

Understanding College Graduate Unemployment in China: Causes and Suggestions

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Abstract. Over the past years, college graduate unemployment in China has risen drastically, reaching a high point of 21.3% in 2023 and remaining high with a large regional divide in the country. In the current paper, the causes of Chinese college graduate unemployment and potential policy solutions are discussed based on the analysis of significant indicators in 2019-2024 and the identification of four underlying reasons: regional imbalance, slow employment supply-demand mismatch, and skill mismatch. The research concludes that there are three key trends that are still present: the rapid growth of graduate supply (up 41% 2019-2024), high unemployment levels among the youth (with regional disparities), and the job market being the most challenging in the western region. These results and the four contributors to Chinese college graduate unemployment led to four policy recommendations which include fiscal incentive, part-time internships, flexible enrollment optimization and curriculum reform. The research problem is that the study adds to the current body of knowledge, offering a structural perspective of graduate unemployment and giving some practical consequences to policymakers and institutions of higher learning, which aim to alleviate the graduate employment crisis in China.

Keywords: China, College Graduate, Unemployment, Regional Disparities, Slow Employment

1. Introduction

The Chinese economy has been going through a phase of structural change and decelerating growth rate of its GDP, shifting its high-rate growth phase to a high-quality and moderate-rate development. In this macroeconomic context, the labor market has been under the pressure more than ever, especially after the COVID-19 pandemic, which also worsened the situation with employment in many areas. Although there has been a comparatively steady state in the overall urban unemployment rate, the employment prospects of young gender-particularly college graduates- have become a major issue over the last few years. The supply of college graduates has grown tremendously, although the employment sector has been unable to absorb the supply, resulting in a long-term rise in the rate of graduate unemployment. This not only leads to personal financial loss and psychological trauma to the students but also creates risk to the stability of society, and investment in human capital as well as long-term productivity. Furthermore, the issue of regional

inequalities and the so-called slow employment that is becoming more and more popular has complicated this study. Thus, it is important and urgent to determine the real reasons behind the unemployment of Chinese college graduates. In this light, the rationale of this research is there is a need to systematically diagnose the structural, behavioral, and educational elements that cause unemployment and to determine action and practical policy response and solution. Also, this research has been motivated by the need to overcome this challenge.

The reasons behind the unemployment of college graduates in China have been debated extensively in literature based on various viewpoints. A single line of study has reported the record high levels of graduate cohorts over the past few years joining a labor market stretched by trade war, deflationary pressure, and AI-inflicted replacement of traditional white-collar jobs, with many being highly educated young people turning to gig work [1]. Other researchers label such structural problem as the degree inflation, discovering that the master's degrees became the minimum qualification to hold a significant number of entry-level jobs, although more advanced degrees do not promise any improved job opportunities [2]. Structurally, the growth of higher education enrolment since 1999 has been associated with the long-term supply-demand imbalance whereby the number of graduates has increased faster than the number of high skilled jobs [3]. Empirical data further show that the level of salary and coverage of social security are the feeblest aspects of employment quality especially among graduates of the less prestigious institutions and vocational colleges [4]. Still more recent policy examinations have focused on the curriculum-employer skill mismatch, with the Ministry of Education in China initiating significant reforms to eliminate outdated majors, and increasing number of programs tailored to new sectors of the economy like artificial intelligence and green energy, recognizing that university curriculum has typically been inadequate in providing students with practical skills needed in the job market [5]. Regardless of these useful inputs, there is still a lack of systematic incorporation of the structural, behavioral, and educational aspects into a single analytical framework.

This paper will discuss why college graduates in China are not finding jobs and offer relevant policy recommendations. The paper embraces a multi-dimensional analytical approach, based on the official data of the Ministry of Education, the National Bureau of Statistics, and the MyCOS Institute that includes the timeframe between 2019 and 2024. The analysis is done in four steps. First, it provides a case description of critical trends in graduate supply and youth unemployment rate, focusing on regional imbalance of eastern, central and western parts of China. Second, it reviews and finds four underlying causes of graduate unemployment; regional imbalance in the distribution of employment opportunities, the slow employment phenomenon of late labor market entry, continuing supply-demand imbalance between graduate output and job creation, and skill mismatch between what is taught in universities and what employers demand and require. Third, it suggests specific policy recommendations and ideas based on each of the identified reasons. Lastly, the paper ends with a conclusion of findings and discussion of limitations of this paper. This study has theoretical and practical implications. In theory, it uses regional, behavioral, supply-demand and skill-based views to create a unified analytical strategy that goes beyond the current literature that has emphasized a single factor at a time. In practice, the results present policy implications that can be practically applied by central and local governments, institutions of higher education and employers to address the problem of graduate unemployment in China and to enhance the effectiveness of the school-to-work transition.

2. Case description

In order to analyze the current situation of college graduate unemployment in China, this section examines key indicators from 2019 to 2024, with attention to regional differences between eastern/central/western areas.

Table 1 shows the number of college graduates and the youth unemployment rate (16-24) from 2019 to 2024. Graduates increased from 8.34 million to 11.79 million, up 41%. The youth unemployment rate rose sharply from 11.2% in 2019 to a peak of 21.3% in June 2023. Although the rate was adjusted to approximately 15% in late 2023 and 2024, independent estimates suggest the actual unemployment rate for recent graduates remains above 18%.

Table 1. College graduates and youth unemployment rate in China (2019-2024)

Year	Graduates (million)	Youth unemployment rate (%)
2019	8.34	11.2
2020	8.74	12.5
2021	9.09	13.6
2022	10.76	18.2
2023	11.58	21.3 (peak)/14.9 (December)
2024	11.79	15.1 (official)

Source: Ministry of Education; National Bureau of Statistics.

Table 2 compares graduate unemployment rates six months after graduation by region in 2023. The western region has the highest unemployment rate (22.5%), followed by the central region (17.8%) and the eastern region (12.5%).

Table 2. Graduate unemployment rate by region (2023)

Region	Unemployment rate (%)
Eastern Region	12.5
Central Region	17.8
Western Region	22.5

Source: MyCOS Institute, 2024.

Several factors explain these regional unemployment disparities. The eastern region has a more developed economy with high-value industries such as finance and technology, which create more jobs for college graduates. The central region faces moderate unemployment due to its ongoing industrial transformation. The western region suffers from limited industrial diversity and a mismatch between graduate skills and local job opportunities, leading to the highest unemployment rate.

In summary, the data reveal three trends: rapidly increasing graduate supply, persistently high youth unemployment, and significant regional gaps where the western region faces the most severe graduate unemployment challenges.

3. Analysis on the problems

3.1. Imbalance in employment opportunities regionally

Regional imbalance in the work opportunities is a long-term obstacle to the employment of the Chinese college graduates, a structural imbalance (or structural mismatch) whereby the job creation is concentrated in the geographical area that is not aligned with the location of the university-educated talent. In the Chinese labor market, jobs are unevenly distributed with most multinational corporations, economy headquarters, and advanced industrial and modern service sectors being located in the eastern coasts-Peking, Shanghai, and the Pearl River Delta-but the central, western and northeastern areas are obviously underrepresented in terms of their employment opportunities. The difference can be seen in the overall economic development in the eastern, central, and western parts of China, among provinces and even between cities, where Shenzhen in Guangdong Province has a per capita GDP of US25, 790, seven times higher than Meizhou in Guangdong Province where the figure is US3, 626 [6]. This spatial inequality has direct effects on graduate unemployment in two fundamental aspects. On one hand, the increased amount of job hunters in the already saturated job markets of the developed cities, the competition becomes even tougher; and more and more students cannot find a vacant position and are eventually jobless. However, in the case of graduates that go back to their less developed native town, they often find either no jobs that reward their educational attainment or those jobs that do exist, their pay and career advancement opportunities are often well below their standards- a fact that leads to most of them voluntarily turning down positions offered and staying unemployed in the hope of some jobs improved. This phenomenon of regional mismatch, therefore, does not only push students out of the workforce in the economically disadvantaged regions; it also results in a pool of cohort of people who are voluntarily unemployed in developed cities who will remain unemployed until a job opportunity that will never be materialized comes to them.

3.2. The phenomenon of slow employment: the late downturn into the labor markets

Over the last few years, more Chinese college graduates have increasingly opted not to get employment as soon as they graduate-a behavioral pattern also commonly known as slow employment. Under the pressure of competitive labor market, numerous Chinese graduates decide to become a part of the so-called slow employment category, where they are not keen on securing a job or want to postpone the aspect of employment till after graduation; simply put, they have no immediate job prospects in mind and fall under employment confusion, and the number of such graduates is growing by the year [7]. This may be an apparent self-imposed delay but this phenomenon directly adds to the rate of unemployment that is measured since these graduates, though they can work, are not in the labor force and thus are counted as part of the unemployed. After graduating, these graduates usually spend some time preparing their postgraduate entrance exams, civil service exams, professional certifications, or even applying to foreign universities, but others often do short-term internships, long-term traveling or just wait without actively looking to get a job. This procrastination, however, is oftentimes followed by protracted periods of unemployment, when the efforts to pass the examinations fail, or the jobs of one's choice are not arrived at. Thus, gradual hiring of Chinese graduates eventually leads to joblessness.

3.3. Mismatch in supply-demand of graduates and the creation of jobs

The other significant case of the employment obstacles among Chinese college graduates is the current mismatch of supply-demand in the workforce-that is, the number of students graduating annually into the labor market continues to outnumber the number of job opportunities created, so that a large proportion of students will remain in a state of unemployment. In 2023, the Chinese college graduates grew to an all-time high of 11.58 million, adding 0.8 million to the number of the previous year, but with this growing volume, the employment rate at the first employment has been dropping at an average of 70-80 percent [8]. With the number of job seekers ever surpassing the number of individuals recruited in the labor market, job market competition is intensifying at an alarming rate taking away many university graduates in the job market and leaving them without employment at the end of the day. Such a long-term imbalance is thus a cause of graduate unemployment in China.

3.4. Skill mismatch: university curriculum and labor market expectations

Finally, but not the least, one of the reasons why the Chinese labor market has such employment difficulties is the skill mismatch, which refers to a strong lack of alignment between what higher education institutions instill in people with knowledge and competencies, and what employers actually require. Academic curricula tend to pay excessive attention to theory and outmoded material, and too much emphasis is placed upon memory and test results, rather than the job-related skills, which are valued by employers. Society and employers have put more demands on the graduate not only academic talent, but also other compound talents since more organizations are coming to realize that soft skills in the workplace are what make great employees good and thus these skills are greatly sought after by employers that are seeking new graduates [9]. Consequently, all of these skill gaps are directly converted into unemployment since unqualified graduates are filtered out in the resume screening process, unsuccessful in technical tests, or unable to meet probationary performance requirements. In this way, skill mismatch will inevitably lock out many Chinese graduates of the job market, making them jobless.

4. Suggestions

4.1. Regional imbalance in the employment opportunities

The central government, local government and institutions of higher learning should work together to tackle the problem of regional imbalance in employment opportunities. The Chinese government has adopted the Western Development Strategy (WDS) to stimulate economic development in the western part of the country, which is less developed [10]. Fiscal benefits such as tax incentives, housing allowances, loan forgiveness need to be increased to motivate businesses to open branches or R and D facilities in less developed regions and recruit local graduates. Universities ought to establish local labor partnerships with local governments and local industries, providing specific career fairs and internship opportunities that will match graduates with opportunities in their local areas, instead of just metropolises. Such strategies would contribute towards reducing congestion in the labor market in developed cities and voluntary unemployment in the lagging regions.

4.2. Leadership of the phenomenon of slowness in employment

To tackle the issue of slow employment, it is important to have policies that decrease the transition time of graduates and minimize chances of long-term unemployment. Universities ought to encourage postgraduate or civil service candidates to undertake part-time internships in the process of graduate studies, in order to ensure that they are not lost to the labor market. The government employment agencies ought to come up with a gradual employment tracking system that will offer career counseling, skill evaluation, and incentives to the graduates who have not been employed six months after their graduation. Moreover, employers and hiring websites ought to revise their screening policies to minimize stigma on less than one-year job gaps and lower the psychological barrier of slow-moving graduates to rejoin the labor market. An acceptable buffer time of six to a year ought to be set after which a compulsory re-engagement would be implemented to strike the right balance between personal choice and the objective of workforce participation. All these measures would help to minimize the period of long-term unemployment and prevent its transformation into long-term unemployment.

4.3. Supply-demand mismatch: graduate output and job creation

To resolve the mismatch in supply and demand between the number of graduates and the number of jobs created, there should be a coordinated response on the supply-side (increased enrollment in higher education) and the demand-side (employment creation policies). The Ministry of Education ought to introduce a dynamic enrollment adjustment system that decreases the number of admissions to majors that have a low employment rate and increases the number of admissions to those majors that fit the latest trends in the employment sector like AI, green energy, and digital trade. Governments ought to widen employment avenues to new graduates through subsidizing small- and medium-sized businesses to employ new graduates, increasing government-sponsored internship programs, and persuading state-owned businesses to keep on or enhance recruitment of new graduates during economic recessions. Mechanisms of entrepreneurship support like startup grants, incubation space and tax reductions should be enhanced to turn part of the job seekers into job creators especially in under-served sectors or underdeveloped areas. And there should be a publicly accessible system of labor market information to provide real-time information on supply-demand asymmetries so that students and universities can adjust expectations and training programs to reflect that information. The structural disequilibrium of graduate output and demand can be reduced over time through concerted adjustments in the aspects of supply and demand.

4.4. Overcoming the skill mismatch between labor market expectations and university curriculum

To reduce the skills gap between university programs and labor market demands, curriculum reforms, industry-college partnerships, and work-integrated learning designs are necessary. Graduates are supposed to have various employability skills, such as team-working, communication, leadership, critical thinking, problem-solving, managerial skills, and technical skills [11]. University-industry cooperative education programs like the dual-study course developed in Germany, or pilot industrial colleges in China, ought to be extended and students in applied fields must have at least one semester of credit-based mentored work experience with an enterprise partner. Micro-credential programs, like Python certificates, digital marketing certificates or data analytics certificates, ought to be integrated into undergraduate degrees such that students leave

school with a degree and some form of industry-acknowledged proof of a particular ability. Also, to make sure that degree programs are responsive to changes in the labor market, there should be institutionalization of employer participation in curriculum development by means of industry advisory boards that can veto obsolete courses. The skill gap between labor market needs and university graduates can be moved as close as possible through reformation of the curriculum, work-integrated learning, micro-credentials, and employer engagement.

5. Conclusion

This paper has explored the cause of college graduate unemployment in China and given the relevant recommendations. The essay started with an introduction comprising of background information, literature review, and research motivation and then a case description looking at key indicators between 2019 and 2024 and found three major trends, which include rapid rise in graduate supply with an increase rate of 8.34 to 11.79 million and a high rate of unemployment among the youth with a peak of 21.3 percent and a high level of regional. The analysis of the problem also found four root causes, which included regional imbalance of job opportunities, slow employment phenomenon of late entry of labor, the long term supply-demand gap of university graduates to job opportunities, and mismatch of skills between the university programs and the expectations of employers. On the basis of these results, four related recommendations were made: solving the issue of regional imbalance by means of fiscal incentives and local employment alliances, steering slow employment processes with part-time internship, tracking systems, balancing supply-demand mismatch with dynamic enrollment adjustments and with job creation pathways, and bridging the gap of skills mismatch by reforming the curricula, developing industry-college partnerships, and micro-credential pathways.

Nonetheless, this research paper has a number of limitations. The research was mainly based on macro-level aggregated data, which can overlook high levels of heterogeneity between various levels of universities, majors, and the individual attributes of the student. Also, the causality associations among the factors identified and graduate unemployment in China could not be determined strictly as the analysis was descriptive. These limitations might be addressed in future studies through the use of micro-level survey data and applying econometric models (i.e. logistic regression or panel data models) to determine the marginal effect of each factor more accurately, which would further support the theoretical insight and practical policy implications of the graduate unemployment phenomenon in China.

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