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Sharing Economy: Challenges and Opportunities for Chinese Individual Income Taxation

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This point in time marks a great change in our economic system. We have witnessed the emergence of the sharing economy and it has been growing rapidly while disrupting well-established industries along the way. China, the world's second largest economy and a unique consumer market, constitutes an interesting example of the implications of the sharing economy to the society. Among others, the sharing economy poses challenges to taxation. Using the examples of ride-hailing (“Didi Chuxing”) and property leasing (“Airbnb”) business models, this article analyses the challenges posed by the sharing economy particularly to individual income taxation, from both substantive law and tax administration perspectives. Along with an analysis of the status quo, this work investigates the policy responses of other countries and provides proposed solutions to the underlying problems in China. The article also elaborates on how tax authorities can work with the sharing economy platforms and advanced technologies to jointly benefit Chinese society, in particular with regard to tax compliance.

1. Setting the Scene: The Sharing Economy

The past few years have seen the emergence of revolutionary technologies such as big data, block chain, cloud computing, artificial intelligence, Internet of things and mobile Internet. Such cutting-edge technologies not only improve the traditional industries, but also give rise to new business models for the exchange of goods and services, such as the “sharing economy”.^[1]

Although this term has been discussed all over the world, there seems to be a lack of a common consensus on its specific scope and definition.^[2] The sharing economy is often equally referred to as the “gig economy”,^[3] “peer-to-peer economy”,^[4] “platform economy”,^[5] as well as many other names.^[6] Nevertheless, despite their slightly different meanings, the common feature of these business models lies in the participation of three parties, i.e. the platform, the goods/services providers and the consumers who demand the goods/services. In essence, the online platform facilitates the “peer-to-peer” exchange of goods/services between the supplier and the demander.^[7]

The sharing economy has permeated many aspects of our lives. In the transportation sector, Uber has provided people with a more convenient and economical way of travelling. In the hospitality sector, Airbnb offers many types of accommodation to satisfy

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1. G. Beretta, *VAT and the Sharing Economy*, World Tax J. (Aug. 2018), pp. 385.
2. A. Aslam & A. Shah, *Taxation and the Peer-to-Peer Economy*, IMF Working Paper (Aug. 2017), also appeared as A. Aslam & A. Shah, *Taxation and the Peer-to-Peer Economy*, in S. Gupta, M. Keen, A. Shah & G. Verdier (Eds.), *Digital Revolutions in Public Finance* (International Monetary Fund 2017). See also e.g. Rachel Botsman's four quadrants, dividing up the sharing economy into four broad activities (production, consumption, finance and education) or Jeremiah Owyang's honeycomb, mapping out an industry-sector-based classification of the different kinds of collaborative economic activities; J. Owyang, *Honeycomb 3.0: The Collaborative Economy Market Expansion* (10 Mar. 2016), available at <http://www.web-strategist.com/blog/2016/03/10/honeycomb-3-0-the-collaborative-economy-market-expansion-sxsw/> (accessed 8 Apr. 2018); R. Botsman, *The Sharing Economy Lacks a Shared Definition* (21 Nov. 2013), available at <http://www.fastcoexist.com/3022028/the-sharing-economy-lacks-a-shared-definition#8> (accessed 8 Apr. 2018); S. Greenhouse, *The Whatchamacallit Economy*, New York Times (16 Dec. 2016). See also Beretta, *supra* n. 1.
3. G. Friedman, *Workers without Employers: Shadow Corporations and the Rise of the Gig Economy*, 2 *Review of Keynesian Economics* (2014), pp. 171-188, also referred to in Beretta, *supra* n. 1.
4. S. Scanlon, *Peer-to-Peer Rental: The Rise of the Sharing Economy*, *The Economist* (9 Mar. 2013), also referred to in Beretta, *supra* n. 1, at p. 385.
5. C. Busch et al., *The Rise of the Platform Economy: A New Challenge for EU Consumer Law?*, 5 *J. of Eur. Consumer and Market Law* 1 (2016), pp. 3-10; Beretta, *supra* n. 1, at p. 385.
6. For example, “collaborative economy”, “collaborative consumption”, “1099 economy”.
7. C. Migai, J. De Jong & J. Owens, *The Sharing Economy: Turning Challenges into Compliance Opportunities for Tax Administrations*, 16 *eJournal of Tax Research* 3, pp. 395-424.

the needs of different travelers. Online platforms such as Ebay and TaskRabbit have made the direct exchange of goods and services between individuals easier. China, as the second largest economy in the world, does not lag behind other countries in respect of the sharing economy.^[8] One can find a Chinese equivalent for most western business models: Didi Chuxing (the Chinese version of Uber), Xiaozhu Duanzu (similar to Airbnb), Xianyu (a second-hand product exchange platform, similar to Ebay) are all examples of Chinese sharing-economy platforms.

The sharing economy is a representation of the rise of the digital economy that has changed business models dramatically and challenged the traditional tax system. The tax challenges arising from this type of economy include the corporate income tax treatment of the platforms, the value added tax (VAT) implications of the transactions, as well as the individual income tax implications for the suppliers who provide goods/services via the platforms.

In this article, the author analyses the challenges and opportunities which the sharing economy may bring for individual income tax from the Chinese perspective. Section 2. discusses in detail the tax challenges posed by the sharing economy using the examples of Didi Chuxing and Airbnb. Section 3. recommends appropriate policy responses from the tax authorities in the presence of challenges resulting from the rise of the sharing economy. Section 4. addresses possible solutions, outlining the advanced technologies applicable to counter the potential challenges. The concluding section summarizes the key policy responses and the potential actions necessary for ensuring a smooth implementation of the policies. For the purpose of this paper, the author uses the term “suppliers” to describe the goods/service suppliers (such as Uber drivers) on the sharing-economy platform, and the term “customers” for the demanders who enjoy the goods and services provided by the “suppliers” of the platform.

2. Issues Arising from the Sharing Economy

2.1. Example 1: Didi Chuxing

Didi Chuxing (“DiDi”) is China’s biggest mobile transportation platform.^[9] In 2016, it acquired Uber China and by 2018, its user base had increased to 550 million including users from China, Brazil, Australia, Japan and Mexico.^[10] The company initially offered conventional taxi hailing services on their platform, without engaging private car owners; over the years, the business has expanded to a full range of transportation options, whereby DiDi engages with private car owners to provide passengers with various services such as Express cars, Designated Driving, Car Rental and Sharing.

From a tax perspective, the classification of the drivers’ income attracts heated discussions, since different classifications may give rise to different tax implications under the Chinese schedular tax system, and the nature of the income depends on the working relationship between the drivers and DiDi. This issue will be discussed in detail in the following sections.

2.1.1. Working relationship between drivers and platforms

In the case of Uber, countries have divergent views on the classification of the working relationship between the drivers and the platform. In the United States, Uber itself classifies the drivers as independent contractors, which was endorsed by the US Department of Labor in its latest opinion letter issued 29 April 2019. However, courts in different states have rendered divergent decisions on the worker classifications and there has been no case published yet at the federal level. In Australia, the Fair Work Ombudsman launched an investigation in relation to the classification of Uber drivers and reached a conclusion in June 2019 that they should be classified as independent contractors.

Despite its different legal system, China faces similar challenges with regard to the worker classification. Under the current Chinese legal framework, there are three possible interpretations of the working relationship between the drivers and the platforms: employment, independent service provider, and production and operation of individual industrial and commercial households (similar to self-employment).

Firstly, the term “labour/employment relationship” is not defined under the Labour Law nor the Labour Contract Law of China. In legal practice, references are predominantly made to the “Notice of the Ministry of Human Resources and Social Security on Matters regarding the Establishment of Labour Relations” (“Notice of Labour Relations”).^[11] Furthermore, court decisions on this issue are inconsistent,^[12] which adds to the difficulties of interpreting the term “employment relationship”.

8. China’s annual report on sharing economic development (2019), National Information Center Sharing Economic Research Center, 2019 02.

9. The term “mobile transportation platform” comes from DiDi’s website, <https://www.didiglobal.com/about-didi/about-us> (accessed 29 Mar. 2020).

10. See <https://www.didiglobal.com/about-didi/about-us> (accessed 29 Mar. 2020).

11. Author’s translation. Art. 1 Notice of Labour Relations provides that:

A labour relationship is established under the following circumstances, even without a written labor contract: (1) the employer and the employee meet the requirements of the law and regulations; (2) the employer formulates all labour rules and policies that are applicable to the employees, and the employees are subject to labour management by the employer, and are paid accordingly; (3) Labour provided by the employees is an integral part of the employer’s business.

12. In cases No. 6355 *Jing Yi Zhong Min Zhong Zi* (2014), No. 176 *Jing Yi Zhong Min Zhong Zi* (2015) and No. 01359 *Jing Yi Zhong Min Zhong Zi* (2015), the court determined the relationship between the driver and the platform as that of an independent service provider ((2014)京一中民终字第6355号, (2015)京一

In addition, regulatory measures allow platforms to sign various forms of agreements, including, but not limited to, labour contracts with the driver.^[13] This opens up opportunities for not only employment and independent service contracts but also a third possibility: the “individual industrial and commercial household”,^[14] which is a special concept under Chinese law, similar to a small business entrepreneur. This is based on Notice 50 [1995] of the State Administration of Taxation,^[15] which applies when the drivers have ownership of the car that is specifically for the purpose of running a transportation business, register the car with the platforms and pay a management fee to the platforms.

In determining the working relationship between drivers and platforms, one has to interpret the laws and regulations on a case-by-case basis based on the business model and the working agreements. In the case of DiDi, based on the description on their website, there are four main service lines: DiDi taxi, express, premier and luxurious.

DiDi taxi is essentially the same as the regular taxis operated by taxi enterprises. The only difference is that passengers use DiDi’s mobile application to order a taxi, instead of waving one down on the street. In this scenario, DiDi cooperates with taxi service enterprises, and probably gets a commission for each order completed via their application. Therefore, the nature of the working relationship depends on the working agreement between the taxi drivers and the taxi enterprises, rather than with DiDi.

The express service is similar to the business model of Uber Economy. The drivers may be working on a full-time basis or part-time/occasionally, and can compete with other drivers for bookings from customers. The drivers very likely have ownership over the car and DiDi has the responsibility of checking the qualifications of the car and the driver to ensure safety.

The premier and luxurious services are DiDi’s high-end service lines. Compared to the express service, the drivers are subject to more qualification checks as well as detailed training in driving and etiquette. DiDi also has higher standards and requirements for the service performance of these drivers and appoints specific drivers to take orders from customers. It is unclear from the website whether ownership of the cars belongs to the platform or the drivers.

Different fact patterns indicate the possible varieties of the working relationship. For instance, for the high-end service lines, platforms tend to have higher standards and stricter requirements for the drivers. If the platforms have ownership over the cars, explicitly employ the drivers to provide driving services, and the employment contract contains substantial management and control of the work policies, there is little doubt that the platform and drivers will have an employment relationship. On the other hand, it is also possible for a professional driver to be dedicated to providing transportation services on a stand-alone basis, own the car, and merely register the car with a platform. In that case, the driver is subject to the minimum requirements of the platform, and pays a management fee to the platform. This may fall within the ambit of “individual industrial and commercial households” income.^[16]

What is trickier is the middle ground: if the platforms do not explicitly sign employment contracts with the drivers, but implicitly have many management rules and policies^[17] that are binding on the drivers in a way that could benefit the platform by improving service quality, ensuring passenger safety and increasing competitiveness. These rules could, in the author’s opinion, be understood as “labour rules and policies” under article 1 of the Notice of Labour Relations^[18] – therefore, even if the platforms do not sign an employment contract with the drivers, it may in substance indicate an employment relationship. On the other hand, if a driver’s work is temporary or short term without being bound by detailed labour policies and management, and he can decide when and how much to work, the relationship tends to be in the nature of an independent service.

2.1.2. Income tax implications

Different classifications of drivers’ income may give rise to different tax implications under the Chinese schedular individual income tax system, since a distinct tax treatment applies for each type of income depending on whether it is employment income, service

中民终字第176号, (2015)京一中民终字第 01359; however, in No. (2014)京二民终字第07157号, No. (2014)浦民一初字第37776号, the court ruled that the driver was performing an employment duty. (2014京二民终字第07157号, 2014浦民一初字第37776号)

13. 网络预约出租汽车经营服务管理暂行办法, Interim Measures for the Administration of Online Taxi Booking Business Operations and Services, issued on 27 July 2016, effective from 1 Nov. 2016.
14. Based on the Regulation on Individual Industrial and Commercial Households:
Individual industrial and commercial households are citizens with business operation capacity engaging in industrial and commercial business operations after registration with the industrial and commercial administrative departments in accordance with the provisions of this Regulation. Both individual operations and household operations shall be allowed for individual industrial and commercial households.
15. Art. 6 Notice by the State Administration of Taxation on Issuing the Interim Measures for the Administration of the Collection of Individual Income Tax on Taxi Drivers (No. 50 [1995]) (“Notice No. 50”). The notice was revised in 2018 according to the “Decision of the State Administration of Taxation to Amend Some Departmental Rules on Taxation”, but Article 6 remains unchanged. It reads:
(3) When the taxi is owned by the individual, but it is linked to the taxi business unit or enterprise, and the driver pays the management fee to the affiliated unit, or the taxi business unit transfers the ownership of the taxi to the driver, the income from passenger and cargo operations is taxed in accordance with the income from the production and operation of individual industrial and commercial households. (author’s translation).
16. See also W. Yang, *Research on the Tax Collection and Management of Personal Income Tax in Sharing Economy – Take Web Vehicle Driver as an Example*, Shanghai National Accounting Institute 2019, Master Thesis, available at <https://www.cnki.net/> (accessed 28 Aug. 2019).
17. An example can be found at <https://www.d1ev.com/kol/69944> (accessed 28 Aug. 2019).
18. See <http://www.acla.org.cn/article/page/detailById/20086> (accessed 27 Aug. 2019).

income or income from the production and operation of individual industrial and commercial households. Therefore, it could happen that three drivers working the same hours and earning the same gross income have different net income because of the income tax they pay. This could potentially violate the general legal principle of equality, by taxing taxpayers in similar situations differently. On the other hand, it could also create room for abuse of the law. The platforms may artificially avoid concluding employment contracts to avoid payroll tax and social security obligations, while factually having effective management and control over the drivers. From the perspective of the drivers, they may prefer to be taxed in the most economical way and this might incentivize them to make artificial arrangements with the platform.

This problem was more evident before individual income tax was reformed in 2018 but has, to some extent, been alleviated after the reforms, with employment income and service income now subject to the same treatment.^[19] Nonetheless, income from the production and operation of individual industrial and commercial households still have implications that are distinct from those for employment income and service income. Even within income from “production and operation of individual industrial and commercial households”, there may be two different tax collection methods, which could lead to different outcomes.^[20]

2.1.3. Summary

The challenges brought by ride-hailing platforms such as DiDi are mainly twofold: the uncertainty of the income characterization, and the potential unequal treatments due to the different tax implications for different types of income.

China could learn from Australia and launch an investigation on the work classifications. Although it is not possible to go through every individual contract to determine the work nature, it is feasible to define a consistent approach by making a general classification based on the business model and the types of contractual and substantial arrangements. There could be a general guidance on which rule should apply to taxpayers in similar circumstances, providing more certainty to both the platforms and taxpayers.

2.2. Example 2: Airbnb

Short-term leasing of immovable property is another dominant business model in the world of the sharing economy, such as that of Airbnb and Xiaozhu Duanzu. Airbnb started to operate in China in 2015 and gradually gained popularity over the years. Xiaozhu Duanzu is the Chinese equivalent to Airbnb. Founded in 2012, Xiaozhu Duanzu has a wider customer base and its listings cover more cities in China than Airbnb. Up to May 2019, it had more than 800,000 active listings and 80 million customers.^[21]

The scope of this article is limited to the regular rental of properties without other additional services and thus for this purpose, this section deals with immovable property rental income. The issues with respect to this type of income lie mainly in tax compliance.

2.2.1. Non-compliance in the real property sector

Before going into the issue of tax compliance, it is necessary to understand that immovable property has always been a topic of heated discussion in China.

Tax-sharing reforms in China in 1994 reassigned tax revenue between the central and local governments, with more tax revenue allocated to the central government.^[22] With the consequent decrease in the tax revenue of local governments due to the

19. Statutory deductions include CNY 60,000 plus a special purpose deduction and additional deductions, and the same progressive tax rates (from 3% to 45%) apply to both types of income.

20. This income under this category is subject to either regular fixed-rate collection (for small-scale business) or audit collection (for larger business). Individuals with small-scale production and operations not exceeding the legal threshold will pay tax at fixed progressive rates on gross revenue. The threshold for taxable income and tax rates vary from place to place, subject to the rules stipulated by the local tax authorities. The two collection approaches may give rise to unequal results. For the first type of collection, the specific rules vary depending on the specific city or region. For instance, in Beijing, if the gross monthly turnover of an individual carrying on business activities is less than CNY 20,000, the income is tax free, thereafter the marginal rates start from 0.6% for monthly turnover between CNY 20,000 and CNY 50,000 to the highest rate of 1.8% for monthly turnover over CNY 100,000 (art. 1 of Beijing Municipal Bureau of Local Taxation Announcement 10, 2013). For individuals with higher turnovers, and who satisfy the requirements for audit collections, the income will be taxed at progressive tax rates from 5% to 35% after the deduction of costs, expenses, taxes, losses, other expenses and allowances. For such taxpayers, difficulties arise from the actual calculation of the expenses, since the car may also be driven for personal purposes. Drivers may have difficulties allocating the expenses and may lack the habit of collecting proper evidence for the deductions as required under art. 7 of the Measures for Calculating Individual Income Taxes of Individual Industrial and Commercial Households.

21. See <http://dw.chinanews.com/chinanews/content.jsp?id=8840004&classify=zw&pageSize=6&language=chs> (accessed 28 Aug. 2019).

22. See C.P.W. Wong, *Central-Periphery Relations in China: Integration, Disintegration or Reshaping of an Empire?*, Wong World Bank Office in China, Chinese University of Hong Kong (24-25 Mar. 2000), for an overview of the tax sharing system:

Under the Tax Sharing System (TSS), taxes were reassigned between the central and local governments. Central taxes (or “central fixed incomes”) include customs duties, the consumption tax, VAT revenues collected by customs, income taxes from central enterprises, banks and nonbank financial intermediaries; the remitted profits, income taxes, business taxes, and urban construction and maintenance taxes of the railroad, bank headquarters and insurance companies; and resource taxes on offshore oil extraction. Local taxes (or “local fixed incomes”) consist of business taxes (excluding those named above as central fixed incomes), income taxes and profit remittances of local enterprises, urban land use taxes, personal income taxes, the fixed asset investment orientation tax, urban construction and maintenance tax, real estate taxes, vehicle utilization tax, the stamp tax, animal slaughter tax, agricultural taxes, title tax, capital gains tax on land, state land sales revenues, resource taxes derived from land-based resources, and the securities trading tax. Only the VAT is shared, at the fixed rate of 75 percent for the central government, and 25 percent for local governments.

reforms,^[23] selling land use rights became an important means to fulfilling the budget goals of the local governments.^[24] In the aftermath of the reforms, a significant amount of local budgets has come from real estate companies that pay large land transaction fees,^[25] and from 2008 to 2016, the land transaction fee has increased by over 400%.^[26]

The high cost of land use rights partially contributes to the steep increase of housing prices by the real estate companies. Based on the Chinese Residential Land Price Indexes,^[27] the total increase of the national price index growth (aggregated from 35 cities) from 2004 to 2017 was 636%.^[28] Beijing's price index growth amounted to 1538% from 2004 to 2016, representing the highest growth rate in China.^[29] The high price of housing increases the economic pressure on taxpayers.^[30] Furthermore, when it comes to the sale/purchase of immovable property, depending on the type of housing, there can be many taxes and fees involved: deed tax, stamp duties, VAT, personal income tax, city construction and maintenance tax, fees for registration, certification, property management and insurance, etc. The numerous types of taxes can be confusing for taxpayers.^[31]

Local governments try to encourage tax compliance by reducing the tax rates,^[32] which is a step in the right direction but does not appear to be very effective. It is said that less than 1% of landlords declare their rental income,^[33] while a survey by Centaline Property Agency, a real estate company agency, found that less than 10% of owners declare their rental income to the tax authorities.^[34] Although there is no official governmental data to confirm the accuracy of such surveys, based on information from large authoritative newspapers such as People's Daily and Securities Times, it can be inferred that due to the lack of registration and enforcement procedures, the rental market has been operating under the radar for a long time.

Comparatively, if the sharing-economy platforms, such as Airbnb, disclose the property owner's rental income to the tax authorities, the owners will likely be discouraged from renting out their property, or raise the rent to recover the tax. On the one hand, if the owners refuse to provide their vacant resources it will be disadvantageous for the development of the asset sharing economy; on the other hand, if the rental price increases, it will be a burden for the consumers.

2.2.2. Computation of tax

The computation of tax on income from immovable property can be difficult, and the reasons for this are discussed below. It should be said that the issues arise not only within the sharing economy itself, but also in traditional property renting.

As mentioned above, the sale of immovable property attracts several types of taxes. Similarly, rental of immovable property may also involve several types of taxes: VAT, individual income tax and real estate tax, apart from fees levied by the government authorities. Taxpayers may feel burdened by the complexity of the multiple tax liabilities.

Secondly, local governments can mandate specific rates for each type of tax. The lack of clarity and consistency may cause confusion among taxpayers,^[35] especially those who are highly mobile or those with multiple properties in different cities. Furthermore, the lack of easily accessible information complicates matters for the taxpayers and they may struggle to obtain or grasp the most updated information.

The deductibility of expenses poses another challenge for taxpayers. Based on the Individual Income Tax Law (IITL), taxpayers are entitled to a statutory deduction of either a fixed amount of expenses of CNY 800 when the monthly rental is CNY 4,000 or

See also 中国房地产税改革的定位与地方治理转型 张平, 邓郁松(P. Zhang & Y. Deng, *The Positioning of China's Real Estate Tax Reform and the Transformation of Local Governance*, Comparative Economic & Social Systems, No. 2 (Mar. 2018), p. 43).

23. 李瑞昌. 政府间网络治理: 垂直管理部门与地方政府间关系研究. 上海: 复旦大学出版社. 2012年: 139页. (R. Li, *Intergovernmental Network Governance: A Study of the Relationship between Vertical Management and Local Government*, Shanghai Fudan University Press (2012), p. 139).
24. 叶开. 土地收入20年涨100倍秘密: 政府垄断土地一级市场. 第一财经日报. 2016-08-31 (K. Ye, *Land income rose 100 times in 20 years. Secret: The government monopolizes the land primary market*, China Business News, 31 Aug. 2016).
25. See also P. Zhang & Y. Deng, *The Positioning of China's Real Estate Tax Reform and the Transformation of Local Governance*, Comparative Economic & Social Systems, No. 2 (Mar. 2018), p. 45.
26. See <https://chinanewscenter.com/archives/9004> (accessed 28 Aug. 2019).
27. Chinese Residential Land Price Indexes (CRLPI) are indexes presented by the NUS-Wharton-Tsinghua as a result of their joint research. CRLPI are constant-quality series that track changes in the real value of residential land parcels in 35 major cities across China. Index values are reported at quarterly, semi-annual, and annual levels for different levels of geographic aggregation (i.e. national, regional and city) depending upon data availability and quality.
28. J. Wu, J. Gyourko & Y. Deng, *Evaluating Conditions in Major Chinese Housing Markets*, 42 *Regional Science and Urban Economics* 2 (2012), pp. 531-543. For detailed Data and Index Creation Procedures, see <https://ireus.nus.edu.sg/publications/real-estate-market-indexes/chinese-residential-land-price-indexes-crlpi/crlpi/> and the whitepaper attached thereto (28 Aug. 2019).
29. See <https://ireus.nus.edu.sg/publications/real-estate-market-indexes/chinese-residential-land-price-indexes-crlpi/crlpi/> (28 Aug. 2019).
30. 李瑞昌. 政府间网络治理: 垂直管理部门与地方政府间关系研究. 上海: 复旦大学出版社. 2012年: 139页 (R. Li, *Intergovernmental Network Governance: A Study of the Relationship between Vertical Management and Local Government* (Shanghai Fudan University Press 2012), p. 139).
31. P. Zhang & Y. Deng, *The Positioning of China's Real Estate Tax Reform and the Transformation of Local Governance*, Comparative Economic & Social Systems 2 (Mar. 2018), p. 43.
32. *Security Times*, 15 Feb. 2019, available at <http://www.nbd.com.cn/articles/2019-02-15/1300432.html> (accessed 28 Aug. 2019).
33. See <http://news.leju.com/2019-02-16/6502325050098891955.shtml> (accessed 28 Aug. 2019).
34. *People's Daily*, 4 July 2016. The article can be found at <https://m.nbd.com.cn/articles/2016-07-04/1018785.html> (accessed 28 Aug. 2019).
35. See D. Dai, *China's 2018 Individual Income Tax Reform: A Global Perspective*, *Tax Notes Intl.* (27 May 2019).

lower, or 20% of the rental income when the monthly rental is higher than CNY 4,000, as well as certain other expenses.^[36] The statutory deduction has been fixed at the same amount for many years without considering the changes in the consumer price index and currency inflation, which has risen over the years.^[37] Therefore, the amount of the tax deduction allowed may not match the actual costs. In practice, taxpayers may not pay detailed attention to the deductibility rules and, consequently, neglect to collect proof of expenses. Furthermore, Airbnb property owners who rent out part of their own housing may struggle to split the expenses between personal use and for rent.

2.2.3. Summary

The difficulties for property rental platforms are twofold: the computation of income tax and tax compliance. However, these issues are not themselves unprecedented – they are inherent from the complexity of the Chinese immovable property market. The emergence of sharing-economy models merely amplifies the problems since the platforms can provide more transparency with regard to the rental prices and the property owners' information. At the other end of the spectrum, since the platforms possess detailed information with regard to the time, amount and parties of each transaction, if they provide this information to the tax authorities, the tax authorities will be able to tackle the problem of non-reporting or underreporting. Therefore, the platforms also provide a unique opportunity to enforce tax compliance due to this transparency.

Due to the unique situation of immovable property, the author's concern is that enforcing the tax compliance of the sharing-economy suppliers without improving the non-compliance situation in the traditional rental market may discourage the suppliers from participating in such businesses. What might serve as an interim solution is to apply simplified measures to tax the property rental sharing economy. For example, Hungary has adopted a nominal income tax of EUR 120 per room for taxpayers who rent out accommodation for less than 90 days and who do not have more than three properties.^[38] China could learn from this experience and also adopt simplified measures to tax the property owners on platforms such as Airbnb. The tax measures could be combined with regulatory measures, such as setting out the maximum rental price based on the valuation of the property in order to protect the tenants (consumers) from an undue increase in the rental fee by the property owners.

3. Policy Analysis

There are different policy responses to the taxation of the sharing economy. Some countries have established dedicated rules to address the issues arising from sharing-economy transactions.^[39] For example, Belgium, Denmark, Norway and the United Kingdom have introduced tax benefits such as tax exemptions, special allowances, deductions or tax breaks on income from the sharing economy.^[40] Countries such as Australia take the position that issues raised by the sharing economy can be addressed by the existing tax system and therefore treat the sharing and traditional economies equally.^[41] Other countries take a hybrid approach.^[42]

Considering the two sharing-economy models discussed in this paper, the author submits that the current Chinese legal system provides an analytical framework that can cover the major individual income tax issues arising from the sharing economy. However, in respect of specific issues, the law in question may present ambiguities that need to be clarified in order to provide more certainty to taxpayers.^[43] Another difficulty, from a practical point of view, is the taxpayers' lack of familiarity with certain laws and regulations related to the sharing economy model. It is the author's view that keeping the current system, while enhancing the clarity, certainty and accessibility of the laws and regulations is the correct approach in terms of individual income tax, since the issues to a bigger extent lie in the degree to which taxpayers understand their tax liability and their willingness to comply with the rules.^[44]

In the next sections, the author will discuss in detail the rationale and potential approaches to improving tax certainty and tax morality with regard to the sharing economy. The author submits that these aspects are the key policy considerations in order for taxpayers to understand their tax liability and comply with tax rules. Improvements in these aspects could serve as a basis for the next step in the enforcement of tax compliance via digital means.

36. Other deductible items include taxes and fees paid in the course of property leasing, rent paid to the lessor, repair expenses for the actual expenses of leasing the property borne by the taxpayer, and standard deductions for fees as stipulated by the tax law. 《国家税务总局关于个人所得税若干业务问题的批复》(国税函[2002]146号): 财产租赁过程中缴纳的税费; 向出租方支付的租金; 由纳税人负担的租赁财产实际开支的修缮费用; 税法规定的费用扣除标准.

37. Dai, *supra* n. 35.

38. See https://read.oecd-ilibrary.org/taxation/the-sharing-and-gig-economy-effective-taxation-of-platform-sellers_574b61f8-en#page28 (accessed 28 Aug. 2019).

39. Migai, De Jong & Owens, *supra* n. 7, at pp. 395-424; see also R. Basselier, G. Langenus & L. Walravens, *The rise of the sharing economy*, NBB Economic Review (Sept. 2018), p. 70; see https://read.oecd-ilibrary.org/taxation/the-sharing-and-gig-economy-effective-taxation-of-platform-sellers_574b61f8-en#page28 (accessed 28 Aug. 2019).

40. Beretta, *supra* n. 1, at p. 8; see also https://read.oecd-ilibrary.org/taxation/the-sharing-and-gig-economy-effective-taxation-of-platform-sellers_574b61f8-en#page28 (accessed 28 Aug. 2019).

41. Australian Taxation Office, *The Sharing Economy and Tax* (19 May 2015), available at <https://www.ato.gov.au>. See also Beretta, *supra* n. 1, at p. 7.

42. Beretta, *supra* n. 1, at p. 7.

43. See Dai, *supra* n. 35, at p. 856.

44. Id.

3.1. Increasing tax certainty

In the author's opinion, having clear and accessible rules and regulations on the tax implications of different types of income is the first step towards a compliant tax morale. Tax authorities can conduct comprehensive research and understand the tax implications of each type of sharing economy business model. The research should not only cover personal income tax implications, but also VAT and other taxes that might be triggered by the sharing-economy transactions. It should also cover the platforms' obligations to facilitate tax compliance based on the different features and functions of the platforms.

This is in line with the national policy of China on the sharing economy to "define platform enterprises, rights, responsibilities and obligations of resource providers and consumers according to the different forms and characteristics of the sharing economy, scientifically and rationally".^[45] In this respect, the tax authorities could collaborate with other government sectors to ensure the tax policies are consistent with other national policies.

3.2. Improving tax morale as a general goal

There are several reasons for non-compliance, for example: taxpayers' perception that they are over-burdened, especially in the area of immovable property;^[46] lack of awareness of their tax obligations;^[47] ambiguity of tax laws and regulations;^[48] and deliberately taking the chance of not being audited.^[49] Since non-compliance exists in many sectors of the economy, the tax authorities should not just focus on the sharing economy, but rather aim at improving tax morale and foster tax compliance in general.

Tax authorities could work on two specific aspects: changing taxpayers' mindsets and increasing their awareness of the tax liabilities; and improving taxpayer services by providing more open and easy access for taxpayers to the laws and regulations, and simplifying the tax compliance process.

For the first aspect, tax authorities could undertake educational activities to make taxpayers aware of their tax obligations and foster voluntary compliance. Several developing countries' practices have proven the effectiveness of taxpayer educational campaigns.^[50] When it comes to the sharing economy, tax authorities could engage the platforms in promoting the tax responsibilities – platforms could post clear information of the taxpayers' obligations and links to the tax authorities on their website – or the tax authorities could have direct communications with the sharing-economy suppliers.^[51] For example, in the United Kingdom, HMRC launched an online small-business forum in order to help suppliers of the sharing economy understand their tax position.^[52] In Singapore, the tax authorities have engaged with sharing-economy platforms to disseminate information about platform suppliers' tax liabilities.^[53] In the Netherlands and Italy, platform websites contain a dedicated page with FAQs or a summary of the tax information.^[54] Estonia has gone one step further to simplify the tax compliance procedures by collaborating with Uber on developing a platform to submit tax returns.^[55]

For the second aspect, studies have shown that taxpayers who receive better public services are more willing to pay tax.^[56] With the emergence of advanced technologies, tax administrations could benefit from digitalization to improve taxpayer services. Since October 2016, China has already applied a digitalized tax administration system, Golden Tax System Phase III, to collect

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45. 关于促进分享经济发展的指导性意见, 发展改革委等八部门. Guiding Opinions on Promoting the Sharing of Economic Development, published by Development and Reform Commission and other eight departments of China. The text can be found at https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=2ahUKEwJzvfskajkAhWDYcAKHV_0AB4QFjAAegQIAhAC&url=http%3A%2F%2Fwww.ndrc.gov.cn%2Fzcfb%2Fzcfbtz%2F201707%2FW020170703647475531606.pdf&usg=AOvVaw0x3gSoRMkg4eino5sYDt9d (accessed 28 Aug. 2019).
 46. 中国房地产税改革的定位与地方治理转型 张平, 邓郁松 P. Zhang & Y. Deng, *The Positioning of China's Real Estate Tax Reform and the Transformation of Local Governance*, *Comparative Economic & Social Systems* 2 (Mar. 2018), p. 43.
 47. 马国强, 纳税人行为方式研究, 涉外税务 (2000), 年第四期, p. 1 (G. Ma, *The study of the taxpayer behaviour*, *Intl. Taxn. in China* 4 (2000), p. 1 (author's translation)).
 48. See D. Dai, *China's 2018 Individual Income Tax Reform: A Global Perspective*, *Tax Notes Intl.* (27 May 2019), p. 856.
 49. See Ma, *supra* n. 47.
 50. For example, from 2011 to 2012, the revenue office in Burundi held a campaign in big shopping malls and markets to encourage informal traders to register for a taxpayer identification number. This campaign increased taxpayer registration by 7,000 from 2011 to 2012. Colombian tax authorities launched a taxpayer education campaign in 2012, promoting social acceptance of taxes and fostering a taxpaying culture and specifically focusing on promoting digital signatures and online filing, which has effectively increased online filing and voluntary compliance. See OECD, *Building Tax Culture, Compliance and Citizenship*, a global source book on taxpayer education, OECD publishing, Paris. https://read.oecd-ilibrary.org/taxation/building-tax-culture-compliance-and-citizenship_9789264205154-en#page48, pp. 47-48, 60-62 (accessed 28 Aug. 2019).
 51. OECD, *The sharing and Gig Economy: Effective taxation of Platform Sellers*, Forum on tax administration, available at https://read.oecd-ilibrary.org/taxation/the-sharing-and-gig-economy-effective-taxation-of-platform-sellers_574b61f8-en#page28, p. 23 (accessed 28 Aug. 2019).
 52. Id.
 53. Id.
 54. Id.
 55. Beretta, *supra* n. 1, at p. 9.
 56. OECD/ECLAC, *Latin American Economic Outlook 2012: Transforming the State for Development* (2011), at p.12.

taxpayer information and simplify certain tax declaration procedures. The State Taxation Administration (STA) has also developed a Personal Income Tax App,^[57] which provides great convenience for individual taxpayers to process their tax-related requests.

It is recommended that the tax authorities build on this digital tax administration system and further improve taxpayer services. With regard to the sharing economy suppliers, two aspects could be enhanced: opening up easy access to legal documents to taxpayers and simplifying the tax compliance process.

As discussed in section 2.2.2, different cities or regions may have different specific rules when it comes to the interpretation or implementation of the same issue, and there may also be multiple types or layers of taxation with regard to one transaction, for example the various taxes related to immovable property rental income. A quick and easy channel for correct and comprehensive information will be a useful basis for compliance for taxpayers. Therefore, tax authorities should set up a central platform or open database that collects and categorizes the different rules for the convenience of taxpayers. This platform/database could be integrated with the existing individual income tax app so that taxpayers can easily check the applicable tax laws and regulations. The app could also facilitate the simplification of the declaration and computation of income for taxpayers. This will be elaborated in section 4.2.

4. The Emerging Opportunities for Tax Compliance

The sharing economy presents not only challenges, but also opportunities, for individual income tax compliance. With the popularization of mobile payments in China, many cities are moving towards cashless societies. The information on every transaction is recorded in the sharing-economy platforms and mobile payment platforms, pushing what used to be a shadow economy into the formal economy. If tax authorities had access to this tax information and cross-checked it with the tax returns submitted by the taxpayers, tax authorities would be able to detect any discrepancies, and non-reporting or under-reporting behaviour.

Such an automatic matching and verifying system has proven to be effective in the United States. In 2015 the IRS was able to verify tax return information with information from third parties to resolve tax return discrepancies of USD 3.7 million,^[58] which has resulted in an increase in tax revenue of more than USD 6.3 billion.^[59] China is also quite developed in terms of big data and artificial intelligence technologies and, in the author's opinion, its current level of technology is sufficient to support the establishment of a similar information matching and verification system.

However, before launching such a system, certain considerations have to be carefully weighed against the interests of tax enforcement, especially the legal basis for collecting such information, in view of the rule of law and data and privacy protection.^[60]

4.1. Obligations of the sharing economy platforms and mobile payment processors to disclose information

4.1.1. Legal basis

Some countries already require platforms to disclose suppliers' tax information to the tax authorities. In 2018, Denmark became the first country to gather homeowners' tax information via Airbnb.^[61] The United States, Italy and Australia have similar measures.^[62] Spain has used data collected from the platforms to generate pre-populated returns and inform taxpayers that the tax authorities are aware of their renting activities, which has led to an increase of 26% in declared income.^[63]

The current Chinese laws provide some legal basis for requiring sharing-economy platforms to disclose taxpayer information. Article 6 of the Tax Collection Administration Law provides a general legal basis for information disclosure: "Taxpayers, withholding agents and other relevant entities shall, in accordance with relevant provisions of the State, truthfully provide the tax authorities

57. The Personal Income Tax App was launched by the STA in 2018 to adapt to the individual income tax reforms. It is a high-standard app that has 28 functions, including identity authentication, information collection, facial recognition, special purpose deduction application, etc. Up to May 2019, the app had over 70 million users. Fifty million users claimed the special purpose individual income tax deduction through the app, consisting of 70% of the taxpayers.

58. K.A. Houser & D. Sanders, *The Use of Big Data Analytics by the IRS: Efficient Solutions or the End of Privacy as We Know It?*, 19 *Vanderbilt J. Ent. & Tech. L.* 4 (2017).

59. *Id.*

60. S. Oei & D.M. Ring, *Can Sharing Be Taxed?*, 93 *Washington University Law Review* 4 (2016) at p. 1065.

61. See <https://theculturetrip.com/europe/denmark/articles/denmark-becomes-first-country-to-gather-homeowners-tax-information-via-airbnb/> (accessed 28 Aug. 2019).

62. Migai, De Jong & Owens, *supra* n. 7, at pp. 395-424. See also C. Putzolu, *Challenges and Opportunities in the Sharing Economy: The Italian Perspective* in M. Silva Pinto, N. Sawyer & Á. Kóvágó (eds.), *Disruptive Business Models: Challenges and Opportunities for Tax Administrations (Intra-European Organisation of Tax Administrations (IOTA 2017))* pp. 18, 19; *A sharing economy reporting regime – A consultation paper in response to the Black Economy Taskforce Final Report* (Jan. 2019).

63. OECD, *The sharing and Gig Economy: Effective taxation of Platform Sellers, Forum on tax administration*, available at https://read.oecd-ilibrary.org/taxation/the-sharing-and-gig-economy-effective-taxation-of-platform-sellers_574b61f8-en#page28, p. 29 (accessed 28 Aug. 2019).

with information related to tax payment and taxes withheld and remitted or collected and remitted.”^[64] Sharing-economy platforms and mobile payment processors are not withholding agents or taxpayers per se, but could fall within the ambit of “other relevant entities” and be required to provide “tax payment” information upon request.

On 1 January 2018, the E-Commerce Law of China came into effect. Article 28 of the E-commerce Law provides a legal basis for platforms to disclose information, i.e. a platform has an obligation to submit information on the identity and other tax-related information of the e-commerce operators on its platform, and notify the operators about their tax registration obligations.^[65] Since March 2018, Airbnb China has notified property owners that it may disclose information to Chinese government agencies without further notifications to the owners. Similar platforms have also added this to the terms and contracts with suppliers, in line with the information disclosure rule under the E-commerce Law.

Another important aspect to consider is the data protection rules to protect taxpayer rights including the right to privacy. The Cybersecurity Law has established high-level legal principles on data security but does not entail specific measures. Further, China does not have a personal information protection law, and the legal protection of personal data is scattered among several laws, regulations and regulatory documents.^[66] With respect to taxation, the Tax Collection Administration Law requires the tax authorities to maintain the confidentiality of taxpayer information.^[67]

4.1.2. Practical implementation

In terms of implementation, although both sharing-economy platforms and mobile payment platforms have disclosure obligations, it is more straightforward to implement them via sharing-economy platforms on a regular basis. This is because sharing-economy platforms commonly specialize in one or two types of transactions such as house rental or car rental. It is, consequently, easier to extract specific information about its suppliers directly, and less data sorting and processing is required once a fixed format of reporting is established.

In comparison, it is more difficult and costly for mobile payment processors to provide such tax information. Since cash is being gradually replaced with digital solutions, e.g. Wechat Pay or Alipay, one mobile payment account may contain a significant amount of transactional data, making it more difficult to identify the income compared to sharing-economy platforms.^[68] It also requires a higher standard of data protection, due to the larger quantity of personal information at hand. Nonetheless, such payment facilitators could be an alternative source of information upon the tax authorities’ request, in extraordinary situations.

4.2. A digital solution to tax compliance

On the premise of a solid legal basis, the tax authorities could collaborate with sharing-economy platforms to implement a process whereby the tax information flows securely from the taxpayer through the platforms to the tax authorities using a simplified tax compliance procedure.

The example below illustrates the steps that would be involved in such a process.

64. Art. 6 Tax Collection Administration Law of the People's Republic of China, translated by the en.pkulaw.cn.
65. Art. 28: “An operator of an e-commerce platform shall, in accordance with the laws and administrative regulations concerning the administration of tax collection, submit to the tax authority information on the identification of operators on its platform and other information relating to tax payment, and warn e-commerce operators that are not required to register themselves as market subjects under Article 10 herein about handling tax registration as per the second paragraph of Article 11 herein.” Translation by Business China Law blog. See <https://www.bizchinalaw.com/archives/8892> (accessed 28 Aug. 2019).
66. Such as the Cyber Security Law, Consumer Protection Law, Criminal Law and *The Decision of the Standing Committee of the National People's Congress on Strengthening the Protection of Network Information*.
67. Art. 8 Tax Collection Administration Law requires that “[t]he tax authorities shall maintain confidentiality for the information of the taxpayers and withholding agents in accordance with the law” (translation by pkulaw.cn).
68. See also *Tackling the black economy, A sharing economy reporting regime – A consultation paper in response to the Black Economy Taskforce Final Report* (Jan. 2019), available at <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=2ahUKewim55OgodPkAhXPsaQKHTSpBWgQFjAAegQIARAC&url=https%3A%2F%2Ftreasury.gov.au%2Fsites%2Fdefault%2Ffiles%2F2019-03%2FConsultation-Paper-A-sharing-economy-reporting-regime-1.pdf&usq=AOvVaw1EAXbpPGxJK6rRAJP-kVjy> (accessed 28 Aug. 2019).

Step 1: Each sharing-economy platform collects the information of each supplier, does an annual overview of each supplier's tax information, and sends it to the tax authorities.

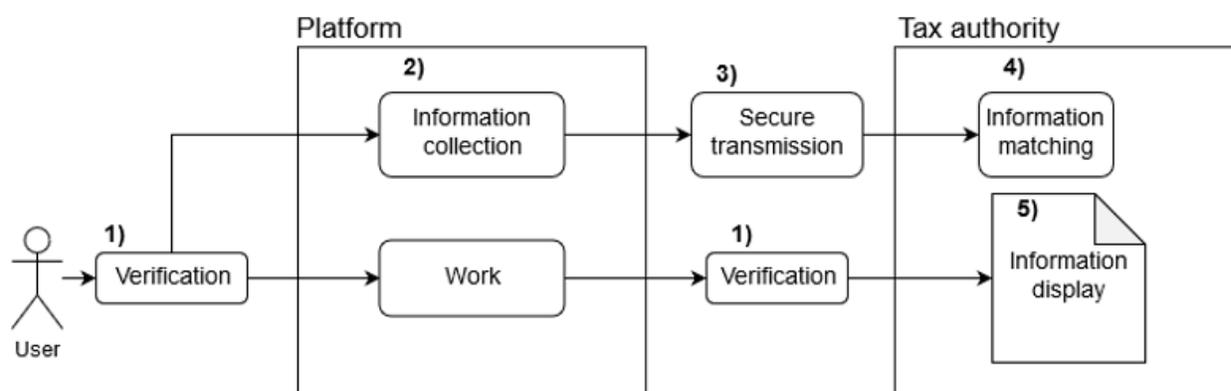
Step 2: After the information has been collected and sent to the tax authorities, the tax authorities' database matches the information automatically based on the identification of the taxpayer and the information of the taxpayer from multiple platforms is consolidated.

Step 3: Tax authorities could add a feature to the Personal Income Tax App to display such consolidated information in the form of a pre-populated return, presenting the consolidated income information of each taxpayer on the app.

Step 4: Taxpayers can revise the information, and claim deductions by uploading proofs of expenses via the app. The tax payable will then be automatically adjusted and displayed. The Personal Income Tax App should also contain a link to the applicable laws and regulations so that taxpayers can easily refer to them and understand the automatic calculation.

Figure 1 charts the key components of this process, referencing the necessary underlying technologies.

Figure 1 – Information flow



Verification (1)

Verification is necessary at two stages of the process: registration on the sharing-economy platform and logging into the Personal Income Tax App for income declaration. These two procedures usually require uploading an identity card and providing a phone number. In order to prevent impersonations, the platforms should further match the image on the suppliers' identity card with an image of the supplier taken during the registration process. Subsequently, this procedure may also be used to verify the identity upon every log-in on the platform. In fact, the Personal Income Tax App already requires facial recognition for the initial registration. Tax authorities can learn from the latest iPhone facial recognition technology, whereby a photo taken by suppliers upon log-in is compared with the 3D infrared images from the initial registration. There is great potential for further performance improvement of such systems in the future.

Information collection (2)

The sharing-economy platforms facilitate user interaction, acquiring information on each individual transaction. Consequently, tax-related information of each supplier is readily available for year-end transmission to the tax authorities.

Secure transmission (3)

The platforms need to transfer tax-related information of the suppliers to the tax authorities in a secure way. Currently, there is a "Natural Person Tax Management System" in place for individual income tax withholding agents (typically employers) to withhold tax and transfer the employees' tax information to the tax authorities.⁶⁹ Tax authorities could build on this system's infrastructure to ensure the security of information transmission from the sharing economy platforms.

⁶⁹. A description of the system can be found on the state tax authorities' website, available at <http://www.chinatax.gov.cn/n810219/n810744/n3752930/n3761918/c4008031/content.html> (accessed 28 Aug. 2019).

Information matching (4)

After acquiring tax-related information from each platform, the tax authorities automatically match such information with their taxpayer database using the provided identification number.

Information display (5)

The consolidated information about each taxpayer is displayed on the Personal Income Tax App. The app will also provide reference to the applicable laws and regulations depending on the taxpayers' residential region. Taxpayers who do not use the Personal Income Tax App could go to the tax authority offices and obtain the consolidated information in physical form.

It would be advisable to conduct pilot programs before rolling out the system nationally. Such programs could help both taxpayers and tax administrators to familiarize themselves with the tax disclosure and declaration system, and improve the functions based on user experience.

5. Conclusion

The rapid growth of the sharing economy has presented several challenges and opportunities for taxation. With regard to individual income taxation, from the Chinese perspective, a substantial overhaul of the tax system is not necessary as current laws provide the doctrines for addressing the basic issues arising from the sharing economy. Nonetheless, it is important to improve the general compliance morale to balance the sharing economy with the traditional economy. In the area of immovable property rental, an interim simplified tax measure could be applied to sharing economy suppliers to improve compliance, and it is also necessary to enhance the clarity, certainty and accessibility of laws and regulations.

Advanced technologies also provide tax authorities with efficient digital solutions to enforce tax compliance. With identity verification and data transmission technologies, tax information can flow securely from the taxpayers to the platforms and, finally, to the tax authorities. Tax authorities could further exploit the information received to simplify the tax compliance procedure and improve taxpayer services.