



ARTICLES

DECENT WORK FOR DIGITAL PLATFORM WORKERS. A PRELIMINARY SURVEY IN BEIJING

Yan Xu¹, Dun Liu^{2,*}

¹School of Economics and Business Administration,
Beijing Normal University
19, Xijiekouwai str., Haidian District, Beijing, People's Republic of
China, 200044

²School of Economics and Management,
China University of Labor Relations
45, Zengguang rd., Haidian District, Beijing, People's Republic of China, 100048

Abstract

This paper discusses the status and implications of the employment relations and working conditions experienced by digital platform workers; the analysis is based on a survey conducted in 2017 on 1 338 workers engaged in work-on-demand via apps (WODVA) from 25 platforms in Beijing, of whom 48.8 % are full-time WODVA workers or take WODVA as their primary job. The survey finds that nearly a half of the respondents engage in platform work due to a lack of employment opportunities in formal labor markets or their permanent jobs providing insufficient income. The respondents reveal substantial decent work deficits in representation, compensation, job stability, social protection, working time, and health and safety: 1) WODVA workers seldom have any voice in labor dispute settlements and have a very low rate of unionization; 2) about one third of the full-time WODVA workers cannot earn a living wage and 7.6 % of them earn less than the minimum wage level; 3) three quarters of the full-time WODVA workers have no labor contract with the platforms or other employers, nor access to employer-contributed social insurances; 4) overtime work and underemployment coexist among full-time respondents, with nearly 10 % working for fewer than 4 hours per day while nearly 10 % work for more than 11 hours per day; 5) a majority of respondents run a higher risk of occupational health or physical risks, without any protection provided by the platforms or employers. To promote decent work by digital platform workers, the State needs to establish a portable social security system extending to all workers, to facilitate association and collective actions of platform workers either by extending the outreach of traditional unions or fostering new forms of organizations, to leverage digital technology to facilitate platform workers' organization and information sharing, and even to promote universal basic income and a workers' cooperative of platforms in the long run.

Keywords

digital labor platform, platform workers, work-on-demand via apps, decent work, working conditions, labor market regulation

Conflict of interest

The authors declare no conflict of interest.

Financial disclosure

The study is sponsored by the National Social Science Foundation of China (grant number: 16CJL036).

Acknowledgments

The authors deeply appreciate Beijing Municipal Federation of Trade Unions (BMFTU) for their providing access to the datasets. The authors also express sincere gratitude to Professor Vladimir S. Osipov of the Moscow State Institute of International Relations for his selfless help in improvements and the publication of this article, along with other related scholars in Russia involved in cooperation with Beijing Jiaotong University under the grant of graduate education reform project of Beijing Jiaotong University “China-Russia Comparative Research in the Development of Labor Economics Discipline” (grant number: 134575522).

For citation

Xu, Y., & Liu, D. (2021). Decent work for the digital platform workers. A preliminary survey in Beijing. *Digital Law Journal*, 2(1), 48–63. <https://doi.org/10.38044/2686-9136-2021-2-1-48-63>

* Corresponding author

Submitted: 24 Nov. 2020, accepted: 26 Jan. 2021, published: 31 Mar. 2021

СТАТЬИ

ОБЕСПЕЧЕНИЕ УСЛОВИЙ И ОХРАНЫ ТРУДА РАБОТНИКОВ ИТ-ПЛАТФОРМ В ПЕКИНЕ

Я. Сюй¹, Д. Лю^{2*}

¹Школа экономики и делового администрирования, Пекинский педагогический университет
200044, Китайская Народная Республика, Пекин, район Хайдянь, ул. Синьцзекоувай, 19

²Школа экономики и менеджмента, Китайский университет трудовых отношений
100048, Китайская Народная Республика, Пекин, район Хайдянь, ш. Чжэнъян, 45

Аннотация

В статье обсуждаются условия труда работников цифровых платформ. Опрос 1 338 респондентов, занятых работой на 25 Интернет-платформах в Пекине (work-on-demand via apps, WODVA), показал, что почти половина из них работают на ИТ-платформах из-за отсутствия возможности трудоустройства на традиционном рынке труда или недостаточной заработной платы на основной работе. Респонденты отметили проблемы, связанные с невозможностью участия в деятельности профсоюзов, недостаточной заработной платой, отсутствием стабильности, социальной защищенности, а также проблемы регламентации рабочего времени, охраны труда и техники безопасности, а именно: 1) отсутствует эффективный механизм разрешения трудовых споров из-за недостаточной развитости профсоюзных организаций; 2) заработная плата около 1/3 опрошенных WODVA ниже прожиточного минимума, а 7,6 % — меньше минимального размера оплаты труда; 3) 3/4 работников WODVA, занятых полный рабочий день, не имеют трудового договора

с платформами или другими работодателями, а также доступа к социальному страхованию; 4) почти 10 % опрошенных работают более 11 часов в день, тогда как около 10 % заняты менее 4 часов в день; 5) у большинства респондентов отсутствуют гарантии по предоставлению медицинских услуг в связи с временной нетрудоспособностью из-за заболеваний. Государству необходимо распространить систему социального обеспечения на всех работников, в том числе занятых на IT-платформах, содействовать развитию профсоюзного движения с помощью традиционных либо современных способов, использовать цифровые технологии для оптимизации работы и обмена информацией. Более того, в долгосрочной перспективе государству необходимо установить минимальный размер заработной платы в рассматриваемой сфере.

Ключевые слова

цифровая платформа, IT-платформа, работа на Интернет-платформе, платформа удаленной работы, WODVA, достойные условия труда, регулирование рынка труда, регулирование новых форм труда

Конфликт интересов	Авторы сообщают об отсутствии конфликта интересов.
Финансирование	Исследование спонсируется Национальным фондом социальных наук Китая (номер гранта: 16CJL036).
Благодарность	Авторы глубоко признательны Пекинской муниципальной федерации профсоюзов (BMFTU) за предоставленный доступ к базам данных. Авторы также выражают искреннюю благодарность профессору МГИМО В. С. Осипову за его бескорыстную помощь в улучшении и публикации настоящей статьи, а также другим российским ученым, сотрудничавшим с Пекинским университетом Цзяотун в рамках гранта проекта реформы высшего образования Пекинского университета Цзяотун на тему «Китайско-российские сравнительные исследования в развитии дисциплины экономики труда» (номер гранта: 134575522).
Для цитирования	Сюй, Я., Лю, Д. (2021). Обеспечение условий и охраны труда работников IT-платформ в Пекине. <i>Цифровое право</i> , 2(1), 48–63. https://doi.org/10.38044/2686-9136-2021-2-1-48-63

* Автор, ответственный за переписку

Поступила: 24.11.2020; принята в печать: 26.01.2021; опубликована: 31.03.2021

Introduction

The last decade has seen the notable upsurge of digital labor platforms, making “gig work” a truly global phenomenon¹ (Gutbrod, 2020; Inozemtsev, 2020). According to the widespread definition, “digital platform work” can be grouped into two categories² (Menegatti, 2018). One is “crowd

¹ Zhou, I. (2020). *Digital labour platforms and labour protection in China*. International Labor Office. https://www.ilo.org/beijing/information-resources/WCMS_757923/lang-en/index.htm

² Codagnone, C., Abadie, F., & Biagi, F. (2016). The future of work in the “sharing economy”. Market efficiency and equitable opportunities or unfair precarisation? *JRC Science for Policy Report EUR 27913 EN*. <http://doi.org/10.2791/431485>; De Stefano, V. (2016). The rise of the “just-in-time workforce”: On-demand work, crowdwork and labour protection in the “gig-economy”. *Conditions of Work and Employment Series No. 71*. International Labor Office. https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---travail/documents/publication/wcms_443267.pdf

work”, which is both managed and carried out online, either requiring more specialized skills such as logo design and software development (e. g. Freelancer.com, Upwork), or involving lower-skilled, repetitive “microtasks” such as data entry and content moderation (e. g. Amazon MTurk, Clickworker). The other is “work-on-demand via apps”, which is managed online but carried out offline, mostly incorporating traditional services restricted to a local-based labor market, such as transportation (e. g. Uber, Lyft), delivery (e. g. Instacart, Deliveroo), and home services (e. g. Taskrabbit, Helpling). Although the size of the platform economy is still relatively modest (Farrell & Greig, 2016; Ilsøe, 2017), it is expanding at a remarkable pace. For example, a widely cited report predicts revenue in the key sectors of the platform economy growing from US \$ 15 bn as of this date to US \$ 335 bn in 2035;³ an index measuring the utilization of digital labor platforms suggests their use is growing globally at a rate of 25 % per annum (Kässi & Lehdonvirta, 2018).

As the fastest-rising star of digital economy, China has emerged as a global leader in some key digital industries⁴ (Liu et al., 2020), especially the sharing economy. According to the report issued by RCSE⁵ in 2008, the sales revenue of the sharing economy in China amounted to 2942 billion RMB, at a growth rate of 41.6 % compared to the last year, involving 760 million participants and 75 million service providers; China accounts for 83 of the 305 “Unicorns” around the globe, among which 34 are players in the sharing economy. Digital labor platforms are the fastest-growing business in China’s sharing economy. The major digital labor platforms include Didi Chuxing (DiDi) for ride-hailing, Eleme and Meituan for food delivery, ZB.com (Zhubajie) for professional consulting, 58.com for household services, ymm56.com for transportation, haodf.com for online consulting, and Homeincare for household medical care.⁶ From 2015 to 2018, passenger volume of online ride-hailing increased from 9.5 % to 36.3 % of the overall taxi passenger volume; the revenue generated from food delivery expanded from 1.4 % to 10.6 % of the overall revenue of the catering sector.⁷

Although proponents argue that digital platforms can significantly facilitate meeting labor supply and demand, reduce transaction costs, enhance flexibility and autonomy for both providers and customers, and create jobs (especially for those socially marginalized groups)⁸ (Johnston & Land-Kazlauskas, 2018), more and more scholars recognize its challenge to traditional employment relations and labor market regulation. Because digital platform workers are usually classified as self-employed or independent contractors, they are devoid of the fundamental rights and protection accessed by dependent employees, such as overtime compensation, minimum wage, social security, paid leave, and the ability to engage in collective action⁹ (Aloisi, 2016; Sidorenko & von Arx, 2020; Sundararajan, 2016). It has been almost a consensus that, instead of a disruptive change to the labor

³ PWC. (2015). *The sharing economy – Consumer intelligence series*. https://www.pwc.fr/fr/assets/files/pdf/2015/05/pwc-etude_sharing_economy.pdf

⁴ Zhang, L., & Chen, S. (2019, January 17). *China’s digital economy: Opportunities and risks*. International Monetary Fund. <https://www.imf.org/en/Publications/WP/Issues/2019/01/17/Chinas-Digital-Economy-Opportunities-and-Risks-46459>

⁵ RCSE. (2019). *Zhōngguó gōngxiāng jīngjì fāzhǎn niándù bàogào [Annual report of China’s Sharing Economy Development]*. [https://researchprofiles.herts.ac.uk/portal/en/publications/crowd-work-in-europe\(30dbdc7c-9919-4150-a485-4fcb06cd6606\)/export.html](https://researchprofiles.herts.ac.uk/portal/en/publications/crowd-work-in-europe(30dbdc7c-9919-4150-a485-4fcb06cd6606)/export.html)

⁶ Zhou, 2020.

⁷ RCSE, 2019.

⁸ Huws, U., Spencer, N. H., & Joyce, S. (2016, December). *Crowd work in Europe: Preliminary results from a survey in the UK, Sweden, Germany, Austria and the Netherlands*. Foundation for European Progressive Studies. https://uhra.herts.ac.uk/bitstream/handle/2299/21934/crowd_work_in_europe_draft_report_last_version.pdf?sequence=1

⁹ Berg, J., Furrer, M., Harmon, E., Rani, U., & Silberman, M. S. (2018). *Digital labour platforms and the future of work: Towards decent work in the online world*. Geneva: International Labor Office. https://www.ilo.org/global/publications/books/WCMS_645337/lang-en/index.htm; Huws et al., 2016; Berg et al., 2018.

markets, labor platform is nothing but the continuation of the broad shift toward more precarious and contingent labor as has lasted for several decades¹⁰ (Aloisi, 2016; Menegatti, 2018). Ever since the early 1980s, globalization and neoliberal transformation has enabled capitalists to re-commodify labor by offshoring, outsourcing, and deploying non-standard labor contracts. In this context, the concept of decent work emerges as an institutional effort to combat the degradation of the labor market (Pereira et al., 2019). In 1999, the Director General's report presented to the 87th International Labor Conference declared: "The primary goal of the ILO today is to promote opportunities for women and men to obtain decent and productive work, in conditions of freedom, equity, security and human dignity"¹¹. Four strategic objectives were proposed to underpin the realization of this goal, namely, standards and fundamental principles and rights at work, employment, social protection, and social dialogue. From this perspective, digital labor platforms pose unprecedented challenge to the decent work agenda.

Although an increasing number of surveys on "crowd work" have emerged recently¹² (Graham, et al., 2017), surveys on "work-on-demand via apps" (WODVA) are quite scarce. A survey on WODVA is especially critical for China, given it constitutes a large proportion of China's sharing economy and given its prominent role in China's job creation in the post-crisis era. This article aims to reflect the decent work deficits experienced by digital platform workers based on a questionnaire survey of 1 338 WODVA workers in Beijing. To our knowledge, this is the first survey with a large sample size on WODVA conducted in China (which is also very scarce in other countries). Firstly, we present an overall description of the demographic distribution and employment status of the samples. Then, we dive into the working conditions of the respondents through the lens of the widely agreed decent work measurements, including fundamental rights at work, compensation, job stability, social security, working time and autonomy, health and safety, and career development. Finally, we discuss the policy and legislative implications to promote decent work of the digital platform workers.

Description of Data and Samples

Data Collection and Demographic Features

The survey was commissioned by Beijing Municipal Federation of Trade Unions (BMFTU) and conducted by the staff of BMFTU, in collaboration with a third-party research company, from March to May 2017. The survey covers 25 platforms clustered within 3 broad categories of business: namely, ride-hailing, logistics and express delivery, and household services. The questionnaires are distributed either by BMFTU staff when they made on-site interviews with the platform managers, or by the staff of the research company making face-to-face interviews with randomly selected WODVA workers on the street. A total of 1 400 questionnaires were distributed, with 1 338 effective samples collected. Specific on-demand jobs taken by the respondents include ride-hailing driver (46.2 %), housekeeper (12.2 %), courier (8.4 %), massagist (6.9 %), car wash (6.5 %), cooker (6.1 %), home repair (4.5 %), manicurist (4.1 %), legal / medical / tutor services (2.8 %), and house moving (2.2 %). The demographic composition of the samples is shown by Table 1.

¹⁰ De Stefano, 2016; Berg et al., 2018.

¹¹ ILO. (1999). *Report of the Director-General: Decent work*. <http://www.ilo.org/public/english/standards/relm/ilc/ilc87/rep-i.htm>

¹² Zhou, 2020; Huws et al., 2016; Berg et al., 2018.

Table 1*The Demographic Composition of the Samples*

Demography	Composition, (%)
Gender	male: 61.2; female: 38.8
Age	24 and below: 8.5; 25–34: 41.0; 35–44: 35.2; 45–54: 14.0; 55–64: 1.4
Household registration	local: 46.8; non-local with residence permit: 34.1; non-local without residence permit: 19.1
Education	junior high school: 24.6; high school or middle vocational school: 31.5; junior college or higher vocational school: 26.2; undergraduate: 14.3; graduate or higher: 3.4

Nearly 85 % of the respondents are less than 45 years old. This is consistent with the findings of other surveys that digital platform workers are dominated by young people¹³ (Graham et al., 2017). The overall gender distribution is generally balanced, but it is quite uneven in different jobs. Male workers account for over 75 % of ride-hailing drivers, couriers, and home repairers, while female workers account for over 82 % of housekeepers and manicurists. Over half of the respondents have non-local household registrations (*Hukou*). Excluding ride-hailing drivers — among whom 60.4 % are local as the traffic administration authority in Beijing stipulated that ride-hailing drivers must be local residents (i. e. have Beijing *Hukou*) — 64.9 % of the respondents are non-local. This confirms that WODVA is more likely to be taken by marginalized workers, since non-local workers generally face inferior employment status under China's *Hukou* system. The distribution of education level is also quite uneven but as expected. Among the legal / medical / tutor service, 40.5 % have a bachelor's degree and 21.6 % have a master's degree; among the lower-skilled jobs, however, such as car wash, housekeeping, and couriers, 72.4 %, 54.6 %, and 31.3 % have an education level of only junior high school or even lower, respectively.

Employment Status and Motivation

43.0 % of the respondents take WODVA as their full-time job; an additional 5.8 % take WODVA as their major job while doing other part-time offline jobs; the remaining 51.2 % have their own permanent jobs. The proportion of full-time participants in WODVA found in this survey is much higher than the counterpart in crowd work as reported by other studies¹⁴ (Graham et al., 2017; Ilsøe, 2017). 91.1 % of the respondents work for a single platform; 7.7 % work for two platforms; the final 1.2 % work for three or even more platforms. The percentage of working for two and more platforms is the highest (16.6 %) among those who take WODVA as their major job while doing other part-time offline jobs. This is not surprising, since their employment status implies that they are desperate to find more channels to increase their income.

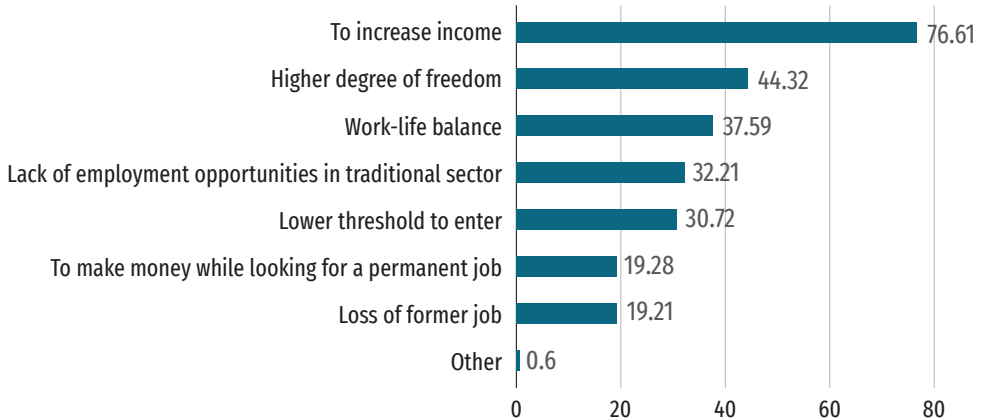
As for motivation to engage in WODVA, the distribution of the responses is shown in Figure 1. As expected, “to increase income” is the most frequently selected motivation, followed by “work-life balance” and “higher degree of freedom”. 48.2 % of the respondents choose at least

¹³ Zhou, 2020; Huws et al., 2016; Berg et al., 2018.

¹⁴ Huws et al., 2016.

Figure 1

Distribution of Motivation to Engage in WODVA, (%)



one of the following motivations: “lack of employment opportunities in traditional sectors”, “lower entry threshold”, “loss of former job”, and “to make money while looking for a permanent job”. This means that nearly half of respondents do not engage in WODVA voluntarily, but simply because they could not find another acceptable permanent job. For those full-time WODVA workers or those who take WODVA as their primary job, this proportion increases to 58.6 %.

Working Conditions of WODVA Workers

The concept of decent work provides a comprehensive framework for evaluating the workers’ working condition or employment quality, as well as an integrative policy agenda to promote the citizens’ work-life wellness. It is particularly relevant to this study since it was proposed as a response to the increasing precariousness and informality of labor relations in the new global context. Numerous scholars and international organizations have contributed to the concepts and measurements of decent work, either using macro-level indicators (e. g. Anker et al., 2003; Bescond et al., 2003; Bonnet et al., 2003; Ghai, 2003) or micro-level scales (Duffy et al., 2017; Ferraro et al., 2018; Webster et al., 2015). Although scholars have not agreed upon a uniform set of measurements, they share many aspects in common with decent work, such as fundamental principles and rights at work (free from mistreatment, workers’ representation, rights of collective action, etc.), adequate compensation, access to social security, employment safety, a safe work environment, decent working hours or a good work-life balance, fulfilling and meaningful work, and opportunities for personal development. Subject to the data collected, this study present the survey results of the working conditions of WODVA workers from the widely agreed aspects of decent work, including fundamental rights at work, compensation, job stability, social security, working time and autonomy, and health and safety.

Fundamental Rights at Work

Fundamental rights at work involve being treated with equity and dignity, worker's representation in decision making and disputes settlement, and freedom of association. Because a significant power asymmetry exists between workers and platforms, and platforms usually operate on behalf on the customers, the workers seldom have a say whenever there is dispute on the terms of trade. Typical examples are “wage theft” for crowd work (i.e. the customers can reject work without giving any reason) and the lack of dispute resolution policy if workers think they are rated unfairly (Schmidt, 2017). Our survey finds that 19.0 % of the respondents explicitly report that they have at some point had at least one dispute (if not more) with the platform (whilst another 10.4 % report “not clear”). By comparison, according to the 8th Survey on Status of Employees (SSE) in Beijing conducted by BMFTU in 2017, which generally covers those unionized, formal-sector employees, the proportion of employees who had had dispute(s) with employers are no more than 5.6 %.

For digital platform workers, the deficiency in fundamental rights at work which is most of concern is the inability to form an association. The inability to build any large-scale digital labor movement is especially obvious for crowd workers, “not only because many of them simply don't know each other, but also because there is an understanding that if they withdraw their labor, then workers in other parts of the world are able quickly to replace them”. For WODVA participants, this problem may be alleviated, since they generally operate in local traditional labor markets; nevertheless this issue still remains, given their being classified as self-employed or independent contractors. Those unions already in existence have no experience – or even legitimacy – to mobilize them. Our survey shows that only 26.5 % of the respondents are union members. Actually, a majority of the union members are from those who have a permanent job; for full-time WODVA workers, only 20.8 % are union members.

Compensation

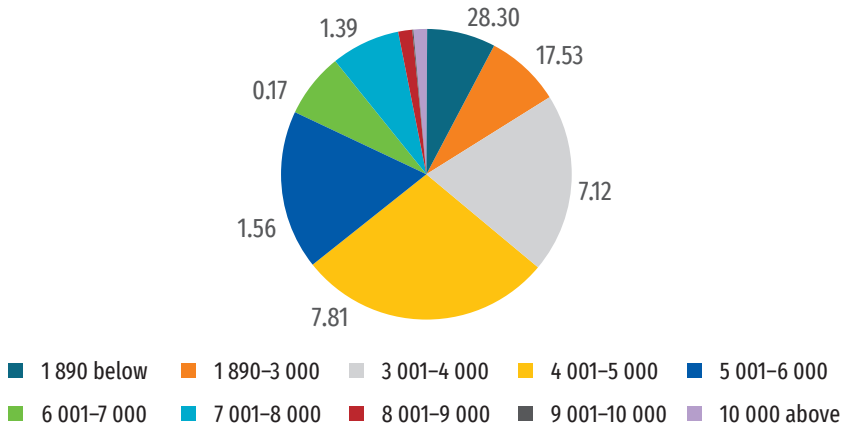
Economic uncertainty is a very likely condition for digital platform workers, given the fierce competition and lack of unionization¹⁵ (Menegatti, 2018). Crowd workers are more likely to be obliged to accept low pay since the fierce competition often result in underbidding practices (Graham et al., 2017). WODVA workers are less likely to underbid their pay rate but face the same extent of income instability. When being asked “what are you most worried about in doing this work”, 57.0 % and 51.64 % chose “income instability” and “instable flow of customers”, respectively, ranking the most frequently chosen responses.

The distribution of monthly income level for full-time WODVA workers is shown in Figure 2. More than one third (36.1 %) earn less than 4 000 Yuan per month, which can hardly guarantee a decent living in Beijing, although according to the 8th SSE, this proportion is only 28.9 %. Particularly, 7.6 % of full-time WODVA workers earn a monthly income less than 1 890 Yuan, or the minimum wage level of Beijing in 2017. Low pay occurrence is especially common for those low skilled WODVA jobs, including housekeepers, couriers, house moving, and car washing, among which 42.6 % earn a monthly income of less than 4 000, and 9.1 % earn a monthly income of less than minimum wage level. In consideration of the lack of employers' contribution to social security and other benefits, the economic situation of WODVA workers are even worse than the data indicates compared to those formal-sector employees.

¹⁵ De Stefano, 2016.

Figure 2

Distribution of Average Monthly Income of Full-Time WODVA Workers, (%)



Job Stability and Social Security

The most discussed issue related to digital platform work is the precariousness or the contingency of the jobs due to the classification of their employment status. In our survey, for those full-time WODVA workers or those who take WODVA as their major work, only 25.0 % report that they have signed labor contract with the platform; 40.4 % report that they have only signed a cooperation agreement with the platform; while 34.6 % claim that they have signed nothing with the platform. The lack of a labor contract leads to the lack of any social security, since only dependent employees who have a labor contract have access to social insurances partly contributed by employers. The survey shows that 34.4 % of the full-time WODVA workers or those who take WODVA as their major work have no access to social insurances. Among the remaining workers who have access, 40.8 % pay all the premium by themselves, 13.6 % share premium payment with their former employers, and only 11.2 % share premium payment with the platforms.

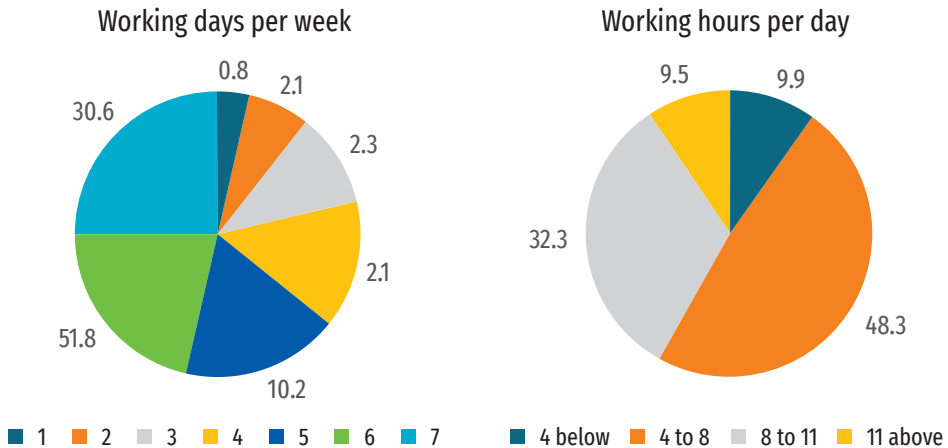
Working Time and Autonomy

A work schedule with greater flexibility is an important reason for many workers who participate in WODVA. However, “flexibility is just a kind of solace: to earn a significant sum of money, workers might also have to work more hours every day than a ‘standard’ worker. Since they have to be available ‘around the clock’, this kind of flexibility does not entail a greater freedom for the worker”. Figure 3 displays the distribution of working time of full-time WODVA workers. An overwhelming majority (82.4 %) of the respondents have no weekends; 41.8 % of the respondents work for more than 8 hours per day; and 9.5 % even work for more than 11 hours. Furthermore, overwork coexists with a considerable amount of underemployment, implying that, given the highly instable demands and low pay rates, WODVA workers are desperate to work for more time to earn sufficient income. This is consistent with Berg’s¹⁶ finding that the majority of crowd workers would prefer to work more, but are hindered by limited available tasks.

¹⁶ Berg et al., 2018.

Figure 3

Distribution of Working Time of the Full-Time WODVA Workers, (%)



Neither do WODVA worker enjoy a true sense of autonomy in way of work, since they are under the close control of the platforms’ algorithm-driven rating system¹⁷ (Aloisi, 2016; Schmidt, 2017). 64.9 % of the respondents explicitly report that the platforms have some evaluation and incentive system, and 9.8 % report “not clear”. As shown by Figure 4, the respondents confirm that the platforms have requirements for multiple aspects of their work, among which the service quality, service language, online time, and order quantity rank the highest in proportion of confirming responses. 86.7 % of the respondents confirm requirements on at least four aspects. This reality refutes the platforms’ assertion that WODVA workers are self-employed or independent contractors. Majority of them are *de facto* employees of the platforms, given what close control platforms clearly have of their workers’ labor processes.

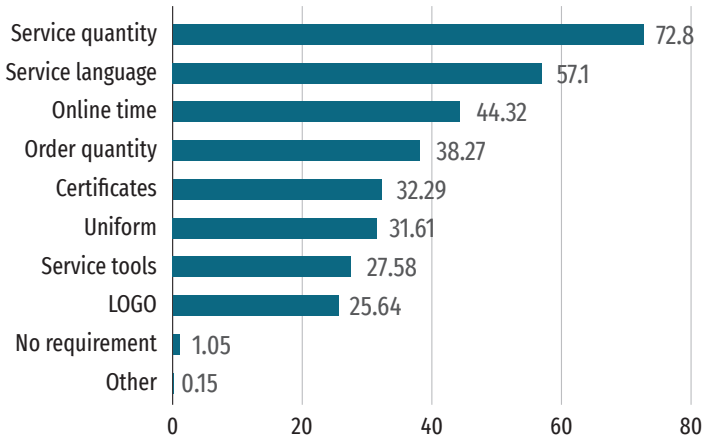
Health and Safety

By shirking an employment relationship with the workers, the companies (as well as the platforms) externalize obligations and the ensuing costs of preventing health and safety hazards befalling individual workers. The popular WODVA jobs are characterized by salient health and safety hazards, such as traffic accidents, exposure to chemicals, carrying heavy loads, or working at heights or various uneasy environments. These hazards are aggravated when workers are desperate to undertake more orders within a given time. Nowadays, a hot-button issue in China is that food delivery couriers are becoming the most visible victims as well as instigators of traffic accidents, because they have to drive (usually motorbikes) as fast as they can within a very harsh time limit, given that being late leads to a severe penalty on remuneration and their personal rating. As a food delivery rider said in a widely watched blog entitled *Food Delivery Riders Trapped in System* published in September 2020, “the riders are racing against death, struggling with the traffic police, and making friends with the red lights”. This blog lists the following data which was cited from traffic police corps in several cities: during the first half of 2017 in Shanghai, there was one food delivery rider

¹⁷ Berg et al., 2018.

Figure 4

Proportion of Confirming Responses to the Platforms' Working Requirements, (%)



casualty every 2.5 days; in 3 months of the same year, 12 casualties of food delivery riders happened in Shenzhen; in 7 months of 2018 in Chengdu, the traffic police handled 196 accidents related to food delivery riders, with 155 casualties, or one casualty per day, due to the riders' traffic offences. According to our survey, only 13.9 % of respondents confirm that platforms provide labor protection appliances, and 48.6 % report that the issue most worrying them is "traffic, personal assault, working injury or other fortuitous accidents", ranking as the third most frequently chosen issue following "income instability" and "unstable flow of customers".

Implications for Promoting Decent Work for Digital Platform Workers

Given most operational labor market regulations are applied to dependent employees, many scholars and practitioners have discussed reclassifying the employment status of digital platform workers. In recent years, several class action lawsuits have been brought against Uber, Lyft, and Crowdfunder, to challenge the platforms' classifications (Cherry, 2016; Johnston & Land-Kazlauskas, 2018). These struggles have borne some fruits. For example, the US district court in the north district of California and the labor commissioner of the State of California, in three separate cases against Uber and Lyft, recognized that a driver was an employee of Uber or Lyft instead of being self-employed.¹⁸ On January 1st, 2020, California passed the AB5 act, which stipulates that a workers could not be classified as independent contractor unless the employer could prove that (a) the working performance of the employed is not under the control and direction of the employer, (b) the work done by the employed is not the normal business of the employer, or (c) the employed usually participates in transactions, operations, or practices independently. According to this act, drivers of Uber and Lyft and workers on many other WODVA platforms will be classified as employees. Long before that, some companies, such as

¹⁸ De Stefano, 2016.

Alfred, Instacart, and Munchery, have indeed already spontaneously reclassified a part of their workers as employees.¹⁹

In our opinion, instead of debating whether platform workers are “employees” or even proposing an intermediary category of classification²⁰ (Todolí-Signes, 2017), a more fundamental and feasible solution is to reform the traditional labor market regulation system so as to extend the labor rights protection to all kinds of workers (Graham et al., 2017; Menegatti, 2018; Sundararajan, 2016). This proposition is innate within the ILO’s primary objective of “decent work for all”.²¹ A new safety net should be built by making the social security “universal” and “portable”; that is, instead of the employers’ direct contribution of social security, a tax-financed, universally covered social security should be provided by the states. This model has long been adopted by the Scandinavian countries, based on the concept of “flexicurity” (a linguistic combination of “flexibility” and “security”). Besides, other labor rights accessed by dependent employees, such as minimum wage and working time limits, should also be extended to the non-standard labor relations. In the long run, nonetheless, a universal basic income may be a more fundamental and socially desirable solution (Pulkka, 2017; Sundararajan, 2016).

Another indispensable solution to promote decent platform work is to support platform workers with their association and labor movement. This is pivotal to make a level playing field given the huge power asymmetry between platforms and workers. Existing unions can lend powerful support to the labor movement of platform workers by extending membership to non-standard workers, giving legal advice, providing group policies of insurances, carrying on public relations campaigns, mobilizing collective actions, or even helping to cultivate union-like organizations. Within Europe, many unions have a long history of incorporating non-standard workers into their ranks. In Italy, for instance, unions created specific representational opportunities in existing labor confederations for non-standard workers (Pulignano et al., 2015). In many parts of the world, there has been an emergence of rejuvenated or even completely new collective organizations, such as the Spanish workers’ collective and informal associations, solidarity movements like the broodfonds in the Netherlands, the Independent Drivers Guild in New York, and the Independent Workers Union in Great Britain, and other initiatives aimed at helping or supporting the collective organization of platform workers.²² One of the best-known examples is the Independent Workers Union in Great Britain (IWGB), which was formed explicitly to organize non-traditional, low wage, and immigrant workers. Its successes include supporting the couriers’ strike in protesting Deliveroo (a food delivery platform) to reduce the pay rate in August 2016 (Johnston & Land-Kazlauskas, 2018). In China, given its centralized union system, the official unions should take more responsibility in organizing platform workers or should even act as the negotiators. For instance, the Beijing Express Delivery Association and the Beijing Express Delivery Workers’ Federation organized enterprises and workers’ representatives in early 2019 to sign China’s first Special Collective Contract for Labor Protection in the express delivery industry, and agreed on setting up labor protection inspectors and purchasing accidental injury insurance for workers.²³

¹⁹ De Stefano, 2016.

²⁰ Weber, L. (2015, January 28). *What if there were a new type of worker: Dependent contractor*. Wall Street Journal. <http://www.wsj.com/articles/what-if-there-were-a-new-type-of-worker-dependent-contractor-1422405831>

²¹ ILO, 1999.

²² Daugareilh, I., Degryse, C., & Pochet, P. (Eds.). (2019). *The platform economy and social law: Key issues in comparative perspective*. ETUI Research Paper – Working Paper 2019.10. Brussels: ETUI. <http://doi.org/10.2139/ssrn.3432441>

²³ Zhou, 2020.

While platform workers can be hard to organize, network technology provides convenient conditions for their communication.²⁴ As Degryse²⁵ clarified, “the trade union movement could perhaps discover in these new technologies an additional tool for exchange, cooperation, mobilization, action, visibility, etc.” Platform workers are spontaneously establishing Internet tools such as FairCrowdwork.com and turkernation.com, creating grassroots, democratic, worker-driven forums in which platform workers meet virtually and exchange information (Fabo et al., 2017). Such online forums are not only potential trade union allies, but also provide workers with the ability to rate platforms or clients and critique their actions, and hence intensify competition between platforms via the reputation mechanism.

Finally, few organizational models promote worker voice and control more than cooperatives, where workers are both owners and participants in the operation of the enterprises (Johnston & Land-Kazlauskas, 2018). If labor movements leveraged by platform technology are “digitalization used by workers”, then platform cooperatives are “digitalization owned by workers”. Initiated and promoted by Trebor Scholz, professor at the New School in New York, the “platform cooperativism” movement advocates a new platform type based on cooperative ownership (Scholz, 2016, 2017). By building and owning the platforms themselves, the workers can redesign working conditions from bottom up, “so as to crack the broken system of the sharing economy / on-demand economy that only benefits a few” (Scholz, 2017). The taxi industry has given rise to a number of new cooperative firms in recent years. Swift may be an early example of a platform owned by drivers. A different yet familiar idea — allocating shares of platforms (that remain shareholder corporations) to providers — seems like the most pragmatic near-term path towards sharing the wealth of the sharing economy. An early example of this kind of program is Juno, a ridesharing service that has committed to ensuring that its drivers own 50 % of the company’s founding stock by 2026 (Sundararajan, 2016).

Conclusion

As an advanced variant of neoliberal capitalism, digital labor platforms have posed an unprecedented challenge to the decent work agenda. China’s leading role in the development of the sharing economy (especially the WODVA form) makes China a representative research target of digital platform and its implications on the labor market. This study presents a micro-level survey on the employment status and working conditions of 1 338 WODVA workers from 25 platforms in Beijing. The survey confirms the role of digital platforms in job creation, especially for those with less employability, and in providing complementary income other than permanent jobs. However, nearly a half of them engage in WODVA due to a lack of employment opportunities in standard labor markets. The respondents show multiple decent work deficits, reflected by a lack of representation and organization, low pay rates and hence inadequate compensation, income and job instability, insufficient accesses to employer-contributed social security, overtime work, and high exposure to physical and health hazards. These results are consistent with the existing studies on crowd workers. To promote decent work of digital platform workers, the State needs substantial reform in its labor market regulation, including extending social security and labor rights protection to all workers, promoting association and collective actions of platform workers either by

²⁴ Degryse, C. (2016). Digitalisation of the economy and its impact on labour markets. ETUI Research Paper — Working Paper 2016.02. Brussels: ETUI. <http://doi.org/10.2139/ssrn.2730550>

²⁵ Degryse, C. (2016). Digitalisation of the economy and its impact on labour markets. ETUI Research Paper — Working Paper 2016.02. <http://doi.org/10.2139/ssrn.2730550>

extending traditional union's outreach or fostering new forms of organizations, and leveraging platform technology to facilitate platform workers' organization and information sharing. In the long run, a universal basic income and public ownership will be the more fundamental solution to guarantee decent work lives in the digital economy.

This study is valuable in that it is the first survey on WODVA workers with a large sample size. Its implications for labor market regulation is particularly relevant to China, since the Chinese government, with a long tradition of developmentalism, has taken an approach that does not overly regulate but instead promotes — and even hails — the development of digital labor platforms. Despite its originality and relevance, this study is quite preliminary given its scope and depth are constrained by the dataset provided by BMFTU. To attain more in-depth and extensive insights into the working conditions of platform workers and their implications, we suggest the following improvements in data collection: (a) variables and the corresponding data types should be made consistent with the existing mainstream micro datasets in China, such as Survey on Status of Employees (SSE), Dynamic Survey on Labor Markets (DSLML), and Urban Household Survey (UHS), so as to better delineate the decent work gaps of platform workers in comparison with those in formal sectors; (b) datatypes related to compensation and working time should be more precise (instead of the rough interval distribution presented in this survey), so that the pay rates could be evaluated more specifically; (c) a more detailed survey on employment status and motivation should be made to both full-time and part-time platform workers (e.g. for full-time platform workers: whether the respondents engage in platform work due to a loss of permanent job, whether they are actively looking for a permanent job, the income level and working time of their former permanent job, etc.), so that researchers can find out which groups of workers are more likely to engage in platform work, whether they do so voluntarily or just because of limited access to formal sectors or/and their permanent job's failing to provide a living wage, and to what extent the platforms contribute to “net” job creation or just replace those traditional jobs destroyed by digitalization; (d) more variables should be added to reflect the determinants and outcomes of the working conditions. The latter includes, for instances, the physical and mental wellness of the respondents, the level and structure of their expenditure, and the savings and indebtedness of the households, which are crucial to evaluate the micro-, macro-, and socio-economic consequences of the precariousness caused by digitalization.

References:

1. Aloisi, A. (2016). Commoditized workers. Case study research on labour law issues arising from a set of “on-demand / gig economy” platforms. *Comparative Labor Law & Policy Journal*, 37(3), 653–687. <http://doi.org/10.2139/ssrn.2637485>
2. Anker, R., Chernyshev, I., Egger, P., Mehran, F., & Ritter, J. A. (2003). Measuring decent work with statistical indicators. *International Labour Review*, 142(2), 147–178. <http://doi.org/10.1111/j.1564-913X.2003.tb00257.x>
3. Bescond, D., Châtaignier, A., & Mehran, F. (2003). Seven indicators to measure decent work: An international comparison. *International Labour Review*, 142(2), 179–212. <http://doi.org/10.1111/j.1564-913X.2003.tb00258.x>
4. Bonnet, F., Figueiredo, J. B., & Standing, G. (2003). A family of decent work indexes. *International Labour Review*, 142(2), 213–238. <http://doi.org/10.1111/j.1564-913X.2003.tb00259.x>
5. Cherry, M. A. (2016). Beyond misclassification: The digital transformation of work. *Comparative Labor Law & Policy Journal*, 37(3), 544–577. <https://ssrn.com/abstract=2734288>

6. Duffy, R. D., Allan, B. A., England, J. W., Blustein, D. L., Autin, K. L., Douglass, R. P., Ferreira, J., & Santos, E. J. R. (2017). The development and initial validation of the decent work scale. *Journal of Counseling Psychology, 64*(2), 206–221. <http://doi.org/10.1037/cou0000191>
7. Fabo, B., Karanovic, J., & Dukova, K. (2017). In search of an adequate European policy response to the platform economy. *Transfer: European Review of Labour and Research, 23*(2), 163–175. <http://doi.org/10.1177/1024258916688861>
8. Farrell, D., & Greig, F. (2016). Paychecks, paydays, and the online platform economy: Big data on income volatility. *Proceedings. Annual Conference on Taxation and Minutes of the Annual Meeting of the National Tax Association, 109*, 1–40.
9. Ferraro, T., Pais, L., Rebelo Dos Santos, N., & Moreira, J. M. (2018). The decent work questionnaire: Development and validation in two samples of knowledge workers. *International Labour Review, 157*(2), 243–265. <http://doi.org/10.1111/ilr.12039>
10. Ghai, D. (2003). Decent work: Concept and indicators. *International Labour Review, 142*(2), 113–145. <http://doi.org/10.1111/j.1564-913X.2003.tb00256.x>
11. Graham, M., Hjorth, I., & Lehdonvirta, V. (2017). Digital labour and development: Impacts of global digital labour platforms and the gig economy on worker livelihoods. *Transfer: European Review of Labour and Research, 23*(2), 135–162. <http://doi.org/10.1177/1024258916687250>
12. Gutbrod, M. (2020). Digital transformation in economy and law. *Digital Law Journal, 1*(1), 12–23. <https://doi.org/10.38044/DLJ-2020-1-1-12-23>
13. Ilsøe, A. (2017). The digitalisation of service work — Social partner responses in Denmark, Sweden and Germany. *Transfer: European Review of Labour and Research, 23*(3), 333–348. <http://doi.org/10.1177/1024258917702274>
14. Inozemtsev, M. I. (2020). Digital law journal: Introduction. *Digital Law Journal, 1*(1), 8–11. <https://doi.org/10.38044/DLJ-2020-1-1-8-11>
15. Johnston, H., & Land-Kazlauskas, C. (2018). *Organizing on-demand: Representation, voice, and collective bargaining in the gig economy. Conditions of Work and Employment Series No. 94*. Geneva: International Labour Office. http://www2.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---travail/documents/publication/wcms_624286.pdf
16. Kassi, O., & Lehdonvirta, V. (2018). Online labour index: Measuring the online gig economy for policy and research. *Technological Forecasting and Social Change, 137*, 241–248. <https://doi.org/10.1016/j.techfore.2018.07.056>
17. Liu, D., Geng, Y., & Yuan, L.-Q. (2020). The age of digitalization: Tendencies of the labor market. *Digital Law Journal, 1*(3), 14–20. <https://doi.org/10.38044/2686-9136-2020-1-3-14-20>
18. Menegatti, E. (2018). A fair wage for workers on-demand via app. In E. Ales, Y. Curzi, T. Fabbri, O. Rymkevich, I. Senatori, & G. Solinas (Eds.), *Working in digital and smart organizations* (pp. 67–92). Palgrave Macmillan. <https://doi.org/10.1007/978-3-319-77329-2>
19. Pereira, S., Dos Santos, N., & Pais, L. (2019). Empirical research on decent work: A literature review. *Scandinavian Journal of Work and Organizational Psychology, 4*(1), 1–15. <https://doi.org/10.16993/sjwop.53>
20. Pulignano, V., Ortíz Gervasi, L., & de Franceschi, F. (2015). Union responses to precarious workers: Italy and Spain compared. *European Journal of Industrial Relations, 22*(1), 39–55. <https://doi.org/10.1177/0959680115621410>
21. Pulkka, V.-V. (2017). A free lunch with robots — Can a basic income stabilise the digital economy? *Transfer: European Review of Labour and Research, 23*(3), 295–311. <https://doi.org/10.1177/1024258917708704>
22. Schmidt, F. A. (2017). *Crowd design: From tools for empowerment to platform capitalism*. Birkhäuser.
23. Scholz, T. (2016). *Platform cooperativism: Challenging the corporate sharing economy*. Rosa Luxemburg Stiftung. New York Office. https://rosalux.nyc/wp-content/uploads/2020/11/RLS-NYC_platformcoop.pdf
24. Scholz, T. (2017). *Uberworked and underpaid: How workers are disrupting the digital economy*. Polity Press.

25. Sidorenko E. L., & von Arx P. (2020). Transformation of law in the context of digitalization: Defining the correct priorities. *Digital Law Journal*, 1(1), 24–38. <https://doi.org/10.38044/DLJ-2020-1-1-24-38>
26. Sundararajan, A. (2016). *The sharing economy. The end of employment and the rise of crowd-based capitalism*. MIT Press.
27. Todolí-Signes, A. (2017). The “gig economy”: Employee, self-employed or the need for a special employment regulation? *Transfer: European Review of Labour and Research*, 23(2), 193–205. <https://doi.org/10.1177/1024258917701381>
28. Webster, E., Budlender, D., & Orkin, M. (2015). Developing a diagnostic tool and policy instrument for the realization of decent work. *International Labour Review*, 154(2), 123–145. <https://doi.org/10.1111/j.1564-913X.2015.00017.x>

Information about the authors:

Yan Xu — Ph.D. in Economics, Professor, School of Economics and Business Administration, Beijing Normal University, Beijing, People’s Republic of China.
ORCID 0000-0002-0612-1642

Dun Liu* — Ph.D. in Economics, Lecturer of School of Economics and Management, China University of Labor Relations, Beijing, People’s Republic of China.
liudun@bjtu.edu.cn
ORCID 0000-0002-3977-6645

Сведения об авторах:

Сюй Я. — Ph.D. in Economics, профессор Школы экономики и делового администрирования Пекинского педагогического университета, Пекин, Китайская Народная Республика.
ORCID 0000-0002-0612-1642

Лю Д.* — Ph.D. in Economics, преподаватель факультета экономики труда Школы экономики и менеджмента Пекинского университета Цзяотун, Пекин, Китайская Народная Республика.
liudun@bjtu.edu.cn
ORCID 0000-0002-3977-6645