Analysis on the Cost of Higher Education and the Inequality of Educational Resources in China and America

Yiran Zhao

Faculty of Human Social Science, University of Nottingham, Ningbo, China hiyyz32@nottingham.edu.cn

Abstract: This essay explores the cost of higher education and the inequality of educational resources distribution in China and America. As both nations grapple with the challenges posed by rising tuition fees and the uneven distribution of educational resources, understanding these dynamics becomes crucial for policymakers, educators, and students alike. In China, the rapid expansion of higher education has led to huge differences in resource allocation, and the educational resources in urban centers are much richer than those in countryside areas. In America, where elite institutions in the education industry attract the most funding and resources, family income greatly affects the quality and resources of education available. This paper examines the governmental and economic factors that influence the cost and resource allocation of higher education, which have contributed to the widening of equality and opportunity gap in higher education. By comparing China and America, the analysis highlights the need for targeted policy interventions to promote a more equitable education environment. This essay aims to explore the current state of higher education and provide perspectives for addressing the high cost and inequality of higher education

Keywords: Educational inequality, educational cost, policy recommendations, higher education.

1. Introduction

In recent decades, higher education has emerged as a critical determinant of individuals' career prospects and socioeconomic development. However, the escalating cost of higher education and the widening disparity in the distribution of educational resources have become pivotal issues for both China and America. The increasing financial burden associated with higher education has garnered significant attention in both countries. This heavy financial strain raises serious concerns about social equity and access to quality education. China transfered from a planned economy to a market-oriented system since the reform and opening-up period. This has led to the commodification of education, resulting in a sharp increase in tuition fees over the past few decades [1]. This shift has created substantial financial barriers for students from low- and middle-income families, exacerbating educational inequality. Similarly, in America, rapid increases in college tuition have led to unprecedented levels of student loan debt, imposing long-term financial stress on graduates. Driven by undergraduate and graduate teaching and research activities, the operational costs of research universities have significantly increased [2]. Despite considerable economies of scale and scope identified in American research universities [2], these efficiencies have not translated into reduced

student costs. Instead, the financial burden on students and their families continues to rise, raising concerns about the accessibility and affordability of higher education.

These challenges above are further exacerbated by the unequal distribution of educational resources. In China, prestigious universities are predominantly situated in urban areas. Regional disparities and the urban-rural divide have resulted in significant variations in education quality and opportunities [3]. Rural students frequently face disadvantages in terms of school funding, teacher qualifications, and access to learning resources, leading to lower educational attainment compared to their urban counterparts. In America, in order to enhance their competitiveness, colleges and universities continue to carry out campus construction and facility renewal, which increase the operating costs of schools, including the increase in facility construction, scientific research investment and administrative costs, and ultimately transfer to tuition fees [4]. The average cost of attending college per student is \$38,270 per year. The compound annual growth rate (CAGR) of college tuition is as high as 4.04%. The overall average cost of college has more than doubled since the early 2000s [5]. Additionally, increasing income inequality has disproportionately impacting students from low-income backgrounds to receive higher education [6], which exacerbates disparities in educational achievement and future economic prospects for different social classes.

This essay aims to examine the composition of higher education costs and the differences between China and America, along with the reasons for these differences and the trends in higher education costs in both countries. Furthermore, this essay explores higher education resource distribution, identifying reasons of unequal allocation of educational resources in China and America. By comparing the experiences of the two countries, this essay seeks to discover valuable practices that can offer actionable insights for policymakers to design more effective policies aimed at mitigating the challenges associated with rising higher education costs and promoting greater educational equity.

2. Comparison of higher education costs between China and the United States

The composition, scale, and trends of higher education costs differ significantly in China and America. The cost of American universities mainly includes teaching cost, research cost, and administrative support cost, among which administrative cost accounts for nearly a quarter of the total expenditure of American universities [7]. Additionally, there are some hidden costs of higher education in America, such as the opportunity cost of students, which is the potential income that students give up by attending colleges [6]. In China, the cost mainly focuses on teaching, research and management. Recently, the construction and renewal of teaching facilities, the construction of teaching staff, and scientific research investment have become the main cost growth points in higher education. Compared with America, the cost composition in China is relatively simple, the opportunity cost and hidden cost of students is relatively small. The Chinese government's investment in higher education is relatively high, and the cost control of Chinese higher education institutions is relatively strict [8]. This makes higher education relatively cheaper in China than in America.

This difference is mainly reflected in the difference between the two governments' investment strategies and the composition of higher education funds. As a developed country, American universities invest far more in research equipment, faculty salaries and campus facilities than their Chinese counterparts. Higher education institutions in America spend more on research and administration. University administrative positions grew 60 percent from 1993 to 2009, and administrators often earned more than faculty, with Purdue's vice president earning a staggering \$17,200 a year, driving up the overall cost of the university [7]. Chinese government investment in higher education is increasing, but overall investment is still lower than in America. The American government's investment in higher education is mainly reflected in the form of scientific research funds and student funding, while the Chinese government's investment in higher education is relatively more comprehensive and powerful, which makes the proportion of tuition in the total cost

relatively low. In addition, the financial support of China's higher education mainly comes from the government, which usually reduces the financial burden of students through financial subsidies and preferential policies. In America, in addition to government funding, private support such as contracts and grants is another major source of school funding [9]. From 2010 to 2011, the total amount of donations exceeded 28.7 billion US dollars, which also played an effective role in curbing the increase of tuition fees [9]. Overall, the rising cost of higher education in America is mainly driven by research investment and demand for student services, while China relies more on the construction of teaching facilities and teachers. This difference reflects the difference in the development models: America concentrates in the diversification of research and services, while China focuses more on the improvement of teaching quality.

In recent years, the higher education cost in America has continued to rise. The increasing tuition in America is partly because of the increasing demand for high-quality education by high-income families, that is, the higher the income, the greater the willingness to pay, and the greater the importance of their children's education [6]. Furthermore, American research universities are increasing their investment in cutting-edge fields and interdisciplinary research, resulting in rising research costs, and the proportion of student service costs to the total cost of universities is gradually increasing. With the increase of campus operation and maintenance costs, it has become an important expenditure. Moreover, administrative expenses on the office of the American President increased by \$80 million from 2015 to 2016 [7]. Chinese higher education's rising cost can be attributed to the improvement of teaching quality and the increase of enrollment quotas. Specifically, the need of new teaching facilities and the expansion of college staff have pushed up overall teaching costs. Research equipment procurement and project funding have become important factors in cost growth. Colleges and universities have gradually increased the investment in student living facilities and service quality, but the overall proportion is still low. In contrast, the cost of higher education in China has shown a relatively stable trend. The cost of education has not increased substantially as a result of China's higher education expansion [8]. In summary, these differences between China and America are due to different government investment methods and the composition of higher education costs. America needs to control the rising cost of higher education through policy adjustment, while China should keep improving the efficiency and quality of education.

3. Analysis of the problems of resource inequality in higher education between China and the United States

The development and disparity of higher education possibilities, as well as the distribution of government resources, can be used to examine the overall state of higher education resource allocation in China and America. When it comes to government resource allocation, the financial allocation of the Chinese government accounts for 55% of the total funding of universities on average [10]. The Chinese government improved the research capacity of universities by setting up special funding projects such as Project 211 and Project 985 [10]. In the United States, a \$1 increase in federal and state funding for each student reduces tuition by 40 cents, and steady government investment helps to curb the rapid growth of tuition [9]. However, these programs have also been criticized for being unjust in addressing educational inequality. Between 2009 and 2013, 116 universities in Project 211 and 39 universities in Project 985 received more than 72% of China's government research funding, and the level of financial support among universities in the project also varied greatly [10]. There is no doubt that China has made great strides in increasing access to higher education thanks to the country's fast growth in higher education since the end of the 20th century. Between 1999 and 2015, the number of students enrolled in China's higher education system increased from 1.6 million to 7.38 million, with a total of 26.25 million students in 2015 [8]. However, increased access to education does not necessarily translate into equitable distribution, and this

expansion is not evenly distributed across regions and social groups. Despite large increases in school enrollment, inequalities in educational opportunities persist, especially in terms of hukou, family economic status, and parental education levels [8]. Rural students continue to encounter major obstacles when trying to get into prestigious universities and other higher education institutions. Despite an increase in general access to higher education, the gap between various social classes has not decreased [8]. Similarly, higher education expansion in America is not evenly distributed across income groups. Compared to children from low-income homes, children from high-income families are increasingly more likely to pursue higher education, highlighting the unequal distribution of educational opportunities [11]. College graduation rates are growing rapidly among high-income families, and much more slowly among low-income families [12]. At the turn of the 20th century, high-income people were nearly 4.5 times more likely to have completed college than low-income people, and this gap has persisted [12]. In addition, research funding and educational resources tend to be concentrated in elite institutions that primarily serve wealthy students, who are more inclined to attend better-resourced elite institutions. This difference in resource allocation further aggravates the imbalance in the distribution of higher education opportunities.

The reasons that lead to the inequality of higher education resources between China and America can be analyzed specifically from the economic and policy levels. Initially, economic disparity and inequality are crucial factors affecting the allocation of resources in higher education. Since China's reform and opening up, inland regions have lagged behind coastal regions in terms of economic growth. This affects the distribution of educational opportunities, leading to the imbalance of college funds, and colleges in economically developed areas get more resources [1]. Moreover, Higher tuition costs and more barriers to higher education for poverty students are the results of the marketization of education brought about by the shift from a planned to a market economy. In America, as income inequality has exacerbated, the advantage of higher-income families in accessing and benefiting from higher education has increased. High-income families are more inclined to make educational investments for their children, providing resources to promote access to elite institutions and better educational outcomes [11]. Compared to children from households with low incomes, children from wealthy households are more likely to finish college [11]. The growing economic returns to education further entrench this gap, as college graduates from higher-income families are more likely to get higher-paying jobs, making the cycle of economic advantage difficult to break.

Policy decisions have further increased inequality in higher education resources. In China, the household registration system limits the opportunities for students with rural household registration and children of migrant workers to receive urban public education [3]. This restricts the development of this segment of students from the initial stage of education and impedes them from further obtaining higher education. Additionally, decentralized education funding policies have led to significant regional differences in education funding, with wealthier regions receiving more resources [1]. Students from particular regions are given preference when it comes to university enrollment spots, which leads to regional disparities in higher education access circumstances [8]. In America, while policies aimed at expanding access to higher education have increased overall enrollment rates, they have not addressed the underlying inequities in education. For example, the "college for all" policy in America, which focuses on increasing total postsecondary education, may inadvertently benefit high-income students more than low-income students [11]. This is because higher-income students are more likely to take advantage of these policies. After all, they have better access to resources and information. Overall, there is a notable disparity in the distribution of resources for higher education between China and America as a result of economic and regulatory issues. Despite efforts in both countries to expand access to and improve the quality of higher education, substantial gaps remain. Addressing these differences requires a multifaceted approach and concerted efforts,

Proceedings of the 3rd International Conference on Global Politics and Socio-Humanities DOI: 10.54254/2753-7048/2025.22510

including policy reforms, increased investment in education, and a commitment to alleviating income inequality.

4. Conclusion

In conclusion, by examining the disparity in educational resources and the expense of higher education between China and America, it can be found that these problems have a profound impact on the social equity, economic development and education pattern of the two countries. Initially, the cost of higher education has been rising steadily in recent years, placing a huge financial burden on students and their families. Additionally, disparities in educational resources between different regions and socio-economic groups still exist. Both governments have implemented various policies to address these issues, such as increasing funding for education, expanding scholarship programs, and regulating tuition fees. However, the effectiveness and coverage of these initiatives remain controversial, regional disparities in educational resources persist, and addressing these issues requires comprehensive and sustained efforts by the government, educational institutions, and society at large. In the future, both countries face the challenge of balancing educational expansion with cost containment and resource equity. The two countries can learn from each other's experiences and explore innovative solutions to reduce the cost burden on students and promote equitable distribution of educational resources. By doing so, China and the United States can work toward more inclusive and equitable higher education systems that better meet the needs of their citizens and contribute to long-term social and economic development.

References

- [1] Wang, L. (2011) Social Exclusion and Inequality in Higher Education in China: A Capability Perspective. International Journal of Educational Development, 31(3), 277-286.
- [2] De Groot, H., McMahon, W. W., & Volkwein, J. F. (1991) The Cost Structure of American Research Universities. The Review of Economics and Statistics, 73(3), 424-431.
- [3] Ma, Y., Hou, X., Huang, J., Wang, W., Li, Y., Zhou, X., & Du, X. (2018) Educational Inequality and Achievement Disparity: An Empirical Study of Migrant Children in China. Children and Youth Services Review, 87, 145-153.
- [4] Mattingly, T. J., II. (2023) Death, Taxes, and Tuition Increases. American Journal of Pharmaceutical Education, 87(2), ajpe9068.
- [5] Hanson, M. (2025) Average Cost of College & Tuition. EducationData.org.
- [6] Hill, C. B. (2016) American Higher Education and Income Inequality. Education Finance and Policy, 11(3), 325-339.
- [7] Bowdoin Review. (2023) How Administrative Bloat Is Killing American Higher Education. Bowdoin College. Retrieved from https://students.bowdoin.edu/bowdoin-review/features/death-by-a-thousand-emails-how-administ rative-bloat-is-killing-american-higher-education/
- [8] Wu, L., Yan, K., & Zhang, Y. (2020) Higher Education Expansion and Inequality in Educational Opportunities in China. Higher Education, 80(3), 549-570.
- [9] Grey, G., Aaron, H., & Brennan, M. (2024) Tracking College Tuition Growth. Federal Reserve Bank of Richmond. https://www.richmondfed.org/publications/research/economic_brief/2024/eb_24-23
- [10] Wang, D. D. (2019) Performance-Based Resource Allocation for Higher Education Institutions in China. Socio-Economic Planning Sciences, 65, 66-75.
- [11] Bloome, D., Dyer, S., & Zhou, X. (2018) Educational Inequality, Educational Expansion, and Intergenerational Income Persistence in the United States. American Sociological Review, 83(6), 1215-1253.
- [12] Jackson, M., & Holzman, B. (2020) A Century of Educational Inequality in the United States. Proceedings of the National Academy of Sciences, 117(32), 19108-19115.