

Regulation and Case Analysis of the Ridesharing Economy

CHEN YAN

Institute of Comparative Law
Faculty of Law
McGill University, Montreal

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Acronyms and Abbreviations

Certificate of Public Convenience	CPC
Civil Investigative Demand	CID
Civil Resolution Tribunal	CRT
Consumer Protection and Enforcement Division	CPED
Equal Employment Opportunity Commission	EEOC
Federal Trade Commission	FTC
Global Positioning System	GPS
Goods and Services Tax (Canada)	GST
Harmonized Sales Tax	HST
Instructions on Private Vehicle for Transportation Sharing Use	Instructions
Interim Measures for the Administration of Online Taxi Booking Business Operations and Services	Interim Measures
Licensed Private Hire Car Association	LPHCA
Licensed Taxi Drivers' Association	LTDA
Metropolitan Commuter Transportation District	MCTD
Multi-Sided Platforms	MSPL
National Association of Insurance Commissioners	NAIC
National Association of Realtors	NAR
Online Dispute Resolution	ODR
Pennsylvania Public Utility Commission	PUC
Private Transportation Providers	PTPs
Securities Association of China	SAC
Self-Regulatory Associations	SRAs
Taxi and Limousine Commission	TLC
The U.S. National Work Group on Taximeters	USNWG
Transport for London	TfL
Transportation Network Companies	TNCs
United Kingdom	U.K.
United Nations Development Programme	UNDP
United States of America	U.S.
Violation of Terms of Service	VTO
Wheelchair-accessible Services	WAS
Wheelchair-accessible Taxi Services	WAT

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Regulation and Case Analysis of the Ridesharing Economy

Abstract

This thesis analyzes the current regulation of the ridesharing economy in China and the U.S. by examining legal practices and rules not only from these two countries but also from the U.K and several provinces of Canada, including Ontario and Alberta.

The analysis begins by describing the development of the ridesharing economy and identifying the practical and theoretical challenges that it poses for the current regulatory framework. There are three major participants of modern ridesharing services: private vehicle drivers, passengers and technology network companies (TNCs). Because of the legal uncertainties surrounding the relationships among the participants, ridesharing drivers usually work within less regulated legal frameworks, which is why traditional taxi drivers often complain that their competition with ridesharing drivers is unfair. Hence, this thesis first addresses questions regarding the role of TNCs and the relationship between drivers and passengers. The thesis uses vertical and horizontal comparative methodologies to analyze the regulation of the ridesharing economy as follows: (i) Through a vertical comparison with regulations of the traditional taxi industry, the thesis analyzes previous regulatory frameworks from the perspective of taxi regulations and the legal classification of taxi services; then, it assesses the appropriateness of applying these previous regulations and legal classifications to the modern ridesharing industry. (ii) Through a horizontal comparison between China and the U.S., this thesis first explores the general regulatory frameworks in these two countries and then further illustrates their current regulations and practices by analyzing key criteria of their regulations – i.e., rules regarding insurance, driver integrity and private record keeping – in several provinces of China and states in the U.S. Focusing on these key

criteria, regulations in the U.K. and Canada are used as additional examples to provide more options for the construction of new legal frameworks in both China and the U.S.

In addition to examining key criteria that have been established by existing regulations, this analysis extends to a study of regulatory problems that remain unresolved by current regulations in both China and the U.S., including problems related to disabled passengers, tip regulations, and most importantly, phenomena that will influence the labor market and monopoly laws in the future.

Are ridesharing services essentially the same as traditional taxi services? Are regulators responsible for turning ridesharing services into another kind of taxi service merely by applying the same regulations? After careful analysis, this thesis answers these two questions by offering conclusions regarding the responsibility of regulators to level the rights in various markets. The conclusions are influenced by a study from the Mowat Centre of the University of Toronto. A balanced assessment of the impacts of new regulatory frameworks is needed to eventually meet the needs of a range of interested parties.

Starting from this understanding, this thesis offers several remedies for governmental policymakers and regulators of TNCs, which will be useful for future research and help to enhance the understanding of the current situation before new legal frameworks are developed.

Resumé

Cette thèse analyse les réglementations actuelles de l'économie de covoiturage en Chine et aux États-Unis en examinant les pratiques légales et les règles de ces deux pays, mais aussi du Royaume-Uni et de plusieurs provinces du Canada, y compris l'Ontario et Alberta.

L'analyse débute en décrivant le développement de l'économie de covoiturage et en identifiant les défis pratiques et théoriques qu'il pose pour le cadre réglementaire actuel. Il y a trois participants majeurs dans les services de covoiturage modernes : les conducteurs de véhicules privés, les passagers et les entreprises transnationales (STN).

À cause des incertitudes légales entourant les relations parmi les participants, les conducteurs de covoiturage travaillent généralement dans des cadres légaux moins réglementés. C'est pourquoi les chauffeurs de taxi traditionnels se plaignent de leur concurrence avec les conducteurs de covoiturage, car il l'estime injuste.

Ainsi, cette thèse aborde d'abord des questions quant au rôle de STNs puis les relations entre conducteurs et passagers. La thèse utilise des méthodologies comparatives à la fois verticales et horizontales afin d'analyser les réglementations de l'économie du covoiturage : (i) la comparaison verticale, compare dans un premier temps les anciennes réglementations de l'industrie des taxis avec les réglementations modernes.

Puis, dans un deuxième temps, la thèse essaie de comprendre si ces anciennes réglementations des taxis traditionnels s'appliquent toujours pour le marché du covoiturage.

(ii) Par une comparaison horizontale entre la Chine et les États-Unis. Cette comparaison aborde dans un premier temps les cadres réglementaires généraux des deux pays puis, approfondis en

analysant les règles et pratiques actuelles vis-à-vis de quelques critères majeurs (règles à propos de l'assurance, intégrité du conducteur et tenue des dossiers privés) dans plusieurs provinces de la Chine et états aux États-Unis. En se concentrant sur ces critères clés, les réglementations au Royaume-Uni et au Canada sont ensuite utilisées comme exemples supplémentaires afin de donner plus d'options pour la mise en place de nouveaux cadres légaux tant en Chine qu'aux États-Unis.

En plus d'analyser les critères clés établis par les réglementations existantes, cette analyse étend ton étude en étudiant les problèmes réglementaires qui restent non résolus par les réglementations actuelles tant en Chine qu'en Etats-Unis, comme les problèmes à propos des personnes en situation de handicap, la réglementation des pourboires, et le plus important: sur les phénomènes qui influenceront le marché du travail et les lois monopolistes.

Les services de covoiturage sont-ils réellement les mêmes que les services de taxi traditionnels ? Les régulateurs doivent-ils transformer les services de covoiturage en une autre sorte de service de taxi simplement en appliquant les mêmes règlements ? Après une analyse précise, cette thèse répond à ces deux questions en proposant des conclusions quant à la responsabilité de régulateurs afin de classer les droits dans les marchés divers. Les conclusions ont été influencées par une étude du Centre de Mowat de l'Université de Toronto. Il semble qu'une évaluation des impacts de nouvelles réglementations est nécessaire afin de finalement répondre aux besoins d'un nouveau marché.

Cette thèse offre donc plusieurs solutions aux responsables politiques et aux régulateurs des STNs, ce qui s'avèrera utile pour la recherche future et aidera à améliorer la compréhension de la situation actuelle avant que des nouveaux cadres légaux ne soient développés.

I. Introduction

Driven by new technologies, collaborative consumption – also known as “peer-to-peer business” – is rapidly growing and dramatically changing our transportation practices. Worldwide, this overwhelming growth rate is accompanied by legal problems and theoretical challenges. For example, is there a well-accepted definition of the ridesharing economy? What is the role of each participant? What is the nature of ridesharing platforms, and more importantly, what are their liabilities? All of these questions remain under discussion. In 2017, more countries are seeking a balance between encouraging the ridesharing market and protecting the traditional taxi market, but many other factors, including passenger safety and employment issues, deserve consideration. The work in this thesis aims to study two mainstream views in order to explore policies that constrain ridesharing platforms and those that enhance the power of these platforms. Thus far, no comparative research regarding Chinese and U.S. regulations has been conducted in this field. The present thesis fills this research gap.

The thesis proceeds as follows: The first two parts presents an overview of the evolution of the transportation-sharing economy from the perspectives of demand and supply sides. Specifying the nature of this emerging economy requires an exploration of the motivation behind it. Then, based on the new definition derived therefrom, the theoretical challenges of this new economy are analyzed. Part III poses an important inquiry: What are the regulatory backgrounds in China and the U.S., and what are their current legal frameworks for ridesharing services? In this part, examples from Pennsylvania, New York and California will be discussed in detail. Part IV summarizes current regulatory frameworks and their key criteria, such as those related to insurance, driver integrity, and taxation, in China and the U.S. A comparative analysis of the self-regulation

of Technology Network Companies (TNCs) between China and the U.S. will be conducted to determine the differences in their regulatory frameworks and the manner in which these differences or similarities will eventually impact society. The examples and cases used in this thesis are not limited to China and the U.S.; rather, this thesis also considers examples from provinces in Canada to yield a better comparison. Part V and Part VI analyzes significant problems that remain unresolved by existing regulations and discusses how these regulations will influence legal practices in labor and transportation markets in the future. Part VII offers certain remedies and examines the role of self-regulation, with an emphasis on the importance and three key functions of self-regulation. Finally, this thesis provides four solutions for governments and NGOs.

II. The evolution of the ridesharing economy

A. Overview

After encountering difficulties in transporting students to school using the public transportation system, the president of North Shore Community College in Massachusetts, Patricia Gentile, decided to use Uber to pick up her students.¹ Fifteen years ago, nobody could have imagined using the peer-to-peer economy to transport children to school.² Today, however, this collaborative consumption market has \$75.8 billion of funding, according to VB Profiles.³ Many aspects of our lives have been touched by the sharing economy. It has affected various industries, including the transportation industry, accommodations industry, crowdfunding, the hiring of labor, peer-to-peer

¹ "NSCC & Uber Partnering To Enhance Student Transportation Options" (29 August 2016), online: NSCC News and Media <news.northshore.edu/blog/enroll-in-nbcc-uber-ride-today/>.

² *Ibid.*

³ "Sharing Economy Unicorn Market Summary, Employees and Funding Information" (October 2017), online: Vbprofilescom <www.vbprofiles.com/markets/sharing-economy-unicorn-563b431fb44900dc56001e8d>.

sharing, and peer-to-peer lending. Transportation sharing, which "focus[es] on ... services like car rentals, the conveyance of people and goods, and the location of parking spaces – allowing individuals to monetize idle capacity by offering it for use to other consumers"⁴ – is becoming popular because of its unique ability to facilitate transportation and save time. However, criticism has been leveled all over the world about the proper integration of the transport-sharing market and the potential legal risks of its regulation after a series of lawsuits filed against ridesharing drivers and companies.

The sharing economy's unprecedented growth has depended mainly through online platforms and the advanced technology behind these platforms. Defined as “online platforms that help people to share access to assets, resources, time and skills,”⁵ these platforms connect the demand side to the supply side to provide a convenient transportation service to the public. However, the growth of the ridesharing economy has been accompanied by legal problems that have caught the public’s attention.

⁴ Agil Francis et al, "The Sharing Economy: Implications for Property & Casualty Insurers" (April 2016), online: <www.cognizant.com/whitepapers/The-Sharing-Economy-Implications-for-Property-and-Casualty-Insurers-codex1820.pdf>. The definition of the transportation sharing economy differs among theoretical documents, and no consensus on the definition currently exists. Transportation sharing systems have a broad range of categories, including vehicle sharing, bicycle sharing, carpools and other shared transport modes. Scholars and modern media also use the term “ridesharing” to describe the sharing of vehicle trips. However, the exact difference between the terms ridesharing economy and transportation economy remains unclear.

⁵ Lizzie Richardson, “Performing the sharing economy” (2015) 67:4 *Geoforum* 121 at 122. There is also no universally agreed upon definition of “online platforms” in current laws. See e.g. *Executive Transportation Co., Inc., Petitioner v. Pennsylvania Public Utility Commission*, 2016 US Lexis 187 at 4 (Pa. Commw Ct). The PUC described TNCs as:

a fee-based motor carrier employing various modes of mobile digital computing to connect passengers with prequalified drivers of passenger vehicles. TNCs utilize electronic and social media forms of communication, including mobile applications and web-based reservation services, to facilitate these connections. The TNC business model generally does not seek to own vehicles or employ drivers.

B. Trends in the ridesharing economy

1. On the demand side

a. A willingness to trust others

The idea of sharing is not new. It is reported that the traces of a sharing instinct can be found in humans since the primitive age.⁶ However, this sharing instinct was usually limited to trusted family members, relatives and friends based on geographic proximity or emotional connections.⁷ In modern times, the innovation of the Internet and other technologies has expanded the old sharing market far beyond this narrow boundary and has allowed nearly everyone to take part in this business model. First, in this Internet-based social world, everyone can be connected with each other, and innovations from innumerable web-based electronics have greatly reduced the sharing economy's dependence on geographic proximity. The human sharing instinct is no longer limited to close relationships, because people can build trust with others in many ways. For example, this kind of trust is partly based on the user's trust of web-based platforms, such as the ratings systems on Facebook and Instagram. Passengers choose to hail an Uber driver based on someone else's ratings; they can check drivers' rating scores before a trip and rate the driver from one to five stars after the journey. Rating systems efficiently build a trust system over a short period, although they also have underlying risks, which will be discussed later. Second, it is believed that "trust is a function of several major factors, such as system assurance, perceived reputation, informativeness, social presence, and trust propensity."⁸ The Internet is only one of the factors that influence trust, and all of these factors have enhanced people's confidence in the trust-based economy. According

⁶ Parves Kamal & Jim Q. Chen, *Trust in Sharing Economy*, *PACIS 2016 Proceedings*, paper 109 at 4.

⁷ Nestor M. Davidson & John J. Infranca, "The Sharing Economy as an Urban Phenomenon" (2016) 34 : 2 *Yale L. & Pol'y Rev* (2016): 215 at 218.

⁸ Kamal, *supra* note 6 at 4.

to a report conducted by PWC in 2015, 89% of respondents attributed their shared business success to mutual trust.⁹ In ridesharing services, trust can play an important role in gaining wide participation for companies. Under these circumstances, trust “become[s] the major driving force behind human bonding and social reciprocities, and its important role in maintaining a healthy sharing economy reflects this force.”¹⁰ Therefore, a well-established legal framework, as one of influencing factors of trust, is also needed to boost confidence and guarantee trustworthiness in ridesharing economy.

b. A willingness to find alternative transportation methods

The flexibility and affordability of transportation has become a top priority. It is notable that when selecting transportation sharing services, passengers have access to different kinds of vehicles (e.g., UberBlack, UberSUV, UberTaxi, UberXL) and different ridesharing companies, which traditional taxi services seldom offer. Moreover, transportation sharing services typically offer lower prices. According to the "Why Do You Uber?" survey of Uber riders in Chicago from January to June 2014, most respondents (22 percent) chose the factor "cost effective".¹¹

⁹ *Ibid.*

¹⁰ *Ibid* at 4. Many studies have been conducted to study the importance of trust in the development of the sharing economy. See also Dietlind Stolle, “Trusting strangers – The concept of generalized trust in perspective” (2002) 31:4 Aust. J. Political Sci 397; Prashant Palvia, “The role of trust in e-commerce relational exchange: A unified model”(2009) 46:4 Information & Management 213 at 213-214.

¹¹ "Why Do You Choose Uber?" (5 August 2014), online: Illinois <newsroom.uber.com/us-illinois/this-is-why-we-uber/>.

2. On the supply side

a. A willingness to gain alternative sources of income

The best example to illustrate this willingness and the financial attraction for drivers is the "power drill" case that Rachel Botsman discussed in a TED talk. First, she stated that although "the power drill will be used around 12 to 13 minutes in its entire lifetime",¹² many people prefer to buy their own power drill. Then, she mentioned that people could rent out their drill to other people and thereby make money from the drill. The power drill case also works for transportation. For drivers, the average cost of running their car each year is \$8,000, but that car sits idle when it could potentially earn an average of \$23 per day.¹³ This simple potential is the basic idea behind a willingness to share on the supply side.

b. A willingness to invest

A strong potential market, easy access to technology, and the availability of drivers who want to share their cars have fostered abundant investment in the ridesharing market, and even startups can quickly establish positions. The fund-raising data from 2015 provide examples. Uber raised nearly 5 billion dollars; OlaCabs obtained 900 million dollars from DST Global and other contributors; Yidao yongche obtained 700 million dollars from LeTV; and GrabTaxi, one of Uber's competitors, closed a \$200 million funding round in 2015.¹⁴ Investors and venture capital firms have a strong

¹² Rachel Botsman, "The case for collaborative consumption" (May 2010), online: Tedcom <www.ted.com/talks/rachel_botsman_the_case_for_collaborative_consumption?language=fr>.

¹³ *Ibid.*

¹⁴ Ronny Kerr, "The top 10 sharing economy fundraisings of 2015" (25 December 2015), online: VatorNews <vator.tv/news/2015-12-25-the-top-10-sharing-economy-fundraisings-of-2015>.

willingness to invest in the sharing economy; based on this confidence, they have flocked to the market and encouraged the rapid development of the ridesharing economy.

c. The adoption of new technologies

It is impossible to talk about the development of the ridesharing economy without considering the role of advanced technologies, especially wearable devices, smartphones, and tablets. The first important factor is the dramatic increase in smartphone users. According to Statista analysis, the number of smartphone users is expected to reach 2.53 billion by 2018.¹⁵ Thus, people can efficiently connect to each other. The second important factor is the maturation of mobile applications, free or paid, which appeared in 2008 and are run by mobile operating systems or directly managed by their developers.¹⁶ Because of the full availability and easy access to such platforms with smartphones, mobile applications can more effectively satisfy social needs. The function and type of each new generation of mobile applications are more detailed and precise. Therefore, an opportunity emerged to develop a mobile app to solve the old problem of hailing a taxi on the street. Today, almost every ridesharing company relies on a mobile application. Third, the technology of digital payments has played a pivotal role in the overall ridesharing business. Digital payments include multiple payment options, such as mobile wallets (Apple pay), contactless payment (Quick pay), and P2P apps (Zhifubao, Zapp).¹⁷ All of these technology-based

¹⁵ “Smartphone users worldwide 2014-2020 | Statista” (2017), online: Statista <www.statista.com/statistics/330695/number-of-smartphone-users-worldwide/>.

¹⁶ Matt Strain, “1983 to today: a history of mobile apps” (13 February 2015), online: <www.theguardian.com/media-network/2015/feb/13/history-mobile-apps-future-interactive-timeline>.

¹⁷ In the payment industry, Apple pay, Quick pay and other P2P apps are all considered front-end innovations that will dramatically narrow the gap between merchants and consumers. Front-end innovations include not only these payment applications but also various kinds of technological wireless enablers. See Srividya Manchiraju, Ganesh Vudayagiri & Gaurav Garg, “Top 10 Trends in Payments in 2016” (2016), online <www.capgemini.com/wp-content/uploads/2017/07/payments_trends_2016.pdf>.

payment options meet the demand for in-app payments for transportation sharing apps. The efficiency and security of digital payments have driven both drivers' and passengers' desire to use ridesharing apps.

C. Practical challenges

Despite this willingness, the ridesharing economy in practice has led to conflicts between traditional drivers and private vehicle owners, especially because traditional taxi drivers are required to pass numerous rigorous tests to obtain a taxi license. On the one hand, it costs more for traditional taxi drivers to enter the market. For example, in London, drivers must spend years learning every route before they are allowed to provide service on the street. By contrast, private vehicle owners often use GPS technology to provide ridesharing services. In China, many ridesharing drivers are accustomed to asking passengers to navigate the route for them. Therefore, in a sense, taxi drivers are more professional than private vehicle drivers. However, this professionalism does not guarantee a successful career of taxi drivers. The use of ridesharing services could reduce the number of taxi trips taken. For example, ridesharing services like Uber and Lyft, have already devastated the Los Angeles taxi industry by reducing the number of taxi trips by almost 30%, according to a report conducted by the city of Los Angeles in 2016.¹⁸ Hence, the existence of TNCs threatens traditional taxi drivers' jobs. This economic insecurity for traditional taxi drivers has led to strikes and demonstrations around the world. In 2016, approximately 90 percent of taxis in Shenzhen refused to provide services, claiming that ridesharing services had dramatically reduced their income and it was reported that this strike was the largest taxi strike in

¹⁸ Laura J. Nelson, "Uber and Lyft have devastated L.A.'s taxi industry, city records show" (14 April 2016) , online: Los Angeles Times <www.latimes.com/local/lanow/la-me-ln-uber-lyft-taxis-la-20160413-story.html>.

the history of Shenzhen and caused significant traffic jams in the city center.¹⁹ This situation is not limited to China; rather, strikes have occurred in nearly every city in which ridesharing services operate. For example, on May 30, 2017, taxi drivers in Spanish cities went on strike to protest ridesharing services, claiming that ridesharing services created unfair competition.²⁰ In 2016, French taxi drivers staged a national strike, shutting down roadways across Paris in a protest against ridesharing companies.²¹ In Montreal, taxi drivers have engaged in strikes to protest the provincial government's deal with Uber, asserting that it is unfair that TNCs can work without the burden of regulations to which the taxi industry is subject.²² In a nutshell, the legal uncertainty often causes traditional taxi drivers to feel that they are more strictly regulated than ridesharing drivers. Hence, it is time for governments to reconsider their regulations in order to prevent such incidents and maintain social stability.

D. Theoretical challenges

1. Different roles of participants

Concerns about applying existing transportation laws to the ridesharing economy have emerged because, as discussed below, traditional laws have failed to effectively regulate the old transportation market. Many countries have started to develop regulatory reforms for this new economy. However, the first focus of this paper will be on the mode and role of each participant

¹⁹ "Taxi drivers in Shenzhen refused to provide service" (2016), online: Sztvcutvcom <sztv.cutv.com/m/Eshenzhen/zixun/baoliao/201601/04152921904.shtml>. [translated by author]

²⁰ Stephen Edelstein, "Spanish Taxi Drivers Striking Against Uber" (30 May 2017), online: The Drive <www.thedrive.com/tech/10787/spanish-taxi-drivers-striking-against-uber>.

²¹ Amar Toor, "French taxi drivers clash with police in anti-Uber strike" (26 January 2016), online: The Verge <www.theverge.com/2016/1/26/10832204/french-taxi-uber-strike-paris-vtc>.

²² According to the agreement between the Quebec government and Uber, a one-year pilot project will allow Uber to legally operate in the province as of Oct. 14 and Uber drivers must pay only federal and provincial sales taxes and contribute to a fund to help the taxi industry rather than renting or purchasing traditional running permits. See "Quebec taxi drivers hold strike to protest government's Uber deal" (5 Octob2016), online: The Globe and Mail <www.theglobeandmail.com/news/national/quebec-taxi-drivers-hold-strike-to-protest-governments-uber-deal/article32259575/>.

in the ridesharing economy. In traditional circumstances, passengers choose taxis on the street or reserve them by calling taxi companies. However, for ridesharing services, users often choose specific drivers after looking through online profiles in the list of “drivers near you”. Hence, in the ridesharing economy, the roles of the participants are much more complicated.

a. A traditional ride-offer mode

In the traditional ride-offer market, there are three common participant types. The first is private taxi companies or state-owned enterprises, which are the direct supervisors of taxi drivers in the market. The second participant type is the drivers, who usually serve companies as employees. The third group of participants comprises passengers, who hail cabs on the street or make reservations in advance.

b. A traditional ridesharing mode

The conventional ridesharing market is the original mode of today’s transportation sharing economy, which still exists in modern society. It is simple and typically based on trust. There are only two participants in this mode, private drivers and passengers, without an organized third company to connect them. In a sense, this mode is not a transportation service at all, because payments are not mandatory or fixed but rather depend on the mood of each participant and negotiations between them. However, this mode has a natural limitation, i.e., it arises only in limited districts or among a small group of people. Hence, the pure ridesharing mode is not within the scope of this thesis.

c. A modern ridesharing mode

The current ridesharing mode has three major participants: private vehicle drivers, passengers and TNCs. The complicated and hard-to-define relationships among them is the core theoretical challenge for lawmakers. First, the relationship between private vehicle drivers and TNCs is not easily defined. Moreover, TNC drivers are in a different legal position compared with traditional taxi drivers. They have greater autonomy in certain aspects of their work but hold less bargaining power when negotiating with companies about other issues, such as rates and health insurance.

Today, there are two dominant theories regarding this worker classification issue. The debate is whether certain relationships between TNCs and drivers should be regarded as employment or independent contractor relationships. This debate exists because in both China and the U.S, employment law provides different safeguards for workers depending on whether they are employees or independent contractors.²³

In practice, Chinese regulations state that the legal nature of the relationship between TNCs and drivers should not simply be defined by the courts. In other words, participants of ridesharing services have the autonomy to decide the nature of their relationship in accordance with established regulations. According to Article 18 of the Interim Measures for the Administration of Online Taxi Booking Business Operations and Services (Interim Measures),²⁴ the relationships between TNCs

²³ In China, most employees are hired by companies directly, under the protection of Chinese labor laws. Although independent contracting is not technically illegal, it is permitted only in certain circumstances. For example, the Decision on Revising the Labor Contract Law of the People's Republic of China (Order No.73 of the PRC President) states that "dispatched" (paqian) employees may only work when the nature of work is temporary, auxiliary or backup. Any other kind of independent contractor is not protected by Chinese labor laws. In comparison, the laws in the U.S freely allow the use of independent contractors. Many companies in the U.S even use independent contractors as full time employees. However, several federal and state laws, such as the Fair Labor Standards Act, Title VII of the Civil Rights Act of 1964 and the Age Discrimination in Employment Act, "require minimum and overtime wages be paid to employees but not to independent contractors." See John Tan, "Independent Contractors in China: Worth the Risk? - IPO Pang Xingpu" (3 February 2017), online: IPO Pang Xingpu < www.ipopang.com/blog/business-in-china/independent-contractors-in-china-worth-the-risk/>; See also Robert L. Redfearn III, "Sharing Economy Misclassification: Employees and Independent Contractors in Transportation Network Companies" (2016) 3:2 Berkeley Technol. Law J 1024 at 1028.

²⁴ Interim Measures for the Administration of Online Taxi Booking Business Operations and Services, adopted at the 15th Ministerial Meeting of the Transport Ministry by July 14, 2016, and by the Ministry of Industry and Information Technology, Ministry of Public Security, Ministry of Commerce, SAIC, AQSIQ Administration, the State Council Informatization Office network agree, is hereby promulgated and shall go into effect November 1, 2016. See "Interim Measures for the Administration of Online Taxi Booking Business Operations and Services [Effective]" (2016), online: Pkulaw<en.pkulaw.cn/display.aspx?cgid=276513&lib=law>.[Interim Measures]

and drivers should not be limited to employment. Various forms of labor contracts or agreements may be signed “according to the duration of the working relationship, service frequency characteristics...”, etc.²⁵ For example, in accordance with relevant laws and regulations, drivers can work as franchisees, agents of commission contracts or employees.

In the U.S, in the absence of guidance from the central government, courts have struggled to solve this worker classification issue. For example, in *Berwick v. Uber Technologies, Inc.*, the California Labor Commissioner first ruled that TNCs should not misclassify drivers as independent contractors.²⁶ In the O’Connor case, the court determined that Plaintiffs are Uber’s presumptive employees because the Plaintiffs can establish that they do provide services to Uber.²⁷ Moreover, the court determined that it is the responsibility of the jury to classify drivers’ legal nature.²⁸ In this regard, the jury’s view is often based on the TNC’s control over its drivers, for example whether the TNC has the right to determine drivers’ working conditions or to monitor driver data.²⁹

However, it is nearly impossible to consider all factors that bear upon the TNC’s control over its drivers; the issue is further complicated by the presence of both full-time and part-time private drivers in the market. Hence, it is impractical to classify all TNC drivers as either employees or independent contractors.

All modes of ridesharing discussed above are components of the broader definition of the ridesharing economy that will be analyzed in this article. The analysis will focus on the modern ridesharing mode but is not limited to the word "sharing," because contemporary society and legislators seem to link the ridesharing economy and TNCs as a matter of course.

²⁵ *Ibid.*

²⁶ Order of the Labor Commissioner of the State of California, *Berwick v. Uber Techs. Inc.*, Summer 2016 43 W. St. U. L. Rev. 321 at 10 (Cal Super. Ct)

²⁷ *Douglas O'Connor, et al v. Uber Techs, Inc., et al*, F. Supp. 3d 1133; 2015. Lexis 30684; 24 Wage & Hour Cas. 2d (BNA) 975; 80 Cal. Comp. Cases 345, (Dist Ct). [O'Connor v. Uber]

²⁸ Redfearn, *supra* note 23 at 1043.

²⁹ *Ibid* at 1047.

2. The legal nature of ridesharing platforms

To understand the legal nature of ridesharing platforms, we need to analyze their functions. Presented below are five possible functions of TNCs.

a. Information exchange

In the transformation of the traditional ridesharing economy to the modern mode, the most obvious change is the increased need for information. TNCs serve as platforms to solve the information asymmetry that was discussed above, and they have more detailed functions than the original information blackboard. For example, in the past, passengers may not know the insurance policy of the service car or the certificate held by its driver or may have a difficult time finding drivers who are planning the same trip as they are. Sharing-economy platforms have the ability to gain information from both sides, and due to the control of information and private data, if one party tries to use the presence of information asymmetry to conduct unwarranted or illegal behavior during the service, regulation by platforms will have a more direct and efficient ability to prevent such behavior because platforms are direct participants in ridesharing services. In contrast, the implementation of governmental rules is always subject to delays.

Large TNCs have already used their databases and Internet technology to offer proper solutions to information asymmetry. For example, TNCs offered an online feedback system for both passengers and drivers.³⁰ Based on other people's reviews and profiles on the platform, passengers and drivers can obtain a basic impression of each other before they share a vehicle. There are other verification

³⁰ See e.g. Mike Truong & Ronak Trivedi, "Updates to the Rating System" (26 April 2017), online: Uber Newsroom <www.uber.com/newsroom/ratingsupdate-2/>.

requirements for passengers and drivers as well. All of these trust mechanisms will benefit participants in the ridesharing economy by providing adequate information about both sides and avoiding the limitations of government regulation. In a sense, the development of a platform depends on the extent of information exchanged, although the original success of TNCs was due to information asymmetry.

b. The legal line between private vehicle drivers and professional drivers

According to the analysis of Molly Cohen and Arun Sundararajan, another important feature of ridesharing platforms is “the way in which the provision of services often blurs the line between the personal and the professional.”³¹ For example, although private vehicle drivers are not required to drive as well as traditional professional taxi drivers, the existence of these platforms gives private vehicle drivers an opportunity to provide the same services as traditional taxi drivers. According to the data provided by TNCs, the majority of drivers with Uber and Didi are private vehicle owners who have no professional training and consider ridesharing work a part-time job. It has also been reported that most Lyft and Uber drivers work fewer than fifteen hours per week.³² As discussed above, this feature is the main basis for claims of unfair competition by traditional taxi drivers.

³¹ Molly Cohen & Arun Sundararajan, "Self-Relation and Innovation in the Peer-to-Peer Sharing Economy" (2015) 82:1U Chicago L Rev 116 at 122.

³² Dan Levine & Sarah McBride, "Uber, Lyft face crucial courtroom test over driver benefits" (28 January 2015), online: Reuters UK <uk.reuters.com/article/us-uber-lyft-workers-idUKKBN0L11BN20150128>.

c. Multi-sided platforms (MSPs)

To define the liability of platforms, this thesis prefers to regard them as multi-sided platforms (MSPs) because modern TNCs are involved not only in ridesharing services but also in a number of other services that are provided on the same platform to meet various public demands. In an MSP model, the platform can often “get two or more sides on board and enable interactions between them.”³³ As mentioned, ridesharing platforms also share this function. Hence, a discussion about the liability of TNCs should not be divorced from the regulation of MSPs. It is important to recognize that there are two types of characteristics of the ridesharing economy: MSP characteristics and sharing features. Hence, solutions for murky legal area in the ridesharing market must be based on these two factors. This thesis will discuss applicable regulations in detail in the following sections. The analysis of the current regulatory frameworks in the U.S., China and certain provinces of Canada in the following sections clearly shows that a single legal definition cannot cover all possible functions and the related responsibilities of TNCs.

In conclusion, all of the theoretical and practical problems mentioned above play significant roles in ridesharing disputes. Differences in the recognition of these main definitions will lead to different regulatory outcomes, which is why we must offer comparative research on various regulations to explore how these regulations are defined and how they work in different jurisdictions.

³³ Andrei Hagiu & Julian Wright, “Multi-Sided Platforms” (2015) Harvard Business School Working Paper No 15-037.

III. Approaches to regulating the ridesharing market

A. Regulatory background

1. Taxi regulation

In federal jurisdictions, taxi regulation is often the responsibility of states, and different states may have completely different regulatory frameworks. These various regulatory frameworks thus co-exist within a federal country. For example, in the U.S., different states have different regulations and judicial practices, making it difficult to use a single specific regulatory framework to reflect the legal situation of the entire country. Hence, it should be noted that the examples from Pennsylvania, New York and California that are mentioned in this thesis do not reflect the entire U.S. regulatory framework.

In non-federal jurisdictions, such as China, “taxi regulation is usually the subject of national laws administered at the local, county and municipality levels.”³⁴ In 2000, China passed the Legislation Law to create a more open and transparent legislative system³⁵, and in 2015, the Legislation Law underwent a major modification by expanding local legislative power. Since then, rule-making authority has been decentralized into districts, which increased in number to 282.³⁶ Local people’s congresses and their standing committees were gradually given a full role in the Chinese legislative system.³⁷ However, most of the regulations mentioned in this study were enacted by local

³⁴ Kenneth M Gwilliam, *Regulation of Taxi Markets in Developing Countries: Issues and Options*, WB, No TRN-3 (2005) at 3.

³⁵ Legislation Law of the People’s Republic of China, 2000 (China).

³⁶ Although the legislative rights were decentralized, this modification was regarded as an efficient means of eliminating regional differences and bridging the gap between urban and rural areas in order to accelerate the modernization of national governance systems and governance capacity. See Chunlei Yang & Lei Huang, “Research on Legislative Work of Chinese New Authorized Local People’s Congress” (February 2016) 3:2 Intl J of Humanities, Social Sciences&Education 17 at 17.

³⁷ *Ibid* at 18.

governments, not local people's congresses, and thus most taxi and ridesharing regulations are executive in nature. The provincial government does have a certain authority to pass regulations, but these regulations are not the law and thus their effectiveness is inferior to that of local laws.³⁸ In other words, transportation regulation is a clear example of how the government and its "subordinate functional" departments bear the responsibility of social and economic management.³⁹

2. Legal categorization and organization of taxi services and ridesharing services

A clear and full understanding of the legal categorization of TNC ridesharing services can help to identify and explain the regulatory similarities and differences among the countries considered in this article. Providing such an understanding is important because different methods of legal categorization can lead to different conclusions regarding the liability of TNCs and ultimately impact countries' judicial practices. Long before the rapid growth of TNCs, traditional taxi services adhered to strict governmental requirements, although the details of these legal frameworks vary across cities and countries.⁴⁰ In New York City, as well as in several other large cities in the U.S., governments often use medallion systems to organize and regulate the taxi industry.⁴¹ Only taxis with medallions can legally pick up passengers on the street, and due to the exorbitant price of a medallion, the number of taxis in a city is strictly limited.⁴² Under these circumstances, an

³⁸ *Ibid* at 19.

³⁹ *Ibid* at 20. Governmental regulations could respond to rapid changes in a society in a "timely manner". Chunlei Yang and Lei Huang believe that by allowing the government and its departments to continue to participate in decisions regarding local legislation, we could "master new information, grasp new trends in a timely manner and proffer more scientific and objective legislative proposals."

⁴⁰ Katie Barglind, "Innovation, Technology, and Transportation: The Need to Address On-Demand Ridesharing and Modernize Outdated Taxi Regulations in the US" (2015) 33:4 Wis Intl LJ 701 at 701.

⁴¹ Matt Thoman & Ike Brannon, "Taxi Medallions Coming to a City Near You." (2012) 35: 1 Regulation 4.

⁴² In June 2013, the price of an individual medallion in New York City averaged \$1.05 million, and it was believed that the widespread use of ridesharing services such as Uber was one of many factors disrupting medallion values. In

increasing number of owner-operators find it difficult to participate in the taxi industry and are forced to work for large taxi companies that can afford expensive medallions. Therefore, it is not surprising that those who cannot afford medallions prefer a less regulated system of ridesharing services due to uncertainties regarding the current legal framework in the ridesharing context.

a. In the U.S

i. Common carrier

In the U.S., the debate over the legal categorization of TNCs is focused mainly on the categories of *common carrier* and *broker*. In common law countries, a common carrier refers to a person or company that transfers goods or people for the public and is generally responsible for any loss that occurs during transport, even that due to “the slightest degree of negligence toward a fare-paying passenger.”⁴³ However, the categorization of ridesharing services as common carriers remains under discussion in common law countries. Several U.S. states prefer to include TNCs in the “common carrier” category. For example, the Pennsylvania Public Utility Commission (PUC) once certified Rasier, a ridesharing company, as a common carrier.⁴⁴ According to the PUC definition,

November 2014, the average price of medallions dropped almost 20 percent from its peak in 2013. See Josh Barro, “New York Taxi Medallion Prices Fall Again” (2 December 2014), online: [Nytimescom <www.nytimes.com/2014/12/03/upshot/new-york-taxi-medallion-prices-fall-again.html>](http://nytimes.com/2014/12/03/upshot/new-york-taxi-medallion-prices-fall-again.html); See also Barglind, *supra* note 40 at 707.

⁴³ Riebana Sachs “The Common Carrier Barrier: An Analysis of Standard of Care Requirements, Insurance Policies, and Liability Regulations for Ride-Sharing Companies” (2016) 65:2 DePaul L Rev 873 at 875.

⁴⁴ According to the opinion by Judge Cohn Jubelirer, the PUC would issue a CPC allowing Rasier to operate legally as long as Rasier filed a compliance plan. According to the CPC, Rasier would operate its services as an experimental common carrier. A number of dissenters claimed that the PUC lacked jurisdiction to offer a CPC to Rasier before judging its common carrier characteristics because “Rasier is neither ‘fish nor fowl’ under the Public Utility Code categories of ‘common carrier’”. Nevertheless, the PUC determined that Rasier’s service met the standards of 52 Pa Code § 41.14 and Appendix A of the December 5, 2014 Opinion and Order. This classification of Rasier is also a response to the Pennsylvania court decision that the Public Utility Code encourages flexibility with respect to common carrier market entry. See *Capital City Cab Service, et al. v. Pa. Public Utility Commission*, 2016 US Lexis 172 (Pa. Commw. Ct).

section 201 classifies the TNCs as common carriers.⁴⁵ However, it doesn't mean that all ridesharing modes can be regarded as common carriers. Since TNCs often provide a broad-scale

⁴⁵ *Public Utility Code* tit 66 Pa. C. S §§ 102 (b) (2014). Section 102 sets the following rules to define "common carrier":

"Common carrier." Any and all persons or corporations holding out, offering, or undertaking, directly or indirectly, service for compensation to the public for the transportation of passengers or property, or both, or any class of passengers or property, between points within this Commonwealth by, through, over, above, or under land, water, or air, and shall include forwarders, but shall not include contract carriers by motor vehicles, or brokers, or any bona fide cooperative association transporting property exclusively for the members of such association on a nonprofit basis. The term does not include a transportation network company or a transportation network company driver.

"Common carrier by motor vehicle." Any common carrier who or which holds out or undertakes the transportation of passengers or property, or both, or any class of passengers or property, between points within this Commonwealth by motor vehicle for compensation, whether or not the owner or operator of such motor vehicle, or who or which provides or furnishes any motor vehicle, with or without driver, for transportation or for use in transportation of persons or property as aforesaid, and shall include common carriers by rail, water, or air, and express or forwarding public utilities insofar as such common carriers or such public utilities are engaged in such motor vehicle operations, but does not include:

(1) A lessor under a lease given on a bona fide sale of a motor vehicle where the lessor retains or assumes no responsibility for maintenance, supervision, or control of the motor vehicles so sold.

(2) Transportation of school children for school purposes or to and from school-related activities whether as participants or spectators, with their chaperones, or between their homes and Sunday school in any motor vehicle owned by the school district, private school or parochial school, or transportation of school children between their homes and school or to and from school-related activities whether as participants or spectators, with their chaperones, if the person performing the school-related transportation has a contract for the transportation of school children between their homes and school, with the private or parochial school, with the school district or jointure in which the school is located, or with a school district that is a member of a jointure in which the school is located if the jointure has no contracts with other persons for the transportation of students between their homes and school, and if the person maintains a copy of all contracts in the vehicle at all times, or children between their homes and Sunday school in any motor vehicle operated under contract with the school district, private school or parochial school. Each school district shall adopt regulations regarding the number of chaperones to accompany students in connection with school-related activities.

(3) Any owner or operator of a farm transporting agricultural products from, or farm supplies to, such farm, or any independent contractor or cooperative agricultural association hauling agricultural products or farm supplies exclusively for one or more owners or operators of farms.

(4) Any person or corporation who or which uses, or furnishes for use, dump trucks for the transportation of ashes, rubbish, excavated and road construction materials. This paragraph does not include the use or furnishing of five-axle tractor trailers.

service, the Ridesharing Arrangements Act has been amended by giving further guidance to ridesharing arrangements and liability of ridesharing operators.⁴⁶

In contrast, other states have elected to expressly exclude ridesharing services from common carrier categories.⁴⁷ The Ride-Sharing Arrangement Act of Illinois is an example of such exclusion. In 2014, a bill to establish strict requirements for ridesharing services was passed. This bill requires ridesharing vehicles to obtain distinctive legislative plates from the secretary of state and to undergo “the same safety tests that a unit of local government requires for other vehicles used in transporting passengers for hire”.⁴⁸ Riebana Sachs believes that this bill excludes ridesharing services from the common carrier category; thus, the mere classification of ridesharing services as

(5) Transportation of property by the owner to himself, or to purchasers directly from him, in vehicles owned and operated by the owner of such property and not otherwise used in transportation of property for compensation for others.

(6) Transportation of voting machines to and from polling places by any person or corporation for or on behalf of any political subdivision of this Commonwealth for use in any primary, general, municipal or special election.

(7) Transportation of pulpwood, chemical wood, saw logs or veneer logs from woodlots.

(8) Transportation by towing of wrecked or disabled motor vehicles.

(9) Any person or corporation who or which furnishes transportation for any injured, ill or dead person.

(10) A person or entity that is any of the following:

(i) A transportation network company.

(ii) A transportation network company driver.

⁴⁶ *Public Utility Code* tit 66 Pa. C. S §§ 2602 (a) (2014). Section 2602 defines that “a transportation network company may not be considered a ridesharing arrangement or ridesharing operator under the act of December 14, 1982 (P.L.1211, No.279), entitled ‘An act providing for ridesharing arrangements and providing that certain laws shall be inapplicable to ridesharing arrangements.’”

⁴⁷ Sachs, *supra* note 43 at 874, n13.

⁴⁸ *Ibid* at 875, n16.

common carriers is not the best means for incorporating a new mode of transportation service into an outdated regulatory scheme.⁴⁹

Why does Sachs refuse to categorize ridesharing services as common carriers? What are the essential features of a common carrier, and what is the liability of a ridesharing service provider if it is regarded as a common carrier?

As discussed above, a common carrier must maintain “the highest degree of care”⁵⁰ to prevent any type of damage or loss, except in special cases.⁵¹ Traditional taxi services and taxi companies are typically regarded as common carriers in common law countries and thus are subject to the strictest liability for public operation.⁵² In contrast, no highly regulated system has been established for the ridesharing industry. In addition to the different operating requirements, Sachs mentions another important problem with defining ridesharing services as common carriers, that is, the anti-discrimination policies applicable to traditional taxi services. As common carriers, taxi drivers are prohibited from discriminating against passengers, whereas some ridesharing drivers are free to choose their passengers by refusing the trip request assigned by TNCs.⁵³ For example, although Uber drivers are unable to know the destination of passengers until they pick them up,⁵⁴ Didi

⁴⁹ *Ibid* at 875. Sachs wrote that “the Illinois legislature should affirmatively pass a bill excluding ridesharing services from common carrier definitions and enact ridesharing-friendly regulations similar to Pennsylvania S.B. 1457.18 P.”

⁵⁰ *Ibid* at 882, n87.

⁵¹ Exceptional cases, such as acts of God, may relieve common carriers from the responsibility for utmost care. *Ibid*, at 882, note 86, Jorgen Basedow, Common Carriers-Continuity and Disintegration in United States Transportation Law, 13 TRANSP. L.J. 1, 3 (1983) (quoting Orro Riage by Inland Transport 189-92 (3d ed. 1956)).

⁵² *Ibid* at 881.

⁵³ *Ibid*.

⁵⁴ Adam Tuss, “Uber Drivers Stiff Passengers After Finding Out Final Destination” (27 December 2016) , online : < www.nbcwashington.com/news/local/Uber-Driver-Stiff-Passengers-After-Finding-Out-Final-Destination-408432315.html >.

drivers do know the destination of passengers before they accept the trip request.⁵⁵ Sachs notes that in *Doe v. Rockdale Sch.*, the Illinois court relied on the difference between public and private entities, regardless of “whether the carrier serves all of the public alike”,⁵⁶ to determine what constitutes a common carrier. This “definitive test” means that there is no requirement for private drivers to “serve every person who may apply”.⁵⁷ Based on this reasoning, Sachs refuses to define ridesharing services as common carriers. Hence, for regulators, the imposition of strict liabilities and requirements on ridesharing service providers should not be justified merely by defining them as common carriers.

ii. Broker

Another possible legal categorization of TNCs is that of *broker*. For example, Section 102 of the Pennsylvania Public Utility Code defines a broker “as any person or corporation...who or which, as principal or agent... negotiates for, or holds out by solicitation, advertisement, or otherwise, one who sells, provides, contracts, or arranges for such transportation... or procuring of facilities therefor, other than as a motor carrier directly or jointly, or by arrangement with another motor carrier, and who does not assume custody as a carrier.”⁵⁸ From this perspective, the role of platforms in the ridesharing economy seems to be much closer to “broker” than to “common carrier”. However, there is an exclusion from the definition of “broker”, as follows:

⁵⁵ Josh Horwitz, “Didi Kuaidi’s Tony Qiu on how the company is going to crush Uber in China” (29 October 2015) , online: Quartz <qz.com/536586/uber-rival-didi-kuaidi-might-pull-ahead-in-china-for-one-simple-reason-local-knowledge/>.

⁵⁶ Sachs, *supra* note 43 at 883, n 96.

⁵⁷ *Doe v. Rockdale Sch. Dist.*, 1997 US Lexis 236 at para (Ill. App. Ct).

⁵⁸ *Supra* note 45, §102.

Any person or corporation not included in the term “motor carrier” and not a bona fide employee or agent of any such carrier or group of such carriers.⁵⁹

It is thus obvious that platforms in the ridesharing economy are excluded from the definition of “broker”. In an opinion of the Commonwealth Court of Pennsylvania, Judge Cohn Jubelirer argues that Rasier’s TNC service does not fit neatly into any existing category of passenger services in the Public Utility Code.⁶⁰ However, neither Sachs nor Judge Cohn Jubelirer provide a precise answer regarding the legal categorization of TNCs. Sachs ends her comment by referring to the necessity of “legal innovation”⁶¹ and suggesting that the Illinois legislature consider “developing a new standard of care fitted to twenty-first-century technology”⁶² without further explaining the term “innovation”.

b. In China

In contrast, there is no exact equivalent term of common carrier in civil law jurisdictions. However, A.N. Yiannopoulos once mentioned in his article *Carriage of goods* that the concept of public carrier in civil law jurisdictions and the concept of common carrier is functional equal.⁶³ As a civil law country, China has had few disputes regarding whether ridesharing services belong in the public carrier category. Chinese regulations regard traditional taxi services as an important means of public transportation, along with bus services. In the Chinese legal framework, taxi services are a mode of the public transportation system without a specific legal categorization because the

⁵⁹ *Ibid.*

⁶⁰ *Supra* note 44 at 13.

⁶¹ *Supra* note 43 at 905. According to Riebana Sacha, ridesharing standards should include basic safety standards and other car inspections; however, Sacha does not address how these basic standards should be established.

⁶² *Ibid* at 906.

⁶³ A.N. Yiannopoulos, “Carriage of goods” (July 1998), <www.britannica.com/topic/carriage-of-goods#Article-History>.

original and current purpose of the Chinese taxi market is to relieve the stress on city buses.⁶⁴ Prior to the 1990s, in an attempt to ameliorate the massive pressure on the public bus system, the Chinese government allowed not only state-owned enterprises but also private companies and individual owner-operators to enter the taxi market.⁶⁵ After 1996, the Chinese government started to encourage the entrance of companies while limiting the entrance of individual owner-operators in order to ensure taxi service quality by limiting its quantity.⁶⁶ In general, the regulation of the taxi industry by the Chinese government is similar to the medallion system in the U.S., including in terms of entry restrictions, price controls, and service rules. However, these strict market access requirements make it difficult for drivers to obtain certificates of operation from taxi companies. Thus, to avoid the expensive entrance fees charged by taxi companies, many drivers choose to transport passengers secretly, without applying for certification. In China, these drivers are called “heiche siji”, which means “those who drive in the dark”; today, these “heiche siji” constitute the majority of ridesharing drivers. Without a legal category for common carriers, the liability of taxis in China depends on their own legal status. Different modes of organizing and operating taxis have different impacts on the determination of liability.⁶⁷ Hence, if Chinese law defines ridesharing vehicles as taxis, the liability of ridesharing vehicles is the same as that for traditional taxis.

B. Current legal situation

⁶⁴ Mingyi Chen & Lifeng Shen "Analysis of Taxi Fare Control Issues for Shanghai Taxi Market" (2009), at 61, online: Encnki.com.cn <en.cnki.com.cn/Article_en/CJFDTOTAL-CSGS200902017.htm>.

⁶⁵ *Ibid* at 62.

⁶⁶ *Ibid* at 62-63.

⁶⁷ Jian-fan Luo et al, "On the determination of Tort Liability Subject of Taxi Traffic Accident" (2012) 11:6 J Shangqiu Vocational and Technic College 21 at 22.

1. General regulations in China

In 2016, the Chinese government passed the Interim Measures,⁶⁸ which went into effect on November 1, 2016. The Interim Measures address “autonomous regional people's government transportation departments, under the leadership of the people's government, responsible for directing the administrative areas of network management regarding cars.”⁶⁹ This regulation finally ended the era in which ridesharing drivers operated in a legal gray area, even risking arrest in certain cities in China.⁷⁰ Therefore, in general, this regulation conveys an open attitude of the Chinese government toward ridesharing services; however, it is much stricter than expected. There are two key terms in this regulation. First, the term “online taxi booking” suggests that this regulation is in essence based on the use of Internet technology and other related digital systems. However, the second term, “taxi”, is somewhat ambiguous. The use of this term indicates that the Chinese government regards all private vehicles that operate in public as a kind of “taxi” service. Therefore, the regulation’s first draft asked all ridesharing drivers to sign full-time employment contracts with TNCs. Since then, the relevant departments of several large cities, including Beijing, Hangzhou, Shanghai, and Shenzhen, have issued different drafts that aim to adhere to the requirements of the central government while limiting the pool of drivers due to the pressures of urbanization, which means greater restrictions on ridesharing services. These restrictions are discussed in the following section. However, the question of whether ridesharing vehicles are causing congestion and pollution in urban areas remains open pending further scientific and rigorous verification.

⁶⁸ *Supra* note 24.

⁶⁹ *Ibid*, art 3.

⁷⁰ Zheping Huang, "China finally made ride-hailing legal, in a way that could destroy Uber's business model" (29 July 2016), online: Quartz <qz.com/745337/china-finally-made-ride-hailing-legal-in-a-way-that-could-destroy-ubers-business-model/>.

2. General regulations in the U.S.

In September 2013, the California Public Utilities Commission (CPUC) established 28 rules and regulations for TNCs,⁷¹ which made California the first state in the U.S. to regulate ridesharing services. In fact, it was California that introduced the class of “transportation network companies” (i.e., TNCs).⁷² As of September 2016, 34 states and more than 69 cities in the U.S. have passed legislation governing TNCs,⁷³ and it has been reported that lawmakers are considering more stringent regulations.⁷⁴ For example, the mayors of the two largest ridesharing cities in the U.S., New York and Chicago, have indicated their intention to cap the growth of ridesharing services in exchange for political support from the traditional taxi industry and to guarantee the benefits derived from government-granted monopolies or state-owned enterprises.⁷⁵

However, the road to TNC regulation has not been smooth in the U.S. As ridesharing services have enjoyed high popularity over several years, lawmakers of different states have struggled to construct their own ridesharing-specific frameworks. In addition, because of differences between start times and legal systems, it is natural that differences exist in the development of legislation for the ridesharing economy.

⁷¹ These rules address various issues. For example, TNCs must obtain licenses and establish driver training programs. See US, California Public Utilities Commission, *CPUC Establishes Rules for Transportation Network Companies* (Doc No R12-12-011) (San Francisco: CPUC 2013).

⁷² Technically, CPUC does not consider all TNC services to be traditional ridesharing services; rather, it defines ridesharing services as casual practices such as carpooling. However, as used by the public, the word “ridesharing” often refers to relevant regulations. Hence, this article will use the term “ridesharing” to analyze regulation of TNCs in China and in certain states of the U.S.

⁷³ Harriet Taylor, “Uber and Lyft are getting pushback from municipalities all over the US” (2 September 2016), online: CNBC <www.cnbc.com/2016/09/02/uber-and-lyft-are-getting-pushback-from-municipalities-all-over-the-us.html>.

⁷⁴ *Ibid.*

⁷⁵ “Ridesharing Companies Battle Big Government’s Regulations” (13 January 2016), online: Americans for Prosperity <americansforprosperity.org/ridesharing-companies-battle-big-governments-regulations/>.

Although U.S. legislation concerning the ridesharing economy began earlier than similar Chinese legislation, the Chinese legislative process is more stable than that in the U.S. In China, the central government first enacted a general guideline, i.e., the *Interim Measures*, and then different Chinese cities started to develop specific rules. In contrast, the U.S. did not enact a general law applicable to the states; instead, states enacted their own bills to address different issues and then developed their own legal frameworks.

Table 1: Ridesharing-specific regulations in major cities/states in China and the U.S.

	China	U.S.
Central/Federal Government	Interim Measures: July 2016	
Cities/States	Chengdu: October 2016	New York: SB4280A(Pending); SB4108D(Pending)
	Hangzhou: November 2016	California: September 2014, AB 2293
	Beijing: December 2016	Illinois: December 2014, SB 2774
	Shanghai: December 2016	Arizona: April 2015, HB2135
	Guangzhou: December 2016	Texas: June 2015, HB 1733
	Shenzhen : December 2016	Pennsylvania : Nov 2016, SB 984

Litigation between rideshare companies and the government is more intense in the U.S. than in China,⁷⁶ and TNCs in Asia tend to pay more attention to price wars than to perfecting their self-regulation compared with TNCs in Western countries. To dominate the Asian market, companies such as Uber have attracted billions of dollars in investments to compete with local TNCs in China. Consequently, Chinese passengers can usually buy a 20-minute ride for less than CAD 0.8. Because of the huge subsidies offered by TNCs, extremely cheap fares are guaranteed, which in turn attracts more passengers. Indeed, Uber CEO Travis Kalanick has reported that the company is losing over \$1 billion per year by engaging in this “money-burning game” in China.⁷⁷ In

⁷⁶ U.S. TNCs are reported to be more willing to fight against “heavily taxi-favored regulations” in court, whereas Chinese TNCs usually try to adapt to new regulations, even though Chinese TNCs have as many complaints as U.S. companies do. This reluctance to fight among Chinese TNCs is due to the unique and complicated political, economic and legal environment of China. The U.S. is a mixed economy, which means that the government partially controls several areas of the economy and the market controls other areas. See Sean Ross, “Is the United States Considered a Market Economy or a Mixed Economy?” (17 August 2017), online: Investopedia <www.investopedia.com/ask/answers/031815/united-states-considered-market-economy-or-mixed-economy.asp>. In contrast, the Chinese government proclaims that China is a socialist market economy. Although China has made significant strides toward a market economy over the past 30 years of reform and opening up by continually reducing the central command planning apparatus, these strides do not mean that China has a mixed economy system. Indeed, more complicated issues in the Chinese market concern the incentives behind political and personnel control and intricate property ownership problems. Kate Hanna mentions in her book that although Chinese laws and regulations are intended to give enterprise managers the right to make decisions over a clearly delineated economic province in a manner not unlike the power conveyed by property rights in Western market economies, Chinese contracts, laws and regulations have not proved to be sufficiently strong to fulfil this charter. Hence, the decentralization of economic and property rights does not necessarily lead to the development of a market economy. Rather, a long history of firm control over financial policy and the core aim to maintain social and political stability make it difficult for enterprises to enter or develop in the market without the direct or indirect support of the government. Hence, Chinese companies generally prefer not to fight the government directly in court. For example, according to a CEO questionnaire regarding the number of major laws, regulations, and policy changes that occurred between 2009 to 2012, only 31 percent of firms indicated that they chose to go to court to resolve a dispute, on average; in large cities, sudden compulsory acquisition by the government is often cited as a particularly troublesome factor for many enterprises. In addition, there is a great disparity in strength between the U.S. and Chinese industrial associations. In China, it is more difficult for TNCs to gain the support of independent associations or labor unions in court. See also Kate Hannan, *Industrial Change in China*, (Hoboken; London; New York : Routledge, 1998) at 125; Hongbin Li & Li-An Zhou, “Political turnover and economic performance: the incentive role of personnel control in China” (2005) 89:9-10 J Public Economics; Ross Garnaut et al, *Private enterprise in China*, (ANU Press, 2012) at 120-25.

In conclusion, the unique features of the Chinese economic system make the relationship between government policy and enterprises much tenser than that in the U.S.; under these circumstances, it is not surprising that enterprises in China are usually unwilling to fight government policies in court.

⁷⁷ According to data collected in 2015, the daily completed rides of Uber China approximate 1 million. However, Didi Kuaidi can complete 7 million rides per day. Travis Kalanick claims that their fierce competitors were buying

response to market events, Article 3 of the new regulations of the Chinese government mentions the government's intention to eliminate all unfair competition in the current market. TNCs are allowed to set their ride prices, but the final decision-making power belongs to the government authority. Companies such as Uber have indicated that they welcome the new regulation and that they will work with the government to build a fair market. Uber's statement regarding China differs substantially from its stance in the U.S. Specifically, in most U.S. cities, Uber has refused to reform its self-regulatory framework despite the guidance of new laws; TNCs have even defied the government by threatening to shut down operations in certain cities.⁷⁸ In the U.S. and Canada, many lawsuits have been filed by TNCs to challenge rules that the companies deem unfair.

C. Core standards

Several jurisdictions have tried to ban ridesharing services,⁷⁹ and "courts in almost all jurisdictions have yet to answer the question of what standard of care should apply to ridesharing services."⁸⁰ Countries are still seeking a way to strike an appropriate balance between the traditional taxi market and the innovative ridesharing market in order to level the playing field for all participants. However, the only certainty is that specific regulations regarding the distribution of benefits in the ridesharing market will depend on each country's unique situation.

IV. Key criteria of current regulations

up market share. See Huang, *supra* note 58 at para 8; Jonathon Narvey, "Travis Kalanick speaks out: Uber's CEO on risk, regulation, and women in tech" (16 February 2016), online: BetaKit <betakit.com/travis-kalanick-speaks-out-ubers-ceo-on-risk-regulation-and-women-in-tech/>.

⁷⁸ See e.g. Feliks Garcia, "Uber and Lyft to leave Austin after failed campaign to reduce background checks" (8 May 2016), online: Independent <www.independent.co.uk/news/world/americas/uber-lyft-austin-proposition-1-leaving-a7018876.html>.

⁷⁹ Sachs, *supra* note 43 at 874.

⁸⁰ *Ibid* at 874.

A. Insurance

The emergence of the ridesharing economy poses significant risks for the insurance industry, especially because a process to identify legal liability has not yet been specified by law. Moreover, this unprecedented economy is growing at a staggering pace, and the risks of this new business model cannot be ignored any longer. Property and casualty (P&C) insurance carriers and insurers often find themselves in complicated positions when faced with problems related to the use of personal vehicles for commercial purposes, the line between commercial use and private use, and the use of absurd and uncertain contractual terms regarding pricing, claims, covered assets, etc. In other words, the entire insurance market for the ridesharing economy is in a state of complete disorder and confusion. However, opportunities always emerge from challenges, and all of these opportunities will be analyzed in detail below.

1. Bridging the gaps in the ridesharing economy

a. A lack of insurance coverage

As discussed above, one of the most important characteristics of the ridesharing economy is its commercial nature. Thus, the priority for lawmakers and insurance carriers is to clearly delineate between the personal and commercial use of private vehicles and determine how the legal framework of insurance could better regulate the commercial use of private vehicles. For example, assume a private vehicle owner wants to use his car through Uber. There are two possible operation modes: (i) The owner picks up passengers for profit just a few hours a day and spends the remaining time using his car to drive to the supermarket, to school, etc.; or (ii) the owner spends the entire day providing transportation services. Every time the owner uses the platform to contact potential passengers, he puts himself at risk that his personal insurance plan will not cover an

accident that occurs during the commercial use of his private vehicle. Thus, for insurance applications, drivers should be required to contact their insurance carriers. For lawmakers, more risks arise and thus more regulations must be implemented. Generally, personal automobile policies exclude coverage if the insured vehicle is used for a commercial purpose.⁸¹ Before insurance regulations were introduced into the ridesharing economy, commercial coverage provided by TNCs existed but was extremely limited. For example, TNCs usually narrowly defined the service provision period. In the case of Uber, commercial coverage was provided only when a driver was transporting passengers and using their app.⁸² Moreover, this coverage was provided only when the driver's private insurance policy rejected the claim.⁸³

b. A lack of proper claims processes

The ridesharing economy is Internet-based, which means that ridesharing trips are largely dependent upon the technology and Internet. A trip may be required, and thus a claim can arise, at any time and in any place. This characteristic of the ridesharing economy necessitates faster reactions from insurance providers. Hence, the original insurance operating system – especially with respect to claims processes – must be modified for ridesharing economy participants. For example, insurance companies and TNCs could take different vehicle operation modes (full-time/part-time) into account. Given the clear differences in dependence levels among participants in the ridesharing economy, traditional insurance providers must address challenges arising from the wide variety of requirements among participants. Drivers who use their vehicles for

⁸¹ Alexander B. Traum, "Sharing Risk in the Sharing Economy: Insurance Regulation in the Age of Uber" (2016) 14:3 Cardozo Public L, Policy and Ethics J 511 at 524, para 2.

⁸² *Ibid* at 525, n53.

⁸³ *Ibid* at 524.

transportation sharing services just a few times per day may prefer per-day or per-ride insurance protection, whereas those who use their vehicles to provide this service more frequently may prefer long-term protection. Under these circumstances, traditional providers must reconsider their current billing cycles, claims processes and sales processes.

There are many other challenges for the insurance industry. This thesis will not mention all of them, but rather will focus on the problems cited above because they have closer connections to regulatory compliance and thus could provide insights into the reformation or creation of new regulations for the transportation sharing economy.

2. Regulatory responses

However, even with full recognition of the profit-driven nature of this business, lawmakers must consider billing cycles and claims processes to guarantee price certainty and regulatory compliance and to offer strict guidance, not only for insurance carriers but also for the other participants in this complicated business chain. On the one hand, several European cities have banned the ridesharing economy altogether. Under these circumstances, insurance carriers would put themselves at high risk of violating the law by providing policies to ridesharing drivers. Moreover, in most countries, participants in the ridesharing economy have found themselves in a legal limbo. Traditional regulations do not prohibit their behavior, but neither do they provide any clear guidance for protecting their legal interests and safety. On the other hand, in countries that have passed new regulations regarding ridesharing, such as China, providers of ridesharing services are still not appropriately protected by their insurance plans. The Interim Measures stipulate only that TNCs

should pay taxes for the purchase of passenger liability and related insurance but fail to provide detailed plans and rules for TNCs and insurance companies.⁸⁴

In the U.S., in contrast, states, TNCs and insurance companies have worked together in an effort to provide more detailed insurance regulatory guidelines. In March 2015, several ridesharing companies, insurance companies and social organizations, such as Uber, Lyft and the United Services Automobile Association jointly released a “Compromise Model Bill”⁸⁵ to provide insurance guidance for the entire ridesharing industry. Under the Compromise Model Bill, TNC insurance policies will no longer require that a claim first be denied by a personal insurer.⁸⁶ Moreover, in April 2015, the National Association of Insurance Commissioners (NAIC) published a white paper regarding coverage gaps and other regulatory issues in the ridesharing industry. This paper also provided several suggestions for state lawmakers.⁸⁷ The NAIC white paper mentions the difficulties of asking TNCs to provide insurance coverage at all stages of the TNC business cycle and proposes that state lawmakers require liability coverage to protect passengers and third parties involved in the ridesharing industry.⁸⁸ At the state level, the California law that established new coverage and disclosure requirements became effective in July 2015.⁸⁹ Nineteen other states have also passed laws that guarantee insurance coverage for participants.⁹⁰

⁸⁴ Interim Measures, *supra* note 24, art 23.

⁸⁵ Traum, *supra* note 81 at 531.

⁸⁶ *Ibid* at 532, n 102.

⁸⁷ *Ibid* at 530.

⁸⁸ *Ibid* at 531.

⁸⁹ *Ibid* at 533.

⁹⁰ Francis, *supra* note 4 at 15.

a. Proof of liability insurance

New laws are trying to increase the responsibility of TNCs to establish and modify relationships with insurance carriers in order to provide higher liability insurance coverage. The fundamental requirement for TNCs is proof of valid insurance coverage. For instance, in the compliance plan submitted with Rasier's application for the experimental authority certificate to provide passenger trips between points in Allegheny County, the company promises to “submit to the Commission proof of adequate insurance evidencing policies and coverage....”⁹¹ This proof should meet or exceed minimum government standards that set forth the detailed insurance requirements for TNCs. According to the compliance law applicable to Rasier, Commission at 53 Pa. Code 32.11 and 41.2, TNCs should provide a certificate obtained from insurers to the Commission as a condition of issuing the operating certificate.⁹² Efforts in the U.S are also illustrated by the examples presented below.

b. Requirement that drivers contact their insurance carriers

The Department of Insurance of California stipulates that drivers should notify their individual insurance carriers of any plans to use their vehicles commercially and should obtain verification from their insurer within a specified period.⁹³ Such verification can be in written or electronic form

⁹¹ In Rasier's application, Rasier-PA promises to require their operators to provide proof of liability insurance that complies with or exceeds the minimum standards required by law on all vehicles. However, Rasier-PA does not mention specific requirements regarding the process for submitting such proof or indicate whether there is a process to check the validity of documents provided to it by operators. See US, Pennsylvania Public Utility Commission, *Opinion and Order*, (PA 17105-3265) (Harrisburg, PA: The Pennsylvania Public Utility Commission, 2014) at 48. [Opinion and Order]

⁹² US, Pennsylvania Public Utility Commission, *Tentative Opinion and Order* (PA 17105-3265, 2014), (Harrisburg, PA: The Pennsylvania Public Utility Commission, 2014). [Tentative Opinion and Order 2014]

⁹³ Opinion and Order, *supra* note 91 at 52.

and should include the driver's signature. However, Appendix A of Rasier's Experimental Authority Certificate Conditions does not mention any consequences for the removal of this verification.⁹⁴ For example, assume that a private driver registered with a TNC platform before the law was enacted. What is the deadline for the driver to obtain this verification, and what is the consequence of failing to meet this deadline? According to existing regulations, it seems to be the responsibility of TNCs to impose specific requirements on drivers. However, no such regulation exists in the Chinese Interim Measures.

c. Levels of insurance coverage

Insurance coverage must comply with the applicable insurance regulations. For example, Rasier-PA was asked to inform drivers of all levels of insurance coverage provided “during Stages 1, 2 and 3, and to instruct drivers regarding the appropriate protocol to be followed in case of an accident.”⁹⁵ According to Mr. Fuldner, Uber's director of insurance and risk management, primary liability insurance coverage can be provided only during the log-in period, that is, from the time that the driver logs in to the system until the transportation service has been completed. This method provides an easy way for insurance carriers to provide service.

In Canada, the Alberta government developed a new form of insurance instead of asking drivers and TNCs to choose their own insurance. This insurance differs from the commercial insurance that traditional taxi drivers use.⁹⁶ It has three specific periods of coverage. Period 1 starts when a

⁹⁴ *Ibid.*

⁹⁵ Opinion and Order, *supra* note 91 at 50.

⁹⁶ Alberta, Alberta Government, *Transportation Network Companies Frequently Asked Questions* (Alberta, 2016) at 1.

driver opens the TNC's app, because once the driver opens the app, they will not be protected by their personal insurance. However, the insurance specifications do not address the situation in which a driver logs in to the system without the desire to pick up passengers and/or simply forgets to log out of the app. Should this period be protected by special insurance? The lack of a detailed report regarding the "driver sign-up" process underscores the risk of future insurance disputes. All of these questions thus need to be answered. Period 2 starts when a driver has secured a fare, and period 3 starts when a passenger is in the vehicle.⁹⁷ All three of these periods are designed for TNC activities. In contrast, the California statute bases insurance coverage on two basic time periods. Period 1 starts when a driver accepts a ride and ends when the ride is complete. During this period, primary insurance must be maintained either by the TNC or the driver.⁹⁸ Period 2 is the period when drivers are logged in to the app but have not accepted any ride request.⁹⁹ Most importantly, during either period, if the drivers' policy "lapsed or ceased to exist, the transportation network company shall provide the coverage required by this section beginning with the first dollar of a claim."¹⁰⁰ This language means that under the current California statute, there is no lapse in insurance protection. Lagging far behind Canada and the U.S., insurance regulations in the ridesharing industry in China remain undeveloped.

⁹⁷ US, Pennsylvania Public Utility Commission, *Before the Pennsylvania Public Utility Commission: Rasier-PA LLC Compliance Plan- Sixth Quarterly Report* (Nos. A-2014-2416127 & A02014-2424608)(2016) at 2 n.

⁹⁸ Traum, *supra* note 81 at 533.

⁹⁹ *Ibid* at 533 n 105.

¹⁰⁰ *Ibid* at 533 n 109.

d. Detailed instructions to drivers

A vague insurance form or obscure notice provides insufficient guidance for drivers in an accident. For example, in the case of Rasier, the Insurance Federation of Pennsylvania noted the shortcomings of Rasier's compliance plan with respect to the Commission's insurance requirements:

Rasier should be required to give true instruction to its drivers – who they should call, within what time frame, what they should say and do with their other insurance, what information they should collect from passengers or other vehicles or accident victims, and how they are to file a report of the accident with Rasier. It should also explain how drivers are to access each of its policies – who makes the decision that an accident was in which stage, the driver or Rasier?¹⁰¹

This objection highlights the importance of instructing drivers on what they need to do in the event of an accident. This thesis agrees with the statement that a valid compliance plan must provide adequate guidance not only to drivers but also to the government. It will be a long-term problem if ridesharing vehicles enter the market without specific instructions, not only from the perspective of the Commission's supervision but also in terms of the drivers' original insurance plans. Nonetheless, the current regulations of most countries often ignore the importance of providing guidance to drivers.

B. Driver integrity

1. Qualification examination

¹⁰¹ US, Pennsylvania Public Utility Commission, *Before the Pennsylvania Public Utility Commission: The Objection of the Insurance Federation to the Rasier-PA LLC Compliance Plan*, (Philadelphia: Insurance Federation of Pennsylvania, 2015) at 9. [The objection to the compliance plan]

On December 15th, 2016, 117 drivers in Hangzhou, China, took part in the first Hangzhou Internet-based Transportation Service Qualification Examination. Hangzhou is the first province of China to have implemented the governmental Interim Measures. According to the Interim Measures, drivers of ridesharing services must pass the related qualification examination before picking up passengers.¹⁰² The examination requirement was refined by the government of Hangzhou into one examination of increased sophistication and complexity. It is divided into two parts: (i) national public subjects (National), which includes 85 topics and comprises both multiple choice and true/false questions, and (ii) local area subjects (local), consisting of 40 multiple choice and true/false questions. The questions are automatically extracted from the question bank by a computer. Participants must obtain scores of 80 and 70 points on the national and local parts to qualify. Those who fail the examination are not eligible to take the make-up exam for 7 days.¹⁰³ If they fail a second time, they may apply again after 15 days from the date of the make-up exam.¹⁰⁴ Most drivers only pass the local tests and believe that the national test is too difficult.¹⁰⁵ However, some drivers claim that as long as one is well-prepared, it is not overly difficult to pass both tests. Driver Qu Dayong states that he prepared for the national test by finding materials from the taxi service qualification examination question bank. He ultimately scored 93 points on the national examination on December 15.¹⁰⁶ For the local test, participants can review materials recently published by the Hangzhou government.¹⁰⁷ Overall, the qualification examination for transportation sharing services is quite similar to the taxi qualification examination. However, it has been noted that there are more than 300,000 drivers providing ridesharing services, according

¹⁰² Interim Measures, *supra* note 24, art 15.

¹⁰³ "Strict examinations were held on Hangzhou TNCs' drivers" (19 December 2016), online: Csjxinhuanetcom <csj.xinhuanet.com/2016-12/19/c_135915991.htm>. [translated by author] [Hangzhou Examinations]

¹⁰⁴ *Ibid.*

¹⁰⁵ *Ibid.*

¹⁰⁶ *Ibid.*

¹⁰⁷ *Ibid.*

to TNCs' order records for the first six months of 2016 in Hangzhou, whereas little more than 1000 people have submitted examination applications.¹⁰⁸ Thus, most drivers still provide services illegally, which raises several questions. Should TNCs or local governments be responsible for checking driver certificates? What are the deadlines for drivers to provide a certificate and for TNCs to check each driver's certificate? How should drivers without qualification certificates be handled? According to the Interim Measures of Hangzhou, drivers and TNCs were given a four-month transition period to obtain qualification certificates and enter into operating contracts. At the end of the four-month period, the transportation management department increased the intensity and frequency of investigations into undocumented drivers. However, these measures fail to provide concrete answers to the questions presented above and fail to specify where the responsibility lies. In the case of undocumented drivers, it remains unclear who will be punished and what the penalties will be.

China is not the only government that has implemented an examination process to ensure driver integrity. Drivers in New York City must hold "a commercial license"¹⁰⁹ to operate a private vehicle for public use, and drivers in the United Kingdom must pass language tests to provide ride services.¹¹⁰

As discussed above, many recently implemented regulations require private drivers to pass qualification examinations before they are allowed to provide ride services. However, these

¹⁰⁸ *Ibid.*

¹⁰⁹ In New York City, TNC drivers must be professionals and must apply for a commercial license to offer rides. In addition, the city, rather than TNCs, is responsible for conducting more rigorous inspections. Hence, the regulations in New York City differs considerably from those in other jurisdictions in the U.S., such as San Francisco and Washington, D.C. See US, New York (City of) Office of the Mayor, *For-Hire Vehicle Transportation Study* (New York: Office of the Mayor, 2016) [For-Hire Vehicle Transportation Study]

¹¹⁰ *The Private Hire Vehicles (London PHV Driver's Licences) (Amendment) (No.2) Regulations 2017*, SI 2017.

regulations fail to specify which qualities should be examined. For example, do drivers need to pass a basic language test? Transport for London (TfL) requires minicab drivers to pass a written English test to obtain a new or renewed private hire license. Drivers who have sufficient language skills to pass the road test and who pass the driving safety test will not be qualified if they cannot pass the written English test.¹¹¹ According to lawyers for Uber, this English test could put nearly 33,000 drivers out of work, which means that “28 percent of those who currently hold a license would lose their livelihood over three years.”¹¹² Although the court acknowledged the risk that many drivers would be unable to obtain licenses, it ultimately ruled in favor of TfL’s written English test based on the belief that drivers must be able to sufficiently communicate with passengers in an emergency situation for the sake of public interests, namely, the “safety, welfare and convenience of passengers.”¹¹³ For instance, in a medical emergency, the ability to talk about a medical condition in English is crucial to protect passenger health.

By contrast, there are no such language requirements in China and the U.S. The necessity of a language test depends on the conditions in a country. Hence, as a nation of immigrants¹¹⁴, the U.S. should be more concerned than China about the potential need for a language test.

2. Background check

¹¹¹ *Ibid.*

¹¹² Rob Davies, "Uber v TfL: court hears written English test will cost 33,000 drivers their jobs" (28 February 2017), online: the Guardian <www.theguardian.com/technology/2017/feb/28/uber-v-tfl-court-hears-written-english-test-will-cost-33000-driver-jobs>.

¹¹³ Madhumita Murgia, "UK court rules London Uber drivers must pass English test" (3 March 2017) online: Ftcom <www.ft.com/content/b6ba6938-3e25-328f-970d-8bb685a3df9e>.

¹¹⁴ Susan F. Martin, *A nation of Immigrants*, (Cambridge; New York : Cambridge University Press, 2011) at 183.

All regulations discussed in this thesis require driver background checks. Certain states in the U.S. require TNCs to undertake driver history checks, whereas the government in China places this burden on the transportation management department. In Rasier-PA's case, the company was asked to conduct driver background checks of the scope described in the application and consistent with 52 Pa. Code §§ 29.503, 29.504 and 29.505 at the time of driver sign-up and then annually.¹¹⁵ According to 52 Pa Code §§ 29.503-29.507, each TNC should check and maintain drivers' records and certificates and implement a "zero tolerance" policy with respect to drug and alcohol use.¹¹⁶ Moreover, on September 20, 2016, Bruce Schaller published the report "*A Blueprint for Uber, Lyft and Taxi Regulation*", which recommends deeper background checks (specifically, fingerprint-based criminal background checks) for TNC drivers.¹¹⁷ Schaller argues that a fingerprint-based background check is the best practice for the development of the ridesharing economy.¹¹⁸ Each company should also build a data system to record vehicle collisions, driver behavior and passenger reviews. A fingerprint-based background check system is the one of the most important issues; however, large TNCs have strongly resisted government efforts to enact fingerprint-based background check requirements.¹¹⁹

¹¹⁵ US, Pennsylvania Public Utility Commission, *Appendix A to the Combined Joint Motion of Chairman Robert F. Powelson and Commissioner Pamela A. Witmer, Rasier-PA –Experimental Authority Certificate Conditions*, (PA 17120) (Harrisburg, PA: public meeting, 2014) at 2. [Appendix A to the Combined Joint Motion]

¹¹⁶ US, The Philadelphia Parking Authority, *Notices Transportation Network Service Temporary Authorization*, (Doc. No. 16-002) (Pennsylvania: Pennsylvania Bulletin, 2016).

¹¹⁷ Bruce Schaller, *Unfinished Business: A Blueprint for Uber, Lyft and Taxi Regulation* (New York: Schaller Consulting, 2016).

¹¹⁸ *Ibid.*

¹¹⁹ Two notable exceptions are Houston and New York City, where regulations require fingerprint-based checks. Lyft left Houston in 2014, claiming that it would not return if the city kept its mandatory fingerprinting rules, and returned in May 2017, after the signing of House Bill 100, a law that bans fingerprint-based background checks for TNCs. See Darla Guillen, "Lyft back in Houston, Uber back in Galveston after Abbott signs HB 100" (30 May 2017), online: Houston Chronicle <www.chron.com/news/houston-texas/texas/article/Lyft-back-in-Houston-Uber-back-in-Galveston-11181753.php>; Avery Hartmans, "What happened to Austin, Texas, when Uber and Lyft left town" (June 2016), online: Business Insider <www.businessinsider.com/what-happened-to-austin-texas-when-uber-and-lyft-left-town-2016-6>.

In contrast, the Chinese government asks that driver background checks be conducted before drivers apply for the qualification examination. According to data provided by the transportation department of Hangzhou, 1262 drivers have submitted an application for the qualification examination since the Internet-based vehicle declaration and management system started running, and the transportation department has conducted background checks on 751 of them, with 581 applicants passing.¹²⁰ The background check process ensures better public security. People who have records of violent crimes, dangerous driving, or driving while impaired, those who have had their taxi qualification certificates revoked in the previous three years, and those whose driver's licenses have been terminated with 12 points in the last three consecutive point cycles are not eligible to sit for the qualification examination.¹²¹

Another difference in the background checks required by various countries relates to district restrictions, which presently exist in China. Specifically, the Chinese transportation department must check drivers' temporary residence permits, residence permits and household registration status (the "hukou" system of household registration) to determine whether each certificate or status has been held for a sufficient period of time. On December 21st, 2016, Beijing published the final version of Measures for Transportation Sharing Economy Regulation, which mandates that drivers who provide transportation sharing services in Beijing must hold a Beijing driver's license (rather than a driver's license from any other province) and must have Beijing household registration status. China's hukou household registration system was designed to control and classify citizens as either urban or rural. An urban hukou provides access to abundant public services, such as education and health care. However, those who work in cities often find it

¹²⁰ Hangzhou Examinations, *supra* note 103.

¹²¹ *Ibid.*

impossible to gain residential status in the largest cities in China, such as Beijing, Shanghai, Guangzhou, and Shenzhen, which are the top four cities in China.¹²² The hukou system of household registration remains tightly controlled by the government to avoid massive migration from rural to urban areas, because large cities are already stressed under the weight of their present populations.¹²³ Hence, it is not surprising that drivers in large cities will experience difficulty in passing the background check, especially given that most transportation sharing drivers are individuals in the lower or middle class who are seeking another source of revenue and already find it challenging to live in competitive cities. Furthermore, private vehicles must have local plates. The Taxi Reservation Network Management Services Implementation Details in Guangzhou, Beijing, and Shanghai all have “local driver and local plate” provisions, which require local plates for private vehicles. According to the response of the Beijing Municipal Transportation Commission, there are four main reasons for this restriction. One reason is to manage urban disease. The second is to maintain Beijing's capital function. The third is to ease congestion, and the fourth is to maintain consistency with regulations in other fields, such as real estate. Additionally, there is a maximum age limit for ridesharing drivers in China: male drivers must be under the age of 60 years, and female drivers must be under the age of 55 years.¹²⁴

¹²² For years, the hukou system has been regarded as a governmental barrier to the free movement of people in China, which is believed to be an equal right for every citizen. Large cities view the hukou system as a method of controlling public resources. Hence, it is very difficult for migrant workers to gain sufficient credit to change their hukou status. See Sophie Song, "China's Hukou Household Registration System Needs A Makeover, But Megacities Like Beijing And Shanghai Are Slow To Reform" (08 October 2013), online: International Business Times <www.ibtimes.com/chinas-hukou-household-registration-system-needs-makeover-megacities-beijing-shanghai-are-slow>.

¹²³ “Shifting barriers” (18 December 2015), online: <www.economist.com/news/china/21684145-government-reforms-socially-divisive-system-warily-shifting-barriers>.

¹²⁴ “Beijing’s response to TNC regulations” (09 October 2016), online: <auto.sina.com.cn/service/n/2016-10-09/detail-ixwrhpn9493154.shtml>. [translated by author]

Are background checks a panacea? To date, TNCs such as Uber and Lyft have been the subjects of numerous legal claims. In addition to the legal uncertainty that surrounds TNCs, it is frequently reported that passengers have been raped or robbed by drivers in countries where the transportation sharing economy is available. For example, in 2015, a 42-year-old woman was robbed by an Uber driver in Chengdu, China. After being robbed of approximately RMB 5,000 (US\$ 750), she was sexually assaulted by the driver. Similar cases often occur in the U.S.,¹²⁵ sometimes transpiring within hours of each other on the same day. Apparently, it is the TNCs' responsibility to ensure passenger safety during ridesharing trips. Hence, the following questions are raised: Do the background checks discussed above sufficiently reduce the number of criminal cases? Is it possible to find an appropriate balance between adequate background checks and non-discrimination policies?

Background checks have their limitations, and as the Equal Employment Opportunity Commission (EEOC) has noted, they can have a negative impact on minority drivers.¹²⁶ In *El V. Southeastern Pennsylvania Transportation Authority*, Douglas El was denied permission to continue to drive paratransit buses for individuals with disabilities based on the background check requirement of the Southeastern Pennsylvania Transportation Authority (SEPTA). The district court upheld

¹²⁵ C Custer, "Uber nightmare: Chinese woman robbed, sexually assaulted in three-hour ordeal" (26 August 2015), online: Technasiacom <www.technasia.com/uber-nightmare-chinese-woman-robbed-sexually-assaulted-threehour-ordeal>.

¹²⁶ See U.S. Equal Employment Opportunity Commission, online< www.eeoc.gov/eeoc/>. The U.S EEOC is a federal agency formed in 1965. The EEOC has the authority to investigate discrimination charges. The EEOC has issued specific and detailed guidelines regarding background checks to ensure that everyone is treated equally. See "Background Checks: What Employers Need to Know", online: Eeocgov <www.eeoc.gov/eeoc/publications/background_checks_employers.cfm>. The EEOC has also claimed that "background checks have limited predictive value and can have a disparate impact on minority drivers". See Brishen Rogers, "The Social Costs of Uber" (2015) SSRN Electronic Journal at 93; See also US, Equal Employment Opportunity Commission, *Consideration of Arrest and Conviction Records in Employment Decisions under Title VII of the Civil Rights Act of 1964* (Guidance No 915-002) (2012), online: <www.eeoc.gov/laws/guidance/upload/arrest_conviction.pdf>.

SEPTA's background check, concluding that it was necessary to reduce risks to paratransit passengers.¹²⁷ However, the appeals court emphasized the need for employers to "accurately distinguish between applicants [who] pose an unacceptable level of risk and those [who] do not," and stated that the defendant must "overcome the showing of disparate impacts by proving a 'manifest relationship' between the policy and job performance."¹²⁸ However, the court did not explain how TNCs could "accurately distinguish" between applicants of different risk levels.

Other important questions include the following: Should stricter background checks be required for private vehicle drivers? Is the experience of riding in a traditional taxi clearly better than that of riding in a ridesharing vehicle? As asked by Brishen Rogers, "is there any reason to think that problems of dangerous or underinsured Uber drivers will not be self-correcting?"¹²⁹ Rogers believes in the self-balancing and coping abilities of a competitive economy. Arguably, TNCs such as Uber should have incentives to "embrace compromise legislation", including legislation regarding "safety inspections, liability insurance levels, and background checks on drivers."¹³⁰ Nevertheless, there are many reports of strong TNC opposition to new regulations.¹³¹ Hence, it is advisable that legislators enact appropriate regulations regarding the responsibilities and ethics of TNCs to provide better oversight of this emerging economy.

C. Vehicle safety

¹²⁷ *EL v. Southeastern Pennsylvania Transportation Authority*, 2007 US Lexis (3d Cir. 2007).

¹²⁸ *Ibid*, para 14.

¹²⁹ Rogers, *supra* note 126 at 93.

¹³⁰ *Ibid* at 9.

¹³¹ *Ibid* at 10, n 34.

In the U.S., drivers must ensure that their vehicles successfully pass inspections and comply with vehicle standards. In the *Rasier-PA* case, the company was asked not to permit the use of vehicles older than eight years.¹³² In addition, all vehicles must be easily identifiable while operating, for example, by displaying the TNC's decal in the right rear window.¹³³

In China, considerable attention is paid to vehicle emissions, and there are stricter requirements for private vehicles that are used for public transportation. For example, the Beijing City Taxi Reservation Network Management Services Implementation Details¹³⁴ ask that all private ridesharing vehicles meet the following requirements before operating: for 5-passenger-cars, the wheelbase is not less than 2650 mm (including new energy cars) and the engine displacement is not less than 18 L; for 7-passenger cars, the wheelbase is not less than 3000 mm and the engine displacement is not less than 20 L. Many other cities, such as Shanghai, Tianjin and Hangzhou, also have strict rules regarding the wheelbase, engine displacement and vehicle length of ridesharing vehicles.¹³⁵

However, many Chinese scholars believe that it is unnecessary to pass such cumbersome rules.¹³⁶

In Shanghai, for example, a survey conducted by Didi indicates that fewer than one-fifth of current

¹³² Opinion and Order, *supra* note 91 at 42.

¹³³ Bryan Cave, 8“Cal PUC issues new rules for TNCs” (26 April 2016), online: Bryan Cave Sharing Law<www.lexology.com/library/detail.aspx?g=9ff83235-70de-44f9-acc0-915346a69591>.

¹³⁴ The Beijing City Network Reservation Taxi Management Service Management Implementation Details, 2016 (China), the government of Beijing.

¹³⁵ The Shanghai City Taxi Reservation Network Management Services Implementation Details, 21 December 2016 (China), the government of Shanghai; The Hangzhou City Taxi Reservation Network Management Services Implementation Details (draft for opinion), 10 October 2016 (China), the government of Hangzhou; The Tianjin City Taxi Reservation Network Management Services Implementation Details (draft for opinion), 09 October 2016 (China), the government of Tianjin.

¹³⁶ Some Chinese scholars believed that such a strict regulation might work against the development of ridesharing market. See e.g. Xu Xin, “The Legality and Legal Remedies of Administrative Rules on Online Car-hailing Service” (2017) 3 J of Shandong U (Philosophy & Social Sciences); see also Luo Kaihong, “Challenges and Countermeasures

Didi drivers' cars meet the new wheelbase regulations.¹³⁷ Another issue is whether these regulations can be enforced. Several scholars claim that the regulations may undermine the Administrative License Law of the People's Republic of China, which mandates that a local region's administrative licenses shall not hinder the ability of individuals or enterprises of other regions to engage in production and business and provide services in the local region and shall not restrict the commodities of other regions from entering the market of the local region.¹³⁸ Hence, the legality of these regulations remains questionable. In contrast, the U.S. and Canada have not passed such strict and detailed regulations regarding ridesharing vehicles.

D. Record keeping, reports, and audits

Record keeping is one of the most important components for the healthy development of the ridesharing economy. In the U.S., TNCs must maintain verifiable service records for a certain minimum period.¹³⁹ For example, in the Rasier-PA case, Rasier-PA has been asked to maintain

under the Legal Thinking about Online Car Booking Regulation" (2016) 34:6 J of Taiyuan U of Technology (Social Sciences Edition).

¹³⁷ Meng Jing, "The ride gets bumpy, costly - Business - Chinadaily.com.cn" (31 October 2016), online: Chinadailycomcn <www.chinadaily.com.cn/business/motoring/2016-10/31/content_27221152.htm>.

¹³⁸ Administrative License Law, 2003(China), art 15.

¹³⁹ See e.g. *Interim Administrative Rule for Transportation Network Companies*, TRN-14.23 Or Reg (2015) Art H. The interim administrative rule of the City of Portland set the following requirements for digital record keeping:

H. Digital Record Requirements - Secure, digital records with contact information from TNC Drivers and TNC passengers shall be maintained by the TNC. Such records shall provide a verifiable way to identify drivers and riders for investigatory purposes.

i. TNCs own the digital records and are responsible for their maintenance and the records produced by them.

ii. If a Portland Police Bureau Officer requests access to any record to assist in the investigation of any crime after following appropriate legal process, the TNC must provide access thereto within 24 hours.

iii. No TNC Company or Driver may allow any unauthorized person to intentionally access any records produced by the digital record systems.

relevant records for two years after the provision of service.¹⁴⁰ Drivers' background information, accident reports and insurance reports, among other records, are subject to different record-keeping requirements.

However, these rules are limited in record-keeping period requirements without any other specific requirements on private data protection. In fact, in addition to ensuring driver safety and allowing audits, the protection of private data – such as ride information, location history, and payment history – is an important purpose of establishing record-keeping regulations. Privacy protection became a major concern after it was reported that Uber, one of the largest TNCs, released rider information. There are two main concerns about privacy protection in the ridesharing economy. First, user information should be protected from the government, to a certain degree, and second, user information should be protected from the use of public.

On the one hand, law enforcement and governments need to collect data to facilitate investigations of crimes or terrorism. However, regulators paid little attention to the privacy issue until Uber provided information about more than 5 million passengers and 300,000 drivers in California to state regulators during the second half of 2015.¹⁴¹ Nationally, Uber has released data on 11.6 million passengers and 583,000 drivers.¹⁴² Moreover, Uber claims that it has received 33 requests from regulators nationwide. Although it has endeavored to narrow these requests, “there's very little to stop them from saying, ‘Give us more data and we're still not going to tell you why

iv. The TNC Company shall notify the City of a known data security breach in the same manner as provided in ORS 646A.600 to ORS 646A.628.

¹⁴⁰ The objection to the compliance plan, *supra* note 95 at 69.

¹⁴¹ Marisa Kendall, "Uber releases rider information, raises privacy concerns – The Mercury News" (12 April 2016), online: Mercurynewscom <www.mercurynews.com/2016/04/12/uber-releases-rider-information-raises-privacy-concerns/>.

¹⁴² *Ibid.*

otherwise we're going to shut you down,” according to Gautam Hans, a San Francisco-based policy counsel at the Center for Democracy & Technology, a nonprofit that focuses on Internet privacy issues.¹⁴³ Currently, neither Chinese nor U.S. regulations specifically address concerns regarding the limitation of regulators’ access to these records.

On the other hand, regulations must protect user information from abuse by TNCs. Early in 2014, Uber was criticized for tracking users in real time without their permission by using its “God View” function.¹⁴⁴ Although Uber has insisted that it has a strict privacy protection policy, it was reported that Uber continued to allow broad access to private information by five former Uber security professionals.¹⁴⁵ Spangenberg, a former information security employee of Uber, once said that “Uber’s lack of security regarding its consumer data was resulting in Uber employees being able to track high profile politicians, celebrities, and even personal acquaintances, including ex-boyfriends/girlfriends and ex-spouses.”¹⁴⁶ Spangenberg’s lawsuit also claims that TNCs’ lack of appropriate security measures has led to the deliberate destruction of documents and records, which violates government regulations regarding data protection and user privacy rights.¹⁴⁷ For example, Uber would “lock up” laptops when they were seized, and Spangenberg stated that it was

¹⁴³ *Ibid.* Uber also states that in many cases, regulators send blanket requests for data without explaining why they need the information or how the information will be used.

¹⁴⁴ According to Samuel Ward Spangenberg, a former forensic investigator of Uber Technologies, “God view” is a tool of Uber used to track, for example, the whereabouts of politicians, celebrities, and even Uber employees’ personal acquaintances, such as their ex-boyfriends and ex-girlfriends. See *Samuel Ward Spangenberg vs. Uber Technologies, Inc. and Does 1-50*, inclusive, Np. CGC-16-552156 (Sup Ct (Cal, US), 2016) at 2. In his court declaration, he complained that Uber did not have appropriate regard for data protection and that all employees had access to private consumer information.

¹⁴⁵ It was reported that there were no strict barriers to giving or getting information at Uber. Thousands of employees could obtain details regarding customer trips and private customer information after Uber trips ended. See Will Evans “Uber said it protects you from spying. Security sources say otherwise” (12 December 2016), online: Reveal <www.revealnews.org/article/uber-said-it-protects-you-from-spying-security-sources-say-otherwise/>.

¹⁴⁶ *Ibid.*

¹⁴⁷ *Ibid.*

his job to encrypt the computers of the San Francisco office.¹⁴⁸ Under these circumstances, i.e., when computer data are erased or encrypted, it is difficult for law enforcement departments to find information on TNC computers, even if they are able to obtain the machines. Hence, there should be clear legal regulations regarding the type of user information that TNCs can collect and use.

Compared with regulations in the U.S. and Canada, Chinese regulations offer even less protection for private data. Indeed, Chinese regulations mention only the maintenance of important information and the responsibility of TNCs to report certain information to authorities. Overall, current regulations concerning record keeping and privacy protection are far from adequate in the ridesharing economy.

E. Qualification certificates for TNCs

Should a special qualification certificate be required for TNCs to enter the ridesharing market be required? Or do regulators view TNCs as typical MSP enterprises? In practice, a qualification certificate is essential to ensure the propensity to operate safely and legally. Chinese regulators require that TNCs hold not only personal or managerial qualifications but also ridesharing service qualification certificates. For example, Chapter VI of the Interim Measures stipulates that any car platform company found in violation of the requirement to provide services with “network reservation taxi transport permits” would be subject to a fine of between 5,000 and 10,000 yuan; in serious circumstances, the potential fine ranges from 10,000 to 30,000 yuan.¹⁴⁹ The required qualification certificate asks that both online and offline service capabilities are available to ensure

¹⁴⁸ *Ibid.*

¹⁴⁹ Interim Measures, *supra* note 24, §VI.

stable service.¹⁵⁰ In contrast, most cities in the U.S. and Canada utilize a more practical process for granting certificates. For example, governments in these cities prefer to establish an experimental period to assess whether the company can meet the applicable requirements.

F. Compliance plan

A compliance plan is a plan developed by TNCs to meet regulatory requirements. A TNC must file a compliance plan within a specified period to obtain a qualification certificate that allows it to operate. In the U.S., the completeness and adequacy of compliance plans are significant factors in the decisions and evaluations of courts or related commissions regarding TNCs.¹⁵¹ In the Rasier-PA case, Rasier-PA was required to demonstrate how it would achieve compliance with the conditions outlined in Appendix A.¹⁵² In particular, Rasier-PA had to identify the Rasier-PA employees, Uber employees and third-party contractors who would be responsible for implementing each certificate condition.¹⁵³ According to the Opinion and Order of the PUC, issued on November 13, 2014, no Certificate of Public Convenience would be issued if Rasier-PA failed to expressly accept the certificate conditions specified in the order in its compliance plan.¹⁵⁴ As this case shows, a compliance plan is a part of the legal process in certain U.S. states.

In contrast, Chinese regulations do not require TNCs to submit their plans as a condition of finalizing the certification process. For Chinese TNCs, a compliance plan is more like a marketing tool that is used to convey company attitudes to the public. For instance, after the Interim Measures

¹⁵⁰ *Ibid.*

¹⁵¹ Appendix A to the Combined Joint Motion, *supra* note 115 at 70.

¹⁵² *Ibid.*

¹⁵³ *Ibid.*

¹⁵⁴ Opinion and Order, *supra* note 91 at 70.

were introduced, many Chinese TNCs published their “compliance plans” to show their determination to operate the platform in compliance with the new regulations.¹⁵⁵

However, unlike the compliance plan submitted by Rasier-PA, Chinese companies focus primarily on the theoretical aspects of these regulations; they prefer to offer opinions for governments rather than merely accept the requirements of governments. For example, Didi believes that the local government’s regulations regarding vehicle access and the hukou limitation reflect a simplistic understanding by the Ministry of Transportation of the goal of “high-quality service.”¹⁵⁶ Didi argues that the establishment of a higher threshold for vehicles and drivers will cause the market to shrink, resulting in an insufficient number of drivers on the platform who are available to transport passengers.¹⁵⁷ For example, according to Didi’s report, fewer than one-fifth of the vehicles that currently operate in the Shanghai market meet the city’s wheelbase requirements. Moreover, out of more than 410,000 Didi drivers providing services in Shanghai, only 10,000 of them hold local household registration status.¹⁵⁸ These statements constitute advice rather than compliance plans. Hence, it is difficult to apply the new regulations in the absence of a compliance plan requirement. In practice, many Didi drivers continue to operate in the city of Shanghai without meeting the city’s standards; TNCs and drivers choose to ignore these requirements because there is no associated supervisory mechanism.

¹⁵⁵ See e.g. Didi Chuxing, “Didi’s response to interim regulations in Beijing, Shanghai and other cities. (8 October 2016 at 17:26), online: Weibo<www.weibo.com/diditaxi?profile_ftype=1&is_all=1#_0>. [translated by author]

¹⁵⁶ *Ibid.*

¹⁵⁷ *Ibid.*

¹⁵⁸ *Ibid.*

In contrast, in the U.S., the submission of compliance plans allows TNCs to bring their subjective initiatives in line with the judicial or legislative process by encouraging them to establish a comprehensive self-organizing mechanism with higher standards. Moreover, a compliance plan is a requirement of the legal application process. For instance, the order only generally regulates insurance requirements and thus it is the responsibility of Rasier-PA to satisfy the goal established in the order. Specifically, Rasier-PA must demonstrate that its insurance coverage is between Stages 0 and 3, refine its insurance model with its insurance partners, and identify the party or parties responsible for driver instruction and the insurance claim process.¹⁵⁹

G. Institutional structures for passenger protection

Although the ridesharing economy can provide great benefits for passengers, all jurisdictions are currently facing the challenge of protecting passengers when they travel via Internet-based reservations. Many governments do not pay sufficient attention to this issue, preferring to manage it through traditional consumer protection laws. However, disputes in the ridesharing economy can be particularly complicated because of the different understandings of concepts in the ridesharing economy. Therefore, before identifying the means through which governments establish passenger protections, we first must establish the legal categorization and definition of passengers. For example, is it a commercial service? According to the three modes of the ridesharing economy that are discussed in Chapter II, if ridesharing is purely a traditional shared ride, then passengers should not be regarded as consumers because they do not purchase a service. In other words, they don't have to pay for the trip. However, if ridesharing is viewed as a vehicle-sharing journey, should passengers be considered consumers? If so, do they have the same rights as traditional consumers?

¹⁵⁹ Opinion and Order, *supra* note 91 at 50-53.

According to the U.S. definition, a consumer is “an individual who purchases and uses products and services in contradistinction to manufacturers who produce the goods or services and wholesalers or retailers who distribute and sell them.”¹⁶⁰ Chinese law defines consumers as those who purchase and use commodities or receive services for daily consumption. Both Chinese and U.S. laws regard the actions of paying, buying or purchasing as significant identification methods.¹⁶¹ From this perspective, passengers who pay for their rides should be regarded as consumers and thus should be protected by the present law or by other relevant laws in the new regulations.

China passed the General Principles of Civil Law in 1986, and it passed separate legislation to enact the branches of civil law rather than only consolidating them into a single code. For example, in 1993, China separately promulgated its consumer protection law.¹⁶² Hence, the main responsibility here for Chinese government is to further apply its consumer protection law into the emerging ridesharing market. In contrast, the U.S. focuses on enacting statutes and rendering decisions as guides for further consumer protections in this new market. This section identifies several methods that the two governments have established. In China, for instance, passengers can also seek the assistance of the Consumer Association.¹⁶³ The Chinese government does not have a governmental agency for consumer protection issues. Hence, these public organizations are responsible for exercising social supervision over commodities and service.¹⁶⁴ For example, the

¹⁶⁰ Gale Virtual Reference Library, “Consumer” in *West's Encyclopedia of American Law 2nd* by Jeffrey Lehman & Shirelle Phelps (Detroit : Thomson/Gale, 2005).

¹⁶¹ *Law of the People's Republic of China on Protection of Consumer Rights and Interests*, 2013 (China) [Revised].

¹⁶² *Ibid.*

¹⁶³ *Ibid.*, art 31. The Consumer Association and other consumer organizations are public organizations formed in accordance with applicable laws.

¹⁶⁴ *Ibid.*

Consumer Association can make reports to relevant administrative departments or accept and hear complaints of consumers and offer investigations and mediations of their own.¹⁶⁵

In the U.S., by contrast, the Federal Trade Commission (FTC) plays a significant role in regulating the ridesharing economy and protecting consumer rights. On November 17, 2016, FTC staff released an in-depth report on the app-based sharing economy of TNCs. According to this report, the FTC “has already been active in providing advice to rule makers and regulators regarding how to amend the laws and regulations that apply to the sharing economy through a competition advocacy program. The FTC can give advice and offer opinions on the potential impact of pending legislation.”¹⁶⁶ Further, the FTC has clarified its objectives in regulating ridesharing economy by emphasizing the importance of market balance. Specifically, Chairwoman Ramirez’s explains the FTC staff advocacy letters as follows:¹⁶⁷

[E]nforcers and policymakers have to strike a balance. We must allow competition and innovation in the form of these new peer-to-peer business models to flourish. At the same time, where necessary, targeted regulatory measures may be needed to ensure that these new business models have appropriate consumer protections; but they should be no greater than necessary to address those concerns.¹⁶⁸

The FTC prefers a neutral and unbiased attitude toward the emerging sharing economy. Thus, regulators should be sufficiently cautious when considering the necessity of additional regulations.

¹⁶⁵ *Ibid*, art 33 (3) (4).

¹⁶⁶ US, Federal Trade Commission, *The “Sharing” Economy Workshop Segment 1 Transcript* (2015). [Segment 1]

¹⁶⁷ US, Federal Trade Commission, *The “Sharing” Economy Issues Facing Platforms, Participants & Regulators* (2016)

¹⁶⁸ Edith Ramirez, “Keynote Remarks of FTC Chairwoman Edith Ramirez 42nd Annual Conference on International Antitrust Law and Policy Fordham Law School”, Remark, (2015).

In the U.S., many other agencies also protect consumers. The biggest difference between the U.S. and China in this regard is that each U.S. state has its own consumer rights protection agencies and labor unions, which dramatically outnumber Chinese consumer rights protection organizations. In addition, U.S. consumer protection organizations have greater rights to speak on consumers' behalf. For instance, in California, the commission's Consumer Protection and Enforcement Division(CPED) once issued a nine-page investigative order to recommend fines for TNCs. According to CPED's investigation, among 154 "zero-tolerance"¹⁶⁹ complaints that were reviewed, Rasier failed to suspend or investigate 151 complaints of them.¹⁷⁰ Hence, CPED recommended a \$7,500 fine per violation.¹⁷¹ In Pennsylvania, the PUC asked Rasier-PA to submit a compliance plan as a condition of obtaining a certificate for experimental service. Moreover, the Commission will carefully track whether Rasier-PA's services satisfy the demands of the public "in a safe and efficient manner."¹⁷²

Moreover, the FTC also has authority to promulgate specific rules that "define unfair or deceptive trade practices."¹⁷³ In this regard, Chinese agencies have less power to protect consumer rights. In addition, the Consumer Association seems unable to adapt to the new ridesharing economy.

¹⁶⁹ According to the TNC Zero Tolerance Policy Requirements, it is a TNC's responsibility to instruct the driver to stop the service immediately if the TNC suspects that the driver is under the influence of drugs or alcohol. See US, California Public Utilities Commission, *Decision adopting rules and regulations to protect public safety while allowing new entrants to the transportation industry* (2012) at 26.

¹⁷⁰ David Kravets, "Uber in hot seat with California regulators over drunk drivers" (14 October 2017), online: Ars Technica<arstechnica.com/tech-policy/2017/04/uber-in-hot-seat-with-california-regulators-over-drunk-drivers/>.

¹⁷¹ *Ibid.*

¹⁷² US, Pennsylvania Public Utility Commission, *Joint Statement of Commissioner Pamela A. Witmer and Commissioner Gladys M. Brown* (Harrisburg, Pennsylvania, 2014).

¹⁷³ Corones Stephen et al. "Comparative analysis of overseas consumer policy frameworks" (April 2016), online:<consumerlaw.gov.au/files/2016/05/ACL_Comparative-analysis-overseas-consumer-policy-frameworks-1.pdf> at 154.

In addition to the agencies, state governments in the U.S. and local governments in China also play critical roles, not only in regulatory enforcement but also in consumer advocacy. However, because of the difference between federalism and a unitary government, the highly decentralized state governments in the U.S. often have more rights and responsibilities for consumer protection. For example, states have the authority to issue civil investigative demands (CIDs) to conduct in-depth investigations. This authority can be useful in the ridesharing economy. In particular, a state can request documents from “specific individuals or companies.”¹⁷⁴ By contrast, the local governments in China have supervisory authority rather than CID power. Local governments do not often become involved in private cases, although they have the authority to make local rules in accordance with central government regulations. However, this authority is limited. Hence, we do not see many differences in the decisions among various cities in China. In the U.S., state governments act in response to local conditions. For instance, New York and Pennsylvania have different regulatory methods and attitudes toward the ridesharing economy. It is an interesting phenomenon that in New York, many Uber drivers went on strike to object to stricter regulations, whereas in China, traditional taxi drivers went on strike to demand stricter regulations. The Taxi and Limousine Commission (TLC), a New York City agency, always prefers tighter market regulation to protect passengers’ legal rights. In contrast, the government of Pennsylvania has been more cautious in regulating the ridesharing economy, as evidenced by its preference for an experimental certificate model. In addition, the government of New York City has devoted significant attention to road capacity and congestion-causing violations, whereas the government

¹⁷⁴ *Ibid* at 160.

of Pennsylvania has focused on how to protect small cab companies' equal access to public transportation.¹⁷⁵

H. Taxation

Taxation is another major concern of governments and states that has been ignored in recent regulations. Whether TNCs should pay taxes for providing transportation sharing services remains unclear, but in 2016 and 2017, legislative processes regarding taxes occurred in both the U.S. and certain cities in Canada. Many cities have asked for a "hotel occupancy" tax for short-term rentals from accommodation sharing services.¹⁷⁶ However, whether the responsibility for paying taxes lies with the hosts or the platforms remains an open question.

According to the 2017 federal budget of Canada, the government plans to impose a goods and services tax (GST) and harmonized sales tax (HST) to the cost of ridesharing services.¹⁷⁷ The idea behind this change is to charge the same taxes for traditional taxi services and ridesharing services in order to eventually achieve tax fairness. The new tax went into effect on July 1, 2017.¹⁷⁸ According to the report, the effect of this change will be modest for federal revenues, accounting for "just \$3 million in additional revenue in 2017-18", but will make a significant difference in terms of leveling the playing field.¹⁷⁹ Uber dislikes this plan and claims that it is a tax on

¹⁷⁵ James Campolongo, *Remarks Expanding on August 28, 2014 Testimony Before the Pennsylvania Public Utility Commission En Banc Transportation Hearing*, ed (Pennsylvania Taxicab and Paratransit Association, 2014) at 7.

¹⁷⁶ Airbnb, one of the largest accommodations sharing companies, has started to collect a "hotel occupancy" tax directly from guests. See Cindy Widner, "AirBnB quietly started collecting Texas hotel occupancy taxes yesterday" (02 May 2017), online: Curbed Austin <austin.curbed.com/2017/5/2/15522428/austin-airbnb-hotel-taxes-state-texas>.

¹⁷⁷ "Uber Canada hits back at Liberal plan to charge tax on rides" (23 March 2017), online: CBC News <www.cbc.ca/news/business/uber-gst-tax-budget-1.4038389>.

¹⁷⁸ *Budget Implementation Act 2017 No. 1*, SC 2017, c 20, s 2.

¹⁷⁹ Dean Beeby, "Budget 2017: Hello Uber tax, goodbye transit credit" (22 March 2017), online: CBC News <www.cbc.ca/news/politics/federal-budget-2017-uber-bonds-transit-tax-1.4036893>.

innovation that will hurt the ridesharing economy. In a sense, the value of ridesharing services is that it makes transportation more affordable and sustainable, and the Canadian federal budget plan achieves exactly the opposite.¹⁸⁰ Ian Black, regional general manager for Uber Canada, also notes that small business owners have already received an exemption from federal tax laws and argues that this policy should be extended to taxi drivers. This exemption would be the best way to level the playing field.¹⁸¹

In Georgia, House Bill (H.B.) 225 includes TNCs in the definition of dealers of services who should collect and remit sales tax.¹⁸² However, Rep. Jay Powell (R), a H.B. 225 sponsor, claimed in his talk with Bloomberg BNA's Chris Marr (subscription required) that TNCs are seeking to transfer this tax responsibility to drivers.¹⁸³ In Hawaii, TNC drivers and taxi drivers are required to post their tax licenses or their employer's general excise tax licenses in vehicles and to "submit a tax identification number with routine filings."¹⁸⁴ In Nevada, State Bill(S.B.) 376 imposed the state's 3 percent excise tax upon rides provided by TNCs.¹⁸⁵ In South Carolina, a tax of 1 percent of the gross trip fare is imposed on TNCs.¹⁸⁶ In New York City, a 4% state sales tax, 5% city sales tax and 0.375% Metropolitan Commuter Transportation District (MCTD) surcharge are imposed on "black car" services (professional limousine services) if the cars enter the city.¹⁸⁷

¹⁸⁰ Statement from Uber Canada on the 2017 Federal Budget" (23 March 2017), online: Uber Blog <www.uber.com/en-CA/blog/federal-budget-2017/>.

¹⁸¹ *Ibid.*

¹⁸² US, HB 225, *Ride share networks; licensing and sales tax exemption; repeal inoperable provisions*, 2017-18 Ga Assem, Ga, 2017.

¹⁸³ Laura Lieberman, "Extras on Excise: Will New State Tax Bills Prove Minor Delays or Major Detours for Ride-Sharing Services?" (15 March 2017), online: Bna.com <www.bna.com/extras-excise-new-b57982085340>.

¹⁸⁴ *Ibid.*

¹⁸⁵ *Ibid.*

¹⁸⁶ *Ibid.*

¹⁸⁷ *Ibid.*

Based on these regulations, we can conclude that different tax bills have different definitions of taxpayers and different tax rates. It will take significantly more time to determine which approach is most helpful to the healthy development of the ridesharing economy.

V. Further unsolved problems

The above discussion indicates that existing regulatory systems fail to adequately address the following areas.

A. Disabled passengers

Passengers with disabilities should be treated fairly in the ridesharing market, but current regulations fail to provide for such treatment. Indeed, TNCs and even national regulations often lack the accessibility regulations that are included in traditional taxi regulations. Because most self-use vehicles in the ridesharing market cannot provide electric wheelchairs, scooters or any other devices for disabled passengers, people with disabilities do not have equal access to this market in the absence of regulatory intervention.

1. General protection for disabled passengers

The history of anti-discrimination legislation that protects the rights of disabled people is long in most Western countries, especially the U.S. and Canada. The U.S. enacted Section 504 of the Rehabilitation Act of 1973¹⁸⁸ and the Americans with Disabilities Act to guarantee equal rights for people with disabilities and to eliminate barriers that prevent disabled people from accessing transportation. According to the Americans with Disabilities Act, “mass transportation entities are

¹⁸⁸ *Rehabilitation Act*, USC §504 (1973).

required to make efforts to purchase or lease wheelchair-accessible vehicles, although this mandate does not apply to private entities providing taxi services.”¹⁸⁹ However, the Americans with Disabilities Act also mentions that private entities such as limousines and car services¹⁹⁰ should not discriminate against people with disabilities and must provide the same service “without any refusal by the driver to stow mobility devices.”¹⁹¹ Efforts have also been made to provide equal accessibility in Canada. For example, British Columbia and Ontario both require wheelchair accessibility in taxicabs. In Quebec, taxi drivers are required to participate in mandatory training for persons with disabilities.¹⁹² However, because TNC drivers use private vehicles, it is difficult to ensure accessible facilities and transportation for people with disabilities. The payment method also limits accessibility to those whose disabilities prevents them from using smartphones to make payments. Currently, Uber operates in almost 573 cities around the world; however, they provide ramps or hydraulic lifts for disabled passengers in only a few cities, such as Chicago and San Diego.

2. Practical barriers for disabled passengers’ protection

Hence, the provision of wheelchair-accessible vehicles is a complex problem for all regulators. If ridesharing drivers are required to use wheelchair-accessible vehicles, who is responsible for funding the necessary changes? Although Austin¹⁹³ and Seattle¹⁹⁴ have determined that TNCs will

¹⁸⁹ Matthew W Daus, *The Expanding Transportation Network Company “Equity Gap”, Adverse Impacts on Passengers with Disabilities, Underserved Communities, the Environment & the On-Demand Workforce* (New York: University Transportation Research Center (Region 2) of The City College of New York, New York University School of Law’s Labor and Employment Law Center, Cornell University’s School of Industrial and Labor Relations, 2016) at 25.

¹⁹⁰ *Ibid* at 25.

¹⁹¹ *Ibid*.

¹⁹² Société de l’assurance automobile du Québec, *Taxis and Limousines* (Québec).

¹⁹³ Daus, *supra* note 189 at 31.

¹⁹⁴ *Ibid*.

bear the responsibility of paying a surcharge for an “accessibility fund”,¹⁹⁵ most new regulations do not provide a clear answer to this question, and this regulatory gap has already led to significant litigation. In September 2014, the National Federation of the Blind of California and service dog users Michael Hingson, Michael Kelly, and Michael Pedersen brought a lawsuit against Uber Technologies, Inc. and Uber’s subsidiaries Rasier, LLC and Rasier-CA, LLC (collectively, “Uber”) because of discriminatory ride denials.¹⁹⁶ One of the named plaintiffs, Mr. Pedersen, stated that he once explained to an UberX driver that his dog was a service animal but the UberX driver responded “I don’t care. It’s not my problem.” The UberX driver cancelled Mr. Pedersen’s trip request.¹⁹⁷ Similar experiences routinely occurred, depriving people with disabilities of equal and fair access to Uber services, and thus the plaintiffs alleged that Uber’s service violated 1) the Americans with Disabilities Act, 2) the California Unruh Civil Rights Act, and 3) the California Disabled Persons Act. Uber defended itself by claiming that its function is only to connect private car owners and potential passengers and that it has no rights over the drivers’ personal vehicles. However, according to a Statement of Interest filed by the U.S. Department of Justice, “Title III of the Americans with Disabilities Act prohibits discrimination based on disabilities by a range of entities, including public accommodations and, as applicable here, private entities primarily engaged in providing transportation services.”¹⁹⁸ Additionally, Uber could no longer excuse itself based on its status as a “private entity”. As the first nationwide class-action case against an app-

¹⁹⁵ *Ibid.* According to Taxicab and For-Hire Vehicle Rules in the City of Seattle, an accessibility fund will collect all Wheelchair Accessible Services (WAS) surcharges for the “higher operational costs of wheelchair accessible taxi (WAT) services.” TNCs are asked to collect and remit WAS surcharges to the City of Seattle. See also US, Seattle, *City of Seattle Taxicab and For-Hire Vehicle Rules*, (SMC 6.310.175) (City of Seattle Finance and Administrative Services, 2016)

¹⁹⁶ *Nat’l Fedn. of the Blind of Cal. v. Uber Techs., Inc.*, 2015 U.S. Dist. Lexis 51767 (Dist Ct).

¹⁹⁷ Victory for Blind Rides in Landmark Civil Rights Lawsuit against Uber; Case Advances - Disability Rights Advocates" (21 April 2015), online: Disability Rights Advocates <dralegal.org/press/victory-for-blind-riders-in-landmark-civil-rights-lawsuit-against-uber-case-advances/>.

¹⁹⁸ *National Federation of the Blind of California, Michael Kelly, Michael Hingson, and Michael Pederson, v Uber Technologies, INC, Rasier, LLC, and Rasier-CA, LLC*, 2015 US Lexis 51767 at 4 (N.D. Cal).

based TNC, the settlement of the aforementioned case has had a profound influence on the legal protection of people with disabilities. On April 30, 2016, Uber agreed to require both existing and new drivers to “expressly confirm that they understand their legal obligations to transport riders with guide dogs or other service animals.”¹⁹⁹ Uber also promised to “enhance their response system for complaints related to discrimination against guide-dog users and will track detailed data on all allegations of such discrimination.”²⁰⁰ Although this case represents a great step for people with disabilities, these commitments are limited to service-animal users.

Because China lacks legislation that protects disabled passengers in the ridesharing economy, more specific legislation is needed in this regard. Presently, the quality of life of people with disabilities in China depends primarily on the awareness and social responsibility of companies. In the case of the ridesharing economy, TNCs are at the forefront in terms of implementing policies friendly to disabled passengers. For example, in May 2017, the United Nations Development Programme (UNDP) and Didi launched a cooperative program to make chauffeured car services accessible to people with disabilities in China.²⁰¹

Hence, to help TNCs to better serve society and to improve convenience for more people, TNCs and the government should work together to develop detailed rules for the emerging ridesharing market in order to ensure a more accessible transportation system for everyone. Those passengers

¹⁹⁹ US, National Federation of the Blind, *Groundbreaking Settlement to End Discrimination Against Blind Uber Riders Who Use Guide Dogs* (Berkeley, 2016).

²⁰⁰ *Ibid.*

²⁰¹ "UNDP and Didi Chuxing to Provide Accessible Transportation for All"(01 January 2017), online: GAATES Global Accessibility News <globalaccessibilitynews.com/2017/06/01/undp-and-didi-chuxing-to-provide-accessible-transportation-for-all/>.

who suffered damages, discriminations could also use the law of class action as an effective weapon to protect their legal rights.²⁰²

B. Price and tip regulations

1. Surge pricing system

The nature of the ridesharing market has created different pricing modes in the market. Thus far, TNC fares are not regulated by law. Hence, fares are almost completely self-regulated by TNCs. One disadvantage of such self-regulation in the market economy is the profit tendency, which leads to price wars and a “surge pricing” phenomenon. Most TNCs have implemented the “surge pricing” model, which refers to a system whereby prices vary based on area and time in response to market demand. For example, during rush hour, prices will surge by some selected multiplier to better satisfy market demand.²⁰³ Thus, surge pricing continuously changes, and the recalculated price will be shown on the passenger’s screen. However, many passengers complain that after their trips started, they received no indication of a surge price until they received the final receipt.²⁰⁴ One passenger even received a \$205.03 bill for a 20-minute trip that usually cost \$20.71.²⁰⁵ To solve this problem, TNCs are seeking to modify the surge pricing system. However, some have questioned whether the upfront surge pricing system secretly overcharges passengers. Christian Persa, a senior RSG contributor, once reported that Uber’s upfront pricing system “is really just a

²⁰² It should be mentioned that even though a few class action lawsuits have been discussed above, it is common for ridesharing companies, like Uber, to fend off passenger’s rights to participate in any class action in their arbitration agreement. However, plaintiffs are continually litigate the enforceability of these class action bans, and in the U.S., courts still play their roles when these clauses violating applicable principles of state contract law. See U.S Terms of Use, *Uber* online:<www.uber.com/legal/terms/us/>. (Last visited on 18 January, 2018); see F. Paul Bland, Jr, Claire Prestel, “Challenging Class Action Bans in Mandatory Arbitration Clauses” (2009) 10 :2 Cardozo J of Conflict Resolution 369 at 371.

²⁰³ During rush hour in certain areas of China, prices can increase drastically to due high multipliers, such as 4X or 5.1X, because there is no maximum price limit for most price models. See also “Uber Surge Pricing - How does surge pricing really work?” (2015), online: Alvia <www.alvia.com/what-is-uber-surge-pricing/>.

²⁰⁴ Biz Carson, "Uber will stop showing the surge price that it charges for rides" (June 2016), online: Business Insider <www.businessinsider.com/uber-stops-showing-surge-pricing-rates-2016-6>.

²⁰⁵ Daus, *supra* note 189 at 32.

betting machine with the job of making sure that all of the rides average out to a profit for Uber.”²⁰⁶

The algorithm seems to have two different ways of calculating fares. Drivers obtain payments based on tips, time and distance, whereas passengers are charged based on potential time and distance. Hence, the price difference between the two calculation modes ultimately favors Uber, because unlike traditional taxis, private vehicles do not have fixed meters.

2. Taxi meters on TNC vehicles?

This discrepancy raises a second, more significant question regarding pricing systems and pricing tools; namely, do surge pricing systems work as well as taxi meters? This is the first question that lawmakers must answer before attempting to regulate TNC pricing systems. To answer this question and identify a better pricing system, we can look at a case. The Licensed Taxi Drivers' Association (LTDA) and the Licensed Private Hire Car Association (LPHCA) claimed that Uber's app violated a criminal law because it qualified as a taximeter but was not fixed in drivers' vehicles.²⁰⁷ In the Measuring Instruments (Taximeters) Regulation SI 2006 No. 2304, a taximeter is defined as:

a device that works together with the signal generator to make a measuring instrument and, with the device measuring duration, calculates distance on the basis of a signal delivered by the distance signal generators and calculates and displays the fare to be paid for a trip on the basis of the calculated distance or the measured duration of the trip, or both.²⁰⁸

²⁰⁶ Christian Perea, "Uber's Upfront Pricing is Secretly Overcharging Passengers Without Paying Drivers" (26 September 2016), online: The Rideshare Guy Blog and Podcast <therideshareguy.com/ubers-upfront-pricing-is-secretly-overcharging-passengers-without-paying-drivers/>.

²⁰⁷ At the heart of this debate is the Private Hire Vehicles (London) Act 1998, section 11 of which states that “no vehicle to which a London PHV license relates shall be equipped with a taximeter. See *Private Hire Vehicles (London) Act 1998* (UK), s 11; see *Transport for London v Uber London Ltd, Licensed Taxi Drivers Association, Licensed Private Hire Car Association*, [2015] EWHC 2918, ALL ER (D) 137. (QBD) at para 5.

²⁰⁸ *Ibid*, at para 10.

In this case, the court considered how fares are calculated on the entire Uber network and determined that calculations are conducted by servers operated by Uber in the U.S and then sent to the customer and driver simultaneously and are not conducted by the app itself. The definition of taximeter should not include a GPS signal-receiving and -forwarding server located outside the vehicle.²⁰⁹ Thus, Uber's application is not a taximeter and does not break the law. This decision established legal certainty regarding the use of smartphones as a software-based pricing system in the U.K. However, it also stimulated discussion about whether a GPS signal server used to set prices constitutes a taximeter. Whether GPS technology is a commercial measuring device that serves as a taximeter is also a major concern in the U.S. In 2012, the U.S. National Work Group on Taximeters (USNWG) held a meeting in Gaithersburg, MD, to further discuss the growing use of this type of commercial measurement.²¹⁰ According to H.B.44, taximeters are "devices that automatically calculate at a predetermined rate or rates and indicate the charge for hire of a vehicle".²¹¹ The biggest difference between a traditional taximeter and an app-based device is the measurement source. Is it necessary for lawmakers to develop a separate H.B.44 code²¹² for GPS measurements if the H.B.44 Taximeters Code is declared to be inapplicable to GPS-based vehicles? To regulate not only speed sensor-based measurements but also this new model of measurement, it was determined that the basic definition of taximeter had to be expanded such the taximeter code could adapt to the development of new technologies.²¹³

²⁰⁹ *Ibid.*, at para 1.

²¹⁰ The U.S. National Work Group on Taximeters (USNWG), Draft meeting summary, (delivered at USNWG on Taximeters GPS/APP Subcommittee, hold a meeting in Gaithersburg, 24 July 2015) at 2. [Draft meeting of USNWG 2015]

²¹¹ National Institute of Standards and Technology, HB44 § 5.54.

²¹² *Ibid.*

²¹³ Draft meeting of USNWG 2015, *supra* note 187 at 6. During the July 2015 meeting, the subcommittee expressed its concerns about the existing code. For example, Ms. Macey stated that HB44 needed to be modified in scope and vocabulary and Mr. Davis mentioned the importance of expanding the basic definition to include new technologies.

However, neither regulations in China nor cases in the U.S. have confirmed the legality of these pricing systems, and this legal uncertainty could lead to more litigation regarding TNC pricing systems.

3. Regulations of tips

a. North America

Beyond the issue of price regulation, drivers in North America have been engaged in legal fights against TNCs regarding missing tips. TNCs such as Uber claim on their websites that a 20 percent tip for drivers is included in the price, but Uber does not mention tips for its black car service.²¹⁴ Furthermore, passengers are informed that they must pay the transportation fare and that no other fees will be added, including cash tips. However, drivers argue that TNCs are deliberately stealing their tips because of the lack of appropriate rules. Such cases have been filed in Illinois, Massachusetts, and California.²¹⁵ Although Uber denies the drivers' claims, U.S. District Judge Edward Chen of San Francisco rejected this denial, making it possible that drivers could expand the "missing tips" case to a national class-action case.²¹⁶ Hence, regulations regarding tips present another problem that cannot be ignored. In addition to superficial tip conflicts, this problem raises questions regarding drivers' employment status. Initially, Uber claimed that their drivers were independent contractors, not employees, but ultimately settled two class-action suits regarding this improper classification in California and Massachusetts and paid \$100 million "to compensate its

²¹⁴ Joshua Brustein, "Uber's Other Legal Mess: Drivers Sue Over Missing Tips" (29 August 2013), online: Bloombergcom <www.bloomberg.com/news/articles/2013-08-29/ubers-other-legal-mess-drivers-sue-over-missing-tips>.

²¹⁵ *Ibid.*

²¹⁶ Bob Egelko, "Uber drivers' suit over tips clears hurdle" (07 December 2013), online: SFGate <www.sfgate.com/business/article/Uber-drivers-suit-over-tips-clears-hurdle-5044858.php>.

drivers for their lost tips and expenses, plus interest.”²¹⁷ Hence, the clarification of ridesharing contracts is essential to avoid more problematic disputes.

b. China

By contrast, lawsuits over tips are rarely filed in Asian countries that do not have a history of tipping, such as China. In China, it is unnecessary to tip when taking a taxi or dining in a restaurant. In the ridesharing economy, passengers can use an “add tips” button in TNC applications, but few passengers are accustomed to giving tips; even drivers regard tips as a bonus rather than a mandatory payment. Based on the author’s experience as a passenger, Chinese TNCs seem to be more accustomed to using tips rather than surge pricing to encourage drivers to flood specific zones during periods of excessive demand. Specifically, before the trip, passengers are asked if they want to add a tip for the driver in order to improve the likelihood of receiving a driver response. Hence, for passengers, “adding tips” and “surge pricing” both mean that they will pay more for a trip. Moreover, Chinese passengers have complained that the “add tips” system has increased the difficulty of hailing cars. In response to these complaints, Didi announced that it would stop suggesting that customers add tips and instead would find a more efficient order distribution mechanism.²¹⁸ Asian countries also have particular payment systems and are less dependent on credit cards than Western countries. A major complaint about tipping practices is that tips paid by credit card machines in private vehicles will be subject to processing fees. For instance, Chinese passengers are accustomed to using electronic devices instead of bringing cash or credit cards.

²¹⁷ Hannah Levintova, "Meet "Sledgehammer Shannon," the lawyer who is Uber’s worst nightmare" (December 2015), online: Mother Jones <www.motherjones.com/politics/2015/12/uber-lawsuit-drivers-class-action-shannon-liss-riordan>.

²¹⁸ "Didi Stops Advising Riders To Add Tips To Alleviate The Difficulty Of Hailing A Car During Spring Festival " (25 January 2017), online: Tmtpostcom <www.tmtpost.com/2562771.html>.

Long before the appearance of “Apple pay” or “Samsung pay”, the Chinese widely used “WeChat” or “Alipay” apps to make payments. According to a technology introduction video made by New York Times, WeChat is an app that can be used for nearly every occasion in Chinese society.²¹⁹ Passengers can request a ride in WeChat and then use the “Wallet” function to pay the driver by scanning the driver’s QR Code or making pre-payment settlements. In addition, it is interesting that Chinese ridesharing apps generally ask passengers if they want to add a tip before a driver accepts their request. Under these circumstances, tips are used as a kind of voluntary surge pricing scheme that increases the likelihood that passengers’ ride requests will be accepted by drivers. Hence, disputes regarding tipping practices differ widely across different countries. Therefore, countries should enact suitable regulations based on their own cultural and legal conditions.

C. Reputation and trust systems

In the emerging ridesharing economy, reputation and other trust systems play an important role in attracting passengers and expanding markets. TNCs often use these trust systems to provide more information to all market participants. Thus, passengers and drivers can obtain a first impression of each other by looking through their respective ratings pages on the app. Nonetheless, much work needs to be done to construct a healthy regulatory framework that encourages and maintains participants’ trust. On the one hand, a good trust and reputation system subject to effective governmental supervision would attract more players to the field. Those who are hesitant to join the market might alleviate their concerns by using a recommendation system. On the other hand, a healthy reputation system ensures that TNCs will act ethically, which will encourage TNCs and

²¹⁹ The New York Times, “How China Is Changing Your Internet” (9 August 2016) online : www.nytimes.com/video/technology/100000004574648/china-internet-wechat.html at 00h:01m22s.

governments to work together to implement relevant laws. However, the essence of reputation and trust systems is data – specifically, private data about both passengers and drivers – which gives rise to a number of legal issues in practice, including issues related to false information and privacy. Therefore, a properly designed trust system should not ignore the importance of protecting individuals’ privacy. With governmental supervision and regulation, the transparency and accuracy of these systems is ensured. To date, many regulations address privacy issues but none address reputation systems, which can also have significant consequences on the fairness of transactions.

1. False information

Today, false information provided by drivers has become the primary reason why passengers choose not to use ridesharing services. In China, the authorities have been struggling to investigate and confirm the identities of TNC drivers. A police investigation in Shenzhen revealed that 2,191 TNC drivers had criminal records and 40 were currently wanted for crimes.²²⁰ In addition, authorities are seeing an increase in “ghost driver” cases. Passengers in China have been scared by a number of driver profiles using “ghost” pictures. Specifically, drivers upload ghost or zombie pictures to their profiles instead of using real pictures of themselves. These drivers charge the trip by touching the “Start Trip” button as soon as they accept the passenger request but never pick up the passengers.²²¹ Moreover, passengers usually cancel the trip after seeing a horrific driver picture,

²²⁰ Cara McGoogan, "Uber's 'ghost drivers' are scaring passengers into giving them money" (22 September 2016), online: The Telegraph <www.telegraph.co.uk/technology/2016/09/22/ubers-ghost-drivers-are-scaring-passengers-into-giving-them-mone/>.

²²¹ *Ibid.*

in which case the cancellation fee goes to the driver. Many “ghost” pictures have been digitally edited to successfully pass Uber’s information checking system.²²²

Many “fake ride” experiences were shared on social media sites, such as Weibo, which is one of the most popular websites in China. These negative feedbacks have significantly undermined Uber’s market presence. “Ghost drivers” are just one of the false information problems plaguing TNCs in China. Many drivers tamper with their background information or profiles in order to enter the market. Therefore, the elimination of fraud and deception in the reputation system should be a major focus of regulators.

2. Ratings and peer reviews

Today’s mainstream reputation models usually allow both sides of a transaction to access the system to comment on others or to see how they are being evaluated. How can the transparency of this process be guaranteed?

In China, many Didi drivers ask their passengers to provide positive feedback in the ratings system when they drop passengers at their destinations. Although most drivers ask politely and sincerely, some drivers will threaten passengers to obtain positive feedback. Some passengers even receive persistent harassing phone calls from drivers after leaving negative comments.²²³ Due to an

²²² Tracy You, "Uber's ghost drivers' scare and scam passengers in China" (23 September 2016), online: Mail Online <www.dailymail.co.uk/news/peoplesdaily/article-3804003/Uber-s-ghost-drivers-zombie-like-profiles-scare-scam-passengers-China.html>.

²²³ “Female customer receives hundreds of harassment phone calls and messages after canceling her ridesharing trip” (12 June 2016), online: Financeifengcom <finance.ifeng.com/a/20160612/14477676_0.shtml>[Translated by Author]. Passengers feel unsafe not only because of harassing phone calls but also because of other offensive driver behavior. For example, it has been reported that a Didi driver posted his passenger’s personal information on a porn site, claiming that she was a sex worker, after she gave him a bad review. See "Didi Driver Posts Woman’s Information on Porn Site after Bad Review" (13 July 2016), online: eChinacities <www.echinacities.com/news/72657>.

increase in such cases, TNCs have implemented an automatic phone number generation system to shield passengers' phone numbers. Should drivers have the same right to protect their phone numbers? Moreover, should passengers be able to see how they are rated by drivers? All of these questions remain unanswered under the current laws.

3. Cancellation of registration

The cancellation of driver and passenger registrations is the most overlooked element of the reputation system. Although drivers and passengers should have the ability to easily delete their accounts, it is impossible in practice for users to delete all of their online data. Moreover, most TNCs have failed to provide any guidance on the registration cancellation process. Another significant problem related to registration cancellation concerns privacy protection. If drivers or passengers want to cancel their registrations and delete all of their private user data in the databases of relevant apps, what legal means do they have to protect their private information? How can TNCs maintain company operations without violating users' privacy? These questions highlight the importance of legislation that clearly delineates the responsibilities of governments and TNCs with respect to reputation and trust systems.

V. Legal and policy considerations for the future

A. Socio-economic influences

Socio-economic impacts are another important consideration for governments and legislators as they regulate this new market. As one of the largest components of the entire sharing economy, the ridesharing economy offers governments significant increases in revenue²²⁴ and opportunities to attract investment. In addition to these direct economic influences, environmental and traffic congestion issues should be considered, because they also play pivotal roles in this socio-economic chain. A study in California found that 9 – 13 vehicles could be removed from the streets by one ridesharing vehicle,²²⁵ which would mean fewer vehicle emissions. Moreover, multiple studies have shown that TNCs such as Uber significantly affect traffic flow and decrease traffic congestion.²²⁶

In addition, labor market issues should be seriously considered. It has been reported that the strongest opposition to TNCs comes from traditional taxi drivers; indeed, protests from taxi drivers and taxi committees frequently occur in nearly all markets in which TNCs operate. Not only taxi drivers but also mail-delivery drivers, supermarket clerks and food-delivery drivers, all of whom TNCs want to displace by letting private drivers do the same work, are afraid of losing their jobs. Hence, regulations must also consider the risk that TNCs will drive down wages, create destitution, and weaken labor protections. It is interesting that regulators and many courts are hesitant to specifically and accurately define this relationship in written law or in practice. Without a clear legal definition, confidence in the prospective labor market is baseless. For example, according to

²²⁴ See e.g. Salman Dostmohammad & Jude Long, “Regulating the Sharing Economy: Applying the Process for Creative Destruction” (Essay for National Student Paper Competition, Dalhousie University Institute of Public Administration 2015) [unpublished] at 266. For example, PwC’s projections estimate that the sharing economy has the potential to increase global revenues from roughly \$15 billion to \$335 billion by 2025.

²²⁵ Elliot Martin & Susan Shaheen, “The Impact of Carsharing on Household Vehicle Ownership” (01 April 2011), online: eScholarship <escholarship.org/uc/item/7w58646d#page-6>.

²²⁶ Ziru Li, Yili Hong & Zhongju Zhang, “Do Ride-Sharing Services Affect Traffic Congestion? An Empirical Study of Uber Entry” (30 August 2016), online: SSRN <papers.ssrn.com/sol3/papers.cfm?abstract_id=2838043>.

the General Laws of Massachusetts, an individual shall be considered to be an employee unless “the individual is customarily engaged in an independently established trade, occupation, profession or business of the same nature as that involved in the service performed.”²²⁷ As we all know, TNC drivers drive their own vehicles, wear their own clothes rather than uniforms, and – most importantly – set their own driving schedules.²²⁸ Confirmation of their labor status would influence not only existing private drivers but also future low-wage workers. For example, Brishen Rogers believes that “drivers may fare better under Massachusetts’ liberalized test for employment status, which requires a putative employer to prove that a worker is an independent contractor and applies a more stringent test.”²²⁹ If TNCs and drivers are deemed to be in an employment relationship, the ridesharing market would definitely attract more drivers who lost their jobs due to the expansion of TNCs. Evidently, TNCs will not spontaneously declare drivers to be employees. Hence, this article emphasizes the need for legislators and courts to address the issue.

In conclusion, regulators and TNCs should address these problems and construct an appropriate regulatory system rather than allowing legal uncertainties to remain. Moreover, the solutions to all of the problems mentioned above can be tied to the relationship between drivers and TNCs.

B. Public opinion

Successful regulation should be sufficiently flexible to accommodate the different perspectives of governments, TNCs, and most importantly, the public. In China, cities’ interim regulations for the ridesharing economy have been the subject of criticism. In particular, citizens have complained that certain regulations are overly strict and impracticable. Although the government established a

²²⁷ Mass Gen Laws Ann 149 § 148B.

²²⁸ Rogers, *supra* note 126 at 99, n 59.

²²⁹ *Ibid.*

period for public comments, the final regulation did not change significantly. One survey conducted in the U.S. found that 69 percent of U.S. adults who are familiar with the sharing economy will not trust sharing economy companies unless they are recommended by someone they trust.²³⁰ Hence, a citizens committee could potentially provide meaningful advice to regulators. Because this is a mutually beneficial regulatory process, the participation of the public could also decrease the delays of legislative practice.

C. The risk of monopolies

The risk of monopolies in the future development of the ridesharing economy has been underestimated. Sufficient competition should be injected into ridesharing markets under new frameworks. In China, Didi and Kuaidi, two local ridesharing companies, once controlled almost 80 percent of the market. In February 2015, Didi and Kuaidi merged to become one of the largest TNCs in China.²³¹ In July 2016, Uber waved a white flag and sold its Chinese operations to Didi. Since then, Didi has become the largest ridesharing company in China, with nearly 90 percent of the market.²³² In September 2016, Shen Yangdan, a spokesman for China's Ministry of Commerce, claimed that the Ministry of Commerce was investigating the sale of Uber to Didi because Didi failed to report the merger to the Ministry of Commerce. The Anti-Monopoly Law of the People's Republic of China states that if a combined market share of two business operators is or above 66%

²³⁰ "The Sharing Economy: Consumer Intelligence Series" (2017), online: <www.pwc.com/us/en/technology/publications/assets/pwc-consumer-intelligence-series-the-sharing-economy.pdf> at 9.

²³¹ According to a study by Analysis International, in December 2015, Didi and Kuaidi were the two largest TNCs in the Chinese market. It was estimated that Didi controlled roughly 55 percent of the market and Kuaidi controlled nearly all of the remainder. See Gerry Shih, "China taxi apps Didi Dache and Kuaidi Dache announce \$6 billion tie-up" (13 February 2015), online: Reuters <www.reuters.com/article/us-china-taxi-merger-idUSKBN0LI04420150214>.

²³² Jingmin Zheng, "Didi and Uber, here comes anti-monopoly investigations." (04 November 2016), online: Cbnweekcom <www.cbnweek.com/articles/theme/14751>. [translated by author]

of the market share, the combined business operator may be assumed to constitute a dominant market position.²³³ However, the investigation of Didi's acquisition of Uber has not yet yielded results. In short, new regulations that clearly express the intent to enforce anti-monopoly laws in the ridesharing economy are needed.

D. Governmental data collection and use

Current ridesharing market regulations include various rules regarding the protection of private data. However, the question of how governments can collect and use data from TNCs remains unanswered.

On the one hand, data collected by TNCs could help governments to craft more efficient public policies. For example, the transportation department could use TNCs' operating data to better time traffic lights or plan road networks and public transportation routes. On the other hand, the government should not have unlimited access to private data, especially in the absence of specific regulations regarding that access.

The collection of user data during the ridesharing experience also raises the question whether TNCs have a legal or ethical responsibility to provide user data to the government. How should regulations balance the right to privacy against the need for government surveillance? This issue will become more pertinent as the ridesharing economy develops further. Thus, governments must enact legislation in this area and TNCs should cooperate with governments in accordance with the applicable laws. Mark Zuckerberg, Facebook CEO, once said, "When governments ask Facebook

²³³ *Anti-monopoly Law*, 2007 (China), art19.

for data, we review each request carefully to make sure they always follow the correct processes and all applicable laws, and then only provide the information if it is required by law.”²³⁴ TNCs can gain passengers’ confidence by adopting a similar policy and handling government requests prudently and “on a case-by-case basis”.²³⁵

E. Categorize ridesharing as another taxi service

1. Current debates regarding ridesharing categorization

Are ridesharing services essentially the same as traditional taxi services? For the Chinese government, the answer is yes. Although TNCs are striving to classify themselves as a completely new transportation business model, Chinese regulations still use the word “taxi” to refer to these Internet-based services and regulators continue to try to categorize them as another kind of taxi service. Conflicts regarding the definition of “taxi” have also arisen in Canada. In *Canada inc. c. Agence du revenu du Québec* (SOQUIJ AZ-51286289, 2016EXP-1616, J.E. 2016-886), Uber Canada claimed that the services offered by Uber Canada are not taxi services because the Highway Safety Code (Quebec) defines a “taxi” as “a motor vehicle operated under a permit issued in compliance with the Act Respecting Transportation Services by Taxi” and Uber drivers do not have such permits.²³⁶ Uber Canada also noted that its prices were not regulated by the Act Respecting Transportation Services by Taxi.²³⁷ However, Judge Cournoyer rejected these arguments.²³⁸

²³⁴ Matt Vasilogambros, "What Private Information Did Uber Give the Government?" (April 2016), online: The Atlantic <www.theatlantic.com/technology/archive/2016/04/user-information-uber-shared/477921/>.

²³⁵ *Ibid.*

²³⁶ *Uber Canada inc. c. Agence du revenu du Québec*, 2016 CanLII QCCS 2158 at para 2.

²³⁷ Ian Caines & Zvi Halpern Shavim, "Taxis, Taxes, and the Complexity of Compliance in the Sharing Economy" (January 2017), online: Ctfca <www.ctf.ca/ctfweb/en/newsletters/canadian_tax_focus/2017/1/170103.aspx>.

²³⁸ *Ibid.*

Therefore, as discussed above, the core element of regulating this emerging economy is to bring the traditional taxi market and the ridesharing market to the same level. The healthy development of the ridesharing economy is not only good for a country's economy but also likely to have a dramatic impact on every consumer in the market. Indeed, every part of the new regulatory framework could have a noticeable effect on consumer convenience, safety, and expenditure. Should bylaws and regulations aim simply to turn the ridesharing market into another taxi service? This question is likely the first one legislators will ask themselves when considering new ridesharing rules. What kinds of regulations should be enacted, and what kinds of regulations will be workable in the ridesharing economy? These questions are at the core of a new regulatory framework.

In response to tighter regulation by bylaws, Ramit Kar, Uber's general manager for Alberta, once said that "The bylaw is trying to turn ridesharing into another taxi company."²³⁹ Kar's statement accurately reflects the goal of many countries' new regulatory frameworks. As discussed in Part III, the Chinese government used the term "taxi" when naming the Interim Measures; however, certain local governments use the word "ridesharing" in their own regulations, such as the Instructions on Private Vehicle for Transportation Sharing Use in Beijing. The Chinese government has tried to differentiate its ridesharing laws from other network-based ride service laws and to classify other network-based ride services as taxi services. Nonetheless, these regulations do not create an independent license category for services provided by TNCs and, except for certain

²³⁹ Annalise Klingbeil & Calgary Herald, "Uber says city's bylaw changes won't work for ride-sharing service", (22 February 2016), online: Calgary Herald <calgaryherald.com/news/local-news/new-ride-sharing-rules-go-to-city-council-monday-uber-already-asking-for-changes>.

specific rules, the basic requirements of these regulations for TNC drivers are as same as those regulations for traditional taxi drivers. Should ridesharing drivers be subject to the same regulations as traditional taxi drivers? The main reason for regulating ridesharing services is to improve the operation of the taxi industry by introducing healthy competition. Hence, the major question for governments should be whether requiring ridesharing drivers to pass the same examinations as traditional taxi drivers (or even stricter examinations) will encourage or discourage competition. In most cities in Canada and the U.S., TNCs must pay an expensive license fee to the city. For example, a company such as Uber must pay \$7,253 plus an 11-cent commission per ride in the city of Ottawa.²⁴⁰ In contrast, cities such as Toronto have chosen to relax requirements for traditional taxi services while enacting strict bylaws for ridesharing services in order to help taxi drivers compete successfully. Under new regulations, traditional taxi drivers do not have to “take city-run training programs for CPR or first aid.”²⁴¹ The huge financial burden, combined with extraordinarily time-consuming legal processes, will likely increase the cost of ridesharing services, and this increase will significantly weaken the price advantage that ridesharing services have over taxis, which in turn will undermine the main reason for the popularity of ridesharing services. Therefore, authorities should reconsider the imposition of regulations on the ridesharing economy in light of the risk that they may have the opposite of the desired effect. If governments do consider ridesharing services to be taxi services, then the only difference between the two services is that ridesharing is based on a multi-sided business model.

2. Suggestions

²⁴⁰ Jon Willing, "City legalizes Uber under new licensing system" (13 April 2016), online: Ottawa Citizen <ottawacitizen.com/news/local-news/live-council-votes-on-bylaw-changes-that-would-make-uber-legal>.

²⁴¹ Betsy Powell, "Ride-sharing legal Friday, but the Uber-taxi war rages on" (14 July 2016), online: thestarcom <www.thestar.com/news/gta/2016/07/14/ride-sharing-legal-friday-but-the-uber-taxi-war-rages-on.html>.

In a nutshell, governments should focus carefully on the following questions. First, which issues should be solved by the ridesharing market itself and which issues should be handled by the government? Second, do TNCs have the ability to resolve these issues in a satisfactory manner? Finally, if the answer to the second question is no, then what is the best solution that authorities can offer?

The Mowat Centre, an independent public policy think tank at the University of Toronto, once made the following suggestion:

Better policy would benefit from a more robust assessment of the risk that comes from allowing – or banning – a new sharing economy approach, and delivering a regulatory approach that is targeted at that informed risk assessment. By establishing a strategic operating framework that assesses a broad range of relevant issues, governments will be better positioned to deliver balanced, modern approaches that meet the needs of a range of interested parties and the broader public.²⁴²

The Mowat Centre recognizes the importance of conducting a balanced assessment to examine the impacts of new regulatory frameworks on both the ridesharing market and the traditional taxi market – in other words, the potential impact of new regulations on the promotion of innovation and fair competition. Taking the bylaw of the city of Toronto as an example, if traditional taxi services are lightly regulated while ridesharing services are tightly regulated, the fairness gap between innovation and tradition will be narrowed. At the same time, however, the impact on competition will gradually be weakened. Hence, governments around the world should build their own regulatory frameworks by adopting measures that are suited to the development prospects of

²⁴² Sunil Johal & Noah Zon, “Policymaking for the Sharing Economy: Beyond Whack-A-Mole”, (2015) Mowat Centre Working Paper No 106.

their respective local taxi markets and by conducting adequate risk analyses or preliminary investigations.

It is unrealistic to ask all authorities to create completely new regulatory frameworks for the ridesharing economy. The reality is that most current regulations applicable to the ridesharing economy are merely simpler versions of the traditional taxi regulation framework, which lacks creativity and specificity. Moreover, it has been argued that “[m]any regulations . . . have come to burden innovation and become a formidable barrier to new forms of entry and entrepreneurialism.”²⁴³ FTC workshop participants believe that regulation of transportation participants should be the same, “regardless of whether a supplier is a platform-based new entrant or a traditional supplier”,²⁴⁴ in order to avoid unnecessary and unfair advantages for TNCs. TNCs are currently offering ridesharing services to the public before they seek regulatory approval. Catherine J.K. Sandoval of the CPUC claims that this “illegal” behavior is a “school of thought”.²⁴⁵ Thus, an important question is whether there is a need to promulgate new regulations for the ridesharing economy. If the answer is yes, what is the proper process for seeking regulatory approval, and what is the proper content of the regulations? Hence, what comes up here is the problem of technology neutrality and platform neutrality.

Technology neutrality is one of the key concept of the new European regulatory framework for electronic communications networks and services.²⁴⁶ One important meaning of technology

²⁴³ Kendyll Ferrall, "Adam Thierer: Let the Market Self-Regulate" (12 June 2015), online: Americans for Tax Reforms < www.atr.org/adam-thierer-let-market-self-regulate?page=1 >.

²⁴⁴ Segment 1, *supra* note 166 at 54.

²⁴⁵ *Ibid* at 55.

²⁴⁶ Winston J. Maxwell, Marc Bourreau, “Technology Neutrality in Internet, Telecoms and Data Protection Regulation” (2014) Computer and Telecommunications L. Rev. Forthcoming at 1. [Maxwell]

neutrality is that the scope of regulation should be defined by technology neutrality, which means that the same regulatory principles of market analysis and remedies should be applied to “all kinds of electronic communications networks and services”.²⁴⁷ Under this definition, relevant markets would be identified by the same market analysis process regardless of the difference between technologies and services. The example of retail mobile and fixed-line services were used to better illustrate this meaning of technology neutrality in Maxwell and Bourreau’s paper. They mentioned that retail mobile services were generally not considered as fixed-line services. Hence, these two services used to belong to different relevant markets and should be regulated differently.²⁴⁸ However, the 2009 Better Regulation Directive redefine the principle of service neutrality.²⁴⁹ Under the new principle, the holder of the spectrum license should no longer be restricted in the kinds of services offered, and to better apply this principle, the organization of the spectrum channels will predetermine the kind of service and technology that can be offered.²⁵⁰ Ridesharing services and traditional taxi services may also share the same principle to some extent for technology neutrality, the same as the case of retail mobile services and fixed-line services. In the context of this definition of technology neutrality, regulators will find it is easier to regulate new services. Moreover, it was believed that this regulatory flexibility will help the market to develop their own self-regulatory or co-regulatory solutions.²⁵¹ However, Maxwell and Bourreau also mentioned the risk of extending regulators’ authority into emerging market by applying this kind of technology neutrality without a “healthy dose of regulatory restraint”.²⁵²

²⁴⁷ *Ibid* at 3.

²⁴⁸ *Ibid.*

²⁴⁹ *Ibid.*

²⁵⁰ *Ibid.*

²⁵¹ *Ibid* at 4; See also Guy Halfteck, “Legislative Threats” (2008) 61:3 Stanford L. Rev. 629.

²⁵² *Ibid.*

Nevertheless, technology neutrality doesn't naturally lead to platform neutrality. In the case of ridesharing service, it is the Internet technology neutrality that should be emphasized or platform neutrality? In some contest of the information economy, the term "platform" can replace the term "network".²⁵³ However, it is believed that the platform is not just a network.²⁵⁴ It is true that the ridesharing economy is based on "network" technology, however, it is not the "network" alone that makes the modern ridesharing economy. It is because of the existence of TNCs and other ridesharing platforms that the traditional ridesharing model finally moves to its modern model. Hence, the most important problem is how to use the core characteristic of "neutrality" to help developing real "open, comprehensive, and unbiased"²⁵⁵ platforms. French *Conseil National du Numerique* has claimed that "[t]he goals behind the neutrality principle should ...be factored into the development of digital platforms: while extremely useful and innovative, their growth must not be allowed to hamper the use of Internet as a forum for creation, free expression and the exchange of ideas."²⁵⁶ Responding to this goal, regulators should be careful enough to extend the extant principles to ridesharing platforms. Otherwise, significant adverse effects may happen. For example, seeing ridesharing platforms from the perspective of anticompetitive, ridesharing companies maybe subjected to more obligations, which may burden the development of innovation in fast-moving market.²⁵⁷ Under this circumstance, as it has been discussed above, governments should adopt the Mowat Centre's advice to conduct a balanced assessment before applying neutrality principles.

²⁵³ Julie E. Cohen, "Law for the Platform Economy" (2017) 51:1U.C. Davis L Rev 133 at 143.

²⁵⁴ *Ibid* at 143.

²⁵⁵ Frank Pasquale, "Platform Neutrality: Enhancing Freedom of Expression in Spheres of Private Power" (2016) 17:2 Theor Inq L 487 at 488. [Pasquale]

²⁵⁶ Conseil National Numerique, Platform Neutrality: Building An Open And Sustainable Digital Environment (2014), online:<www.cnnumerique.fr/wp-content/uploads/2014/06/PlatformNeutralityVA.pdf>, cited in Pasquale *Ibid* at 489.

²⁵⁷ Maxwell, *supra* note 246 at 5.

In a conclusion, whether a new framework is created or the traditional framework is maintained, regulators should recognize that ridesharing regulations should react more efficiently to the fast-paced changes that characterize this economy.

VII. Solutions

For the government, the aim to protect the ridesharing economy should not simply be satisfied by “picking winners”.²⁵⁸ According to a New York City study, there are five basic principles for protecting the ridesharing economy: simplicity, flexibility, balance, enforcement and evenness.²⁵⁹ Therefore, to build a healthy operating environment, both legislators and TNCs should enact regulations and rules based on appropriate assessments of current market conditions and legal uncertainties. During this process, it should be recognized that there are reasons for regulatory differences. Based on the above analysis, we know that similar regulatory requirements cannot provide adequate protection for every participant in the ridesharing economy. Although some traditional taxi service providers believe that they should “prevent their market from being disrupted by [the] ‘sharing economy’ service”²⁶⁰ and thus object to any new regulations, legislators must recognize the risk of absolute equality. The ultimate aim is to provide a healthy competitive platform for every participant in the transportation market. Hence, the following suggestions are for both legislators and TNCs. The rapidly evolving nature of the ridesharing economy requires flexible regulation that can adapt to unforeseen problems. Legislators should not enact a detailed, ironclad law; rather, new regulations should emerge as a legal framework based on principles.

²⁵⁸ Segment 1, *supra* note 166 at 55. With the aim of picking winners, regulatory differences are made in favor of specific entrants rather than creating an equal legal framework to regulate new economies.

²⁵⁹ For-Hire Vehicle Transportation Study, *supra* note 109 at 9.

²⁶⁰ Segment 1, *supra* note 166 at 56.

TNCs must be responsible for filling regulatory gaps through self-regulation. A healthy competitive mechanism will encourage TNCs to self-regulate to facilitate experimental certification for both private vehicle drivers and themselves. Under these circumstances, traditional carriers will voluntarily reform when confronted by adequate competitive pressures. Overall, the responsibility of the government is to provide guidance to the emerging market regarding the above key factors rather than putting “a preemptive regulatory policy in place to solve [every] problem.”²⁶¹ In a sense, it is a pyramid mechanism based on regulatory principles, with self-regulation and ex post remedies at the middle and top, respectively.

A. Self-regulation

Molly Cohen and Arun Sundararajan define self-regulation as “the reallocation of regulatory responsibility to parties other than the government.”²⁶² They believe that TNCs should be regarded as actors that play key roles in regulatory frameworks²⁶³ rather than as “entities to be regulated”.²⁶⁴ Julia Black also identifies four types of self-regulation mechanisms.²⁶⁵ In general, all of these mechanisms assume limited governmental involvement.²⁶⁶ Moreover, in practice, a U.S. survey reveals that 64% of sharing economy participants believe that peer regulation is more important

²⁶¹ Ferrall, *supra* note 243.

²⁶² Cohen & Sundararajan, *supra* note 31, at 116.

²⁶³ *Ibid.*

²⁶⁴ *Ibid.*

²⁶⁵ *Ibid* at 123. Julia Black distinguishes four types of self-regulation: “voluntary self-regulation”, “coerced self-regulation”, “sanctioned self-regulation” and “mandated self-regulation”. See also Julia Black, "Decentering Regulation: Understanding the Role of Regulation and Self-Regulation in a 'Post-Regulatory' World" (2001) 54:1 Current Legal Problems. TNCs developed their self-regulation mechanisms naturally while designing their businesses. At the outset, self-regulation is a “voluntary” action in the absence of governmental mandates that impose rules on participants or members. However, the extent and pace of growth of the ridesharing market and of TNCs is highly dependent on the flexibility and full protection of rules. Hence, to obtain government approval, TNCs must redesign their self-regulatory frameworks, which Julia Black calls “coerced self-regulation” or “sanctioned self-regulation”.

²⁶⁶ *Ibid.*

than government regulation.²⁶⁷ Hence, according to both the theoretical and practical opinion, the first solution worthy of focus is self-regulation. During this process, various factors may lead to a nearly perfect self-regulatory mechanism. However, the most important question is why self-regulation should be valued. How can governments and the public gain their confidence from an enterprise's self-regulation?

1. Self-regulations inside companies

Essentially, self-regulations is at its heart designed to advance self-interests by also winning public support.²⁶⁸ In other words, its purpose is to protect self-regulation internal to every company, even though those regulations seem like aiming to protect consumers.²⁶⁹ However, since the ridesharing is essentially a ride-offer service that relies highly on consumers' feedback and reviews, the maturity and integrity of self-regulations inside TNC plays a pivotal role in attracting more consumers for TNC services.

There are three conventional justifications for self-regulation. The first is the existence of some form of market failure.²⁷⁰ Anthony Ogus also claimed that both externalities and information asymmetries are types of market failure.²⁷¹ As we have discussed above that for ridesharing industry, the information asymmetries are a key consideration. The second justification is that "private law instruments are inadequate or too costly to correct the failure."²⁷² The third

²⁶⁷ Albert Downs, "You can't separate millennials from the sharing economy" (21 June 2016), online: Morning Consult <morningconsult.com/opinions/cant-separate-millennials-sharing-economy/>.

²⁶⁸ Harvey C. Jassem, "An Examination of Self-Regulation of Broadcasting," (1983) 5:2 Communications and the Law at 52.

²⁶⁹ *Ibid* at 52.

²⁷⁰ Anthony Ogus, "Rethinking Self-Regulation" (1995) 15:1 OUCJLJ 97 at 97.

²⁷¹ *Ibid*.

²⁷² *Ibid*.

justification is that the self-regulation can better (more cheaply) solve this failure than conventional regulations.²⁷³ These three conditions are the most important reasons for self-regulation.

2. The role of organizations in self-regulation

In comparison to self-regulations inside companies, there are also self-regulatory organizations. Generally, a “greater degree of expertise”, “technical knowledge of practices” and “innovatory possibilities within the relevant area”²⁷⁴ together lead self-regulatory associations (SRAs) to enact institutionalized accepted standards more efficiently than independent companies. Julia Black emphasizes the importance of SRAs by claiming that, “in modern political and social-legal theory, SRAs plays a more fundamental role, acting as intermediaries linking different parts of society.”²⁷⁵ In other words, SRAs can connect different participants of the society. It is because of the significant role that SRAs plays that many countries have already established SARs to exercise regulatory authority, more or less, over a specific industry. For example, in the U.S., the National Association of Realtors (NAR) was formed to regulate the real estate industry and solve the problem of a lack of government regulations in this area.²⁷⁶ China founded the Securities Association of China(SAC) in 1991 with the aim of improving the self-regulatory level in the industry.²⁷⁷ Many other industries have also found their own SRAs to maximize their profit and reduce the cost of regulatory management.

3. Employee classification practices

²⁷³ *Ibid.*

²⁷⁴ Ogus, *supra* note 270 at 98. Anthony Ogus mentioned these three elements as the first advantage traditionally claimed of self-regulation.

²⁷⁵ Julia Black, “Constitutionalizing Self-Regulation” (1996) 59 : 1 Mod L Rev 24.

²⁷⁶ Susan Gray, “National Association of Realtors”(2008) 13:2 J of Business & Finance Librarianship.

²⁷⁷ Chen Ziqiang, “The Role of Self-Regulatory Organizations in China's Securities Industry and Their Contributions to the Capital Market” (Report delivered at the Asian Securities Forum, Beijing, 28 September 2010).

TNCs must correctly classify their members and employees. Many TNCs refuse to clearly define their workers because of the flexibility and savings that a lack of classification can offer. However, from a long-term perspective, as explained by Marcela Sapone, the CEO and co-founder of Hello Alfred, TNCs need to transition these independent contractors to employee status to “exercise more control by providing ongoing training and equipment, and companies that do not implement this shift will face numerous lawsuits, which is not a healthy mode of development.”²⁷⁸ For instance, the California Labor Commission once ruled against Uber, finding that Uber driver Barbara Ann Berwick was an employee rather than an independent contractor.²⁷⁹ Hence, the Commission reimbursed her \$4,152.20 in expenses and interest.²⁸⁰ Although Uber regards this case as rare,²⁸¹ it is time to make a change. On the one hand, one reason why drivers want to participate in the ridesharing economy is that they can enjoy high levels of flexibility and freedom while working for several TNCs concurrently. Many drivers have full-time jobs and only use these platforms during off-hours. On the other hand, TNCs do not want to drastically increase company expenses by paying drivers as employees. Therefore, TNCs must balance driver and company interests by building a more flexible classification system. For example, TNCs could refine the employee classification mode by including both part-time and full-time drivers and could provide

²⁷⁸ Not all drivers can be categorized as employees despite the significant control TNCs have over drivers’ work. People who have other jobs are the most difficult to categorize. In Canada, it is possible to claim that TNC drivers belong to a hybrid employment category. The problem is that different people are trying to interpret Canada’s existing legal framework and these people have different interests at stake. See Aleksandra Sagan, “Uber, Lyft ‘misclassifying’ workers as independent contractors” (20 July 2015), online: CBC News <www.cbc.ca/news/business/uber-lyft-misclassifying-workers-as-independent-contractors-lawsuit-claims-1.3125781>.

²⁷⁹ “California ruling deems Uber driver to be an employee, throwing business model on its head” (18 July 2015), online: CBC News <www.cbc.ca/news/business/california-uber-driver-deemed-to-be-an-employee-not-a-contractor-1.3118353>.

²⁸⁰ *Ibid.*

²⁸¹ *Ibid.*

commensurate benefits and responsibilities for different kinds of employees rather than adopting a “one size fits all” solution.

4. Enforcement mechanism

Effective self-regulation requires a strong enforcement mechanism. TNCs must have independent legal departments that can manage complex legal forms and processes. It is important that TNCs and their employees have sufficient technical expertise and abilities to adhere to government regulations. Furthermore, TNCs should employ independent follow-up teams to ensure driver integrity and conduct insurance checks. Follow-up teams will also play an important role in the effective enforcement of government regulations within TNCs. Although we have discussed many problems in this paper, the top priority here is to develop effective practice principles in order to improve regulatory enforcement. For insurance regulations, a good follow-up team should fulfill two basic functions: 1) following up on company compliance with insurance regulations and 2) following up on drivers’ insurance situations, for example, ensuring that drivers notify their personal insurers that they are operating on a TNC platform and maintaining records of such notifications and other relevant documents. These two seemingly simple functions are both tedious and time-consuming and require a dedicated, independent team. Without an enforcement team, neither government regulation nor self-regulation will be enforced in practice. Moreover, an effective follow-up team could provide detailed instructions to TNC drivers. If government regulations are the only instructions received by drivers, both drivers and passengers will feel confused and “be ill-served”.²⁸² For instance, in the compliance plan submitted by Rasier to obtain an experimental service certificate, the company failed to clearly explain how drivers could access

²⁸² US, The Pennsylvania Public Utility Commission, *Before the Pennsylvania Public Utility Commission*, (Docket Nos A-2014-2416127 & A-2014-2424608) (Harrisburg, 2006) at 9.

company rules. According to the Insurance Federation of Pennsylvania, clear instructions should be given to drivers, as described below:

[...]who they should call, within what time frame, what they should say and do with their other insurance, what information they should collect from passengers or other vehicles or accident victims, and how they are to file a report of the accident with Rasier.²⁸³

Every criterion – not merely insurance rules – should be a part of a complete system that includes procedural rules and substantive rules and does not simply provide obscure notices to interested parties.

5. Flexibility in different markets

The flexibility of self-regulation can have a significant impact on the development of a TNC. Different markets may have different responses to TNC self-regulation. In the aggressive fight for Chinese market share, Uber lost at least \$1 billion per year in China until it sold the Chinese business to Didi.²⁸⁴ To acquire market share initially, Uber commences operations as soon as possible and obtains regulatory approvals later. In the U.S., Uber has tried to convince courts and regulators that it is merely a software company and should not be responsible for regulatory compliance.²⁸⁵ Using this strategy, Uber has managed to convince regulators in certain U.S. cities, such as New York and San Francisco, to change their existing laws.²⁸⁶ Because the laws are more

²⁸³ *Ibid* at 9.

²⁸⁴ Robert Salomon, "The Real Reason Uber Is Losing in China" (07 March 2016), online: Fortunecom <fortune.com/2016/03/07/uber-china-2/>.

²⁸⁵ O'Connor v. Uber, *supra* note 27 at para 17. In this litigation, Uber claimed itself not a TNC but a technology company who has no direct relationship with drivers.

²⁸⁶ *Ibid*.

flexible and they can rely on creative precedents. However, this approach does not work as well in China. Liu Zhen, the head of strategy and government relations for Uber China, once noted that there are many gray areas in ridesharing regulations.²⁸⁷ Even though one of Liu's primary tasks was to help legalize Uber services in China, it seems that both Liu and Uber China seemed to find it was difficult for Uber China to demonstrate the legality of its services by relying on case law.²⁸⁸

In practice, does self-regulation always adapt to government regulation? The truth is that when conflicts arise, companies usually choose not to follow the guidance of the government. In Austin, local voters rejected the Uber and Lyft plan for self-regulation.²⁸⁹ Previously, Uber and Lyft self-regulated in Austin, even conducting fingerprint background checks. In response to restrictive ordinances passed by the City Council, the companies threatened to shut down operations and leave Austin.²⁹⁰ The municipal vote upheld the City Council ordinances, although the companies used "a roster of lobbying tactics" to solve the problem successfully in other jurisdictions.²⁹¹ Free trips and messages sent directly by the companies were used to attract voters in support of Proposition 1; however, these strategies did not guarantee success in Austin.²⁹² Additionally, according to the New York Times, Uber went further by using its VTO program, which is short for "violation of terms of service," to skirt "ethical lines and, potentially, legal ones."²⁹³ Approved by

²⁸⁷ Josh Horwitz, "Uber is mulling a domestic IPO for its Chinese branch, and there's more at stake than cash" (14 August 2015), online: Quartz < qz.com/479693/uber-is-mulling-a-domestic-ipo-for-its-chinese-branch-and-theres-more-at-stake-than-cash/ >.

²⁸⁸ *Ibid.*

²⁸⁹ Alex Hern, "Uber and Lyft pull out of Austin after locals vote against self-regulation" (09 May 2016), online: the Guardian <www.theguardian.com/technology/2016/may/09/uber-lyft-austin-vote-against-self-regulation>.

²⁹⁰ *Ibid.*

²⁹¹ *Ibid.*

²⁹² Richard Whittaker, "Prop 1 Election Results" (07 May 2016), online: The Austin Chronicle <www.austinchronicle.com/daily/news/2016-05-07/prop-1-election-results/>. Austin's Proposition 1 election is a set of TNC rules supported by Uber and Lyft.

²⁹³ The New York Times reported that the VTO program started in 2014 and remains in use, predominantly outside of the U.S. See Mike Isaac, "How Uber Deceives the Authorities Worldwide" (03 March 2017), online: Nytimescom <www.nytimes.com/2017/03/03/technology/uber-greyball-program-evade-authorities.html>.

Uber's legal team, this Uber program was launched as early as 2014 and used to deceive authorities in countries including the U.S., China and South Korea.²⁹⁴ These tactics and political games are not a sensible choice for any company with a sense of social responsibility.

TNCs need to implement stricter regulations for successful long-term development rather than resorting to sophistry – for example, claiming that “the council’s plan would require Uber driver partners to undergo the same background requirements of horse and carriage operators in Austin”²⁹⁵ – or challenging law enforcement for short-term gains.

In addition to adapting to local regulations, another important challenge for TNCs is the threat of fraud, as with fake trips. According to an FT Weekend report, during the summer of 2015, approximately 3 percent of Uber's rides in China were fraudulent.²⁹⁶ Drivers make fake trips to gain bonuses from Uber. Such scams also occur in other countries, but because of China's huge population, the standard TNC regulatory system is insufficient to control the situation. In an effort to avoid fake trips, Uber has introduced a new identity verification system that incorporates voice and facial recognition requirements into its app. From this perspective, the flexibility of self-regulation has a significant impact on the long-term development of TNCs, especially in new markets.

B. Alternative dispute resolution

To contribute a healthier development environment for ridesharing economy, governments also need to offer various accesses to remedial justice. Because the ridesharing economy is an emerging

²⁹⁴ *Ibid.*

²⁹⁵ *Ibid.*

²⁹⁶ Leslie Hook, “Uber’s battle for China” (June 2016), online: FT Weekend<ig.ft.com/sites/uber-in-china/>.

economy, dispute resolutions need to be sufficiently creative to satisfy the requirements of new technologies. Such solutions should carefully consider the needs of various participants, including drivers, passengers and TNCs.

The legal process is expensive and time consuming, and ordinary people cannot afford litigation. Hence, access to alternative dispute resolution facilities, such as online dispute resolution (ODR), mediation, arbitration and small claims court, may facilitate this process.

1. Online dispute resolution

The invention of ODR is important because it helps participants to effectively solve problems in a fast-changing market. High-tech is used in this process to ensure a fair and good-quality litigation process while ensuring that the ridesharing service runs smoothly. Hence, it is clear that the adoption of an ODR platform in the ridesharing economy can maximize advantages for both sides. In fact, the ODR platform was not invented for solving ridesharing disputes; rather, ODR regulation was adopted by the EU as early as 2013.²⁹⁷ Since 15 February 2016, the ODR system has been accessible not only to traders but also to consumers in the EU.²⁹⁸ Although this ODR system is often used by businesses and lawyers with cross-border activities and legal problems,²⁹⁹ it has a strong potential to be used more widely, especially in the ridesharing market. Most disputes in the ridesharing economy relate to economic issues – for instance, unexpected and opaque pricing mechanisms or unnecessary detours to exploit differences in price. Typically, consumers do not

²⁹⁷ *Regulation (EU) No 524/2013 on online dispute resolution for consumer disputes and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC (Regulation on consumer ODR)*, 2013 (The European Parliament and of the Council)

²⁹⁸ *Ibid.*

²⁹⁹ Rogers, *supra* note 126 at 197.

want to waste their time arguing about these troublesome but trivial matters, so they choose not to pursue their claims. However, the ODR phenomenon will finally discourage fraudulent behavior in the ridesharing market:

[The expansion of Online Dispute Resolution in a consumer context] is ‘mostly about finding innovative ways to settle niche disputes which otherwise would remain unresolved due to the high costs of litigation’.³⁰⁰

Thus, it is important for governments to recognize that the healthy growth of the ridesharing economy depends on both parties’ commitment to making trips a quality experience, and the ODR platform is the answer to this problem.

In Canada, British Columbia is the pioneer in the ODR area. Consumer Protection British Columbia is continually making great efforts to build a perfect ODR platform to solve economic disputes. Established under the Civil Resolution Tribunal Act 2012, the Civil Resolution Tribunal (CRT) started providing alternative resolutions for small claims as a new dispute resolution body.

³⁰¹As long as there is a computer or mobile device with an Internet connection, people can access the CRT 24 hours a day, seven days a week. ³⁰² The CRT provides “legal information” using “plain language” and offers “a range of dispute resolution tools, including negotiation, facilitation, and adjudication.”³⁰³

³⁰⁰ Pablo Cortés, *Online Dispute Resolution for Consumers*, ed (he Hague, Eleven International Publishing, 2011).

³⁰¹ "Home - Civil Resolution Tribunal", online: *Civil Resolution Tribunal* <www.civilresolutionbc.ca/>.

³⁰² *Ibid.*

³⁰³ “CRT Overview ,What is the Civil Resolution Tribunal?”, online: *Civil Resolution Tribunal* <www.civilresolutionbc.ca/disputes/>.

Parties submit their dispute to the CRT by completing an application for dispute resolution. Before applying, they can use the Solution Explorer system to learn more about their dispute or similar cases, which can help them gain a comprehensive overview of resolution options. If parties cannot reach agreement during the negotiation process, independent CRT arbitrators will make the final decision based on the information provided by the parties. It is a very efficient problem-solving process that works in both China and the U.S. In June, 2014, the first ODR service in China, the China Online Dispute Resolution Center (China ODR), was established.³⁰⁴ However, according to a study presented at the first UNCITRAL Regional workshop in Asia, few cases have been brought to China ODR since 2005.³⁰⁵ The future of China ODR is thus unclear. Unlike the U.S. and Canada, China has gradually developed a new form of ODR system, called the Internal Complaint Mechanism, which refers to complaints resolving systems established by network transaction platforms.³⁰⁶ For example, Alipay, a third-party payment institution, published its Dispute Resolution Rules in 2005.³⁰⁷ Although its decisions are not binding, the mechanism has played a positive role in the fast-changing market due to its vast customer base. There are also many kinds of ODR systems in the U.S., such as Modria.com, which was established in 2011 and cooperates with eBay.³⁰⁸ The Modria Resolution Center has been successful in the U.S. due to its vast scope of services.³⁰⁹

³⁰⁴ At present, China ODR provides online conciliation, online mediation, online arbitration and other services. See more at its official website: www.chinaodr.com.

³⁰⁵ Qisheng He & Jiping Song, "A Global Online Dispute Resolution System: Is China Ready to Join?", (2010), online: <www.uncitral.org/pdf/english/whats_new/11_2010/1124_8_HE_paper.pdf>, at 5.

³⁰⁶ *Ibid* at 7. The First UNCITRAL Regional Workshop in Asia was hosted by Korea University Law School and the Korean Ministry of Justice in November, 2010.

³⁰⁷ Alipay service was launched by Taobao.com in 2003. As of February 25, 2017, Alipay had more than 400 million registered users, and as of August 10, 2016, the average number of daily transactions was 175 million.

³⁰⁸ Karolina Mania, "Online dispute resolution: The future of justice" (2015) 1:1 International Comparative Jurisprudence at 78.

³⁰⁹ *Ibid*.

Hence, the U.S. and China should take ODR into account and build more cost-effective and efficient platforms to cope with disputes in the ridesharing economy.

2. Small claims courts

Small claims courts are another forum for alternative dispute resolution that “takes place outside a court with the aid of a third party.”³¹⁰ However, it is difficult for consumers without sufficient legal knowledge and experience to fully and equally participate in the process, especially in comparison with the ODR platform. As explained in *Middle Income Access to Justice*, as “[a relatively informal and low cost dispute resolution forum,] small claims courts may still prove difficult to navigate for disadvantaged or vulnerable consumers who lack the experience, language skills or confidence to pursue a claim according to the rules of the tribunal.”³¹¹

C. Compliance and enforcement actions

Comprehensive compliance and enforcement actions are the most important features of a regulatory framework but are difficult to achieve in markets with large populations and numerous participants. A number of methods could be used to guarantee the enforcement process, including the following:

1. Adopting an effective enforcement process

The focus of the entire enforcement process should be on participants in the ridesharing market rather than on legislators and enforcers. Regulations are somewhat difficult to understand for

³¹⁰ C Stephen et al, *supra* note 173 at 212.

³¹¹ M J Trebilcock, Lorne Mitchell Sossin & Anthony J Duggan, *Middle income access to justice*, (Toronto: University of Toronto Press, 2012) at 512.

normal individuals, and a perplexing and time-consuming enforcement process will lead to lower compliance rates and dissatisfaction among participants. Bureaucracy serves as an example. One of the most substantial obstacles to enforcement is the inertia of bureaucratic institutions. First, many enforcement institutions are staffed by people who are used to working with the traditional taxi market; therefore, governments must ensure that every employee has a comprehensive understanding of the new regulations, especially with respect to the differences between traditional taxi service rules and new rules. Second, new regulatory frameworks must be built for markets based on innovative technologies. In this regard, enforcement institutions should improve the innovativeness of their institutional management and organization in order to better adapt to this fast-paced, constantly changing market. For instance, to improve efficiency, governments could try to eliminate unnecessary bureaucratic intermediaries.

2. Constant communication

Without a constant communication platform between governments and participants, those who are experiencing problems in the ridesharing economy will find it difficult to pursue their claims.

For example, legal assistance is one possible solution whereby governments could better understand the needs of the ridesharing market and provide better guidance for market development. Legal assistance is necessary not only during litigation but also during educational processes. Governments should consider extensive programs to educate drivers and consumers about their responsibilities and rights under new regulations, and such programs would require a collective effort among multiple agencies to ensure the adequacy and coherence of the legal information imparted. For instance, drivers who want to take part in the qualification examination

need easy access to an examination database. Passengers need education to protect their legal rights. Responsibility for this education should be assigned to the appropriate agencies. In Canada, there are many educational agencies that aim to help consumers, including the Consumer Measures Committee, the Office of Consumer Affairs, and the Consumers Association of Canada. To address the ridesharing market, these traditional agencies should be adequately updated and should communicate with local transportation bureaus. It should be mentioned that the majority of drivers and passengers regard TNCs as their main source of information. Accordingly, TNCs should convey information effectively and accurately and should be strictly supervised by enforcement agencies.

VII. Conclusion

Although China and certain states in the U.S. have introduced new regulatory frameworks,³¹² the definition of clear regulatory objectives, adoption of appropriate regulatory tools, and facilitation of legal processes are never easy for regulators. The two main questions that regulators should answer before enacting regulations are as follows: (1) Are there meaningful differences between ridesharing services and traditional taxi services? (2) Are the driving forces behind the innovative technologies of the ridesharing economy sufficiently powerful to contribute to a more diversified and sophisticated future compared to that offered by traditional taxi services? Different answers to these two questions will lead to different governmental regulations, but governments will likely never stop seeking to achieve an appropriate balance among all parties' interests and to create a development-friendly environment.

This thesis has explored the legal nature of the ridesharing economy, focusing on the modern ridesharing mode, which has built a complicated relationship net among private vehicle drivers, passengers and TNCs. Understanding this modern ridesharing mode from a broadened definition

³¹² California was the first state in the U.S. to provide a regulatory framework that enabled TNCs such as Uber, Lyft, and Sidecar to operate legally in the state. Further, as discussed above, the CPUC created a new class for TNCs. California even enacted its own bill regarding insurance regulations for TNCs. These new legal frameworks can serve as examples for other states in the U.S. and other ridesharing companies that are seeking to obtain approval from other jurisdictions to operate legally. Many states have made efforts to ensure that government regulations will not prohibit cities from creating new ridesharing rules. For example, in June 2017, new regulations for ridesharing were promised for upstate New York and Long Island. Even Alaska, known as the "last frontier" for ridesharing services, is gradually considering changes to its regulatory framework. In 2015, TNCs such as Uber and Lyft were forced out of Alaska. However, on June 15, 2017, Gov. Bill Walker signed House Bill 132, which allows TNCs to resume operations immediately and legally. Alaska was the last state in the U.S. to authorize TNCs. See US, HB 132, *An Act relating to transportation network companies and transportation network company drivers*, 2017, Alaska; US, Senate Bill S4159, *AN ACT to amend the vehicle and traffic law, the insurance law, the executive law and the tax law, in relation to the regulation of transportation network company services; to establish the New York State TNC Accessibility Task Force; and to amend the state finance law, in relation to establishing the local transit assistance fund*, 2017, NY; US, AB 2293, *An act to add Article 7 (commencing with Section 5430) to Chapter 8 of Division 2 of the Public Utilities Code, relating to transportation*, 2014, Cal; see also Tomio Geron, "Forbes Welcome" (19 September 2013), online: Forbescom <www.forbes.com/sites/tomiogeron/2013/09/19/california-becomes-first-state-to-regulate-ridesharing-services-lyft-sidecar-uberx/#6aec9ae81804>.

by regarding platforms as MSPs, the thesis concludes that it is impractical to simply classify TNC drivers as either employees or independent contractors, so as drivers' liabilities under different classifications. Before illustrating different regulations for the ridesharing economy in the U.S. and China, this thesis discussed conventional approaches of regulating the taxi service in both the U.S. and China. This background regulatory analysis focused on the different legal categorizations and organizations of taxi and ridesharing services by discussing the common carrier and broker classification method, which is no longer adequate to identify participants' liability in a case.

The discussion of current legal frameworks concluded that both Chinese and the U.S. regulations have lots of uncovered realms, for instance, the process of background checking, the insurance regulations and the regulations to protect disabled passengers. Moreover, the thesis raised one important legal consideration for solving current problems, namely, whether it is necessary to turn the ridesharing economy into a traditional taxi economy and regulate ridesharing service under the same legal framework of taxi service. Although China and the U.S. respond differently to this question, the principal conclusion of the thesis is to emphasize the importance of conducting a balanced assessment in guaranteeing current regulatory frameworks rather than create a completely new legal framework for ridesharing economy. Hence, all the solutions proposed in the thesis are legal balance-centered solutions.

In summary, the purpose of regulating the ridesharing economy is the same, in some ways, as the purpose of regulating the traditional taxi market. Specifically, when taxis first appeared, the regulation of the traditional taxi market was necessary to address the legal challenges that arose.

In almost every area that is impacted by technological innovations, legal frameworks must be continually updated to keep pace.

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