A Literature Review of the Research on the Concept, Theory and Practice Path of Precision Funding

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ABSTRACT

Funded education is an important part of the education system of colleges and universities, and it is an important guarantee for colleges and universities to achieve educational fairness and morality. With the advancement of the reform of college funding work, improving the level of precision funding for college students with financial difficulties has become an important part of college student funding. Precision funding is an effective way to optimize the allocation of funding resources. This paper sorts out more than one hundred highly cited papers related to precision funding in universities, defines the concept of precision funding in universities, summarizes related theoretical and practical researches, analyzes the advantages of precision funding for universities and the current development dilemma, and proposes a work path to achieve precision funding for universities from the macro and micro levels, so as to provide   reference for the research of college funding and education.

Keywords : Precision funding, Funded education, Literature review

1. INTRODUCTION

After years of development, Chinese university funding work has gradually formed a government-led student funding system with multiple funding methods coexisting with the active participation of schools and society. The amount of funding and the number of funding members have grown rapidly, and the goal of "preventing every student from dropping out of school due to family financial difficulties" has basically been achieved. There are problems such as the scarcity of temporary funding resources for university funding, the slowdown in the number and amount of funding, and the effectiveness of funding education needs to be improved. How to change from the current funding scale expansion model to a more effective funding resource allocation model is an important research content of university funding work. How to change from the current funding scale expansion model to a more effective funding resource allocation model is an important research content of university funding work.[1]

With the application of the Internet and information technology in the daily management of colleges and universities, the conditions for precise funding of colleges and universities have gradually improved. The trend of precision funding has gradually become apparent, and precision funding has become an important focus of scholars in the funding field. In the past five years, there has been a rapid increase in the literature related to precision funding by universities.

At present, scholars have made preliminary explorations in theory and practice. This article attempts to analyze the highly cited literature related to precision funding by universities, so as to provide reference for precision funding for universities.

2. CONCEPT OF PRECISE FUNDING FOR UNIVERSITIES

2.1. The development of university funding system

After years of development, the university funding system has gradually matured and improved. Since the reform and opening up, Chinese funding system has mainly gone through four stages: People's Grants, People's Grants and Scholarships, Scholarships and Student Loans, and Multiple Funding Methods.[2] After years of reform and development, colleges and universities have established awards (national scholarships, national inspirational scholarships, intramural scholarships, social scholarships), loans (national student loans, interest-free loans on campus, and "green channels" for freshmen admission), assistance (national Grants, work-study subsidies, social scholarships), supplements (grass-level employment tuition compensation loan reimbursement, state subsidy for enlistment, public education for normal students, enrollment subsidies

for new students, tuition subsidies for retired soldiers, subsidies for difficulties, food subsidies), reduction (tuition fees) Reduction and exemption), etc.[3]

In recent years, the number and scale of funding from universities have been increasing, but the growth rate has gradually stabilized. According to statistics, from 2006 to 2019, China's colleges and universities funded about 530 million students from poor families, and the total amount of funding was 919. 366 billion

yuan. The funding scale increased by 7. 8 times from 2006 to 2019. But at the same time, it should be noted that the growth rate of the funding scale has gradually stabilized from the high growth rate in previous years to about 10% in recent years. From the perspective of funding sources, the current funding for universities is mainly derived from fiscal expenditures, and funding sources are uneven, and the structure needs to be optimized.
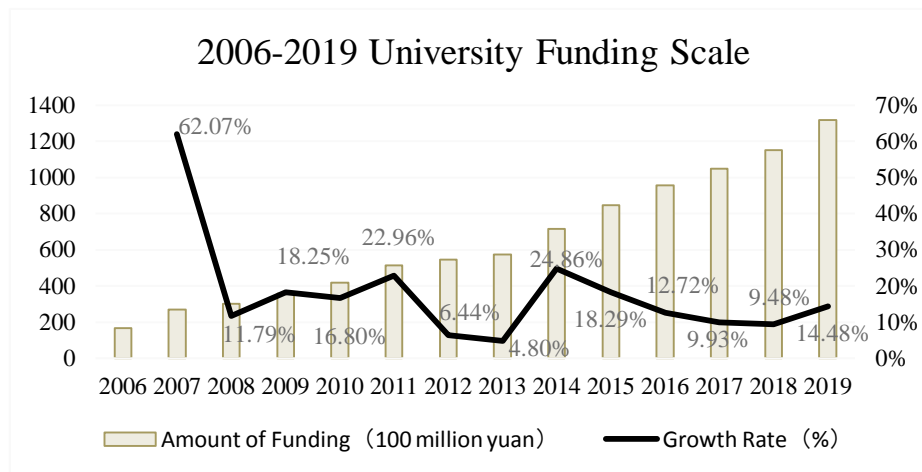

Figure 1 2006-2019 University funding scale

2.2. The concept of precision funding for universities

The concept of precise funding for colleges and universities originates from the national concept of precise poverty alleviation. It first appeared in 2013 and was first proposed by President Xi Jinping during an inspection of Xiangxi in Hunan. The national idea of "precise poverty alleviation" has pointed out the development direction for the financial aid for students from poor families. Relying on the existing university funding policies to explore the implementation of precision funding for universities is not only the implementation of the national precision poverty alleviation work concept in the field of higher education, but also the internal demand for the continuous innovation and development of university funding education.[4]

Scholars have defined the concept of precision funding for universities based on the concept of precision poverty alleviation. Bai Hua and Xu Ying (2017) believe that precision funding for colleges and universities refers to accurately identifying students with financial difficulties in families through certain standards and evaluation methods, and formulating precise assistance measures based on the actual financial difficulties of students to achieve precise arrangements for funding projects and precise use of funding funds Dynamic Management of Funding

Objects.[5] Yang Chunping (2017) believes that the precision funding work for college students is based on the actual situation of different students in different regions. We should use scientific and effective methods to implement accurate identification, precise funding, and precise management of student funding work methods for funding objects.[6] This article believes that precision funding for colleges and universities is a funding work model that uses scientific methods such as information technology to accurately identify, assist and manage students from financial difficulties in colleges and universities to improve the efficiency of funding resource allocation.

3. RESEARCH ON THE THEORY AND PRACTICE OF PRECISION FUNDING IN UNIVERSITIES

3.1. Research on the Theory of Precision Funding

Xu Junli (2017) believes that precision funding for colleges and universities should take the national concept of "precise poverty alleviation" as the guiding principle, enrich the funding and education

system, continuously reform and innovate funding concepts and funding forms, and actively explore the establishment of a new era of precision funding and education for universities.[4] Liu Xiaojie (2017) pointed out that introducing the idea of targeted poverty alleviation into college funding and education will help improve the effectiveness of college funding and education. It is not only a specific application of targeted poverty alleviation in the field of education, but also an effective way to solve the current difficulties of college funding work.[7] Wu Haiyan (2018) believes that diversified project-based funding strategies should be formulated according to the actual situation of students with financial difficulties at home, to build a growth platform for aided students, change "result funding" to "process funding" and "static funding" to " Dynamic funding".[8] Wang Chenghong and Zhang Guoru (2016) pointed out that precision funding for colleges and universities should select the right funding targets, expand the funding bodies, select the right funding measures, and strengthen funding guarantees.[9]

In general, the precise funding of universities mainly includes the following three aspects: First, the precise identification of students with financial difficulties. Through scientific standards and standardized procedures, we can accurately identify college students with financial difficulties, establish an information database, and accumulate basic data for follow-up accurate assistance and accurate management. The second is precise assistance for students from poor families. Fully understand the different situations of students with financial difficulties at home, and formulate differentiated and targeted assistance measures. The third is the precise management of students from families with financial difficulties. After the assistance measures are formulated, data must be dynamically updated to achieve precise and dynamic management of financial assistance for students in colleges and universities. In addition, it is necessary to do a good job in the evaluation of funding effects, continuously revise and improve precision funding measures, and improve the level of precision funding.
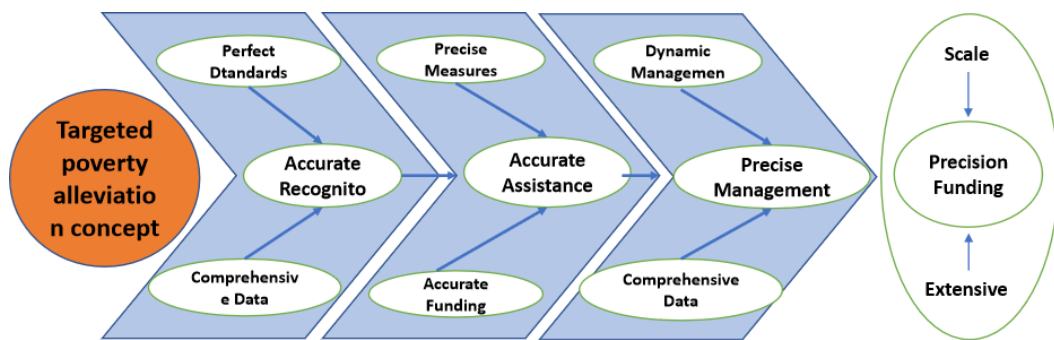

Figure 2 Theoretical research on precision funding education in universities

Research on the Model and Path of Precision Funding in Universities. Luo Lilin (2018) proposed using big data technology to construct a precise funding model for colleges and universities from framework design, system guarantee, technical path and linkage mechanism.[10] Wu Chaowen (2016) conducted an in-depth analysis of the application of big data technology in the precision funding of universities.[11] Liu Yunbo and Bai Hua (2016) analyzed the five realization paths of precision funding for universities: establishing a new concept of funding work, strengthening team building, precise identification and precise assistance, encouraging social participation, and strengthening dynamic management and accountability.[1] Sun Yu (2017) analyzed the realization path of precise funding for college students with financial difficulties from the four links of precise identification, precise assistance, precise evaluation and precise supervision.[12] Liang Guangdong (2017) believes that the effectiveness of precision funding education for universities should be improved from four aspects: improving the professionalism of teachers for funding work,

strengthening information management for students in need, rationally allocating funding resources, and creating a good funding education environment.[13]

3.2. Research on Precision Funding Practice in Universities

Accurate identification of students with financial difficulties at home. Related research mainly focuses on the design of the indicator system for the identification of students from poor families. Chen Jing (2014) believes that it is possible to establish an index system to quantify the degree of students' financial difficulties based on analyzing students' difficult information, family education expenditures, family income and other factors, and to unify evaluation standards to achieve accurate identification.[14] Shu Qiang (2020) proposed that the identification conditions and evaluation criteria of the funding objects should be strictly determined, through the investigation of the student's family economic

situation, student consumption standards, and review procedures to ensure that the funding objects are accurate.[15] Yang Chunping (2017) designed a multi-level identification index system for students with financial difficulties from families, including 6 primary indicators and 23 secondary classification indicators including student family attributes, student source information, student family conditions, and special circumstances.[6] Zhang Yuanhang (2016) pointed out that colleges and universities can use big data technology to capture the family economic status and personal consumption of students with financial difficulties, and actively explore methods of precise funding to improve the effect of precise identification.[16]

In the formulation of precise assistance measures for students with financial difficulties at home. It is necessary to "guarantee the bottom line", "grasp the main line" and "strive to go online" to accurately use the funding policies, form a differentiated assistance plan, and meet the multi-level development needs of students in difficulties.[17] Provide precise assistance through economic assistance, psychological assistance, academic assistance, practical exercises, public welfare activities, etc. [9] For top-notch talents among students from poor families, an advanced subsidy and training system for top-notch talents can be established in line with the development of Chinese cities. [18]

Regarding the dynamic management and effect evaluation of funding objects. Bai Hua (2017) proposed to build an efficient and file-based student precision funding system to establish the concept of student growth and development funding.[5] Yang Xiaohui (2016) suggested taking the form of on-site visits to needy families to ensure that the information on poor students is accurate.[19] Based on the hierarchy of needs theory, Zhang Yuanhang (2016) believes that it is necessary to focus on the combination of material funding and spiritual incentives to meet the high-level needs of poor students to win respect and self-realization.[16] Fan Xiaoting (2015) suggests formulating a systematic evaluation index system and scientific evaluation to promote the improvement and perfection of funding work. [20]

In practice, some colleges and universities have actively explored methods such as the verification of campus all-in-one card consumption records and the verification of mutual evaluation by classmates to improve the accuracy of the identification of students with financial difficulties.[16] Peng Yiquan et al. (2016) investigated 72 families with financial difficulties in 44 districts and counties in western and northern Jiangsu through home visits, analyzed existing problems, and explored measures to improve precision funding. Propose ways to optimize system guarantees, carry out thematic education, and strengthen participatory funding.[21] It is necessary to make full use of information technology, strengthen the construction of information networks, use big data, cloud computing technology, and establish a precise funding system.[22] Use information mining technology to improve information databases related to economic life, such as household income, personal endowments, specialties, and funding needs. Carry out dynamic tracking, precise funding, and optimized management.[23]

4. ADVANTAGES AND DILEMMAS OF PRECISION FUNDING IN UNIVERSITIES

Accurate funding for universities is the current innovation and development direction of funding for universities, which is conducive to improving the quality and efficiency of university funding and education. Xu Junli (2017) believes that the precise funding of education for students in colleges and universities promotes educational equity and helps improve the efficiency of funding.[4] Liang Guangdong et al. (2017) believe that precision funding for colleges and universities is an effective way to achieve education equity and a guarantee for training talents.[13]

Precision funding for colleges and universities faces various difficulties. Wang Jing, Sun Jing (2016) pointed out that the establishment of a precision funding education system for universities requires coordination among multiple departments.[24] Xu Junli (2017) and Liu Xiaojie (2017) believe that there are three main bottlenecks in the current funding of college students: the identification of disadvantaged groups is not accurate enough, the assistance measures are not accurate enough, and mental poverty.[4, 7] Han Lili and Li Yanzhou (2018) reviewed the reform and development of the funding system in the past 40 years and found that the current university funding system mainly faces problems such as unreasonable funding sources, unbalanced funding amounts, and insufficient education guidance after funding.[2] Xiaojing Cao (2017) and Yanjie (2017)pointed out that there are psychological factors, material review issues, and regional differences.[17, 23] Zhang Bo (2013) believes that current accurate identification relies on index data such as the family income of students with financial difficulties.[25] In turn, it is affected by the incomplete social credit system.

5. CONCLUSION

Precise funding for education is a process of gradual improvement. Subjectively, it is necessary to improve the level of professionalization of work and improve the concept of student assistance. Objectively, it requires the progress of network information technology and the improvement of the social credit

system. In addition, there are difficulties such as the balance of university funding and the coordination of work between departments. Combined with the research in this article, the existing literature mainly analyzes the basic content of precision funding for universities, but there is no comprehensive and systematic review yet. This article sorts out the implementation path of precision funding for universities at the macro and micro levels, as shown in Figure 3.
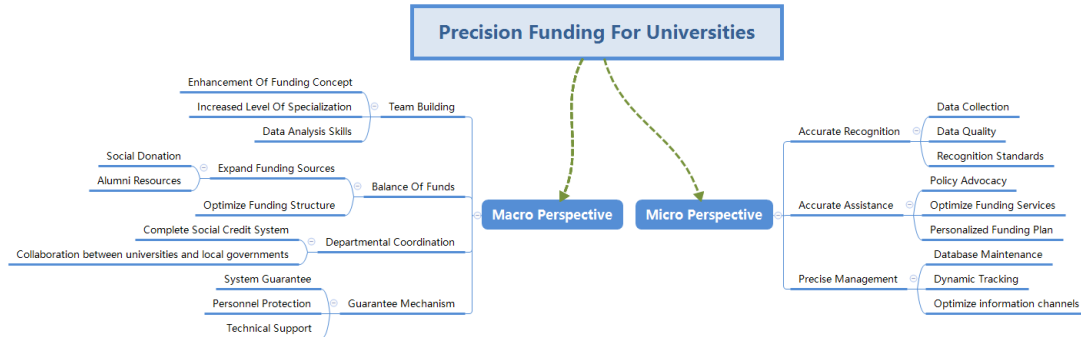

Figure 3 The implementation path of precision funding education for universities

5.1. From a macro perspective

At the macro level, the realization of precise funding for universities is mainly promoted from the following four aspects. The first is to strengthen the construction of college funding work teams. Introduce professional funding talents, data analysis talents, and conduct skills training to create a professional funding team. The second is to optimize the funding structure and expand funding sources. Establish social subsidy funds and publicize donation channels to encourage the society to donate and assist college students in financial difficulties. The third is to strengthen departmental coordination. Provide accurate information, dynamically investigate the situation of assisted students, and optimize assistance measures in a timely manner. The fourth is to establish a guarantee mechanism. Introduce information technology and data management platform to optimize the university information management system.

5.2. From a micro perspective

From a micro perspective, the concept of precision poverty alleviation is applied to the three processes of precision funding. In the precise identification link, rapid information collection and processing is required, and a scientific identification index system and identification procedure must be established. When providing precise assistance, it is necessary to optimize funding services, pay attention to the promotion of funding policies, and enhance students' awareness of actively seeking help. In precise management, it is necessary to understand the changes in the economic situation of each student, establish a dynamic information database, and achieve precise management. In addition, it is

necessary to continuously feedback and revise precise funding measures, by publishing funding feedback mailboxes, telephones, QQ and other contact methods, so that students in difficulties can seek help in a timely manner, supervise the fairness and fairness of funding policies and measures, and improve the effectiveness of funding services.

REFERENCES

[1] Liu Yunbo, Bai Hua. Accurate funding: new ideas for college student funding [J]. Education Review, 2016(2): 67-70.

[2] Han Lili, Li Tingzhou. Retrospect and prospect of my country's higher education funding system in the past 40 years of reform and opening up [J]. China Higher Education Research, 2018(06): 29-36.

[3] 2018 Chinese Student Financial Aid Development Report. http://www.xszz.cee.edu.cn/index.php/shows/70/3716.html

[4] Xu Junli. Exploration of the precise funding and education of college students under the background of targeted poverty alleviation[J]. University Logistics Research, 2017(10):69-72.

[5] Bai Hua, Xu Ying. An Analysis of Accurate Funding for College Archived Students from the Perspective of Poverty Alleviation[J]. Journal of National Academy of Educational Administration, 2017(3).

[6] Yang Chunping. Practical exploration of counselor's precise identification in student funding work[J]. Education Teaching Forum, 2017(26):1-4.

[7] Liu Xiaojie. "Precise funding" for college students under the "precise poverty alleviation" idea [J]. Education Teaching Forum, 2017(03): 3-5.

[8] Wu Haiyan. Exploration of the path of precise funding for college students[J]. School Party Building and Ideological Education, 2018(23):69-70+73.

[9] Wang Chenghong, Zhang Guoru. Analysis of the precise funding path for college students with financial difficulties[J]. College Counselor, 2016(06): 58-61.

[10] Luo Lilin. Research on the construction of precision funding model for colleges and universities from the perspective of big data[J]. Journal of Chongqing University (Social Science Edition), 2018, 24(02):197-204.

[11] Wu Chaowen, Dai Jin, Sun Yannan. Preliminary study on the precision funding model for poor college students under the big data environment[J]. Heilongjiang Higher Education Research, 2016(12): 41-44.

[12] Sun Yu. Exploring the realization path of precise funding for poor students in colleges and universities[J]. Southern Journal, 2017, 000(004): 77-78, 92.

[13] Guangdong Liang, Shuang Zhao, Shuying Sheng, Feng Pengyu Research on the construction of a precision funding system for college students under the new normal [J]. Journal of Henan Institute of Science and Technology: Social Science Edition, 2017(37): 31.

[14] Chen Jing. Analysis of identification difficulties and countermeasures in the work of subsidizing poor students in colleges and universities[J]. China Adult Education, 2014, 000(004):40-42.

[15] Shu Qiang. Research on the realization path of "precise funding" for college students in difficulties [J]. Education Teaching Forum, 2020(07): 333-334.

[16] Zhang Yuanhang. On the "precision aid" for college students with financial difficulties[J]. Ideological and Theoretical Education, 2016(1): 108-111.

[17] Cao Xiaojing. The new model of "precise funding" in colleges and universities-college student funding under the background of targeted poverty alleviation[J]. Journal of Yuncheng University, 2017, 35(05): 90-92.

[18] Liu Shilin, Wang Xiaojing. Thoughts on the innovation and upgrading of my country's higher education funding system [J]. Educational Development Research, 000(5): 61-65.

[19] Yang Xiaohui. Thoughts on the precision funding of college students in the new era[J]. China Higher Education, 2016, 000(009): 22-25.

[20] Fan Xiaoting, Qu Shaowei. Research on the Management of National University Student Financial Aid under the New Normal of Economy——Based on the Statistical Data Analysis of the Student Financial Aid Development Report 2007-2013 [J]. Educational Development Research, 2015, 35(19): 47 -52.

[21] Peng Yiquan, Huang Rong, Gong Jia, Exploration and Practice of Identification of Poor Students in Colleges and Accurate Funding Path[J]. China Education of Light Industry, 2016(3): 19-22.

[22] Wang Jiayi, Feng Qingyun, Zhang Jin. Education and targeted poverty alleviation, targeted poverty alleviation[J]. Educational Research, 2016, v.37(07):14-23.

[23] He Yanjie, Yuan Hua, Research on the Achievements, Problems and Countermeasures of Student Financial Aid in Colleges and Universities in the New Era——Several Typical Cases Based on Scholarship Evaluation of Colleges and Universities [J]. Educational Finance and Accounting Research, 2017, 28(5) :64-67.

[24] Wang Jing, Sun Jing. Analysis on the Practical Path of "Precise Poverty Alleviation" for College Students[J]. High Education Journal, 2016(16): 30-32.

[25] Zhang Bo, Kong Nannan. A review of the research on the identification of students with financial difficulties in colleges and universities[J]. Ideological and Theoretical Education, 2013(23): 88-91.