
DISPARITIES IN CHINA'S LABOUR MARKETS BETWEEN URBAN AND RURAL AREAS

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Abstract

This paper focuses on examining the urban-rural gap in China's labour market, using CHFS data. The findings indicate that rural workers in China exhibit a high employment rate due to lower education levels, making it easier for them to secure basic jobs in society. However, they often face lower wages and lack housing and medical insurance, making it challenging for them to sustain themselves in urban areas. It is crucial to recognize that the economic well-being of workers is not solely determined by wage income but also by working conditions and stability. Disparities between urban and rural labour forces cannot be overlooked, as migratory workers also encounter distinct labour agreements and social welfare rights. Research suggests that individuals with lower education levels tend to fare better in rural areas, whereas those with higher education levels typically thrive in urban settings.

Keywords: Disparities; Inequality; Labour Markets, Urban; Rural; China.

1. INTRODUCTION

The migration of rural workers to cities has significantly transformed the urban labour market (Mazumdar, 2019). However, the primary occupations of rural workers predominantly involve manual and unskilled labour, marking a substantial difference from urban labour. The segmentation of the labour market resulting from the influx of rural workers underscores the inequality between urban and rural areas. Typically, rural workers endure long work hours and receive lower wages. Their limited education inhibits them from commanding higher salaries, and employers often fail to provide them with insurance coverage (Mazumdar, 2019).

Studying the urban-rural labour imbalance in China is crucial as it will impact the success of ongoing reforms, social stability, and overall well-being. China must take measures to narrow the urban-rural income gap or delve into its root causes to manage it effectively (Fleisher & Yang, 2006). Income inequality between urban and rural areas persists as a significant issue in China. Migrant and urban workers receive disparate pay

for the same job. Despite government regulations aimed at addressing unpaid wages and unfair charges against migrant workers, challenges remain (Fleisher & Yang, 2006). The prevalence of labour-intensive industries in cities means that working conditions for migrant labourers have not improved significantly. Surveys indicate that migrant workers face worse employment prospects and lower salaries compared to urban workers (Fleisher & Yang, 2006). Addressing these disparities is crucial for achieving greater equity and stability in China's labour market.

Hence, discrimination in the labour market is identified as the root cause of the wage disparity between migrant workers and urban residents. Despite possessing similar skills and educational backgrounds, urban residents and migrant workers are often subjected to unequal treatment in terms of employment prospects, career paths, advancement opportunities, and wage conditions (Chen & Hamori, 2013). This disparity highlights systemic biases within the labour market that need to be addressed to ensure fairness and equal opportunities for all workers, regardless of their origin or residency status.

The research in this paper delves into the employment discrimination faced by migrant workers, particularly the phenomenon where some migrants are confined to low-level jobs despite possessing similar qualifications, while others find themselves engaged in unsuitable types of work. The primary aim of this article is to aid the government in addressing and ameliorating the inequality between urban and rural labour forces. It seeks to empower migrant workers to enhance their competitiveness in informal employment sectors.

The current employment situation in China is concerning, particularly for college graduates who often face challenges in securing desirable jobs despite their high educational qualifications. Their lack of social and work experience exacerbates this struggle. Meanwhile, migrant workers, who constitute an indispensable group in China's social and economic development, possess abundant labour experience. However, when seeking employment in cities, they do not receive the same benefits as urban employees (Chen & Hamori, 2013). This disparity underscores the need for policies and initiatives to address the unequal treatment of various segments of the labour force in China. The government has undertaken efforts to enhance working conditions for migrant workers with the aim of improving farmers' income levels. These efforts include abolishing the "card" system, prohibiting arbitrary fees for migrant workers, and enacting legislation to address unpaid wages (Ma, 2012). However, challenges persist due to factors such as saturation of urban labour-intensive industries with workers, rising living expenses, job relocation needs, and the social exclusion and economic discrimination stemming from the registered residence system. Migrant workers encounter limited employment opportunities compared to urban workers due to the barriers imposed by the registered residence threshold. Additionally, as noted by Ma (2012), migrant employees often face constraints on their political and democratic rights and struggle to advance professionally. Despite working in the same fields and

performing similar jobs, income disparities persist between migrant workers and urban counterparts. Addressing these systemic inequalities remains a pressing issue for ensuring fair and inclusive labour practices in China.

While urban residents typically formalize labour contracts with their employers, migrant workers often work informally without such agreements. Consequently, salaries for migrant workers are sometimes delayed, withheld, or entirely unpaid. Despite often working under harsher conditions than urban residents, migrant workers do not always receive the same welfare benefits (Fleisher & Yang, 2006). For instance, news reports have highlighted cases where migrant labourers were stranded at roadside stations on the eve of the Spring Festival because they hadn't received their wages and couldn't afford to travel to their hometowns. Even when contracts are in place or when businesses subcontract projects, the welfare benefits are gradually eroded as each party prioritizes its own interests. Eventually, some businesses become unable to pay migrant workers' wages, leading to situations where employers abscond (Fleisher & Yang, 2006). The framework for formal urban employment shapes China's social security and urban welfare systems. However, migrant workers have historically been excluded from these systems as the majority are employed in the informal sector within cities (Chen & Hamori, 2013). Consequently, migrant workers are ineligible for the various preferential policies established under urban housing reforms, even if they invest in commercial real estate. They lack access to formal employment benefits such as unemployment insurance and encounter difficulties in seeking assistance from labour administrative departments. Additionally, they face challenges in obtaining the same treatment for bank mortgage loans as urban citizens (Chen & Hamori, 2013). These disparities underscore the need for reforms to ensure equitable access to social welfare and assistance for migrant workers in urban areas.

While there has been a gradual expansion of social insurance coverage for migrant workers, the proportion of those covered remains limited. Migrant employees exhibit significant heterogeneity in terms of factors such as age, geographical location, and economic activities (Chen & Hamori, 2013). However, the existing social insurance system often fails to account for this complexity, leading to many regulations being irrelevant to their needs. Consequently, despite their inclusion in the system, migrant workers face numerous operational challenges due to the lack of a comprehensive and tailored design (Fleisher & Yang, 2006). Establishing an equitable work environment for migrant workers can serve as a catalyst for sustainable economic development. The current disparity in employment opportunities between urban and rural areas dampens individual motivation for labour-intensive investments. Reducing employment discrimination in the labour market for migrant workers not only fosters faith in human capital investment but also contributes to cultivating a harmonious work environment. This, in turn, enables the full utilization of migrant workers, who represent a crucial human resource (Chen & Hamori, 2013).

Concerns regarding poverty and inequality are mounting in China. Figure 1 demonstrates that China ranks second highest in income inequality based on the GINI index and the 90/10 income share. While some level of inequality can spur economic development by incentivizing productivity and efficiency, excessive inequality hampers growth (Breunig and Majeed, 2020). For instance, high levels of inequality restrict investment in human capital among impoverished households due to limitations in financial markets and credit access (Aiyar and Ebeke, 2020; Cerra et al., 2021). Consequently, poverty becomes entrenched across generations, hindering both productivity growth and social mobility (Aiyar and Ebeke, 2019).

The current employment landscape is challenging, particularly for college graduates who struggle to secure jobs despite their advanced degrees. Farmers, integral to social and economic development, possess extensive labour experience. Therefore, there is a pressing need for systematic research on employment discrimination, given its profound practical implications (Aiyar and Ebeke, 2019). In addition to maximizing the output of migrant workers, a fair employment environment can help college students find jobs despite their academic qualifications and lack of experience and advance sustainable economic growth (Aiyar and Ebeke, 2019). Furthermore, job discrimination prevents migrant workers' labour from being quickly turned into money, decreasing individual enthusiasm for labour capital investment. Eliminating migrant workers' employment discrimination on the job market can inspire trust in the use of human resources. A peaceful workplace atmosphere may be created, and migrant workers' valuable human resources can be fully used by eliminating employment discrimination in the labour market (Aiyar and Ebeke, 2019).

2. LITERATURE REVIEW

For years, researchers and policymakers have been studying the disparity in China's labour markets between urban and rural areas. This dual structure is unmistakable, with urban workers experiencing superior working conditions, higher incomes, and greater job security compared to their rural counterparts. Studies indicate that the country's hukou system, which restricts the mobility of rural labourers to urban areas, is the primary factor contributing to this imbalance (Hung, 2022). Additionally, the lack of access to education and training opportunities for rural workers exacerbates inequality in the Chinese labour market. Many rural labourers lack the necessary knowledge and credentials to compete for higher-paying jobs in urban areas. Consequently, they often find themselves limited to low-paying positions in the agricultural sector or low-skilled, low-wage manufacturing industries (Hung, 2022).

Despite recent government efforts to reform the hukou system and improve the living and working conditions of rural workers, significant obstacles persist. One major challenge is the lack of investment in rural areas, which hinders the creation of new job opportunities. Additionally, many rural individuals continue to face prejudice and exclusion from the urban job market (Hung, 2022).

The hukou system, access to education and training, discrimination, exclusion from the urban job market, and other factors collectively contribute to labour market inequality between urban and rural areas in China. To effectively address these issues and improve the living and working conditions of rural workers, policy initiatives and investments in rural regions will be essential (Hung, 2022). Urban-rural inequality in China's past can be understood by examining historical policies toward urban and rural workers. For example, the hukou system, which restricted rural-to-urban migration, played a significant role in perpetuating this disparity. Additionally, the dual-track labour market implemented various degrees of benefits and protections for urban and rural employees, further contributing to inequality (Hung, 2022). To assess the current level of disparity between urban and rural workers in China, it would be essential to examine recent data on wages, employment rates, and working conditions for both urban and rural workers. Additionally, comparing differences in access to social benefits such as healthcare, education, and employment opportunities would provide valuable insights into the extent of the disparity (Hung, 2022).

Several factors affect the labour market differently in China's urban and rural areas. An examination of governmental regulations, market factors, and cultural norms is crucial to understanding the persistence of the wage gap between urban and rural workers in China.

Governmental regulations play a significant role in shaping labour market dynamics. Policies related to labour rights, minimum wage laws, and social security provisions may differ between urban and rural areas, impacting wage levels and working conditions.

Market factors, such as industry composition and economic development, also influence the labour market differently in urban and rural regions. Urban areas may have a higher concentration of industries offering higher-paying jobs, while rural areas may be more reliant on agriculture and low-skilled manufacturing.

Cultural norms and societal expectations can further exacerbate disparities in the labour market. Perceptions of urban versus rural work may differ, influencing job preferences and opportunities. Additionally, factors such as educational attainment and access to training programs may vary between urban and rural populations, affecting skill levels and employability.

Understanding how these factors interact and contribute to the wage gap between urban and rural workers is essential for developing targeted policies and interventions to address inequality in the labour market. The hukou system, which inhibits rural-to-urban migration and hinders rural employees' access to job opportunities and benefits in urban areas, continues to contribute to the disparity between urban and rural workers in China's labour market (Hung, 2022).

Inequality between urban and rural employees in China's labour market is primarily perpetuated by market forces. The growing disparities between urban and rural workers stem from the country's shift towards a more market-oriented economy. This shift has favoured urban workers, who have access to better-paying jobs with improved working conditions, while rural workers have been left behind (Hung, 2022). Furthermore, government policies aimed at addressing urban-rural inequality have not been effective in bridging the gap. Despite efforts such as increased investment in rural areas and subsidies for rural workers, disparities between urban and rural workers continue to widen. This suggests that current government policies are failing to effectively tackle the root causes of inequality (Hung, 2022). It is important to keep in mind that these hypotheses may need to be amended or refined considering more study and analysis because they are based on existing literature and trends.

In comparison to other nations, such as the United States, where labour laws offer protections for rural workers, the Chinese government may consider strengthening labour laws to safeguard the rights of rural workers. For example, in the United States, relevant labour contracts mandate that employers provide rural workers with a comprehensive written explanation of employment terms, including wages, benefits, employment period, location, compensation, deductions, transportation, and housing arrangements (Hung, 2022). Additionally, employers are required to pay regular insurance premiums to protect workers' legal rights and ensure compliance with federal, state, and local regulations governing living conditions. Moreover, the Fair Labour Standards Act (FLSA) in the United States establishes minimum wage standards, overtime compensation, record-keeping requirements, and child labour laws that apply to both full-time and part-time employees across various sectors, including private, federal, state, and municipal governments. Furthermore, the Occupational Safety and Health Act (OSHA) mandates that businesses provide workers with a safe and healthy workplace, including training on potential hazards. Additionally, the National Labour Relations Act (NLRA) protects workers' rights to engage in collective bargaining and other forms of mutual aid, ensuring their overall protection (Hung, 2022).

Implementing similar comprehensive labour laws and regulations in China could indeed help safeguard the rights and well-being of rural workers, ensuring fair treatment and improved working conditions. For example, establishing an organization akin to the Equal Employment Opportunity Commission (EEOC) could be beneficial. The EEOC in the United States is responsible for upholding federal laws that prohibit discrimination against job applicants and employees based on several factors such as race, colour, religion, sex, national origin, age, disability, or genetic information (Hung, 2022).

It is crucial to emphasize that these rules should apply to rural workers in China just as they do to all other workers in the United States. Rural workers should have the same rights and protections under the law, including the right to file complaints if they

believe their rights have been violated (Hung, 2022). By ensuring equal treatment and protection under the law, China can work towards creating a more equitable and just labour market for all its workers.

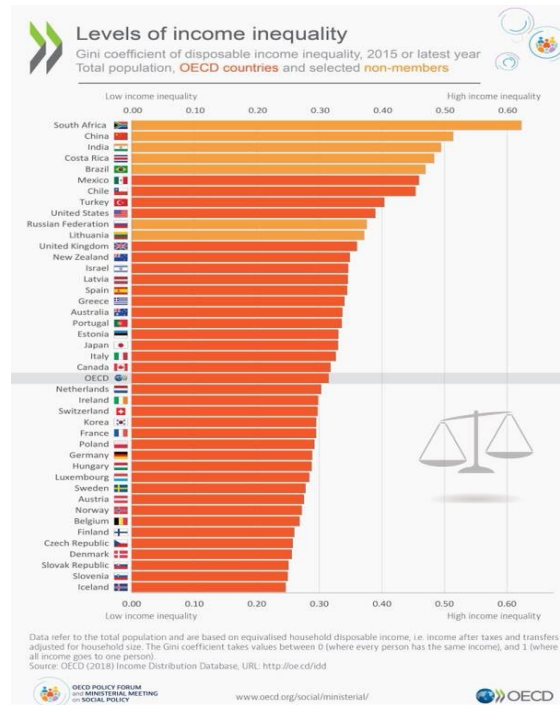


Figure 1. Income inequality in across countries

Source: OECD Income Distribution Database (2022)

A significant issue in China is the disparity between its urban and rural populations. The reform and opening policies have led to urban areas experiencing faster growth compared to rural areas, creating a substantial gap between the two. Consequently, urban and rural populations have unequal access to healthcare, educational opportunities, environmental quality, and job prospects ("Inequality - Income inequality - OECD data,"). This disparity is further evident in income discrepancies between urban and rural populations. Rural areas in China typically have lower income and wealth levels, leading to significant disparities in living standards between the two groups. Additionally, rural populations often face limited access to essential infrastructure and services such as healthcare.

Urban areas in China offer greater economic opportunities and social services, including job prospects and access to various amenities. In contrast, rural residents often lack access to these opportunities, particularly in underdeveloped and impoverished regions. These disparities persist due to the unequal distribution of resources and development between urban and rural areas ("Inequality - Income inequality - OECD data,"). Unbalanced demographic structure: Due to the economic differences between urban and rural areas, a large number of people have migrated

from rural to urban areas, resulting in an unbalanced demographic structure in both locations. Both rural and urban communities will face difficulties as a result of this mismatch, which might cause social and economic instability ("Inequality - Income inequality - OECD data,").

Rapid urbanization has led to significant environmental challenges in China, including resource depletion and pollution. Both urban and rural populations bear the brunt of these issues, but rural areas often face greater challenges due to limited resources and infrastructure. Fortunately, the removals of barriers to movement by the hukou system and improvements in transportation infrastructure have provided rural workers with more options for living outside their hometowns (Wang and Fu, 2019). However, what are the benefits for rural employees moving to cities? To address this question, our study aims to measure the disparity in the labour market between urban and rural areas in China using data from CHFS. Specifically, the study will examine differences in working conditions, wages, and the impact of education on regional inequality (Wang and Fu, 2019).

3. RESEARCH DESIGN, DATA AND METHODOLOGY

Before the reform and opening in 1955, migrant workers were not permitted to settle in Chinese cities, thus there was no issue with migrant workers at that time. However, institutional constraints were relaxed as a result of the reform and opening, granting migrant workers autonomy under the household contract responsibility system (Chen & Hamori, 2013). This allowed migrant workers to choose their own schedules and decide whether to work in rural areas or cities. Government incentives encouraging migrant workers to transition from agricultural production to seeking employment in urban areas have led to significant income disparities between urban and rural regions (Chen & Hamori, 2013). By 2000, 36.9% of the urban labour force comprised migrant workers. As of 2014, there were 274 million migrant workers in China, with this number continually increasing each year (Chen & Hamori, 2013).

However, the employment of migrant workers in cities is restricted by occupation and type of work due to government regulations. Industries that employ foreign labour are restricted, and there is a reservation of occupations list. Consequently, migrant workers are often limited to the secondary labour market and occupations such as cleaners, construction workers, waiters, and street sweepers (Hertel & Zhai, 2006).

Zhang (2010) examines employment discrimination against migrant workers in various industries, considering factors influencing employment for urban residents and the unique attributes of migrant workers. The author assesses the distribution of migrant workers across present and anticipated industries and calculates employment discrimination using a model (Table 1). Analysis of actual industry distribution reveals that migrant workers are predominantly employed in low-skilled, low-paying sectors such as retail, other services, and construction. Certain industries exhibit a low proportion of migrant worker employment, indicating reluctance to fully engage in

competitive labour markets. Consequently, migrant workers with high levels of human capital are excluded from these sectors, notably in construction and other service industries where the proportion of migrant workers is expected to decrease by approximately 5 percentage points, followed by retail and manufacturing with a decrease of around 10 percentage points. Discrepancies between predicted and actual industrial distributions suggest a significant difference between the employment structures of migrant workers and urban residents. Projections indicate a 4-percentage point increase in the employment of migrant workers in government administrative organs, the largest anticipated rise across industries, highlighting high employment discrimination within these sectors. Additionally, an uptick in the percentage of migrant employees is expected in high-monopoly industries such as finance, insurance, post, and telecommunications, with minimal changes projected in the catering sector (Zhang, 2010).

Table 1*Distribution of employment discrimination of migrant workers*

Items	Manufacturing	Construction	Transport	Hospitality	Retails	Finance	Others	Government
Actual	13.644	14.464	5.969	8.841	16.603	3.15	24.487	2.036
Prediction	11.26	11.06	8.09	9.85	13.85	6.44	19.5	6.01
Employment discrimination	2.384	5.404	-2.121	-1.009	2.753	-3.29	4.987	-3.974

Zhang (2010) notes that government agencies, financial and insurance industries, and other sectors typically have higher educational requirements and stricter employment criteria, posing greater challenges for migrant workers to secure employment. Conversely, industries such as transportation, catering, manufacturing, retail, other services, and construction are generally more accessible to migrant workers due to their labour-intensive nature.

The catering industry stands out for its minimal employment discrimination, contrasting with positive discrimination in industrial, retail, and service sectors. This suggests that these sectors are characterized as "dirty, disorganized, and poor" either due to the nature of the work or the low wages offered (Zhang, 2010).

Data

The information utilized in the study is sourced from the Chinese Household Finance Survey (CHFS). The study specifically utilizes data from the most recent wave in 2019, selecting a random sample of 10,000 observations for analysis. Access to the raw data is available to the public through an application process, with the website for accessing the data being: <https://chfs.swufe.edu.cn/>

The study sets specific criteria for exclusion, focusing on individuals outside the working age range of 20 to 55 years old, as well as those not currently participating in the labour force. Notably, there are five distinct groups of individuals excluded due to their status as "not in the labour force." The first group comprises individuals who are self-employed or business owners. The second group includes farmers who own land for cultivation. Disabled individuals form the third group excluded from the analysis. The fourth group encompasses students. Lastly, individuals who have reported themselves as being out of the labour force make up the fifth and final group of exclusions.

Variables

The study delves into the determinants impacting both job status and wages of workers. Accordingly, it employs a survey conducted at the individual level, encompassing a range of variables.

Table 2

Definition of variables

Variable name	Initial coding	Variable group	Definition
work	a3132b	response	Binary indicator of employment
wage	a3136	response	Continuous variable of wage (in RMB)
urban	a2022	variable of interest	Binary variable of urban residency
male	a2003	control	Binary variable indicating gender
age	a2005	control	Age of respondents
edu_year	a2012	control	Years of completed school education
exper		control	Calculated working experience from age and education
married	a2024	control	Binary indicator of marital status
kid6		control	Number of kids under 6 years old, calculated from age of family members
old65		control	Number of cared elder adults above 65 years old, calculated from age of family members

The study utilizes cross-sectional data from the 2019 wave of the Chinese Household Finance Survey (CHFS) to examine the disparities in the labour market between urban and rural workers in China. The survey employs county-level stratified sampling, covering a total of 343 counties. It comprises 107,008 individual observations from 34,643 households across 29 provinces on the Chinese mainland, ensuring its representativeness of the country's labour market. For this study, a random sample of 10,000 observations within the working age range of 20–55 years old is selected for analysis. While previous studies by Su and Heshmati (2013) and Wang et al. (2019) have addressed the wage gap between urban and rural workers in China, none have specifically examined differences in job opportunities or the role of education in determining this urban-rural wage gap. The current study aims to fill these knowledge

gaps by investigating the influence of urban residency on both job market opportunities and wages, while also considering the varying impact of education on urban and rural workers.

To assess the disparities in employment and compensation between urban and rural employees, wage income and employment status are chosen as the two outcome variables. A binary indicator of urban status is selected to account for spatial disparities, with years of schooling serving as the moderator variable. Additionally, the study includes several control variables to mitigate the potential issue of omitted variable bias. These variables encompass prior employment history based on Mincer's earnings equation, household information such as the dependency rate, demographic data including gender and marital status, as well as household information pertaining to marriage status (1974).

Summary Statistics

Table 3 presents the summary statistics of the variables. It is noted that there is a minor issue with missing data regarding wage and urban residency. However, in comparison to surveys conducted in affluent nations, the non-response rate is notably lower, standing at less than 7%. To assess whether the pattern of missing values is random, the distribution of other variables between the groups with and without missing data can be examined. Therefore, while the accuracy of the data is not the primary concern, it is essential to understand the pattern of missing values for comprehensive analysis.

Table 3

Summary statistics

VarName	Obs	Mean	SD	Min	P25	Median	P75	Max
work	10000	0.822	0.382	0.000	1.000	1.000	1.000	1.000
log_wage	9376	8.318	4.129	0.000	8.817	10.201	10.735	13.816
urban	9956	0.492	0.500	0.000	0.000	0.000	1.000	1.000
male	10000	0.502	0.500	0.000	0.000	1.000	1.000	1.000
age	10000	39.160	9.647	20.000	31.000	39.000	48.000	55.000
edu_year	10000	11.184	3.765	0.000	9.000	11.000	15.000	20.000
exper	10000	22.510	10.391	0.000	14.000	23.000	32.000	40.000
married	10000	0.806	0.396	0.000	1.000	1.000	1.000	1.000
kid6	10000	0.323	0.589	0.000	0.000	0.000	1.000	5.000
old65	10000	0.315	0.623	0.000	0.000	0.000	0.000	4.000

The table also provides important insights into the sample, including the following details: The employment rate stands at 82.2%. Approximately half of the sample resides in urban areas. More than half of the individuals in the sample are men, comprising 50.2%. A significant portion of the sample, specifically 86%, is married. The average age, educational level, employment history, and log wage are 8.31, 39.16, 11.18, and 22.51, respectively. Additionally, the data does not exhibit any outlier issues

on average, as evidenced by the fact that the minimum and maximum values for each variable fall within three standard deviations from the mean.

Table 4
Correlation coefficients

	work	log_wage	urban	male	age	edu_year	exper	married	kid6	old65
work	1	0.68	0.08	0.30	0.00	0.21	-0.04	-0.08	-0.14	-0.01
log_wage	0.97	1	0.21	0.30	-0.03	0.40	-0.11	-0.01	-0.07	-0.05
urban	0.08	0.11	1	0.00	0.10	0.44	0.01	0.00	-0.08	-0.06
male	0.30	0.31	0.00	1	0.04	0.01	0.04	-0.10	-0.05	0.03
age	0.01	0.00	0.10	0.04	1	-0.29	0.98	0.40	-0.26	0.00
edu_year	0.21	0.27	0.43	0.02	-0.29	1	-0.45	-0.13	0.04	-0.08
exper	-0.04	-0.05	0.01	0.04	0.98	-0.45	1	0.40	-0.25	0.02
married	-0.08	-0.06	0.00	-0.10	0.42	-0.12	0.41	1	0.21	-0.04
kid6	-0.14	-0.13	-0.09	-0.05	-0.24	0.03	-0.23	0.19	1	-0.01
old65	-0.01	-0.02	-0.05	0.02	0.01	-0.06	0.03	-0.03	-0.01	1

Regression Framework

The study begins by investigating whether there exists a disparity in the unemployment rate between urban and rural areas. Since the response variable is binary, probit and logit models are appropriate for estimation. The conditional probability of employment is expressed as follows:

$$P(1|X = employed) = G(\theta controls + \beta_1 urban + \beta_0)$$

In contrast, the function $G()$ uses the cumulative distribution for the normal distribution in probit and logit analysis.

The response variable, log wage, is then employed to assess the impact of residing in an urban area on income. To account for the issue of wage unavailability for unemployed individuals, a Tobit analysis is employed, introducing the following latent variable:

$$\begin{aligned} \log wage (if \log wage > 0) &= \log wage^* \\ \log wage &= \beta_0 + \beta_1 urban + \theta controls + \varepsilon \end{aligned}$$

If urban workers in China hold a superior status in the labour market, the coefficient of interest in both regression models is expected to be significantly positive.

Additionally, the regressions include an interaction term between education and urban residency to investigate whether education exacerbates or mitigates the urban-rural disparity in the Chinese labour market. The augmented models are presented as follows:

$$\begin{aligned} P(employed = 1|X) &= G(\beta_0 + \theta controls + \beta_1 urban + \beta_2 urban * educ) \\ \log wage^* &= \log wage (if \log wage > 0) \\ \log wage &= \beta_0 + \beta_1 urban + \beta_2 urban * educ + \varepsilon + \theta controls \end{aligned}$$

As opposed to this, an opposite sign of β_{0_02} with β_{0_01} would indicate a modest decline in the urban-rural gap because of education.

4. RESULTS

The probit and logit estimations for employment probability are presented in Table 5. Contrary to the initial expectation that urban employees would consistently exhibit higher employment rates, the estimations reveal a lower employment rate for urban workers when all other control variables are held constant. To be precise, the effect is statistically significant at the 0.1% level for the first two columns when conducting a complete sample analysis and holding all other variables constant. Workers in urban areas have a 2.5% to 3% decreased likelihood of finding work. There are two possible explanations for this phenomenon. The first is the "bathtub" concept, which suggests that a higher proportion of workers leaving their jobs voluntarily as they transition between positions may contribute to the lower employment rate in metropolitan regions (Jones, 2013).

The alternative explanation is based on a job search model, which attributes increased unemployment to urban workers' better access to benefits (Bloemen, 1997). Specifically, compared to urban workers, rural workers are more likely to work part-time, resulting in less access to healthcare and unemployment insurance. Consequently, urban employees have higher reservation utilities, reducing the incentive to quickly secure a job while unemployed.

Table 5
Marginal effect for getting employed

	Full sample		Female		Male	
	probit	logit	probit	logit	probit	logit
urban	-0.030*** (0.0079)	-0.025** (0.0080)	-0.000070 (0.013)	0.00061 (0.014)	-0.048*** (0.0079)	-0.049*** (0.0080)
male	0.21*** (0.0071)	0.22*** (0.0076)				
edu_year	0.022*** (0.0011)	0.021*** (0.0011)	0.031*** (0.0018)	0.031*** (0.0019)	0.0083*** (0.0012)	0.0080*** (0.0012)
exper	0.012*** (0.0019)	0.011*** (0.0019)	0.012*** (0.0032)	0.012*** (0.0033)	0.0082*** (0.0018)	0.0081*** (0.0017)
exper_sqr	-0.00023*** (0.000039)	-0.00022*** (0.000039)	-0.00026*** (0.000067)	-0.00026*** (0.000068)	-0.00016*** (0.000037)	-0.00016*** (0.000036)
married	-0.028* (0.012)	-0.036** (0.012)	-0.14*** (0.022)	-0.14*** (0.023)	0.025* (0.010)	0.026* (0.010)
kid6	-0.065*** (0.0060)	-0.066*** (0.0058)	-0.14*** (0.0099)	-0.14*** (0.0098)	-0.0022 (0.0068)	-0.0023 (0.0070)
old65	-0.0075 (0.0057)	-0.0059 (0.0057)	-0.0023 (0.0097)	-0.000076 (0.0098)	-0.010 (0.0055)	-0.011* (0.0053)
N	9956	9956	4953	4953	5003	5003

Standard errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

The table reports the associated marginal probability change calculated at the sample mean values.

Ceteris paribus, as seen by the first two columns of the remaining independent variables, male applicants had a 21% to 22% higher chance of being hired. An extra year of education results in employment rates rising by 2.1% to 2.2%, which is roughly twice the effect of past employment (Jones, 2013). The employment rate increases with experience at a slowing rate until it exceeds 26 years of experience, at which point it starts to decline. In particular, a nonlinear influence of working experience is observed, indicating this. Furthermore, the analysis also shows that having children under the age of six decreases the likelihood of employment, with married persons having a lower employment rate of 2.8% to 3.6% and those with one additional child under the age of six having a lower employment rate of 6.5% to 6.6%. In particular, all of the aforementioned variables have a statistically significant impact on employment rate, whereas the presence of older family members has no effect at the 5% level of significance (Jones, 2013).

The remaining four columns reveal gender disparities in labour market outcomes upon closer examination of subsamples. Firstly, the employment gap between urban and rural areas is statistically significant only for male workers. Secondly, female workers experience better returns on both schooling and work experience. Lastly, the negative impacts of marriage and having small children are more pronounced among the female subsample, indicating that female employees bear a greater burden when it comes to caregiving responsibilities (Lee, 2020). In addition, the most prevalent form of discrimination in the job market targets women. Women face higher barriers to employment compared to men. According to a survey, 67% of businesses either explicitly prohibited women from becoming pregnant or having children while working, or imposed gender-specific requirements during the hiring process. Gender disparities seem to stem from inherent differences between men and women. Variances in social roles between genders directly influence their disparities in the workplace (Lee, 2020). Furthermore, job search challenges represent only one facet of gender discrimination. Another significant aspect is the unequal compensation for comparable effort between men and women. According to relevant data from Shanghai, there was an income disparity between men and women in 2005, highlighting the prevalence of this issue (Lee, 2020). The findings of the second sampling survey on the social status of Chinese women, which was jointly organized and conducted by the All-China Women's Federation and the National Bureau of Statistics, also show that women's income is significantly lower than men's, even in industries where women are disproportionately represented, like retail, catering, and social services. (Lee, 2020).

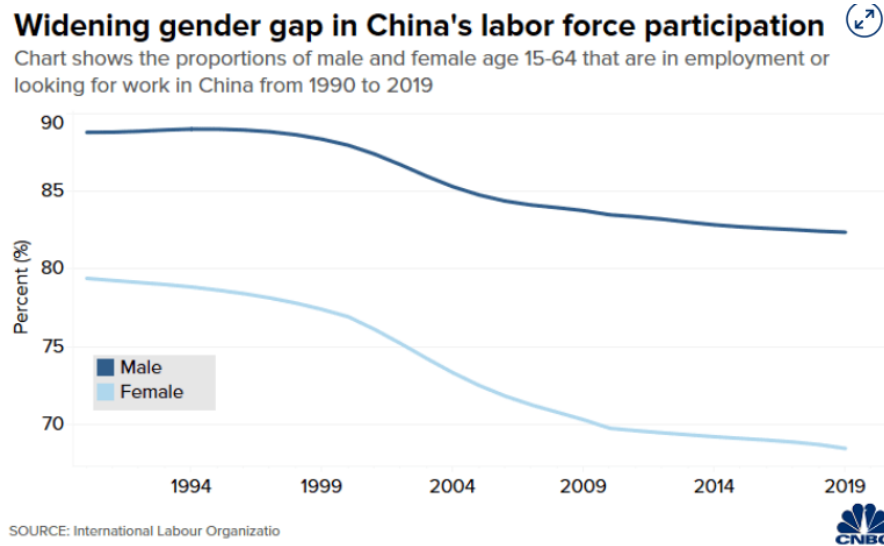


Figure 2. The line graph illustrates that from 1990 to 2019, the proportion of women participating in the workforce consistently remained lower than that of men.

5. ANALYSIS AND INTERPRETATION

Employment discrimination against migrant workers is primarily fueled by factors such as the registered residence system, industry monopolies, ownership structure disparities, and social biases. To address this issue effectively, the government ought to abolish sectoral monopolies and implement measures to accurately track the number of migrant workers, as suggested by Hertel and Zhai (2004). To tackle discrimination effectively; the government should establish robust anti-discrimination legislation and strengthen institutions dedicated to combating discrimination. Specifically, it is imperative to enact laws that explicitly prohibit discrimination against migrant workers in the workplace, thereby safeguarding their fundamental human rights, as advocated by Hertel and Zhai (2004).

Initially, the government ought to improve hiring practices within businesses, dismantle the segregation of labour across units and sectors driven by prejudice and discrimination, and provide job opportunities for skilled migrant workers. Additionally, to address the employment challenges faced by migrant workers and boost their earnings, it's crucial to foster development in underdeveloped areas, especially those with substantial migrant populations like the catering, sales, and service sectors. Furthermore, to expand job opportunities and enhance management involvement rates for foreign workers, the government should establish a fair and transparent platform, as recommended by Hertel and Zhai (2004). Furthermore, to elevate the overall employment rate of migrant workers, it is essential to offer comprehensive technical training and career advancement opportunities, while also facilitating access to prominent institutions for select high-skilled migrant workers, as emphasized by Hertel

and Zhai (2004). Additionally, governmental oversight should regulate the conduct of urban employers to ensure the protection of legal rights and interests of migrant employees. This includes mandating the signing of labour contracts upon hiring and enforcing timely payment of wages. To uphold their rights and interests effectively, migrant workers must receive their rightful compensation. Moreover, local labour and social security institutions should intensify law enforcement efforts, augmenting routine inspections and specialized supervision to target areas, industries, and businesses where egregious violations of migrant workers' rights occur, as highlighted by Chen and Hamori (2013).

The government should enhance the fairness of personnel assessments across various departments and industries, eliminating barriers hindering migrant workers' participation in the labour force and departmental selection processes. Furthermore, it is imperative to rectify unjust practices regarding talent selection and salary treatment prevalent in large enterprises, including state-owned and foreign-funded entities, as suggested by Chen and Hamori (2013). Moreover, efforts should be directed towards bolstering the economic prospects of private businesses to expedite the growth of the private sector and consequently enhance the overall income of migrant workers. Ultimately, institutionalized social services should be provided by the government to mitigate job discrimination against migrant workers, recognizing its close association with the labour market environment, as emphasized by Chen and Hamori (2013).

To ensure fair treatment of migrant workers, it is imperative to establish an equitable social environment:

Firstly, confronting prejudice and promoting equality are paramount. Creating an atmosphere of fairness for migrant workers is essential for fostering social integration. Encouraging open discussions and dialogues about discrimination enables society to understand its various manifestations and the harm it inflicts, empowering citizens to reject discrimination, as advocated by Hertel and Zhai (2004).

Additionally, prioritizing the education of migrant workers' children is crucial. Providing quality education not only enhances the future quality of the migrant population but also improves their adaptability to urbanization and enriches their social, cultural, and scientific knowledge, as highlighted by Hertel and Zhai (2004).

Ultimately, there exists a direct correlation between the labour market climate and the discrimination faced by migrant workers in employment. To establish a truly fair labour market for migrant workers, the government must provide institutionalized social services to reduce their employment costs. This entails addressing industry entry barriers, job restrictions, wage arrears, and diminishing the benefits and institutional privileges enjoyed by urban residents during the employment process, as emphasized by Hertel and Zhai (2004).

6. CONCLUSION

Migrant workers and urban workers face unequal opportunities in various employment sectors due to discrimination. A prime example is the bias against hiring migrant workers in state-owned enterprises, where urban workers are favored even when they possess similar qualifications.

Our study using data from CHFS sheds light on the urban-rural labour market gap in China. Initial findings indicate that while rural workers earn lower wages, their employment rates surpass those of urban workers. However, further analysis reveals that the returns on education are higher in urban areas, prompting less-educated individuals to fare better in rural settings and more-educated ones to seek opportunities in cities. This trend significantly impacts China's regional inequality and migration patterns, elucidating why college graduates gravitate towards certain locations and emphasizing the importance of bolstering local sectors to attract highly educated individuals.

Disparities between urban and rural populations persist in China's labour markets, perpetuated by limited access to education, healthcare, and employment opportunities in rural areas. Consequently, a widening income gap ensues, affecting the living standards of both groups.

The Chinese government has initiated various programs to tackle these challenges, such as rural development initiatives aimed at improving infrastructure, healthcare, and education access in rural regions. However, further efforts are necessary to bridge the urban-rural labour market gap, including fostering more equitable economic growth and enhancing employment prospects in rural areas. Addressing these issues will contribute to the establishment of a fair and sustainable economy that benefits all residents, irrespective of their geographic location.

In essence, the employment discrimination faced by migrant workers correlates directly with the state of the labour market. To address this, the government should implement institutionalized social services to reduce the barriers to employing migrant workers. Additionally, attention must be paid to various employment issues affecting migrants, including industry access, job restrictions, wage discrepancies, and the privileging of urban residents in hiring processes. By fostering a genuinely equitable labour market environment, China can ensure fair opportunities for all workers, regardless of their background or origin.

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