

Platform Employment Relations in Present China: Problems, Symptoms and Realistic Paths

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ABSTRACT

Along with the development of digital technology, the adjustment of industrial structure and the emergence of platform enterprises, "platform employment" has emerged as a new form of employment, which has played a positive role in stabilizing jobs and increasing residents' income. However, this new form of employment, which is flexible, elastic and diversified, also makes China's traditional labor relations recognition system and its corresponding labor protection laws and systems seem more and more inadequate. For this reason, some scholars have proposed the concept of "labor trichotomy", arguing that the traditional labor dichotomy should be used as a basis to develop the institutional space for a "third type of labor relations", treating platform workers as "employee-like" and constructing a related legal system. This paper argues that we should open up the institutional space of "third class labor relations" based on the traditional labor dichotomy, treat platform workers as "employee-like" and build a multi-level protection system. This paper argues that since there are many kinds of platform enterprises and the needs of platform employees are different, it is undoubtedly difficult to establish a third type of labor relations to regulate this new form of employment, with its operation difficult and its practicality doubtful. It is also difficult to achieve targeted protection for various types of platform employees. In line with the principle of "problem-oriented, urgent use first", the construction of the occupational injury protection system, which is the most important concern of platform employees, should be strengthened as soon as possible, and pilot work has been carried out by local governments and leading platform enterprises. In the future, the government should issue a national document on occupational injury protection system as soon as possible, and encourage platform enterprises and related organizations to build an occupational injury protection system suitable for their fields and industries.

KEYWORDS

Platform economy; Platform employment; Occupational injury protection; Labor dichotomy

1. Introduction

With the continuous popularization and iteration of the Internet, digital technology and mobile terminals, the digital economy, as a new economic mode and model based on digital technology, is gradually becoming an important driving force for China's economic growth and a booster for stable employment expansion, bringing great changes to China's economic and social development. A large number of platform enterprises supported by digital technology have emerged, involving life, services, labor and employment, supply chain and many other fields. They have increasingly become an indispensable part of people's production and lifestyle. Compared with traditional industrial-era

enterprises, platform enterprises, based on algorithms and big data, have realized high-efficiency and large-scale integration, coordination and allocation of market supply and demand information resources, making market supply and demand information more fluid and exchange more efficient, and the division of labor has gradually realized the decomposition and refinement from jobs to standardized specific tasks. At the same time, along with the adjustment and upgrading of China's industrial structure, a large amount of surplus labor from primary and secondary industries flowed to the tertiary industry, and the efficient matching of labor supply and demand was continuously carried out on the platform, on the basis of which the new economic mode of "sharing economy" gradually took shape. Based on this, the new economic mode of "sharing economy" is gradually taking shape, and "platform employment" is also a new employment mode.

The booming development of platform employment in recent years has seen a gradual upward trend in the number of employment driven by it. According to the annual "China Sharing Economy Development Report" released by the National Information Center during 2017-2021, from 2016-2020, the number of employees of platform enterprises in China will be about 5.85 million, 7.16 million, 5.98 million, 6.23 million and 6.31 million respectively, and the number of service providers will be about 60 million, 70 million, 75 million, 78 million. The data of the ninth national survey on the status of the workforce carried out in 2022-2023 shows that the total number of workers in the country is about 402 million, with 293 million migrant workers. Among them, new employment forms of workers have become an important part of the workforce, reaching 84 million, mainly composed of groups such as truck drivers, net car drivers, couriers and take-away delivery workers. Male young adults comprise the majority, with a high proportion of people holding agricultural household registration¹. For example, the questionnaire research of Meituan Research Institute in the first quarter of 2023 showed that male riders accounted for 93.2% while female riders accounted for 6.8%, and the vast majority of riders were between the ages of 25 and 44, with 43.5% of riders aged 25-34 and 26.7% of riders aged 35-44; the labor force from rural areas accounted for about 78.7% of the total number of riders. This figure has remained stable at around 80% in previous research studies. The newly released "China Sharing Economy Development Report (2023)" points out that the new sharing economy, with its unique advantages, has played a positive role in stabilizing jobs and increasing residents' income, not only improving the efficiency of the employment market, but also opening up new channels for workers to increase their income from employment.

However, with the rapid development and extensive penetration of new employment patterns in various fields, traditional labor relations have gradually become irrelevant, and the set of labor protection laws and systems established in China in the context of traditional industrialization and factory system have become increasingly inadequate in the face of the increasingly flexible, elastic and diversified new employment patterns. On July 16, 2021, eight ministries and commissions, including the Ministry of Human Resources and Social Security, jointly issued the "Guidance on Safeguarding the Labor Rights and Interests of Workers in New Employment Patterns", pointing out that "to effectively safeguard the labor protection rights and interests of workers in new employment patterns and promote the standardized, healthy and sustainable development of the platform economy". In addition, China's trade union organizations at all levels are also actively playing a role in guiding platform enterprises to regulate employment and new employment workers to enhance their legal awareness. According to the "China Sharing Economy Development Report (2023)", by the end of 2022, 111,700 service stations for various types of outdoor workers had been built nationwide, and trade unions at all levels had invested a total of 1.89 billion yuan; in February 2022, the All-China Federation of Trade Unions issued ten typical cases of labor relations confirmation disputes for workers

¹ People's Daily Online. (2023). *New employment patterns of workers reach 84 million nationwide*. <https://baijiahao.baidu.com/s?id=1761569733476293486&wfr=spider&for=pc>

in new employment forms to guide the majority of workers in new employment forms to enhance their awareness of the rule of law and rationally defend their rights according to the law, and to guide enterprises to standardize employment and fulfil their responsibility of protecting workers' rights and interests.

At the same time, academic circles have also launched intense discussions on the protection of the rights and interests of workers in new employment forms, among which, how to define the identity of platform workers and their relationship with the platform is the basis for deciding how to impose protection on this group, is also the focus of academic circles' debates. In this regard, some scholars pointed out that the current "labor dichotomy" should be expanded to a "labor trichotomy", and a "third type of labor relationship" should be established to give platform workers "employee-like" status.² The related doctrine exists widely in China's labor law circles, but China has not yet issued a law to respond to it. In this paper, we believe that since there are many kinds of platform enterprises and platform employees facing different situations, it is doubtful to establish a "third type of labor relationship" to regulate this new form of employment, and its practicality is doubtful and difficult to operate. At present, in line with the principle of "problem-oriented and urgent use first", the construction of an occupational injury protection system for platform employees should be strengthened as soon as possible, and pilot work has been carried out by local governments and leading platform enterprises. In the future, the government should issue a national document on occupational injury protection system as soon as possible, and encourage platform enterprises together with related organizations to build an occupational injury protection system suitable for their fields and industries.

2. The clarification of platform employment relationship

2.1 Platform business model

Clarifying the specific types of platform enterprises and their characteristics is the basis for studying the way of labor relations governance of platform employment. With the vigorous development of platform economy, platform enterprises gradually show different employment methods, mechanisms and characteristics from those of traditional enterprises. At the same time, taking into account the differences in business fields, target markets, operation modes and profit models of platform enterprises, a variety of complex platform enterprises have gradually emerged in the field of platform economy. Although they belong to the platform economy, different characteristics have driven further classification within the platform enterprises, and the relationship between different categories of platform enterprises and their employees is different.

2 As to the necessity of establishing the three-division of labor law and its relationship with the protection of labor rights and interests of platform workers, Wang (2020a) believes that platform employment cannot be effectively adjusted under the current "labor dichotomy" framework of "subordinate labor-independent labor", and the protection of labor rights and interests of labor providers is insufficient. "In terms of the concrete practice path of labor dichotomy, Gai (2018) believes that "labor-like" subjects should be added for this new form, and the general protection measures such as occupational safety, social insurance and labor supervision should be clarified while the protection measures in labor disputes should be provided. Wang (2020b) points out that the regulatory system of platform employment relationship should be based on the positioning of "employee-like", and the "employee-like" system should be based on the "employee-like" system. Wang (2020a) pointed out that the regulatory system of platform employment relations should be based on the positioning of "employee-like", and the protection of the rights and interests of workers in new labor relations should be placed under the framework of "three divisions of labor", through the system of pricing and compensation protection, the system of occupational risk protection, the system of dispute complaint and remedy, etc. "In addition, Wang (2023) finds that countries have formed different governance goals and practical logic in judicial decisions and legislative amendments based on their own legal frameworks, showing that the "third type of labor form" balances labor. At the same time, the practice of platform employment in China has broken through the legal abstraction of labor dichotomy, and the combination of platform-based flexible employment policies has opened up the institutional space of "the third type of labor form".

Regarding the specific classification criteria of platforms, there is currently no unified standard in domestic and international academic circles. Kai (2021) points out that a more common view in the current academic community is that various types of platform enterprises can be classified as autonomous platforms and organizational platforms, based on the functions and status of platforms in labor transactions. The former only provides virtual trading places, sets trading rules and collects service fees, but does not participate in labor transactions and pricing, such as Piggyback.com and 58 Tongcheng, etc. The latter both organizes labor transactions and actually participates in them, contracting with the supply and demand sides of labor services respectively. Enterprises belong to the latter, i.e. organization-type platform.

The "China Labor Security Development Report (2017)" further subdivides the types of platform enterprises and divides them into four types according to their operation modes and employment forms: the first type is platform self-management mode, which is similar to the traditional enterprise management and employment mode, except that the main body of employment has become the platform enterprise, and such enterprises directly construct labor relations or contracting or cooperation relations with employees, using direct employment or labor dispatch. The second type is the information service mode, in which the platform only functions as an information intermediary and does not directly manage employment or labor, similar to the autonomous platform mentioned above. The third type is the new sharing mode, in which the employees under such platforms can flexibly choose work or leisure by registering an app account and so on, which is flexible. Although such platforms tend to position the relationship between them and the practitioners as a cooperative relationship, they are still able to regulate and control the practitioners through user evaluation and big data monitoring, etc. What kind of employment relationship between such platforms and the practitioners is still undecided in the academia and industry. The fourth category is the mixed model, which is not bound to a single business model but often presents a combination of the other models mentioned above.

The Research Group of Beijing First Intermediate People's Court (2022) systematized the current common platform employment models for the representative Internet take-away and express delivery platforms, which can be divided into seven categories: self-employed, labor dispatching, outsourcing, merchant responsible for delivery, individual business, sharing and crowdsourcing. Among them, "self-employed" and "crowdsourcing" correspond to the aforementioned "platform self-employed mode" and "new sharing mode" respectively. The remaining five categories consider different dimensions of the business models of platform enterprises. The labor dispatching model is that there is no direct contractual relationship between the platform enterprise and the laborer, but the labor dispatching company acts as an intermediary and concludes a labor contract with the rider and dispatches the rider to the platform enterprise to engage in the delivery business. Under this model, the platform enterprise and the labor dispatching company may be jointly and severally liable for compensation. The outsourcing model means that the platform enterprise signs a business outsourcing agreement with the site or delivery provider in a specific area, and the third-party company is responsible for the rider under the contracted business. The third party company is responsible for the recruitment and management of riders under the contracted business, which may constitute labor relations or labor relations between the third party and the workers. Merchants responsible for distribution is a simpler mode of employment, in which the merchants directly employ riders to be responsible for distribution, and is the original mode of cooperation before the economic development of the platform. Individual business type is the rider and the platform operator or its cooperative enterprises before signing the corresponding contracting and cooperation agreement. This model is conducive to reducing the tax burden of enterprises and riders, but what kind of legal relationship it constitutes is still controversial. The essence of the shared model is staff secondment, which was developed during the epidemic, where the shortage of work between enterprises and enterprises that have not yet resumed work is shared, and

employees are borrowed to assist in the work, but the labor relationship of employees still continues with the lending unit.

In summary, the definitions of platform business models may vary somewhat among scholars, but the substantive analysis process is similar in that they all aim to gain insight into how platforms operate and achieve commercial success. When analyzing the platform business model, the usual considerations include the core functions of the platform (e.g., the main objectives and features of the platform's services, how to meet customer needs), the profit model (how the platform achieves profitability, e.g., by charging transaction commissions, advertising fees, membership fees, or other forms), the user base (the type and number of users of the platform, their usage needs, etc.), and the platform architecture and technology (e.g., the platform's technology, system architecture, data management, security, etc.) and other aspects. These elements are to some extent interrelated and together form the basis of the platform business model. Therefore, researchers usually define and systematically classify platform business models on this basis.

2.2 Platform employment model

With the rapid development of the technological revolution and the digital economy, new businesses, industries and business models are changing rapidly, so there is no accurate and authoritative definition of what business models can be classified as platforms. It can be roughly divided into three categories: micro-enterprise, family business and independent service provider. Later, foreign countries further subdivided the types of platform economy workers, such as Schmidt's earlier classification of the platform economy into six categories: goods, services, finance, social, entertainment and information, and later divided the service platform economy into cloud tasks (web-based) and local tasks (location-based) or odd jobs (gig work). Cloud tasks are subdivided into freelance platforms, micro-crowdsourcing tasks and merit-based tasks, while local tasks are performed by practitioners in designated geographic locations, including accommodation, transportation services and housekeeping and personalized services, etc. This division is cited by the International Labor Organization in the "World Employment and Social Outlook Report: Trends 2021". In addition, based on the types of products or services provided by platform economy practitioners, they can also be divided into the following six categories, namely commodity-based practitioners (mainly providing physical goods sales, such as sellers on e-commerce platforms), service-based practitioners (mainly providing online and offline services, such as online education, online taxi, and domestic services), content-based practitioners (mainly providing content creation and sharing services, such as short (mainly providing content creation and sharing services, such as short video production, live broadcast platform anchor, etc.), capital-based practitioners (mainly providing financial, investment and credit services, such as P2P lending platforms, stock investment platforms, etc.), data-based practitioners (mainly providing data analysis, mining and application services, such as big data platforms, artificial intelligence, etc.), social practitioners (mainly providing social interaction, communication and dating services, such as social networking platforms, stranger social).

The concept of "informal employment" does not exist in China, but is more commonly defined as "flexible employment", "new employment pattern", etc. In the "Guidance Opinions on Safeguarding the Labor Rights and Interests of Workers in New Employment Patterns" jointly promulgated by the Ministry of Human Resources and Social Security and other eight departments, the extension of new employment patterns is listed, that is, the so-called new employment patterns refer to "online delivery workers, online car drivers, truck drivers, Internet marketers, etc., who rely on the Internet platform for employment". This summarizes the business model of the platform economy from one dimension. During the continuous development of China's platform economy, more rich and diverse business forms have emerged in addition to the aforementioned business models, such as domestic helpers who provide services such as cleaning, nanny, sister-in-law, and tutor through domestic helper platforms; part-time platform workers who provide short-term services such as event planners, promoters, and

waiters through part-time platforms; freelance knowledge, skill, and creative services through online platforms writers, programmers, designers, and other online platform workers; social media platform creators who create and share content through social media platforms and earn income through fan support and sponsorship; task crowdsourcing workers who complete small businesses such as data labeling, survey research, and image recognition on task crowdsourcing platforms; online course instructors and online tutors who provide teaching services through online education platforms; and online or offline platforms to showcase music, dance and performance; logistics and warehousing workers who work on logistics and warehousing platforms and are responsible for warehouse management, goods packaging and distribution, etc. It is foreseeable that with the development of technology and platform economy, new forms of platform employment business will continue to emerge.

The employment relationship formed between different types of platform enterprises and practitioners often presents different characteristics. In order to accurately identify the legal relationship between platform enterprises and relevant practitioners, representative platform business models should be selected as the research objects and targeted analysis should be conducted on this basis. Therefore, a brief analysis of online delivery workers, online car drivers and live salespersons will be conducted later.

2.2.1 Online delivery riders

With the development of the platform economy, the employment pattern of the labor force has changed significantly and provided more employment opportunities, of which online delivery riders (later referred to as riders) are typical representatives. A survey report by Zhang et al. (2022) on a platform rider shows that a platform had a sample of 63,811 riders with wage data in 2020, of which 80.1% of delivery riders belonged to agricultural households, and about 40% of riders worked across provinces. This large number of "riders from the countryside" was often engaged in risky and heavy physical labor such as construction workers, but the threshold for switching to the takeaway industry is low, as long as they have an electric vehicle, cell phone and master Mandarin, they can register as riders. According to empirical data, these groups earn higher levels of income than in their previous occupations and also have greater autonomy and flexibility. Many current specialist graduates are also invested in the take-out industry. Becoming a rider is a good employment option for employed rural households with low education and vocational skills, as this industry has a significant effect on their income levels.

In recent years, the employment mode of take-out platforms has undergone a rapid and complex evolution. Because of the characteristics different from traditional employment, the issue of protection of workers' rights and interests has been the missing part, which makes the issue of determining labor relations between platforms and riders appear frequently in court judgments. Understanding the judicial decision on the determination of the labor mode of take-out platform is of great reference value in regulating the employment of take-out platform enterprises and promoting the protection of workers' rights and interests in the new employment pattern.

The "Research Report on the Definition of Legal Relationships of Labor Employment in New Employment Patterns" published by the Suzhou Central Court Group shows that, among the cases involving arbitration and trial of labor employment in new employment patterns, the ruling of the Labor Personnel Dispute Arbitration Committee and the court judgment present different characteristics. First, in the relevant labor arbitration, the subjects of the cases are widely distributed, involving many riders and well-known platform enterprises. Second, there are different ruling results of arbitration committees on whether to confirm labor relations. In disputes on the confirmation of labor relations, although the arbitrators mostly cited the "Notice on Matters Relating to the Establishment of Labor Relations" for reasoning, there is only a half probability that the applicant's arbitration request will be supported, while in other types of cases the applicant's arbitration request will most likely be

supported or partially supported. Third, the risk factor of jurisdictional uncertainty and different decisions in the same case has increased. This is because the arbitration-related cases, foreign enterprises account for a large proportion of the cases, and at the same time, riders often do not have a fixed workplace, bringing uncertainty to the jurisdiction of the case, so some cases have repeatedly accepted or mutually shirked the acceptance of two places, unit jurisdictional objections lead to case jurisdiction uncertainty. In the court decisions, the types of cases are relatively focused on the direct confirmation of labor relations disputes and the determination of legal relations in disputes involving new employment forms of workers causing damage to third parties. In addition, the complexity of case subjects, group litigation is more common, and the diversity of claims is also an important feature of the relevant litigation disputes.

To summarize, an analysis of litigation between online delivery riders and platform companies reveals that most of the related litigation disputes are due to the issue of occupational accidents and risks occurring at work, and rarely are they based on low wage compensation or salary arrears by the employer. For the group of riders, who are mainly migrant workers, whether they are involved in traffic accidents causing damage to themselves or to third parties, the riders themselves cannot afford to fill the responsibility of injury or damage compensation, so they will take the platform or affiliated enterprises to court. However, in view of the complex and diversified employment mode of the platform, it involves the definition of legal relationship between the new industry workers and the platform enterprises or the platform outsourcers who directly provide labor, and it is difficult to determine the appropriate object to be sued after the dispute occurs, which also leads to the difficulty in defining the employment subject and legal relationship, and often requires additional parties to ascertain the facts of the case, resulting in a long trial period and high cost for workers to defend their rights. Recently, the Ministry of Human Resources and Social Security, the National Development and Reform Commission and other eight departments jointly issued the "Guidance on Safeguarding the Labor Rights and Interests of Workers in New Employment Patterns", which for the first time clarifies a number of focal issues such as platform responsibility, compensation, rest and occupational injury protection, and builds a "protection net" for the rights and interests of take-away riders, online taxi drivers and e-commerce anchors.

2.2.2 Online car driver

Among the 84 million employees of the platform companies, besides online delivery workers there are also many other types of occupations, such as online car drivers, a new type of employment that requires an individual business certificate. Net-contracted car drivers are full-time or part-time drivers who receive orders through Internet platforms and engage in operational activities. They use their own private vehicles to pick up and drop off passengers, complete the transaction according to the time, place and cost conditions set by the platform, and collect service fees through the platform. Net-contracted drivers are usually required to hold a valid driver's license and vehicle license, as well as comply with traffic regulations and platform management rules. With the development of the sharing economy, the online taxi industry has become an important form of employment and entrepreneurship. Many people also choose to become an online taxi driver because of the more flexible pay model of the profession, which can even be settled at any time, and is very different from the traditional labor relationship where labor is paid on a monthly basis. Most online taxi drivers are not affiliated with the online taxi platform, and as a kind of freelancer, their source of income is not limited to the platform. Although the platform will charge a certain percentage of the driver's service fee, it varies roughly in a range between 15% and 30%, depending on factors such as market competition and policy adjustments. In addition, the platform will also provide some information services, such as payment, customer service and marketing support, and these services may also charge a small fee.

Generally speaking, there are two different ways to allocate orders on the platform, i. e. order dispatching mode and order grabbing mode. The dispatch mode means that the platform automatically

assigns orders to nearby idle drivers according to certain algorithms and rules, and the drivers only need to accept or reject the orders. Such online taxi drivers must comply with the management rules and requirements of the platform companies in the course of their services, and the motor vehicles they drive are usually also owned by the platform companies. Employees usually do not have the right to make their own decisions, and need to accept the arrangements and dispatch of the platform. In addition, the income of online taxi drivers is also directly related to the policies and pricing system of the platform companies, which purchase insurance for them. Therefore, such online taxi drivers should be regarded as employees of the platform enterprise and protected by labor laws. The advantages of the assignment model are that it can reduce the competition for orders among drivers, enable the rapid allocation of orders during peak transportation periods, and help improve the efficiency of the system. The disadvantage is that drivers cannot choose the orders they want and cannot decide independently whether to take orders, while the unreasonable assignment algorithm may lead to lower earnings for some drivers.

Rush mode means that when there is a new order on the platform, all drivers online can see the order information, they are free to choose the order they want, and they can arrange their working hours and slots according to their working conditions and income goals. When such drivers register with the platform, they need to agree to the platform's service agreement, complete the transaction in accordance with the agreement, pay the platform for the service, and apply for an online vehicle transportation certificate and purchase insurance. The platform companies, as service providers, also need to review and manage the qualifications and behavior of drivers to ensure service quality and safety. The academic community has different opinions on the characterization of the legal relationship between such new industry practitioners and platform enterprises, or it is considered as labor relationship, cooperative relationship, or even a nameless contract, but the author believes that the relationship between such online taxi drivers and the platform is in line with the provisions of the Civil Code on the elements of contracting, and it is appropriate to consider it as contracting relationship (Tu, 2017). As a contractor, the online taxi driver party completes the route designed by the platform as a finalist and provides point-to-point transportation services. Once the driver party completes the transportation service, the platform pays the driver's remuneration for the transportation service from the transaction fee paid by the customer. In addition, part-time drivers can grab orders on multiple platforms, so it essentially constitutes a multi-employer contracting model. The advantage of this model is that drivers are free to choose the orders they want, and it can also increase the driver's sense of competition and improve the quality of service. The disadvantage is that it is prone to vicious competition, resulting in a waste of resources. Besides, there will be a large number of rush orders during peak periods, affecting the overall system efficiency.

In recent years, the capacity tends to be saturated due to the rapid growth in the number of net car drivers and net cars. According to the statistical information of the national net car regulatory information interaction platform, compared with October 31, 2020, in the two and a half years to April 30, 2023, the national net car platform companies that have obtained the net car platform operating license grew from 207 to 309, an increase of 49%. The number of net car driver's licenses issued around the country increased from 2.545 million to 5.406 million, an increase of 112.4%. However, there was no significant increase in the total number of orders nationwide. From October 2020 to January 2021, a total of 630 million, 660 million, 810 million and 730 million orders were received per month on the national net car regulatory information interaction platform, while in the first four months of 2023, the relevant orders were 576 million, 652 million, 716 million and 706 million per month, respectively. In short, the current excessive labor supply in the labor market of the industry may lead to a decrease in the unit price of transportation and a decrease in the number of orders per capita, indirectly leading to a decline in the per capita income of online taxi drivers and an increase in the number of working hours per capita, which may also lead to a decline in service quality and an increase

in frictional conflicts between drivers and passengers over time. In view of this, this year, Changsha, Sanya and other places to suspend the acceptance of net car business license and transport certificate issuance business, Jinan, Suining, Dongguan and other cities have issued a number of risk warning notice in the online reservation and car rental industry, people who hope to become a net car driver also need to be cautious.

2.2.3 Live salesman

With the rapid development of digital economy and fan economy in recent years, "Internet marketer" has become an emerging profession, rapidly integrating into people's lives in the fields of entertainment consumption, knowledge sharing and interest e-commerce. In the context of "double creation" advocated by the state, small and medium-sized enterprises are actively using the Internet platform to provide services, product sales and other activities to seek business opportunities and cooperation in a broader field, and "live with goods" has become an important marketing tool for online sales. Since the outbreak of the COVID-19 pandemic, offline sales and the real economy have been seriously impacted, at this time the platform "live with goods" has shown its unique convenience advantages and flourished in a short period of time, and live salesmen (later referred to as network anchors) also won support for network sales with their unique charm and huge traffic. According to the statistics in the "China Network Performance (Live Streaming) Industry Development Report", by the end of 2021, there were 7,661 operating Internet culture units with network performance (live streaming) business qualifications, with a total of nearly 140 million anchor accounts, and the market size of the entire network performance (live streaming) industry reached 184.442 billion CNY. Many companies have hired anchors in the shopping platform "live with goods", relying on the Internet platform medium and the popularity of network anchors to carry out e-commerce activities. Disputes between anchors and brokers are gradually increasing, but because the work performance mode of network anchors differs greatly from that of traditional industries, the labor relationship is considered ambiguous.

The current network live industry involves many live broadcast participating subjects, and there are three main modes of operation between different subjects. First, the anchor and live broadcast platform directly signed a contract, which can be subdivided into authorized live and contract mode, two models may be established under the cooperation relationship and labor relationship respectively. The second is that the anchor no longer signs a contract with the platform directly, with the economic company (MCN agency) or live guild as the link between the anchor and the platform. According to "Article 38 of the Code of Conduct for Live Network Marketing" issued by the China Advertising Association, a live network marketing anchor service agency is a specialized agency (such as an MCN agency, etc.) that cultivates anchors and provides services for them to carry out live network marketing activities. The anchor and MCN agency or guild contracted in the network platform activities, and no longer have a direct relationship with the platform. The live broadcast activities are managed, coordinated and divided by the MCN agency or guild. Again, whether the live broadcast is on an exclusive platform depends on how the latter is agreed with the platform. Thirdly, the cooperative relationship between anchor and merchant, usually exists in the field of live broadcast with goods, the anchor may undertake the merchant's obligations in an independent capacity, or may be an employee of the merchant itself, and the two aforementioned situations may also affect the nature of the contract and the identification of legal relationship. Wang and Shao (2018) argue that web hosts provide labor remotely based on the webcasting platform, which not only significantly weakens the subordination feature, but also poses a great challenge to the traditional labor legislation. Therefore, there is a need to revisit the criteria for determining labor relations and further need to construct the concept of non-standard workers. The second model is more common in practice, i.e., anchors contract with MCN agencies, and this model will be analyzed later.

The main goal of MCN agencies is to help contracted anchors to continuously export and realize

their content. Network anchors establish a cooperative relationship by signing "Cooperation Agreements, Acting Brokerage Contracts and Commissioning Agreements" with MCN agencies, and then register themselves on third-party live streaming platforms to engage in live streaming activities and obtain live streaming income according to the cooperation agreements. The anchor engaged in live streaming may be full-time or part-time, so if we want to determine the legal relationship between the MCN organization and the anchor, we should first consider the terms of the contract signed by both parties. As a new form of employment, webcasters have significant differences from standard labor relations in terms of labor remuneration, workplace and working hours. In practice, many provisions in the cooperation agreement signed between the two parties are different from labor relations, but more similar to the legal characteristics of civil cooperation, and the legal relationship between the MCN organization and the anchor is very loose, and there is no labor management with personal affiliation. The live broadcast activities of the anchor are not part of the business of the MCN agency, and the income from the live broadcast based on the cooperation agreement is not economic subordinate labor compensation in the sense of labor law, which means the two do not conform to the legal characteristics of labor relations. After considering the terms of the contract signed by both parties and the actual performance, it is clear that the MCN organization does not manage and pay the anchor on a daily basis, and the so-called "salary" received by the anchor is actually the "commission" of the service fee for engaging in the live broadcast business, which lacks labor relations. The so-called "salary" received by the anchor is actually the "commission" for the service fee of live broadcasting business, which lacks labor attribute and should be considered as cooperative relationship.

3. The core needs of platform workers and the social security dilemma they face

Although platform workers work in a variety of fields and have different job content and processes, they are all employed and share the same core needs for protection and occupational health in the labor process. However, due to the fact that the social security system is still tied to traditional labor relations and the identity of platform workers is still ambiguous, this group is facing a serious social security dilemma.

3.1 Existing controversies on the group characteristics of platform employment workers and their legal status positioning

The "Main Report on the Analysis of the Generation Mechanism, Risk Points and Countermeasures of Platform Employment" (hereinafter referred to as the Report) released by Renmin University of China in 2021, through research on a sample of 5,081 individual workers and a sample of 700 manufacturing factories, found that the four major sources of platform employment are factory workers (25%), career change of other platform employment (20%), service workers (15%), and construction workers (8%), and this cross-industry labor mobility is mainly concentrated in the young-adult labor group. Compared with traditional jobs in construction, manufacturing and service industries, jobs in the platform economy tend to have three major characteristics. The first characteristic is lower employment threshold. This is because the division of labor in the platform economy has gradually realized the decomposition and refinement of jobs to standardized specific tasks. For example, the employment threshold for a takeaway rider is usually limited to a mobile phone for receiving orders, an electric car for food delivery and a Mandarin level that can meet basic communication needs. This means the rider no longer needs to seek help from the labor market or a "foreman", but can register as a rider through a cell phone. The second characteristic is a more flexible working schedule, most platform employees can choose their own working hours, especially for those who work on an app-based platform. According to the Report, on average, the monthly income of platform workers is 1500 yuan more than that of factory workers and 500 yuan more than that of mobile vendors. As to the higher hourly or daily salary level, the flexible working hours are also an important influencing factor, which makes the workers no longer bound by the 8-hour working system and holidays under the standard labor relations,

and they can put in work to earn compensation at any time.

For rural household-employed people with low education and vocational skills, the above three characteristics of platform employment make it a major employment option superior to construction, manufacturing and even service industries. On further analysis, the lower employment threshold only involves the issue of entering the industry and becoming a practitioner, and the flexible schedule is to some extent a prerequisite for platform employment to raise income, so it can be argued that the higher income level is the fundamental factor that makes platform employment a better employment choice than construction, manufacturing and even services. With this driver, there has been a massive flow of labor from traditional industries to platform employment, but new drawbacks have emerged. Due to the tendency of "de-laborization" of platform employment, the legal status of platform employees has been controversial in the academia and industry, and there is still no official conclusion on whether labor relations exist between platform enterprises and platform employees, and whether platform employees are employees or independent contractors. Traditional labor relations are generally characterized by subordination, i.e., the degree of control of the employer over the worker and the existence of labor relations between the two parties are determined by the subordination of the worker's personality, economy and organization. However, compared with traditional labor relations, platform employment shows more flexible characteristics, and some workers often own part of the means and tools of production, such as online taxi drivers who use their own cars to conduct business and delivery riders who buy their own electric bikes. The factors of organization and management are sometimes more important than their own. Therefore, there are many controversies in domestic academic circles about the existence of labor relations between platform employees and platform enterprises, and the phenomenon of "different judgments in the same case" often occurs in judicial practice.

3.2 The urgent need for social security for those employed on the platform

The above phenomenon makes the identity and economic and social relations of platform workers in China still unclear, which further leads to the chaotic state of rights and obligations of this group. For the group of platform workers, a set of labor protection laws and systems established in China under the traditional industrialization and factory system are no longer applicable to the standard labor relations, especially in terms of safety and social security, the relevant institutional design and arrangements appear to be stretched to the limit, and the protection of the rights and interests of the platform workers is an urgent issue. Zhang (2018) conducted an in-depth analysis of the data from a joint survey conducted by four departments, including the Beijing Municipal Transport Union, on 25 sharing economy platforms, 10 types of new employment types in the sharing economy, and 1,338 workers in Beijing in 2017, and found that there was no direct labor contract signed between any of the platforms and the workers, but some civil agreements (cooperation agreements, interlocutory agreements). Only 32.96% of the part-time practitioners signed labor contracts with their own work units or original units, and 6.13% signed labor contracts with third parties (labor dispatch companies or outsourcing companies). In terms of safety and social security, the survey data shows that no platform operating companies pay social insurance for platform practitioners, and the social insurance of part-time workers is generally the responsibility of their own work units, while full-time employees need to have Beijing household registration to be able to work in Beijing. When answering the question of "the most worrying problem of being employed on the platform", 45.49% of full-time employees and 38.96% of foreign nationals think that "there is no social insurance payment and there are worries". The most worrying issue is the lack of social insurance.

3.3 The current social security dilemma faced by those employed on the platform

Although it is urgent to solve the problem of limited social security coverage for platform-employed people, in general, the platform-employed groups in China are still facing the phenomena of low level of social security, few options to participate in insurance, low participation rate and even discontinuation of insurance (Wang & Tu, 2022). The reasons for these phenomena are complex and

closely related to the current situation of China's social security system and the operating characteristics of the platform economy.

First of all, considering the characteristics of the flexible labor platform, with its arrangement from project-contracting enterprises to the labor providers, the whole process of providing flexible labor services for enterprises and promoting labor providers to realize flexible employment is called flexible labor. Unlike traditional third-party HR service companies whose work is mainly about outsourcing or dispatching, the advantages of flexible labor platform as an intermediary to earn service fees are difficult to imitated, at least the following characteristics must be met: easy and fast registration of individual business in local industrial and commercial bureau, ownership or management of high-quality HR industrial park, good approved levy tax policy (tax depression qualification), self-employed people can entrust the platform for personal tax withholding payment and remittance, etc. (Chen, 2022). However, in terms of the professionalism of HR agencies and the necessary compliance of flexible employment platforms, the biggest challenge faced by such agencies is the identification of the employment relationship between individuals and platforms, because the traditional social security is linked to labor relations, and the ambiguous employment relationship means that the social security benefits of individuals employed on platforms are difficult to obtain protection from the enterprise side. Specifically, under the de-labor relationship platform employment situation, the employer can no longer bear the corresponding responsibility and cost. If the employer is forced to pay social security for all platform employees, flexible employment will not only lose its flexibility, but also lead to relevant costs transferred to the individual. Therefore, the current insurance purchased by platform enterprises for platform employees is mainly based on commercial insurance, employer's liability insurance, and single work injury insurance (Chen, 2022), which not only adapts to the flexibility of the new industry, but also empowers the platform employment group with basic protection. However, the insurance purchased by enterprises in different fields and with different business contents are not the same, and the country still needs to explore a new insurance payment model with better universality.

Secondly, the current "trinity" social security system in China is not compatible with the flexible employment mode. The trinity protection mode, in which the government, the unit and the individual share the funds for protection, has established a "combination of social coordination and individual account" model, which reflects social equity for the employee group. However, for the flexibly employed group, the absence of units in the social security system has increased the pressure on the government and the flexibly employed to pay contributions, and considering that social insurance is not mandatory for the platform employed, the social security needs of this group cannot be effectively met (Wang & Tu, 2022).

In addition, China's social security has not yet fully realized the national network. Taking pension insurance as an example, although the "14th Five-Year Plan" for the development of the national aging career and pension service system clearly proposes "to realize the national coordination of basic pension insurance for enterprise employees as soon as possible", China's pension insurance is still at the current stage of provincial coordination, while the provinces, cities and autonomous regions are not connected to each other. Under such circumstances, it is impractical for platform employees, especially those whose household registration is outside their working provinces and cities, to request platform enterprises to apply for social security system for them. For workers with rural household registration, they face the dual choice of basic pension insurance for urban employees and basic pension insurance for urban and rural residents. According to the current social insurance law, each citizen can only have one social security status, and purchasing social security is a common obligation of employers and workers. However, the reality is that most of the online workers belong to rural household registration status, and they cannot purchase local urban employees' social security. Furthermore, the amount paid for rural social security and urban residents' social security varies from city to city and differs by several times. This means that even if they can pay, it is difficult for them to enjoy it because they work in different places and their status is different. This increases the labor cost, which is not the Pareto

optimal choice for employers, platform enterprises or rural employees (Tu & He, 2020). The relevant government departments in China have responded to this issue, pointing out that "migrant workers are engaged in self-employment or flexible employment in cities and towns, and they can choose to participate in either employee pension insurance or urban and rural residents' pension insurance based on their own situation. Migrant workers can enjoy the basic pension insurance for urban workers as long as they participate in the basic pension insurance for employees and meet the conditions for receiving the basic pension. Those who are not employed and do not have the ability to participate in the employee pension insurance can participate in the basic pension insurance for urban and rural residents."³ Therefore, it is a more realistic solution to put the initiative of whether and how to purchase social security into the hands of platform employed people themselves, which is more in line with the current construction of China's social security system.

Finally, considering the characteristics of platform employed people differ from those workers under traditional labor relations, there is still a lack of insurance products suitable for their needs in the market. Taking the group of delivery riders as an example, on the one hand, many riders are engaged in delivery work part-time, their working hours are more flexible, and the job-hopping rate and mobility are also higher. Meanwhile, the risk of traffic accidents faced by riders in the delivery process involves a variety of situations, and insurance products for riders should be able to cover death, disability, medical treatment, lost work, third-party personal injury and property damage caused by accidents. On the other hand, as mentioned above, nearly 80% of riders are from rural areas, and most of them have high school (including secondary school/vocational high school/technical school) education or below, so they tend to choose insurance products that are easier to operate, easier to understand and have a shorter review period. In addition, riders have a higher demand for cash flow and capital flexibility. Facing the choice of services such as insurance products, they tend to obtain more comprehensive coverage with a small, phased capital investment (Meituan Public Policy Research Center, 2022). As can be seen, the rider group tend to prefer insurance products with fast claim timelines, simple material requirements, and shorter review times. The platform employed people cover a variety of employment groups, hence how to develop insurance products that suit their employment characteristics and job needs is a key issue.

The above dilemma means that in the current reality of China, solving the problem of social security for platform workers faces multiple difficulties, and the most urgent task should be to solve the most concerned and immediate problems of platform workers. Due to the characteristics of their work, the occupational risks faced by platform workers are not lower than those of workers under traditional labor relations, and accidents in the work of this group also happens from time to time. But the platform workers with unclear legal status cannot enjoy the work injury insurance treatment linked to the standard labor relations. This means that the risks previously shared by the state and enterprises under the traditional work injury insurance will all be borne by the platform employees alone, and once casualties occur in the course of work, whether they are the employees' own casualties or cause others' casualties, it is difficult for the practitioners themselves to bear. Therefore, how to establish a set of scientific and effective occupational injury protection system for the platform employment group has become a major practical problem that needs to be responded and solved in the current economic and social development of China.

4. The main views of the labor triad and its limitations

4.1 The path of reasoning of the labor triad and its main ideas

With regard to the protection of labor rights, interests and social security of platform workers, some scholars point out that the current "labor dichotomy" should be expanded into a "labor trichotomy" and

³ Website of the Central People's Government of the People's Republic of China. (2019). *Migrant workers pay pension insurance, how to deal with the two insurance?* http://www.gov.cn/fuwu/2019-07/24/content_5414554.htm

a "third type of labor relationship" should be established. Some scholars point out that the current "labor dichotomy" should be expanded into a "labor trichotomy" and a "third type of labor relationship" should be established, giving platform workers the status of "employee-like". Some scholars believe that practitioners constitute a new type of labor relations and belong to the intermediate form between labor legal relations and equal contractual relations (Hall & Krueger, 2017), and "labor-like" subjects should be established for this new form. While specifying general protection measures such as occupational safety, social insurance, and labor regulation, they should also be provided with protection measures in labor disputes, union establishment and management. In addition to clarifying general protection measures such as occupational safety, social insurance, labor regulation, etc., breakthrough measures applicable to the actual situation should be explored in the areas of labor dispute handling, union establishment and management to promote the harmonious symbiosis between the development of the new industry and the protection of the rights and interests of "labor-like workers" (Gai, 2018). Wang (2020a) proposes that the regulatory system of platform employment relations should be based on the "employee-like" positioning, and the protection of the rights and interests of workers in new labor relations should be placed under the framework of "labor triad", through the system of pricing and compensation protection, occupational risk protection system, dispute complaint and remedy system. The system of protection of workers' rights and interests in new labor relations should be placed under the framework of "labor triad", and a multi-level protection system should be built through the system of pricing and compensation protection, occupational risk protection, dispute complaint and remedy system, etc.

In order to explore the relationship between the platform and the platform employees in the case of platform employment and discuss whether the "labor dichotomy" should be expanded to "labor trichotomy", we should first clarify the concept of traditional labor relationship and its recognition criteria, and then deduce the path of "trichotomy". Traditional labor relations are a kind of social relations arising from the fact that labor and means of production belong to different subjects but are combined with each other (Tu, 2018). It is generally believed that subordination is the essential attribute and core recognition criterion of labor relations, and Shi (2000) points out that "the labor contract (Arbeitsvertrag) in labor law (also known as labor law) is a special employment contract in which one party provides his or her professional labor to the other party in a subordinate relationship and the other party pays him or her. It can be called a subordinate employment contract (sog. *abhängiger Dienstvertrag*)". This kind of subordination is reflected in the subordination of the worker to the employer in three aspects: personal, economic and organizational. Specifically, personal subordination is the employer's right to direct, supervise, and discipline the employee, thus achieving control over the employee's personality; economic subordination refers to the employee's dependence on the employer in terms of economic resources because he or she is forced to be subordinated to the employer by selling labor to earn a living due to the loss of the means of production; organizational subordination overlaps with personal and economic subordination in a certain degree, which is generally considered to be reflected in the fact that the employee is a member of the organization run by the employer, his or her work is an important part of the organization's business, the services he or she provides are an integral part of the organization's business, and the employee is required to comply with the organization's rules and regulations. It is easy to see from the above that behind the subordination is the imbalance of power between labor and management. Under the nature of capital seeking profit, employees are prone to unfair treatment in the workplace, and even to the violation of their legitimate rights and interests. This means that the principle of equality of contract in the civil law is no longer applicable to the field of labor relations, therefore, compared with the civil law, the labor law adds the principle of "tilted protection" for workers, thus promoting the balance of rights and obligations between labor and management.

The current law on the recognition of labor relations in China mainly follows the "labor dichotomy",

whose judgment is essentially based on the strength of subordination. Under this framework, various labor providers are divided into two camps based on the strength of their subordination: those with strong subordination are considered to be "subordinate labor", while those with less subordination are considered to be "independent labor". The former is governed by labor law and requires the signing of a labor contract, and workers in such activities enjoy the protection of various labor rights and interests under the principle of "tilted protection", with the employer paying for their five insurance and one fund, etc. The latter is governed by civil law and requires the signing of a labor contract, with the labor service provider and the employer being equal subjects, and the related occupational risks and social security borne by the labor service provider itself. Under the "labor dichotomy" system, the characterization of labor payment relationship is either one or the other, and there is no transition zone. This dichotomy presents an "all or nothing" protection model: for labor providers and their employers, either the labor relationship is deemed to exist, in which case workers are protected by labor law and enjoy more complete and tilted protection, or the labor relationship only exists, in which case the labor provider has to bear all the possible risks in the process of providing labor. The risks of the labor service provider will have to bear all the possible risks in the process of providing labor services. Although the "Guidance Opinions on Safeguarding the Labor Rights and Interests of Newly Employed Workers" issued by the Ministry of Human Resources and Social Security and other eight departments on July 16, 2021 states that "if the circumstances of establishing labor relations are met, the enterprise shall conclude labor contracts with the workers according to law. If the enterprise does not fully comply with the circumstances of establishing labor relations, but the enterprise manages the labor of the workers (hereinafter referred to as not fully comply with the situation of establishing labor relations), the enterprise is instructed to enter into a written agreement with the workers to reasonably determine the rights and obligations of the enterprise and the workers. Individuals rely on the platform to carry out their own business activities, engage in freelance work, etc., in accordance with civil law to adjust the rights and obligations of both parties". To a certain extent, it supplements the "labor dichotomy", but the relevant laws and regulations in China still do not regulate the employment relationship that "does not fully comply with the situation of establishing labor relationship but the enterprise manages the labor of the workers", so the dichotomy is still the mainstream of labor law in China. Therefore, dichotomy is still the mainstream of labor law in China.

However, it is important to note that the labor law system developed along with industrialization and the modern factory system (Tu, 2018). At that time, most factories practiced "Taylor-style" management, emphasizing discipline as the basis of productivity, and in vertical and integrated enterprises, the boundaries of employers' legal concepts overlapped with the boundaries of economic organization in the workplace (Xiao, 2021). With the development of productivity and the iterative renewal of production organization forms, the previous Taylor and Ford production organization forms, which emphasized rigidity, are gradually replaced by flexible accumulation, and in production, capital can benefit from economic globalization and move freely around the world, making full use of the international division of labor and global production chains to establish multi-level outsourcing networks. At the same time, enterprises can respond to market changes in a timely manner and minimize production costs through multi-variety and small-lot production. In terms of employment, workers are multi-skilled, and companies can reduce their burnout by changing jobs. Flexible employment has emerged, with the number of workers employed and their working hours depending on orders. Besides, pay conditions are set according to workers' individual circumstances, rather than being set entirely by unions and companies through collective bargaining. These changes have made the field of labor practices more flexible and modern, and also more complex.

Compared with standard labor relations, the non-standard labor relations formed by such flexible employment are characterized by multiple labor relations, flexible working hours, flexible working places and relatively weaker subordination of workers, which have brought impacts and challenges to

the traditional labor law system. The current labor law system has not yet answered a series of questions arising from flexible employment, such as whether employees working for multiple employers are required to fulfill confidentiality obligations, whether they can work for two or more competing employers, whether employers should have the right to know the employment status of employees, and whether different employers should have the right to know the employment status of employees. The right to know the employment status of the employed person, how to share the social insurance cost of the employed person among different employers, etc. (Tu, 2018). In this regard, some scholars have started to explore how to reasonably position the platform employment relationship, which has given rise to the debate between "labor dichotomy" and "labor trichotomy". The former emphasizes the protection of platform employees through specific extension of labor rights, while the latter calls for the speedy realization of "labor dichotomy". The former emphasizes the protection of platform workers through the specific extension of labor rights, while the latter calls for the speedy transition to a trichotomy of "subordinate labor-operational labor-independent labor" and the establishment of a trichotomy of "employee-worker-like worker-independent worker". The latter calls for the speedy implementation of the triple division of labor "dependent labor - business labor - independent labor", and the establishment of a three-tier identification standard of "employee - worker".

4.2 Comparative law reference of the three divisions of labor

The above section has sorted out the reasoning path and main viewpoints of the "labor trichotomy" proposed by the academic circles in China. In many other countries, the emergence and development of platform economy also bring common dilemma related to the governance of platform employment. From the perspective of comparative law, although there is a debate among countries on the adoption of "labor dichotomy" or "labor trichotomy", some countries already have legislative practices and systems related to "labor trichotomy".

For example, in order to adapt to the specificity of incomplete labor relations, European countries have created the legal concept of "third category of workers" and named it with different names, such as "Arbeitnehmerähnliche Person", "il lavoro c. d. parasubordinato", "dependent contractor" or "worker", etc. The criteria for identifying "third category workers" vary significantly from country to country, with the "single source of income determination" and "multifactor test" being the two main criteria. The following is a detailed description.

The single source of income determination method means that the status is determined by the percentage of personal income that the worker receives from the same principal, and if this percentage is exceeded, the worker is economically dependent, and if not, the worker is not. Lou (2021) points out that German law requires a single source of income to account for more than half of the "employee-like" status, while in Spain and Canada the percentage is as high as 75% and 80%. In short, income ratios are mostly determined by national judicial practice, without explicit legal or theoretical justification, and with poor legal legitimacy. Since workers may have more than one source of income, it is difficult to determine the overall income and the sub-portion, so the application of this standard requires the construction of a whole set of registration and information disclosure system, and the legislative cost is huge. Considering that there is still a gap between China's economic development level and that of western countries, and that there is also an obvious regional imbalance in the level of economic development, this paper proposes that the "single source of income determination law" is not suitable for legal transplantation in China.

The so-called multi-factor test refers to the fact that, in addition to the percentage of personal income, several indicators should be considered, such as whether the worker performs personally, bears the business risks, and provides his or her own production tools, in order to determine whether he or she is an employee, a class of employees, or an independent contractor in a comprehensive manner. However, there are difficulties in applying this criterion. To apply this standard in China, the following

four questions must be solved: What are the specific elements of the multi-factor test? Is there a weighting order and sequential logic among the elements? Is it necessary to have all the elements at the same time? If only some elements are required, should there be a majority or an absolute majority? Failure to accurately respond to the above questions will inevitably lead to judicial chaos, resulting in different judgments in the same case and undermining the fairness and predictability of judicial decisions.

In conclusion, the concept of third category workers emerged in Europe, rooted in the level of economic development and historical and cultural traditions, and arised from the design of the legal system of "three divisions of labor". In the comparative law study, our scholars have carefully analyzed the review factors of the judicial authorities in European countries and summarized the specific criteria for judging economic subordination. However, there are differences between countries in terms of their traditions of identification and level of protection of rights and interests, so the introduction of the concept of "employee-like" will undoubtedly impact the traditional institutional framework of "labor dichotomy" in China. Although the concept of "employee-like" indicates the direction of differentiated rights and interests protection, it cannot be accurately applied until the supporting subordination standards are clear, which is not helpful to respond to the specific rights demands of new industry practitioners. Article 2 of the "Guidance of the Ministry of Human Resources and Social Security" stipulates that "the situation is not fully consistent with the establishment of labor relations", which is considered to indicate the legislative tendency of introducing a "third category of workers" in China. However, we believe that the "Guidance of the Ministry of Human Resources and Social Security" is to protect the rights and interests in the context of labor law and does not mean to break through the existing system and create legal concepts. Therefore, the labor subordination standard should be improved under the framework of "labor dichotomy" in order to regulate the employment of platform workers and protect the legal rights and interests of new industry practitioners.

4.3 Problems

However, this "labor trichotomy" has also come under certain criticism in academic circles. First of all, there is the problem of the applicability of foreign experience gained from the comparative law perspective in our national context. For example, based on the analysis of the theoretical results and practical experience of the "third category of workers" in foreign countries, Xiao (2018) suggests that the design of the rules and theoretical support of this system are still subject to refinement, and need to be applied with caution in consideration of China's national conditions. At this stage, it is more important to identify and regulate the problem of "hidden employment" and to expand the specificity of labor rights as the path of regulation of such relationships. Lou (2021) points out that although the new employment pattern brought by the platform economy is not unique to China, the construction of the labor rights and interests protection system for platform employees needs to take into account China's unique national conditions, such as our high level of mobile Internet development, the existence of urban-rural dual employment structure, and the practice of dividing the population into compulsory and voluntary insurance according to their employment status, etc. Therefore, the relevant issues of the current labor rights and interests protection for platform employees in China are special problems faced by China in a special historical development process, which determines that the comparative law reference can only be principled and directional, not structural.

Secondly, we should also consider the administrative costs associated with the construction of the "labor triad". From the perspective of legal economics, the current discussion on the protection of labor rights and interests of platform workers, especially on the issue of occupational injury protection, which is the most important concern of this group, can be summarized into the analysis of risk, responsibility and administrative cost. In the process of platform workers' work, they face a certain degree of risk, such as for the group of delivery riders and online taxi drivers, the work content and working environment determine that there is a certain risk of traffic accidents in the process of work.

While for the group of netizens, the main risk they face is the decline of health level and even sudden death that may be caused by long hours and high intensity of work around the clock. Therefore, the demand of this group for the relevant social security is in fact to fix the responsible party after the occurrence of the relevant risk in the form of a legal system, so as to reduce their own losses after the occurrence of accidents. If China were to construct an overall system for the "labor triad", the administrative cost of the process would be an important consideration, not to mention the feasibility of the relevant system design and theoretical support. From the perspective of law and economics, if the administrative cost is so high that it exceeds the compensation to the victims, then this is an inefficient act that society does not want. In this case, the most efficient way to solve the problem is not to build a "labor triad", but to build a system for specific areas of occupational injury protection.

Therefore, this paper believes that the most urgent task is to build a relevant system in the area of occupational injury protection, which is the most important concern of platform employees. At present, our government attaches great importance to the construction of this system and has issued relevant guidance documents, and some local governments and platform enterprises have also carried out pilot work.

5. Occupational injury protection: current exploration and pilot

Under the conditions of digital economy, flexible workers on the platform usually have the following characteristics: they have certain means of production to participate in the platform business instead of traditional proletarians; most of them are young and strong self-employed workers aged 18-49; they do not have labor contracts but are bound by the rules of labor services on the platform; they are mostly migrant workers; most of them work part-time; they serve multiple platforms; they do not have long-term (more than 5 years) psychological preparedness to be employed; they have flexible working hours and a certain degree of freedom. Due to the different design and treatment of the social security system in urban and rural areas, the migrant workers in the platform are not concerned about whether they have purchased social security (five insurance and one fund) or not, because most of them have purchased social security (new rural insurance and new rural cooperative) in rural areas, and what they are most concerned about is whether they can be protected in case of accidents or diseases in the city (Tu & He, 2020).

Migrant workers are an important part of the platform employment group, and also a group with a high incidence of work-related accidents and occupational diseases. Especially in the context of the new industry of digital economy, the transportation and timeliness requirements of new occupations such as "take-away riders" and "courier boys" have greatly increased the possibility of occupational injuries at work. Therefore, under the guidance of the principle of "emergency first", the problem of unbalanced and inadequate occupational injury protection for part-time workers needs to be solved urgently. In recent years, the relevant state departments have responded to the relevant social needs and paid attention to the protection of labor rights and interests of the platform employment group, introduced and revised a series of relevant laws and regulations. The "Guidance on Safeguarding the Labor Rights and Interests of Workers in New Employment Patterns" states: "Strengthen occupational injury protection, with a focus on platform enterprises in the travel, take-away, instant delivery and crosstown freight industries, and organize pilot occupational injury protection for flexible employment on platforms encourage platform enterprises to purchase personal accident, employer's liability and other commercial insurance, to enhance the level of protection of flexible employment platform personnel", which made instructions from the national level to the platform to carry out occupational injury protection pilot. The "2022 Government Work Report" also further emphasizes "strengthen flexible employment services, improve social security policies for flexible employment, and carry out pilot occupational injury protection for new employment forms", highlighting the importance the government attaches to this issue.

At present, some provinces and platform enterprises in China have carried out relevant pilot work on

occupational injury protection for flexible employment groups. The ways of occupational injury protection for this group in each pilot province vary and can be summarized as the following three models. In the first model, the flexible employment personnel are fully covered by the existing work injury insurance system. For example, Weifang City in Shandong Province requires all flexibly employed persons to participate in work injury insurance, but only if the personnel agency signs a labor contract with the employed person on behalf of the platform enterprise, and "the treatment that should be paid by the employer as stipulated in the Regulations on Work Injury Insurance shall be borne by the flexibly employed persons themselves"⁴; and Jia Shan County in Jiaxing City, Zhejiang Province directly demands the new industry enterprises relying on the platform establish labor relations with the employees and arrange the employees to participate in single insurance during the period of employment", and "the new industry employees who establish labor relations with multiple platforms, each employer should participate in work injury insurance for them separately"⁵. This approach seems to give the flexible workers the same treatment as standard labor relations, but in fact it still does not go beyond the traditional idea of linking social security with labor relations, and does not solve the problem of determining the weight of responsibility among employers when workers working in multiple platforms suffer occupational injuries. The second model combines work injury insurance with commercial insurance, which some scholars call "composite model" (Han, 2022) or "1+1 model" (Bai, 2022), such as Huzhou City in Zhejiang Province, which stipulates that "new industry enterprises are allowed to participate in single-insurance work injury insurance for their employees according to their actual needs, and new industry enterprises are encouraged to participate in supplementary commercial insurance to realize the tripartite sharing mechanism of work injury insurance, commercial insurance and new industry enterprises"⁶; Jinhua City of Zhejiang Province stipulates that "all new industry employees are allowed to participate in work injury insurance by the employing unit (platform) as a unit, project, etc. The same new industry organization can reasonably choose the combination of different employment forms to participate in the insurance"⁷; Quzhou City, Zhejiang Province provides that "encourage new industry enterprises and other work injury insurance participating units to participate in work injury supplemental insurance according to their own needs". This mode is "to encourage new business enterprises and other work-related injury insurance participating units to participate in supplementary insurance according to their own needs, transferring the responsibility of work-related injury insurance that should be borne by new business enterprises and other employers to commercial insurance, thus improving the level of protection and building a tripartite collaboration and sharing mechanism among the government, commercial insurance and new business enterprises"⁸,

4 Weifang Human Resources and Social Security Bureau. (2009). *Notice on the participation of flexibly employed persons in work injury insurance*. http://rsj.weifang.gov.cn/zxzx/tzgg/jycy/201910/t20191018_5465845.html

5 Jiashan County People's Government. (2020). *Trial measures for promoting the participation of employees in "new business forms" in work-related injury insurance throughout the county*. http://www.jiashan.gov.cn/art/2020/2/28/art_1229740450_1806455.html

6 Huzhou City Human Resources and Social Security Bureau. (2020). *Note of Huzhou City Human Resources and Social Security Bureau and other five departments on the trial implementation of the courier enterprises and other new industry employees occupational injury protection methods*. http://hrss.huzhou.gov.cn/art/2020/7/21/art_1229208340_54734623.html

7 Jinhua Human Resources and Social Security Bureau. (2020). *Guiding opinions of the Office of the Comprehensive Deepening Reform Commission of the Communist Party of China Jinhua Municipal Committee and the Jinhua Human Resources and Social Security Bureau on carrying out the pilot program of occupational injury protection for employees in new business forms*. http://rsj.jinhua.gov.cn/art/2020/10/19/art_1229567053_1645744.html

8 Quzhou Human Resources and Social Security Bureau. (2020). *Notice on issuing the trial measures for occupational injury protection for employees in new business forms in Quzhou city*. http://rsj.qz.gov.cn/art/2020/7/28/art_1229199906_1052854.html

which effectively supplements the traditional work-related injury insurance payout body and further improves the level of protection by introducing commercial insurance as a market-oriented prevention mechanism. The third model is "government-led, commercial insurance company underwriting, and individual insurance", such as Changchun City, Jilin Province, which proposes that "employees in the new economy and new industries who have not established labor relations (including de facto labor relations) with any employers and are not covered by the 'Regulations on Work Injury Insurance'. In this administrative region, those who receive remuneration or income from their labor are insured for occupational injuries according to the voluntary principle"⁹. This model is in line with the work characteristics of flexible employment groups, and does not make "establishing labor relations with employers" a condition for insurance coverage, which is more flexible. However, the principle of "voluntary insurance" also faces the risk that workers' willingness to insure themselves may be reduced due to high premiums, which to a certain extent defeats the original purpose of establishing occupational injury insurance.

In addition to the above-mentioned provincial pilots, some platform companies have also carried out pilot occupational injury protection work. According to a report released by Meituan Public Policy Research Center titled "Building Exclusive Insurance Products for Riders to Help "New Citizens" Better Integrate into Urban Life", Meituan has developed different occupational injury protection for special delivery riders and crowdsourcing riders. The insurance covers accidental death, disability, medical treatment, lost work, third-party personal injury and property damage. For crowdsourced riders, considering that their work is more flexible, not directly managed by the partner, and the time of receiving orders is not fixed, the accidental injury insurance for crowdsourced riders is paid according to the actual number of working days, at RMB 3 per person per day. The main coverage includes accidental death, disability, medical treatment, third-party personal injury and property damage in the course of delivery. In order to solve the problem of "difficult claims", Meituan has built a "claims service platform" system to improve the claims processing time and established a differentiated claims mechanism to carry out a number of fast payment services. For small claims, Meituan launched a rider insurance product fast claims program in November 2021, for non-risk claims under RMB 5,000, riders only need to submit a small amount of necessary documents, and can be quickly reviewed and paid. In the future, the coverage rate will increase to 100%. This kind of pilot work provides ideas for many platform companies in China to learn from. However, in general, the current pilot of China's occupational injury protection system is still at the local and enterprise levels, and many problems have emerged in the actual implementation of the policy, including the lack of guidance from the higher law at the national level, which has led to differences in pilot policies, the general lack of compulsory participation, inconsistency in the main body of contributions and the level of contributions, lack of clarity in the definition of employer responsibility, and the lack of effective supervision, which has affected the play of the proper meaning of the occupational injury protection system. This affects the proper meaning of the occupational injury protection system. What's more, the platform employment groups involve many fields and many types of practitioners, such as take-away riders, online taxi drivers, domestic service workers who rely on the platform to receive orders, and other groups with different needs in terms of occupational injury protection. Therefore, besides the above-mentioned issues, we should also consider how to establish a specific, scientific and effective protection system that suits the needs of different groups who rely on the platform employment under the general framework of the occupational injury protection system. This has become an important issue to be responded to and solved in the process of China's economic and social development, which is related to

9 Changchun Human Resources and Social Security Bureau. (2019). *Notice on soliciting public opinions on the "Measures for Occupational Injury Insurance for Employees in the New Economy and New Business Forms of Changchun City (Trial)" (draft for soliciting opinions)*. http://ccrs.changchun.gov.cn/ywdt/tzgg/201911/t20191111_2043208.html

the degree of protection of labor rights and interests of the platform employment groups, and more importantly, the quality and prospect of the development of platform economy.

6. Conclusion

However, with the rapid development and extensive penetration of new employment patterns in various fields, the set of labor protection laws and systems established under the traditional industrialization and factory system in China, which are suitable for standard labor relations, are becoming more and more inadequate in the face of the increasingly flexible, elastic and diversified new employment patterns. In the face of the urgent demand for occupational injury protection system from platform workers, it is not wise to expand the current "labor dichotomy" to "labor trichotomy". Considering the variety of platform enterprises and the different situations faced by platform workers, establishing a "third labor relationship" is undoubtedly a "one-size-fits-all" approach, which is not only of doubtful practicality, but also difficult and costly to operate, and its implementation process is not a socially desirable act, as it may lead to inefficiency. In line with the principle of "problem-oriented and urgent first", the construction of the occupational injury protection system for platform employees should be strengthened as soon as possible, and the system should be designed to complement the supply of occupational injury protection system for platform employees, with priority to carrying out pilot projects in the field of online taxi drivers. This is because considering that online taxi is subject to the constraints of the traffic department's traffic insurance, the probability of occupational injury and accidents is very high. The probability of occupational injury and accident is easier to measure, and then try to gradually form an occupational injury protection system with Chinese characteristics of "occupational injury insurance + supplementary work injury insurance + industry mutual work injury insurance" by means of "classification treatment and multi-layer protection", and on the basis of this, to provide a comprehensive protection system for different types of platforms. On the basis of this, we will explore the occupational injury protection system suitable for the work characteristics and core needs of different types of platform employment groups. In the design of insurance coverage, we will consider expanding the coverage of occupational injury insurance through diversification of contribution methods, differentiation of insurance rates and complementary arrangements of insurance products. In the insurance management, we will promote the refinement of the management of occupational injury insurance and digital reform of the management, so as to protect the socio-economic rights and interests of a wider range of new industries in the future through multiple measures. In order to promote the sustainable and healthy development of the new platform economy and meet the needs of the platform workers' rights and interests, the government should maintain the unique advantages of the platform economy over the traditional economic development model and not neglect the implementation of a series of workers' rights and interests. The government should issue guiding documents for the occupational injury protection system as soon as possible, encourage platform enterprises and related organizations to build an occupational injury protection system suitable for their fields and industries, and call on platform employees to participate in the insurance through their platform enterprises or on a voluntary basis.

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Disclosure statement

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