on health issues, and doctors can answer their questions during their spare time and provide users with more convenient and professional medical advices and services.

3.3 Achievements of the Sharing Economy

Overall, the sharing economy in China has achieved the following: (1) the market structure has so far transformed from one of excessive dispersion to moderate concentration through horizontal mergers; (2) market competition has transformed from vicious competition to healthy competition as the market begins to mature and the competitive behavior of managers tends to be rational; (3) market emphasis has shifted from providing price subsidies to improving the consumer experience. Therefore, improvement in services and quality has become one of the main means of competition in the sharing market²⁷; (4) activating the ideal resources in the market, especially making use of the ideal apartments in the real estate market; (5) the deindustrialization and decentralization of the sharing models allow more industry innovation, as everyone transforms from passive consumer to creator, and further releases individual creativity.²⁸

4 The Challenges of the Sharing Economy in China and Their Solutions

The rapid growth of platforms has stirred considerable debate over the application of regulation to these platforms and their suppliers. On the one hand, regulatory measures may be needed to protect consumers, public safety, and legitimate governmental goals. On the other hand, regulation can chill incentives for innovation by increasing costs and thereby impede or prevent new entry and deprive consumers of the benefits of new product and service offerings. Lawmakers and regulators face a challenging task in balancing these concerns²⁹ and have to deal with duplicated investment and vicious competition, as well as the issues of sustainability and negative externalities.

4.1 Duplicated Investment and Vicious Competition

4.1.1 The Problem

The development of the sharing economy is based on high market liquidity, real-time matching system of supply and demand between buyers and sellers, and transactional security, which presupposes that platforms reach economy of scale and

²⁷ Wen Xueguo, Sharing Economy Faces the Problem of Monopolistic Platform, Restricted Access, etc. (in Chinese), available at <http://money.163.com/17/0918/14/CUKE0H5L002598NV.htmlpage>.

²⁸ Ding Yuanzhu. Several Thoughts to Promote the Development of Sharing Economy (in Chinese), 2 Journal of Chinese Academy of Governance 106–111(2016).

²⁹ USFTC, The “Sharing” Economy: Issues Facing Platforms, Participants & Regulators, available at <https://www.ftc.gov/news-events/events-calendar/2015/06/collaborative-economy-issues-facing-platforms-participants-regulators>, pp. 19–23.

possess certain market power. All of that imply that only a limited number of platforms can be winners in a specific area of the sharing economy. All the dimensions to competition between platforms, such as bribes (which are transferred to third parties), prices charged to consumers, quality, pure rent dissipation (such as investment in capacity that is never used), and so on,³⁰ may be used simultaneously by platforms. In China, duplicated investment and vicious competition become prevalent, which are diametrically opposite to the original intention of the sharing economy, namely optimal resource allocation.

The development of sharing bicycles can be a typical case. With the leading cycling companies OFO and Mobike successfully attracting financing, a huge amount of capital has flowed into the industry, and a large number of shareable bicycles were put into the market, and at the same time price wars were conducted in the form of free rides and “red envelopes” (subsidies in disguise) just for a larger market share, while neglecting all other efforts. Statistics show that by the end of June 2017, there were nearly 70 sharing bicycle companies in China, and more than 16 million bicycles were put on the market. Excessive distribution of these bicycles has even become a form of negative equity for society. Normal traffic operations were affected in first-tier cities like Beijing and Shanghai. Shareable bicycles in Shanghai at one time reached more than 1.7 million, far exceeding the demand. After overinvestment and vicious competition, most companies withdrew from the market due to financing failures. Currently, OFO and Mobike take up about 95% of the market. Others, such as sharing of trips, live broadcast platforms, and power banks, are also undergoing a similar process.

4.1.2 The Solution

To design an environment in which competition results in surplus which will be transferred to consumers, rather than wasteful rent dissipation, is clearly an attractive policy goal. According to the theory of institutional economics, the granting of exclusive property rights can reduce rent dissipation.³¹ Therefore, creation and award of intellectual property rights for business models of the sharing economy have become the direction of exploration in China. As the “State Council’s Opinions on Accelerating the Construction of Powerful Intellectual Property Rights under the New Situation” state, the Chinese government is pursuing to “perfect the intellectual property protection system for business patterns and patent protection system for utility models, to strengthen the study of intellectual property protection rules regarding the Internet, e-commerce, big data and other areas, and to promote the development of relevant regulations.”³² As a matter of fact, China is now exploring

³⁰ Hal R. Varian, Joseph Farrell, and Carl Shapiro, *The Economics of Information Technology*, Cambridge University Press, 2007:30.

³¹ Steven Cheung, *The Structure of a Contract and the Theory of a Non-Exclusive Resource*, 13 *Journal of Law and Economics*, 49–70 (1970).

³² State Council, *Opinions on Accelerating the Construction of Powerful Intellectual Property Rights under the New Situation*, available at http://www.gov.cn/zhengce/content/2015-12/22/content_10468.htm

ways to expand the range of patentable objects to protect new Internet business models, or to grant them short-term exclusivity through individual legislation, which will be revoked within 1 year. However, the ultimate question remains whether intellectual property rights should be given to Internet business models or not, and how to define the boundary between the exclusivity and the public domain to avoid hindering the development of the industry.

4.2 The Sustainability Issue

Unlike the efficiency in matching the supply and demand and the expansion of the market, which are greatly determined by technology advances, trust mechanisms can be easily destroyed by opportunistic behavior in practice, which would increase transaction costs, and make it difficult for the sharing economy to further develop.³³ Thus, opportunistic behavior, such as the infringement of consumer rights and the distortion of reputation evaluation systems, challenges the sustainability of the sharing economy.

4.2.1 Cases of Infringement of Consumer Rights Grow Rapidly

Due to the lack of market entry certification and regulation, cases of consumer rights infringement have grown rapidly. According to statistics on the “Customer Network,”³⁴ from January to August 2016, the website received a total of 736 consumer complaints about sharing economy businesses such as “online taxi-hailing,” “online tourism,” and so on. The amount of complaints received by local governments is also increasing. For example, the data released by Hubei Province Administration for Industry and Commerce shows that in the first half of 2017, the number of complaints about “sharing bicycles” and “online taxi-hailing” increased by 121.8% compared to 2016.³⁵

The cause for the rise in consumer complaints lies in the unclear division of responsibilities among participants of the platform and the platform. Platforms’ approach is to gain profits from participants’ transactions without taking on too much responsibility for any illegal actions which may occur. For example, DiDi provides in its “Special Vehicle Terms of Use” Section 1 – “Our Services” that “DiDi platform does not provide rental, car rental or driving services. All we provide is related information about rental vehicles and drivers. DiDi is just a platform between you and the suppliers.” Under the “Four-Party Agreement,” users assume

³³ Lu Xianxiang, Collaborative Economy: Transaction Cost Minimization, Institutional Change and Institutional Supply (in Chinese), 9 Social Science Front 51–61 (2016).

³⁴ “Customer Network” (<http://www.bjxf315.com>) is a professional service platform for consumer rights protection supported by the Beijing Consumers Association. It accepts consumer’s complaints and conveys that to the association, promotes communication between consumers and business operators, and releases information on consumers’ right protection.

³⁵ Wan Jing, Sharing economy platforms must respect the antitrust law (in Chinese), Legal Daily (November 9, 2017).

primary legal responsibility as the renter of the vehicle and the employer of the driver. Thus, defining tort liability arising from sharing behavior becomes problematic.³⁶ However, doesn't a car hailing platform have to assume joint tort liability for the driver's fault? Doesn't an online platform have the obligation to guarantee the online shops' quality? Isn't it liable for contents searched? The absence of suitable regulation and clear rules on responsibility makes it difficult for users and consumers to safeguard their rights.

4.2.2 Distortion of the Reputation Evaluation System

The trust and reputation system is one of the important preconditions for the sharing economy market, which allows the parties to evaluate each other after the transaction is completed, serves as a reference for later decision making, and provides a reward and sanction mechanism for the provision of higher quality products and services. However, with the development of the sharing economy, false and malicious evaluation by paid users has distorted this credibility evaluation mechanism.

4.2.3 The Solution

An effective mechanism for consumer rights protection and defining responsibility needs to be clarified and improved expeditiously. The solution is to build a "government-enterprise-society" regulatory model of tripartite cooperation, to promote fair trading and self-discipline of trading subjects, mainly through the use of information regulatory tools.³⁷ In comparison with government regulation, platforms are better equipped than the government for the purpose of running background checks on sharing service providers, and responding quickly to conflicts among participants. Furthermore, platforms have the monetary incentive to look after their communities, and to ensure consumer satisfaction and safety.³⁸ At the level of business practice, some platforms like DiDi construct a platform credit evaluation system to guarantee the authenticity and credibility of the information of the transacting parties by ID verification, linking to mobile phone numbers and bank accounts, enhancing user experience by offering review and score functions, establishing a credit record of the transaction process and a "black list" system, and giving priority to those whose credit evaluation is excellent. Furthermore, some platforms cooperate with insurance companies to provide coverage for potential accidents of parties.³⁹

³⁶ See Hou Denghua, On Legal Status of Internet Platforms Under the Sharing Economy: the Study of Online Car-Hailing (in Chinese), 1 *Tribune of Political Science and Law* 157–164 (2017).

³⁷ Ying Feihu and Tu Yongqian. The Information Tool in Public Regulation (in Chinese), 4 *Social Sciences in China* 122 (2010).

³⁸ D. S. Evans, Governing bad behavior by users of multisided platforms. 2 *Berkeley Technology Law Journal* 1201 (2012).

³⁹ For example, Piggy Short-term Lodging cooperates with Zhongan Insurance (a Chinese insurance company) to provide accommodation accident insurance for tenants and comprehensive insurance for landlords' property. The "Home-to-Eat" company cooperates with the People's Insurance Company of China to promote "safety plans" for food safety; see Information Research Department of the State Information Center, Sharing Economy Work Committee of China Internet Association, Report on China's Collaborative Economy Development 2017, p. 15.

In addition, legal measures for the protection of consumer rights in China's online platforms is set by the "E-Commerce Law of the People's Republic of China",⁴⁰ which stipulates that e-commerce platform operators have an obligation to verify the authenticity of e-commerce business operators' identity information,⁴¹ ensure network security,⁴² preserve transaction information,⁴³ improve credit evaluation systems,⁴⁴ and take responsibilities in some cases.⁴⁵ However, whether it is to be established by the government, in which the government plays a more active role in regulation,⁴⁶ or by a third-party neutral entity, as some have suggested,⁴⁷ still requires further discussion.

⁴⁰The E-Commerce Law of the People's Republic of China was adopted at the 5th session of the Standing Committee of the Thirteenth National People's Congress on August 31, 2018, and became effective from January 1, 2019.

⁴¹Article 27 of the E-Commerce Law prescribes: "An e-commerce platform business shall request a business applying for selling commodities or providing services on its platform to submit authentic information including its identity, address, contact information, and administrative permits, make verification and registration, establish a register, and make regular updates and verification."

⁴²Article 30 of the E-Commerce Law foresees: "(1) An e-commerce platform business shall take technological measures and other necessary measures to ensure its cybersecurity and stable operation, prevent online illegal and criminal activities, effectively tackle cybersecurity events, and guarantee e-commerce trading safety. (2) An e-commerce platform business shall make a contingency plan for cybersecurity events and when a cybersecurity event occurs, it shall launch the contingency plan forthwith, take corresponding remedial measures, and make a report to the relevant competent authorities."

⁴³Article 31 of the E-Commerce Law reads: "An e-commerce platform business shall record and retain the information on the commodities and services released on the platform and transaction information and ensure the integrity, confidentiality and availability of the information. The information on commodities, services, and transactions shall be retained at least for 3 years from the day of completion of the transaction, unless otherwise provided by any law or administrative regulations."

⁴⁴Article 39 of the E-Commerce Law stipulates: "(1) An e-commerce platform business shall establish and improve a credit rating system, publish credit rating rules, and provide channels for consumers to make comments on the commodities sold or services provided in the platform. (2) An e-commerce platform owner may not delete any comment made by a consumer on the commodities or services sold or provided on its platform."

⁴⁵Article 38 of the E-Commerce Law prescribes: "(1) Where an e-commerce platform business fails to take necessary measures, though it knows or should have known that an in-platform business sells commodities, or provides services, inconsistent with the requirements for guaranteeing personal and property safety, or otherwise infringe the lawful rights and interests of consumers, the e-commerce platform business and the in-platform business shall be jointly liable. (2) If, in respect of commodities or services relative to the life and health of consumers, an e-commerce platform business causes damage to a consumer by its failure to perform the obligation of reviewing the qualifications of an in-platform business, or the obligation of guaranteeing the safety of consumers, the e-commerce platform business and the in-platform business shall be correspondingly liable in accordance with the law."

⁴⁶Jiang Shengyang, *The Legal Regulations of Information Tools, Reputation Incentives, and Sharing Economy* (in Chinese), 3 *Postgraduate Law Review* 141–150 (2016).

⁴⁷Hong Zhisheng et al., *Industrial Innovation and Economic Transformation Driven by the Concept of Sharing* (in Chinese), *Guangming Daily* (May 11, 2016).

4.3 The Negative Externalities Issue

The current dominant economic and social management system is based on industrial mass production, which emphasizes regional and fragmented management, and requires prior approval. The network-based sharing economy is typically characterized by cross-regional and cross-industry networking, which brings a series of “negative externalities.”

4.3.1 Regulatory Fairness

Many new industries in the sharing economy are operating in the ambiguous zone of law and supervision, and are even suspected of being “illegal” under the current system. Clearly, “equal” regulation subject some innovative practices to unreasonable institutional requirements; for example, companies engaged in Internet education are asked to deploy offline classrooms in order to be approved, etc. However, innovative business patterns in the sharing economy will inevitably be in a competitive relationship with the existent ones. The sharing economy model is based on network platforms, and a large number of operators do not need to obtain administrative licenses, which can considerably reduce operating costs. The resultant prices are more attractive than those of the existent operators, from whom users and consumers are taken away, leading to the issue of fairness in regulation and conflict of interests, as demonstrated by the online taxi-hailing service and traditional cruising taxis. The development of the sharing economy is challenging the administrative law control systems for property use, market access, and professional qualification.⁴⁸

In designing new supervision over the sharing economy, the innovation of the sharing economy should not be stifled by excessive supervision. Challenging, though, in the process of policy adjustment is how certain behavior of the sharing economy can be identified as “innovation” that is worthy of encouragement, how to judge whether the regulation for the new sharing economy model should be the same as or equal to the traditional ones, and how regulation can adapt to the essential needs of new economic patterns.⁴⁹

4.3.2 Monopoly Issue

According to the estimate of the State Information Center, China’s sharing economy will maintain an average annual growth rate of 40% in the next few years, and there will be five to ten giant platform-oriented companies in the next 10 years.⁵⁰ However, the emergence of such giants may further heighten the risk of monopoly, because of

⁴⁸Zhang Xiaoyu, Challenges in Internet Sharing Economy to Administrative Regulations and Responses to Them (in Chinese), 5 *Global Law Review* 151–161 (2016).

⁴⁹Ranchordas, Sofia, Does Sharing Mean Caring? Regulating Innovation in the Sharing Economy, 16 *Minn. J.L. Sci. & Tech.* 413 (2015).

⁵⁰Information Research Department of the State Information Center, Sharing Economy Work Committee of China Internet Association, Report on China’s Collaborative Economy Development 2016, p. 29.

the dominant feature of the sharing economy, namely the two-sided network effect. This effect means that an increase in the number of users at either side of the two-sided economic platform will lead to more users at the other side. As a result, sharing platforms have the chance to establish monopoly through subsidizing users at either side for free. Such effects may enable large platforms to accumulate huge numbers of users on both sides of platforms and thus have dominant market power. In contrast, smaller platforms are less attractive to users due to fewer participants, and fewer trading opportunities and options for buyers and sellers, and thus stand no chance in competing with large-scale platforms. Two-sided network effects may also lead to market entry barriers, as existing monopoly platforms can easily overwhelm new entrants.

The sharing platforms initially only served as intermediaries to match the supply and demand ends, and were themselves not direct suppliers of products or services. However, with gradual vertical integration, platforms are directly providing products and services to consumers through the employment of professional suppliers. Although such vertical integration can improve efficiency, once the vertically integrated platform owns and controls a large amount of supply capacity, buyers may no longer be willing to switch to other platforms with insufficient supply capacity, thus creating an anticompetitive blocking effect. Therefore, one of the antitrust agencies of China, the National Development and Reform Commission, pledges in Article 8 of the “Guiding Opinions on Promoting the Development of the Sharing Economy” “to encourage and guide the sharing enterprises to carry out effective and orderly competition, and to effectively strengthen the supervision and prevention of platform companies’ monopolistic behaviors in the sharing economy field.”⁵¹

However, due to concentration of immense market resources and nondisclosure of internal information on the sharing platforms, the limitations of traditional and governmental supervision means and capabilities are obvious. In the process of supervision, giving greater autonomy and rights to the market players on the sharing platforms, allowing stakeholders to engage in the governance of supervision, and constructing a “co-regulation” regulatory framework can be more effective.⁵²

4.3.3 Protection of Laborers’ Rights

Peer-to-peer exchange moves jobs away from traditional manufacturing and services to microservices.⁵³ Statistics from the Ministry of Personnel and Social Security in 2014 show that 9.6247 million people were directly employed through online stores, but more than 70% of them did not have any social insurance, and their average monthly wage was only RMB 2115 Yuan. The employment created by the sharing economy platforms is not all high-quality employment. The labor

⁵¹ Fa Gai Gao Ji (2017) No.1245 (发改高技(2017)1245号), published on 3 July 2017.

⁵² See Brhmie Balaram, How to Defeat Monopoly Power in the Sharing Economy, available at <https://blog.p2pfoundation.net/how-to-defeat-monopoly-power-in-the-sharing-economy/2016/02/18>

⁵³ Arvind Malhotra and Marshall Van Alstyne, The Dark Side of the Sharing Economy and How to Lighten It. 11 Communications of the ACM 27 (2014).

employment pattern under the sharing economy is very different from traditional industries. The most prominent feature is that workers have more freedom in terms of organizational attribution, economic independence, etc., which prevents them from receiving effective social security, which is deeply connected to the traditional labor employment relationship. Therefore, in the labor dispute of “Good Chef APP” and disputes between online drivers and platforms, some courts have ruled that “the relationship between laborers and platforms is not the traditional labor contract relationship but a cooperative relationship.”⁵⁴ To provide corresponding labor and social security for new types of labor groups like network contract workers, the current labor law needs to expand the scope of protection to provide network contract workers with legal protection similar to that of traditional laborers,⁵⁵ or the existing institutional frameworks should be reconstructed to provide a social welfare system that is not attached to labor relations.

4.3.4 Protection of Users’ Information

Sharing not only means sharing information or practical items between users and third-party service providers, but also often sharing users and data with platforms. Therefore, sensitive data, such as personal addresses, contact information, preferences and habits, and even the lifestyle of participants, are exposed to platforms. If there are no sound protection measures, once the information is leaked, the user’s personal privacy will be damaged. Moreover, it may also involve national security risks if massive amounts of data and information were leaked.⁵⁶ The following questions need to be addressed for the sharing economy to continue to thrive: how broadly platforms can use information they have collected, whether they have a right to use them, whether they can transfer the right to third-party developers and advertisers, and how to ensure users’ personal data and personality rights will not be compromised.⁵⁷

⁵⁴ See for example Beijing First Intermediate People’s Court (2014) Yi Zhong Min Zhong Zi No.6355 Civil Judgment, (2015) Yi Zhong Min Zhong Zi No.176 Civil Judgment, and (2015) Yi Zhong Min Zhong Zi No.1359 Civil Judgment.

⁵⁵ Ban Xiaohui, A Research on the Expansion of the Protection Scope of Labor Law in the Sharing Economy—From the Perspective of Hiring Cars by Internet Platform (in Chinese), 2 Journal of Sichuan University (Philosophy and Social Science Edition), 154–161(2017).

⁵⁶ Article 37 of [Cybersecurity Law of China](#) prescribes: “Personal information and important business data collected and produced by critical information infrastructure operators during their activities within the territory of the People’s Republic of China shall be stored within the territory; where due to business requirements it is truly necessary provide it outside the mainland, a security assessment shall be conducted according to the measures jointly formulated by the national cyberspace administration and the relevant departments of the State Council. Where laws or administrative regulations provide otherwise, those provisions apply.”

⁵⁷ See Hu Ling, On Legal Regulation of “Sharing Economy” (in Chinese). 4 Beijing Cultural Review 112–115(2015).

4.3.5 Tax Issues

The development of the sharing economy has caused two major regulatory difficulties for tax regulation. First is difficulty in regulating tax opportunism, as transacting subjects use the ambiguity of existing tax rules to evade taxes. An example in this context is the definition of the participants as “third-party settlement entity” to capitalize on the loopholes in regulatory systems to circumvent tax regulation. The second difficulty relates to supervising tax declarations. Many of the sharing economy participants are either microenterprises or traditional consumers who use their personal property for commercial purposes and gain relatively low income from each transaction, making supervision of tax filings difficult.⁵⁸ Therefore, the framework for tax declaration and regulation is in need of reform and restructuring to adapt to the revolution in business models.

5 Conclusion

In China, the sharing economy has experienced rapid expansion, is now covering many spheres of social life, and has become one of the priorities in China’s economic development. The sharing models have effectively activated idle resources, expanded employment, and promoted industrial innovation. However, there are also challenges, namely duplicated investment and vicious competition, as well as the issues of sustainability and negative externalities. For the government to effectively deal with these challenges, it would be advisable to build a “government-enterprise-society” regulatory model to promote self-discipline through the use of information regulatory tools, and to create an environment for fair competition and leave enough breathing space for constant innovation. Only then can the sharing economy maintain its high growth momentum in China and serve as a development model for other economies.

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⁵⁸ Jiang Daxing and Wang Shoujie. Legal Regulation of Sharing Economy (in Chinese). 9 Social Sciences in China 156–157 (2017).

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