

Analysis of the Financial Status of College H Based on Harvard Analytical Framework

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Abstract: Harvard Analytical Framework analyzes the financial status of enterprises from the perspective of enterprise strategy, points out the direction for the future development of enterprises on the basis of scientific prediction by analyzing the opportunities and threats existing in the external environment and the advantages and disadvantages of internal conditions of enterprises. This paper selects College H as the research object, based on College H's financial statements from 2017 to 2021, and analyzes them according to the four components of the Harvard Analytical Framework on strategic analysis, accounting analysis, financial analysis, and prospect analysis to provide opinions and suggestions for the development of College H.

1. Introduction

Harvard Analytical Framework analyzes the financial status of enterprises from the perspective of enterprise strategy, points out the direction for the future development of enterprises on the basis of scientific prediction by analyzing the opportunities and threats existing in the external environment and the advantages and disadvantages of internal conditions of enterprises. Domestic studies mainly take domestic enterprises as cases. Thus, this paper attempts to use this method to analyze and study the financial situation of private colleges and universities.

2. College H Overview

2.1 The introduction of College H

H College is a full-time private vocational college approved by Sichuan Provincial People's Government, supervised by Sichuan Provincial Department of Education and recorded by the Ministry of Education. The college has a long history of operation, strong faculty, huge investment in state-owned assets, complete school facilities, and excellent learning and living conditions. The college has 47 enrollment majors in 2021. There are more than 10,000 full-time students. After years of trials and tribulations, the college has a stable quality of schooling and distinctive features. In order to promote the overall development of students, College H has proposed and insisted on exploring and practicing the "1+2N" talent training model, which focuses on the cultivation of craftsmanship and vocational ability while improving students' cultural level and professional theoretical knowledge. In the teaching of professional courses, around the needs of students seeking employment, innovation and entrepreneurship, the college strengthens vocational skills certificate training, highlighting the practicality and relevance of the teaching content of professional courses, and helping students obtain one or more vocational qualifications during their school years. The college practices the modern vocational education concept of "integration of industry and education, characteristic schooling", forms eight secondary colleges and three industrial colleges jointly built by the university and enterprises, creates advantageous majors, cooperates with the university and enterprises to educate people, and forms a set of talent cultivation mode with distinctive characteristics of the times, in line with the laws of higher vocational education and adapts to the needs of society.

2.2 College H revenue components

College H's revenue is dominated by tuition and accommodation fees, which accounted for 95% of total revenue in 2021, and other revenue such as rent training accounted for 5%. the composition of main business revenue in 2021 is shown in Figure 1 below.

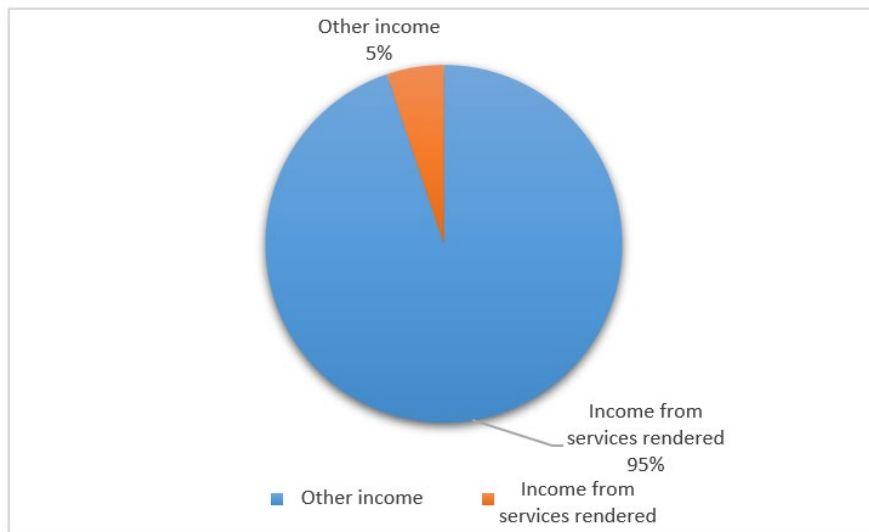


Figure 1: College H Revenue Composition in 2021

2.3 The expense composition of College H

College H expenses are mainly personnel expenses and school-enterprise cooperation expenses, which accounted for 70% of total expenses in 2021. The composition of expenses in 2021 is shown in Figure 2 below.

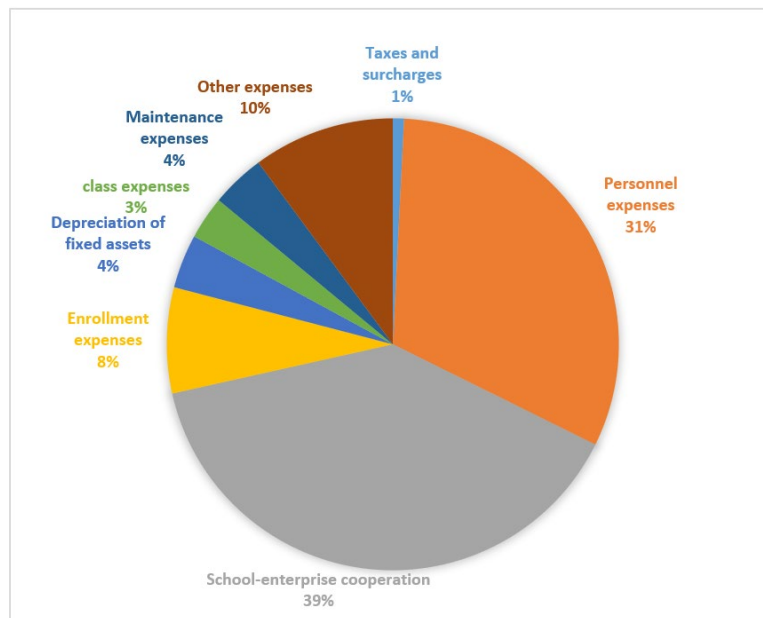


Figure 2 The Expense Composition of College H in 2021

2.4 Key operating results and financial data

Figure 3 presents the trends in revenue from services provided and change in net assets for College H from 2014 to 2021, in millions of dollars.

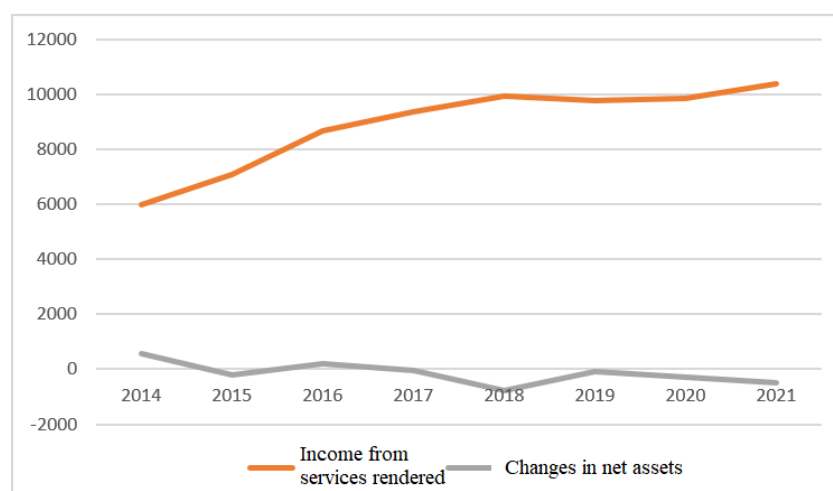


Figure 3 Trend of Change in Main Operating Income and Net Assets from 2014 to 2021

From Figure 3, we can see that College H's main business income had been increasing year by year, but the change in net assets was on a decreasing trend and had been negative in recent years.

3. Strategy Analysis

3.1 Industry analysis

In January 2019, China issued *National Program for the Implementation of Vocational Education Reform*, which states that vocational education, like general education, has a very important and equal status. The important role of vocational education in society was emphasized and it was clarified that vocational education is a separate type of education in the education system. Xi Jinping, General Secretary of the Central Committee in April 2021, emphasized the need for China's vocational education work in the next phase to clearly position, reform mechanisms, improve the system, and train batches of high-level professional and technical talents for the modernization of China under the leadership of the Party. This important instruction provides a clear direction for the teaching methods and reform goals of vocational institutions. Vocational education is an important foundation for China to train professionals and technicians, enhance social employment, promote industrial innovation, and facilitate the development of manufacturing industries. Not only does it provide a way for hundreds of millions of young people in society to learn professional skills, but it also provides a strong skill support for our country to achieve great national rejuvenation.

From the data, according to statistics, during the 13th Five-Year Plan period, China's vocational colleges and universities have exceeded 10,000, with more than 30 million students, which has become the largest education system in the world. From the industry distribution, manufacturing, strategic emerging industries and modern service industries, more than seven layers of new employees engaged in front-line positions are graduates of vocational colleges. It can be said that since the 18th Party Congress, graduates from vocational colleges have become the main source of China's industrial army and the main force supporting the development of small and medium-sized enterprises gathering, regional industrial transformation and upgrading, and urbanization development. At the same time, whether through vocational education to cut off the root of intergenerational transmission of poverty, or a large number of veterans, laid-off unemployed people, migrant workers to obtain a skill, vocational education has also played an increasingly important role in serving employment and improving people's livelihood. With the promotion of China's 14th Five-Year Plan, the transformation and upgrading of various industries, and the gradual acceleration of the government's macroeconomic market regulation, the society is in urgent need of various professional and technical talents. With the rise of high-tech changes, AI intelligent applications, big data promotion, the popularity of the Internet of Things, etc., ordinary personnel have been unable to meet the requirements of new technology positions. Such new technology companies are in urgent need of a large number of high-quality professional team. As China's economy begins to experience a downward spiral in 2019, the trillion-

dollar vocational education market is growing rapidly, and favorable national policies are pushing vocational education into the wind. Vocational education is the largest track in terms of volume among the education segments. The market size of vocational education is the sum of the market size of academic education and non-academic education. Data show that the market space of vocational education in China exceeded 1 trillion yuan in 2020, while the scale of academic vocational education reached 176.1 billion yuan and the scale of non-academic vocational education market reached 985.9 billion yuan. The vocational education market space is large, the demand is long-term, the orientation is strong, the willingness to pay is strong. There is still more space to explore the future model.

3.2 SWOT analysis of College H

3.2.1 Advantage analysis

College H has a long history of operation and is one of the very few general higher education institutions in China held by state-owned assets of public undergraduate institutions. The location is in the downtown area of Chengdu, so students can broaden their horizons and have more opportunities for employment and internship by studying in a big city. In 2021, in the 14th Five-Year Development Plan of College H, it put forward the development strategy of "improving quality and stabilizing expansion", which has pointed out the direction of the development of the College. The new campus is expected to be put into use in 2024, when the campus environment, student housing environment, teaching hardware and equipment have been greatly improved.

3.2.2 Disadvantage analysis

College H is a private higher education institution, and because of the background of public undergraduate institutions, the school system of College H is inflexible. Compared with purely private colleges and universities, it lacks flexibility and autonomy; compared with public colleges and universities, it lacks sufficient funding and good-quality hardware facilities. Its tuition fee is not as low as the public ones.

3.2.3 Opportunity analysis

First of all, there is a large market space for vocational education. According to public data, in 2021, China's top ten key manufacturing skills had a shortage of 21 million people. It is predicted that the gap will continue to expand to 30 million people in 2025. Secondly, the "Million Expansion Plan" injects new vitality into higher vocational education. In March 2019, Premier Li Keqiang proposed in the government work report to reform and improve the examination and enrollment methods of higher education institutions, planning a massive expansion of 1 million students that year. The "Million Expansion Plan" is a new impetus for the country to improve the quality and level of higher vocational talents, which inevitably brings a series of significant changes in the field of vocational education and is of great significance to the development of vocational education.

3.2.4 Challenge analysis

First of all, the national funding for higher education is relatively small. According to the statistical snapshot of the implementation of national education funding in 2020 released by the Ministry of Education, the total investment in education funding in 2020 was 5,301.4 billion yuan, an increase of 5.65% over the previous year. Among them, the total investment in pre-school education, compulsory education, senior secondary education and higher education in 2020 was 420.3 billion yuan, 2,429.5 billion yuan, 842.8 billion yuan and 1,399.9 billion yuan respectively, among which the total investment in general senior secondary education was 275.8 billion yuan, accounting for only 19.7% of the investment in higher education and 5% of the total investment in education nationwide. Its ratio was relatively low, comparing to the investment in other education. Second, the number of newborns has fallen off a cliff in the past 30 years. In 1990, 23.91 million babies were born; In 2000, 17.71 million babies were born; In 2010, 15.88 million babies were born; In 2020, 10.03 million babies were born. With the annual decrease of the newborn, the source of students is all kinds of diversion,

coupled with social discrimination in vocational college, so that people are not willing to choose vocational colleges. Vocational colleges in the future will have a student source crisis.

4. Accounting Analysis

4.1 Analysis of monetary funds

Table 1 shows the ratio of monetary funds to total assets for College H from 2017 to 2021. It can be seen that College H had a slow decreasing trend in the proportion of monetary funds to total assets during 2017-2021, with a total of \$28,462,000 in 2017, accounting for 55.37% of total assets, and \$15,281,300 in 2021, accounting for 32.86% of total assets. The third row shows the percentage of unrestricted funds (total monetary funds minus state appropriation scholarships, collection of textbook fees, etc.) of College H from 2017 to 2021, which also decreased year by year. 2021 was as low as 12.2%, which was less than the safe ratio of 20%. Therefore, the conclusion can be gotten that its funds are very tight. It is highly likely that the problem of insufficient Current will occur, with certain financial risk potential.

Table 1 Table of Monetary Funds as a Percentage from 2017 to 2021

Y	2017	2018	2019	2020	2021
Monetary funds as a percentage of total assets	55.37%	38.50%	39.00%	34.27%	32.86%
Unrestricted funds as a percentage of total assets	45.59%	26.67%	26.74%	21.48%	12.20%

4.2 Fixed assets analysis

At present, the fixed assets of College H mainly consist of buildings, electronic equipment, instruments and meters, etc. Depreciation is based on the straight-line method, and quarterly reconciliation of accounts is conducted between the Finance Office and the Assets Office, and the Assets Office conducts asset cleanup work every year. Figure 4 presents the trend of the original value of fixed assets (in million dollars) and the increase ratio from 2017 to 2021 in College H. From this, it can be seen that the total value of fixed assets was growing year by year, with a larger growth of more than 20% in 2018 and 2019, but the growth became slower in 2020 and 2021.

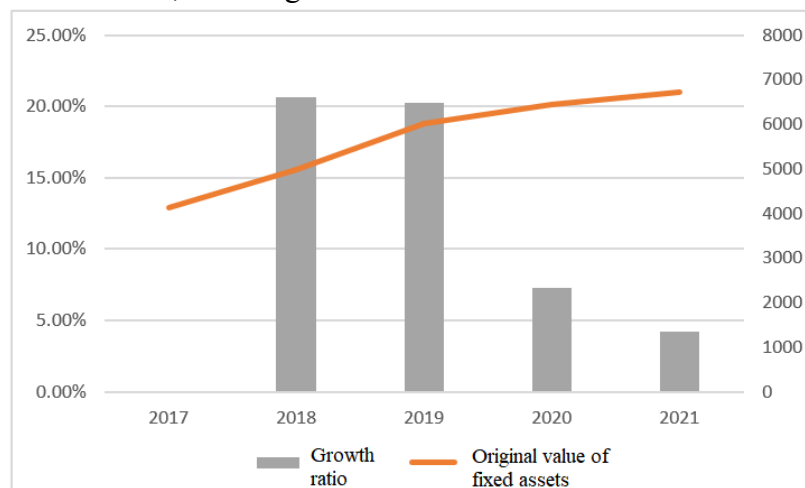


Figure 4: College H Original Value of Fixed Assets and Increase Ratio from 2017 to 2021

5. Financial Analysis

Considering the special characteristics of colleges and universities, this paper analyzed the financial analysis of College H from three perspectives.

5.1 Solvency analysis

Table 2 Current Ratio and Asset-Liability Ratio of College H

Year	2017	2018	2019	2020	2021
Current ratio	108.77%	66.12%	57.44%	46.13%	40.61%
Asset-liability ratio	54.05%	64.44%	73.26%	75.51%	84.20%

A higher current ratio indicates strong short-term solvency. Usually, a current ratio of around 200% is better. As seen in Table 2, the current ratio of College H has been decreasing year by year for the past five years, which indicates that the short-term solvency of College H has been weakening year by year.

The asset-liability ratio reflects the extent to which assets protect the interests of creditors. The lower the ratio, the less assets are acquired with liabilities, and the enterprise is less capable of using external funds; the higher the ratio, the more assets are financed by borrowing, and the greater the risk. As seen from Table 2, College H's asset-liability ratio has been increasing year by year. Its financial position is poor and its financial risk increases.

Table 3 compares with listed companies in the same industry, China Education Group has been controlled within 60% in the last three years. Hope Education Group was higher in 2017 and also controlled around 60% in the last three years. China Ginkgo Education Group was better controlled in other years because the financial report of 2021 has not yet been out. It can be seen that the average level of asset-liability ratio in the same industry are around 60%, College H has been higher than the industry average and has a greater financial risk.

Table 3 Peer Group Asset-Liability Ratio

Year	2017	2018	2019	2020	2021
China Education Group	15.48%	26%	54.31%	50.45%	56.04%
Hope Education Group	87.86%	49.82%	57.95%	54.2%	60.71%
China Ginkgo Education Group	36.24%	40.53%	56.45%	56.19%	-

Data source: xueqiu.com

5.2 Profitability analysis

Table 4 College H Operating Profit Margin and Return on Net Assets

Year	2017	2018	2019	2020	2021
Operating profit margin	-0.65%	-7.77%	-0.67%	-2.94%	-4.82%
Return on net assets	-2.56%	-48.67%	-4.29%	-23.57%	-68.18%

College H's net assets were positive and both of the above indicators were negative mainly because of the negative profit in the last five years, resulting in a negative operating profit margin and return on net assets. From the above data, it can be seen that College H has weak profitability and is at risk of not being able to continue as a going concern.

Table 5 Return on Net Assets of the Same Industry

Year	2017	2018	2019	2020	2021
China Education Group	10.51%	9.10%	9.30%	8.35%	14.81%
Hope Education Group	38.06%	6.99%	11.24%	3.49%	8.97%
China Ginkgo Education Group	14.71%	7.95%	7.81%	3.36%	-

Data source: xueqiu.com

In comparison with its peers, China Education Group's return on net assets has been maintained at around 10%, Hope Education Group's return on net assets in 2017 was as high as 38.06% and as low as 3.49%, and China Ginkgo Education Group had 3.36% at its lowest. All three listed education companies have been profitable in the last five years. College H has a weaker profitability compared to its peers.

5.3 Growth capacity analysis

Table 6 Growth Rate of Operating Revenue and Total Assets of College H

Year	2018	2019	2020	2021
Operating revenue growth rate	6.1%	-1.64%	0.80%	5.35%
Total assets growth rate	-13.09%	27.49%	-11.63%	-7.62%

The growth rate of College H's operating revenue has been basically on an upward trend, which proves that the scale of College H's operation is increasing. The growth rate of total assets was positive only in 2019 and negative in all other years, which indicates that after so many years of operation, many equipment of College H is old and aging, and the total amount of scrapped equipment is greater than the total amount of new equipment, so the growth rate of total assets in the past five years was negative. From the above data, we can see that College H has poor growth ability.

6. Prospect Analysis

Integrating the strategic analysis, accounting analysis and financial analysis of College H, it can be concluded that College H is currently in crisis and opportunity at the same time. First of all, vocational education has a promising future. Accelerating the development of modern vocational education is the most efficient and basic means of training high-quality technical and skilled personnel. It is also an important support to promote the development of high-tech in China. Moreover, it is an inevitable requirement for building a strong education country. In recent years, the central to local governments at all levels have introduced preferential policies to support vocational education. Vocational education has a bright future. Secondly, there is a crisis of survival and development in College H. The management system has not been rationalized, the solvency, profitability and growth ability are weak, and the capital is not sufficient, which have become bottlenecks in the development of College H. If College H does not change its management model, it will face the risk of bankruptcy once the capital flow is cut off.

7. Suggestions

First, it is recommended that the management actively communicate with the higher administration to facilitate the conversion of College H to a public institution. The current way of managing a private institution in the same way as a public institution is not conducive to the development of a private college. For College H, the best way out is to switch to a public institution. In the current situation of not being able to switch to public, the investor should increase the financial support and policy support for College H.

Second, it is recommended that all departments of College H effectively implement the development strategy of "improving quality and stabilizing expansion". The college needs to find ways to expand the size of the college, improve the influence of the college and the quality of teaching, increase revenue and improve the financial situation of the college.

Third, it is recommended to strengthen the level of business management of College H and reduce the running cost of the college. It is necessary to strengthen the business training for managers to improve their business management ability, business decision making ability, personnel decision making ability, tactical and strategic decision-making ability, etc.

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