Return Expectations and Risk Assessment of Higher Education Investment in China

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Abstract: With the rapid development of higher education, a series of problems have appeared in recent years: some colleges are facing with the problems of enrollment difficulties, inefficient investment and weak sustainable development, and some colleges are even shutting down and closing down. Facing the increasing competitive pressure from higher education, how to improve investment efficiency and how to enhance risk prevention and control capacity of investment so as to achieve sustainable development have become the important problems for the government and researchers. By analyzing and discussing the investment and risk management of China's higher education, this study aims to improve and perfect the theory of China's higher education investment and risk management, and provide a quantitative analysis technique for investment decision-making and risk management technology of higher education, to provide a reference for the government to formulate policies and the higher education investors to make decisions.

Keywords: Higher Education; Investment Efficiency Measurement; Investment Risk Evaluation; Investment Risk Warning

1. INTRODUCTION

With the rapid development of higher education in China, the running scale of colleges and universities has been expanding. However, the risks in the operation and development of higher education have also become increasingly prominent [1]. The expansion of the scale of running a school, the convergence of educational goals and professional structure, and the market dependence of resource allocation will bring risks to the sustained and healthy development of higher education such as policy risk, market risk, financial risk and management risk [2]. Therefore, analyzing the investment risk of universities in China and establishing the investment risk assessment system of higher education in China are of great significance in preventing and resolving the risks of running colleges and universities. Based on the previous chapter, we analyze the return on higher education in China, analyze the types of investment risks, explore the causes of the investment risk of higher education in China, construct the investment risk assessment system and warning system for higher education in China, education investment risk control, to improve the risk prevention and control of higher education in China to provide theoretical guidance.

Education investment in universities is a kind of productive venture capital. According to the theory of investment and venture capital, the higher education investment aims at obtaining a reasonable return [3]. Under the principle of public welfare, the return of investors must at least be able to compensate for the investment cost, the degree of investment risk is proportional to the size of investment risk return, and if the return on investment is greater than 0, indicating that investment in education is cost-effective and profitable [4]. However, due to the influence of many internal and external factors, the return on investment tends to fluctuate. While obtaining the return on investment in education, it will also cause different levels of investment risk (operational risk) and the return on investment will be less than 0, indicating that investment in education Activities are not worth it [5]. Therefore, it is necessary to analyze the investment risk of colleges and universities. The sources of funding for colleges and universities are single, depend mainly on student contributions and self-financing by colleges and universities [6]. They have the characteristics of long return on investment, many factors influencing investment, and uncertain return on investment. They are subject to external economic environment and credibility of colleges and universities, enrollment, tuition Income and logistics management [7]. Based on the analysis of investment income of universities, it is an urgent problem to set up the investment risk assessment and early warning system in colleges and universities.

2. RETURN EXPECTATIONS OF HIGHER EDUCATION INVESTMENT IN CHINA

The return expectations of higher education refers to the economic and social benefits of colleges and universities through investment in running schools, reflects the output of colleges and universities and reflects the investors' returns [8]. As a quasi-public product, higher education not only brings certain economic returns to investors, but also promotes the

development of higher education, optimizes the allocation of resources in higher education and produces greater social benefits. As an important part of China's higher education system, higher education not only brings economic returns to investors, but also promotes economic and social development with multiple benefits. The benefits of higher education mainly reflected in two aspects: (1) economic benefits. Economic benefits can be divided into public economic benefits and personal economic benefits. Public benefits refer to the economic benefits of higher education through the provision of higher education products (graduates, scientific and technological achievements, etc.), raising the level of productivity and promoting national economic development [9]. Economic income mainly refers to higher education investors to obtain economic benefits through investment in higher education, or the income from higher education has increased [10]. (2) Social benefits. Social benefits can be divided into public social benefits and social benefits. The public social income refers to the social effects and benefits arising from the provision of higher education services and products by higher education [11]. For example, investing in higher education can improve people's education level, improve the quality of social workers and promote social progress. Social benefits can increase the social impact of investors and educators and enhance the skills and quality of educated people.

According to the construction principle of evaluation index system of higher education, the characteristics of investment in higher education in China, the construction process of investment efficiency evaluation index system of higher education [12]. Based on the input and output analysis of higher education, efficiency and social benefits to construct the index system of higher education investment evaluation. The first index in the index system is the index of economic benefits and the index of social benefits. In the analysis of economic benefits, the index of economic benefits is decomposed into three second-level indexes of financial operation index, resource utilization index and sustainable development [13]. Benefit index is divided into social contribution rate indicators, social evaluation indicators two secondary indicators. In the construction of input-output economic indicators reference public colleges and universities input-output efficiency evaluation index from the perspective of financial evaluation to build a three-level index system that can reflect the input-output ratio of higher education [14]. From the utilization of human, financial and material resources in higher education, it can reflect the utilization rate of higher education Level indicator system; set up a three-level index system under the indicators of sustainable development from the perspectives of the fund guarantee rate and the total growth rate of funds to describe the sustainability of the investment in higher education [15]. When analyzing social contribution rate indicators in social benefits, we construct a three-level index system that describes the contribution rate of society from the perspectives of personnel training and output of higher education, and build a social evaluation model based on the school's popularity and the employment rate of graduates Three-level index system. Therefore, we can construct the evaluation index system of investment efficiency of higher education as shown in Table 1.

Table 1 Investment Benefit Evaluation Index System of Higher Education in China

First-class indicators	Second-class indicators	Third-class indicators
Economic benefits	Financial operation	Income expenditure ratio
		Return on investment
		Assets preservation and appreciation rate
		Return on net assets
		Average cost of education
	Resource utilization	Student ratio
		Average student equipment value
		Health per school area
		Average number of books per student
	Sustainable development	Assets and liabilities
		Growth rate of career development fund
		Fixed asset growth rate
Social benefits	Social contributions	Graduate employment rate
		Excellent graduate rate
		The number of papers published
		Research project completion rate
		Scientific research utilization rate
	Social evaluation	Social contribution rate

When using the constructed index system of investment benefit evaluation of higher education to evaluate the investment returns of higher education, the indexes play different roles in the evaluation of investment efficiency of higher education. Therefore, the importance of each index in the evaluation is also different In order to reflect the differences between the importance of indicators, different indicators need

to be given different weights. The relative importance of each indicator in the evaluation needs to be reflected by the indicator weight. Reasonable to determine the investment in higher education evaluation of the weight of the indicators, the investment efficiency of higher education to make a scientific assessment of the guarantee.

At present, the method of determining the weight of indicators can be generally divided into subjective right-of-way, objective right-of-way and subjective-objective combination of right-of-way. The common index weighting method mainly includes expert scoring method, entropy method, gray relational analysis method and analytic hierarchy process.

In the 1970s, American scholar Sartre put forward a multi-criteria decision analysis method combining qualitative and quantitative analysis, that is, analytic hierarchy process. The method can make the mathematical process of decision-making based on less quantitative information, and has the characteristics of subjective analysis and objective calculation [16]. It has been widely used in the fields of multi-objective decision-making and index weight determination. The use of analytic hierarchy process to determine the weight of indicators can reflect the level and structure between indicators, the analysis of the importance of indicators is more logical, with a solid theoretical foundation and a sound method system, the calculation process is simple. Based on the advantages of analytic hierarchy process (AHP) in determining the weight of indicators, this article will use AHP to determine the weight of each index in the evaluation index system of investment efficiency of higher education in China

Using analytic hierarchy process to determine the weight of indicators, the factors included in the assessment system should be stratified and arranged according to the order of target, criterion and index to constitute the hierarchical analysis structure as shown in Fig.1

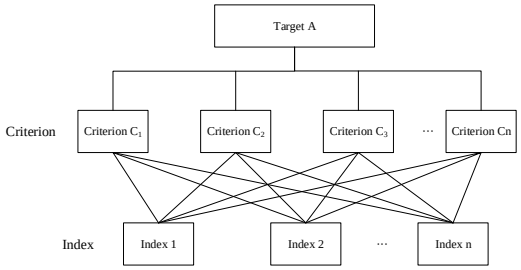

Fig.1 AHP Hierarchy Model

3. RISK TYPES OF HIGHER EDUCATION INVESTMENT IN CHINA

With the rapid development of higher education in China, the running scale of colleges and universities has been expanding. However, the risks in the operation and development of higher education have also become increasingly prominent. The expansion of the scale of running a school, the convergence of educational goals and professional structure, and the market dependence of resource allocation will bring risks to the sustained and healthy development of higher education such as policy risk, market risk, financial risk and management risk. Therefore, analyzing the investment risk of universities in China and establishing the investment risk assessment system of higher education in China are of great significance in preventing and resolving the risks of running colleges and universities.

Education investment in universities is a kind of productive venture capital. According to the theory of investment and venture capital, the higher education investment aims at obtaining a reasonable return. Under the principle of public welfare, the return of investors must at least be able to compensate for the investment Cost, the degree of investment risk is proportional to the size of investment risk return, if the return on investment is greater than 0, indicating that investment in education is cost-effective and profitable. However, due to the influence of many internal and external factors, the return on investment tends to fluctuate. While obtaining the return on investment in education, it will also cause different levels of investment risk (operational risk) and the return on investment will be less than 0, indicating that investment in education Activities are not worth it. Therefore, it is necessary to analyze the investment risk of colleges and universities. The sources of funding for college and universities are single, depend mainly on student contributions and self-financing by colleges and universities. They have the characteristics of long return on investment, many factors influencing investment, and uncertain return on investment. They are subject to external economic environment and credibility of colleges and universities, enrollment, tuition Income and logistics management. Based on the analysis of investment income of universities, it is an urgent problem to set up the investment risk assessment and early warning system in colleges and universities.

(1) Anaclitic risk

The policy risk of the development of higher education originates from the risk that the relevant policies and regulations are not perfect. The promulgation of the Law on the Promotion of Education clarifies the rights and obligations of education entities, improves the rules and regulations on the investment in higher education, and reduces the risk of running ly-run colleges and universities. However, there are still some shortcomings and uncertainties in the regulatory environment for laws and regulations related to higher education, which are mainly reflected in the following three aspects:

(a) The relationship between property rights is not clear. Property rights directly affect the rights and

interests of investors, property rights and property rights system will directly affect the investor's investment in higher education is expected to have a sponsor's education objectives and school behavior have a significant impact. However, at present, the relevant policies and regulations on higher education in China and the ownership of assets invested by higher education funders have not yet been clearly defined, which will increase the investment risk of higher education.

(b) Investment returns the uncertainty. The reasonable rate of return of higher education has always been the focus of investors in higher education. The realization of a reasonable rate of return is the basic guarantee of the rights and interests of investors. A reasonable return can not only arouse the enthusiasm of investors but also provide higher education for higher education Sustainable development to provide a basic guarantee. However, at present, there is still no clear stipulation on how to determine the reasonable rate of return of colleges and universities and how to guarantee the realization of the reasonable rate of return of colleges and universities. This makes the investment returns of higher education more uncertain and will increase Risks of University Investment.

(c) The operability of relevant policies is not strong. At this stage, the relevant policies of China's education are difficult to implement and many policies and laws are of no other name.

(2) Selective risk

The dependence and sensitivity of universities on the market is much higher than that of public colleges and universities, and the impact of the market on the survival and development of universities is more direct. The market risk of higher education mainly comes from three aspects.

Student market risk. The number and quality of students in higher education directly affect their survival and development. At present, the running direction of colleges and universities in China is defined as junior college level, undergraduate colleges occupy only a minority, while higher education is not widely recognized by the public. In addition, the charges of colleges and universities are obviously higher than those of public colleges and universities. , The competition among students in colleges and universities is getting fiercer and fiercer. Some non-government-run colleges and universities will face the problem of enrollment difficult. The development of higher education is facing some students' risks.

Run a market risk. With the deepening of the reform of higher education system, the competition in the higher education market has been aggravated. Public higher education not only enjoys a high social reputation and social status, enjoys strong government financial support, but also has a sound infrastructure and a strong faculty, its educational level and ability to run schools is obviously superior to colleges and universities. In the face of competition from public colleges and universities, the running risk of universities will continue to increase.

Talent market risk. Raising the employment rate of graduates and realizing the "export" are the basic preconditions for the survival and development of universities. However, with the continuous increase of college graduates, employment pressure of college graduates is constantly increasing, employers still have some discrimination against college graduates, which will make the employment pressure of college graduates increase. The employment risk of graduates will have an impact on the survival and development of colleges and universities.

(3). Unemployment risk

At present, many non-state-owned colleges and universities have irregularities in financial management, weak awareness of financial risks and weak risk prevention and control capabilities, which will increase and lead to the running of colleges and universities. Part of universities in the process of expanding the scale of running a school, did not consider the school's ability of sustainable development and solvency, blindly by increasing the bank loans to achieve the expansion of school scale. This model of liability development has alleviated the shortage of funds for running ly-run colleges and universities for a certain period of time, and has provided strong financial support for the rapid development and expansion of the scale of ly-run colleges and universities, to a certain extent, boosted the development of colleges and universities. However, the loan is to pay back the principal and interest. The solvency of universities mainly depends on the tuition and fee income of universities, and the tuition and miscellaneous fees cannot be raised without subsidy. Therefore, colleges and universities also highlight the debt service risk.

(4).Excessive risk

The quality of education in colleges and universities is its lifeline. The quality of education directly affects the quality of running schools and social reputation of colleges and universities and affects the sustainable development of higher education, which undoubtedly increases the investment risk of colleges and universities. The quality of education in colleges and universities depends on many factors, including the teaching management, teaching quality and quality of students in universities. With the expansion of the scale of colleges and universities, the advent of admission barriers has led to the emergence of problems such as the decline in student quality. Another important factor that affects the quality risk of higher education is the teachers 'strength and

teaching facilities. The blind expansion of colleges and universities can lead to teachers' ability and teaching facilities being unable to meet the teaching needs, resulting in a decline in the quality of education.

4. RISK PREVENTION OF HIGHER EDUCATION INVESTMENT IN CHINA

Improving the investment efficiency of universities in China and strengthening the prevention and control of investment risks in universities are not only important issues for investors, but also the most important task in promoting the sustainable development of higher education in China. Therefore, we should objectively analyze and grasp the favorable situation that -owned higher education is facing. At the same time, according to the problems existing in the investment and risk management of higher education in China, according to the results of investment efficiency evaluation and investment benefit evaluation of higher education and the investment risk assessment and early warning analysis of higher education in China. Counter measures and suggestions for strengthening prevention and control of investment risks in universities and colleges and providing useful reference for the investment and risk management of higher education in China.

(1) Adjust Investment Attitude

Higher education has quasi-public product attributes. According to the theory of higher education investment income and public product theory, colleges and universities, as the principal and beneficiary of running a school, follow the principle of "who invests and who benefit from it" On the one hand, the investment system for higher education should be established and perfected, and all the investors should fulfill their obligation of capital contribution on time and in full to ensure the full funding of running funds, maximize the funds needed for running ly-run colleges and universities, and ensure the teaching input , Management and logistical support work of the normal operation. At the same time, we should moderately increase the scale of running ly-run colleges and universities, improve the quality and overall strength of running a school, and continuously increase the profit-making ability of colleges and universities so as to make up for the shortfall in capital investment in universities and improve the higher education.

The efficiency of using resources, promoting independent development of higher education, featuring development and sustainable development. On the other hand, according to the investment income interval and rate of return determined by the dynamic estimation model of investment efficiency of higher education explored in this study, universities can obtain the corresponding return on investment and reasonable cost compensation to improve the enthusiasm of investors. Development to broaden the necessary space. Third, we must improve preferential policies and measures for higher education charging mechanism and student loans, build an effective market for student loans for higher education, establish a stable guarantee system for student loans for higher education, and effectively solve the " Difficult to go to college ", to encourage poor students to apply for student loans to complete their studies

(2) Improve Employment Psychology

In order to further promote the development of higher education in China, we must learn from and learn from the experience of running advanced foreign non-governmental institutions of higher education and wholeheartedly rely on the various stakeholders in higher education and all sectors of society to realize the diversification of the main body of education investment and the source of funds.

According to the theory of sharing education cost, firstly, we should establish a diversified investment body with organizers, governments, families and financial institutions, and properly handle the economic interests of the state, sponsors, donors, schools and educators, Diversified investment channels to relax the market entry barriers for colleges and universities to encourage social capital in a variety of ways to enter the field of education, all-round and multi-channel mobilization to attract social forces and capital, build a symbiotic and equal competition in the school funding system; Second, eliminate discriminatory policies and behaviors on higher education. In order to meet the need of survival, reform and development of higher education, the state should reform its investment and classified grants to higher education, increase the proportion of financial allocations to universities, rationally allocate educational resources and enhance the ability of universities to run independently. Improve the efficiency of the use of financial funds in order to promote the healthy development of colleges and universities. Finally, improve the management and service system of education, actively expand social donation channels, strive to improve the ability to serve local economic development, and earnestly enhance the level of social services and profitability.

(3) Promote University Reform

Universities in developed countries and regions not only have the advantage of scale, but more importantly, the quality of running schools occupies relative advantages. Most high-quality higher education resources in developed countries are mainly concentrated in universities. This is mainly because foreign universities attach great importance to the construction of connotation. To provide

teachers with a good platform for scientific research, to create a good hardware and software environment for the development of students, continuously improve their core competitiveness and sustainable development capabilities through connotation construction, and to provide high-quality graduates and high-level scientific research services to the society. And gradually establish its academic status and social reputation. Through the analysis of investment development course and development trend of universities in China, we can see that higher education in China is undergoing the transition from "scale" development to "connotation". To realize the transformation from "scale" development to "connotation", universities must strengthen the connotation construction and realize the transformation of key development points.

In order to strengthen the connotation construction, efforts should be made to improve the quality of running schools and the effectiveness of running schools in non-governmental colleges and universities, continuously improve the level of running schools and the level of running a school, adhere to the principle of "doing something and not doing something" in disciplinary construction and professional construction according to the needs of national economic development, Use the advantages of system flexibility to create a competitive and unique professional brand, pay attention to the cultivation of theoretical talents and technical talents, dislocation development with public colleges and universities, deepen the connotation construction, highlight the characteristics of running schools and effectively integrate all kinds of resources , Increase the total amount, adjust the stock, improve the quality and continuously improve the social reputation. Take active measures to break the bottleneck of institutional mechanisms, to explore the development of higher education train of thought, to achieve major breakthroughs to promote sound and rapid development of higher education.

(4)Strengthen macro regulation

Establish a scientific and standardized internal management system. We will further improve the corporate governance structure with clear responsibilities and rights and harmonious relations and establish and improve the system of directors and supervisors. We must earnestly respect the laws governing the running of higher education and the laws of the market economy, and actively promote the separation of political affairs from operations and the separation of management from operations, improve the system of teaching and staff congresses and the system of directors and supervisors, and further optimize and improve the operating environment for ly-run colleges and universities. We should actively explore the modern university system, improve the internationalization of higher education, open up areas of investment, production and supply for higher education, foster education in the logistics industry, promote various forms of running schools for all kinds of school-running subjects, and satisfy the multi-level and diversified needs of the masses of the people Education needs, and promote the equal and coordinated development of public colleges and universities run by local people.

Correct understanding of the status and role of higher education. Actively explore new ideas for the development of education, establish brand awareness, quality awareness and development awareness, optimize the allocation of higher education resources, determine the characteristics of a reasonable positioning, and improve the quality assurance system, establish the quality first, management first, educate people first, talent is This concept, and strive to achieve the development of the extension of the extension of development to the connotation, to achieve the size, quality, structure and effectiveness of the harmonization of human resources from a large power to achieve the transformation of the country.

Establish and improve college asset management system and return on investment system. The effective integration of educational resources, the reasonable provision of depreciation of fixed assets, improve the use of fixed assets efficiency, education quality and efficiency of running a school. Scientifically calculate the ratio of education input demand to output, properly handle the relationship between public welfare and reasonable return on investment, and clearly define the procedures, rights, obligations and responsibilities of ownership, use, return and disposal of various types of ly-run colleges and universities.

5. CONSTRUCTION OF EARLY RISK WARNING SYSTEM FOR HIGHER EDUCATION INVESTMENT IN CHINA

(1). Early Risk Warning System Design

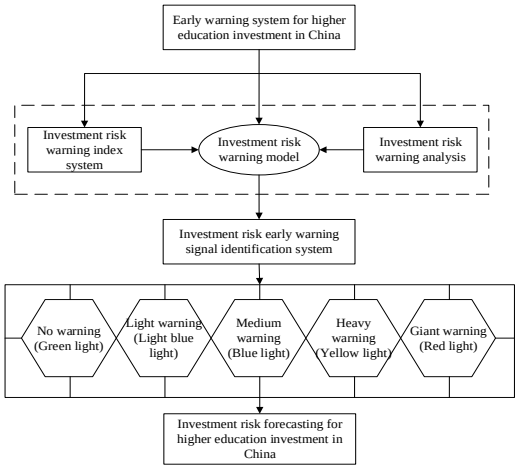

Fig.2 The early risk warning system design for higher education investment in China

The investment risk early-warning system in colleges and universities mainly includes the construction of early warning index system, early warning model of investment risk in universities, early warning signal identification system and police forecast. Among them, the investment risk pre-warning index system in colleges and universities is the basis of the whole model system, which is the prerequisite for the establishment of investment risk early-warning model in universities. The early warning of investment risk in universities is based on the investment risk assessment of colleges and universities. Therefore, we can make use of the indicators in the investment risk assessment index system of universities to carry out the pre-warning analysis on the investment risk in colleges and universities. College investment risk warning model is the entire system.

The investment risk early-warning model of colleges and universities is a measure of the investment risk of colleges and universities methods and techniques. Early warning signal recognition system is based on investment risk in civilian-run colleges and warnings to set the warning value of the police set up the system, mainly the use of risk early warning model to calculate the warning value and the police value comparison to determine the investment of colleges and universities The size of the risk, and issued an early warning signal. The early warning system design for higher education investment in China is presented in Fig.2.

(2) Early Risk Warning Method and Standard Selection

The essence of early warning is to analyze whether the development and operation of the evaluated system deviate from the expected goal, and to issue early warning signals according to the degree of deviation so as to timely intervene in and control it so as to ensure the effective operation of the system. Efficacy coefficient method is based on the principle of multi-objective programming, through the calculation of the achievement level of the satisfaction value of the evaluation index, the comprehensive judgment of the evaluation object can be realized. This method can be used to measure the degree of deviation of the system from the expected goal, Early warning, in essence, is to measure the scope of investment risks in colleges deviate from the expected goal. Efficacy coefficient method can reduce the deviation of evaluation result caused by single standard evaluation, and can reduce the error when all the index values of the object to be evaluated are greatly different, and objectively reflect the status of the evaluated object. At the same time, the efficiency coefficient method is simple, easy to promote the application. Therefore, the coefficient of effectiveness can be used to measure the investment risk of universities in China.

The essence of the efficiency coefficient is to find out the ratio of the actual value of each evaluation index in the full range of the index. Efficacy coefficient method is generally to determine the satisfaction of each index value and the value is not allowed, the satisfaction value is the index may reach the optimal level, the impermissible value is the index of the worst possible level. According to the connotation of each evaluation index, combined with the actual situation of the development of higher education in China, through the investment-related statistical data and actual investigation of universities in China, we collected and collected the actual data of investment risk warning indicator of higher education in China, On the basis of the above, we determine the satisfaction and inadmissibility of each index in the indicator system of early warning of investment risk in higher education, and then determine the value of satisfaction and impermissible value. The calculation formula of single effective coefficient. Calculate the single effective coefficient of each index and determine the weight of each index. On the basis of calculating the individual efficiency coefficient and the index weight, the comprehensive efficiency coefficient of the evaluation object is obtained, and the alarm forecast is made according to the comprehensive efficiency coefficient score.

In general, the percentage of individual indicators is scored using the percentage method, and based on the empirical data of the general research, it can be concluded that the individual scoring $S_{i,}$ the single-effect coefficient C_i and the comprehensive scoring of the indicator *CS* are calculated as follows:

$$\begin{cases} S_i = 60 + 40 \cdot C_i; \qquad C_i = \dfrac{a_i - u_i}{b_i - u_i} \\ CS = \sum_i S_i \times w_i \end{cases} \tag{1}$$

Where a_i is the indicator actual value; b_i is the indicator satisfaction value; u_i is the indicator not-allowed value w_i is the indicator weight.

According to the construction principle of the efficiency coefficient method of investment risk of higher education, the larger the value of the comprehensive effectiveness coefficient, the closer the index values of each target to be evaluated are to the satisfaction value. The extent to which the investment risk of the object to be evaluated deviates from the ideal state is, the smaller the risk is, the smaller the risk of the object being evaluated. From the setting of the coefficient of function, it can be seen that the effective coefficient of the evaluated pair is between 60 and 100, while the general warning limits are divided into five grades. If the score of the comprehensive efficacy coefficient is less than 60, it indicates that the assessment object

seriously deviates from the expected goal, then it is a giant police, and the average between 60 and 100 will be divided into four intervals equally, corresponding to police, police, light police and no police. Efficacy coefficient between the sub-area and the corresponding warning, as shown in Table 2.

Table.2 Warning Limit and Comprehensive Efficacy coefficient value

Warning limit	Comprehensive efficacy coefficient value	Warning lights
Giant Warning	⩽60	Red light
Heavy Warning	60~70	Yellow light
Medium Warning	70~80	Blue light
Light Warning	80~90	Light blue light
No Warning	⩾90	Green light

6. CONCLUSION

This paper makes a systematic study on the investment and risk management in universities in China by using the theories and methods of education economics, investment, risk management and modern management science. The main research work and conclusions are as follows:

This paper systematically analyzes the current situation of the development and investment of higher education and further clarifies the investment attributes of universities in China. Based on the analysis of the history of higher education, to summarize the stage characteristics of the development of higher education reviews and summarizes the investment history and major investment patterns of universities in China. By analyzing the influences of the colleges and universities in the United States and Britain Financing channels, to obtain the status quo of investment in universities in China, and find out the current investment risks in China's colleges and universities. Based on the previous analysis, the model of investment benefit measurement of higher education and the evaluation system of investment benefit have been established, which provide a strong basis for the investment return calculation of universities and the evaluation of investment efficiency of colleges and universities. Based on the analysis of the costs and benefits of higher education, the theory of internal rate of return accounting and project investment rate of return accounting, this paper constructs a measure model of investment efficiency of higher education in China from the perspective of investors.

In addition, the classification of the investment risk of higher education in China is presented, to analyze the internal and external motivation for the formation of the investment risk and establish the investment risk assessment and early warning system of higher education in China, which provides the technical support for the quantitative assessment of investment risk in universities and promotes advances in research on early warning of investment risk in colleges and universities.

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