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# Ride-hailing drivers' working conditions and social protection in China

## Abstract

This article aims to examine ride-hailing drivers' working conditions and social protection in China. Through interviews with 25 ride-hailing drivers in Beijing, we found that their working conditions are precarious, stressful, surveilled, and their social protection exhibits features of inadequacy and fragmentation. They are excluded from social insurance for urban employees due to the lack of a formal employment relationship. Instead, they largely participate in the medical insurance for residents, but its insurance benefits are much lower than those for urban employees. Furthermore, citizens' participation in residents' medical insurance is determined by their *hukou* (i.e., household registration) residency. Internal migrant drivers are only entitled to be insured at their origin where their *hukou* is located. Despite working in the same occupation and living in the same city, internal migrant drivers and Beijing-native drivers have distinct social insurance benefits. Thus, we propose the binary classification of *de jure/de facto* residency, which contributes to a deeper understanding of social protection for non-standard forms of employment.

**Keywords:** Ride-hailing drivers, non-standard forms of employment, working conditions, social protection, medical insurance, China

## 1. Introduction

The global gig economy is estimated to reach \$455 billion for the year 2023. Due to its atypical working arrangements, an increasing number of academic researchers examine issues related to platform work (De Stefano, 2016; Parvez, 2023), including legal regulations and employment relationships (Adams et al., 2018), digital labour markets and their scale (Farrell and Greig, 2016), the experience of specific platforms such as Uber (Rosenblat and Stark, 2017), Amazon Mechanical Turk (McInnis et al., 2016), and Didi (Chen and Qiu, 2019). Generally, online platforms can be categorized into two types: place-based work and crowdwork (Johnston, 2020). The former refers to platforms that enable real-time matching of demand and supply through applications, requiring face-to-face delivery to complete tasks, such as Deliveroo, Foodora, Uber, and Didi. The latter refers to platforms that use the web as

a medium to effectively connect a variable number of organizations and individuals, potentially linking customers and workers on a global scale (e.g., Amazon Mechanical Turk).

By the end of 2023, 58.1 percent of the global gig economy's revenue is expected to stem from transportation services, including ride-sharing platforms like Uber, Lyft, Grab, and Didi (MKA, 2019), which are place/location-based platforms. Over the past decade, an increasing number of studies have explored Uber and Lyft in Western countries. For example, Isaac and Davis (2015) discussed Uber's business strategies, Rogers (2015) highlighted the social costs of Uber drivers, Rosenblat and Stark (2016) explored Uber's use of algorithmic management to control drivers' behaviour, Campbell (2017) studied Uber and Lyft drivers' insurance, and Cook and colleagues (2018) analyzed the gender earnings gap among over a million Uber drivers. However, platform workers' experiences may vary significantly in different geographies defined by specific government regulations, labour markets and actors.

Globally, Uber has 5 million drivers, while Didi has 15 million drivers which dominates China's ride-sharing market (Reuters, 2021). Despite its large number, the everyday work situations of Didi drivers in China haven't been widely explored. In recent years, there have been only a handful of emerging studies focusing on Didi. For example, some research examined the digital utility and Didi's platformisation of urban transport (Chen and Qiu, 2019), assessed driving safety for Didi drivers (Mao et al., 2021), explored how Chinese taxi drivers fight against the rise of ride-hailing platforms like Didi (Chen, 2018), and investigated Didi drivers' trust and intention to participate in the sharing economy (Guo et al., 2020).

Ride-hailing drivers, engaged in non-standard forms of employment, are featured with precarious work arrangements (ILO, 2016). Taking an example of Shenzhen city in southern China, the percentage of traffic accidents for ride-hailing was 7.15 percent, compared with 1.78 percent for traditional taxis in 2017 (SZNEWS, 2017). However, there is lack of empirical studies on Chinese ride-hailing drivers' working conditions and social protection. Against this backdrop, based on semi-structured interviews with 25 ride-hailing drivers in Beijing, this study aims to fill the research gap by addressing the following research questions: 1) what are the working conditions of ride-hailing drivers in China? 2) what is the social protection coverage for these drivers? 3) Whether these drivers face the same working conditions and enjoy the same social insurance benefits or not? If not, what's the difference?

## **2.Literature review: Non-standard forms of employment and its social protection**

The International Labour Organization defines Non-Standard Forms of Employment (NSFE) as those falling outside the standard employment relationships which are full-time, indefinite, and subordinate. NSFE show features of temporary employment; part-time work; temporary agency work; disguised employment relationships, and dependent self-employment (ILO, 2016:7). Ride-hailing drivers are NSFE because they are recognised by platforms as independent third-party contractors although the platforms seek to control and monitor their work, which results in a form of disguised employment (Behrendt and Nguyen, 2019).

Existing literature indicates that in Western countries, in addition to their main occupations, workers often engage in digital work to earn extra income (Potocka-Sionak, 2018). Thus, their social protection is normally covered through their main employment, such as pensions and unemployment insurance. Taking an example of Europe, 85 percent of platform workers have other main jobs, meaning that more than half of their income comes from other occupations instead of platform work (Codagnone et al., 2018). However, for those who engage in platform work as their sole source of income, they often lack social protection as platforms generally do not provide such coverage to workers. Many of these workers have low income, poor working conditions, and inadequate social protection coverage (Berg et al., 2018). For instance, based on an empirical study in European countries, scholars found that a lack of effective social protection is a significant downside of platform work (Joyce et al., 2019; Forde et al, 2017). They further argued that the more workers financially depend on platform work, the lower their access to social protections.

Recent debates assert the possibilities of decoupling social protection from employment (Behrendt and Nguyen, 2019). As for Non-Standard Forms of Employment, there are four types of social protection (or not) linked to employment relationships: 1) social protection linked to a contract with a specific employer, 2) social protection linked to salaried employment, 3) Social protection linked to participation in gainful employment (including non-salaried employment), 4) Social protection linked to residency status (ILO, 2016: 299-300). The inclusion of platform workers in social protection varies from one welfare system to another. For example, in Iceland, it is medical insurance based on residency status, while in the US, medical insurance is largely linked to salaried employment (Friedman, 2014).

The Centenary Declaration for the Future of Work, adopted by the International Labour Organization's 187 member States in 2019, advocates the universal access to adequate, comprehensive and sustainable social protection to workers, which also calls for policies that respond to platform work. Although social protection arises from policies, it is also influenced by workers' practices, for example, workers' responses to the lack of rights can reshape social protection (Castellani, 2020). Civil Society Organisations (CSOs) also configure themselves differently ranging from "service delivers" to "migrants' advocates", adopting responses that vary from aid to co-production (Padilla et al, 2022). However, in the Chinese context, workers' social protection is known as state-centred concept of provision because of the government's authority (Gao, 2020). Meanwhile, social protection in China is largely studied from the aspect of social insurance as social insurance provides a broad coverage for China's population (He, 2019). Therefore, social protection in this article refers to as social insurance.

In China, 75 million workers engage in platform work, representing the largest number of platform workers in the world (Zhou, 2020). Through quantitative methods, several existing studies draw the conclusion that employment-based social insurance coverage for platform workers is inadequate in China which is largely due to the lack of formal employment contracts (Chen et al., 2020). Without being legally recognized as employees, drivers cannot be enrolled in the social insurance scheme for employees (e.g., medical insurance, old-age insurance, work injury insurance, unemployment insurance, and maternity insurance). For instance, a 2016 survey report on ride-hailing drivers in China revealed that among 1005 respondents, 94.4 percent of such drivers were not covered by employees' social insurance (SRRI, 2016:18). However, these quantitative analyses overlook the social behaviours of platform workers in the context of inadequate social protection. By employing qualitative methods, this study aims to uncover ride-hailing drivers' working conditions and social insurance from the individuals' experiences.

### **3. Research methods**

To gain a vivid understanding of ride-hailing drivers' everyday work situations in China, we conducted semi-structured interviews with 25 drivers in Beijing in 2021. Beijing was selected as the case site because ride-hailing services are part of the digital economy, and Beijing's

digital economy accounted for more than 50% of its GDP, according to the 2022 China Digital Economy Development Report. Ministry of Transport data showed that Beijing ranked first among 36 major Chinese cities in terms of ride-hailing orders in 2021. Inspired by Robinson (2017)'s interview sampling methods on Uber drivers in Boston, we also adopted the approach of random sampling through ride-alongs to recruit participants. In total, 25 Didi drivers were interviewed by riding along during their work. Each interview lasted between 30 and 60 minutes, and audio recording was permitted by the interviewees. After gathering information from ride-hailing drivers, NVivo 12 Plus was employed for data analysis. To ensure the privacy of the interviewees, all names used in the following results section are pseudonyms. The interview questions encompass three primary parts: 1) basic demographic information (e.g., age, hometown, family structure, *hukou* (i.e., household registration) status); 2) details regarding their work conditions (e.g., employment relationship, working pattern, working hours, income, orders); 3) their social protection (e.g., medical insurance, work injury insurance).

As shown in Table 1, among the 25 interviewed ride-hailing drivers, there were 2 women and 23 men. 36% of them were native residents of Beijing (hereafter: Beijing-native driver), and 64% were internal migrants from other parts of China (hereafter: internal migrant driver), such as from Shandong province and Hebei province. 23 drivers used their own cars while 2 rented a car. As for age, a total of 4% of interviewees were 18-24 years old, 12% were 25-34 years old, 40% were 35-44 years old, and 44% were 45-54 years old. As regards working hours, 28% of interviewees worked more than 12 hours per day, 32% worked between 10 and 12 hours, another 32% worked between 8 and 10 hours, and 8% worked less than 8 hours. Driving ride-hailing cars as all 25 interviewees' only job. 23 were full-time drivers and only two were part-time drivers.

#### **4.Results**

Based on the qualitative data we collected, we found ride-hailing drivers' working conditions are precarious, stressful, and surveilled, which causes fatigue, illness, and even fatal car accidents. Despite this, such drivers are not covered by adequate social insurance. Especially for drivers migrating from other provinces to Beijing, internal migrant drivers' social insurance benefits are much lower than those of Beijing-native drivers. Thus, we assert ride-hailing

drivers' social protection shows strong features of inadequacy and fragmentation.

#### **4.1 Ride-hailing drivers' working conditions**

Digital platforms act as intermediaries between workers and users to facilitate quick matching of supply and demand (De Stefano, 2016). Registering as a ride-hailing driver is a straightforward process in China. They can either use their own car or rent one from the platform. Flexibility is one of the key reasons why ride-hailing drivers choose to join this profession. Ride-hailing drivers can work from any place, at any time, and decide whether to work or not as they wish (Harris and Krueger, 2015), implying that ride-hailing drivers can enjoy their freedom due to the flexible employment relationship. However, our interviewees revealed that if they take part-time work or frequently take breaks from the ride-hailing sector, they will receive poorer ratings and have fewer chances to receive desired orders. On the contrary, ride-hailing drivers who work full-time and long hours tend to receive higher ratings on the platform and get more orders, which helps them increase their income.

Furthermore, our interview data indicated that ride-hailing drivers in China are constantly manipulated by the online platform. Their flexibility is constrained by working time and working space. They do not truly enjoy freedom once they start their everyday work. Drivers are free to choose when and where to begin work on a single day but not during work, as they are typically expected to accept any order allocated by the platform. It is worth noting that drivers acknowledged that there are fewer job options available to them, so they are financially heavily dependent on the platform, leading to their involuntary acceptance of various controls imposed by the platform. Mr. Li (35 years old, Beijing-native driver, full time worker) stressed, *“I registered on the platform when the company started, and I have been working as a full-time ride-hailing driver. I do not know how the order and payment are calculated; I just follow it as I have no better skills except driving a car.”*

##### **4.1.1 Working time**

Ride-hailing drivers can decide what time to start work flexibly. For example, some drivers tend to work very early. Mr. Zhao (49 years old, Beijing-native driver, full time worker) stated, *“I usually start work before 7:00 am, so I can avoid the morning rush hour and pick up some early birds.”* Meanwhile, Mr. Li (35 years old, Beijing-native driver) said, *“I usually start a bit*

*late and work until midnight. Driving in the morning is not a pleasant experience due to traffic jams. I prefer to work late at night instead.”* Sometimes, drivers can adjust their working time on a daily basis. Mr. Zhang (38 years old, internal migrant driver from Shandong province) noted, *“Yesterday, I had a cold, so I took medicine last night. Today, I didn't get up very early. I left home around 9:00 am. Then I went to a car wash, but there were too many cars waiting. So, I waited in line until 11:00 am. Afterward, I started to work.”*

However, once ride-hailing drivers start working, they are tremendously controlled by the platform. Platforms often use a carrot-and-stick approach. The carrot is a bonus incentive, and the stick is mandatory dispatch. When supply falls short of demand on the platform market, platform companies encourage drivers to work by increasing work incentives. Rewards have become an invisible form of management (Qi et al., 2019). Mr. Zhao (49 years old, Beijing-native driver, full time worker) explained, *“The platform has informed us that there will be a bonus during the May Day holiday. Even before the last order is completed, the platform allocates another new order. Especially around mealtime, there is high demand for cars. During these hours, it is impossible for us to take a break. We have to complete one order after another until the busy hours pass...”*

Moreover, the platform motivates drivers to work long hours by setting up an incentive mechanism that reduces rest time. For example, one indicator is the level of activity on the platform. The more active the driver is, the more desirable orders they receive from the platform. Most drivers are invisibly forced to conform to such a mechanism due to financial stress and their low competitiveness in other job markets. As Mr. Nie (40 years old, internal migrant driver from Shanxi province, full time worker) said, *“As long as I am not exhausted, I will not take a rest. Working for four hours straight will result in a mandatory break from the platform, and after a short break, I will work again.”*

It is evident that most drivers work “around the clock”. Flexibility and freedom are more like fantasies. Despite working overtime, they do not receive any overtime allowance. Moreover, due to these working patterns, their health also suffers. Mr. Wu (42 years old, internal migrant driver from Hebei province, full time worker) highlighted this, *“One Sunday, I received many orders and earned more than 1000 yuan. Despite the relatively large amount of daily income, such workload is harming my health. I have stomach-aches due to irregular eating. I usually drink very little water because it is not convenient to find a toilet. Furthermore, I work at night*

*more than ten days a month because the night shift brings in more income than daytime, but sometimes my sleep is deprived.”*

Due to long hours spent sitting in the car, several interviewees mentioned suffering from back pain (e.g., Mr. Hu, Ms. Peng, Mr. Shao, Mr. Li). For example, Mr. Peng (52 years old, internal migrant driver from Shandong province, full time worker) stated, *“Many of my fellow drivers have chronic back pain issues, especially after being ride-hailing drivers for a few years. As for me, after sitting in the car for 3 hours, my back starts to ache. The longer I work in the car, the more severe my back pain becomes.”*

#### **4.1.2 Working space**

Ride-hailing drivers can start their everyday work on any road or street, but they cannot control the location of orders during working hours. Orders are usually received in two ways: either allocated by the platform or obtained by drivers searching for passengers' reservation orders. The platform rates drivers based only on orders allocated by the platform, rather than self-searched orders. Orders are often allocated based on the location of the cars, service ranking, cancellation rate, platform activation, and more. Undesirable orders are often allocated when there is insufficient supply of cars. Mr. Zhang (39 years old, internal migrant driver from Shandong province, full time worker) noted, *“Despite the order being from an inconvenient location, the platform allocates it to drivers because the company rule states that standard dispatch is within eight kilometres. I have to accept such orders, but eight kilometres is not a short distance, and the cost is high. The platform does not give us a subsidy for these orders.”*

Pick-up and drop-off points can cause stress for drivers. On one hand, drivers have to obey traffic and road regulations. On the other hand, they need to meet passengers' requests, which can sometimes be unrealistic as not all places are allowed for parking. Drivers may be fined if they park in inappropriate locations, but if they do not meet passengers' needs, they will receive complaints that negatively affect their ratings. Mr. Hu (46 years old, internal migrant driver from Henan province, full time worker) expressed his frustration, *“When approaching the pick-up point, I found that I couldn't park there, and there were surveillance cameras on the road as well. So, I sent messages and called the passengers, but there was no response. I had to drive away slowly, and in such cases, I received complaints from the passengers and received a low rating.”*

It is worth noting that ride-hailing drivers spend long hours inside their cars not only for providing rides to passengers but also for their own rest and relaxation. For example, Mr. Wu (35 years old, internal migrant driver from Hebei province) said, *“When I feel very sleepy around 2-3 pm, I often take a nap in the car. However, due to the limited space in the car, I cannot stretch my legs, which is not very comfortable.”*

During the interviews, several drivers (e.g., Mr. Duan, Mr. Li, Mr. Zhang) shared their concerns about the camera surveillance inside their cars. All ride-hailing cars have been equipped with cameras by the platform since September 2018 due to two murders between May and August 2018. In May, one female passenger in Zhengzhou city was raped and murdered by the driver of a ride-hailing car she ordered, while in August, a similar incident happened to a 20-year-old woman in Leqing city whose body was found dead and the ride-hailing driver admitted the crime (Asianews, 2018). In order to prevent such incidents, cameras have been installed and operated in all ride-hailing cars. Through the camera, the platform carries out real-time surveillance of drivers' work performance. However, such comprehensive surveillance takes a toll on drivers' mental health, as they feel constantly watched. Drivers noted that they cannot control the camera operation unless the car is disconnected from the power supply. Mr. Li (35 years old, Beijing-native driver, full time worker) gave an example, *“It is a regulation that when there is a female passenger accompanied by a male passenger, we must ask if the male passenger has consumed any alcohol. It is a standard question we are required to ask by the platform. Although sometimes it is obvious that the male passenger did not drink, we still have to ask this question due to surveillance.”*

#### **4.2 Ride-hailing drivers' social insurance coverage**

From the above, it is clear that ride-hailing drivers are exposed to various health risks (e.g., back pain, stomach-ache, sleep disorder). Further, they are at high risk of being involved in work injuries caused by traffic accidents or driving fatigue (SZNEWS, 2017). However, their social medical insurance coverage is very limited (e.g., medical insurance, work injury insurance).

Ride-hailing drivers are excluded from social insurance for employees. According to the Social Insurance Law, only employees who have a standard labour relationship with employers are

entitled to social insurance for employees, including medical insurance, work injury insurance, basic old-age insurance, unemployment insurance, and maternity insurance. However, ride-hailing drivers do not have a formal employment relationship with the company (i.e., no labour contract) because the ride-hailing company states that “our company only has an affiliated cooperation relationship with all drivers who provide online ride-hailing services, and there are no direct or indirect labour relations” (Zhou, 2020). Without labour contracts, drivers are not eligible for the social insurance scheme for employees. Some scholars have pointed out that one concern for the platform to pay for social insurance contributions for ride-hailing drivers is the high operating costs (Wang and Wei, 2019), as the above five branches of social insurance contribution premiums may account for 40% of the total business expenditure. For example, according to the Decision of the State Council on the Establishment of a Basic Medical Insurance System for Urban Employers, employers should pay 6% of the gross salary for employees’ medical insurance premiums, while employees pay 2%.

In China, social medical insurance is categorised into two main types: one for “urban employees” (i.e., Urban Employee Basic Medical Insurance) and the other for “residents” (i.e., Urban and Rural Resident Basic Medical Insurance) (He, 2023). At the end of 2022, the number of participants in social medical insurance in China was 1.346 billion, accounting for 95% of the total population (China Healthcare Security Administration, 2022). Among them, 362.43 million were enrolled in Urban Employee Basic Medical Insurance and 983.49 million in Urban and Rural Resident Basic Medical Insurance. Being excluded from insurance for urban employees, we found that a majority of ride-hailing drivers are covered by medical insurance for urban and rural residents. Among the 25 interviewed drivers, 88.8% are covered by this type of insurance. However, its benefit level is significantly lower than that of employees’ medical insurance (He, 2023). Taking Beijing’s medical insurance scheme as an example, Table 2 shows the comparison of Urban Employee Basic Medical Insurance (UEBMI) and Urban and Rural Resident Basic Medical Insurance (URRBMI). It clearly demonstrates that urban employee insurance has a higher reimbursement rate and higher reimbursement ceiling line than resident insurance. To be concrete, as for outpatient care, urban employees’ reimbursement rate is 60%-90%, while residents only receive 50%-55%; and there is no reimbursement ceiling for urban employees, while the reimbursement ceiling line for residents is 4500 yuan per year. Regarding hospitalization, the reimbursement rate for employee insurance is 85%-99%, while resident insurance is 75%-80%; the reimbursement ceiling line for employees is 500,000 yuan, which is double the amount of the ceiling line for residents (i.e., 250,000 yuan).

As mentioned earlier, work injury insurance is one of the five branches of social insurance for employees. Without a formal employment relationship, ride-hailing drivers have no access to such work injury insurance. The platform provides one type of commercial insurance to drivers, which covers five major scenarios: traffic accidents, conflicts in the car, car insurance refusal, accidental injuries, and sudden death of a car owner. However, ride-hailing drivers have little knowledge and awareness about this insurance. Furthermore, the scope and amount of reimbursement are very restricted. Mr. Duan (51 years old, internal migrant driver from Shandong province, full time worker) mentioned, “*The platform has accident insurance. Each order deducts 10 cents for it, such as traffic accidents, sudden death, etc. But I haven't read the terms carefully; it seems that it only covers accidents that occur when there are passengers inside.*”

In 2018, one driver’s death drew a lot of attention to ride-hailing drivers’ work injury compensation. At 12:25 am on October 1, 2018, Mr. Ge died in a car crash while on his way to pick up a passenger in northern Beijing. Mr. Ge’s family alleged his death should be regarded as a work-related fatality, thus, the family demanded legal compensation based on work injury insurance regulations. However, Didi, the ride-hailing platform, refused such a demand. Eventually, Mr. Ge’s family sued Didi in the court in Beijing. However, the court dismissed all claims of Ge’s family because the court believed Mr. Ge and Didi platform did not have a formal employment relationship (PKULAW, 2020).

#### **4.3 Differentiated working conditions and social protection between internal migrant drivers and Beijing-native drivers**

The above empirical data has revealed ride-hailing drivers’ work shows features such as precariousness, stress, and control. Meanwhile, their social insurance coverage is very limited. We further find that working conditions and social protection between Beijing-native drivers and internal migrant drivers are different. Thirty-six percent of interviewed drivers are Beijing residents with Beijing *hukou* (i.e., household registration), and 64 percent of interviewed drivers migrate from other provinces of China to Beijing, while their *hukou* remains at their origins. Our data indicates, firstly, internal migrant drivers face more financial pressure and work stress compared to Beijing-native drivers; secondly, internal migrant drivers’ social protection is less adequate than that of Beijing-native drivers.

### 4.3.1 Working pattern, income, and expense

On average, internal migrant drivers work more than 10 hours a day, which is longer than Beijing-native drivers' working time. One main reason for internal migrant drivers' long working hours is their high financial pressure. Normally, Beijing-native drivers are homeowners in Beijing, which means they have their own place to stay. However, internal migrant drivers need to pay for rental accommodations. Additionally, internal migrant drivers, who moved to Beijing as ride-hailing drivers, are often from impoverished backgrounds. They are the breadwinners for the families left behind in their hometowns, such as young children and elderly parents. Apart from their own expenses in Beijing, they need to send remittances back home. This financial pressure pushes them to prolong their working hours. Mr. Duan (51 years old, internal migrant driver from Shandong province, full time worker) described his situation: *"I work 12 hours/day and earn 500 yuan/day on average. After paying for petrol, the net daily income is around 350 yuan. I work every day and have no holiday or weekend, unless I am physically unwell. The total monthly earning is around 10,000 yuan. A large amount of my income is sent back to my family in Shandong. As my children are in school and my mom is 80 years old, my wife stays at home to look after them. The only source of my household income is from me. In order to save money, I rent a shared place with other internal migrants in a cheap neighbourhood in the suburbs."*

On the contrary, Beijing-native drivers have less financial pressure compared to migrant drivers. Mr. Wang (46 years old, Beijing-native driver, full time worker) described his working pattern: *"I work 8 hours per day (7 am to 3 pm) and five days a week. My monthly income is around 5000 yuan, which is enough for me as I have a flat in Beijing, and I do not need to pay for rent like internal migrant drivers do."* Ms Gao (38 years old, female, Beijing-native driver, part time worker) said: *"I used to work full-time. But when I needed to provide childcare to my son, I started to drive part-time and only work around 30 hours a week."* Gao's experience also indicated this female driver's efforts in balancing work and family responsibilities.

According to a large-scale survey, 83.8 percent of ride-hailing drivers own their cars in Beijing, while 16.2 percent of drivers rent cars from the platform (SRRI, 2016). Among the 25 interviewed drivers in this research, 23 own their cars, and two drivers rent cars. These two drivers are also migrants, and we found they have the longest working time (i.e., 14 hours/day) and face huge financial pressure. In addition to their accommodation rent, daily expenses in

Beijing, and remittances back home, they have to pay for the cost of car rent. Mr. Ao (36 years old, internal migrant driver from Heilongjiang province, full time worker) said, *“I work 14 hours a day and I have to work every day, otherwise, I wouldn't earn enough money. I pay 4,500 yuan per month for the rental car. If I take some days off, I still need to pay for the car rent. My daily routine is I literally drive on the road all day and only go back to my rental place to sleep.”*

#### **4.3.2 Medical insurance benefits**

As noted in Section 4.2, ride-hailing drivers are not entitled to Urban Employee Basic Medical Insurance. Instead, a majority of them are covered by Urban and Rural Resident Basic Medical Insurance, which is a pooling of funds mainly financed by the government, and participants contribute a small amount of premium annually. It is a kind of voluntary social insurance. As residents' medical insurance funds are generally coordinated at the municipal level, reimbursement rates and benefits vary from municipality to municipality, showing a strong locality feature (He, 2022). Residents' access to this medical insurance is based on their household registration (i.e., *hukou*) location. Generally, citizens' *hukou* was registered at the location where they were born and grew up (Sun, 2019: 72). A Beijing-native driver's *hukou* is located in Beijing; therefore, they have access to the Urban and Rural Resident Basic Medical Insurance in Beijing. On the other hand, for internal migrant drivers, their *hukou* is located in their hometowns, thus, they are only eligible to participate in the Urban and Rural Resident Basic Medical Insurance at their origins instead of in Beijing.

As an affluent region, Beijing residents' social protection benefits are much higher than those of most other provinces. For example, in 2018-2019, the social expenditure per capita for Beijing residents was 17,389 yuan compared to 13,525 yuan in the poorer province of Hunan (Hong and Ngok, 2022: 879). In other words, Beijing-native drivers can enjoy better medical insurance benefits than internal migrant drivers. Mr. Zhang (53 years old, Beijing-native driver, full time worker) noted that *“I have high blood pressure and diabetes and I take medication every day. I participate in the medical insurance for residents in Beijing. The same as other participants, I was provided with an insurance card. Each time, I show my insurance card when purchasing medicines. I only pay for 50 percent of the total cost as the insurance reimbursed 50 percent of the cost automatically. Each year, the maximum amount of reimbursement for my medicine is 4500 yuan.”* However, one of the sending areas of internal migrant drivers is

Shijiazhuang, the capital city of nearby Hebei province, which has a much lower reimbursement ceiling line for its residents' medical insurance (i.e., 200 yuan) (SJZGOV, 2022). In other words, Beijing-native drivers' medical insurance (outpatient) reimbursement ceiling is around 22 times that of internal migrant drivers from Shijiazhuang.

Besides lower medical insurance benefits, internal migrant drivers also face the complexities of cross-provincial medical reimbursement, as medical insurance is not fully portable across provinces in China (Chen et al., 2022). In order to claim insurance benefits, internal migrant drivers have to either return to their hometowns where they are insured to receive treatment or choose to be treated in a limited number of designated hospitals in Beijing. If internal migrant drivers choose the designated hospitals in Beijing, the insurance reimbursement rate and ceiling are based on the insurance regulations of their hometowns instead of enjoying Beijing insurance benefits. Such cross-provincial treatment in designated hospitals often has the lowest reimbursement rate; for example, the aforementioned Shijiazhuang city regulated that the reimbursement rate for cross-provincial hospitalisation is between 30 percent and 50 percent, while if internal migrant drivers return to get treated in hospitals in Shijiazhuang, the reimbursement rates are between 60 percent and 90 percent (SJZGOV, 2022).

However, internal migrant drivers often lack knowledge and awareness of such regulations and procedures. For some mild common illnesses, they often pay out of their own pockets for medicines instead of making a claim to the insurance. Mr. Li (37 years old, internal migrant from Hebei province, full time worker) shared his view, *“I participated in the medical insurance for residents in my hometown, but I have never used the reimbursement since I arrived in Beijing. Because insurance policies across provinces seem very complicated for us. So, my fellow internal migrant drivers and I usually just buy medicine and pay out of pocket.”*

## **5 Conclusion and Discussion**

With 75 million Chinese engaging in platform work, China has the largest number of platform workers in the world (Zhou, 2020). It is estimated that transportation services, such as ride-sharing platforms, generate 58 percent of the global digital economy revenue (MKA, 2019). However, the working realities of ride-hailing drivers in China largely remain unknown. Based on qualitative interviews with 25 ride-hailing drivers in Beijing, this research has thoroughly examined their working conditions and social protection. Our in-depth data have revealed

empirical findings in the following three main aspects.

Firstly, ride-hailing drivers face severe working conditions. For example, they work on average 10 hours every day; they feel mentally stressed as in-car surveillance cameras are operated constantly; they rarely have meals on time as lunch and dinner time are their busiest hours; they are reluctant to drink too much water because it is difficult to park and find a toilet; they have to take a nap in the car with uncomfortable postures when they feel tired. Such daily working conditions have resulted in some illnesses commonly found among ride-hailing drivers, such as back pain, stomach-ache, sleep disorder. Furthermore, ride-hailing drivers are at a high risk of traffic accidents due to fatigues caused by the long working hours.

Secondly, in the face of such health risks and accidents, ride-hailing drivers are excluded from social insurance for urban employees (e.g., Urban Employee Basic Medical Insurance, Work Injury Insurance) because such drivers do not have a formal employment relationship with the ride-hailing platform companies. In Western countries, a large number of ride-hailing drivers are part-time as they have other main occupations which often provide them with social insurance (Codagnone et al., 2018). In contrast, 80 percent of ride-hailing drivers in Beijing are full-time drivers, but they cannot be insured through such work (SRRI, 2016). We found that being excluded from medical insurance for urban employees, most ride-hailing drivers participate in Urban and Rural Resident Basic Medical Insurance based on their *hukou* status. Thus, we assert without employees' social insurance, *Hukou*-based resident social insurance functions as a fallback option for ride-hailing drivers. However, its benefit level is significantly lower than that of employees' social insurance. It is worth noting that when encountering road accidents, ride-hailing drivers may suffer from serious injuries or even lose lives, but they cannot get legal work injury compensation due to the lack of formal employment relationship.

Thirdly, among the 25 interviewees, 9 are Beijing-native drivers, and 16 are internal migrant drivers, 23 are male and 2 are female. Different groups of drivers' working conditions and social insurance are varied. In general, internal migrant drivers face more financial pressure and work longer hours than native drivers. For example, they need to pay for rental accommodation in Beijing. Additionally, we found despite both groups enrolling in the Urban and Rural Resident Basic Medical Insurance, internal migrant drivers' insurance benefits are lower than those of Beijing-native drivers. This is because social insurance for residents is tied to citizens' *hukou* (household registration). Internal migrant drivers' *hukou* is often at their

origins; thus, they are insured at their hometowns instead of in Beijing. Medical insurance for residents in Beijing has a higher benefits level than that in most other provinces. Thus, Beijing-native drivers enjoy more insurance benefits than internal migrant drivers. Furthermore, Urban and Rural Resident Basic Medical Insurance is not fully portable across provinces, which is a constraint internal migrant drivers encounter when claiming insurance benefits. Thus, we found internal migrant drivers often pay out of pocket for mild illnesses' medication costs instead of making a claim to insurance.

The above findings demonstrate ride-hailing drivers generally participate in Urban and Rural Resident Basic Medical Insurance. As noted in the literature review section, as for non-standard forms of employment, its social protection's linkage to employment relationship has been categorised into four types (ILO, 2016: 299-300). Based on such typology, we assert Chinese ride-hailing drivers' social protection is not linked to their employment, which instead belongs to the type of "whose social protection linked to residency status". As social insurance for residents in China is bound to their residency where their *hukou* is located, we further argue ride-hailing drivers' social protection is linked to their *de jure* residency status instead of being linked to *de facto* residency status. As migrant drivers' *de jure* residency is their hometowns (i.e., *hukou* location), they are not entitled to the residents' social insurance in their *de facto* residency (i.e., Beijing). Despite working in the same occupation and living in the same city, internal migrant drivers and Beijing-native drivers have differentiated social insurance. By raising the binary classification of *de jure/de facto* residency, our research contributes to deepening the typology of non-standard forms of employment's social protection.

As international organisations (e.g., ILO) and national governments advocate the "adequate, comprehensive and sustainable" social protection to all workers (Behrendt and Nguyen, 2019), our empirical findings reveal the urgent need to enhance ride-hailing drivers' social protection in China. We propose: 1) "adequate": ride-hailing drivers, mostly full-time workers with the only job, should be entitled to access social insurance for employees in China because their current coverage by social insurance for residents is inadequate due to its low benefits level. 2) "comprehensive": besides social insurance, ride-hailing drivers should be granted other forms of social protection, such as social housing provision, social assistance benefits; as several of our interviewees state that despite being the low-income group in the city, they still spent a significant percentage of their income on private housing rental. 3) "sustainable": we assert the importance of social insurance's portability on guaranteeing ride-hailing drivers' long-term

social provision because some ride-hailing drivers are internal migrants who might move to another city or return home after working in the current city, but social insurance in China cannot be fully portable across provinces. In sum, besides the academic contributions, our study also provides empirical evidences for policy recommendations.

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