

http://ojs.bbwpublisher.com/index.php/PBES

Online ISSN: 2209-265X Print ISSN: 2209-2641

Analysis of Influencing Factors of Platform Economy on the Allocation Efficiency of Labor Resources

Yifan Wang*

The University of Queensland, Brisbane, Brisbane 4072, Australia

Copyright: © 2025 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: Against the backdrop of the rapid development of digitalization today, the platform economy, as an emerging economic form, is profoundly changing the operation mode and resource allocation methods of the labor market. The efficiency of labor resource allocation is an important indicator to measure the vitality and potential of economic development in a country or region. It is not only related to the welfare level of workers but also directly affects the productivity level and development quality of the entire society. With the help of modern information technology means such as Internet technology, big data algorithms, and mobile communication devices, the platform economy closely connects originally scattered individual workers with employers, building a large and complex networked trading platform. Based on this, this paper focuses on the impact and role of the platform economy on the efficiency of labor resource allocation, aiming to stabilize the efficient operation of the labor market.

Keywords: Platform economy; Labor resources; Allocation efficiency; Influencing factors

Online publication: September 10, 2025

1. Introduction

1.1. Definition of platform economy

Platform economy relies on internet technology to build a bilateral or multilateral market system, with participants including service providers, consumers, producers, and other relevant parties [1]. The core of this economic form lies in establishing an open network platform that effectively integrates scattered information, resources, and services to achieve precise connection and efficient matching between supply and demand sides. In this process, the platform not only acts as a transaction medium but also serves as a resource integrator and distributor, promoting the optimal allocation of various resources and improving the operational efficiency of the entire market. Moreover, platform economy emphasizes resource integration rather than simple transaction matching. It uses internet technology to connect numerous participants, forming a large and complex ecosystem. Within this system, various resources can be recombined and optimally allocated [2]. In this way, it not only meets enterprises'

^{*}Author to whom correspondence should be addressed.

demand for specific types of talents but also helps workers find more suitable job positions, maximizing the degree of job-person fit.

1.2. Characteristics of platform economy

1.2.1. Flexibility

Platform economy has broken the time and space constraints of traditional working modes. With the help of internet platforms, workers are no longer restricted by fixed workplaces and can seek job opportunities worldwide. For example, a freelance designer can provide services to enterprises in different countries without worrying about obstacles caused by geographical locations. This possibility of remote work has greatly enhanced the flexibility of the labor market, allowing individuals to choose the most suitable working environment and schedule according to their own situations. Meanwhile, platform economy also enables workers to participate in work either part-time or full-time, meeting the needs of different groups of people for work intensity and rhythm ^[3]. Some people may prefer short-term projects or scattered tasks, while others hope to maintain a stable career development path, and platform economy can provide corresponding solutions.

1.2.2. Diversity

With the development of digital technology, emerging industries such as shared mobility, online education, and self-media creation are constantly emerging, providing job seekers with more abundant choices. These new types of occupations not only broaden employment channels but also promote changes in society's demand for skills, stimulating workers' motivation for self-improvement [4]. For instance, online education platforms have enabled many people with professional knowledge to find new development directions. They can share their experience through methods such as recording courses and live teaching, attracting a large number of students eager to learn new skills. In addition, platform economy has promoted the integration and development of cross-industry fields, making originally distinct professional areas begin to infiltrate each other. For example, traditional media practitioners can transform into content creators with the help of short-video platforms. Such cross-boundary cooperation not only increases the number of employment positions but also promotes the exchange and innovation of knowledge and technology.

2. Factors affecting the low efficiency of current labor resource allocation

2.1. Unreasonable structure of the labor market

From the perspective of industrial distribution, traditional manufacturing industries absorb a large number of laborers. However, with technological progress and industrial upgrading, some positions in these industries are gradually replaced by automated equipment, putting laborers originally engaged in such work at risk of unemployment and forcing them to seek employment opportunities in other industries [5]. Nevertheless, although emerging industries are developing rapidly, the talents they need must possess high professional knowledge and skill levels. For laborers transferring from traditional industries, there are insurmountable knowledge and technical barriers. The mismatch between supply and demand hinders the flow of labor between different industries and exacerbates the structural contradictions in the labor market.

From a geographical perspective, the eastern coastal areas attract talents from all over the country due to factors such as a high level of economic development and a sound industrial system, forming a situation of highly dense labor ^[6]. Correspondingly, although the central and western regions also have a certain number of labor

resources, due to the relatively backward local economic development, insufficient job opportunities, and poor working environment, they cannot effectively retain local labor, resulting in a brain drain.

In terms of enterprise scale, large enterprises can provide more favorable salary packages and broad career development space by virtue of their own strength, thus being more favored by job seekers. In contrast, although small and medium-sized enterprises (SMEs) are numerous and occupy an important position in the national economy, they have limited funds and weak anti-risk capabilities, putting them at a disadvantage in attracting and retaining outstanding talents. This leads to the excessive concentration of labor in a few large enterprises, while many SMEs face difficulties in recruiting workers, disrupting the ecological balance of the labor market, and restricting the effective utilization of labor resources in the entire society [7].

2.2. Information asymmetry in the labor market

In the traditional labor market, there exists a significant information gap between employers and job seekers, making it difficult for both parties to achieve effective matching. For job seekers, they usually cannot fully and accurately understand key information such as the internal working environment of the enterprise, career development prospects, and specific salary packages. This makes it hard for job seekers to make optimal career choices, leading to misjudgments of their own career development directions and thus affecting their personal career planning. Secondly, the channels for releasing recruitment information are scattered and lack unified standards. Different enterprises post recruitment information on different platforms, with vastly different information formats and description methods. To obtain complete information, job seekers have to spend a lot of time and energy browsing multiple websites or applications, which increases the cost of job hunting. Due to the lack of effective supervision, some enterprises may exaggerate the advantages of positions or conceal work risks, further exacerbating information asymmetry [8].

For employers, information asymmetry also brings many challenges. On the one hand, enterprises find it difficult to judge whether the actual ability of job seekers meets the job requirements during the resume screening stage. Many job seekers beautify their resumes to enhance their competitiveness, and it is hard for enterprises to accurately evaluate their real level based solely on resume content. On the other hand, the information that enterprises can obtain during the interview process is also limited [9]. Although they can gain an in-depth understanding of candidates through the interview link, it is still difficult to fully grasp the true situation of their work attitude, teamwork ability, and adaptability.

2.3. Low match between labor skills and market needs

On one hand, there is a significant discrepancy in skill structure between talents cultivated by the traditional education system and the demands of modern enterprises. The update speed of universities' major settings and curriculum content fails to keep up with the rapidly changing trends in technological development, leaving graduates' knowledge and skills unable to meet practical work requirements. For example, the information technology industry has developed rapidly in recent years, with new technologies emerging constantly in fields such as artificial intelligence and big data. However, the teaching of related majors in some universities remains at the level of basic theories, lacking in-depth explanations of cutting-edge technologies. As a result, computer science graduates often need to spend a lot of time on secondary training after entering the workplace to adapt to job demands [10].

On the other hand, some workers have limited professional skills and face narrow channels for improvement.

Older workers or those engaged in traditional industries, who have long been engaged in repetitive labor, possess relatively single skills. When their industries are impacted by emerging industries, it is difficult for these workers to quickly transition to other positions or new fields. Meanwhile, the distribution of vocational skills training resources for in-service personnel in society is uneven. High-quality training programs are mostly concentrated in developed regions and large enterprises, leaving employees of small and medium-sized enterprises and workers in remote areas with few opportunities to access high-quality training. This further exacerbates the disconnection between labor skills and market demands.

Furthermore, there is a phenomenon in the recruitment process of enterprises where academic qualifications are valued over skills. Excessive attention is paid to the educational background of job seekers while their practical operational abilities are ignored, resulting in the overlooking of talents who truly possess the skills required for the positions. ^[11] In addition, with the acceleration of globalization, multinational corporations frequently adjust their layouts in the domestic market, creating a large number of new job positions. However, domestic laborers have insufficient ability to learn and absorb foreign advanced technologies and management concepts, making it difficult for them to keep up with the pace of the international market. This low degree of matching not only reduces the effective utilization rate of human resources but may also hinder the healthy development of the local economy.

3. Factors influencing the efficiency of labor resource allocation in platform economy 3.1. Information sharing and optimized matching

Within the framework of platform economy, the matching process between workers and employers has undergone fundamental changes. With the strong support of internet technology, both parties can achieve efficient information exchange on specific platforms, facilitating in-depth two-way communication regarding job seekers' skill demonstrations, work experience sharing, and career expectations [12]. For instance, many online recruitment platforms allow job seekers to upload detailed resumes, portfolios, and even video introductions, enabling employers to gain a more intuitive understanding of candidates' comprehensive qualities. Employers can also promptly update key information such as job requirements and corporate culture, ensuring that job seekers obtain the most accurate overview of the enterprise.

On the other hand, the real-time circulation of information has broken down many barriers in the traditional labor market. Geography is no longer a limiting factor for the mobility of outstanding talents, as job seekers can easily access work opportunities worldwide through the internet. Meanwhile, flexibility in terms of time has also significantly improved. Previously constrained by fixed work schedules, job seekers can now browse recruitment information and respond quickly at any time. Enterprises, too, no longer have to wait for specific recruitment cycles; they can initiate the interview process immediately once suitable candidates appear.

Furthermore, the platform economy has enhanced the transparency of the labor market. All participants can easily obtain real feedback on salary levels, welfare benefits, and industry development prospects. This highly transparent environment encourages enterprises to pay more attention to their own image building and strive to provide more attractive working conditions, thereby further stimulating the vitality of the entire market. Workers can also make rational decisions based on sufficient information, avoiding misjudgments or losses caused by information asymmetry, and effectively promoting the continuous improvement of resource allocation efficiency [13].

3.2. Enriching job positions and enabling flexible employment

The traditional employment model is mainly based on full-time and fixed positions. However, in the context of the platform economy, forms such as part-time work, freelance work, remote work, and short-term contracts have gradually become the norm. The new employment methods have broken the constraints of time and space, providing workers with more diversified choices.

Firstly, part-time work allows workers to participate in multiple projects simultaneously and accumulate experience in different fields. For example, a designer can provide services to multiple clients in their spare time, which not only increases their sources of income but also broadens their professional horizons. For enterprises, it enables more flexible allocation of human resources, reduces labor costs, and improves operational efficiency. Secondly, freelancers have achieved true independent entrepreneurship with the help of the platform economy. They directly connect with clients through various online platforms, reducing intermediate links and improving transaction transparency [14]. Take programming as an example; developers can freely choose projects they are interested in to participate in, without being restricted by region or company size. Thirdly, the remote work model has changed the traditional office model. With the help of Internet technology and collaborative tools, employees can work anytime and anywhere. For some knowledge workers, remote work not only improves work efficiency but also enhances the quality of life. For instance, tasks such as copywriting and data analysis can be completed online, saving commuting time and reducing the negative impacts caused by problems like traffic congestion.

Fourthly, short-term contracts provide enterprises with greater flexibility in employment. In the face of fluctuations in market demand, enterprises can quickly adjust their personnel structure according to actual business needs. For example, during the peak season of e-commerce promotions, logistics companies can sign short-term contracts to quickly expand their delivery teams; during the off-season, they can timely reduce labor costs. For job seekers, short-term contracts offer more opportunities to try new fields, helping them accumulate experience in different industries and enhance their comprehensive competitiveness.

3.3. Adjusting salaries to activate the market

In the traditional employment model, significant wage gaps between regions and industries have led to idle or mismatched labor resources in some areas. However, under the platform economy model, the salary structure has become more transparent and dynamic. Enterprises can quickly adjust salary standards according to market demand to ensure they attract suitable talents. For example, although jobs like food delivery riders and online ridehailing drivers involve high work intensity, their relatively high piece-rate wages have attracted a large number of job seekers, especially young people who are eager to earn high returns through short-term intensive work.

The platform economy also grants workers greater autonomy, allowing them to choose career paths that best suit their development based on personal preferences. Some emerging professions, such as live streamers and self-media creators, have attracted many job seekers with their flexible working hours and considerable incomes [15]. These professions are not restricted by fixed workplaces, enabling workers to carry out their jobs anytime and anywhere. As a result, even in remote areas, people can enjoy salary packages similar to or even higher than those in big cities, breaking down geographical barriers and promoting talent mobility across the country.

The salary growth driven by the platform economy is not an disorderly expansion but a reasonable distribution guided by market demand. On one hand, it encourages workers to continuously improve their skills to adapt to market changes; on the other hand, it prompts enterprises to optimize internal management processes and enhance production efficiency and service quality. Over time, this will form a positive cycle: outstanding talents

gather due to high salaries, enterprises become more competitive with high-quality employees, and this in turn drives the entire industry and even the national economy to move toward a higher level.

4. Conclusion

To sum up, the platform economy has played an irreplaceable role in improving the efficiency of labor resource allocation. By breaking down geographical barriers, the platform economy connects employers and job seekers nationwide and even globally, providing a broader range of employment options for various types of talents, and enhancing both the success rate of job hunting and the accuracy of talent matching.

Through optimizing information-sharing mechanisms, expanding the variety of job positions, and adjusting salary and welfare systems, we can not only address the existing major issues but also prepare for potential new challenges in the future. This will inject new vitality into the sustained and healthy development of China's economy and society.

Disclosure statement

The author declares no conflict of interest.

References

- [1] Cai F, 2018, Has the Potential for Agricultural Labor Transfer Been Exhausted. Chinese Rural Economy, 2018(9): 2–13.
- [2] Hao D, 2020, The Effect of Labor Allocation Structure in China's Economic Growth: 1953–2018. Chinese Journal of Population Science, 2020(2): 30–43.
- [3] Zhang R, Shen K, 2024, The Impact of Platform Economy Development on Industry Wage Gap. East China Economic Management, 38(9): 85–95.
- [4] Cheng C, Liu Y, 2024, Platform Economy Development and Rural Entrepreneurship Vitality. Studies in Science of Science, 42(10): 2138–2149.
- [5] Sun Y, Shi W, Liu Y, 2023, Can Platform Economy Break Labor Market Segmentation. Shanghai Journal of Economics, 2023(10): 51–62.
- [6] Ji Y, Zhang M, Feng S, 2022, Research on the Impact of Platform Economy on Industrial Structure Upgrading—From the Perspective of Consumption Platforms. Systems Engineering—Theory & Practice, 42(6): 1579–1590.
- [7] Xiao W, 2019, Flexible Employment, New Labor Relations and Improving Employability. Fudan Journal (Social Sciences Edition), 61(5): 159–166.
- [8] Liu G, 2023, Identification of Employment Status of Digital Platform Workers and Paths to Realize Social Security Rights and Interests. International Economic Review, 2023(1): 114–130.
- [9] Li L, Zhou G, 2022, Labor Employment and Income Distribution in the Platform Economy: Trends and Policy Responses. International Economic Review, 2022(2): 46–59.
- [10] Zhou Y, Yang D, Wang L, 2022, The Impact of Digital Economy on China's Labor Resource Allocation—Based on Mechanism and Empirical Analysis. Inquiry into Economic Issues, 2022(4): 154–163.
- [11] Bai J, Liu Y, 2018, Can Outward Foreign Direct Investment Improve China's Resource Misallocation. China Industrial Economics, 2018(1): 60–78.

- [12] Jiang T, 2022, Mediation Effect and Moderation Effect in Empirical Studies of Causal Inference. China Industrial Economics, 2022(5): 100–120.
- [13] Sun J, 2021, Antitrust Regulation of Digital Platforms. Social Sciences in China, 2021(5): 101–127.
- [14] Lu Q, 2021, Production Methods, Employment Patterns and Innovation in Social Insurance Systems. Journal of Social Sciences, 2021(6): 12–19.
- [15] Hu H, Zhang P, Zhang R, 2020, Internet Popularization and Convergence of Provincial Wage Gaps in China. Economic Review, 2020(1): 96–111.

Publisher's note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.