

Unregulated Flexibility and the Multiplication of Labour: Work in the Chinese Platform Economy

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Abstract

The global labour market is witnessing an increase in non-standard employment, and China is no exception, albeit with distinct socio-political dynamics. This research explores the variation of employment relations in China’s platform economy and discusses how the various types of precarious employment are generated and developed in post-socialist China. Based on interviews with platform company managers and platform food delivery workers in China, this study draws a broader picture of platform work, considering the complex layers of labour practices at the level of platform companies and platform work. The research discusses the various labour arrangements in the ZZ food delivery platform and finds that variation serves to intensify and diversify managerial practices in platform work; at the same time, traditional types of work in platform companies are also undergoing transitions and the boundary between internal and external organisations is increasingly blurred and fluid. Labour relations in the platform economy are characterised by multiplication, and this multiplication is facilitated by the post-socialist Chinese labour market’s general trend towards precariousness and the state’s tolerant approach to various non-standard employment types in the era of “the new normal.”

Keywords

China; labour relations; multiplication of labour; platform economy; platform work; precarious work

1. Introduction

The global labour market is witnessing an increase in non-standard employment, such as part-time work, temporary work, self-employment, agency work, and platform work. These trends mark a shift towards

precariousness in employment relations (International Labour Organization, 2016; Kalleberg, 2009; Taylor et al., 2017). The mounting precarious employment is a consequence of neo-liberalism policies that advocated higher flexibility over the past three decades in Western countries. Scholars identified four structural forces driving the expansion of precarious employment: de-unionisation, financialisation, globalisation, and the digital revolution-led reconstruction of organisational and labour arrangements (Kalleberg & Vallas, 2017; Western & Rosenfeld, 2011). In China, the prevalence of precarious employment mirrors global trends, albeit with distinct socio-political dynamics. China has undergone transitions from permanent employment under a socialist planned economy to a contract-based system within a market economy (Gallagher, 2004; Kuruvilla et al., 2011), spurred by post-socialist national policies and the pressures of competitive global capitalism (Kuruvilla et al., 2011). The rise of the platform economy and platform work marks a significant transition in labour relations towards precariousness both in China and globally.

This research explores the variation of employment relations in the Chinese platform economy and discusses how different types of precarious employment are generated by China's historical path and new political economy. Past research has illustrated the precarious features and distinct characteristics of platform work in China, but the variation of employment relations in the platform economy has received inadequate attention. This article fills a gap by reporting on interviews with 34 platform companies and 21 couriers. The research discusses the various labour arrangements for food delivery couriers and finds that the variation serves to intensify the workload among internal migrant workers undertaking platform work. It also finds that traditional types of work in platform companies also undergo transitions and the boundary between internal and external organisations is blurred and fluid. The theoretical lens of “multiplication of labour” (Mezzadra & Neilson, 2013) is used to explain the Chinese case in this study. It adds to Altenried's (2021) research by showing that the multiplication of labour for migrant workers is not only through automatic and algorithmic management but also through sophisticated contract design and a variety of labour arrangements. Additionally, this research argues that labour is multiplied in the post-socialist Chinese labour market, which is characterised by a prevailing precariousness. The state's tolerant approach towards various non-standard employment types in the current “new normal” (*xin chang tai*) climate promotes this trend.

This research contributes to three debates. First, it adds to the research on precarious work in post-socialist countries, where the role of the state, market-oriented reforms, and historical social control play essential roles. Second, this article engages with Mezzadra and Neilson's (2013) concept of “multiplication of labour” to explain the complicated layers of platform economy employment, adding to Altenried's (2021) research on the multiplication of labour and international migrant platform workers. Third, it empirically examines employment relations in the Chinese internet-related platform economy, situating the discussion of platform-based work within a broader political economy context.

2. Mapping and Explaining Precarious Work in the Global Platform Economy

A growing body of literature explores the prevalence of precarious platform work around the world. One approach focuses on the platform's power and control over workers, explaining workers' precariousness as a consequence of asymmetric power relations between the platform and workers. Studies of algorithmic control find that platforms exercise hard and soft control over workers through the labour process (Kellogg et al., 2020;

Newlands, 2021; H. A. Rahman, 2021; Rosenblat & Stark, 2016). Furthermore, scholars argue that platforms exercise a dominant power over users and their ecosystem (Culpepper & Thelen, 2020; Cutolo & Kenney, 2021; Kenney et al., 2021; Srnicek, 2017; van Dijck et al., 2018). Another approach sees precarity in the platform economy as part of the rise of precarious employment in the labour market since the 1970s (Schor et al., 2020). Platform work is seen as another form of global non-standard precarious employment, along with existing part-time, temporary, and self-employment arrangements developed under neoliberal policies (International Labour Organization, 2016; Kalleberg, 2009; K. S. Rahman & Thelen, 2019; Ravenelle, 2019; Taylor et al., 2017).

Despite the strengths of these two approaches, they often view platforms and platform workers as homogenised, overlooking their diversity. This study reveals that two additional approaches, which delve into individual and institutional variations within platform work, prove particularly insightful in explaining the dynamics of the Chinese context. The third approach examines the exploitation of disadvantaged workers in the labour market by platforms. The diversification of platforms results in good and bad gig jobs, with skilled freelancers having more autonomy, while unskilled piece-rate workers face more precariousness (Cappelli & Keller, 2013; Kalleberg, 2016; Spreitzer et al., 2017; Sutherland et al., 2020). Schor et al. (2020) argue that workers who are dependent on platform income are more precarious than those earning additional income elsewhere. Moreover, academics highlight that migrant workers constitute the primary platform workforce, and their vulnerability in work is intricately tied to their precarious migrant status (Altenried, 2021; Das & Srravya, 2021; van Doorn et al., 2023).

A fourth approach explains the variation in platform work through an institutional-regulatory lens. Comparative studies suggest that platforms adopt varying employment arrangements in different national regimes (Koutsimpogiorgos et al., 2023). It is argued that self-employment is most prevalent in lightly regulated countries such as the US, while continental regimes in Europe adopt a greater variety of contract types as secondary forms of employment (Ametowobla & Kirchner, 2023). The diversity of platform strategies and practices in various contexts is influenced by the contested interplay among market, state, and civil society, and this diversity is connected to platforms' capability to adjust to domestic institutions, encompassing the markets of capital and labour, as well as the education and social safety systems (Davis & Sinha, 2021; Schüßler et al., 2021).

The third and fourth approaches, which explain the diversity of platform work, can situate Chinese platform economies in global platform capitalism. Yet, due to the post-socialist context and the unique dynamics of internal migrant workers, the Chinese platform economy does not simply adopt North American and European models. Research on platform work in China has largely focused on the precariousness of internal migrant workers in the platform economy. The mainstream approach remains the first approach of algorithmic management and control over workers in the labour process, and they are less associated with the broader transition in the labour market (L. Chen, 2020, 2022; J. Y. Chen & Sun, 2020; Sun, 2019; Sun & Chen, 2021; Sun et al., 2023; Wu et al., 2019; L. Zhao, 2022; L. H. Zhao & Yu, 2021). A few studies have situated labour concerns within broader socio-economic and organisational contexts (Lin, 2022; Lüthje, 2019; E. J. Zhao, 2019; L. H. Zhao & Yu, 2021). Despite the rich case studies in the Chinese context, comprehensive accounts of the diversity of platform work and its relation to the historical development of the labour market and the vulnerability of workers are less explored. This research aims to fill this gap and add the perspective of the "multiplication of labour" to the discussion of platform work in China.

3. Changing Employment Relationship in Post-Socialist China

Employment relationships in China have dramatically transformed from a socialist system characterised by permanent employment and comprehensive social benefits to a contract-based system (Gallagher, 2004; Kuruvilla et al., 2011) following the Open and Reform policy (*gai ge kai fang*) in 1978. The state and the *hukou* system (household registration system) have played essential roles in this transition and the creation of an unequal labour market in post-socialist China. Pre-reform socialist China was a society with institutional segmentation in essential aspects of life, one of the most influential of which was the *hukou* system established in the 1950s. The *hukou* system divides Chinese citizens into two classes: Urban *hukou* holders are entitled to urban citizenship and state-provided social welfare, while rural *hukou* holders are entitled to rural citizenship, with welfare reliant on families and rural collectives (Cheng & Selden, 1994; Z. Liu, 2005). Socialist *Danwei* (work units) were the central economic and social units in urban areas. They offered permanent employment and guaranteed social benefits from cradle to grave for urban citizens (Fan, 2002). By contrast, rural citizens were bonded to agriculture and excluded from the industrial labour market and state-funded social welfare.

The reforms abolished *Danwei* employment and weakened institutional segmentation to establish a market economy. The labour market transition towards flexible accumulation and precarious employment continued when China opened its market to global competitors in preparation for joining the World Trade Organisation in the 1990s. Contract-based employment allows employers to hire and fire workers according to their demands, creating vast work opportunities for rural residents, while many urban workers were laid off from permanent employment. However, the persistent *hukou* system functions as an “institutional-based opportunity structure” (Fan, 2002, p. 103) and has significantly influenced job opportunity distributions. The rural-urban *hukou* division has created not only direct institutional discrimination that excluded rural-to-urban migrant workers from privileged state-owned enterprises but also more subtle accumulated disadvantage for internal migrant workers in the competitive labour market, including those in educational attainment and social capitals (Huang et al., 2010).

The marginalisation of internal migrant workers (*nong min gong*) in the marketised labour market is fuelled by post-socialist policies that have transformed labour legislation and welfare systems into individualised and fragmented systems. The Labour Law of 1995 requires employers to establish formal labour contracts with their workers. However, the law lacked detail on enforcement, resulting in its failure to be implemented (Cooney, 2007). The new Labour Contract Law of 2008 has improved enforcement, but implementation remains imbalanced among corporations with varying ownership and scales. As state-owned sectors and large enterprises followed labour legislation, internal migrant workers in the private and informal sectors were exploited without cost (Cooney, 2007; Friedman & Lee, 2010), resulting in an even more segmented and fragmented labour market. Furthermore, new government-operated social insurance schemes that provide social benefits for workers in the marketised labour market have similar implementation issues. Internal migrant workers remain among the least covered groups after decades of social insurance coverage expansion. In 2017, the Employee Health Insurance and Pension coverage rate for internal migrant workers was only 22% (Zhang, 2019). At the same time, enterprises in China have developed various non-standard employment types, which have been applied to internal migrant workers, such as dispatched workers (*pai qian gong*), outsourced workers (*wai bao gong*), and short-term contract workers, pushing the labour market towards flexibility and precariousness (Friedman & Lee, 2010).

This review focuses on how the rural-urban *hukou* citizenship division has transformed into labour market inequality in China. While there is a rich body of literature on the prevalence of precarious employment and the vulnerability of internal migrant workers in China, there is a gap in perspectives on how industry practices of precarious employment are embedded in the post-socialist unequal labour market. The emergence of an internet-driven platform economy marks a further transition towards precarious employment, providing opportunities for scholarly research on industry practices as a case to examine labour relations in precariousness.

4. Researching the Chinese Platform Economy: Multiplication of Labour

“The multiplication of labour” describes tendencies in how labour is intensified, diversified, and heterogenised in contemporary capitalist society (Mezzadra & Neilson, 2013). It points to the frontiers of capital that explore various economic, political, geopolitical, and cultural borders, which play a productive role in the multiplication of labour (Mao, 2021). The multiplication of the labour lens offers a perspective to capture the ongoing trends in the global labour market, with the increasing blurring of work and non-work, along with the increasing flexibility and fragmentation of work arrangements (Altenried, 2023; Neilson, 2009).

The multiplication of labour perspective is applied in explaining key dynamics in platform work. On the one hand, platforms utilise digital standardisation and algorithmic management to automate work distribution, effectively including and excluding different workers from the labour process, including unskilled migrant workers with language barriers. These arrangements blur the boundaries between work–life and production–reproduction, intensifying workers’ time arrangements and incorporating former non-workers into the workforce (Altenried, 2021, 2023). On the other hand, international migrant workers, who experience multiple dimensions of vulnerability and exclusion in the local labour market, find platform work to be inclusive due to platforms’ ability to work with a highly diverse and heterogeneous group of unskilled workers (Altenried, 2021).

This research argues that Chinese platform work is an example of the multiplication of labour in the post-socialist platform economy. Most Chinese platform workers, predominantly internal migrants relocating from rural to urban areas, encounter fewer constraints, such as undocumented status and language barriers, compared to international migrants in Altenried’s (2021) European cases. However, Chinese internal migrant workers remain an appropriate workforce for the platforms’ algorithmic management, contributing to the further multiplication of labour in the sector.

Internal migrant workers in China differ from non-migrant workers undertaking platform work in three key ways under the influence of the *hukou* system. First, internal migrant workers, being non-citizens of destination cities, face restrictions in accessing local educational resources for children, causing family separation, especially those with left-behind children (Ye & Pan, 2011). This family arrangement creates a large number of workers who delegate care work to rural family members and relocate to cities, ready for intensified work, while the platforms’ piece-rate system not only permits but also incentivises workers to extend their working hours and workload (Sun et al., 2023). Second, internal migrant workers are significantly less covered by employee social insurance, including healthcare, pension, unemployment, occupational injury, maternity insurance, and housing funds (Zhang, 2019). Migrant workers, due to their precarious circumstances, frequently prioritise immediate and temporary rewards in their work. Platform

work is a source of immediate cash flow for these workers. The flexibility of working overtime and the algorithmic distribution of orders allows workers to maximise their immediate cash earnings (Zhen et al., 2020). Third, internal migrant workers, often lacking skills and with limited education, are excluded from formal and secure jobs in the labour market. Traditionally, their choices are limited to factory assembly lines and low-end service jobs, both characterised by precarity and insecurity (National Health and Family Planning Commission, 2018). New platform jobs provide an alternative with comparable levels of precarity but offer more autonomy and flexibility under algorithmic management, attracting workers to transition from factories to platforms.

This research will further explore the combination of internal migrant workers and platform work in post-socialist China. It examines the intensification and diversification of managerial practices in both platform companies and platform work, adding another layer of analysis to the multiplication of labour: The multiplication of labour in the platform economy is not only through the incorporation of migrant workers into algorithmic and automatic management but also through complicated designs of labour arrangements. As discussed in Section 6, the perspective of “multiplication of labour” explains the increasing complexity and differentiation in the platform economy and allows for political economy explanations. This article explores how the multiplication of labour is practised in the platform economy and how the political economy in China facilitates or impedes these practices.

5. Research Methods

In the Chinese context, the government uses “the new economy” (*xin jing ji*) to cover a wide range of activities in the platform economy when making policies and reporting statistics. The new economy includes all types of online and offline gig platforms, social media platforms, and other internet technology-orientated companies (National Bureau of Statistics, 2018). This research employs the widely accepted term “platform economy,” which refers to *xin jing ji* in the Chinese context as defined by the government. This research is based on fieldwork conducted in Guangdong province, which is a hub for labour relations studies and has an active and robust platform economy.

There are two parts to employment relations in the platform economy: employment within platform companies and platform work. While many researchers have treated them separately, we consider that a comprehensive understanding of employment relations requires information from both parts. The first part of the fieldwork was carried out in 2018 and 2019 and consisted of interviews with representatives from 34 platform companies located in Shenzhen, Guangzhou, Foshan, Dongguan, Zhuhai, and Zhongshan. These companies were identified alphabetically from B to Z and then from AA to AE. These interviews aimed to gain insight into the general labour practices of platform companies in Guangdong province in the context of current labour legislation. The focus was on the degree of management flexibility and the labour relationships between companies within the platform ecosystem. The companies interviewed provided a range of services, such as transportation, delivery, information, and real estate services. They ranged in size from platform headquarters with over 1,000 employees to platform subcontractors with about 100 to 500 employees and city offices with fewer than 10 employees. The majority of interviewees held positions in human resources departments. The interview covered topics such as the company’s general employment situation, human resource strategies and challenges, and the potential risks associated with regulatory policies.

The researchers chose the ZZ platform for the second part of the study because it represents a typical case for understanding labour arrangements in platform work. Fieldwork was conducted in 2019 to investigate workers' experiences on the ZZ platform, which is a leading food delivery platform with millions of workers. The study observed six locations in three cities (Shenzhen, Guangzhou, and Foshan) to represent diversities in city scale, central and marginal business areas, and labour organisational patterns. Additionally, 21 couriers were interviewed.

6. Findings

This research examines two sets of labour practices in the platform economy: The platform workers who deliver services for the platforms and the staff who work in the platform companies. These workplaces exhibit differences in terms of precariousness. Platform workers face precarity under new management forms, especially with a significant labour force consisting of unskilled internal migrant workers, and lack the applicable labour protection guaranteed by Chinese labour laws. Conversely, employment in platform companies primarily involves skilled and educated workers, entailing a more traditional type of employment subject to labour protection, which refers to a set of labour rights based on employment contracts and five social insurances: pension, healthcare, occupational injury, unemployment, and maternity insurances. Nevertheless, they share similarities in two key aspects: The work in platform companies also undergoes a significant transition to flexible and precarious employment and both exhibit multiple designs of labour arrangement, leading to the intensification and multiplication of labour.

6.1. Multiple Design of Platform Workers: The Case of the ZZ Platform

Our discussion starts with the platform work. Similar to European counterparts (Ametowobla & Kirchner, 2023), Chinese food delivery platforms also feature diverse employment types, however varying in regulatory context and managerial strategies. In continental European regimes, counterpart platforms use a mix of employment relationships, including self-employment, employee-type contracts, and subcontracting, as an adaptation to state regulations that protect workers' labour rights. However, the development of Chinese platform work has been in the opposite direction. The original form was direct employment contracts between workers and platforms (or subsidiary companies). However, this form of contract disappeared in 2018 and was replaced by subcontractor relationships (premium delivery, see type 2) and self-employment contracts (crowdsourcing delivery and loyal crowdsourcing delivery, see types 1 and 3; Beijing Zhicheng Migrant Workers Legal Aid and Research Centre, 2021). There are no significant differences between self-employment and subcontracting in terms of social protection from the workers' perspective. Neither type of contract provides protection and social benefits, suggesting a different dynamic in the use of different labour arrangements in China.

Founded in the early 2010s, the ZZ platform is a leading food delivery platform that employs over a million couriers. The majority of the platform work pyramid consists of unskilled rural migrant labour: 77% of the total platform couriers for the ZZ platform were rural migrant labourers at the time of this study. Delivery workers are divided into three types of work arrangements, but workers are similarly precarious. Although all couriers register through the company's app and work via the app, the internal organisation of labour and management of the ZZ platform is a multi-layered system. The three types of work arrangement are:

1. Crowdsourcing delivery (*zhong bao*): Workers register on the platform and receive orders independently without establishing formal labour relations with the platform. Workers can decide their working time and workload, but they are still subject to the platform’s algorithmic management.
2. Premium delivery (*zhuan song*): Full-time workers who must go online during pre-arranged work periods and receive mandatory orders. The working hours are usually at least 48 hours a week, more than the labour law stipulated 40 hours a week. Under this pattern, the platform outsources orders in a specific area to contractors who operate management stations (*zhandian*) that directly recruit and manage couriers in a full-time manner.
3. Loyal crowdsourcing delivery (*zhong cheng*): Workers have to finish a stipulated large number of orders with higher service standards but still build on crowdsourcing relationships. Their working hours and workload are similar to those of full-time premium couriers. Loyal crowdsourcing is the initial name of this type of platform workers and this paper still uses it because it captures a crucial feature of the type.

All three options involve complex labour relations by introducing third-party agencies, such as subcontractors that operate delivery management stations, human resources agencies that provide labour dispatching services, and financial services agencies that handle workers’ salaries. For crowdsourcing and loyal crowdsourcing delivery, couriers are required to agree on a service contract with a third-party labour provider when registering on the platform (Figure 1). It is important to note that this is not an employment contract. Premium delivery may involve a few subcontracted management stations that sign labour contracts directly with workers, but many rely on additional third-party labour service agencies (Figure 2).

The practices of precariousness are carried out through two strategies. Firstly, the introduction of various third-party agencies to complicate labour relations, which, in the cases of loyal crowdsourcing and some premium delivery, constitutes disguised employment; as courier Li (pseudonym) said:

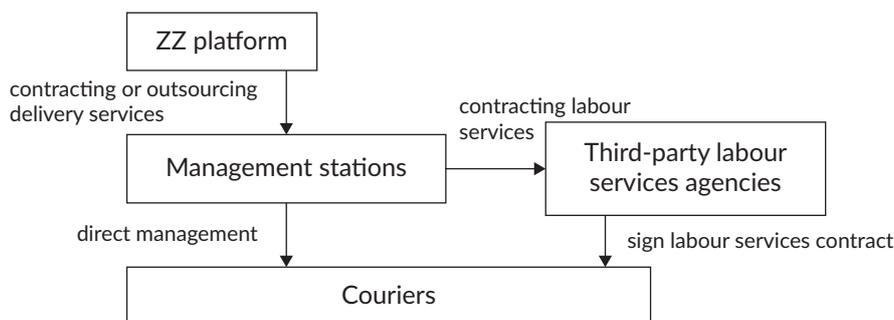


Figure 1. Employment relations of premium delivery.

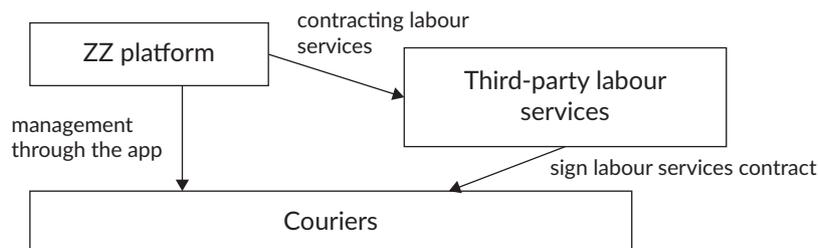


Figure 2. Employment relations of crowdsourcing and loyal crowdsourcing delivery.

I am not sure about the labour relationship. I previously worked in crowdsourcing delivery, and I could say I was a freelancer. But I work as a loyal crowdsourcing delivery now, and it requires me to be online at least 8 hours a day and 6 days a week. It even requires us to attend morning meetings. The management is all about full-time work.

Secondly, the evident gaps in employment protection and enforcement and direct violation of labour laws. Of the 21 respondents, 6 signed labour contracts with subcontractors, but none received social insurance from employers. Of these, two workers were covered by the Employee Social Insurance system but had to pay the full cost themselves, including the part that employers are legally obliged to pay. Some workers had negotiated with employers but failed, as courier Mei (pseudonym) said: “I asked before, but they refused and said that all the money was given to me....The government doesn’t care.”

There are no significant differences between migrant and non-migrant workers in terms of the precariousness of employment contracts and social security; however, the work of internal migrant workers is intensified and multiplied, especially through premium delivery and loyal crowdsourcing. Premium delivery and loyal crowdsourcing require mandatory working hours and stricter management than crowdsourcing. For example, one customer complaint can result in a fine of less than 10 yuan for crowdsourcing workers, and the fine is around 50–200 yuan for premium delivery and loyal crowdsourcing workers.

So why do some workers choose the latter two, even though they are no better in terms of labour protection? This is because premium delivery and loyal crowdsourcing provide adequate orders, and crowdsourcing entails fewer orders distributed by algorithms, a strategy that pushes some workers to choose the former two. Adequate orders reduce the waiting time, which intensifies the workload, and workers can work as long as they want—extending working hours to the physical limits of the worker. As a result, workers can earn a higher monthly income. These two types meet the needs of internal migrant workers in particular. As discussed in Section 4, many internal migrant workers are separated from their families and are willing to work harder and longer due to their precarious social security situation pushing them to seek higher and immediate income. Although there is diversity among internal migrant workers, and workers who are family breadwinners tend to opt for premium delivery and loyal crowdsourcing, non-migrant workers are still distinct in the sector. Interviewees Tian and Hu (pseudonyms), the two non-migrant workers out of 21 interviewees, reported a different work–life balance compared to migrant workers. Both of them worked for crowdsourcing delivery, although Hu is the breadwinner in the family. Tian sometimes takes Cantonese morning tea in restaurants with family or friends before starting work at around 10 am, and Hu plays mahjong (a traditional Chinese four-player tile-based game) at weekends. The keywords in their narratives—weekend, family, and regular leisure activities—are rare in the stories of migrant workers.

6.2. Employment Structure of Platform Companies: A Four-Layer Design

Precarious employment is not only experienced by internal migrant workers in platform work; non-migrants in the traditional type of employment have also been experiencing flexibilisation and multiplication of labour. The labour force in the platform companies is mainly educated and skilled workers, with a small portion of internal migrant workers doing unskilled work. The Chinese *hukou* system transforms rural into urban *hukou* when students enter universities. Therefore, educated workers mainly have urban *hukou*, although they may

initially be from rural villages. Our research finds that platform companies have widely used flexible employment as an important cost-saving strategy. According to the 34 interviews with platform representatives, we summarise the flexible employment structure as a four-layer design, namely: (a) full-time and well-paid employment for core functions; (b) outsourcing employment for supportive functions such as administration and customer services; (c) dispatched employment for cleaning and facility maintenance; and (d) diversified partnership for labour management and services delivery.

6.2.1. Direct Employment for Core Functions

Our research finds that there are three distinct core functions in firms for which human resource managers reserve a considerable budget: (a) internet technology, which guarantees the internet infrastructure and advances the innovation of firms; (b) operations that design competitive services or goods for customers and deliver them efficiently; and (c) management, which supports the company as a whole. Not surprisingly, most firms provide full-time jobs with relatively generous benefits for these core positions. For instance, S company, which runs live broadcasting platforms, reserved 70% of their total of approximately 4,000 positions for internet technology-related programmers and engineers. Firms recruit core workers from elite universities, both locally and abroad, and offer them payment above average. The representative of S company was proud of its highly rewarded incentive mechanism: The company offers those who achieve the goals of innovative projects up to 20 times their monthly income as a reward. Platform companies try to create a satisfying environment to retain core workers, but simultaneously, the work is highly intensive and competitive. Forced ranking systems are widely used. AC platform organised employees into groups and evaluated their input and output at every stage. While workers in groups that made profits received enviable awards, workers in less profitable groups could be forced out of groups and companies.

6.2.2. Outsourcing and Dispatched Employment for Skilled and Non-Skilled Supportive Work

The employment relations of ancillary positions in platform companies are complex; indeed, they cannot simply be summarised as peripheral. For supplementary functions, such as parts of HR management and administration, sales and marketing, and call centres, platform companies rely on outsourcing. The practices of firms vary according to the different value contributions defined by the employer. However, this mainly relates to skilled work that requires a certain level of education and skills. If platform companies hire them directly, the labour cost is high because of the high-level salaries and benefits. In outsourcing employment, contractors, usually small-to-medium size companies, build up formal labour relationships with skilled workers with proper labour contracts and social insurance, but at a lower level. Firms still exercise significant control over the daily practices of workers. The ZZ platform outsourced management of regional service to AB company, and the workers employed in AB company call ZZ platform their “headquarters,” although they know ZZ platform or its subsidiary does not employ them. Outsourced workers in AB company report to “headquarters” weekly and communicate with representatives of ZZ platform for detailed checks regarding promotional items and activities and so on.

Another layer of employment in firms is of unskilled workers, such as cleaners, security guards, and facility maintenance staff. Unskilled internal migrant workers mainly take on these kinds of work. Workers in this type of employment usually build up relationships with third-party labour services agencies, and workers may sign labour contracts and enjoy the lowest level of social insurance. However, contracts could be terminated quickly

without compensation. In other cases, workers have no labour contract with either platform companies or third-party agencies. Introducing third-party agencies lowers the cost of labour and avoids legal responsibility. E platform, a ride-hailing platform, uses dispatched workers for canteen, cleaning, and security services, as does T platform, an information services platform. At AC company, dispatched workers account for some 3,000 workers from a total workforce of 8,000 employees, primarily for “basic and replaceable tasks, such as facility maintenance and testing” (interview with HR in AC company). The AC company provides a channel for the best-performing dispatched workers (around 10%) to become formal employees. Others, however, remain on dispatched status, even if they stay with the company for a few years: “They work really hard because they have the opportunity for promotion” (interview with HR in AC company).

6.2.3. The Partnership of Labour Management for Services Delivery

The partnership of labour management for services delivery is the fourth layer of employment in the platform economy. The platform-dependent partners include, but are not limited to, suppliers of goods or services and labour-management agencies. Platforms and firms are highly co-dependent as one cannot function without the other (Kenney & Zysman, 2020)—for instance, the ride-hailing E platform partnered with a few car-rental companies in Dongguan. The drivers working for the E platform rent cars from a car rental, and the rental company helps the drivers get proper licenses for the ride-hailing platforms. An interview with Dongguan B car rental company shows a close relationship between the E platform and the car rental companies:

Staff in E platform would ask us to come to their office regularly. The government requires E platforms to follow the new regulations on (getting a special) driver’s license and car license (for ride-hailing services), and we are responsible for the driver’s license.

In summary, we identify four employment types deployed by platforms and elaborate on the considerations of platform companies behind the arrangements. It is noted that the actual practices may be more complicated and less clear-cut. Some companies tend to deny the dispatched and outsourcing arrangements and prefer to call all “partners” regardless of the legal relations. Furthermore, the layer four “partnership” could be diverse, ranging from various service delivery institutions to independent individuals. However, little information is available on how platform workers are organised because HR departments generally do not consider platform workers as part of a company’s workforce.

Employment practices in platform companies indicate changes in the traditional workforce in this sector. Migrant and non-migrant divisions still play a role in differentiating various levels of contracts and social benefits, but the variety is more complex. The organisational boundary between internal and external is blurred (Connelly et al., 2021). In this study, some internal functions of organisations, which entail skilled and non-skilled supportive work, are outsourced or dispatched to reduce labour costs. The platform companies heterogenise based on elite educational backgrounds and internet and technology skills, differentiating some workers from others as more privileged. However, the core-supportive distinction is also fluidly defined by the employer. Even the core function and internet skills do not guarantee preferential jobs in many cases. Platforms also outsource some programming tasks to other smaller companies. Labour is multiplied through the complex work design, which diversifies and heterogenises workforces into sub-groups with different functions and characteristics.

6.3. Discussion: The Political Economy That Proliferates the “Multiplication of Labour”

The multiple types of labour arrangements at the platform work level are used to intensify working hours and workloads in heterogeneous groups of workers at low or no cost, while the multiple layers of labour relations at the level of platform companies are introduced for some internal functions for less privileged groups, differentiated by skills, educational backgrounds, migrant status, and so on. *Hukou* is a differentiation tool in the labour market that multiplies labour, although platform companies and labour laws do not directly discriminate against internal migrant workers. Employers and platforms exploit the inequality and gaps in both the labour market and policy implementation, piloting and applying the most radical flexibilisation methods to the most disadvantaged in the labour market. Moreover, the general labour market trend towards precariousness and flexibility provides ample opportunities for flexible platform work modes. The use of dispatched workers is one example. Not only do the HR managers of platform companies use dispatched workers as cleaners and security guards, but the management stations of the ZZ platform also use them to complicate the employment relations with delivery workers.

The state has a significant role in allowing fragmented and precarious labour relations practices with sophisticated multiple layers. The Chinese government has encouraged the internet industry and platform economy to boost growth during the economic downturn. Developing the internet-related economy has been a national strategy since President Xi Jinping’s speech at the World Internet Conference in Wuzhen in 2015, directing China to become a global internet powerhouse (Jinping, 2015; H. Y. Liu, 2023). The industry practices of informatisation and precariousness have been bolstered by China’s priority to drive economic growth. Under this direction, labour protection can be of secondary importance, especially during periods of economic hardship (Lin, 2022). While supporting the platform economy through policies and budgets, the state has taken a *laissez-faire* attitude to regulating platform work. Easy-accessed platform jobs and other flexible but precarious jobs are considered buffers to rising unemployment. Premier Li Keqiang summarised that the attitude to take is to stay open to newly emerging things, and regulatory rules should be “tolerant” (*bao rong*) and “cautious” (*shen shen*; Li, 2018). Therefore, jobs in the platform economy are being created in the era of “new normal” labour relations in which labour standards are lowered and protections are further loosened. Governments freeze the minimum wage standard, intervene in labour protests through police action, and crack down on labour NGOs and activists to maintain a stable society and a business-friendly environment (Chan, 2020). Without much intervention from the central and local state, new types of platform-dependent work are generated, and various non-standard employment patterns are further developed. It is noted that there is a shift in attitude towards regulating platform work in 2021; however, as it is later than our field research, we will not elaborate on it in detail.

In summary, the complexity of employment relations in the Chinese platform economy can be understood through the lens of the multiplication of labour. Compared to Altenried’s (2021) study on international migrant workers in the platform economy, Chinese internal migrant workers are influenced by *Hukou* and the post-socialist rural-urban dynamics in China, while platforms have adopted multiple types of labour arrangements to intensify working hours and workload. Furthermore, managerial practices in platform companies witness similar trends of multiplication. Labour practices have become more diverse and complicated, with blurred boundaries between employer–employee and internal–external relationships. The multiple layers of work are diversified by matching workers with various characteristics, while education, skills, and migrant status are applied as differentiation tools. Furthermore, the multiplication of labour in the

Chinese platform economy is better understood in the context of the Chinese state, which prioritises economic growth over workers' protection during times of economic hardship.

7. Conclusion: Impact of the Multiplication of Labour in the Chinese Platform Economy

In summary, this research adds to the “multiplication of labour” lens in the platform economy by investigating the experiences of Chinese internal migrants and the managerial practices in platform companies. The multiplication of work is not only through the algorithmic management of platforms to nudge migrant workers but also through the multiple designs of work arrangements to intensify workers' working hours and workloads. Furthermore, the multi-layered structures of employment suggest the consistency of platform work and other forms of precarious employment in the platform economy. The “multiplication of labour” lens provides a useful and critical perspective to address workers' experiences, industrial practices, and the wider political context.

Ultimately, it is essential to ask what implications are present with the multiplication of labour in the platform economy. The practices of multiple layers of flexible employment in the platform economy could push the Chinese labour market further towards precariousness. The platform economy is one of the leading sectors in the country and its labour practices will most likely serve as a pathway for other industries. It is not surprising to see many traditional enterprises rapidly seeking a digital transformation, including reorganising their labour force by using platforms and new internet technologies.

Another question is how the multiplication of labour influences workers. As argued by Mezzadra and Neilson (2013, p. 91), it has challenged the hegemony of organised “industrial workers over the entirety of dependent workers” in economically advanced countries. The study of Chinese food delivery workers also demonstrates the eroded solidarity among workers with various labour arrangements (Lei, 2021). In the platform economy, workers are stuck in a labour market that is fragmented, segmented, and multiplied. This situation raises unanswered but crucial questions. For instance, what will be the alternatives for workers who do not want to choose from multiple options, each with the same level of precariousness? How can the agency of workers overcome the high levels of flexibilisation and multiplication in the workplace in a broad sense?

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Conflict of Interests

The authors declare no conflict of interests.

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