

Analysis of factors affecting college students' employment in post-epidemic era and policy suggestions

--Take Nanjing Audit University as an example

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Abstract

In the post-epidemic period, with the global economic downturn, the employment concept and employment planning of college graduates have also changed under the influence of factors such as the expansion of the scale of college graduates, the contraction of labor demand and the deterioration of employment stability. The employment situation of college graduates is becoming more complex and severe. Based on the survey of college students in Nanjing Audit University, this paper analyzes the employment situation of college graduates at the present stage, and puts forward countermeasures and suggestions for promoting the employment of college graduates in the post-epidemic era.

Keywords

Post-epidemic era; College student employment; Influencing factors; Logit model.

1. Introduction

With the rapid development of higher education, the number of college graduates in China continues to rise, and the impact of the epidemic and the downward pressure of the economy are parallel, and the employment of college students is facing unprecedented severe challenges. This paper collected the employment situation of undergraduate students in Nanji University from 2019 to 2022, conducted a survey on the employment concept of college students in Nanji University, integrated the main factors that may affect the employment of college students in recent years, and proposed a series of policies to help college students find employment in the post-epidemic era.

2. Employment rate of undergraduates in Nanjing Audit University from 2019 to 2022

	Agreed employment	Institutional employment	Study in China	Study abroad	Flexible employment	Self-employment	Freelance work	Waiting for employment
2019	73.58%	28.95%	14.14%	8.16%	2.05%	0.05%	0.22%	1.81%
2020	59.36%	41.18%	16.40%	8.33%	1.14%	0.02%	0.05%	14.70%
2021	61.83%	-	18.95%	5.90%	2.12%	-	0.15%	4.17%
2022	55.62%	-	20.76%	4.40%	-	-	-	-

Compared with the period before and after the COVID-19 epidemic, the employment rate of the South Trial agreement decreased significantly during the epidemic period, the domestic enrollment rate increased steadily, and the overseas enrollment rate decreased slightly.

Graduates are more likely than before the pandemic to continue their education rather than enter the workforce. In the agreed employment, the employment ratio within the system has increased significantly, and the uncertainty of the economic environment has increased, leading more graduates to choose civil servants, public institutions, state-owned enterprises and other institutions as the primary employment choice. According to the data of the Information Disclosure network of Nanjing Audit University, the employment rate of 73.58% of the agreement in 2019 has plummeted to 59.36% in 2020 and will no longer return to the original level. Employment in the system soared by 12.23 per cent. At the same time, the domestic enrollment rate increased steadily from 14.14 percent in 2019 to 20.76 percent in 2022, while the overseas enrollment rate decreased from 8.16 percent to 4.40 percent.

3. Data acquisition and model building

(1) Data acquisition

The questionnaire content mainly focuses on the three aspects of society, family and individual to ask the South Trial college students questions, aiming at studying the South Trial college students' views on whether different factors will affect the future employment.

In this survey, the questionnaire part uses the form of online questionnaire distribution, and the "Questionnaire star" platform is used to distribute questionnaires to college students in Nanshan University on QQ, wechat and other platforms.

In the questionnaire design, "the maximum number of filling in per device is once" was set to prevent respondents from filling in the questionnaire repeatedly. In the questionnaire quality monitoring, questionnaires with filling time less than 60s, incorrect contents, abandoned filling in the middle, and IP addresses not located in Jiangsu Province will be regarded as invalid questionnaires and deleted later. A total of 360 questionnaires were sent out, and 348 valid questionnaires were obtained. The Cronbach's α coefficient of this model is 0.622, 0.622 > 0.6. The reliability of the questionnaire is average and it can be used normally. The KMO value was 0.648 > 0.6. The validity of this questionnaire is for reference. p value was 0.042, 0.042 < 0.05, and the AIC value and BIC value are small, this model is overall effective and can be used. The assignment of main variables is shown in Table 1.

Table 1 Description of variable selection and processing in the model

Variable type	Variable code	Variable name	Assignment condition
Dependent variable	Y	Employment willingness of college students	Unwilling =0, willing =1
	x1	sex	Female =1, male =2
	x2	Desired employment area	New first-tier cities =1, hometown =2, Beijing, Shanghai, Guangzhou and Shenzhen =3, second and third-tier cities =4
	x3	Participated in an internship related to my major in the past year	Yes =1, no =2
Independent variable	x4	Understanding of the general employment direction related to the major	Basic knowledge =1, basic knowledge =2, general knowledge =3, very good knowledge =4
	x5	Think that family factors will affect the choice of employment	Not sure =1, yes =2, no =3
	x6	The main household factors influencing employment choice	Family economic status =1, family expectations and pressures =2, family geographical location =3, family members' occupational background =4
	x7	The epidemic has an impact on job hunting or internships	Yes =1, no =2

x8	Think that social factors will affect the choice of employment	Yes =1, no =2
x9	The main social factors affecting employment choice	Fierce competition =1, social demand for specific majors =2, social atmosphere and values =3, and entrepreneurial atmosphere =4

(2) Model establishment

In order to deeply explore the most important factors affecting the graduation trend of undergraduates from Nanjing Audit University in the post-epidemic era and better analyze the internal differences among the main factors, the team constructed a regression model. The dependent variable is a binary categorical variable, and the independent variable is a categorical variable. Therefore, the binary Logit regression model is the most suitable for fitting.

$$P = \frac{\exp(z)}{1+\exp(z)} \tag{1}$$

In the formula: P represents the probability of the event, Z represents x_1, x_2, \dots , linear combination of x_n ,

$$Z = a + b_1x_1 + b_2x_2 + \dots + b_nx_n \tag{2}$$

Applying the Logit transformation to P yields:

$$\text{Logit}(P)=\ln\left(\frac{p}{1-p}\right) = a + b_1x_1 + b_2x_2 + \dots + b_nx_n \tag{3}$$

Based on the analysis of factors affecting the employment of college students in previous literatures and the actual situation of undergraduates in Nanjing Audit University, this paper designs questions from three aspects: social, family and personal factors, and selects 9 groups of factors that may affect the employment choice of college students. The dependent variable is the employment intention of college students, and the options are set as "willing" and "unwilling".

Based on the above analysis, a model of influencing factors of college students' employment intention is established:

$$Y=(x_1,x_2,x_3,x_4,x_5,x_6,x_7,x_8,x_9) \tag{4}$$

Y is the employment intention of college students, $x_1, x_2, x_3, x_4, x_5, x_6, x_7, x_8, x_9$ respectively indicates gender, desired employment region, participated in the internship related to the major in the past year, the degree of understanding of the general employment direction related to the major, believe that family factors will affect the choice of employment, the main family factors affecting the choice of employment, the impact of the epidemic on job hunting or internship, believe that social factors will affect the choice of employment, and the main social factors affecting the choice of employment. Thus:

$$\text{Logit}(P)=a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + b_7x_7 + b_8x_8 + b_9x_9 \tag{5}$$

In equation (5), a is the constant term and the constant term to be estimated.

4. Empirical analysis

In this hypothesis test, 95% confidence interval was selected and verified by Logit regression analysis. The order of regression coefficient results was gender > Impact of the epidemic on job hunting or internship > Main family factors influencing employment choice > Thought social factors would influence employment choice > Participated in a major-related internship in the past year > Thought family factors would influence employment choice > Major social factors influencing employment choice > desired employment region > For the degree of understanding of the general employment direction related to the major, the specific quantitative analysis results are shown in Table 2.

Table 2 Logit regression analysis table

variable	Variable name	Regression coefficient	Standard deviation	Z-value	p-value
x1	sex	-0.663	0.434	-1.528	0.127
x2	Desired employment area	0.262	0.175	1.496	0.135
x3	Participated in an internship related to my major in the past year	-0.412	0.164	-2.512	0.012
x4	Understanding of the general employment direction related to the major	-0.210	0.152	-1.386	0.166
x5	Think that family factors will affect the choice of employment	-0.353	0.413	-0.853	0.394
x6	The main household factors influencing employment choice	0.452	0.312	1.664	0.096
x7	The epidemic has an impact on job hunting or internships	-0.466	0.282	-1.652	0.099
x8	Think that social factors will affect the choice of employment	-0.434	0.395	-1.098	0.272
x9	The main social factors affecting employment choice	0.345	0.460	0.748	0.455

(1) Social factors

The coefficient of influence of the epidemic on job hunting or internship is -0.466, and the coefficient of believing that social factors will affect employment choice is -0.434, which shows that in the context of the epidemic, students in Southern Examination think that most of their job hunting plans and internships are not affected, and in the post-epidemic period, they do not think that social factors will not affect employment to a large extent. However, the coefficient of the main social factor influencing employment choice is 0.345, which indicates that social competition and the demand for a particular profession become important considerations in the context of the pandemic.

(2) Influencing factors at family level

It is believed that the coefficient of family factors affecting employment is -0.353, which indicates that in the post-epidemic period, the students of South Trial University believe that family factors are not the main reason affecting employment, and the coefficient of main family factors affecting employment choice is 0.452. This indicates that family economic status and family expectation and pressure play a strong role in employment choice.

(3) Individual level influencing factors

The gender coefficient is -0.663, indicating that men are more inclined to direct employment, while women are more inclined to wait for employment, take the entrance exam or go abroad. The regional coefficient of hope for employment is 0.262, indicating that college students are more willing to work in new first-tier cities and hometown. The coefficient of internship participation is -0.412, indicating that internship experience may affect employment intention, and those college students who have participated in internship may be more cautious about employment. The coefficient of the degree of understanding of the general employment

direction related to the major is -0.210, which means that the more students know about the employment direction, the more inclined they are to find employment.

5. Conclusions and Suggestions

(1) Conclusion

The epidemic has had an impact on the job market, leading to the reduction of traditional jobs and increased competition, but also the emergence of some new industries and new ideas. During the epidemic period, the employment rate of college students decreased significantly, the enrollment rate of foreign students decreased slightly, the employment rate of the system and the enrollment rate of domestic students increased, and college students were more inclined to continue their studies or engage in stable jobs.

Among the social factors, the fierce competition in society and the demand of some professions for specific majors have a great impact on the employment choice of college students.

Among the family factors, family economic status, expectation and pressure have the most prominent influence on college students' employment choice.

Among individual factors, factors such as gender, internship experience and knowledge of professional employment direction play an important role in decision-making.

(2) Suggestions

Strengthen support for the job market

The government can provide support and funds for college graduates who start their own businesses by providing one-time start-up subsidies, venue support, and guaranteed loans to start businesses, so as to promote start-ups and technological innovation, and provide more business and employment options for young people. At the same time, social protection systems should be strengthened to ensure that vulnerable workers and young people from low-income families have access to the necessary support. For example: provide unemployment benefits, health care and housing support to reduce economic pressure.

Fully introduce on-campus online communication software and establish a personalized employment information push system

Universities introduce and train teachers and students to use efficient online collaboration tools, such as video conferencing software, team chat platform and document sharing tool, so that teachers and students can talk efficiently when it is difficult to communicate in study and work. It is also possible to establish a personalized job information push system according to students' interests, majors and employment needs to ensure that they receive the most relevant job information and recruitment opportunities.

Strengthen career planning and employment guidance

Establish a library of online courses and training resources to provide educational institutions and students with a centralized platform for online courses and training resources, and provide students with support such as learning materials, career planning, resume advice and interview skills to improve their competitiveness in employment.

Give students enough support and understanding

The school has increased investment in employment guidance courses, emphasized communication with students on employment issues, and increased psychological counseling for college students who have experienced employment pressure. The government will increase the publicity and introduction of information on college entrance and different occupations, so that more parents can better understand the current situation of college entrance and employment, reduce the information gap between parents and students, increase parents' attention and understanding of students to a certain extent, and reduce excessive pressure from parents.

Students improve their employment quality

Students should actively improve their professional knowledge, transferability and self-management ability, and actively participate in internships and projects to accumulate practical work experience and improve employment opportunities. It is also necessary to make career plans according to their own circumstances and interests, flexibly respond to changes in the job market, and make various preparations.

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