

Research on the Relationship between the Regulation of Macroeconomic Policies and the Employment Rate of Chinese College Students

Liu Chenjiao and Valliappan Raju

***Abstract---** China is a country with a large population; thus, unemployment issues in the Mainland is a huge concern. As an important part of social labour, college students have become the focus of the workforce, government, universities, and families. Many experts and scholars have carried out various aspects of analysis and research on the employment situation of college graduates from the economic, political, social, educational or specific operational aspects. This paper hypothesised between three aspects, namely the country's employment system, higher education and government interventions and the employment rate of college students. A questionnaire survey was conducted through an online questionnaire network. Finally, after analyses conducted through SPSS and SEM-PLS, it is concluded that the national macro policy has a positive relationship with the employment rate of college students through the employment system, higher education and government interventions. The macroeconomic policy needs to be adjusted to achieve the goal of improving the employment rate of college students.*

***Keywords---** Macroeconomic Regulation, Employment Rate, Chinese Universities, College Students.*

I. INTRODUCTION

In 1952, China established the National Unified College Admission System, referred to as the “College Entrance Examination”. The target audience is Chinese citizens who have graduated from all senior secondary schools or have equivalent qualifications. Through this examination, students are admitted to universities corresponding to their different learning abilities. Because there is not much difference in race, gender and family conditions, it is a relatively fair and open form of talent selection.

Since China’s expansion of colleges and universities in 1999, the prelude to a new round of college entrance examination reform has been unveiled. The number of colleges and universities, the admission rate of college students, and the number of admissions have all risen sharply. According to the latest data released by the Ministry

Liu Chenjiao, Limkokwing University of Creative Technology, PhD, Selangor Darul Ehsan, Malaysia. E-mail: 3317686802@qq.com

Valliappan Raju, Limkokwing University of Creative Technology, Dr., Selangor Darul Ehsan, Malaysia. E-mail: 290635938@qq.com

of Education in 2019, the number of applicants for the national college entrance examination was 10.31 million. Under the policy dividend of “high-level enrolment expansion of 1 million”, the overall acceptance rate of the college entrance examination this year should be 85%, about 8.76 million. Compared with the first year of the resumption of the college entrance examination in 1977, the number of college entrance examinations has increased by more than 32 fold. As a result, China's higher education has gradually transitioned from a popularised education to popular education. In the long period after the expansion of the first university, the overall national quality of the country has been greatly improved, the development of social civilisation has been satisfactory, and the speed of economic development has risen steadily. However, while enjoying the benefits of higher education popularisation, we have overlooked several issues:

1. The domestic education mechanism has always adopted the model of “strict entry, easy graduation”. After the expansion of enrolment in 1999, the import of colleges and universities was loose, and the export was still not tightened. In the case of sustained throughput in colleges and universities, a large student enrolment rate means a huge student graduation population.
2. In order to solve the unemployment issue, colleges and universities began a series of emergency or systematic employment training. The employment training content only deals with universality and does not involve specialty, where only the basicity is targeted, and only meets the public and not the minority. Therefore, it is crucial to find out several factors that are important for the employment rate of colleges and universities, and concentrate on finding the solutions.
3. The immeasurable era of Internet information has deepened the transparency of various types of information. Information is no longer a resource that government interventions have, so they cannot rely on controlling information sources to control the sources of information of employment groups. This adjustment is a serious challenge.

Therefore, finding out the relevant factors that affect the employment rate of college graduates, investigating, analysing, and obtaining influence factors with different proportions, finding out the source and solution, and helping hard-to-work areas overcome difficulties could help to promote the overall employment pattern in China.

II. EMPIRICAL REVIEW

Developed countries have always attached importance to the improvement of the quality of human capital, especially to the cultivation of college students. Romer, Lucas, Krugman, and others pointed out that the improvement of human capital and the innovation of science and technology are the most important explanatory variables of economic growth. The employment problem of college students has become the top priority of various employment issues. Despite the huge differences between China and the West in terms of political systems, cultural practices, and educational models, the main employment theories in the West still have important references that are significant for solving the problem of employment of college students here.

1. A review of foreign scholars' research on college students' employment.

Unemployment is not only an important economic issue but also a significant social problem. If not resolved in time, it will lead to pre-social instability, which will cause huge development costs to the economy and society. The mainstream economics community generally believes that achieving full employment can not only achieve economic prosperity but also the government's primary economic function. At present, the important theories that explain the employment problem in the theoretical circle are: Involuntary Unemployment Theory (John Maynard Keynes, 1936), Natural Rate Hypothesis (Milton Friedman, 1968) Dual Sector model (William Arthur Lewis, 1954), Job search theory (E.S. Phelps, 1968), Voluntary Unemployment Theory and High Wage Unemployment Theory (A.C. Pigou, 1933) and so on.

2. A review of domestic scholars' research on college students' employment.

Researchers have been studying employment issues in China for many years. Based on the Chinese academic professional research website (cn.cnki.net), the existing literature basically started in the late 1990s, by Su Jun and Li Dan (2001), Chen Jianhui (2000), Ji Bin (2003), Lin Wuping, and Yin Xingming (2004). The research involved employment reasons, employment skills, employment concepts, employment status, and analysis. As of February 2019, CNKI had 38,579 articles on the employment of college graduates. Among them, there are 6,768 articles on the employment system factors such as employment and employment guidance of college students (hereinafter referred to as ES). A total of 4,659 articles are available on the subject of high education (hereinafter referred to as HE), such as the enrolment scale of colleges and universities, the current professional discipline setting, the information circulation between schools and enterprises, and the establishment of employment indicators. With the

government's employment, personnel, and household registration policy supporting legal and social security systems, the status quo of unemployment and skilled labour coexistence and policy guidance and other government interventions (hereinafter referred to as GI) is the research theme of a total of 8092 articles, which is in the forefront of the research topic of this category. These major categories are used as several variables to study the employment rate, analyse the different reasons for the employment rate of students, and find ways to steadily promote the employment situation in China through research.

III. RESEARCH QUESTIONS AND RESEARCH HYPOTHESES

Through the research review, it was discovered that the employment system, higher education, and government interventions have an impact on the employment rate in the country's macro policy regulation and control (Li Gonghua, 2018; Yang Hongtu, 2017; Liu Hongwei, Xiao Caibo, 2017), but as for the relationship between them, there is no specific study and research data on the intensity of the impact. Therefore, the following questions are raised:

Research question 1: Is the relationship between the employment system and student employment rate positive or negative? What is the intensity of influence?

Research question 2: Is the relationship between college education factors and student employment rates positive or negative? What is the intensity of influence?

Research question 3: Is the relationship between government intervention factors and student employment rates positive or negative? What is the intensity of influence?

Based on these questions, the following hypotheses were made:

H1: The employment system factors (i.e. ES) and the employment rate of college students are positively affected by employment and employment guidance.

H2: The educational factors (i.e. HE) and employment rate of colleges and universities are positively influenced by the enrolment scale of colleges and universities (Abawajy, 2019), The establishment of current professional disciplines and the establishment of employment indicators are also important.

H3: The government intervention factors (i.e. GI) and employment rate are positively affected by employment, personnel, household registration policy, supporting legal and social security systems and policy guidance.

IV. RESEARCH METHODOLOGY

Based on the hypotheses formulated, the research methods of the study were developed which included a comprehensive use of literature review methods, questionnaires, interviews, and statistical analysis.

1. Literature review: The interpretation of historical documents is an important one in research methods. This research system has reviewed all kinds of Chinese and English literature and materials. Not only the related literatures are reviewed, collected and organised, but also related books, manuscripts and journals. The research results and theoretical research on the employment of college students are deepened, while the views and opinions of others are drawn on to provide references for this study.

2. Questionnaire survey method: This study selected 20 universities in the country as the survey objects through a network survey “questionnaire star” system, and sampled the survey. For the scope of the survey, a group of college students were chosen who are in the middle school or above and who are 16-35 years old or have graduated within 3 years.

3. Interview method: Through the use of self-made interview outlines, in-depth interviews were conducted with the management personnel of 10 colleges and universities in charge of the employment of graduates. The respondents were asked if they understand the employment situation of the graduates of the year, the problems existing, and the initiatives of the universities in promoting employment. The heads of employment departments of some provinces and cities discussed the current employment policies and talent introduction policies of college students through seminars or interviews. Some employers were interviewed to understand their opinions and suggestions on current personnel training, student quality development, and employment guidance.

4. Statistical analysis method: All data in this study were stored Microsoft Office Excel 2010 to establish a database, draw statistical charts and perform cluster analysis, and SMART-PLS and SPSS were used for statistical analysis, including descriptive analysis, multiple linear regression, etc. The system was clustered and analysed to classify the indicators.

According to the literature review, a framework for research was designed. First, three influencing factors (i.e., three independent variables) were identified based on the proposed literature review, and a research framework was formulated as shown below :

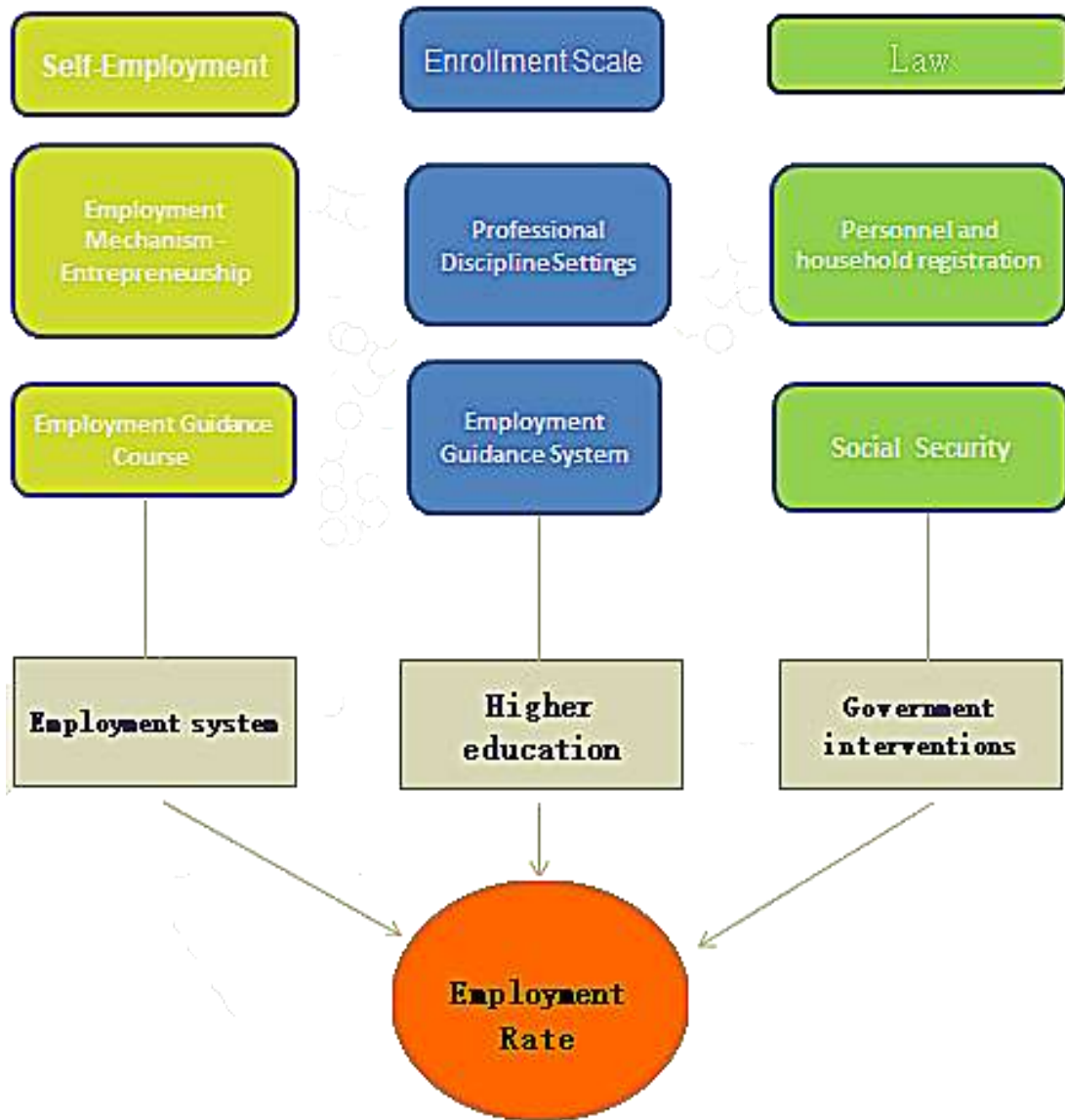


Figure 1: Structural model consisting of three independent and dependent variables

The questionnaire was designed according to the above framework. The specific content of the questionnaire referred to the relevant research literature at home and abroad. The design followed five principles: relevance, necessity, comprehensibility, structural rationality and validity of the answer, so as to make the problem as comprehensive and accurate as possible.

In response to the above questionnaire, the period to respond ended on September 30, 2019. 600 questionnaires were sent through an online social research platform and 597 questionnaires were collected. Out of those, the

number of valid questionnaires was 534. The average question-answer time was 3 minutes and 20 seconds, and the total page view rate was 1,509. The completion rate was 89.0%. The geographical distribution was mostly from the east and the middle regions of China.

V. RESULTS AND DISCUSSION OF FINDINGS

5.1 Results

The SEM-PLS results are analysed and the model structure diagram is built as follows:

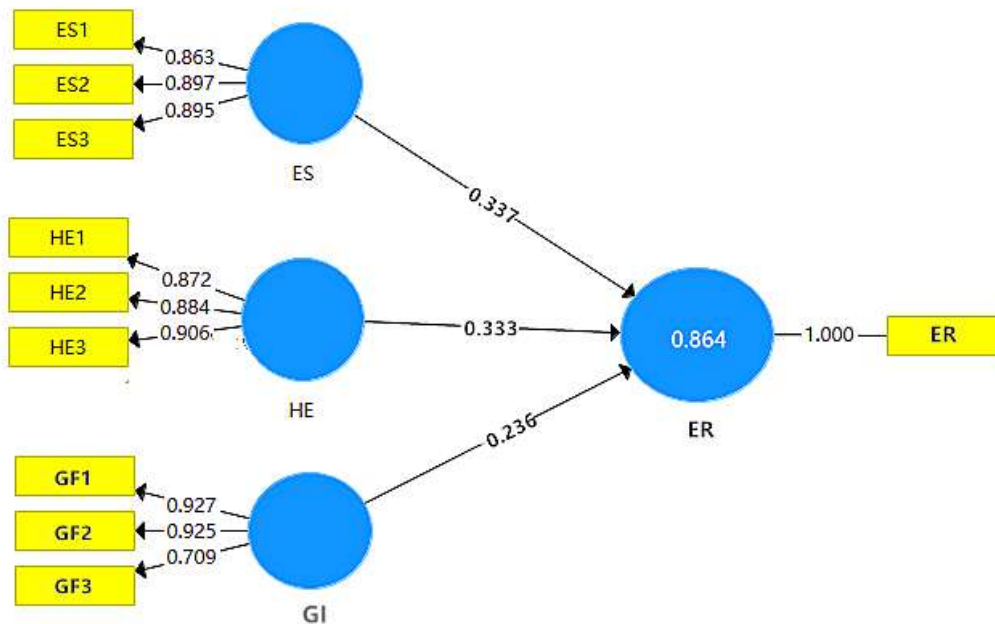


Figure 2: Research framework quantitative analysis diagram

5.2 Discussion

It can be seen from the above figure that the lowest value of the observable variable Outer Loadings in the model was the threshold of ES1 at 0.813, while the highest threshold for HE3 was 0.896. All were above the 0.7 threshold indicator item. The coefficient of determination R Square was 0.864 and R Square Adjusted was 0.862; thus, the model was well established.

The path coefficients (beta) obtained by ES, HE, GI and ER through three correlation lines were 0.337, 0.333, 0.236, respectively, all > 0.1 , which proved that the path coefficient was significant between them. The relationship

was valid. The relationships between ES, HE, GI and ER were positive, and EE had the most significant effect on ER. Thus, the previous assumption was true.

The AVE values were 0.833, 0.838, and 0.842, all of which were greater than the 0.5 threshold level. The aggregation validity of the questionnaire was good, while the explanatory power of the indicator exceeded the error variance. The measurement of each latent variable had sufficient polymerisation validity.

The square roots of the diagonal AVE values in the Fornell-Larcker criterion were 1, 0.835, 0.832, and 0.840, all of which were greater than the correlation coefficients of the various latent variables (Graham Hardy, 2013). The validity of the distinction between the various latent variables within the model was very good.

5.3. Conclusion

Through data collection and the quantitative analysis results, we can see that ES, HE, GI and ER were positively correlated with each other, and the effect was significant. From the above results, it can be concluded that the previous assumptions were meaningful. In our previous literature review, we can understand that many employment issues are the focus of modern scholars, but many theoretical proposals lack data support. This paper provides some data support for further research on the employment issue of college students.

ACKNOWLEDGEMENTS

First of all, I would like to thank my supervisor for his guidance on the topic selection, and my parents for providing the basic data for the research investigation. Secondly, I would like to thank my classmates Dai Xin and Cao Jie for their assistance in technical support and English thesis writing, and also the proofreading team for a more accurate expression of the article. Finally, I would like to thank ISPC for providing the platform and X journals for the publication of the article.

REFERENCES

- [1] Abawajy, J.H., Choo, K.-K.R., Islam, R., Xu, Z., Atiquzzaman, M. (Eds.), "International Conference on Applications and Techniques in Cyber Intelligence ATCI 2019", *Springer Science and Business Media LLC*, 2020
- [2] Chen Jianhui. "Several Analysis of the Current Employment Situation of College Students", *China Forestry Education*, Vol. S1, 79-80, 2000.
- [3] E.S. Phelps. "Money-Wage Dynamics and Labor Market Equilibrium" *Journal of Political Economy*, 1968.
- [4] Graham Hardy. "Academic Self-Concept: Modeling and Measuring for Science", *Research in Science Education*, 2013
- [5] Ji Bin. "Strengthening Vocational Guidance and Strengthening Employment Services—Thinking about

- Employment Problems of Higher Vocational College Graduates", *Northern Economy*, No. 12, 52-54, 2003.
- [6] John Maynard Keynes. "The Principle of Effective Demand" Chapter 3, section II." *Revista Colombiana De Ciencias Pecuaris*, Vol. 24, No.2, 107-115, 1936
- [7] Lewis, W. Arthur, "Economic Development with Unlimited Supplies of Labour", *The Manchester School*, 22, 139-92, 1954.
- [8] Lin Wuping, Yin Xiaming. "Thinking about the Impact of College Expansion on Employment", *Journal of Shandong Youth Management Cadre College*, No.06, 69-71, 2003.
- [9] Li Gonghua, Shi Xiubo, Chen Siyu. "Research on Employment Market Optimization of University Graduates in the New Situation", *China Market*, 172-173, 2018
- [10] Milton Friedman. "Dollars and deficits", *The American Economic Review*, Vol. 58, No. 1, 1-17,1968
- [11] Pigou, A.C. "A Note on Imperfect Competition". *Economic Journal*, Vol.43, No.169, 108-112, 1933
- [12] Su Jun, Li Dan. "Current Situation and Challenges of Graduate Employment in Chinese Universities", *Journal of Tsinghua University*, No.06, 33-38, 2000.
- [13] Xiao Caibo, Liu Hongwei. "System Reform and Risk Aversion: A Study on the Employment Guarantee Mechanism for Tibetan College Students". *Journal of Tibet University*, Vol. 32, No.04, 184-190, 2017.
- [14] Yang Hongtu. "Design and Implementation of a Graduate Employment Management System Based on J2EE". *Jiangxi University of Finance and Economics*, 75, 2017.