Regulating Online Ride-hailing Platforms: Comparing Policy Responses in Beijing and Shanghai to Business Conflicts and National Policy

by

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Bachelor of Law, Nankai University, China, 2014
Master of Law, Renmin University of China, China, 2016

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Abstract

Existing studies on the formulation of regulations for online ride-hailing platforms merely see the process as a struggle between interest groups. They do not address how policymakers perceive this struggle and act on their own initiative to govern these platforms. This study supplements existing studies by exploring how the metropolitan governments of two Chinese cities, Beijing and Shanghai, perceived conflicts between contending forms of chauffeur businesses and brought in regulations for new platform ventures. This thesis employs a policy change approach in the Chinese authoritarian context and reaches three conclusions. Firstly, it explains that the "special interests" of taxi entities institutionalized by the old regulatory regimes for taxi businesses incentivized the two metropolitan governments to protect taxi entities. Thus, even if Beijing and Shanghai had different first responses towards platforms with one initially emphasizing "cracking-down" and the other working on a "loose" regulatory approach, they adopted similar platform-capping policies. Secondly, this thesis finds that the two metropolitan governments cautiously disobeyed the central government's "loose" directives for platforms by combining their capping policies with selectively implementing a central directive of differentiating the markets of ride-hailing platforms and taxi operators. Thirdly, this thesis addresses obstructions to the establishment of "new regulation" that respects the business logic of platforms, which is proposed by the platform coalition. It argues that the interaction between the vested "special interests" and the fragmentation of authority makes local governments resistant to this "new regulation."

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Acknowledgments

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Chapter 1 Introduction

As online ride-hailing platforms expand globally, an increasing number of scholars and regulators have realized disruptions these platforms have caused to economic sectors they enter and regulatory regimes that govern those sectors. Some studies on the formulation of regulations for online ride-hailing platforms reveal that different states have responded differently to platform ventures, ranging from "welcoming embrace" with accommodating regulatory adjustments to "complete rejection" with legal bans. Even governments at different administrative levels within a state have varied regulatory responses towards these platforms (Collier, Dubal & Carter, 2018; Thelen, 2018). However, these existing studies merely see the regulatory formulation process as a struggle between online ride-hailing platforms and their incumbent market competitors. They do not address the initiative of policymakers. More explicitly, these studies do not explain how policymakers perceive the struggle and offer their solutions for governing online ride-hailing platforms. For these studies, policymakers or politicians who participate in the regulatory process are just resources that interest groups try to mobilize. Therefore, this thesis will emphasize this missing dimension.

By highlighting the initiative of policymakers, this study also aims to answer why several metropolitan governments formulated policies in contradiction to the national government's "loose" regulatory directives for platform ventures in China. More explicitly, it expects to find how business conflicts between platforms and taxi entities influenced these metropolitan governments in making policies inconsistent with those of the central government.

Hence, by focusing on the regulatory process for online ride-hailing platforms in China, this study situates the metropolitan governments in triangular interactions with the other two sides, which are namely the central government and the two conflicting groups of platform ventures and taxi entities. The following questions will be answered: how does business conflicts arise between platform ventures and their incumbent competitors, taxi entities? How does these business conflicts shape the metropolitan governments' decisions for governing online ride-hailing platforms? Why these policy decisions are in contradiction to those of the central government? Given that regulating online ride-hailing platforms is a part of reforming incumbent regulatory regimes for taxi entities in China (Guo, 2016), this study will employ literature on policy change to establish an analytical framework to interpret the policy formulation. For case selections, this study will focus on the policy-making processes of two Chinese cities, Beijing and Shanghai.

Why Beijing and Shanghai? A comparison of two cities with different starting points

Ride-hailing platforms in China have been growing noticeably fast. According to a report from the State Information Center (SIC, 2017), the size of the travel-sharing market represented by online ride-hailing businesses reached 100 billion Renminbi (RMB) in 2015 and 203.8 billion in 2016. Take Didi, the Chinese version of Uber and the most extensive online ride-hailing platform in China, as an example. It started with only 120,000 United States Dollars (USD) in 2012 but gained a value of 50 billion USD within five years (Ma & Yu, 2017). In 2017, the platform had more than 450 million users, who completed about 7.43 billion rides ("Didi released data for 2017," 2018).

Beijing and Shanghai are the two cities with the earliest development of online ride-hailing platforms and the most prominent urban markets for these platforms in China ("The growth path analysis of Didi," 2016). Customers in Beijing accounted for 7% of Didi users, while customers in Shanghai accounted for 4.6% as of December 2017 (Jiguang Big Data, 2017).

Facing fast-growing online ride-hailing platforms, Beijing and Shanghai initially took two different extremes. At an early stage, Beijing's municipal government publicly defined online ride-hailing services as "illegal" and initiated a series of campaigns to "crack-down" on them (Liu, 2015). However, at about the same time, the municipal leader Han Zheng in Shanghai openly expressed his encouragement for online ride-hailing platforms. Consequently, Shanghai's municipal government started working with these platforms to develop an "innovative" regulatory approach ("Han Zheng: Didi is an innovative model," 2015).

Despite the contrast of their original tactics, these two cities ultimately made very similar and "strict" regulatory policies for online ride-hailing platforms. These policies were "strict" because they capped the future expansion of platform ventures, which was a departure from the "innovative" regulatory approach that Shanghai used to promote. Moreover, local regulatory policies even deviated from central directives, which emphasized "after-the-fact regulation" rather than restrictions. The centralized authoritarian system in China determines that local governments should make detailed policies following central directives. Thus, in the case of regulating online ride-hailing platforms, this study needs to explain why the metropolitan governments of Beijing and

Shanghai did not obey the central authority completely and what role business conflicts between ride-hailing platforms and taxi business entities played.

In sum, this thesis will conduct a comparative case study and contrast the factors that influenced the formulation of regulatory policies for online ride-hailing platforms in Beijing and Shanghai. Within the comparison, it will explicitly address how business conflicts between platforms and incumbent businesses influenced perceptions and resulted in similar policy decisions of the two metropolitan governments with different initial attitudes towards those platforms. Also, this study will answer why these two local governments unanimously chose to stand against the directives of the central government.

Economic advantages of online platforms and regulatory challenges to the government

The quick expansion of online ride-hailing platforms is a global phenomenon, which has intrigued scholars and researchers worldwide. The success of Uber, which is a start-up founded in 2009 in San Francisco and now has expanded its businesses globally (uber.com), has drawn the attention of many economists. Different theories have been generated to explain Uber's accomplishment. Some theorists claim that the uniqueness of Uber represents a new form of business called the sharing economy (Sundararajan, 2016). Based on the idea of "access over ownership," this new business form allows people to re-utilize their "idle assets," such as extra car seats in vehicles, to provide services to someone in demand, thus gaining benefits. More importantly, information technology is employed so

that sharing platforms can connect service providers and customers more effectively (Botsman & Rogers, 2010; Gansky, 2010; Stephany, 2015; Sundararajan, 2016).

Meanwhile, other scholars maintain that online ride-hailing platforms operate within a new asset-light supply paradigm, the platform economy. Theoretically, this paradigm offers a new approach for start-ups to enlarge their commercial layouts by generating "network effects" in the matching service between providers and customers (Choudary, Alstyne, & Parker, 2016; Evans & Schmalensee, 2016). The platform economy refers to a business model that applies information technology to "connect people, organizations, and resources in an interactive ecosystem" (Choudary, Alstyne, & Parker, 2016). This definition emphasizes two key elements. First, information technology is essential as it grants online platforms the power to employ labor and connect producers and consumers more precisely, speedily, and efficiently (Choudary, Alstyne, & Parker, 2016; Evans & Schmalensee, 2016). The second key element is the ecosystem generated from the interactions between external producers and consumers. Platforms are designed as open and participative infrastructures in order to facilitate matches. They can trigger "network effects" to establish an ecosystem between external producers and consumers. Roholf (1974) applies the term "network effects" to describe that the utility of a subscriber gaining from a communication service increases as other subscribers join the system. In other words, "network effects" denote that the value of each participant grows as more people use the platform, and as the individual's utility increases, more people will be attracted to the platform (Evans & Schmalensee, 2016; Choudary, Alstyne, & Parker, 2016). Consequently, an ecosystem is built where external producers can match with consumers

in real-time, and the network of consumers can digest the product and service of producers instantly.

Online ride-hailing platforms' innovative aspects emphasized by the sharing economy and the platform economy pose challenges for regulators. For example, platforms recruit vehicles without taxi franchising licenses to operate businesses that could compete with taxis, which disrupts regulatory regimes based on franchising policies (Li & Hou, 2019). Also, with technological advantages, being empowered by "network effects," and re-utilizing "idle assets," platforms are able to expand quickly and defeat incumbent business entities, which in turn produces disruptive effects on the latter (Choudary, Alstyne, & Parker, 2016; Drahokoupil & Brian, 2016; Evans & Schmalensee, 2016). Moreover, job opportunities created by platforms are blurring lines between being fully-employed and participating in casual labor (Sundararajan, 2016). Thus, some studies recognize the importance of establishing a new regulatory regime for new platforms. This regime should avoid the biased support of incumbent market participants and instead should emphasize preventing harm and encouraging fair competition. In this regard, policymakers need to liberalize existing market restrictions and establish "after-the-fact regulation" (Choudary, Alstyne, & Parker, 2016; Zuluaga, 2016).

However, these studies neglect to take into account varied responses of regulatory regimes to new online platforms. Only a few studies have researched regulatory regimes' responses and the formulation of regulations for online ride-hailing platforms (Collier, Dubal & Carter, 2018; Thelen, 2018). However, these studies only focus on cases from western societies and see the formulation process as a struggle between interest groups. Consequently, they do not address how policymakers perceive the economic and political

impacts of online platforms and make decisions based on their own initiative, which is what this study will supplement.

Governmental regulation of business in China: The state, the Internet, and the political context

From a practical perspective, the research questions raised by this thesis may be particularly important in the Chinese context. The perception and initiative of policymakers neglected in existing studies are essential elements in the Chinese policy process, as they determine interventionalist policies for various businesses.

Most scholars who research the Chinese political economy agree that China's "still completing" transition from a socialist command economy to a market economy induces a unique environment, within which the state plays a critical role in economic development. To the Chinese government, challenges of economic development are always political issues as well as economic ones. "Centering on economic development" is a strategic choice of the state to acquire firm support from the public (Li, 2010). Moreover, the government is always promoting its capabilities to efficiently cope with obstacles that hinder economic growth as well as the increasing social pressure accompanied by the economic transition (Naughton, 2006). Thus, the government has increased and reinforced its influence on economic affairs, which makes it capable of implementing "selective controls" over the market (Hsueh, 2011). These "selective controls" include making some industrial or business sectors national priorities for the implementation of developmental strategies, setting economic goals for various business entities, and issuing interventionalist

policies and giving bureaucratic support to different industrial sectors. In this way, the Chinese government could influence or even alter the future of business sectors.

The development of online ride-hailing platforms in China cannot escape such a context. In recent years, the Chinese government has been emphasizing economic restructuring, during which the development of online ride-hailing platforms has gained strategic significance. The "Internet +" strategy has been proposed to deepen the integration between the Internet and various sectors of the economy and society to support the transformation of economic structure ("The 'Internet+' strategy is upgraded to a national strategy," 2015). Within this national strategy, online ride-hailing platforms are regarded as a new business form that employs Internet-based technologies (the State Council, 2015). Moreover, the sharing economy represented by online ride-hailing platforms is seen as a new economic engine to replace the conventional ones (the State Council, 2016).

Empirically, online ride-hailing platforms have achieved economic performance that could coincide with the prospects of the state's "Internet +" strategy. In 2016, the market scale of transportation sharing platforms, most of which were online ride-hailing ones, was 203.8 billion RMB, a 104% increase from 2015. The number of individuals providing services on these ride-hailing platforms in 2016 reached approximately 18.55 million, which included 120,000 platform employees and over 18.43 million online ride-hailing drivers (The Sharing Economy Research Center of the State Information Center, 2017). Moreover, these platforms absorbed a large number of unemployed personnel from industries that reduced their production capacity due to the adjustment of industrial structure. For example, 18.6% of work opportunities provided by Didi were taken by

unemployed workers from capacity-reducing industries as of July 2017 (Didi policy research institute, 2017). Meanwhile, online ride-hailing platforms also spontaneously transformed traditional taxi businesses. Aside from online ride-hailing services, these platforms conduct matching services between customers and taxis. These matching services increased efficiency and reduced the operating cost of taxi services by employing Internet technologies ("Taxi drivers were once 'bullied' by Didi," 2017).

Since the development of online ride-hailing platforms has gained an essential place in the state's economic restructuring, scholars have proposed "innovative" governmental regulations (Cai, 2017; Xue & Li, 2014). These "innovative" regulations aim to form an efficient collaboration between market self-discipline and powerful regulation. Therefore, the government should play an auxiliary role in the development of new business forms and give more discretion to the market. Also, "innovative" regulations need to respect the operational logic of online ride-hailing platforms (Ibid.). The central government of China adopted the proposition of these "innovative" regulations (the State Council, 2015, 2016). However, the metropolitan governments of Beijing and Shanghai went against the central government in regards to regulating online ride-hailing platforms. These cities selected regulatory policies that capped the number of ride-hailing vehicles and ride-hailing drivers. This study aims to answer why these cities made policies contradicting those of the central government.

A policy change theoretical approach in the authoritarian context of China

Given that the Chinese government reforms the regulatory regime for the taxi industry, which includes regulations for online ride-hailing platforms, this study will employ a policy change theoretical approach. Policy change focuses on adjustments and revisions of policies, either with incremental shifts in existing structures or with innovative changes (Bennett & Howlett 1992). Studies on policy change provide two critical conceptual tools. However, these concepts, which are originated from industrialized democracies, require some explanations for why they apply to the authoritarian context of China.

The two conceptual tools this study will employ are the Advocacy Coalition Framework and the "punctuated equilibrium" theory. Firstly, interactions among advocacy coalitions could result in policy change. The theory of the Advocacy Coalition Framework (ACF) primarily assumes that when people pay attention to an important policy issue, a policy subsystem is formed. Within the policy subsystem, different advocacy coalitions establish their belief systems, which include a set of basic values, causal assumptions, and perceptions of problems to make sense of their interests. A coalition includes not only core interest groups that are influenced by this policy issue but also individuals, experts, and organizations that support or have the same beliefs with core interest groups. All coalitions want to make their belief systems adopted by policymakers (Sabatier, 1988; Sabatier & Jenkins-Smith, 1991; Yu, 2009). Policy change happens when external changes or shocks to the political system occur, and specific advocacy coalitions gain success after competing with others and adapting policy preferences to other coalitions' proposals and the environment (Cerna, 2013; John, 2003; Moyson, 2018). Both the theories of the sharing

economy and the platform economy have pointed out two interest groups that each bear conflicting beliefs regarding their interests. As a result, two coalitions form, namely the coalition around online ride-hailing platforms and that around traditional business entities. In the formulation of regulatory policies for online ride-hailing platforms, these two coalitions express opinions about their expectations for policy options and beliefs about where their interests lie.

Secondly, some scholars focus on the "punctuated equilibrium" in policy change, within which new beliefs or new ways of thinking concerning a particular policy sweep through the government and become unstoppable (Baumgartner & Jones, 1991). Of course, old beliefs interact with these new beliefs within the "punctuated equilibrium" to influence policies in the existing policy venue. These new beliefs also seek new policy venues when adapting to institutional constraints in a changing environment (Cerna, 2013). More relevant to this study, scholars have identified sources of friction that hinder the “sweeping” of new beliefs within the "punctuated equilibrium" (Baumgartner et al., 2009). The operational logic of online ride-hailing platforms, as many scholars have proved, is distinguished from incumbent businesses. Thus, the ideas of the "access over ownership" and the light-asset developmental paradigm are incompatible with existing regulatory policies for incumbent entities. Therefore, new beliefs on regulating platform ventures have emerged along with some sources of friction from incumbent regulatory regimes for taxi entities, which creates the "punctuated equilibrium" for policymakers. Enlightened by the "punctuated equilibrium" theory, this study will pay attention to how interactions between new beliefs and sources of friction in the "punctuated equilibrium" influence the formulation of regulatory policies for platform ventures.

Seeing that these conceptual tools are originated from institutionalized democracies, the ACF and the "punctuated equilibrium" theory are based on the epistemology of pluralist theory. Pluralist theory perceives the policy process as an interest mediation mechanism that "incorporates struggle, coordination, and balance of interests" (Zhu, 2013). How can the ACF and the "punctuated equilibrium" theory apply to explain the policy process in centralized authoritarian China? This study argues that the fragmentation of authority within the Chinese authoritarian system provides a foundation for this study to employ these conceptual tools.

The fragmentation of power and authority, among and within various levels of the Chinese government, has provided the space and the autonomy for bureaucracies and different levels of government to further their own interests and to launch their own initiatives. As a result, policy-making in China has become increasingly malleable to the organizational and political initiatives of various bureaucracies, and the incorporation of interests and initiatives via bureaucratic bargaining shape policy outcomes (Lieberthal and Oksenberg, 1988; Yang, 2013). Moreover, the fragmented authoritarian system lowers the entry for some new actors, such as the media, experts from think tanks, non-governmental organizations, and individual activists, to engage in the policy process. This enlargement of participation is caused by the inability of governmental bureaucracies to adapt to rapid socio-economic transformations. Within these socio-economic transformations, the processes of industrialization, urbanization, and neo-liberalization have increased the changing expectations of citizens and the aggressive lobbying of pressure groups (Mertha, 2009, 2010; Wang, Liu, & Dang, 2018; Zhu, 2013). As the range of participants involved

in the policy process has significantly expanded, pluralism has been injected into the authoritarian system (Mertha, 2009, 2010).

However, policy theories based on pluralist theory emphasize the lobbying process and believe the function of the government is to provide institutions for open and reasonable debates of interest groups (Yu, 2009), which is epistemologically contrasting the authoritarian context. Thus, two conceptual tools this thesis will use need to be transformed and integrated with an authoritarian logic, under which the government tolerates or welcomes new actors to enter the policy process for their positive and negative roles in controlling risk and maintaining stability. Also, actors outside the government must adopt strategies necessary to work within the structural and procedural constraints of the authoritarian system to successfully enter the policy process (Brødsgaard, 2017; Mertha, 2009, 2010). In other words, what matters in this fragmented authoritarian system are fragmented bureaucracies' perceptions and articulations of proposals and the interests of actors who are outside the authoritarian system but have gained more influence on these governmental bureaucracies. Fragmented bureaucracies that this study will emphasize are the national government versus the metropolitan governments of Beijing and Shanghai.

In summary, the fragmented authoritarianism provides a foundation for utilizing the "punctuated equilibrium" theory and the ACF to explain the policy process in China. This study will focus on how the coalition around traditional taxi entities and the coalition around online ride-hailing platforms struggle to influence policy outcomes. The development of online ride-hailing platforms generates a "punctuated equilibrium" in which new beliefs about regulating platform ventures are sweeping. Correspondingly, some sources of friction hinder these new beliefs. The platform coalition and the taxi

coalition side with these new beliefs and sources of friction respectively and try to persuade policymakers to adopt their policy proposals. In order to reflect the fragmented authoritarian context, this study will emphasize how the metropolitan government and the national government as two distinctive policymakers perceive the beliefs of conflicting coalitions and the "punctuated equilibrium." More importantly, the analysis will stress how the metropolitan government and the national government combine their perceptions and initiatives to formulate policies for governing online ride-hailing platforms.

By integrating the policy change approach into the Chinese authoritarian context, this study can clarify triangular interactions in the formulation of regulations for ride-hailing platforms. The most crucial side within these triangular interactions is the metropolitan government, which directly regulates online ride-hailing platforms. The other two sides, which influence the policy decisions of the metropolitan government, are the coalitions outside the authoritarian system and the national government that issues directives and guides the metropolitan government. A more detailed explanation of the theoretical framework will be presented in Chapter 2.

Data collection and the arrangement of the thesis

This study will empirically gather and analyze two types of research data concerning the formulation of regulations for online ride-hailing platforms in Beijing and Shanghai. First, it compares the differences in expression, articulation, and participation of online ride-hailing businesses and traditional taxi businesses in terms of influencing governmental regulations. Second, this study will collect data on the governmental processes of policy

formulation and analyze how the government responds to conflicts between ride-hailing platforms and taxi entities and subsequently makes policies for governing platform ventures.

The first type of research data will be acquired from online resources and media coverage. Since online ride-hailing platforms are very eye-catching new businesses that have raised intense debates and deliberations, the media and many research institutions have been following the development of these platforms. Thus, this study can gain access to sufficient knowledge about how those who stand by online ride-hailing platforms or by taxi operators express their opinions and participate in influencing the government. The second type of data will be sourced directly from government policy documents, as they will provide insights on how policymakers respond to different factors and reach policy decisions. However, by employing online resources, this study needs to acknowledge the existence of information bias because certain actors in the cyber world are more powerful in producing and distributing information (Segev, 2010). Explicitly in the empirical cases, more articles and reports on platforms could be found, probably due to their closeness to the Internet, while taxi entities have been marginalized. Thus, this study will try to balance information bias and present the opinions of those who stand by platforms and taxi entities equally.

Overall, this study will rely on secondary materials to answer the question: how did the metropolitan governments of Beijing and Shanghai perceive business conflicts between online platforms versus traditional taxi entities and act on their own initiative to govern online ride-hailing platforms? The formulation of regulations in these two cities involved triangular interactions. This study will place a pivotal emphasis on the metropolitan

government that directly regulates platform ventures. It will contrast the formulation of regulatory policies in Beijing and Shanghai, which were two cities with different initial attitudes but similar policy decisions towards ride-hailing platforms. The other two sides within triangular interactions were the national government and the coalitions outside the authoritarian system that aim to influence the policy-making process. This thesis will argue that all interactions among these triangular sides were centered around business conflicts between platform ventures and taxi entities. It will claim that these business conflicts interacted with the fragmented authoritarian system of China, which led to similar policies being made by the two metropolitan governments and driving them to stand against the national government.

Chapter 2 of this thesis will theoretically review and analyze triangular interactions in the formulation of regulations for online ride-hailing platforms and form an analytical framework that integrates conceptual tools from the pluralist democratic theory into the authoritarian context of China. Then, the cases of the regulatory formulation in Beijing and Shanghai will be introduced and contrasted in Chapter 3 and Chapter 4 respectively. Chapter 3 will explain how Beijing moved from "cracking-down" on online ride-hailing platforms to considering regulating platform ventures. Chapter 4 will interpret how Shanghai shifted from a "loose" and "innovative" approach to "strict" regulations for online ride-hailing platforms. Chapter 5 will offer a summary and a conclusion for why these two cities with different initial standpoints ended up with similar policy decisions for ride-hailing platforms.

Chapter 2 The local government takes a pivotal role: triangular interactions in regulating online ride-hailing platforms

As mentioned, regulating online ride-hailing platforms in Beijing and Shanghai involved triangular interactions, which centered around business conflicts between platform ventures and taxi entities. However, before conducting further analysis, this thesis needs to clarify: first, how these business conflicts arise, and second, how these conflicts prompt interactions among the mentioned three sides.

Scholars have developed two theoretical approaches to explain the economic logic of online ride-hailing platforms, both of which highlight features distinct from traditional business models. Business conflicts between platform ventures and taxi entities originate from these features.

The sharing economy approach

First, scholars apply the sharing economy approach to interpret the different economic logic of online ride-hailing platforms. They maintain that these platforms are more efficient and sustainable than incumbent businesses.

The popularity of the sharing economy lies in the word “sharing.” As some scholars maintain, the sharing economy reduces the importance of ownership and relies on shared access to products and services. As a result, a new form of collaborative consumption is generated to replace the 20th century’s “hyper-consumption” that emphasizes the owning of consumer goods. This collaborative consumption requires participants to be connected and to form an online community in order to conduct peer-to-peer interactions (Botsman

& Rogers, 2010; Stephany, 2015). Based on sharing interactions, participants construct a reciprocal network analogous to that of gift exchange. Scholars who focus on gift exchange assert that the sending of gifts from the giver to the receiver could lead to establishing a peer-to-peer feeling-bond. The receiver might consider giving a pay-back that does not always repay the giver but others in the community. Consequently, a reciprocal network is facilitated within the community (Hyde, 2009; Mauss, 2002). Analogously, the idea of sharing consists of two parts, namely the sharing-in and the sharing-out (Ince & Hall, 2018). Those who have experienced sharing by someone might also be more willing to share the use right of their assets with others. Eventually, the aggregation of individual sharing practices forms a vast reciprocal network. Sundararajan believes that this reciprocity explains the popularity and the future potential of the sharing economy (Sundararajan, 2016). Inch and Hall further elaborate that this new business model could be more sustainable because it bases on the shared access to assets, which provides a way of managing the ups and downs after the 2008 financial crisis (Ince & Hall, 2018).

Also, some scholars have highlighted that the application of information technology makes sharing platforms more efficient than incumbent businesses. Scholars like Buckland (2017) and Hassan (2008) have already asserted that the invention of information technology is a solution to increase market efficiency. Buckland maintains that markets are information systems because buyers need to know who provides products as well as the prices and the quality of various products. Furthermore, the market information, such as price lists, content descriptions, and warranties, needs to be documented. Information technology can facilitate ubiquitous recording, pervasive reproduction, and simultaneous information interaction regardless of geographical distance and provide more powerful

analyses of records (Buckland, 2017). Moreover, Hassan indicates that computerization is a way to improve the speed, flexibility, and efficiency of production. Computerization assists the transformation from mass production to a more flexible and on-demand mode of production. The on-demand production mode means more effective cost controls of the enterprises (Hassan, 2008). In addition, other scholars indicate that information technology contributes to a frictionless entry and efficient interactions, which could significantly reduce transaction costs (Evans and Schmalensee, 2016).

In the sharing economy model, information technology and sharing behaviors are organically combined. Gansky applies the term “Mesh” to describe the network of the sharing economy, which allows any node to link in any direction with any other node in the system. Primarily, it is a network that does not limit locally but can extend globally. Also, connecting activities within the “Mesh” are immediate. More importantly, the “Mesh” can deploy physical assets more efficiently because people’s spare time and space capacity in assets are detectable. All these advantages of the "Mesh" come from applying sophisticated information systems, which can track what is being shared and by whom in real-time (Gansky, 2010).

Finally, some scholars assert that the sharing economy represents an alternative capitalist system. Dyal-Chand (2015) argues that the sharing economy is an alternative capitalist system that provides ways to success for both participants who share their assets and sharing platforms. He believes that the sharing economy is a different way from doing businesses of many American entrepreneurs who see the accumulation of sufficient privately-owned assets as a capitalist success. Instead, the sharing economy operates like a nascent coordinated market economy, in which coordination intermediaries tackle

problems and deploy resources with a long-term perspective and emphasize collaboration among firms in the industry. Sharing platforms function as intermediaries that coordinate participants who share assets, a common source of customers, and the technology to access these customers. In this manner, platforms can acquire profitability by sharing managed information about demand and supply of "idle assets." At the same time, the participants can also gain benefits by sharing privately owned assets. Sundararajan gives this alternative capitalist system a name, the crowd-based capitalism. Allied with Dyal-Chand, Sundararajan holds that this form of capitalism creates new institutions for organizing economic activities that benefit individual producers (Sundararajan, 2016). Firstly, the crowd's sharing behaviors allow nearly the full capacity for the utilization of assets, which creates new opportunities to make money. Secondly, this crowd-based capitalism achieves the democratization of economic opportunities that promises inclusive growth for micro-business entrepreneurs. More and more micro-business entrepreneurs gain commercial successes by becoming producers of sharing platforms because those platforms significantly expand the reach of micro-businesses. Furthermore, Sundararajan pinpoints that by attracting a variety of service providers, sharing platforms provide numerous services, which in turn facilitates the increase of consumption (Ibid.).

In sum, scholars have discovered the superiority of sharing platforms over incumbent businesses, which comes from three aspects: the reciprocal sharing network, the more efficient use of assets, and the creation of an alternative capitalist system that provides new economic opportunities and increases consumptions.

The platform economy approach

Second, some other scholars stress that online ride-hailing platforms represent an example of the platform economy. Initially, a platform has different types of participants or put it another way, different sides, which includes various suppliers and consumers. Of course, individuals on each side are not necessarily fixed, because one can conveniently change the role from a provider to a consumer, or vice versa. Subsequently, the platform economy emphasizes the importance of connection like the sharing economy. Different groups need to get connected before interacting and exchanging. Also, the role of digital technology must be noted, as the platform economy heavily depends on digital technology to provide efficiency to the connectivity. In general, the platform economy can be defined as a business model that is based upon digital infrastructures to enable two or more groups to interact (Srnicek, 2017).

From this definition, the platform economy forms an asset-light supply paradigm, which differs from traditional businesses that firstly purchase raw materials, then produce, and finally sell products to customers (Choudary, Alstyne, & Parker, 2016; Evans and Schmalensee, 2016). Scholars assert that traditional businesses run like a pipeline around products and count on inefficient gatekeepers to deliver products to consumers. Those gatekeepers manage the flow of value from the producer to the consumer. However, the platform economy model depends on product or service providers and therefore reduces the need for purchasing raw materials, let alone assets like warehouses, factories, and machines. Also, it stresses direct interactions between goods/service providers and consumers, which eliminates gatekeepers (Ibid.). Thus, scholars characterize the platform

economy as an asset-light paradigm. Besides, due to the elimination of gatekeepers, the flow of value is controlled by product/service providers and the platform, which could lead to the supply of products and services with more attractive prices to consumers (Choudary, Alstyne, & Parker, 2016).

Yet, platforms are more than brokers who arrange transactions due to two other features. Firstly, information technology makes platforms more "turbocharged" than conventional brokers because it serves platforms' flexible and on-demand model of production and thus reduces transaction costs (Choudary, Alstyne, & Parker, 2016; Evans & Schmalensee, 2016).

The interactive ecosystem is the second feature to differentiate the platform economy entities from traditional brokers (Ibid.). This ecosystem is slightly different from the community of the sharing economy, which underlines the ideas of sharing and feeling-bond. For the platform economy, the formation of the ecosystem relies on "network effects." The fundamental value of a platform is to connect different sides, with each side having as many members as possible. For example, an online ride-hailing platform simultaneously needs a large number of passengers on one side and drivers to provide services on the other. Intensive interactions between these two sides eventually generate benefits for the platform (Evans & Schmalensee, 2016). Enough participants and intense interactions can contribute to establishing an interactive ecosystem of a platform. "Network effects" are identified as the core to attract enough participants on each side and then to contribute to a powerful ecosystem.

Then, what are "network effects"? In the introduction, this thesis simplifies the term as that the utility of each user will increase as a new member join the network, which in

turn attracts more users to this network. However, the term "network effects" was first applied by Roholf to interpret the expansion of the telephone industry. Some scholars suggest that Roholf's definition of "network effects" is just a "one-sided" theory, as it only pays attention to customers, which are telephone users. The development of online platforms relies on more than the expansion of one side. For instance, an online ride-hailing platform needs both large numbers of passengers and drivers to build the ecosystem because more drivers mean more utility of each passenger and vice versa. Thus, Roholf's definition needs some adjustments to explain the complex "network effects" for online platforms. Some scholars find that some industries have at least two sides that matter. For example, in the videocassette recorder (VCR) industry, the acceptance of the recorder does not only rely on more families to purchase the products but also on more content providers to produce pre-recorded videos. In other words, more videos can be played by the recorder, the more attractive it becomes to families, which leads to the purchase. At the same time, when VCRs are more popular, content providers would be more willing to produce recorder-displayed content. The situation that either side's expansion contributes to the enlargement of the other is termed as "indirect network effects" (Clements & Ohashi, 2005; Ohashi, 2003; Rochet & Tirole, 2004).

The platform economy is operated under the logic of "indirect network effects," since the value of a platform to customers relies on the scale of goods/service providers, and the value to a goods/service provider depends on the number of customers. Moreover, scholars emphasize that a platform needs to ensure that "indirect network effects" work in a positive direction to keep sustainable expansion (Choudary, Alstyne, & Parker, 2016; Evans and Schmalensee, 2016). Therefore, the growth of each side needs to keep a proportional pace

with the other side, in case that one side of participants has difficulty in finding a match and then drops the platform.

Consequently, an ecosystem that leads to massive scaling is built upon the successful management of "indirect network effects," which keeps proportional expansion for all sides (Choudary, Alstyne, & Parker, 2016). Also, the ecosystem of the platform economy unlocks some new sources of supply, uses data-based tools to create community feedback loops that inform users about the quality of products or the reputation of service providers (Choudary, Alstyne, & Parker, 2016).

Overall, for those who research the platform economy, the advantages of online platforms over their incumbent competitors are caused by the potential of massive scaling, and the interactive ecosystem that leads to the superior marginal economics of production and distribution.

Challenges to regulation

From both the perspectives of the sharing economy and the platform economy, new business forms represented by online ride-hailing platforms gain competitive advantages over traditional taxi businesses. Some scholars even assert that online platforms' impacts on incumbent businesses are disruptive. They characterize these disruptive impacts by the term "creative destruction," which was applied by Schumpeter (2010) to describe industrialization that overthrew incumbent market order and traditional businesses

Inevitably, business conflicts have arisen between new platform ventures and traditional entities. A subsequent question is how these conflicts prompt triangular

interactions that this study mentions. Many studies have explained how these business conflicts cause interactions between regulatory authorities versus new platform ventures and traditional entities.

Primarily, the disruptiveness of new online platforms raises the concern of regulators. The continuing loss of interests drive traditional business entities to lobby policymakers to provide protection. However, for regulators, problems are more than disruptions to traditional businesses. New online platforms have also brought many challenges to regulatory regimes that govern these traditional business entities. Sundararajan recognizes that sharing platforms have provided chances for allowed people to conduct businesses that have been defined as "illegal" by incumbent regulatory regimes. For example, online ride-hailing vehicles on Uber are regarded as "illegal taxis" by many regulators (Sundararajan, 2016). Besides, the rights of consumers may not be adequately protected, as many business activities are new (Choudary, Alstyne, & Parker, 2016). Furthermore, those individuals who act as service providers may work on a freelance basis without the benefits and worker protections usually mandated by law (Choudary, Alstyne, & Parker, 2016; Sundararajan, 2016).

Overall, scholars have identified a significant tension between promoting innovations of platforms and maintaining existing regulatory policies for traditional businesses (Choudary, Alstyne, & Parker, 2016; Drahokoupil and Fabo, 2016; Harding et al., 2016; Sundararajan, 2016). Some suggest new regulatory policies for platform ventures, which should only pay attention to market failure and respect the operational logic of new businesses (Sundararajan, 2016). Choudary et al. even propose a regulation 2.0 framework to encounter the challenges brought by new platform ventures with a fundamental concern

for promoting the platform economy (Choudary, Alstyne, & Parker, 2016). These scholars all agree that regulatory policies need to avoid failures that allow traditional businesses to use them as shields against competitions. Besides, some scholars criticize newly-issued regulations for online platforms as fierce regulatory contests that do not respect the operational logic of platforms, and thus, could reduce efficiency and distort markets (Cramer and Krueger, 2016; Rauch and Schleicher, 2015).

However, a gap can be identified in these studies, as they do not explain how incumbent regulatory regimes respond to these new online platforms and formulate diversified regulations worldwide. For ride-hailing platforms, the diversity of regulations is more remarkable, which range from accommodating regulatory adjustments to complete legal bans. Thelen (2018) has compared the formulation of regulations for Uber in three advanced capitalist countries, the United States, Germany, and Sweden. She concludes that different regulatory outcomes depended on how Uber and its opponents, taxi companies and taxi drivers, inspired and mobilized different interest groups and politicians. For example, taxi associations in Germany allied with interest groups in public transportation. They positioned themselves as defenders of consumers who were interested in high-quality taxi services, which successfully convinced the government to ban the operations of Uber. However, in Sweden, taxi companies managed to form a broad coalition with labor unions to claim that Uber threatened the tax system and thus shook the norms of fairness on which the Swedish social system rested. As a result, the Swedish government adjusted some aspects of existing regulations to allow Uber to operate in compliance with national laws on licensing and taxation. Collier and his colleagues (2018) confirm Thelen's conclusion. They assert that Uber in the U.S. was able to conduct surrogate representation of dispersed

customers and Uber drivers to create a powerful interest group, which lobbied for policies that Uber found acceptable. Even when some cities intended to conduct restrictions on Uber's operations, this interest group could persuade state legislatures to reverse those restrictions (Ibid.).

This thesis builds upon the above studies on the formulation of regulations for online ride-hailing platforms. However, those studies merely see the formulation processes as the games of interest groups and neglect to address the government's initiative. This thesis recognizes that the government can act on its own initiative and embed its intention in various regulations. The definition of "regulation" has been extended from which initially refers to government laws or rules designed to change the behavior of firms in order to correct market failures, promote equity and shave the peaks and troughs of business cycles (Samuelson, Nordhaus & McCallum, 1988). In more recent literature, scholars reveal that the government could conduct governance to lead over the market through regulatory policies ranging from imposing market constraints to augmenting public resources or public influence to encourage some market trends (Gereffi & Mayer, 2006; Wade, 1990). The enforcement of governance is variable, which means the regulatory authority could either make enabling rules that allow the market itself enough flexibility to self-correct or compose mandatory laws that specify the clauses concerning market players (Wihlborg, 1997).

China is regarded to have a powerful government in coordinating economic affairs and conducting governance over the market. Facing the challenges brought by new platform ventures, regulatory policies of the Chinese government aim more at governing the market than simply maintaining market order. Closely related questions are how these

regulatory policies are formulated and how they can implement market guidance. This study can answer these questions by explaining how the metropolitan governments of Beijing and Shanghai formulated regulations for governing online ride-hailing platforms in responding to the challenges brought by platform ventures.

Triangular interactions caused by business conflicts

For online ride-hailing platforms and traditional taxi entities, municipal governments are the most direct regulatory authority in China. Nonetheless, these municipal governments are still bureaucracies under the guidance of the national government. As revealed in the introduction, the national government found the strategic significance of online ride-hailing platforms, which led to "loose" central directives to coordinate municipal governments to formulate regulations. However, the metropolitan governments in this study eventually adopted regulatory policies that contrasted these central directives, which makes it necessary to explain how the metropolitan governments interacted with the national government in the policy-making process.

Interactions between the national government and the metropolitan governments reflect the complex central-local relationship in China. Studies have illustrated that the complexity in the central-local relationship started to increase since the delegation of economic control to localities began in the late 1970s (Cheng, 2004; Wu, 1999). The vertical leadership from the center to the local has been weakened, as the central government prefers to issue guiding directives to local governments instead of mandatory orders. Even though the central government has conducted several rounds of centralization

in the face of increasing local autonomy, it gradually fosters a "principal-agent" relationship with local governments (Huang, 2008). Within this relationship, the central government controls the cadre management system of local officials and establishes administrative monitoring mechanisms over local governments. To a large degree, the central government resembles stockholders, also known as principals, who control their agents. On the other hand, local governments could leverage their information superiority and use their growing discretion over economic affairs to disobey the central government. Thus, they act similarly to agents who are expected to maximize the principals' utility, but sometimes conduct shrinking or opportunistic behaviors to maximize their own interests (Huang, 1999).

This "principal-agent" relationship results in local governments becoming adept at tailoring policies to their local contexts (Huang, 2008). Consequently, local policies might be in contradiction to those of the central government (Burns & Rosen, 2016; Huang, 1999; Lieberthal & Oksenberg, 1990). In regulating online ride-hailing platforms, the metropolitan governments were influenced by business conflicts between platform ventures and taxi entities and used their discretion to make policies contrasting directives of the national government.

Until now, this chapter has identified how business conflicts induce triangular interactions among the metropolitan governments, platforms/taxi entities, and the national governments. Next, it will construct an analytical framework to interpret these triangular interactions.

An integrated theoretical framework for triangular interactions

Since the metropolitan governments transformed regulatory regimes for taxi businesses, into which they integrated regulations for online ride-hailing platforms, this study will employ literature on policy change to establish the analytical framework. Within this framework, the metropolitan governments will be placed at the center. The analysis will focus on the influence of the national government and actors outside the government system over the decision-making of the metropolitan governments.

Primarily, two conceptual tools from studies on policy change are employed to interpret interactions between the government and outside actors. First, as mentioned in the introduction, this study will pay specific attention to the surging conflicts between platform businesses and traditional businesses, which needs a tool to analyze, namely the Advocacy Coalition Framework (ACF). The ACF model assumes that participants in a coalition perceive the world through a set of beliefs that make sense of interests, and interactions between coalitions can be conceptualized as debates over beliefs, which results in beliefs from specific coalitions gaining dominant status (Sabatier, 2005; Yu, 2009). Hence, this model pays much attention to the beliefs of each advocacy coalition. The emphasis of beliefs rather than interests has an advantage because the former can be more easily measured by policy preferences or policy goals (Sabatier, 1993; Yu, 2009). Based on the insights of the ACF model, this study will emphasize how the coalition of online ride-hailing platforms holds beliefs concerning interests on the one hand, and how that of taxi entities thinks and believes on the other. However, this study only selectively uses the ACF,

as it will not address how different coalitions are learning from each other and then adapting their strategies.

The second tool useful is the theory of the “punctuated equilibrium.” The “punctuated equilibrium,” as mentioned, occurs when new ways of thinking sweep through the government. According to scholars, the punctuated equilibrium is the opposite of the endurance of the status quo. Lindblom (1959) recognizes that the way people make decisions in the real world is limited in their thinking to a restricted number of alternatives. The consequence is that people decide based on what is already familiar or what most people have reached a consensus through bargaining and negotiation, which leads to only small moves in policymaking. However, the accumulation of small movements may cause sharp departures from existing policies. Yet, there is no clear demarcation that could identify the "punctuated equilibrium" from incremental changes.

Still, scholars do recognize many sources of friction that result in preventing or limiting considerable changes in policies (Baumgartner et al., 2009). Among them, one may be especially essential to this study – the “special interests.” Scholars maintain that there are many sides to an issue in the policy-making process. A side with groups that have gained material interests from existing policies might be more powerful to mobilize resources to protect the status quo. Besides, the historically embedded “rules of the game,” which range from constitutional rules to informal norms, could consolidate the “special interests” to create constraints that impact policymakers directly (Béland and Waddan, 2012). In the following chapters, this thesis will identify the “special interests” embedded in the existing “rules of the game” and further explain how the “special interests” influence the formulation of regulations for online ride-hailing platforms.

Nevertheless, the two conceptual tools mentioned above originate from pluralist theory within the industrialized democratic context. The fragmented authoritarianism in Chinese politics creates cleavages for the increasing of pluralization, which lays a foundation for this study to employ the mentioned tools. The fragmented authoritarianism makes policy-making in China a process of negotiation, coalition building, and compromise from competitive policy options. Due to rapid socio-economic transformations and the more aggressive lobbying and changing public expectations that accompany these transformations, fragmented bureaucracies tolerate various contending parties to push their agendas. As a result, the Chinese policy process has evolved to become more pluralistic.

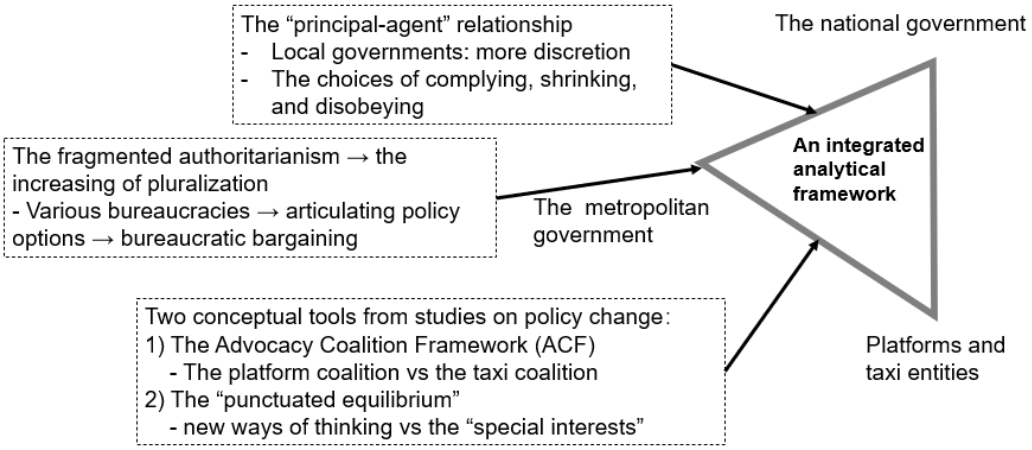
Even though different parties with conflicting interests struggle to influence the policy process, the most critical element in this process is various bureaucracies' perceptions and articulations of contending parties' interests within the fragmented authoritarian system. Ultimately, various bureaucracies act as varied channels for articulating different policy options, and policy outcomes are made via bureaucratic bargaining (Burns & Rosen, 2016; Lieberthal & Oksenberg, 1990). Therefore, for this study, what matters is how the national government and the metropolitan governments act as channels for perceiving the diverse beliefs of the conflicting coalitions and start bargaining for regulatory policies.

By looking into bargaining interactions, this study needs to interpret the metropolitan governments' incentives to disobey the national government. As mentioned, the central government and local governments have established the "principal-agent" relationship, which is inevitably reflected in the policy-making process. In this process, the central government only sets goals or prescriptions without detailed implementation documents.

Thus, local governments gain more discretion, which enables them to transform central initiatives into policies meeting local needs or turn these central initiatives into non-decisions (Lieberthal & Oksenberg, 1990). However, such transformations are conducted carefully given that the central-local relationship is neither in terms of central dominance nor local autonomy but somewhat interdependent (Ibid.). Thus, local governments selectively implement some central policies and neglect or disobey others when they have a strong need to do so, when they think they can get away with it, or when the urgency level concerning a policy is not high (Huang, 1999; Chung, 2016). Based on the above studies, the next chapters will explain how business conflicts between ride-hailing platforms and taxi entities interacted with the "principal-agent" central-local relationship and then resulted in local governments feeling incentivized to stand against the central government.

Overall, this chapter established an integrated analytical framework to explain triangular interactions among the metropolitan governments of Beijing and Shanghai, two conflicting coalitions, and the national government. The framework diagram is shown as below.

Figure 2- 1 Triangular interactions in policy-making



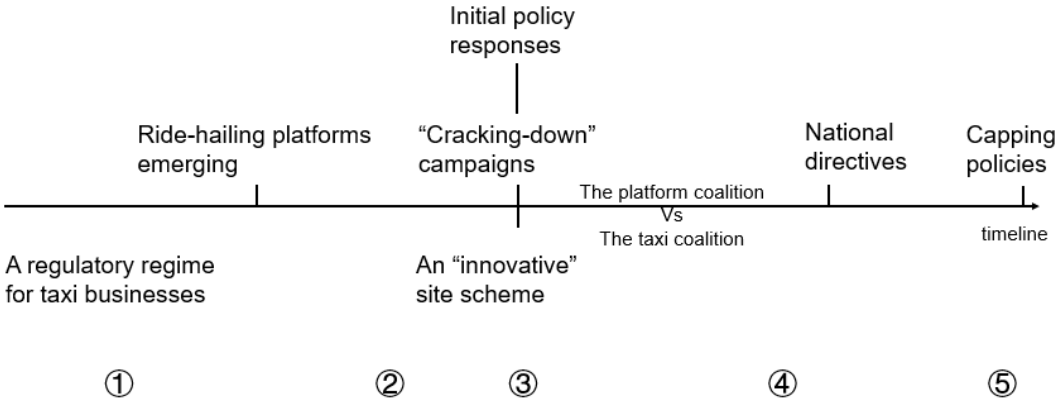
At the core, this analytical framework adopts a policy change theoretical approach. The metropolitan governments faced challenges by new online ride-hailing platforms and eventually reformed the old regulatory regimes to integrate regulations for platforms. During the formulation of regulations, two conflicting coalitions formed around platform ventures versus taxi entities to influence the metropolitan governments. Furthermore, when making regulations for newly-emerged online ride-hailing platforms, the metropolitan governments faced new beliefs about regulating these new platform ventures, which created a "punctuated equilibrium." Correspondingly, the vested "special interests" worked as a source of friction to hinder the sweeping of these new beliefs. The two conflicting coalitions respectively stood behind these new beliefs and the vested "special interests" and tried to persuade the metropolitan governments to adopt their policy proposals. However, the metropolitan governments were also under the guidance of the national government, which had its own agenda. In this regard, the metropolitan governments interacted with the national government by choices of complying, shrinking, and disobeying. The next two

chapters will interpret more explicitly triangular interactions in the formulation of regulations for online ride-hailing platforms in Beijing and Shanghai.

Chapter 3 Beijing: from “cracking-down” to “strict” regulations

The next two chapters will explicitly analyze the formulation of regulations for online ride-hailing platforms in Beijing and Shanghai. Firstly, the analysis will focus on how online ride-hailing platforms challenged regulatory regimes that governed taxi businesses. Secondly, it will stress how conflicts between platform ventures and taxi entities arose and produced two conflicting coalitions. Thirdly, triangular interactions among the metropolitan governments, the conflicting coalitions, and the national government will be explained. The cases will be presented following a timeline, as shown below. Five nodes will be emphasized, namely established regulatory regimes before platform emerging, conflicts after platforms’ emergence, first policy responses of the local governments, the issuing of national directives, and the making of final local policies.

Figure 3- 1 A timeline for empirical cases



This chapter will start with Beijing. In short, online ride-hailing businesses of platform ventures challenged existing regulatory policies for taxi businesses to a large degree in

Beijing. During this process, the increasing conflicts arose between traditional taxi businesses and online ride-hailing platforms. The initial response of the local government of Beijing was to "crack-down" on platforms (Liu, 2015). At this point, a political event at the national level occurred, which opened the policy window for making regulations for online ride-hailing platforms. The "Internet + initiative" was proposed by the central government, which was a national strategy aimed at promoting the transformation and upgrade of traditional industries by utilizing Internet-based information technology ("The 'Internet +'is upgraded to a national strategy," 2015). Therefore, the central government intended to encourage the development of online ride-hailing platforms and issued "loose" regulatory directives. Even though the local government of Beijing altered its initial "cracking-down" attitude following the "Internet +" strategy and "loose" central directives, it still made "strict" capping policies for platform ventures.

Challenges to the regulatory regime for taxi businesses

In the beginning, the business model of online ride-hailing platforms was matching passengers with taxis. Besides, platforms reduced the travel cost of passengers through subsidies. During this period, taxi drivers experienced income increases by joining ride-hailing platforms because these platforms took advantage of digital technology to improve the efficiency of each taxi. Also, taxi drivers could benefit from the subsidies of platforms. In one online community, some taxi drivers in Beijing have even claimed to be able to increase their monthly income by 1,000 to 2,000 RMB ("Can Didi help taxi drivers increase

their income?" 2013). Under the stimulus of this income growth, thousands of taxi drivers joined online ride-hailing platforms and became service providers.

The rapid expansion of online ride-hailing platforms at this moment complied with the expectation of the local government for a city-wide taxi scheduling system. Back then, the local government of Beijing intended to promote the modernization of urban transportation and expected to improve the efficiency of the taxi operation. A city-wide intelligent taxi scheduling system was to be constructed to reduce the empty driving rate of taxis, according to the "Outline of the Transportation Development" (2005). To a certain degree, ride-hailing platforms that utilized information technology to provide matching services for passengers and taxis complied with such an expectation. Within such a context, the local government of Beijing had not considered suppressing these platforms but tacitly encouraged platforms' expansion.

However, the attitude of the local government shifted due to a new type of business, online ride-hailing services, emerging from these platforms, which challenged ongoing regulations for taxi businesses. As the number of passenger users accumulated, ride-hailing platforms no longer served as mere brokers between taxis and passengers. At the midpoint of 2014, online ride-hailing platforms began to recruit private car owners or car rental companies to provide chauffeur services to customers (Zhang, 2017).

At this time, the existing regulatory regime for taxi businesses in Beijing was seriously challenged. Nevertheless, it is necessary to scrutinize how Beijing gradually forged this regulatory regime.

The taxi market in Beijing began to develop in the mid-1980s, adapting to the growing demand for traveling within the urban area. Before that, there were only two or three state-

owned taxi companies in Beijing with hundreds of vehicles. However, statistics show that Beijing had 302 taxi companies with more than 16,000 taxis in the city as of 1991 (Media Opinion Monitoring Office of People.cn, 2015; Jia, 2006). Thus, the local government started to reinforce regulating the growing taxi market.

Regulations for the taxi market since the mid-1980s had two characteristics. First, a franchising policy was implemented. At that time, the local government commenced issuing taxi plates and taxi driver licenses to taxi companies, and these taxi companies bought cars and hired drivers to run taxi businesses (Wang, 2002). Second, there was a close relationship between the local government and taxi companies, as each company operated under the direct control of one local government's department. The 1985's "Interim Measures on the Administration of Taxis in Beijing" (《北京市出租汽车管理暂行办法》) required that to establish a taxi company, state-owned and collective-owned enterprises required to hold a certificate that proved them being supervised by a governmental department before acquiring a company license from the Taxi Administration Office. This requirement made all taxi companies affiliated with one government department (Jia, 2006). Some taxi companies even started with direct investment from local governmental departments (Wang, 2002).

Even though the number of taxis in 1991 had increased sharply, the supply of taxi services still could not meet the market demand. Therefore, in 1992, the taxi industry in Beijing started a market-oriented reform, within which the municipal government lessened restrictions on market access. This restriction-lessening allowed individuals and private enterprises to set up taxi companies and to operate taxi businesses, doubling the number of taxi companies (Media Opinion Monitoring Office of People.cn, 2015). By the end of May

1993, there were 1,085 taxi companies and more than 500 individual operators with 49,000 vehicles in operation (Jia, 2006).

After the 1992 reform, taxi companies remained as main actors in the market who gained franchising taxi plates and driver licenses from the local government, and only a few individual operators existed. Most taxi drivers needed to acquire licenses and taxi plates from taxi companies, which led to a partnership between drivers and companies. Drivers were affiliated with but not employed by taxi companies. They paid deposits, rents, and other fees to companies to get licenses and plates but purchased cars with their own capital and operated semi-independently (Liu, 2009).

However, the rapid growth of the taxi market resulted in market chaos. For example, taxi companies resold taxi plates and driver licenses arbitrarily and did not manage their taxi drivers, which led to low-quality taxi services (Xuan, 2013). In the meantime, some studies illustrate that the number of taxis largely exceeded the market capacity and city capacity, which led to two direct results: cut-throat market competitions among taxi drivers and traffic jams (Media Opinion Monitoring Office of People.cn, 2015; Liu, 2015).

Therefore, the municipal government decided to start reinforcing regulations for the taxi market and restoring the order of the market. First, the quantity control policy was implemented since 1994. According to "Notice on Controlling the Increase of the Total Number of Taxis in 1994" (《关于 1994 年控制出租汽车总量增加的通知》), Beijing stopped approving new taxi companies and individual operators in 1994. Also, this policy document marked the beginning of Beijing's quantity control policy, as it required to keep the total number of taxis at a fixed amount (Jia, 2006).

Second, local transportation authorities began to transfer a part of their regulatory functions for the taxi market to taxi companies and formed a “government-company-driver” regulatory model (Development Research Center of the State Council, 2008). Beijing taxi administration bureau issued a document in 1996 that required taxi companies to become employers of taxi drivers. In practice, companies needed to buy back the cars purchased by taxi drivers and sign employment contracts with drivers. In this way, companies became the main regulatory objects of the local government, while taxi drivers became company employees who rented operation licenses and vehicles from taxi companies and paid taxi companies monthly (Wang, 2002; Jia, 2006; Liu, 2009). This practice enabled taxi companies to operate as agencies of the local government, which assisted the local government in scrutinizing the qualification of taxi drivers, monitoring the integrity of drivers, setting industry standards for drivers, and so on (Development Research Center of the State Council, 2008).

The most significant advantage of the "government-company-driver" regulatory model is to reduce the regulatory cost of the local government (Ibid.). The local government can directly implement the "government-driver" regulatory model, which can reduce intermediate links between the government and taxi drivers. However, this model can increase the difficulty and the cost of regulating the taxi market, especially when the number of taxis reaches a specific scale. Alternatively, the government can depend on agencies and establish a "government-agency-driver" regulatory model. In such a manner, the government only needs to issue taxi licenses to agencies and allow them to manage the vast number of taxi drivers. In the 1990s, the taxi industry was recognized as immature with uneven professional qualities, and the self-discipline of the taxi market was regarded

as weak due to the insufficient development of industry associations. Consequently, the local government of Beijing chose the second regulatory model, and the selected agencies were taxi companies (Development Research Center of the State Council, 2008; Chen, 2007).

Nevertheless, there were two obstacles to establishing the "government-company-driver" regulatory model. Firstly, many taxi companies not only regulated by local transportation authorities but also accepted supervision from at least one other local governmental department. Secondly, there were too many taxi companies of different scales, which increased the complexity of regulatory work. For transportation authorities of Beijing, ceding the regulatory power to so many companies with various scales did little to reduce the regulatory cost.

Thus, the local government took two critical measures to overcome these obstacles in the late 1990s. Firstly, the local government started to re-establish the relationship between local government authorities and taxi companies. Transportation authorities in Beijing issued "The Opinions on Rectifying the Taxi Industry and Strengthening the Enterprise Management" (《关于整顿出租汽车行业强化企业管理的意见》) in 1999. This document concentrated the regulatory power for the taxi market to transportation authorities of Beijing, as it required taxi companies to cut off their economic and supervisory links with non-transportation governmental departments (Jia, 2006).

Secondly, the merger of taxi companies was encouraged and promoted by local transportation authorities. An executive directive was issued to require large taxi companies to merge smaller companies in 2000. After this directive, the number of taxi companies in Beijing dropped sharply. By the end of 2001, only 340 taxi companies

survived in Beijing, down from more than 1,000 before. Among them, only 151 companies owned less than 49 taxis, a 57% decrease from 1999. In 2002, the number of taxi companies declined to less than 300, and those with fewer than 49 vehicles also gained an 18% decrease (Beijing transportation development research center, 2001, 2003). Since the number of taxi companies declined, the local government transferred some of the regulatory power over the taxi market to the remaining taxi companies and gradually made these taxi companies become the agencies of transportation authorities.

Eventually, the "government-company-driver" regulatory model was established, which led to a reciprocal tie between taxi companies and the local government. Companies obtained franchising licenses and taxi plates from the local government, and in turn, they needed to assist the local government in maintaining market order. Some scholars assert that franchising licenses and taxi plates are monopolized resources of the local government. By acquiring these monopolized resources and leasing them to drivers, taxi companies could maintain their continuous earnings (Liu, 2015). The reciprocal tie works both ways. The local government must ensure taxi companies profit from obtaining the monopolized resources in order to sustain the regulatory model. Driven by self-interest, taxi companies willingly became the regulatory agencies of the local government to manage taxi drivers. Also, to maintain continuous profitability, taxi companies always needed to keep acquiring franchising licenses and taxi plates, which in turn pushed them to strengthen their relationship with the local government (Ibid.). Studies on the crony relationship between companies and officials in China (such as Pei, 2016) also indicate that there might have crony relations existed between taxi companies and some local officials who effectively

had the power to allocate the monopolized resources. These crony relations indeed reinforced the reciprocal tie between the local government and taxi companies.

Another regulatory policy formed during this period is the price control policy, which consolidated the "government-company-driver" regulatory model (Development Research Center of the State Council, 2008). Price control was employed to protect the interests of the passengers. As mentioned, the explosive expansion of the taxi industry in the early 1990s led to cut-throat market competitions. One result of these cut-throat competitions was taxi drivers charging customers arbitrarily. Many scholars have demonstrated that the unique features of the taxi market result in information asymmetry between customers and taxi drivers, which makes it hard to protect customers (i.e., see Balafoutas et al., 2013). To solve this information asymmetry and to protect passengers' interests, the local government of Beijing decided to conduct price control over taxi services. In addition to protecting passengers, the price control policy also functioned to ensure taxi drivers' profitability, so that drivers were able to pay "the monthly fees" to taxi companies. In this way, the benefit of taxi companies were guaranteed (Wang, 2002; Li, 2010). From this logic, the price control policy consolidated the "government-company-driver" regulatory model.

At this point, the regulatory regime for taxi businesses had been formed in Beijing, and its core was the franchising policy. Taxi plates and driver licenses were issued to taxi companies, and taxi companies recruited employees to drive taxis. Then, to meet the market capacity and the city capacity, the quantity control policy was adopted, which means the local government maintained the numbers of licenses and plates. Based on the limited franchising licenses and plates, a "government-company-driver" regulatory model was established to reduce the regulatory cost of the local government. Moreover, price

control was conducted to protect customers from overcharging by taxi drivers, on the one hand, and to consolidate the existing "government-company-driver" regulatory model by ensuring the profit of taxi drivers on the other.

This chapter has spent much space to introduce the regulatory history of the taxi industry because the gradually formed regulatory regime created a unique relationship between taxi entities and the local government. This relationship laid the groundwork for the government's policy choices in the formulation of regulations for ride-hailing platforms.

However, this established regulatory regime was thoroughly challenged by the expansion of online ride-hailing platforms. Primarily, platforms challenged the franchising policy because they quickly recruited vehicles without taxi plates and drivers without franchising licenses to operate alternative taxi businesses. These vehicles came from two sources. Primarily, many private car owners were recruited. Also, platforms leased cars from car rental companies and handed them over to contracted drivers (Li, Yu & Pan, 2016). Those online ride-hailing vehicles and drivers were regarded as "illegal" in terms of existing regulations for taxi businesses.

Secondly, the amount of online ride-hailing cars experienced a marked increase and was not controlled by the local government, which challenged the quantity control policy. The number of online ride-hailing cars rapidly grew due to "network effects." In a year, Beijing had about 95,000 online ride-hailing vehicles, which outnumbered taxis that were controlled by the local government in quantity since 1994 ("Special report on the development of online ride-hailing," 2015).

Thirdly, due to their technological advantages, platforms had the right of pricing for online ride-hailing services, which was incompatible with the government's price control

policy for the taxi industry. The price of online ride-hailing services was determined by algorithms of online platforms, which learned and evaluated demand and supply of ride-hailing businesses and then set the price (Tan, 2018).

More importantly, the increasing business conflicts between taxi businesses and online ride-hailing platforms resulted in declining incomes of taxi drivers. Thus, the foundation of the "government-company-driver" regulatory model was damaged.

The growing conflicts between online ride-hailing platforms and taxi operators

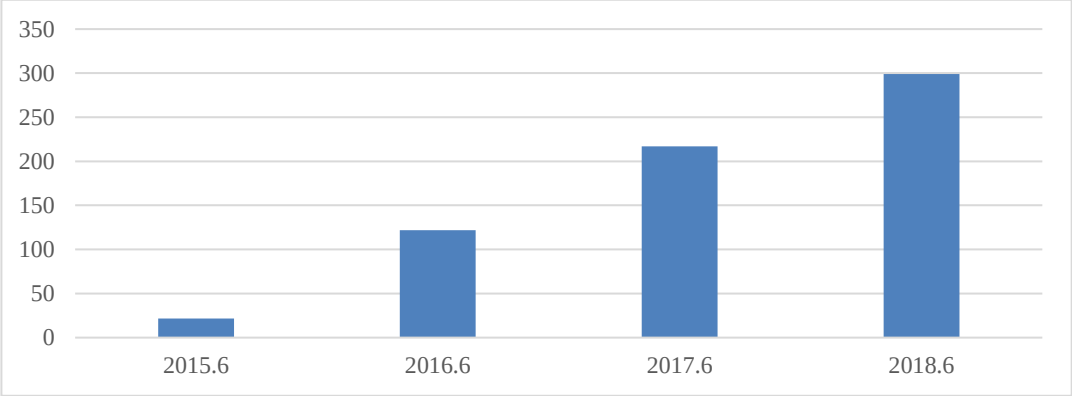
When platform ventures positioned online ride-hailing services as high-end, they did not immediately cause conflicts with taxi drivers. However, since the end of 2014, conflicts between online ride-hailing platforms and taxi operators had increased. Platforms started to launch cheap ride-hailing services one after another, which had a price advantage over taxi services and therefore posed a direct threat to taxi business operators.

Moreover, online ride-hailing businesses expanded rapidly since 2015 due to platforms' massive subsidies to both passengers and drivers. Subsidies to passengers were designed to cultivate costumers' habits for using ride-hailing services. In this regard, coupons and vouchers were issued to passengers to enjoy ride-hailing services at a lower price. At the same time, cash incentive mechanisms were invented to entice more private-car owners and to encourage existing online ride-hailing drivers to increase the frequency of receiving orders from passengers.[1] Due to subsides to passengers and ride-hailing

[1] For information on subsides to passengers, see: Didi's and Kuaidi's subsidies of 1 billion RMB will lift the price war and free the starting price for taking online ride-hailing cars. (2015, March 21). *Xinhuanet*. Retrieved December 22, 2018, from http://www.xinhuanet.com//fortune/2015-03/21/c_127605121.htm; For information on subsides to online ride-hailing drivers, see: Li, J. (2016, December 23). Didi: From crazy

drivers, online ride-hailing businesses expanded quickly since 2015. Figure 3-2 shows that the number of users of online ride-hailing services nearly increases five-fold from mid-2015 to mid-2016.

Figure 3- 2 The scale of users using online ride-hailing services from July 2015 to July 2018 in China (million)

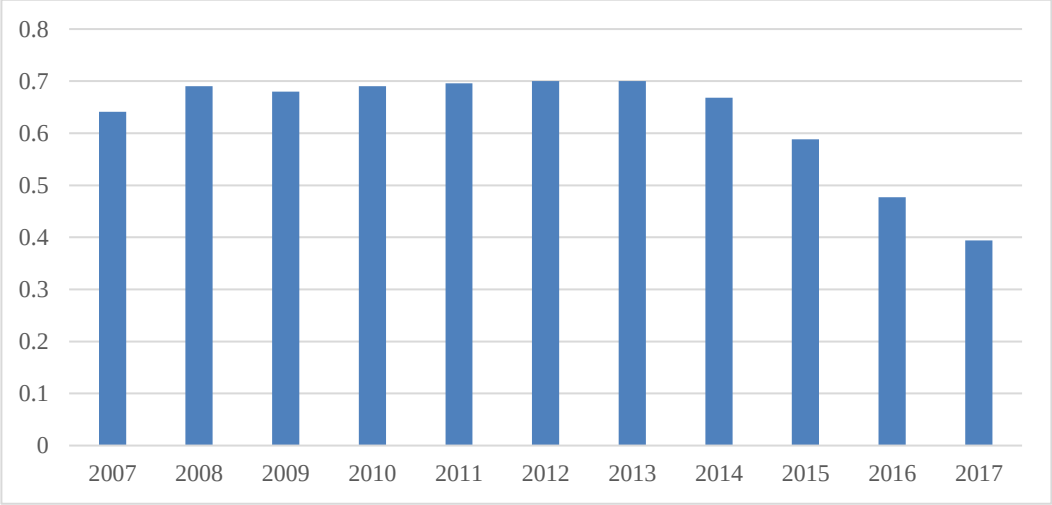


Data source: China Internet Network Information Center. (2016). Statistical report on the development of China's Internet (Rep. No. 37). Retrieved June 3, 2020, from China Internet Network Information Center website: http://www.cac.gov.cn/2016-01/22/c_1117858695.htm; China Internet Network Information Center. (2016). Statistical report on the development of China's Internet (Rep. No. 38). Retrieved June 3, 2020, from China Internet Network Information Center website: http://www.cac.gov.cn/2016-08/03/c_1119326372.htm; China Internet Network Information Center. (2017). Statistical report on the development of China's Internet (Rep. No. 40). Retrieved June 3, 2020, from China Internet Network Information Center website: http://www.cac.gov.cn/2017-08/04/c_1121427728.htm; China Internet Network Information Center. (2018). Statistical report on the development of China's Internet (Rep. No. 42). Retrieved June 3, 2020, from China Internet Network Information Center website: http://www.cac.gov.cn/2018-08/20/c_1123296882.htm.

subsidies to rational growth, what lies behind the brutal growth? *Sina*. Retrieved February 28, 2019, from http://tech.sina.com.cn/zl/post/detail/i/2016-12-23/pid_8509422.htm.

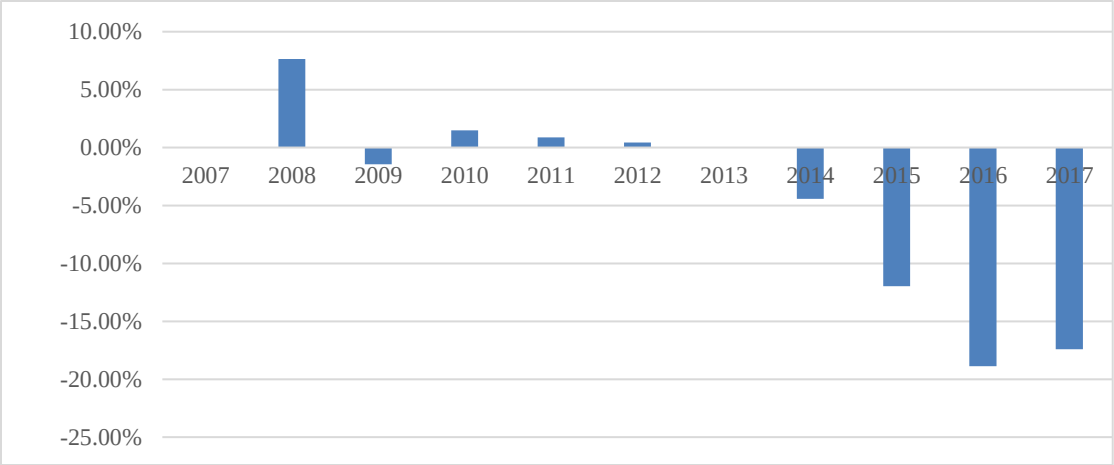
In Beijing, fast-growing online ride-hailing businesses directly seized the market share of taxi businesses. Figure 3-3 and Figure 3-4 illustrate that the volume of taxi passenger traffic in Beijing sharply declined since 2015, from 588 million to 394 million in 2017, by more than 10% for three consecutive years. The direct result of declining passenger traffic was reflected in taxi drivers' incomes, which sharply decreased by 100 to 200 RMB per person a day in Beijing (“Didi was summoned for a face-to-face meeting by authorities in Beijing,” 2015).

Figure 3- 3 Total passenger traffic volume of taxis in Beijing from 2007 to 2017 (one billion/person)



Data source: China, Beijing transportation development research center. (2008-2018). *Annual report on Beijing transportation development*. Beijing: Beijing transportation development research center.

Figure 3- 4 The growth rate of taxi passenger traffic volume in Beijing from 2007 to 2017 (%)



Data source: China, Beijing transportation development research center. (2008-2018). *Annual report on Beijing transportation development*. Beijing: Beijing transportation development research center.

Due to the loss of income, the conflicts between taxi drivers and online ride-hailing platforms grew and eventually resulted in taxi drivers' street protests. Researchers have counted several street protests organized by taxi drivers in more than ten cities nationwide in 2015 (Xi, 2017). Beijing was one of these cities. At the end of 2015, taxi drivers in Beijing blocked the headquarter of one of the biggest online ride-hailing platforms, Didi, to publicly express discontent at their losses of income caused by the platform's new businesses (Zhou, 2015).

More importantly, the income declines of taxi drivers generated an adverse effect on the existing regulatory model for taxi businesses in Beijing. As mentioned, the local government needed to guarantee the incomes of drivers to maintain a "government-company-driver" regulatory model. Only when the incomes of taxi drivers were guaranteed, could taxi companies continuously benefit from "the monthly fees" paid by taxi drivers,

and thus, maintain as the regulatory agencies of the local government. However, taxi drivers' ability and willingness to pay for “the monthly fees” decreased due to the declining incomes, which made the government's regulatory model unsustainable. In this way, the reciprocal tie between taxi companies and the local government was also disrupted.

“Cracking-down” on “illegal operators”

Facing challenges to the existing regulatory regime and the growing conflicts between traditional taxi entities and platform ventures, the local government of Beijing began to suppress online ride-hailing businesses. Due to the need to reduce air pollution, save energy, ease traffic congestion, and convenient individual-traveling in the urban area, the local government once encouraged "car-sharing" behaviors. This principle was established in a policy document in January 2014, the "Opinions on the Car-sharing" (《关于小客车合乘出行的意见》), within which a "car-sharing" behavior was defined as a travel method that private car owners share idle seats in their cars with passengers who have the same travel route. This policy document acknowledged that co-passengers might reasonably share the expenses of car-owners (Wei, 2014). This flexible definition of "car-sharing" behaviors opened a protecting policy umbrella for the expansion of online ride-hailing businesses because all platforms claimed their online ride-hailing services as "car-sharing" practices. However, the municipal government of Beijing ignored the claim of those platforms. Instead, it defined online ride-hailing services as "illegal" and started to "crack-down" on these "illegal" services (Liu, 2015).

To stop these "illegal" services, Beijing's municipal government increased the penalty for online ride-hailing businesses. In the first half of 2015, Beijing's traffic law enforcement authorities penalized 2,147 operators who used private cars or rental cars to run chauffeur businesses. Among those penalized operators, 1,211 were online ride-hailing drivers from Didi and 170 from Uber ("Didi was summoned for a face-to-face meeting by authorities in Beijing," 2015). In 2014, there were only 47 cases of illegal chauffeur operations involving online ride-hailing platforms (Liu, 2015).

Also, local transportation authorities began to summon face-to-face meetings with senior executives of platforms to intervene in businesses of ride-hailing platforms. In the last week of May 2015, Didi activated a campaign named "Orange Monday," which aimed at attracting more new passengers by giving them great price discounts to enjoy online ride-hailing services. Discount offers were only available on Mondays, so the campaign was called "Orange Monday" ("Didi' orders on June 1st reached 3.85 million," 2015). However, such subsidies for new passengers resulted in declining demand for taxi services, which raised the attention of local regulatory authorities. Right after the second Monday of this campaign, the subordinate authorities of the Beijing Municipal Commission of Transport and the Beijing Municipal Public Security Bureau jointly summoned senior executives of Didi for a face-to-face meeting. At this meeting, these authorities explicitly stated that online ride-hailing businesses were violating the "Regulations on the Administration of Taxis in Beijing" (《北京市出租汽车管理条例》), which prohibited recruiting non-franchising cars to provide chauffeur services. They required the platform to conduct self-inspection and rectification, which directly resulted in Didi canceling its "Orange Monday" campaign ("Didi cancels 'express free,'" 2015).

The window for policy change

When the local government of Beijing was suppressing online ride-hailing businesses, a new change took place at the national level, which directly affected the subsequent formulation of regulations for online ride-hailing platforms. On March 5th, 2015, Premier Li Keqiang proposed at the National People's Congress that the government would formulate an “Internet + initiative,” which made the “Internet +” a national strategy. Then on July 4th, 2015, the State Council issued the "Guidance on Actively Advancing the Internet + Initiative" (《国务院关于积极推进 "互联网+" 行动的指导意见》, hereinafter referred to as "Guidance on Internet + initiative").

The core of the “Internet +” strategy was to encourage full and deep integration between the Internet and various fields of economy and society (“The ‘Internet +’ strategy is upgraded to a national strategy,” 2015). This strategy set two goals. Firstly, the state intended to encourage traditional industries to employ mobile Internet, cloud computing, big data, and the Internet of things technologies to achieve the development of digitalization. Secondly, by upgrading traditional industries, the state also expected to create new economic growth points, foster new industries, and develop new business forms (Ibid.). The development of online ride-hailing platforms could contribute to accomplishing these two goals. Initially, online ride-hailing platforms represented a new business form that employed Internet-based technologies to provide convenient services with more efficient utilization of resources and less cost (“Guidance on Internet + initiative,”

2015). Secondly, the development of online ride-hailing platforms could offer technological supports for taxi entities (Xu, Liu & Xu, 2017).

To achieve the goals of the "Internet +" strategy, the “Guidance on Internet + initiative” promoted innovative measures to regulate online ride-hailing platforms. "Innovative" regulations were meant to create a "loose" and "inclusive" environment for new business forms to develop, which included but were not limited to minimizing ex-ante restrictions and reinforcing “ongoing” or “post-mortem” regulation ("Guidance on Internet + initiative," 2015). Hence, the “Internet +” initiative could be regarded as a policy window, which refers to an opportunity for advocates to push attention to their special policy problems and their pet solutions (Kingdom, 2003). The central government had initially expressed its regulatory attitude towards online ride-hailing platforms, which was welcomed by online ride-hailing platforms (Xi, 2017). Also, local governments started to take further steps or make policies for online ride-hailing platforms based on this attitude of the central government.

This "Internet +" initiative directly softened the attitude of Beijing's local government towards online ride-hailing platforms. In another face-to-face meeting with Didi's executives in July 2015, Beijing's local authorities expressed that they were considering allowing platforms to operate online ride-hailing businesses, of course, with specific regulations. On this basis, they would also promote a reform for the taxi industry to support the integration of Internet technologies and traditional taxi businesses ("Online ride-hailing platforms were summoned for meeting again," 2015). This meeting symbolized that for the first time, local regulatory authorities in Beijing had changed their attitude since they labeled online ride-hailing cars as "illegal" and launched a series of "crack-downs" on them.

Then, the local government of Beijing began the process of formulating policies to regulate online ride-hailing platforms.

National directive policies under the "Internet +" strategy

Under the “Internet +” strategy, the central government issued inclusive and supportive directive policies to encourage the development of online ride-hailing platforms. In October 2015, the central government issued the opinion soliciting drafts of the “Guidelines on Deepening the Reform and Promoting the Healthy Development of the Taxi Industry” (《关于深化改革推进出租汽车行业健康发展的指导意见》, hereinafter referred to as “Guidelines on the Taxi Industry”) and the “Interim Measures for the Management of Business Operations and Services of Online Ride-hailing Cars” (《网络预约出租汽车经营服务管理暂行办法》hereinafter referred to as “Interim Measures”). Taxi companies and taxi drivers, online ride-hailing platforms and drivers, passengers, scholars, and other parties all started to express their opinions concerning these two document drafts (Xi, 2017).

These two document drafts clarified that regulations for online ride-hailing platforms would be integrated with those for the taxi industry. Municipal governments, as the most direct regulators, were expected to establish their own regulatory model and issue their own regulatory policies in line with the central government’s directives. However, the drafts introduced some ex-ante restrictions on online ride-hailing platforms and drivers, which caused the dissatisfaction of online ride-hailing platforms. Firstly, they set up high market entries for platforms and online ride-hailing drivers to start their businesses. For

example, platforms were required to set up branches in each city where they operated and to apply for business licenses one by one. Besides, the nature of ride-hailing vehicles was requested to be registered as “operating cars.” Also, each ride-hailing driver was requested to sign an employment contract with a platform. In some way, these requirements were against the expansion logic of online ride-hailing platforms by recruiting private cars. Secondly, the drafts requested municipal governments to control the number of online ride-hailing vehicles. Thirdly, price control over ride-hailing services was expected. Those drafts required ride-hailing cars to install meters and to apply the pricing system controlled by municipal governments like traditional taxis (“Experts suggested the new policies for online ride-hailing cars to be put on hold,” 2015).

Nonetheless, after extensively collecting public opinions, official policy documents issued on July 27th and 28th in 2016 respectively, removed or modified these restrictions mentioned above. These revisions set five essential keynotes for municipal governments to make “loose” and “innovative” regulatory policies for online ride-hailing platforms.

First, regulating online ride-hailing platforms and their businesses was included in the regulatory regime for the taxi industry, and the legal status of online ride-hailing cars was granted. The “Guidelines on the Taxi Industry” explicitly indicated that municipal governments needed to encourage and support three types of businesses of online ride-hailing platforms, which include matching services for taxis and passengers, online ride-hailing services, and car-sharing services. Also, in the same document, the legal status of online ride-hailing cars was granted, which was another signal from the central government to favor this new business form.

Second, the official documents set lower market entries for platforms and online ride-hailing cars, compared with the opinion soliciting drafts. In the “Interim Measures,” platforms only needed to be certified in one city, and they could avoid repeated license applications in other places they served. Besides, the audit time for permitting a license for an online ride-hailing car was shortened from 30 days in the two drafts to 20 days in official documents. Moreover, the use nature of the ride-hailing vehicles was not required to be registered as an “operating vehicle,” as long as the technical performances of vehicles met the requirements of operational safety standards.

Third, quantity control and price control requirements, which were employed to regulate traditional taxi businesses and highlighted in the drafts, were removed from the official documents. The “Interim Measures” removed the requirement for cities to control the total amount of online ride-hailing cars. Also, it no longer required these cars to use taxi meters and the government-controlled pricing system. Instead, the power for setting the price flowed from the government to the market, or more precisely, online ride-hailing platforms.

Fourth, encouraging the "car-sharing" was explicitly reassured. "Car-sharing" behaviors were officially differentiated from online ride-hailing services. For the former, the central government saw it as a new urban lifestyle that could reduce air pollution and traffic congestion and thus held an encouraging attitude. However, the latter needed to be regulated as business activities (“Guidelines on the Taxi Industry,” 2015).

Fifth, these policy documents responded to disruptions brought by online ride-hailing platforms and thus set up a principle to differentiate the markets of online ride-hailing cars and taxis. Online ride-hailing cars would be guided to provide high-end services, which

then would leave the middle and low-end markets to taxis (“Guidelines on the Taxi Industry,” 2015).

In sum, the central government recognized the growing conflicts between online ride-hailing platforms and traditional taxi operators. However, it believed that through administrative guidance, these ever-increasing conflicts could be resolved. Thus, two complementary but different development paths were set respectively for ride-hailing cars and taxis, with the former serving high-end customers and the latter serving middle and low-end ones. Despite this guidance, the central government still intended to direct all municipal governments nationwide to make "loose" regulatory policies for online ride-hailing platforms by reducing ex-ante restrictions. Thus, directives from these two central policy documents catered to the "Internet +" strategy and to promote the development of online ride-hailing platforms. They encouraged new business forms of platforms so that they granted legal status to the online ride-hailing business and encouraged "car-sharing" practices. Also, access controls for platforms and ride-hailing vehicles were either eliminated or relaxed.

The differentiated beliefs of the two coalitions

After the central government issued its directives, the municipal government of Beijing started to make its own regulatory policies. At this moment, the local government faced two coalitions formed around two conflicting interest groups, online ride-hailing platforms versus traditional taxi entities, with different beliefs of interests. Individuals, organizations, or experts who supported each of the coalitions expressed their opinions and

policy proposals through multiple media platforms such as newspapers, news websites, and some Internet forums (Song, 2017; Xi, 2017).

The first coalition was around online ride-hailing platforms. This coalition primarily insisted that the government should not define their businesses as "illegal" and cap these businesses. Thus, it expected the government, the central or the local, to grant ride-hailing businesses legal status so that ride-hailing platforms and drivers could avoid being fined or facing other penalties (Xi, 2017). Moreover, this coalition proposed regulations that could promote the sustainable innovations of platforms, streamline administrations so to create a favorable environment for the development of new businesses and respect the self-disciplining mechanisms of the market (Lu, 2016). From this perspective, central directives with an intent to promote "loose" regulations catered to this coalition's beliefs. They met the need for platforms in continuing recruiting private vehicles and drivers to expand their business layouts. Consequently, many online ride-hailing platforms welcomed central directives. They claimed that these directives could realize win-win for both traditional taxi entities and platform ventures and would significantly promote the development of China's sharing economy industry (Chen, 2016).

The other coalition around taxi companies and taxi drivers believed that the interests of taxi entities were lost due to online ride-hailing businesses. Taxi drivers who blocked Didi's headquarter in Beijing held that online ride-hailing services allowed private vehicles to operate "illegal" alternative taxi services, which "undermined the existing market order." Also, they claimed their incomes decreased because these new businesses took the market share away from traditional taxis (Chen, 2015). Based on these recognitions, the taxi coalition asked for "cracking-down" activities on online ride-hailing businesses and

banning the operation of platforms (Xi, 2017). In other words, this coalition favored “strict” regulations that could confine the rapid growth of online ride-hailing platforms and their businesses.

The formulation of regulatory policies: a result of triangular interactions

The making of regulatory policies for online ride-hailing platforms was a "punctuated equilibrium" to the local government. Scholars define the "punctuated equilibrium" as a situation, within which new beliefs concerning a policy sweep through the government rapidly (Baumgartner & Jones, 1991). The central government of China adopted new beliefs concerning regulating online ride-hailing platforms. These new beliefs held that some regulating measurements for traditional taxi businesses were not adaptative for regulating online ride-hailing platforms. For example, quantity control and price control that used to regulate incumbent taxi businesses should not be employed to regulate online ride-hailing platforms. Also, these beliefs promoted the government to form a "loose" and "innovative" regulatory regime that allowed online ride-hailing platforms to operate the way they were and to maintain their operational advantages over incumbent business entities (Song, 2017). Thus, the central government issued “loose” directives for regulating platform ventures. These directives reduced ex-ante restrictions, allowed online ride-hailing platforms to recruit private cars to operate online ride-hailing businesses, and advocated platforms to develop their "car-sharing" businesses.

However, the local government of Beijing disobeyed the central government’s directives by making regulatory policies that re-introduced an ex-ante restriction removed

by the central government and adopted other restrictive measures to cap the scale of online ride-hailing platforms. Its policy arrangements made it impossible for online ride-hailing platforms to maintain their competitive advantages by unlimitedly recruiting private cars, which indeed favored the beliefs of the taxi coalition over those of the platform coalition.

In November 2016, the municipal government of Beijing issued the "Implementations of Beijing on Deepening the Reform and Promoting the Healthy Development of the Taxi Industry" (《北京市关于深化改革推进出租汽车行业健康发展的实施意见》), the "Implementation Rules of Beijing for the Management of Business Operations and Services of Online Ride-hailing Cars" (《北京市网络预约出租汽车经营服务管理实施细则》), and the "Guidelines of Beijing on the Car-Sharing of Private Vehicles in Beijing" (《北京市私人小客车合乘出行指导意见》). Within those three documents, the intent of the local government to cap online ride-hailing platforms was very apparent.

Primarily, the local government of Beijing decided to lower the numbers of online ride-hailing cars and drivers by two effective measures and implement quantity control. First, all online ride-hailing drivers were requested to have local household registrations (户籍). Second, ride-hailing cars needed to have Beijing's vehicle plates ("Implementation Rules of Beijing for the Management of Business Operations and Services of Online Ride-hailing Cars," 2016). In Beijing, both the amounts of local household registrations and local vehicle plates were strictly controlled. According to media estimates, these two requirements could significantly reduce ride-hailing cars and drivers (Wen, 2016; Ren, 2018). Moreover, the "Implementations of Beijing on Deepening the Reform and Promoting the Healthy Development of the Taxi Industry" stipulated that Beijing's

municipal government would conduct a dynamic control of the total number of taxis and ride-hailing vehicles.

Subsequently, to mitigate the impact of "car-sharing" practices on quantity control, Beijing also imposed a “strict” limitation on them. As mentioned, “car-sharing” practices opened an umbrella for protecting unlicensed online ride-hailing businesses. Therefore, the local government stipulated the maximum number of car-sharing behaviors of each private car owner to be twice a day (“Guidelines of Beijing on the Car-Sharing of Private Vehicles in Beijing,” 2016).

Afterward, to ensure the market share of taxi operators, Beijing set rigid requirements for online ride-hailing vehicles in providing high-end services. For example, requirements for the wheelbase and the displacement of online ride-hailing cars were much higher than those of taxis. The “Implementation Rules of Beijing for the Management of Business Operations and Services of Online Ride-hailing Cars” required the wheelbase of 5-seat ride-hailing vehicles to be no less than 2650mm, and the displacement to be no less than 1.8L. 7-seat ride-hailing vehicles should have a displacement no less than 2.0L and a wheelbase no less than 3000 mm. These requirements limited all online ride-hailing vehicles to be middle or high-end cars. In this way, they guided online ride-hailing services to become high-end services.

At this point, the local government of Beijing had constructed a "government-platform-driver" regulatory mode to regulate online ride-hailing businesses, which was similar to the "government-company-driver" model for taxi businesses in terms of form, but very different at the core. Identical to the "government-company-driver" model, the local government transferred part of the regulatory functions to online ride-hailing

platforms. Delivering training and education to drivers, vetting the qualifications of drivers' vehicles, and so on, became the responsibilities of platforms (“Implementation Rules of Beijing for the Management of Business Operations and Services of Online Ride-hailing Cars,” 2016). Hence, these platforms became regulatory agencies of the local government and spared the local government from dealing with online ride-hailing drivers directly. However, the "government-platform-driver" model no longer had the reciprocal tie that existed in the "government-company-driver" model. Since the local government directly issue licenses to online ride-hailing drivers and cars rather than distributing licenses through platforms, it no longer provided monopolized resources to platforms.

In general, Beijing’s local regulatory policies capped online ride-hailing platforms and therefore favored the beliefs of the taxi coalition. Why the local government biased in favor of the taxi coalition over the platform coalition? This thesis argues that policy decisions in favor of the taxi coalition were caused by the local government's need to protect taxi entities. This chapter has explained how a reciprocal tie between taxi companies and the local government was institutionalized into the regulatory regime for taxi businesses. This institutionalized reciprocal link determined that the local government needed to maintain the profitability of taxi companies. In other words, the "special interests" of taxi entities had been forged. While taxi entities were experiencing the continuing loss of interests, the local government was incentivized by the vested "special" interests of taxi entities and thus favored the taxi coalition by putting “straitjackets” on the expansion of platform ventures.

Meanwhile, these restrictive policies made by the local government stood against “loose” central directives. Why did the local government make policies in contradiction to

those of the central government in an authoritarian system? This thesis attributes it to the vested "special interests" of taxi entities. As mentioned in Chapter 2, the central and local governments in Chinese politics are fragmented and interdependent bureaucracies. This interdependent/fragmented characteristic determines that policy outcomes are neither entirely dominated by the central government nor the local. Nevertheless, the central government is hierarchically higher than local governments and has established multiple mechanisms to control local governments (Chung, 2016; Huang, 1999; Lieberthal & Oksenberg, 1990). This fact means local governments' disobedience to the central government is not generalized.

Existing literature roughly presents three explanations on why local governments make divergent policies against the central government. Firstly, some scholars attribute it to the "pioneering" leadership. They discover that some local leaders with courageousness and the far political vision might take efforts to depart from central policies and take initiatives and innovations in economic reforms (Cheung et al., 1998). This explanation does not fit the case of this chapter, as the central government is more "innovative" than the local government. Secondly, scholars argue that local governments could leverage their information superiority to conduct opportunistic behaviors. Huang asserts that the central government and local governments in China foster a "principal-agent" relationship. The central government acts like a principal who controls the local officials through mechanisms like the cadre management system. The local officials are like agents of the central government, who may selectively implement some central demands and shrink and avoid others due to their need in some occasions (Huang, 1999). However, this explanation focuses on the shrinking behaviors of local governments, which makes it insufficient to

justify why local governments disobey central directives and formulate contrasting policies. Thirdly, some scholars maintain that sometimes the strong local interest drives local governments to stand against the central government, especially when local officials think they can get away with the punishment (Chung, 2016; Mei and Pearson, 2014). Also, the central government usually gives directives without detailed implementing and regulating documents, which leaves discretion for local governments to obey the central government selectively and argue that their disobedience is due to local needs (Lieberthal & Oksenberg, 1990).

The combination of the second and the third explanations interprets the local government's option for regulatory policies in contradiction of central directives in the case of this chapter. Due to the need to protect traditional taxi operators, Beijing's local government selectively implemented a central directive, and avoided or disobeyed others. Primarily, it selectively emphasized differentiating the markets for taxi businesses and online ride-hailing businesses. Besides, the local government justified that its restrictions on online ride-hailing drivers and vehicles were all due to the need to differentiate the markets for taxi entities and platform ventures ("Implementation Rules of Beijing For the Management of the Business Operation and the Services of Online Ride-hailing Cars," 2016). Subsequently, the local government of Beijing chose to avoid the central government's request to lower the market entries for online ride-hailing cars and platform ventures. Furthermore, it re-introduced quantity control over online ride-hailing cars, imposed the restriction to "car-sharing" practices, and issued franchising licenses to ride-hailing drivers, which directly stood against the central government's directives but reduced the loss of taxi entities.

In conclusion, the "strict" characteristic of Beijing's regulatory policies was shown by the adoption of many ex-ante restrictions that capped the expansion of online ride-hailing platforms. According to a news report, only 6,000 cars in Beijing had met the requirements of local policies and been licensed to operate online ride-hailing services as of August 2017. While under various restrictions, licensed online ride-hailing vehicles and drivers were expected to grow very slowly in the future (Pei, 2017). Moreover, the limitation on "car-sharing" practices and the detailed guidance for online ride-hailing businesses to differentiate their market form taxi businesses could affect the future development of online ride-hailing platforms. Thus, these policies have demonstrated their effectiveness in capping the expansion of platform ventures. By adopting platform-capping policies, the local government of Beijing favored the taxi coalition over the platform coalition. This chapter has argued that the favoritism was caused by the historical reciprocal link between the local government and taxi companies had institutionalized the "special interests" of taxi entities into the regulatory regime for taxi businesses. However, these platform-capping policies contrasted the central government's "loose" directives. Even though the vested "special interests" incentivized the local government to disobey the central government, the disobedience was not arbitrary, as it was accompanied by selectively implementing the central directive that differentiated the markets for online ride-hailing platforms and taxi entities. The next chapter will explain due to the same vested "special interests," Shanghai made similar policy choices, which departed from its initial welcoming attitude towards ride-hailing platforms.

Chapter 4 Shanghai: from a “loose” regulatory approach to “strict” regulations

The context of the policy formulation for online ride-hailing platforms in Shanghai was different from that of Beijing. When Beijing launched activities to “crack-down” on online ride-hailing platforms, Shanghai planned to take an “innovative” regulatory approach under the leadership of the Shanghai Party Secretary, Han Zheng. This regulatory approach aimed at bringing in “loose” regulations to encourage the development of platform ventures. However, after the formulation process, the local government of Shanghai finally adopted regulatory policies very similar to Beijing's, with “strict” measures to restrain platforms and their businesses.

Challenges to the regulatory regime for the taxi industry

Shanghai used to generate a similar regulatory regime like Beijing for the taxi industry, but a bit earlier. At the end of the 1980s, Shanghai formed a regulatory regime with a franchising policy at the core, while Beijing had it well established by the late 1990s. Also, a price control policy and a quantity control policy were adopted, and Shanghai constructed a “government-company-driver” regulatory model. However, unlike Beijing, the regulatory regime for the taxi industry in Shanghai was disrupted before online ride-hailing platforms started recruiting private car owners to provide online ride-hailing services.

Shanghai started to construct the regulatory regime for taxi businesses since its taxi market began to flourish in the mid-1980s. Before that, the city's taxis were under the unified management of a few taxi companies with joint state-private ownership, which only

had hundreds of taxis. However, this situation changed as many state-owned, collective-owned taxi companies, and individual operators emerged since the mid-1980s. Even several Sino-foreign joint-invested taxi companies were established at that time. By 1986, there were more than 600 taxi companies of various types, with about 8000 vehicles in Shanghai. Facing the growing taxi market as well as the development of transportation in Shanghai, the local government set up a special office in 1985, Shanghai Public Transport Administration Office, to regulate transportation businesses. A critical function of this office was to issue taxi plates and franchising taxi driver licenses, which marked the beginning of the franchising policy for the taxi industry in Shanghai ("Local Chronicles of Shanghai," 2002).

Nevertheless, the franchising policy alone was still unable to effectively deal with new problems brought by the rapidly growing taxi market. There were various problems in the market, such as the difficulty for passengers to get a taxi and the poor condition of taxi vehicles (Zhang, 2017). Facing a deteriorating taxi market, the municipal government of Shanghai began to reinforce governance in 1988, which led to three critical regulatory measures.

First, Shanghai introduced a policy to control the price of taxi services in the late 1980s. The Public Transport Administration Office, established in 1985, functioned to monitor the changes in the taxi market and adjust the taxi service price with the joint help of relevant authorities, which built the prototype of price control in Shanghai. Then in 1988, because many taxi drivers refused to take short-distance passengers. To cope with this circumstance, Shanghai adopted a new pricing system, including a starting minimum fare price and a mileage price in addition to the minimum fare ("Local Chronicles of Shanghai,"

2002). Local regulatory authorities set both the minimum price and the mileage price according to market conditions, and by that point, the price control policy for the taxi industry was established.

Second, the quantity control policy for taxis was adopted in the late 1980s. The number of taxi vehicles in Shanghai could not meet the market demand in the early 1980s. The mileage utilization rate (the ratio of operating mileage to total driving mileage) of taxis reached about 80%. Regulatory authorities believed that the mileage utilization rate should be maintained at around 70% to fit the urban development, road traffic conditions, and the development of the taxi industry (Ibid.) Thus, the city decided to regularly monitor and balance the number of taxis to keep a stable mileage utilization rate.

Third, a "government-company-driver" regulatory model was constructed just like Beijing. During the reinforcement of governing the taxi market, the local government of Shanghai imposed a vital measure to choose and set a few key taxi companies as examples to promote service standards of the whole taxi industry. From 1988 to 1991, several leading companies in today's taxi market, such as Dazhong and Qiangsheng, were founded. Taxi drivers were their employees who accepted the standardized management of companies (Ibid.). This standardized management meant that taxi companies became agencies of the local government to regulate taxi drivers. Similar to Beijing, taxi drivers contracted vehicles, franchising licenses, and taxi plates from taxi companies and paid back fixed fees every month. In turn, these taxi companies monitored the service of taxi drivers (“Local Chronicles of Shanghai,” 2002; “The living conditions of taxi drivers in Shanghai,” 2015; Zhang, 2017).

Because of the construction of the “government-company-driver” regulatory model, a reciprocal relationship between taxi companies and the local government was also established. The government issued taxi plates and franchising licenses to taxi companies and protected the interests of these companies. Taxi companies were responsible for supporting the local government in regulating drivers and maintaining the quality of taxi services. In this way, the local government could govern the whole taxi market by monitoring and governing a few taxi companies. On the other hand, in the formation of such a relationship, franchising plates and licenses issued by the local government became core assets of the companies, which in turn incentivized them to maintain a close relationship with the government. Also, possible crony relations between these taxi companies and local officials consolidated this reciprocal bond.

However, once online ride-hailing platforms appeared, they began to damage the interests of taxi companies, which destabilized the local regulatory model. Platforms directly led to on-call platforms hard to earn revenues, in which taxi companies put many investments, despite platforms boosting the profit of taxi drivers in Shanghai. In other words, the benefit created by online ride-hailing platforms were far outweighed by the damage they did. Since the local government failed to protect taxi companies’ interests, the reciprocal tie that supported the “government-company-driver” regulatory model was weakened.

Take Qiangsheng, one of the largest taxi companies in Shanghai, for example. Back in 2014, it had invested tens of millions RMB in setting up its own on-call platform. In contrast to considerable investments, the on-call platform's revenue growth was slow. Initially, a core advantage of this on-call platform was that Qiangsheng had most taxis in

Shanghai, and thus, the platform could monopolize all on-call services of the company's taxis (Lao, 2014). Through this monopolistic resource, the taxi company could slowly profit from its investments. However, ride-hailing platforms became more popular with passengers than the on-call platform because ride-hailing platforms had more effectiveness and convenience in matching services between passengers and taxi drivers. Also, because ride-hailing platforms subsidized both passengers and drivers instead of charging them for broker fees, they quickly attracted large numbers of passengers and taxi drivers (Ibid.). The competitive advantage of taxi companies' on-call platforms disappeared when facing the fast-expanding online ride-hailing platforms. Thus, these on-call platforms of taxi companies were abandoned by both passengers and taxi drivers.

At this moment, Shanghai Transportation and Port Administration Bureau stepped in the conflict between taxi companies and online ride-hailing platforms and proposed a solution. Due to the close relationship between the local government and taxi companies, the bureau's solution favored taxi companies, which required online ride-hailing platforms to cooperate with taxi companies and integrate resources based on taxi companies' on-call platforms. The purpose of this cooperation was to make taxi companies' on-call platforms control all business activities of taxi drivers on ride-hailing platforms ("Third-party on-call apps in Shanghai will not be suspended," 2014; Lao, 2014). In this way, the development of online ride-hailing platforms would not result in the abandonment of taxi companies' on-call platforms.

More challenges to Shanghai's existing regulatory regime were posed with ride-hailing platforms beginning their own online ride-hailing businesses. First, new online ride-hailing businesses resulted in large amounts of vehicles and drivers operating

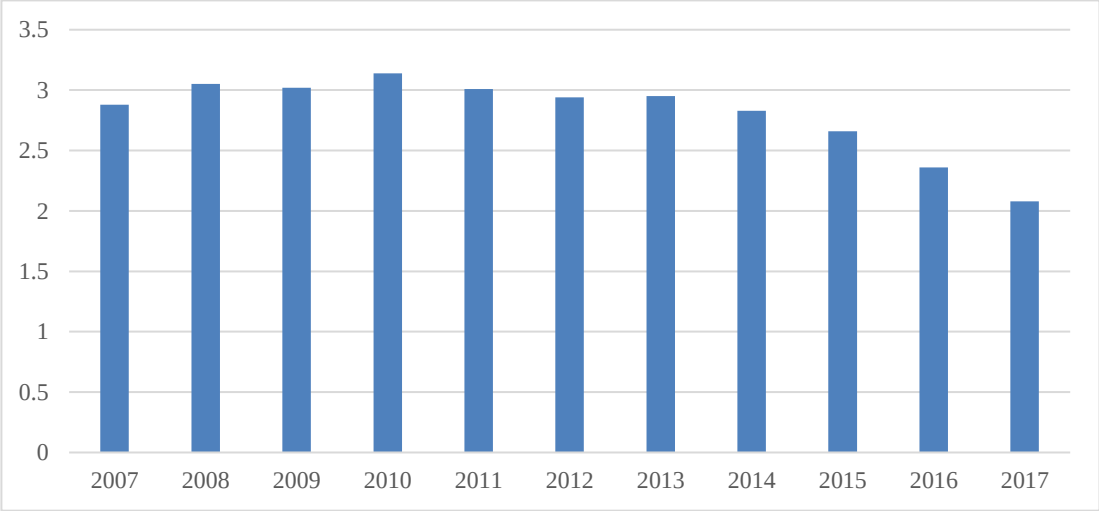
chauffeur businesses without franchising plates and licenses, which directly challenged the franchising policy and the quantity control policy. The local government of Shanghai managed to maintain taxis at around 50,000 ("Shanghai comprehensive transportation annual report 2014," 2014). However, Didi had approximately 410,000 online ride-hailing drivers in Shanghai as of 2016 (Zhang, 2016). Assuming each driver had a car, then the number of online ride-hailing cars of Didi would be eight times that of taxis in Shanghai. Platforms like Didi created a large amount of online ride-hailing cars far outnumbering taxis. Second, the power for setting the price for online ride-hailing services was in the hands of these platforms' algorithms, which challenged the price control policy.

Moreover, since platforms' new online ride-hailing businesses became popular, they began to take the market share of taxi businesses, which resulted in income decreases of taxi businesses, and taxi companies' profitability was weakened correspondingly. Due to the failure of the local government to protect the profit of taxi companies, the reciprocal link that supported the "government-company-driver" regulatory model was disrupted.

The growing conflicts between taxi operators and ride-hailing platforms

As mentioned, online ride-hailing businesses grabbed taxi businesses in Shanghai. Figure 4-1 and 4-2 illustrate that the total passenger traffic volume of taxi businesses dropped from 2.95 million in 2013 to 2.83 million in 2014, and then to 2.66 million in 2015. Much worse, the decline rate of the taxi passenger traffic volume climbed quickly from 4.07% in 2014 to 6.01% in 2015.

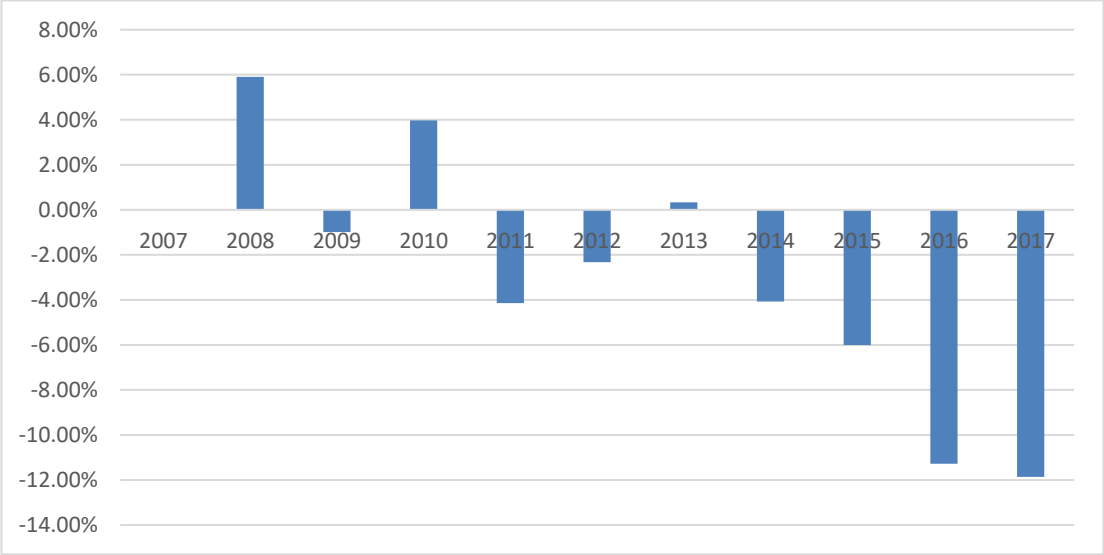
Figure 4- 1 Total passenger traffic volume of taxis in Shanghai from 2007 to 2017 (million/frequency)



Data source: China, Shanghai traffic development research institute. (2008-2015, 2018). *Shanghai comprehensive transportation annual report*. Shanghai: Shanghai traffic development research institute; China, Shanghai traffic development research institute. (2015). *Annual report of Shanghai urban traffic operation*. Shanghai: Shanghai traffic development research institute.

Note: the data for 2016 is missing, which is extrapolated from the traffic volume of 2017 and the growth rate of that year.

Figure 4- 2 The growth rate of taxi passenger traffic volume in Shanghai from 2007 to 2017 (%)



Data source: China, Shanghai traffic development research institute. (2008-2015, 2018). *Shanghai comprehensive transportation annual report*. Shanghai: Shanghai traffic development research institute; China, Shanghai traffic development research institute. (2015). *Annual report of Shanghai urban traffic operation*. Shanghai: Shanghai traffic development research institute.

As the market share of taxi entities declined, Shanghai was on the brink of outbreaking street protests of taxi drivers. The previous chapter mentioned that street protests of taxi drivers occurred in several cities nationwide. In response, Yang Guoping, the chairman of Shanghai Dazhong Transportation (Group) CO., LTD., once publicly expressed his hope through social media for employees to avoid such protests (Zhang et al., 2015). From the words of Yang, the conflicts between taxi business operators and online ride-hailing platforms had the potential to erupt.

In short, Shanghai was facing a similar situation like Beijing's. The local government of Shanghai needed to tackle challenges that online ride-hailing platforms brought to the

regulatory regime for taxi entities and the increasingly manifest contradiction between taxi entities and platforms. However, the local government of Shanghai chose another path, which was entirely different from Beijing's "cracking-down" on online ride-hailing businesses. Shanghai's local officials were considering taking an "innovative" regulatory approach that intended to govern online ride-hailing platforms and their new businesses in a relatively "loose" way.

An attempt to "innovative" regulations

The different choice of Shanghai was mostly due to the pioneering leadership of Han Zheng, the Party Secretary of Shanghai back then. Han advocated regulatory innovations in Shanghai to embrace new business forms like online ride-hailing businesses and to provide supportive services to these new businesses rather than to restrict them ("Han Zheng: Didi is an innovative model," 2015). Because of Han's affirmation, Shanghai's municipal government adopted an attitude of loosely regulating ride-hailing platforms. This attitude coincided with the "Internet +" strategy at the national level, which focused on upgrading traditional industries by employing Internet-based technologies and promoting the new industries and business forms created by Internet-based technologies.

Shanghai started its policy formulation process before the central government's directives. In May of 2015, the Shanghai Municipal Commission of Transportation set up a special working group with Didi to draft a site scheme for regulating online ride-hailing platforms and their new businesses (Ma, 2015). The site scheme emphasized ex-post regulation instead of ex-ante access restrictions. Initially, it allowed private cars to provide

online ride-hailing services without changing their nature from "private cars" to "taxis" or "operating vehicles." Thus, both ride-hailing cars and drivers did not need franchising plates and licenses like taxis and taxi drivers. Subsequently, much discretion was granted to platforms by this site scheme. The scheme planned to establish a "government-platform-driver" regulatory model, within which the local government could govern the market by only regulating platforms. In this way, platforms needed to take responsibilities, such as checking the qualifications of drivers and vehicles and maintaining the quality of online ride-hailing services. Unlike the "government-company-driver" model for taxi entities, the control over drivers' quantity was no longer in the hands of the local government but left to platforms (San, 2015; Ma, 2015). However, this site scheme took some efforts to ensure the profitability of taxi businesses. For example, it required the price for ride-hailing services to be 50% higher than that of taxi services (Ibid.). In conclusion, this site scheme adopted "loose" regulations, which respected the operational logic of platforms and relied less on ex-ante restrictions, especially comparing to the final regulatory policies in Shanghai.

In addition to the “innovative” site scheme, the local government of Shanghai was actively exploring the possibility of integrating old and new business forms. In May 2016, the local government promoted pilot cooperation between Haibo, a taxi company in Shanghai, and Didi. The taxi company (Haibo) was responsible for providing vehicles and recruiting full-time drivers to operate online ride-hailing businesses. Thus, it became a service provider of the platform (Ma, 2015). The local government perceived that the taxi company had advantages in vehicle and personnel management, while the platform was better at effectively connecting cars with consumers. Thus, the pilot cooperation aimed at

designing a developmental path for traditional taxi companies and online ride-hailing platforms to complement each other and achieve a win-win result (Ibid.).

The innovative site scheme and the pilot cooperation symbolized that Shanghai initiated the policy-making process months earlier than the central government's making of directives. Moreover, Shanghai's site scheme preceded the central government in coming up with the "loose" regulatory approach.

Central directives for regulating online ride-hailing platforms

The previous chapter mentioned that in the second half of 2015, the central government issued directives for regulating online ride-hailing platforms. These directives set five essential keynotes, which allowed platform ventures to keep operating the way they were and to maintain their competitive advantages over traditional taxi businesses.

Firstly, central directives responded to the fact that cities like Beijing defined online ride-hailing cars as "illegal taxis." Thus, the central government granted ride-hailing cars legal status and integrated regulations for online ride-hailing platforms and their businesses into the regulatory regime for the taxi industry. Secondly, the central government set low market entries for platforms and ride-hailing vehicles. Thirdly, the quantity control policy and the price control policy, which used to regulate traditional taxi businesses, were removed for regulating online ride-hailing businesses. Fourthly, central directives took a welcoming attitude towards "car-sharing" practices. Fifthly, to reduce the loss of taxi operators, the central government proposed to differentiate the markets of taxis and online ride-hailing cars.

The differentiated beliefs of interests of the two coalitions

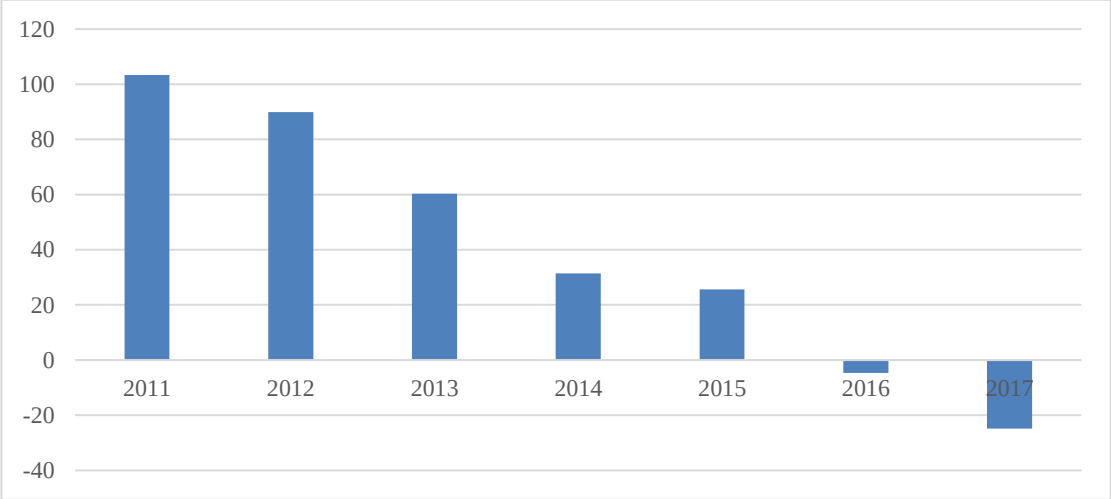
The local government of Shanghai made detailed implementing regulatory policies for online ride-hailing platforms after the issuing of central directives. Like Beijing, Shanghai faced two coalitions around online ride-hailing platforms versus traditional taxi entities. The platform coalition, especially the founders of many ride-hailing platforms and some scholars, seemed satisfied with central directives and had publicly expressed their support for these directives (Chen, 2016). However, taxi companies were experiencing the loss of interests, and thus, the taxi coalition proposed “strict” regulations for online ride-hailing platforms.

In June 2016, Dazhong, one of the leading taxi companies in Shanghai, wrote a letter to the Ministry of Transport about facing unfair competition with platforms such as Didi and Uber. This letter maintained that this unfairness was caused by the burdens of traditional taxi companies from existing regulations ("Shanghai Dazhong sent a letter to the Ministry of Transport," 2016). This chapter has explained that the "government-company-driver" regulatory model made taxi companies become the agencies of the local government in regulating taxi drivers. Thus, Taxi companies needed to spend personnel and resources to fulfill their functions as the regulatory agencies. However, Dazhong held that online ride-hailing platforms had no such burdens. Also, online ride-hailing cars outnumbered taxis because the former remained free from quantity control. Thus, Dazhong called for the same regulations for online ride-hailing platforms. This letter asked the government to implement the franchising policy to platforms, their drivers, and vehicles.

Also, it wished that platforms and their businesses could operate under quantity control and price control (Ibid.). In general, the core appeal of the taxi coalition was to cap the growth of online ride-hailing platforms and to stop the loss of taxi entities.

Sharp declines in taxi companies' profits caused the taxi coalition to form such beliefs. As shown in Figure 4-1 and 4-2, the taxi traffic volume in Shanghai declined sharply in 2016 and 2017. The decrease in the traffic volume directly resulted in the loss of taxi companies' profits. Take Qiangsheng as an example. The following figure shows that this company's net losses reached 4.64 million RMB in 2016 and 24.88 million RMB in 2017.

Figure 4- 3 The net profit of Qiangsheng taxi company from 2011 to 2017 (million/RMB)



Data source: Shanghai Qiangsheng Holding CO., LTD. (2011-2017). *Annual report of Shanghai Qiangsheng Holding CO., LTD*. Shanghai: Shanghai Qiangsheng Holding CO., LTD.

From the "loose" site scheme to "strict" regulations: a compromise after triangular interactions

Facing the same "punctuated equilibrium" as Beijing, the local government of Shanghai also had a strong incentive to protect traditional taxi operators because of a source of friction created by the "special interests" of taxi entities. After the issue of central directives for online ride-hailing platforms and their new businesses, the local government of Shanghai suddenly changed its regulatory approach from "loose" to "strict." The latter "strict" regulations re-introduced an ex-ante access restriction that was removed by central directives and integrated other restrictions.

In December 2016, the municipal government of Shanghai issued the "Implementations of Deepening the Reform and Promoting the Healthy Development of the Taxi Industry" (《关于本市深化改革推进出租汽车行业健康发展的实施意见》), the "Regulations of Shanghai for the Management of Business Operations and Services of Online Ride-hailing Cars" (《上海市网络预约出租汽车经营服务管理若干规定》), and the "Implementation of Regulations on the Car-sharing of Private Vehicles" (《关于规范本市私人小客车合乘出行的实施意见》). These policy documents showed that Shanghai made similar regulatory policies like Beijing's.

Initially, a quantity control measure was taken by the local government of Shanghai to curb the expansion of platform ventures. The total number of online ride-hailing cars and taxis in Shanghai was required to be dynamically controlled by the municipal government based on factors such as overall urban planning, comprehensive traffic demand,

and road-carrying capacity (“Implementations of Deepening the Reform and Promoting the Healthy Development of the Taxi Industry,” 2016).

Also, Shanghai applied two methods to decrease online ride-hailing drivers and vehicles. Shanghai's policies required that ride-hailing drivers to hold household registrations of Shanghai and ride-hailing cars must have local plates (“Regulations of Shanghai for The Management of Business Operations and Services of Online Ride-hailing Cars,” 2016). The numbers of household registrations and vehicle plates were under tight controls in Shanghai. According to Didi’s statistics, of the more than 410,000 ride-hailing drivers activated in Shanghai in 2016, fewer than 10,000 had local household registrations. Thus, the household registration restriction could reduce the number of online ride-hailing drivers of Didi by 97.6% (Zhang, 2016).

Besides, the local government of Shanghai also saw the possibility of "car-sharing" practices to disturb the quantity control policy. Thus, the frequency of car-sharing behaviors of each private car was limited under twice a day, according to the “Implementation of Regulations on the Car-Sharing of Private Vehicles.”

Subsequently, Shanghai set a rigid requirement for ride-hailing businesses to serve the high-end market. As required, the wheelbase of ride-hailing cars was required to be more than 2600mm (“Regulations of Shanghai for The Management of Business Operations and Services of Online Ride-hailing Cars,” 2016). Like Beijing, by this requirement, the local government expected to send out a signal that ride-hailing cars were all high-end vehicles, which would serve high-end customers.

Consistent with the site scheme, local policies established a “government-platform-driver” regulatory model. Platforms were responsible for managing ride-hailing vehicles

and assisting the local government in regulating drivers to ensure safe operation and the quality of online ride-hailing services (Ibid.). However, compared with the previous site scheme, the discretion of platforms was decreased.

In general, new regulatory policies departed from the previous "loose" regulatory approach. Once again, the reciprocal tie with taxi companies led the local government to favor the taxi coalition over the platform coalition. Like Beijing, the reciprocal link institutionalized the "special interests" of taxi companies into the old regulatory regime for taxi businesses. The "special interests" created a source of friction to stop the local government from maintaining its “loose” regulatory approach. Instead, the local government of Shanghai was strongly incentivized to prevent the continuing loss of taxi entities. Thus, it imposed restrictions to reduce online ride-hailing cars and drivers and constrain "car-sharing" practices.

Also, Shanghai's final regulatory policies were against central directives that advocated "loose" and "innovative" regulations for online ride-hailing platforms. The same as Beijing, the vested "special interests" of taxi entities formed a strong incentive for the local government of Shanghai to disobey the central government's directives. Thus, Shanghai's local government defied the central government in setting high market entries for online ride-hailing cars and drivers, constraining "car-sharing" practices, and re-introducing the quantity control policy. However, the local government's disobedience also accompanied by selective compliance. Thus, Shanghai's local government selectively implemented the central directive that emphasized differentiating markets of taxi operators and online ride-hailing platforms. The requirement on the wheelbase ensured ride-hailing

vehicles could only serve high-end and thus would only take the high-end market, which consequently left middle and low-end markets to taxi entities.

In conclusion, Shanghai's final "strict" regulatory policies resulted from the unstopped increase of business conflicts between platform ventures and taxi entities. The reciprocal tie between the local government of Shanghai and taxi companies institutionalized the "special interests" into the regulatory regime for taxi entities, which drove the local government to protect taxi entities and thus favor the taxi coalition over the platform coalition. Yet, due to a pioneering leader, Shanghai used to advocate a "loose" regulatory approach that could embrace the development of online ride-hailing platforms and promoted cooperation between traditional taxi companies and online ride-hailing platforms. However, as in the case of Beijing, the vested "special interests" of taxi entities were essential in the policy process to shift the attitude of Shanghai's local government. When the loss of taxi entities continuously increased, the local government abandoned its "innovative" regulatory approach but resorted to "strict" regulations for platforms. Moreover, the vested "special interest" of taxi companies also formed a strong local interest, which incentivized the local government of Shanghai to disobey central "loose" directives. Parallel to Beijing, Shanghai also accompanied its restrictive policies for ride-hailing platforms with the central directive for guiding platforms and taxi entities in serving different markets.

Chapter 5 Conclusion

Online ride-hailing platforms are a life-changing invention that has shifted the traveling habits of many people. Through reviewing studies on the sharing economy and the platform economy, this thesis explains why online ride-hailing platforms represent a new business model that is different from traditional taxi businesses and could transcend and cause disruptions to the latter. Thus, business conflicts between online platforms and traditional entities have manifested.

The sharing economy approach illustrates that online ride-hailing platforms operate based on the principle of "sharing," which emphasizes the shared access to products and services. Sharing interactions on platforms facilitate the reciprocal network between service/product providers and consumers. An ecosystem is established from this reciprocal network, which causes sharing platforms to become more attractive to participants. Thus, sharing platforms become more sustainable than incumbent businesses. Furthermore, some scholars indicate that the sharing economy is an alternative to the capitalist system that relies on the accumulation of privately owned assets. Also, the sharing economy can realize the optimal allocation of resources, and it benefits both platforms and those who share on these platforms.

Some other scholars summarize the operational mode of online ride-hailing platforms as the platform economy, which refers to a business model where different sides connect through platforms and conduct exchanges. Scholars believe that the platform economy operates within an asset-light supply paradigm, which does not like traditional "pipeline" businesses that manufacture products through purchasing raw materials and depend on inefficient gatekeepers to reach customers. Instead, Internet-based businesses directly

connect product/service providers with consumers and thus can avoid an asset-heavy operational paradigm. Of course, this new paradigm disposes of many inefficient gatekeepers. More importantly, the platform economy can trigger "network effects" to expand its business layout rapidly. As more service/product providers join in, a platform becomes more attractive to consumers, and in turn, more consumers attract more service/product providers. In summary, the asset-light paradigm and "network effects" make platform ventures more competitive than incumbent ones.

Both approaches highlight the importance of applying information technology. For scholars who research the sharing economy, the application of information technology that facilitates ubiquitous recording, pervasive reproduction, simultaneous information interaction regardless of geographical distance, and more powerful analysis of records, could make the ecosystem of sharing platforms run more effectively. As for the platform economy approach, information technology accelerates "network effects" to make platforms more "turbocharged."

No matter the sharing economy approach or the platform economy approach, they both theorize why online ride-hailing platforms could cause disruptions to traditional taxi businesses, and inevitably, conflicts between platforms and taxi entities. How does the government perceive these conflicts and act on its own initiative to govern online ride-hailing platforms? This study has conducted two case studies of Beijing and Shanghai to answer this question. From a comparative perspective, these two cities were selected because they had the same policy options with different initial attitudes towards online ride-hailing platforms. When the conflicts between platforms and taxi entities emerged, the local government of Beijing started to suppress online ride-hailing platforms. But in

Shanghai, the local government was considering embracing these new platforms and taking an “innovative” regulatory approach that emphasized “loose” regulations for platforms due to the influence of a pioneering leader, Han Zheng. This study has discovered how the conflicts between platforms and taxi entities interacted with the authoritarian context of China and resulted in these two cities’ similar “strict” policy choices.

Given that the metropolitan governments of these two cities reformed their regulatory regimes for taxi businesses to include regulations for online ride-hailing platforms, this thesis has employed an integrated analytical framework based on policy change. Each metropolitan government faced two conflicting interest groups, platform ventures and taxi entities. To expand their influence, the two interest groups formed two conflicting advocacy coalitions. Because online ride-hailing platforms bear a different business logic from traditional taxi entities, new beliefs about regulating online ride-hailing platforms emerged, which denoted a "punctuated equilibrium" for each metropolitan government. Old regulatory regimes for taxi businesses institutionalized the "special interests" that created a source of friction to this "punctuated equilibrium." The platform coalition and the taxi coalition sided with these new beliefs or the "special interests" respectively and attempted to influence the metropolitan governments.

The formulation of regulations for platform ventures not only included interactions between the metropolitan governments and the conflicting coalitions but also involved interactions between the metropolitan governments and the national government. The policymaking process in China carries an authoritarian logic, which emphasizes how fragmented bureaucracies perceive and articulate the interests of actors outside the government system and make policies through bureaucratic bargaining. The fragmented

bureaucracies that this study has recognized are the national government and the two metropolitan governments. The metropolitan governments needed to respond to national policy directives.

Overall, the formulation of regulations for online ride-hailing platforms was impacted by triangular interactions, within which the metropolitan governments were influenced by the national government and the conflicting coalitions.

The empirical analysis was organized in chronological order. Challenges to previous regulatory regimes for the taxi industry and the increasing conflicts between taxi business entities and platform ventures caused the local governments of Beijing and Shanghai to respond. The proposal of the national "Internet +" strategy opened a policy window, and the central government started making directives for guiding local governments in formulating "loose" regulatory policies for ride-hailing platforms. Within this context, the two local governments of Beijing and Shanghai began to formulate policies. However, the local governments encountered the growing business conflicts between platform ventures and taxi operators. Affected by a reciprocal link with local taxi companies, the local governments decided to protect taxi operators and made "strict" regulations for online ride-hailing platforms.

This thesis has highlighted three empirical findings. First, it explained how online ride-hailing platforms challenged the regulatory regimes for the taxi industry in Beijing and Shanghai. Through reviewing the formation of regulatory policies for the taxi industry, this study recognized that Beijing and Shanghai had both established regulatory regimes with a franchising policy at their core. Taxi plates and franchising licenses were the market entries set by the two local governments for taxi operators. To make the taxi industry meet

the developmental circumstance at the time, Beijing and Shanghai had both adopted the policy of quantity control. The power of setting the price for taxi services was in the hands of the local governments. The price was settled based on the need to protect both the interests of passengers and taxi operators. Finally, the local governments employed a "government-company-driver" model to govern the taxi market. In this model, the local governments transferred a part of the regulatory functions, such as scrutinizing the qualification of taxi drivers and monitoring the service of drivers, to taxi companies. In this way, the cost of governing the market decreased because this model spared the local governments from directly regulating numerous taxi drivers.

When new online ride-hailing platforms started to operate, they disrupted the regulations that these two local governments had made for taxi businesses. Firstly, platforms recruited a large number of private car owners, who did not have franchising plates and licenses, to provide alternative taxi services. Secondly, the increasing number of online ride-hailing vehicles were not regulated by the local governments' quantity control policy. Thirdly, the price setting for online ride-hailing services was in the hands of the platforms' algorithms and not those of the local governments.

Second, this study has revealed how considerable the conflicts were between online ride-hailing platforms and taxi business entities. In Shanghai, the profit loss of taxi companies began as soon as platform ventures appeared. Online ride-hailing platforms came with technological and capital advantages, and therefore easily beat on-call platforms in which taxi companies had put many investments. Disruptions to the interests of taxi operators became fiercer later when online ride-hailing platforms initiated their online ride-hailing businesses that could provide cheap chauffeured services to passengers. These new

businesses attracted many customers and directly resulted in the passenger traffic volume of taxis dramatically declining. The decreasing passenger traffic volume of taxis also occurred in Beijing. As a direct result, taxi drivers in these two cities started experiencing losses of income.

Two advocacy coalitions were formed around online ride-hailing platforms and taxi business entities due to the growing conflicts. For the coalition around ride-hailing platforms, the core policy appeal was asking for regulations that less relied on ex-ante restrictions, allowed them to maintain their business operational mode, and ensure their future growth. However, the taxi coalition believed that the loss of taxi entities were caused by the emergence of online ride-hailing platforms and their new businesses. Thus, it asked for policies to cap online ride-hailing platforms.

Third, this thesis demonstrates that the metropolitan governments of Beijing and Shanghai issued regulations for governing ride-hailing platforms after triangular interactions with the national government and the conflicting coalitions. Both metropolitan governments believed that they should protect the interests of taxi operators and employ effective measures to stop ride-hailing platforms from seizing the market share of taxi businesses. Thus, they built up a protective wall for taxi operators by imposing many restrictions upon online ride-hailing drivers, cars, and platforms. First, the local governments decided to apply measures that reduced online ride-hailing cars and drivers and implemented quantity control over the number of ride-hailing vehicles. Second, to cooperate with quantity control, the local governments made a restriction to “car-sharing” practices. Third, policies set rigid requirements for online ride-hailing vehicles to guide

them in providing high-end services and left the middle and low-end markets to taxi drivers. All these measures put straitjackets on the expansion of online ride-hailing platforms.

These regulatory policies were “strict” to online ride-hailing platforms, and indeed in favored of appeals from the taxi coalition. Also, by issuing these “strict” policies, the local governments of Beijing and Shanghai stood against the directives of the central government. An essential context at the national level was that the “Internet +” national strategy was proposed to encourage the integration of the Internet and traditional industries and promote the development of new business forms. Due to this national strategy, the development of online ride-hailing platforms gained strategic significance. Firstly, online ride-hailing businesses represented a new business form that relied on Internet-based technologies and thus should have been promoted. Secondly, these platforms could provide technology to assist the reform and upgrade of the taxi industry.

The “Internet +” strategy opened a policy window for the formulation of regulations for online ride-hailing platforms. The central government issued directives for regulating platforms, on which municipal governments nationwide supposed to follow when making their own regulatory policies. These directives reflected the principles of the “Internet +” strategy, and five keynotes were set to make “loose” regulations for online ride-hailing platforms. Firstly, regulating online ride-hailing platforms was included in the regulatory regime for the taxi industry, and the legal status of online ride-hailing cars was granted. Secondly, directives lowered market entries for platforms and ride-hailing vehicles. Thirdly, the quantity control policy and the price control policy that used to regulate taxi businesses would not be adopted to regulate the new business form. Fourthly, central directives encouraged “car-sharing” practices. Fifthly, online ride-hailing services would

be guided to realize differentiated competition with traditional taxis. In general, the central government recognized the growing conflicts between online ride-hailing platforms and traditional taxi entities. However, the central government believed that these conflicts could be resolved by the government's firm guidance for platforms and taxi operators to serve different target markets. On this basis, the central government asked all metropolitan governments to tolerate the operational mode of online ride-hailing platforms and make regulations relying less on ex-ante restrictions to guarantee the future development of these platforms.

The issuing of central directives denoted a "punctuated equilibrium," within which new beliefs promoting "loose" and "innovative" regulations for online ride-hailing platforms were sweeping through the government. Why did the local governments of Beijing and Shanghai not adopt these "loose" regulations? Moreover, in the centralized authoritarian system of China, why did the two metropolitan governments formulate policies that disobeyed central directives? This thesis argues that the local governments' policy decisions were impacted by the vested "special interests" of local taxi entities, which incentivized the local governments to protect these taxi entities.

Chapter 3 and Chapter 4 have explained how the regulatory regimes for taxi businesses fostered a reciprocal relationship between taxi companies and the local governments of Beijing and Shanghai. The franchising policy plus the quantity control policy made franchising taxi plates and licenses become monopolized resources of the local governments. In exchange for these monopolized resources, taxi companies carried out some of the regulatory functions of the local governments. In turn, the local governments issued taxi plates and licenses to taxi companies and protected the profit of taxi companies

in order to maintain these regulatory regimes. Additionally, studies on crony capitalism in China indicate that local officials and taxi companies might have crony relations, which reinforced the reciprocal tie between taxi companies and the local governments. This reciprocal link institutionalized the “special interests” of taxi companies into the regulatory regimes for taxi businesses. Thus, when making policies for ride-hailing platforms, the local governments needed to consider protecting the profit of taxi companies and therefore favored the taxi coalition.

Protecting the vested "special interests" of taxi business entities was also the reason for local policy choices in contradiction to central directives. Existing studies have pinpointed that local governments in China sometimes disobey the directives of the central government when local interests are strong. However, this disobedience is careful. Local officials usually choose to stand up against the central government when they think they can get away without punishment, and their disobedience often accompanies selective compliance and shrinking behaviors. Therefore, within “strict” regulations for online ride-hailing platforms, Beijing and Shanghai accompanied their capping policies that directly disobeyed the central government with the selective implementation of the central directive to differentiate the markets of taxi operators and online ride-hailing platforms.

In summary, this thesis reaches three conclusions. Firstly, it explains that the “special interests” of taxi entities institutionalized by the old regulatory regimes for taxi businesses incentivized the two metropolitan governments to protect taxi entities. Thus, even if Beijing and Shanghai had different first responses towards platforms with one initially emphasizing “cracking-down” and the other working on a “loose” regulatory approach, they adopted similar platform-capping policies.

Secondly, this thesis finds that the two metropolitan governments cautiously disobeyed the central government's "loose" directives for platforms by combining their capping policies with selectively implementing a central directive of differentiating the markets of ride-hailing platforms and taxi operators.

Thirdly, this thesis addresses obstructions to the establishment of "new regulation" that respects the operational logic of new business forms. It argues that the combination of the vested "special interests" and the fragmentation of authority in the Chinese policy process leads to the resistance of this "new regulation."

As many scholars have argued, several incumbent regulatory standards for incumbent business entities are outdated for new business ventures like online platforms. Thus, scholars have advocated for the liberalization of the restricted accesses and the enforcement of "after-the-fact regulation" (Choudary, Alstyne, & Parker, 2016; Zuluaga, 2016). In China, especially after the "Internet +" strategy, more scholars have emphasized "new regulation" for those new business forms tagged with "Internet +." They assert that "encouraging new businesses while ensuring safety" should be the basic principle for this "new regulation" (Guo, 2016; Wu, 2015). For example, scholars suggest that the government's new regulatory regime for online ride-hailing platforms should give the market more discretion for establishing the market entry and self-controlling the quantity, price, and quality of service supply. At the same time, the government should cooperate with platform ventures, consumers, and industry organizations in governing issues concerning market failures, such as vehicle safety, consumer rights and interests, and unfair competition (Guo, 2016).

Then, why are the established new regulations for online ride-hailing platforms not matching the expectations of scholars who promote encouraging platform ventures? Scholars such as Collier and Thelen attribute it to the victory of traditional business entities in the conflict between interest groups (Collier, Dubal & Carter, 2018; Thelen, 2018). This explanation is not enough in the context of authoritarian China. The authoritarian system determines that the most critical aspect of the Chinese policy process comes down to the perception and initiative of the government. In the process of China's decentralization, traditional business entities, which in the cases of this study are local traditional taxi entities, and the local government have built a close reciprocal interest bond. This interest bond impacts the perception of the local government for the conflicts between new platform ventures and traditional taxi entities and thus leads to policies that hinders the "new regulation" from establishing. Even though the central government in China acts as a supporting driving force for the "new regulation," the fragmented authoritarianism within the policy process makes local governments resistant to central directives.

Facing local "strict" regulations that were inconsistent with central directives, the central government repeatedly expressed its disagreement. For example, the speech of Premier Li Keqiang at an executive meeting of the State Council in 2017 implied the dissatisfaction of the central government towards local policies. Premier Li believed that regulatory policies of cities like Beijing and Shanghai limited the developmental prospects of the sharing economy represented by online ride-hailing platforms. Thus, he urged local governments to become more tolerant of these new sharing economy business forms and lower market entries for platforms and their participants (Fu, 2017). This fact seems to indicate that regulatory policies for online ride-hailing platforms still have variables that

might lead to change. However, if the central government intends to urge local governments to alter their policies, it must find ways to break the close reciprocal relationship between taxi operators and local governments.

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