New Changes and Challenges in the Youth Employment in China After Covid-19

Daniel Weiyue Mei¹

1 Emory College of Arts and Sciences, Emory University, Atlanta, United States

Correspondence: Daniel Weiyue Mei, Emory College of Arts and Sciences, Emory University, Atlanta, 30322, United States. E-mail: dmei@emory.edu.

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Abstract

Employment in the younger generation is related to citizens’ well-being, social development, and political stability. In comparison with other demographic groups, young individuals more often face various challenges. These include greater vulnerability in the labor market, dissatisfaction with their employment status, notable structural disparities in employment opportunities, and inadequate effectiveness of policy support in employment. This article focuses on the current employment difficulties faced by college students and other young individuals in China. Drawing insights from official data, survey data, and platform monitoring data, the analysis points out notable shifts in youth employment. These new changes encompass a rise in employment within state-owned enterprises and an increase in the proportion of flexible employment. The youth are now facing new challenges which involve the coexistence of both periodic unemployment and structural unemployment, as well as high education and high unemployment. To address these issues effectively, it is recommended to merge short-term stable economic growth with long-term structural adjustment, thereby improving the quantity and quality of employment opportunities for the youth.

Keywords: Youth people, employment opportunity, employment quality

1. Introduction

Full employment is one of the most important macro policies adopted by countries world-wide. Among the employment issues of various demographic groups, youth employment is undoubtedly the most eye-catching one. According to the 2022 report from the International Labor Organization (ILO, 2022), the global youth unemployment rate in 2022 was about 14.9%, much higher than the global overall unemployment rate of 5.7%. The proportion of young people aged 15-24 to the working age population aged 15-64 is about 25%; however, the total proportion of youth unemployment to the total unemployment is as high as 36.5%. Youth unemployment, particularly in the context of long-term unemployment, not only reflects poorer job prospects, worse health conditions, decreased life satisfaction, and lower overall well-being levels, but also translates into societal losses in terms of output and income (O’Higgins, 2015). In addition, as Li & Yang (2022) discuss in their research, the high unemployment rate in youth generation not only brings economic and social problems, but also becomes a major cause of political turmoil.

China also faces high youth unemployment rate problem after Covid-19, since the three-year fight against the Covid-19 has had a huge negative impact on employment. The “Medium-and Long-Term Youth Development Plan (2016-2025)” released by the Chinese government defines youth as 14 to 35 years old¹, and the size of the youth population under this age standard has been continuously decreasing since the beginning of the 21st century. According to the Seventh National Population Census data in 2020, the population aged 16-35 is approximately 400 million, accounting for 28.4% of the total population in China, a decrease of 90 million from the peak of 490 million in 2000.² At the same time, the scale of higher education in China continues to expand, with the number of graduates from ordinary universities nationwide increasing from 1.01 million in 2000 to

10.535 million in 2022, reaching a historical high. The continuous decline in the working-age population among young individuals, coupled with a growing number receiving and pursuing higher education, indicates a trend of “quantity reduction and quality improvement” in the changes in China’s youth population. Given the Chinese government’s high commitment to prioritizing youth employment and implementation of a range of stimulus policies to tackle this problem, the goal of achieving full employment should be more attainable. However, according to data released by the National Bureau of Statistics of China, in June 2023, the urban survey unemployment rate of the population aged 16 to 24 exceeded 21.3%, and the problem of youth employment is significantly influencing China’s labor market. To solve the problem of youth employment has become the key to implementing China’s employment priority policies. Therefore, it is necessary to timely grasp the new trends in the employment of young groups and continuously improve the effectiveness of employment priority policies for this group based on their changing employment characteristics. This article employs a comprehensive approach, utilizing official released data, graduates survey insights and platform monitoring data, to analyze the evolving dynamics and challenges faced by individuals aged from 16 to 24. The analysis will delve into three dimensions: individual characteristics, family endowment, and macro environment. Drawing from these insights, the article concludes by presenting policy recommendations aimed at promoting high-quality employment opportunities for young individuals.

2. Literature Review

To address the issue of youth employment, a theoretical basis can be found at the macro and micro levels. At the macro level, it includes information asymmetry theory (Akerlof, 1970), labor market segmentation theory (Doering & Piore, 1971), new institutional economics (Galbraith et al., 1974), etc. These theories have provided special interpretations of overall employment situation from different perspectives. Asymmetric information generally results in suboptimal allocation of labor resources and worker effort (Azariadis, 1983). Historical process whereby political and economic forces encourage the division of the labor market into separate segments (Reich, et al., 1973). But the existing legal framework and labor regulation can still accommodate innovative working templates and business models (Aloisi & Stefano, 2020). At the micro level, it includes job search theory (Montenson, 1970), social capital theory (Bourdieu et al., 1990; Nahapiet & Ghoshal, 1998), and so on. The heterogeneity of individuals has been emphasized in the micro theories. The main premise of job research models is that seeking job opportunities is a dynamic sequential process and an individual needs to decide when to stop under conditions of uncertainty and imperfect information (Faggian, 2013). Furthermore, an individual’s social capital has been related to his career success by three network benefits: access to information, access to resources and career sponsorship (Seibert, 2001). Following all the above theories, diverse empirical research on youth employment have been conducted. Hammer’s (2003) took a comparative analysis of youth employment and social exclusion in Europe. Kahn (2010), Oreopoulos et al. (2012) analyzed the long-term impact of economic downturn or recession on youth employment in the United States and Canada respectively. Even if young people changed the time allocation of labor supply to avoid shocks by slowing down employment, waiting time for unemployment means zero accumulation of human capital, which may lead to more serious economic losses for college students (Ortego-Marti, 2016; Fujita, 2018). Zeng’s (2012) analyzed the impact of unemployment on social relations among young people in Shanghai, China. Actually, research on the employment and entrepreneurship of Chinese youth has gradually increased since 2011. By searching on China National Knowledge Infrastructure Database (CNKI), it was found that the volume of literature produced from 2011 to 2020 surpassed the total number of similar papers published in the previous 20 years (Huang & Li, 2021). This body of research encompasses various facets, including factors of influence, empirical analysis, and policy recommendations.

Just as the theories can be divided into macro and micro level, the factors that affect youth employment could be also classified in the same way. One is individual characteristics, including willingness to work, educational background, internship experience, etc. According to the China Youth Development Statistics Report (2020), more than half of urban unemployed youth between ages of 16 to 24 are grappling with joblessness as a direct result of not being able to find a job after graduation. The main reasons for unemployment among urban unemployed youth aged 25-29 are “personal reasons” and “taking care of household chores” (Deng et al., 2021). Young migrants workers, on the other hand, typically exhibit a pattern of short-term employment (Gu, 2017), and face issues such as low salaries, inadequate professional skills, and participation in informal employment (Li & Zhang, 2019). The second reason is family endowment, including income level, social resources, etc. Weng

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and Liu (2018) found that father’s risk preference, mother’s employment field, and family income status collectively exert a significant impact on children’s career choices. The sampling survey conducted by Huang et al. (2023) found that family members’ network resources and entrepreneurial funding support in a certain industry have a significant positive impact on the entrepreneurial willingness of college students. The third is the macro environment, including economic growth, employment policies, social discrimination, external event shocks, etc. Wang & Wang (2023) addressed that China’s employment laws and regulations are fragmented and the correlation between fiscal and monetary incentives and the youth group has room for improvements. Research by Ge et al. (2018) found that male college students tend to receive interview invitations approximately 42% more frequently than female students. Additionally, female college students with better academic performance and more extensive education tend to experience more severe instances of gender discrimination. In the context of these matters, it’s worth noting that Mo et al. (2020) compared the impact of the COVID-19, the SARS epidemic, and the international financial crisis on employment. Their finding pointed out that the adverse impact of the COVID-19, further emphasizing the structural contradiction of employment in China. Xu (2022) also pointed out that Covid-19 has not only reduced job opportunities for the youth but led to a decline in employment quality.

Empirical research methods are generally divided into two categories. First is the one-time youth employment questionnaire survey and field research based on national and regional scope. A survey conducted by Huang (2020) on 6,600 college graduates aged from 25 to 45 across the country revealed significant imbalances in employment geographic location, urban and rural areas, industries, and career paths. Cheng and Zhao (2019) conducted a survey particularly focus on 1,053 ethnic minority youth aged from 18-34 in six provinces and autonomous regions in the northwest of China. The result shows that female employment pressure was higher than that of the male, while Uyghur’s and Tibetan’s employment pressure was significantly higher than that of other ethnic groups. The second category is to conduct research based on various databases such as the Chinese General Social Survey (CGSS)\(^4\). For example, Wang and Su (2022) used a binary logistic regression model based on CGSS data and found that the overall employment status of young people is not optimistic, and the unemployment problem is prominent among young people with low age, low education, and low health level. Guo et al. (2022), based on data from the China Social Survey (CSS)\(^5\), found through regression analysis that the improvement in the quality of youth employment from 2006 to 2016 can be explained by changes in human capital factors. After 2017, it is more dependent on the result of institutional dividends and selective employment.

Suggestions for promoting youth employment include gradually improving the policy system for promoting college student employment, strengthening the construction of an employment ecosystem, and creating a fair and just employment environment (Xu, 2022). The second is to establish a comprehensive service platform, carry out targeted entrepreneurship training, and provide preferential policies such as fiscal subsidies and financing loans for young entrepreneurs (Chen et al., 2022). The third is to cultivate and create more job demands in the digital economy and drive more college students to find jobs and start businesses through economy’s platform (Shen et al., 2021). Fourthly, all sectors of society collaborate to promote and endorse parental involvement in fostering their children’s academic achievements during their time in universities. This effort serves to mitigate the risk of unemployment and career challenges for the young individuals (Gao, 2022).

The existing research shows the defining standards for youth have not yet been unified. The central government’s document defines the age range as 14-35 years old, but scholars’ research varies from 16-25 years old to 18-29 years old. On the other hand, the employment data for urban youth released by the National Department of Statistics is 16-24 years old, which leads to a discrepancy between in age-related data and employment data, making research findings and conclusions incomparable. Furthermore, research on youth employment after the COVID-19 epidemic has often focused on a single influencing factor. Indeed, young individuals are a social group with noticeable structural characteristics, and their employment prospects are constrained at the micro level by individual characteristics and family background, as well as by economic development and macroeconomic policies. In the face of China’s growing economic challenges and the escalating employment crisis, examining the emerging shifts and challenges in youth employment holds both

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\(^4\) China Comprehensive Social Survey (CGSS) is a continuous cross-sectional survey conducted annually by Renmin University of China on more than 10,000 households in provinces, cities and autonomous regions in Chinese Mainland in accordance with international standards. It is the earliest nationwide, comprehensive and continuous academic survey project in China.

\(^5\) China Social Survey (CSS) is a nationwide probability sampling household survey initiated by the Institute of Sociology, Chinese Academy of Social Sciences in 2005. It is conducted every two years to obtain data on social changes in China during the transitional period through long-term longitudinal surveys of the national public’s labor, employment, family, social life, social attitudes, and others.
practical and theoretical importance in the pursuit of youth individuals’ employment.

3. New changes in Youth Employment

Addressing the issue of youth unemployment has become a pivotal aspect of China’s employment-focused policy implementation (Lai & He, 2023). Hence, it is important to promptly discern the evolving patterns and developments in youth employment and consistently enhance and improve the efficacy and pertinence of employment priority policies in alignment with the shifting dynamics of their employment traits.

3.1 The Impact of the COVID-19 Continues, and College Students Are Increasingly Willing to Work Within the State-Owned System

Since 2020, affected by COVID-19, stability has become the key factor for young individuals, especially college graduates, to find jobs. Preferences for company selection tend to lean towards opportunities within an established system. When facing a more uncertain external market environment, an expanding number of college graduates are choosing to avoid risks and participate in job application process to obtain a stable position. In 2022, the number of people taking the National Civil Service Examination (NCSE) reached 1.422 million, with a competition ratio of 2245:1 for the most popular positions. Table 1 shows the registration status for the NCSE from 2016 to 2022, and the data shows the following changes. Firstly, the number of recruits has been increasing year by year. The reason is that many enterprises have not yet excluded the impact of the China-United States trade war, then have encountered the COVID-19, which has greatly reduced the number of jobs recruited. The government has expanded the recruitment scale of civil servants to expand employment and solve the problem of placement of fresh college graduates. The second is the competition ratio has maintained at around 40:1 after reaching a historical peak of 63.28:1 in 2019. In the post-pandemic era, compared to high-salary jobs with strong mobility and high pressure, national civil servants with high stability, high social welfare, and high social status are increasingly favored by college graduates. Compared with in-service personnel, college students have more advantages in terms of time arrangement, knowledge reserves, and exam experiences in preparing for civil service exams (Zhang & Gao, 2022).

Table 1. Registration for the National Civil Service Examination from 2016 to 2022

<table>
<thead>
<tr>
<th>Year</th>
<th>Recruitment Positions</th>
<th>Number of people recruited (person)</th>
<th>Number of Applicants (10 000 people)</th>
<th>Number of people taking NCSE (10 000 people)</th>
<th>Competition Ratio ¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>15 659</td>
<td>27 817</td>
<td>139.46</td>
<td>93.0</td>
<td>33.43:1</td>
</tr>
<tr>
<td>2017</td>
<td>15 589</td>
<td>27 061</td>
<td>148.63</td>
<td>98.4</td>
<td>36.36:1</td>
</tr>
<tr>
<td>2018</td>
<td>16 144</td>
<td>28 533</td>
<td>165.97</td>
<td>113.4</td>
<td>39.74:1</td>
</tr>
<tr>
<td>2019</td>
<td>9 657</td>
<td>14 537</td>
<td>137.93</td>
<td>92.0</td>
<td>63.28:1</td>
</tr>
<tr>
<td>2020</td>
<td>13 849</td>
<td>24 128</td>
<td>143.70</td>
<td>96.5</td>
<td>40.0:1</td>
</tr>
<tr>
<td>2021</td>
<td>13 172</td>
<td>25 726</td>
<td>157.6</td>
<td>101.7</td>
<td>39.53:1</td>
</tr>
<tr>
<td>2022</td>
<td>16 457</td>
<td>31 242</td>
<td>212.3</td>
<td>142.2</td>
<td>45.45:1</td>
</tr>
</tbody>
</table>

notes ¹: competition ratio=number of people taking NCSE/number of people recruited.

Source: According to the examination-related data released by China’s National Civil Service Administration.

3.2 The Digital Economy Is Booming, and the Proportion of Flexible Employment for College Students Is Increasing

The vigorous development of the digital economy in China has enhanced a large number of new formats and models, and their advantages have been fully demonstrated during the COVID-19. Emerging employment models like online retail, mobile travel, online education and training, and online healthcare have not only played a pivotal role during pandemic but also have gained popularity as a preferred employment option among young individuals. According to data from the National Center for Student Information Consultation and Employment

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6 Data is from China’s National Civil Service Administration.
7 According to the “Digital China Development Report 2022” released by the National Internet Information Office of China, the scale of China’s digital economy reached 50.2 trillion RMB yuan in 2022, a nominal increase of 10.3% year-on-year, and its proportion in GDP increased to 41.5%
Guidance in Higher Education Institutions, the proportion of flexible employment among graduates in 2020 and graduates of 2021 was 16.9% and 16.25% respectively. The proportion of flexible employment among graduates of 2021 in Tianjin, Hebei, and Shanxi exceeded 30%. See Figure 1. According to the Survey Report on the Employability of College Students in 2022 released by Zhaopin, which is the largest recruitment platform in China, 18.6% of graduates chose to work in a freelance job, up 2.8 percentage points year on year.

![Graph](image)

Figure 1. Employment Situation of 2021 and 2022 Graduates


3.3 Family Endowment Determines Funds and Resources, and Its Constraints on Youth Employment and Entrepreneurship Are Increasing

Family endowment has a wide and profound impact on youth employment. Individuals with good family backgrounds often possess access to a wealth of employment information and a broader range of job opportunities. They tend to secure better employment prospects, even in times of crises like the Covid-19 pandemic. Conversely, vulnerable youth groups lacking family support are negatively impacted by their employment prospects. Their family background is largely influenced by the formal organizations to which parents belong. Even individuals with similar high-qualified skills and occupying identical job positions can experience substantial variations in income, benefits, housing allocation, and developmental opportunities when employed by different organizations. Compared to developed countries that mainly rely on market allocation, China has long relied more on redistribution mechanisms, and formal organizations are an important part of the redistribution mechanism. Factors such as the scale, level, and type of ownership of formal organizations become the foundation of inner-organizational inequality, and thus become an important force in shaping social inequality (Zhu & Wang, 2022).

The impact of family endowment on youth entrepreneurship is also increasing. According to the 2021 and 2022 “China Youth Entrepreneurship Development Reports” released by the China Foundation of Youth Entrepreneurship and Employment, and Zeping Macro, 19 to 23-years-old university students, fresh graduates, and unemployed individuals are the main body of youth entrepreneurship. Although the China Youth Entrepreneurship Development Index has risen from 100.0 in 2015 to 171.0 in 2021, youth entrepreneurship still

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8 Zhaopin Limited was established in 1994, with 321 million workplace users and a total of over 11.76 million cooperative enterprises.


faces multiple difficulties such as entrepreneurial funds, social resources, and knowledge reserves. Figure 2 compares the main difficulties faced by young entrepreneurs in 2021 and 2022, with the proportion of financial difficulties increasing from 41.7% to 46%, and the proportion of social networking difficulties increasing from 24.8% to 26.0%. In fact, nearly 70% of young entrepreneurs have start-up funds of less than 100,000 yuan, of which about 90% come from personal or family savings and loans from relatives and friends, while 10.6% of the group using venture capital and other channels to start businesses in 2022. The generally low start-up entrepreneurial capital is due to the fact that most entrepreneurs have chosen agriculture, forestry, animal husbandry, and fishery industries with low entry barriers and initial funding, as well as wholesale and retail industries. As the data presents, personal or family savings and loans from relatives and friends have become two important sources of entrepreneurial capital. Family endowment plays a critical role in determining the sources of funding and social networks available to young entrepreneurs when they are just starting businesses, subsequently influencing the success and profitability of their entrepreneurial ventures.

![Figure 2. Main difficulties faced by young entrepreneurs in China from 2021 to 2022](source)

Source: China Foundation of Youth Entrepreneurship and Employment, and Zeping Macro.

**3.4 The Effectiveness of Employment Incentive Policies Lack of Sufficiency, and the Urban Unemployment Rate of the Population Aged 16-24 Has Been Increasing Year by Year**

Since the COVID-19 pandemic, the central and local governments have issued a series of youth employment policies to promote employment rate. In March 2020, the General Office of the State Council proposed to implement employment priority policies and expand employment channels for college graduates in the “Implementation Opinions on Strengthening Employment Stabilization Measures in Response to the Impact of the COVID-19”. In August 2021, the State Council issued the “14th Five Year Plan for Employment Promotion”, which pointed out the need to expand the market-oriented and socialized employment channels for college graduates and create diversified employment opportunities for urban youth. In May 2022, the General Office of the State Council issued the “Notice on Further Improvement of the Employment and Entrepreneurship of Young People”, requiring the expansion of enterprise employment scale and the stability of public sector jobs. Central ministries and local governments have introduced incentive policies and specific measures to align with the documents’ requirements of the above documents, but the outcomes have not yielded expected results.

The average urban unemployment rate for the population aged 16 to 24 in 2018 was 10.8%, and the average annual value slightly increased to 11.9% in 2019. In 2020, the unemployment rate rapidly increased to 14.2% due to the impact of COVID-19 and maintained at 14.3% in 2021. In 2022, the unemployment rate continued to rise to 17.6%. In June 2023, the urban survey revealed that the unemployment rates of the population aged from 16 to 24 exceeded 21.3%. However, the surveyed unemployment rate in urban areas has been quite stable and not been affected by the rise of the youth unemployment rate. The obvious reason is that the unemployed youth
aged 16 to 24 account for only 6% - 7% of the surveyed unemployed population aged 16-59,¹⁰ and its rise has little impact on the overall trend. The National Bureau of Statistics of China declared a suspension on the release of data in the upcoming August. This suspension was prompted by the fact that in 2022, there were more than 96 million urban youth aged 16 to 24 in China, with over 65 millions of them being students. Since the primary role of students is to pursue education and study, the National Bureau of Statistics believes that additional research is necessary to ascertain whether actively seeking employment before graduation should be counted in the labor force survey statistics. Figure 3 shows the gap between the urban survey unemployment rate curve of the population aged 16-24 and the national urban survey unemployment rate curve. It is obvious that the gap between the two variables continues to widen, showing a “trumpet mouth” pattern and continuing to expand.

![Figure 3. Monthly Surveyed Unemployment Rate in Urban Areas from 2018 to 2023](image)

Unemployment Rate in Urban Areas from 2018 to 2023

Source: Wind Database.

4. New Challenges for Youth Employment

Different from the previous challenges in the youth employment, which were only single or a few, various difficulties have been intertwined and there is a concentrated outbreak of contradictions after the Covid-19. The intertwining of internal and external factors, short-term and long-term factors, and historic and realistic factors has resulted in increased employment pressure on young individuals compared to earlier times. These new challenges may become a new normal, thereby constraining the level and quality of the youth employment for a long time. If young people find that opportunities in jobs and other aspects are decreasing or even lost, it will trigger political, economic, or social instability.

4.1 Short-Term Cyclical Unemployment Is Intertwined with Long-Term Structural Unemployment

After the COVID-19, the employment demand of certain industries continued to be weakened, some enterprises delayed or reduced recruitment, and the effective demand of the labor market decreased as well. The China Employment Market Prosperity Index (CIER)¹¹ was derived from data analysis sourced from the Zhaopin website. It captures the evolving trends in supply and demand indicators across various sectors, regions, city tires, and types of enterprises. It effectively mirrors the proportion of job vacancies within the labor market. Figure 4 shows that as of the fourth quarter of 2022, the CIER index of college graduates has been below 1 for five consecutive quarters, while the overall CIER index of the country has been above 1 during the same period.

![Figure 4. CIER Index](image)

CIER—the number of people in demand for market recruitment/the number of job applications in the market. The CIER index takes 1 as the watershed. When the index is greater than 1, it indicates that the demand for labor in the job market is greater than the supply of labor in the market, and the competition in the job market tends to ease. The degree of prosperity in the job market is high, and employment confidence is high. When the CIER index is less than 1, it indicates that the competition in the job market is becoming fierce, the prosperity of the job market is low, and employment confidence is low.

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¹⁰ China’s Wind Database.

¹¹ CIER=the number of people in demand for market recruitment/the number of job applications in the market. The CIER index takes 1 as the watershed. When the index is greater than 1, it indicates that the demand for labor in the job market is greater than the supply of labor in the market, and the competition in the job market tends to ease. The degree of prosperity in the job market is high, and employment confidence is high. When the CIER index is less than 1, it indicates that the competition in the job market is becoming fierce, the prosperity of the job market is low, and employment confidence is low.
At the same time, there is a structural unemployment phenomenon in the employment market for college graduates. Firstly, there exists a disparity in the professional structure that doesn't align with market demand. Fields such as finance, accounting, and law witness an oversupply of graduates, leading to intense competition. Conversely, high-tech industries often struggle to find individuals with the necessary skills and practical experience, creating a disconnect between talent supply and the labor market. Secondly, there is a mismatch between the quality of skills and job requirements. University professional courses fail to keep pace with the rapid changes in industries, resulting in a substantial gap between theory and practical application. Consequently, college students find it challenging to adapt their skills and quality to meet job requirements, resulting in a substantial number of unfilled job positions. Once more, there exists a disconnect between the desire for employment and the demands of the industrial sector. China's manufacturing industry is undergoing a shift towards high-end, intelligent, and environmentally friendly development, necessitating the cultivation of a highly skilled young workforce. However, frontline workers in manufacturing frequently encounter issues such as lower salaries and limited career advancement opportunities, which has led some young individuals to be hesitant about pursuing careers in manufacturing enterprises.

4.2 The Improvement of Youth Educational Levels Is Intertwined with High Youth Unemployment Rate

A high level of education generally represents a better employment rate, but the positive correlation is difficult to achieve in China after the pandemic. Since the reform and opening, the education level of Chinese youth has undergone a significant evolution, transitioning from a primary and junior high school level to encompass high school and university education, resulting in an extended duration of education time frame. After the implementation of the Compulsory Education Law of the People’s Republic of China in 1986, the scope of mandatory education in China has consistently broadened, providing greater access to higher education opportunities for young individuals. The expansion has been facilitated by educational policies such as the increased enrollment capacity in higher education institutions, leading to a noteworthy growth rate in recent years.

In 2020, the domestic enrollment rate of higher education in China reached 54.40%, indicating that China has entered the stage of popularization of higher education. Table 2 shows that the proportion of young employees aged from 16 to 24 with education levels at or above college level has increased from 29.9% in 2015 to 47.9% in 2020, indicating a significant improvement in the quality and educational level of the youth employment group.
Table 2. Composition of Education Levels of Young Employees from 2015 to 2020(%)  

<table>
<thead>
<tr>
<th>Year</th>
<th>Age</th>
<th>Never attended school</th>
<th>Primary school</th>
<th>Middle school</th>
<th>High school</th>
<th>Secondary or vocational education</th>
<th>Higher Vocational education</th>
<th>College degree</th>
<th>Bachelor degree</th>
<th>Postgraduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>16-19</td>
<td>0.5</td>
<td>5.1</td>
<td>61.9</td>
<td>17.7</td>
<td>10.9</td>
<td>1.4</td>
<td>2.1</td>
<td>0.4</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>20-24</td>
<td>0.3</td>
<td>3.7</td>
<td>39.2</td>
<td>16.9</td>
<td>9.5</td>
<td>2.9</td>
<td>17.0</td>
<td>10.3</td>
<td>0.1</td>
</tr>
<tr>
<td>2016</td>
<td>16-19</td>
<td>0.3</td>
<td>5.0</td>
<td>61.1</td>
<td>16.6</td>
<td>11.1</td>
<td>2.0</td>
<td>3.0</td>
<td>0.8</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>20-24</td>
<td>0.2</td>
<td>3.2</td>
<td>39.2</td>
<td>16.1</td>
<td>10.0</td>
<td>2.4</td>
<td>18.2</td>
<td>10.5</td>
<td>0.2</td>
</tr>
<tr>
<td>2017</td>
<td>16-19</td>
<td>0.3</td>
<td>4.7</td>
<td>58.9</td>
<td>18.6</td>
<td>12.4</td>
<td>1.4</td>
<td>3.0</td>
<td>0.6</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>20-24</td>
<td>0.2</td>
<td>2.7</td>
<td>37.1</td>
<td>17.4</td>
<td>11.5</td>
<td>2.3</td>
<td>17.3</td>
<td>11.3</td>
<td>0.2</td>
</tr>
<tr>
<td>2018</td>
<td>16-19</td>
<td>0.2</td>
<td>3.9</td>
<td>56.2</td>
<td>20.8</td>
<td>13.1</td>
<td>1.6</td>
<td>3.3</td>
<td>0.8</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>20-24</td>
<td>0.1</td>
<td>2.4</td>
<td>34.5</td>
<td>17.5</td>
<td>11.3</td>
<td>2.4</td>
<td>19.2</td>
<td>12.3</td>
<td>0.2</td>
</tr>
<tr>
<td>2019</td>
<td>16-19</td>
<td>0.1</td>
<td>3.1</td>
<td>55.6</td>
<td>34.4</td>
<td>-</td>
<td>-</td>
<td>5.4</td>
<td>1.3</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>20-24</td>
<td>0.1</td>
<td>2.3</td>
<td>30.1</td>
<td>27.4</td>
<td>-</td>
<td>-</td>
<td>25.5</td>
<td>14.2</td>
<td>0.4</td>
</tr>
<tr>
<td>2020</td>
<td>16-19</td>
<td>0.2</td>
<td>2.7</td>
<td>54.0</td>
<td>35.8</td>
<td>-</td>
<td>-</td>
<td>5.9</td>
<td>1.3</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>20-24</td>
<td>0.1</td>
<td>2.3</td>
<td>31.3</td>
<td>25.6</td>
<td>-</td>
<td>-</td>
<td>25.2</td>
<td>15.1</td>
<td>0.4</td>
</tr>
</tbody>
</table>


However, the labor market is shrinking along with the improvement of the quality of the young population and the rapid growth of the number of college graduates. Table 3 shows that the proportion of young people aged from 16 to 24 in employment nationwide has decreased from 9.7% in 2015 to 6.6% in 2020. The proportion of young people aged from 16 to 24 in urban employment nationwide has decreased from 9.8% in 2015 to 6.6% in 2020.

Table 3. Composition of Urban Youth Employment according to Ages (%)  

<table>
<thead>
<tr>
<th>Year</th>
<th>Type</th>
<th>Age 16 to 19</th>
<th>Age 20 to 24</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>employed youth</td>
<td>1.6</td>
<td>8.1</td>
<td>9.7</td>
</tr>
<tr>
<td></td>
<td>urban employed youth</td>
<td>1.2</td>
<td>8.6</td>
<td>9.8</td>
</tr>
<tr>
<td></td>
<td>employed youth</td>
<td>1.39</td>
<td>7.53</td>
<td>8.92</td>
</tr>
<tr>
<td>2016</td>
<td>urban employed youth</td>
<td>1.07</td>
<td>7.90</td>
<td>8.97</td>
</tr>
<tr>
<td></td>
<td>employed youth</td>
<td>1.26</td>
<td>7.16</td>
<td>8.42</td>
</tr>
<tr>
<td>2017</td>
<td>urban employed youth</td>
<td>0.95</td>
<td>7.41</td>
<td>8.36</td>
</tr>
<tr>
<td></td>
<td>employed youth</td>
<td>1.17</td>
<td>6.79</td>
<td>7.96</td>
</tr>
<tr>
<td>2018</td>
<td>urban employed youth</td>
<td>0.88</td>
<td>7.04</td>
<td>7.92</td>
</tr>
<tr>
<td></td>
<td>employed youth</td>
<td>1.04</td>
<td>6.57</td>
<td>7.61</td>
</tr>
<tr>
<td>2019</td>
<td>urban employed youth</td>
<td>0.80</td>
<td>6.79</td>
<td>7.59</td>
</tr>
<tr>
<td></td>
<td>employed youth</td>
<td>0.90</td>
<td>5.70</td>
<td>6.60</td>
</tr>
<tr>
<td>2020</td>
<td>urban employed youth</td>
<td>0.70</td>
<td>5.90</td>
<td>6.60</td>
</tr>
</tbody>
</table>


4.3 Job Cuts in Some Industries Is Intertwined with the Mismatch Between Job Positions and Professional Knowledge

The seventh population census data shows that the employment of young individuals aged from 16 to 24 in urban areas is mainly concentrated in the service and manufacturing industries, as shown in Table 4. Over the course of three consecutive years, the epidemic has caused sluggish market demand, reduced corporate income, and increased operating costs. Consequently, numerous small-scale businesses and micro-enterprises operating in the service industry continue to face challenges of closure. In June 2023, the manufacturing PMI new export

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order index continued to decline to 46.4%, and the weak external demand has not been reversed. Recruitment demand in the manufacturing sector has also decreased simultaneously. The synchronous contraction of labor demand in the two major industries lead to growth in the unemployment rate of urban youth.

After the epidemic, the civil service examination in China has become increasingly popular, surpassing the “college entrance examination” and becoming the “first exam” in China. Some college graduates who could have made greater contributions to their professional fields may choose administrative management work in government departments, and their professional, academic, and innovative values may not be reflected. The large number of highly educated talents with professional skills allocated to civil service positions is not only a waste of social resources, but also a failure of human resource market regulation. At the same time, some enterprises are facing a shortage of professional talents, which in turn affects their product iteration and R&D innovation, leading to a loss of development vitality. If the market mechanism cannot timely transport and allocate professional talents to the dedicated production fields, the production and operation of enterprises will be hindered, ultimately affecting economic development and social stability.

Table 4. Seventh National Population Census in 2020 –Youth Employment by Age and Occupation in China

<table>
<thead>
<tr>
<th>Occupational Categories</th>
<th>Age 16 to 19</th>
<th>Age 20 to 24</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>person</td>
<td>%</td>
</tr>
<tr>
<td>Party organs, state organs, mass organizations, social organizations, leaders of enterprises and institutions</td>
<td>1 892</td>
<td>0.25</td>
</tr>
<tr>
<td>Professional and technical personnel</td>
<td>57 443</td>
<td>7.45</td>
</tr>
<tr>
<td>Office staff and related personnel</td>
<td>19 933</td>
<td>2.59</td>
</tr>
<tr>
<td>Social production and life service personnel</td>
<td>324 417</td>
<td>42.09</td>
</tr>
<tr>
<td>Agricultural, forestry, animal husbandry, fishery production and auxiliary personnel</td>
<td>93 985</td>
<td>12.19</td>
</tr>
<tr>
<td>Production, manufacturing and related personnel</td>
<td>250 657</td>
<td>32.52</td>
</tr>
<tr>
<td>Other practitioners who are inconvenient to classify</td>
<td>22 631</td>
<td>2.93</td>
</tr>
<tr>
<td>Total</td>
<td>770 758</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: The Seventh National Population Census.

4.4 The Imbalance of Employment Regions of College Graduates Is Intertwined with the Widening Income Gap of Different Majors

For a long time, the eastern region of China has become a popular place to attract people and talents not only due to its superior geographical location, livable climate environment, but also due to its economic strength, excellent infrastructure, and comprehensive public services. Furthermore, the eastern region has always been a testing ground and vanguard for China’s economic and social development, whether in terms of reform and opening, institutional innovation, or economic transformation and high-quality development. In terms of talent attraction policies, the eastern region stands out with its innovation and initiatives and surpasses what other regions have to offer. For example, Zhejiang Province implemented a pioneering policy geared towards college graduates’ employment and entrepreneurship, which includes provisions for employment subsidies, social security assistance, interest rate reductions, and advantageous loans for both college graduates and employers. For small and medium-sized enterprises that recruit college graduates and sign labor contracts for more than 1 year, a one-time employment subsidy of no more than 1 500 RMB yuan per person will be provided. Subsidies for entrepreneurship training will be also offered to college students who participate in entrepreneurship training.

College students and graduates who start their own businesses for the first time will be given one-time subsidies, one-time social security subsidies, guarantee loans, interest discounts, tax exemptions, and other incentives in accordance with regulations. According to the data released by MyCOS, the proportion of 4-year college

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14 Established in 2006, MacCOS Corporation is a leader in China’s higher education management data and consulting industry, and the only contributor to the “Chinese 4-year College Graduates’ Employment Annual Report”. Since 2007, it has conducted nationwide research on the employment status and work ability of college graduates who graduated after six months.
graduates’ employment in the eastern region in 2022 reached 51.9%, while in the northeastern region it was only 3.8%. Based on the proportion of graduates from undergraduate colleges and universities in various regions and the implementation rate of graduation destinations in Table 5, the eastern region has the strongest attraction for young talents, with the highest inflow of college graduates. Six months after graduation, the monthly income is also the highest in the eastern region, reaching 6,578 yuan. The longer the graduation time, the greater the income gap between regions. For example, the monthly income difference between 2019 graduates who were employed in the eastern and northeastern regions was 3,843 yuan, while the monthly income difference between 2017 graduates was 4,203 yuan.

Table 5. Distribution of Employment Regions and Monthly Income after Half a Year of Graduation for 4-year College Graduates of 2022

<table>
<thead>
<tr>
<th>Regions</th>
<th>Proportion of 2022 graduates employed in the region (%)</th>
<th>Actual proportion of graduates in the region in 2022 (%)</th>
<th>Implementation rate of graduation destination (%)</th>
<th>Monthly income 6 months after graduation (RMB yuan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Eastern</td>
<td>51.9</td>
<td>38.5</td>
<td>88.0</td>
<td>6578</td>
</tr>
<tr>
<td>The Western</td>
<td>24.6</td>
<td>25.4</td>
<td>85.9</td>
<td>5370</td>
</tr>
<tr>
<td>The Central</td>
<td>19.7</td>
<td>26.7</td>
<td>85.2</td>
<td>5192</td>
</tr>
<tr>
<td>The Northeast</td>
<td>3.8</td>
<td>9.4</td>
<td>84.4</td>
<td>4959</td>
</tr>
</tbody>
</table>

Source: MyCOS².

There are significant differences in the income levels of graduates from different disciplines or majors. The monthly income of engineering graduates continues to be the highest, reaching 6,610 yuan in 2022, with economics and management ranking second and third respectively, as shown in Figure 5. The disparities in earnings can be attributed to a variety of factors. Engineering majors represent a notably technical and specialized domain, and the proficiencies and expertise held by engineers are in increasing demand across numerous industries. One of the reasons why engineering students can earn higher salaries than students in other majors is the significant demand for engineering professionals in diverse industries. Additionally, the distinctive skills and training that engineering students acquire further contribute to their higher income. The relatively high income of economics graduates is attributed to the achievements of China’s economic development over the 40 years of rapid growth. Economic knowledge and skills play an important role in enterprise decision-making, market analysis, investment management, and other aspects. At the same time, China is accelerating its economic transformation and innovative development, which further increases the demand for economic professionals.

Figure 5. Monthly income 6 months after graduation of 4-year college graduates from various disciplines and majors

Source: MyCOS.
5. Conclusions and Suggestions

This article uses official released data, graduates survey data, and platform monitoring data to analyze the current employment situation of young individuals between the ages of 16 and 24 in China from three dimensions: personal characteristics, family endowment, and macro environment. The research finds that: First, youth employment values have changed significantly due to the impact of the external environment such as the outbreak of the COVID-19 epidemic, the development of the digital economy, and the increasing downward pressure on the economy. Secondly, the success of youth entrepreneurship is increasingly influenced by family income levels and the abundance of social networking. Thirdly, the employment of urban youth in China presents a situation of interweaving high education and high unemployment, as well as cyclical and structural unemployment. Fourthly, the rapid development of the digital economy and the continuous optimization of the digital ecosystem have brought many new opportunities to young people, especially for flexible employment. The factors leading to difficulties in youth employment after Covid-19 are very complicated. There are both macro level factors such as inadequate institutional arrangements and information asymmetry, as well as micro level factors such as individuals not striving for job search and weak family social networks. Those classic employment theories have been confirmed in China. At the same time, the youth employment in China embodies the country’s characteristics. It is the most obvious is that young people are more enthusiastic about working in the government departments. Based on the above conclusions, the policy implications drawn in this article are as follows.

First, it is necessary to improve legal market framework and institutional arrangements for the youth. Further revision and improvement of China's Employment Promotion Law will be carried out, and existing practices shall be actively incorporated to enhance the standardization and operability of the Employment Promotion Law based on years of operation of youth employment promotion policies. The government also needs to guide the orderly flow of young labor force among different industries from a policy perspective, and to create mobility opportunities, smooth flow channels, and expand flow space for the youth. Discrimination of gender, region and registered residence should be eliminated gradually to create a fairer, free and just employment environment.

Second, it is necessary to improve the human capital level and employment ability of the youth. Universities and colleges need to optimize their major lists, increase the number of STEM majors, compensate for the deviation in major structure, and further strengthen the adaptability of education to the labor market. The government needs to promote the development of vocational education and skill training, and to establish laws to protect the rights of apprentices. The enterprises can participate in the teaching and training processes, and also can provide internships to enable the youth to gain more work experiences before they truly enter the labor market.

Third, it is also necessary to cultivate the youth’s confidence and encourage them to try more options. The problem of unwillingness to find jobs or employment only as a civil servant should be solved by the government, universities, and families jointly. The policies and measures should be introduced to expand employment and entrepreneurship opportunities in new industries and new business models created by the digital economy, to encourage flexible employment, and to encourage the youth to start businesses in some new areas. All sectors of society can work together and build a comprehensive, effective, diverse, and personalized service platform for youth employment and entrepreneurship. The platform can cultivate the youth’s employment confidence through targeted skill training, social networking, financial support and so on.

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